

The AIAMC National Initiative:  
*Improving Patient Care through Medical Education*

# PROCEEDINGS OF NATIONAL INITIATIVE VI

March 2019 Tucson, AZ



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# National Initiative

## OVERVIEW OF THE AIAMC NATIONAL INITIATIVES

### **Why a National Initiative?**

Both the public and our profession acknowledge that quality and safety efforts are falling short, and many hospitals and healthcare systems are seeking rapid improvements in patient care. Those of us in academic medicine realize that residents play an important role in patient care at teaching institutions; however, residents are generally not visible in safety and quality efforts. The AIAMC recognized that resident quality improvement efforts – shared across multiple programs and systems – had the potential to improve care much more quickly and effectively.

### **Role of the AIAMC**

The Alliance of Independent Academic Medical Centers was founded in 1989 as a national network of large academic medical centers. Membership in the association is unique in that AIAMC members are affiliated with medical schools but are independent of medical school ownership or governance. Ninety major medical centers and health systems across the United States are members, representing more than 750 senior academic leaders.

### **National Initiative I**

In early 2007, the Alliance of Independent Academic Medical Centers (AIAMC) launched *Improving Patient Care through GME: A National Initiative of Independent Academic Medical Centers*. The *National Initiative* (NI) featured five meetings over the course of 18 months which served as touchstones for ongoing quality improvement in 19 AIAMC participating organizations. These meetings, as well as the monthly collaborative calls held in-between, provided structure, discussion and networking opportunities around specific quality improvement initiatives. This 18-month "NI I" was supported by a grant from the foundation of HealthPartners Institute for Medical Education, an AIAMC member institution located in Minneapolis, Minnesota.

As a result of these efforts, we developed initial findings that demonstrated the efficacy of integrating GME into patient safety and quality improvement initiatives. These findings were organized into a series of articles that were published in the December 2009 issue of *Academic Medicine*.

### **National Initiative II**

In 2009, we launched the National Initiative II and expanded participation to 35 AIAMC-member teaching hospitals from Seattle to Maine. Each participating hospital developed a quality improvement team led by a resident or faculty member. These teams met on-site four times and participated in monthly conference calls over an 18-month period. Quality improvement projects focused upon one of the following areas: Communication, Hand Offs, Infection Control, Readmissions and Transitions of Care.

Results from NI II were published in a variety of publications, including the February 2011 issue of the *AAMC Reporter*, and in the May/June 2012 special supplement issue of the *American Journal of Medical Quality*.

## National Initiative III

NI III, launched in 2011 with 35 teams, built on the strengths of the first two phases of the AIAMC National Initiative, and moved beyond direct support of local quality improvement teams to the development of teaching leadership and changing organizational culture to support quality improvement initiatives. Graduate medical education *and* continuing medical education were emphasized as platforms for improving patient care. The focus of NI III was faculty/leadership development. We recognized that part of our responsibility as medical educators was to train the next generation of practicing physicians; thus, residents must be considered as junior faculty and were integral in this effort.

Results from NI III were published in a variety of publications, including the Spring 2014 issue of *The Ochsner Journal* and the *Journal of the American College of Surgeons*.

## National Initiative IV

NI IV: *Achieving Mastery of CLER*, launched in 2013 with 34 AIAMC-member and – for the first time – non-member teams, focused on navigating the ACGME’s Clinical Learning Environment Review (CLER) program. The CLER program was designed to evaluate the level of institutional responsibility for the quality and safety of the learning and patient care environment, and NI IV provided teams the training and guidance necessary that identified strengths and weaknesses across the six focus areas and significantly and measurably advanced the institutional level of preparedness.

Results from NI IV were published in numerous publications, including the *Journal of Graduate Medical Education* and *The Ochsner Journal*, the official publication of the AIAMC National Initiatives.

## National Initiative V

National Initiative V: *Improving Community Health and Health Equity through Medical Education* launched in the fall of 2015 with 29 AIAMC-member teams participating and focused on navigating the disparities component of the ACGME’s Clinical Learning Environment program. Four on-site learning sessions addressed understanding and engaging with institutional leaders in the Community Health Needs Assessments; GME education in improving health equity, cultural competency and community engagement; and how to better engage the C-Suite. The Initiative concluded in March 2017.

Results from NI IV were published in numerous publications, including the *Journal of Graduate Medical Education* and *The Ochsner Journal*, the official publication of the AIAMC National Initiatives.

**National Initiative VI: *Stimulating a Culture of Well-Being in the Clinical Learning Environment*** launched in the fall of 2017 with 34 AIAMC member teams participating. Teams were grouped into cohorts based upon similarities of projects in the following domains: Culture and Values; Institutional Well-Being; Meaning in Work, Work-Life Integration and Social Support & Community at Work; and Workload & Job Demands and Control & Flexibility. The Initiative concluded in March 2019 at the fourth and final meeting where teams presented their concluding posters and outcomes.

Various writing teams are currently preparing manuscripts for publication.

***The AIAMC National Initiative (NI) is the only national and multi-institutional collaborative of its kind in which residents lead multidisciplinary teams in quality improvement projects aligned to their institution’s strategic goals. Sixty-four hospitals and health systems and more than 1,000 individuals have participated in the AIAMC National Initiatives since 2007 driving change that has resulted in meaningful and sustainable outcomes improving the quality and safety of patient care***

For more information, visit <https://aiamc.org/national-initiative>

## NI VI Participating Institutions

Advent Health (Florida Hospital) Orlando, FL	HCA South Atlantic Division Charleston, SC
Advocate Illinois Masonic Medical Center Chicago, IL	HealthPartners Institute Minneapolis, MN
Advocate Lutheran General Hospital Park Ridge, IL	HonorHealth Scottsdale, AZ
Arrowhead Regional Medical Center Colton, CA	Main Line Health Bryn Mawr, PA
Ascension Providence Rochester Hospital (Crittenton Hospital Medical Center) - Rochester Hills, MI	Maine Medical Center Portland, ME
Atrium Health Carolinas Medical Center (Carolinas HealthCare System) - Charlotte, NC	Monmouth Medical Center - RWJBH Long Branch, NJ
Aurora Health Care Milwaukee, WI	Ochsner Health System New Orleans, LA
Bassett Medical Center Cooperstown, NY	OhioHealth – Riverside Methodist Hospital Columbus, OH
Baylor University Medical Center at Dallas Dallas, TX	Orlando Health Orlando, FL
Baystate Health Springfield, MA	OSF Healthcare Peoria, IL
Billings Clinic Billings MT	Our Lady of the Lake Regional Medical Center Baton Rouge, LA
Cedars Sinai Los Angeles, CA	Saint Francis Hospital and Medical Center Hartford, CT
Christiana Care Health System Newark, DE	Sinai Hospital of Baltimore Baltimore, MD
Cleveland Clinic Akron General Akron, OH	The Christ Hospital Health Network Cincinnati, OH
Community Health Network Indianapolis, IN	TriHealth Cincinnati, OH
Guthrie – Robert Packer Hospital Sayre, PA	UnityPoint Health – Des Moines Des Moines, IA
Hackensack Meridian Health Jersey Shore University Medical Center - Neptune, NE	Virginia Mason Medical Center Seattle, WA



# Flourish through CREATION Health



NI VI Meeting #4  
Tucson, AZ  
March 2019

Joe Portoghese, MD  
Amanda Sawyer, PhD  
Patricia Robinson, PhD

Kathy Gibney, PhD, APBB  
Leigh DeLorenzi, PhD, LMHC  
Mandi Bailey, MA, LMHC

Serena Gui, PhD  
Yvette Saliba, PhD

## BACKGROUND

AdventHealth GME and the Center for Physician Wellbeing developed a new wellbeing initiative for residents based on their existing whole-person wellness philosophy of CREATION Health. CREATION is an acronym for Choice, Rest, Activity, Trust, Interpersonal Relationships, Outlook, and Nutrition.

The new program, named Flourish through CREATION Health, was grounded in research and funded by the Center for CREATION Health Research.

Previous studies have shown an association between positive peer relationships, self-care workshops, and mindfulness-based practices with reduced burnout in residency (Busireddy et al., 2017).

## OBJECTIVES

Through their participation, AdventHealth residents will be able to:

- Understand the 8 CREATION Health principles of wellbeing with an emphasis on Choice, Trust, Interpersonal Relationships, and Outlook
- Build trust and enhance communication skills
- Practice strategies to reinforce resilience skills (e.g., self-awareness, examine emotions, expand choices, deepen empathy, reclaim personal meaning, and enrich relationships).

## PROGRAM DESCRIPTION

<b>Number of Participants</b>	167 residents in all GME programs
<b>Sessions</b>	Six 90-minute small-group sessions Two booster sessions
<b>Session Components</b>	Expressive arts Mindful living practices Self-reflection

## DATA COLLECTION

### Quantitative Data Collection

Online survey package administered at baseline, mid-point, post-program, and 3-month follow-up

- Maslach Burnout Inventory
- Perceived Stress Scale
- Life Satisfaction Survey
- Resident Wellness Scale

### Qualitative Data Collection

Feedback form completed on paper administered during the final group session

### IRB Submission

AdventHealth IRB determined this program was Quality Improvement (QI).

## DESCRIPTIVE STATISTICS

<b>Age, mean (SD)</b>	30.8 (4.1)
<b>Female, n (%)</b>	71 (52.6%)
<b>Residency Year, n (%)</b>	
1	39 (28.7%)
2	45 (33.1%)
3	39 (28.7%)
4	6 (4.4%)
5	7 (5.1%)
<b>MBI (Emotional Exhaustion/Depersonalization). n (%)</b>	
Yes	41 (29.1%)
No	82 (58.2%)
Missing	18 (12.8%)
<b>Perceived Stress Scale,* mean (SD)</b>	15.2 (7.2)
<b>Resident Wellness Scale,** mean (SD)</b>	2.8 (0.7)

\* Perceived Stress Scale scores range from 0 (low) to 40 (high).

\*\* Resident Wellness Scale scores range from 0 (low) to 4 (high).

## THEMATIC ANALYSIS

### Themes Noted

What would you keep the same about Flourish?

- Small group format
- Group sessions built into protected time
- Experiential activities (instead of lecture/PowerPoints)
- Facilitators

What would you change about Flourish?

- Change group time, frequency, and/or duration
- Increase interaction and open discussion
- Change the mandatory attendance requirement

What is one change you plan to implement after completing Flourish?

- Increase mindfulness and self-reflection
- Improve listening and communication
- Increase self-awareness of own thoughts and feelings
- Improve work-life balance

### Program Evaluation Feedback Form

More than half of the participants agreed that their overall wellbeing had improved, trust among their peers improved, and new information about communication was learned.

## DISCUSSION

### Key Findings

- Improvement in trust and communication skills among residents
- Attendance mandate was a barrier to engagement

### Next Steps and Sustainability

- Complete analysis of quantitative data- report on findings
- In development: A menu of various options for wellbeing interventions that can be chosen by residents or programs to meet the institutional goal of integrating wellbeing
- Continuation of booster sessions called "Resilience Rounds"

## Project Management Plan

Begin completing this Project Management Plan at Meeting One and complete it with your team following Meeting One, i.e., by November 2017. Teams will have the opportunity to review/revise their Project Management Plans throughout the 18-month Initiative at each of the on-site meetings. The collective data from all of the teams' completed project management plans will be invaluable as we share and learn from this collaborative experience.

Team: AdventHealth

Project Title: Flourish through CREATION Health

I.	<p>Vision Statement (markers of success by March 2019; Refer to Toolkit #5)</p>	<p><i>Build resilience in residents through experiential small-group activities grounded in the CREATION Health principles of Choice, Rest, Environment, Activity, Trust, Interpersonal Relationships, Outlook, and Nutrition. In addition to providing all residents with a space for personal exploration, this initiative will examine whether participation in these small groups influence resident burnout, perceived stress, empathy, and/or wellbeing.</i></p>
II.	<p>Team Objectives (‘needs statement,’ project requirements, project assumptions, stakeholders, etc.)</p>	<p><u>Objective:</u> Residents will be able to: (a) describe and display eight principles of Wellbeing as defined by CREATION Health; (b) strengthen collaboration and communication with peers; (c) practice strategies designed to reinforce resiliency skills, including internal reflection, examining emotions, expanding choices, deepening empathy, reclaiming personal meaning, and enriching relationships. <u>Needs Statement:</u> Residents need access to curriculum and experiences built into their training that inform and enhance wellbeing.</p> <p><u>Stakeholders:</u> <b>The Center for Physician Wellbeing-</b> curriculum development and delivery <b>Creation Health Research-</b> Funding, IRB submission/approval, research design, data collection and analysis <b>GME-</b> Chief academic officer, program directors/schedulers</p>
III.	<p>Team Members &amp; Accountability (list of team members from Toolkit #6 and who is accountable for what)</p>	<p>GME Joseph Portoghese, MD, Chief Academic Officer <i>(He originally commissioned the project by partnering with Creation Health Research and CPW. He is accountable for serving on our advisory board and deciding on programming that fulfills the ACGME accreditation requirements.)</i></p>

		<p><i>The Center for Physician Wellbeing</i>  <i>Staff serve as content experts and are accountable for developing programming, staffing the interventions, and making recommendations for program refinement.</i></p> <ul style="list-style-type: none"> <li>• <i>Kathy Gibney, PhD, Psychologist, Director, Curriculum Development and Delivery</i></li> <li>• <i>Leigh Delorenzi, PhD, LMHC, Psychotherapist, Curriculum Development and Delivery</i></li> <li>• <i>Mandi Bailey, MA, LMHC, Psychotherapist, Program Coordinator and Delivery</i></li> </ul> <p><i>Creation Health Research</i>  <i>The team is accountable for funding the initiative, managing dissemination of measures and analyzing data, and making research recommendations</i></p> <ul style="list-style-type: none"> <li>• <i>Patricia Robinson, PhD, ARNP, Senior Director of Research, Principal Scientist</i></li> <li>• <i>Amanda Sawyer, PhD, Research Scientist</i></li> <li>• <i>Ashley Kohrt, MBA, Project Manager</i></li> </ul>
IV.	Necessary Resources (staff, finances, etc.)	<p><i>Five Flourish group facilitators</i>  <i>Finances for one full time salary (coordinator), supplies and materials, and related events.</i>  <i>Staff - curriculum design and delivery (facilitators)</i></p>
V.	Measurement/Data Collection Plan	<p><b>Online survey package</b> administered through Open Clinica at baseline, mid-point, post-program, and 3-month follow-up</p> <ul style="list-style-type: none"> <li>• <i>Maslach Burnout Inventory</i></li> <li>• <i>Perceived Stress Scale</i></li> <li>• <i>Life Satisfaction Survey</i></li> <li>• <i>Resident Wellness Scale</i></li> </ul> <p><b>Qualitative Data Collection</b></p> <ul style="list-style-type: none"> <li>• <i>Feedback form completed on paper administered during the final group session. Demographic and qualitative data to assess resident experience and satisfaction with the program.</i></li> </ul> <p><b>IRB Submission</b>  <i>AdventHealth IRB determined this program was Quality Improvement (QI).</i></p>



VI.	<p>Stakeholder Communication Plan (may be helpful to draft a flow chart of team members &amp; senior management; Refer to Toolkits #2 and #4)</p>	<p><i>GME commissioned the project and makes key decisions regarding which wellbeing initiatives are available to residents based on feedback from program directors, CPW staff, and advisory board.</i></p> <p><i>CPW are the content experts on the topic of resident wellbeing. They are responsible for designing the wellbeing programs and experiences for residents and facilitating those groups/events. CPW makes recommendations on programmatic changes based on feedback and findings.</i></p> <p><i>Creation Health Research makes decisions regarding funding and handles the dissemination and analysis of assessment measures.</i></p>
VII.	<p>Potential Challenges (engagement, budget, time, skills gaps, etc.; Refer to Toolkit #3)</p>	<p><i>Prior burnout/wellbeing initiatives were not well implemented or attended.</i></p> <p><i>Low engagement and buy-in from residents and faculty.</i></p> <p><i>The Quality Improvement design of the project led to program mandates that were experienced as burdensome by some residents and faculty.</i></p>
VIII.	<p>Opportunities for Scholarly Activity (potential publications, conference presentations, etc.)</p>	<p><i>2 scholarly articles reporting the findings of the PI/QI initiative in both Counseling and GME-related journals. One focusing on the quantitative results from the formal assessment measures, the other focusing on overall program evaluation.</i></p>
IX.	<p>Markers (project phases, progress checks, schedule, etc.; Refer to <i>NI V Roadmap to 2019</i> which will be presented at Meeting One)</p>	<p><b>Pre-Launch: July 2017-July 2018</b></p> <ul style="list-style-type: none"> <li>• Project Approval</li> <li>• IRB designation as PI/QI</li> <li>• Funding for staff/supplies</li> <li>• Scheduling</li> <li>• Marketing and Orientation</li> <li>• Pre-Test dissemination</li> </ul> <p><b>Launch: July 2018 – March 2019</b></p> <ul style="list-style-type: none"> <li>• Residents attending bi-weekly small groups</li> <li>• Boosters held after completion of small groups</li> </ul> <p><b>Program Analysis: January 2019 to May 2019</b></p> <ul style="list-style-type: none"> <li>• Data gathering and analysis to inform curriculum changes</li> </ul> <p>Scholarly dissemination of findings (locally at institution and through national publication and presentation).</p>

Sections X thru XIII to be completed first quarter 2019 for “Final Proceedings” booklet:

X.	Success Factors	<p><i>The most successful part of our work was....</i></p> <ul style="list-style-type: none"> <li>- Outcome of improved trust among residents</li> <li>- Reported appreciation of the small-group format</li> </ul> <p><i>We were inspired by....</i></p> <ul style="list-style-type: none"> <li>- CPW’s Improved relationships with residents and increased awareness of and access to our services.</li> <li>- Resident reactions to the content of curriculum, and direct feedback on how to improve the program to best meet their needs</li> </ul>
XI.	Barriers	<p><i>The largest barrier encountered was....</i></p> <p>CPW designed and delivered the program but is a department outside of GME. Unclear roles, responsibilities, and ownership of the project among partners (CPW, Research, GME). Survey fatigue, and confusion over when to complete assessments</p> <p><i>We worked to overcome this by....</i></p> <p>Creating an advisory board consisting of faculty members, residents, facilitators, program developers and GME chief academic officer Increasing communication with Research team, adding time to final sessions to complete surveys</p>
XII.	Lessons Learned	<p><i>The single most important piece of advice to provide another team embarking on a similar initiative would be....</i></p> <ul style="list-style-type: none"> <li>- The wellbeing/resiliency interventions need to be supported by and driven from within GME (leadership, faculty, and/or residents).</li> <li>- Do not approach wellbeing initiatives as a manualized, one size fits all approach</li> </ul>
XIII.	Expectations Versus Results	<p><i>On a scale of 1 to 10 (with “1” meaning nothing and “10” meaning everything), how much of what you set out to do was your team able to accomplish?- We delivered what we set out to, however, the impact and outcomes were not expected.</i></p> <p>1 2 3 4 5 6 7 8 9 10</p>
XIV.	Sustainability and Next Steps	<p><i>What does your CEO need to know to help keep your work sustainable?</i></p> <p>Faculty and program director engagement, built in protected time for self-care, budget/resources (staff, service providers), effective ongoing communication among partners. The institution needs to be responsive to the feedback from key stakeholders.</p>

# Examining the Impact of a Support Group on Burnout and Resilience in Graduate Medical Trainees

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NI VI Meeting #4 Tucson, AZ March 2019

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## INTRODUCTION

Residency programs have strong commitment to address physician well-being in the clinical learning environment. Resident physician support groups are a well-documented and accepted method to mitigate resident burnout and improve resilience.

## AIM

Our primary aim was to establish and sponsor resident support groups (SG) at one metropolitan hospital across three departments: Family Medicine (FM), Obstetrics/Gynecology (OB), Internal Medicine (IM).

### Objectives

- Establish a safe atmosphere to process professional challenges
- Develop coping skills to manage burnout
- Create a template for work-life balance and healthy lifestyle choices

## METHODS

### Study Design

Quasi-experimental multi-department prospective cohort study

### Support Group Content

- Skill-building around coping and prioritizing values
- Processing emotional challenges inherent in the work
- Mindfulness-based stress reduction

### Structure

- IM: 90 min/month (7 groups of 8 residents)
- OB-GYN: 60 min/six months (2 groups of 6 residents)
- FM: 45 min/month, (3 groups of 8 residents)
- Facilitators: behavioral health faculty for OB and FM and behavioral health post-graduate fellows for IM

### Survey Tools

- Maslach Burnout Inventory Human Services Survey (MBI)
- Connor-Davidson Resilience Scale 25 (CDRS)
- The AIMMC Support Survey was developed to examine overall experience and satisfaction every 6 months.

### Statistics

Kruskall-Wallis and Wilcoxon Rank Sum test were conducted to assess scale differences between departments and across time points.  $P < 0.05$  was used to assess statistical significance. Analysis was conducted in SAS 9.4 (SAS Institute Inc., Cary, NC, USA).

The IRB determined this is not research involving human subjects as defined by DHHS and FDA regulations.

## RESULTS – PARTICIPATION

Schedule of Assessments	FM	OB	IM
0 months	27/32 (84%)	9/12 (75%)	60/79 (75%)
3 months	4/24 (17%)	-	33/56 (59%)
6 months	-	-	26/56 (46%)
12 months	15/24 (63%)	11/12 (92%)	18/56 (32%)

Table 1. Participant survey completion at by department

## RESULTS – VALIDATED SCALES

No significant differences were found between baseline and final follow-up among combined departments for Emotional Exhaustion (EE), Depersonalization (DP), Personal Achievement (PA) or Resilience (CDRS).

	FM	OB	IM
EE	3.29	3.6	1.9
DP	2.01	3.11	1.36
PA	4.77	4.54	4.57

Table 2. Baseline MBI for Emotional Exhaustion, Depersonalization and Personal Achievement. Baseline MBI between departments was significant,  $p < 0.05$ .

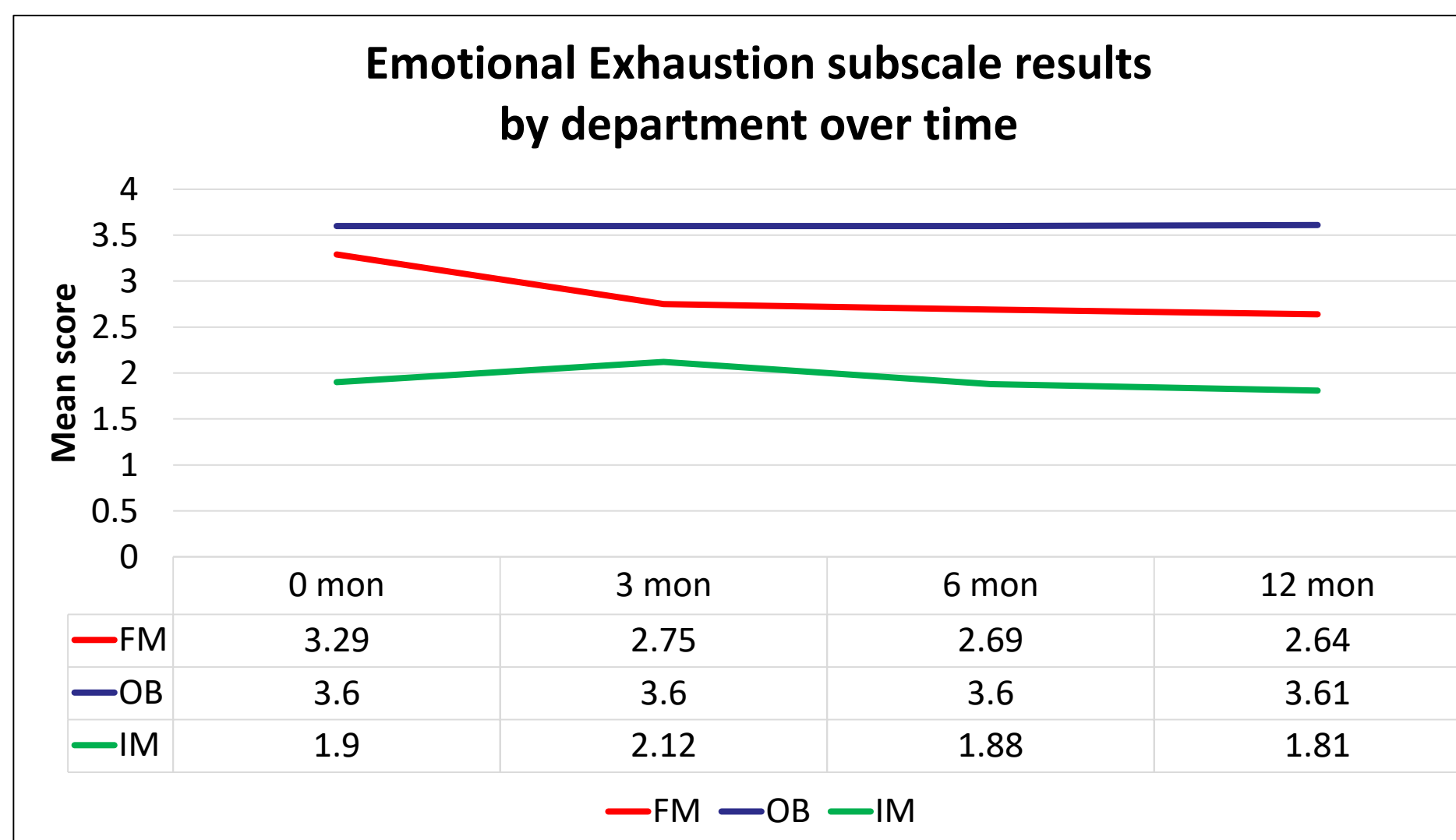


Fig 1. Emotional Exhaustion (EE). All time points between departments were statistically significant,  $p < 0.001$ ; Within departments, FM mean score decreased significantly from 3.29 to 2.64,  $p = 0.03$

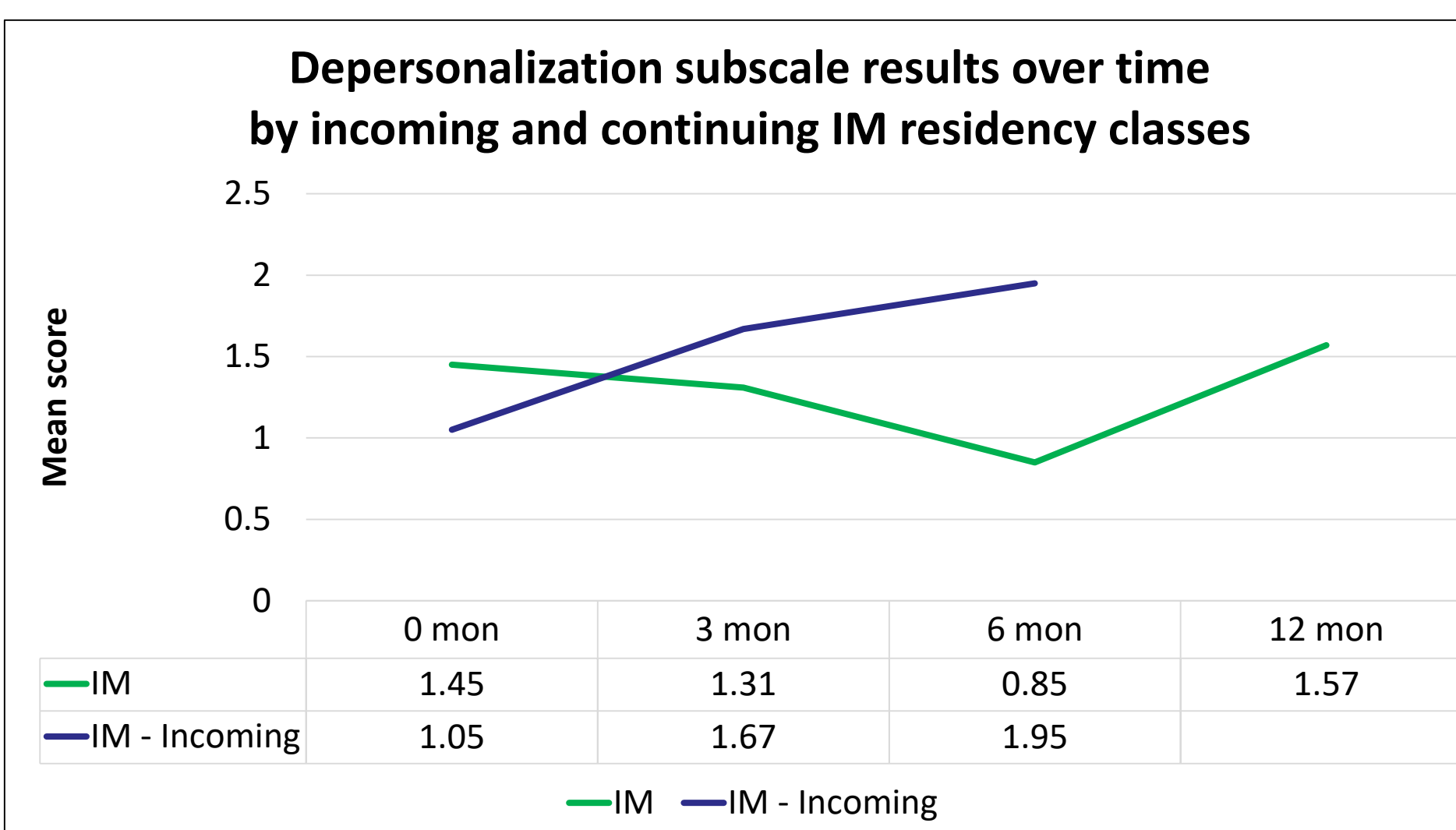


Fig 2. Depersonalization (DP) subscale between IM (continuing) and IM incoming. Incoming IM surveys began in July 2018; Continuing IM surveys began in March 2018. At 6 months, incoming IM class had significantly more DP burnout compared to continuing IM class,  $p = 0.02$ .

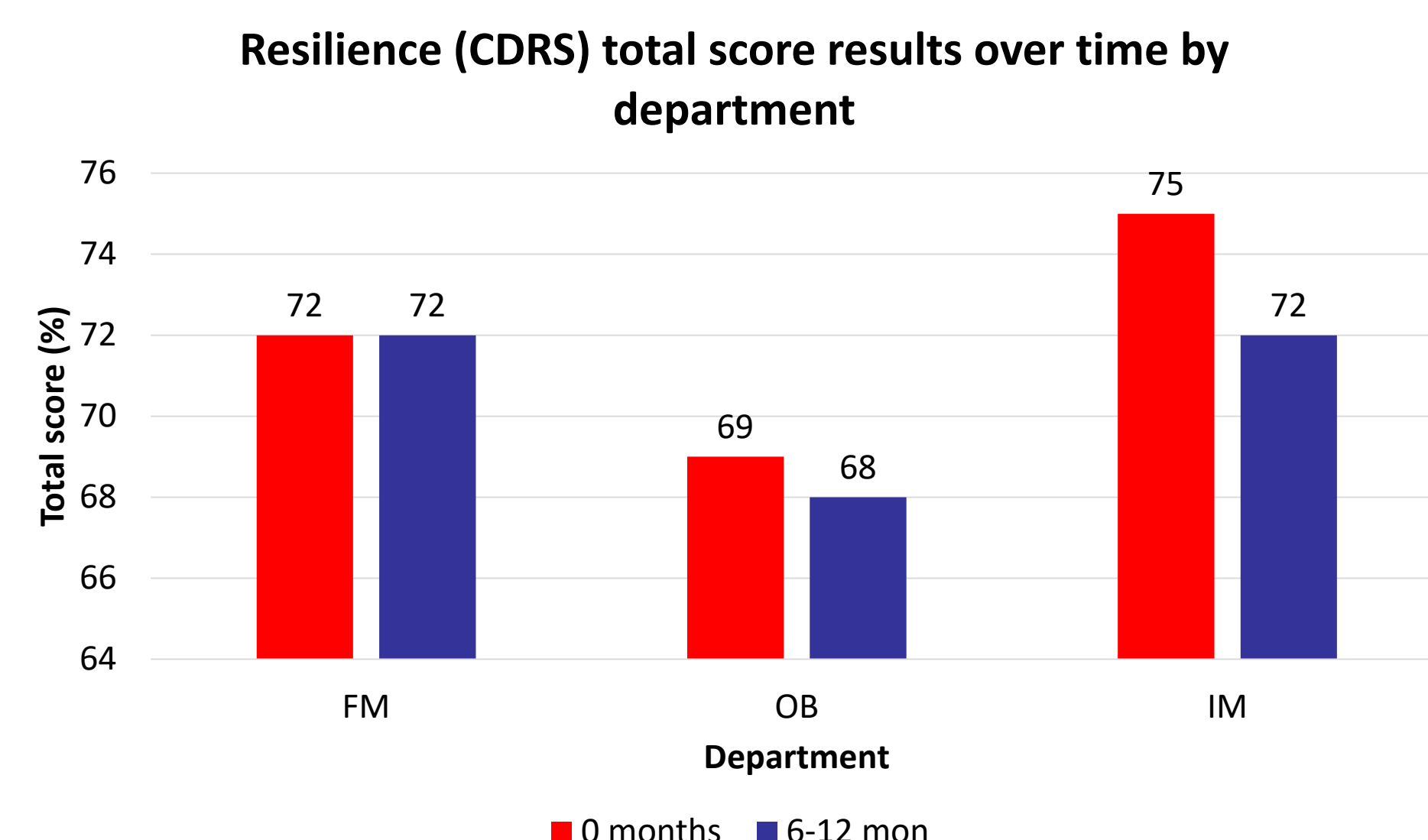


Fig 3. CDRS Between Department. CDRS did not show differences between groups or within groups for baseline and final follow up

## RESULTS – AIMMC SUPPORT SURVEY



Fig 4. Word cloud of helpful SG aspects from open-ended responses

- The most common reported themes for helpful SG aspects were peer support and engagement (n=22), and decompression, venting frustration / talking about personal issues (n=11)
- Overall helpfulness differed significantly between FM, OB, and IM (Medians of 3, 3, and 2, respectively;  $p = .05$ )
- Residents who thought the support groups were more helpful were more satisfied with overall structure, frequency, time length, quality of meeting content
- Residents who thought there were enough resources had higher resilience ( $p = 0.10$ )
- IM was least satisfied with time length of meetings ( $p < 0.05$ )
- FM was most satisfied with resources dedicated to conduct meetings ( $p < 0.05$ )

## DISCUSSION: BARRIERS AND STRATEGIES

### Key Findings and Limitations

- There was no generalized effect of a support group intervention.
- Key differences were discovered between departments and within IM.
- Within the IM department depersonalization changes as the resident progresses through the program highlighting the need for interventions at 6 months.
- Facilitation of the support group for IM changed in September, which may have affected rapport and comfort with an established facilitator.
- Residents had high satisfaction with no more than an hour-long session

### Next Steps and Sustainability

- Small group review to identify ideal length, structure, and content
- Customized toolbox to allow residents to self-select appropriate strategies
- Partnership with wider wellness committee within organization

## Project Management Plan

Begin completing this Project Management Plan at Meeting One and complete it with your team following Meeting One, i.e., by November 2017. Teams will have the opportunity to review/revise their Project Management Plans throughout the 18-month Initiative at each of the on-site meetings. The collective data from all of the teams' completed project management plans will be invaluable as we share and learn from this collaborative experience.

**Team:** Advocate Illinois Masonic Medical Center **Project Title:** Examining the Impact of a Support Group on Burnout and Resilience in Graduate Medical Trainees

I.	<p>Vision Statement (markers of success by March 2019; Refer to Toolkit #5)</p>	<p><i>To create a culture in the clinical learning environment such that resident physicians and those supporting resident training are well-versed in identification, management and available resources to address and promote well-being.</i></p>
II.	<p>Team Objectives (‘needs statement,’ project requirements, project assumptions, stakeholders, etc.)</p>	<p><i>Our primary aim was to establish and sponsor resident support groups (SG) at one metropolitan hospital across three departments: Family Medicine (FM), Obstetrics/Gynecology (OB), Internal Medicine (IM).</i></p> <p><i>Objectives</i></p> <p><i>Establish a safe atmosphere to process professional challenges</i></p> <p><i>Develop coping skills to manage burnout</i></p> <p><i>Create a template for work-life balance and healthy lifestyle choices</i></p>
III.	<p>Team Members &amp; Accountability (list of team members from Toolkit #6 and who is accountable for what)</p>	<ul style="list-style-type: none"> <li>• <i>Principal Investigator: Mohammed Samee, MD, RN, FACP</i></li> <li>• <i>Gina Schueneman, DO, Program Director, Family Medicine, AIMMC; Sub-Investigator,</i></li> </ul>

		<p><i>administrative oversight</i></p> <ul style="list-style-type: none"> <li>• <i>Leah Delfinado, MD, Program Director, OB/GYN, AIMMC, Sub-Investigator, administrative oversight</i></li> <li>• <i>Marion Gonzalez-MD, Internal Medicine Resident, AIMMC, Sub-Investigator, background, methodology, resident-champion</i></li> <li>• <i>Faizan Chaudhary Ahmed-MD, Internal Medicine Resident, AIMMC, Sub-Investigator, background, methodology, resident-champion</i></li> <li>• <i>Monica Lai, OB-GYN Resident, AIMMC, Sub-Investigator, resident champion, data-entry</i></li> <li>• <i>Maggie Pham, OB-GYN Resident, AIMMC, Sub-Investigator, resident champion, data-entry</i></li> <li>• <i>Amy Portacci, Family Medicine Resident, AIMMC, Sub-Investigator, resident champion, data-entry</i></li> <li>• <i>Daniel Armbrust, Family Medicine Resident, AIMMC, Sub-Investigator, resident champion, data-entry</i></li> <li>• <i>Elizabeth Rutha, Psy D. Manager, Clinical Services and Training, AIMMC, Sub-Investigator, background, methodology</i></li> <li>• <i>Chris Kabir, PCOR Coordinator, Advocate Health Care, Sub-Investigator, methodology, statistical analysis</i></li> <li>• <i>Agness Gregg, Program Administrator, Internal Medicine, AIMMC, Sub-Investigator, administrative oversight, analysis</i></li> </ul>
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IV.	Necessary Resources (staff, finances, etc.)	<p><i>Finances: \$25,340 [\$16,800 (2018), \$8540 (2019)]</i></p> <p><i>Staff: Team members, residency coordinators, behavioral health facilitators</i></p>
V.	Measurement/Data Collection Plan	<p><i>Maslach Burnout Inventory Human Services Survey (MBI HSS)</i></p> <p><i>Connor-Davidson Resilience Scale 25 (CD-RISC-25)</i></p> <p><i>The AIMMC Support Survey was developed to examine overall experience and satisfaction every 6 months.</i></p>
VI.	Stakeholder Communication Plan (may be helpful to draft a flow chart of team members & senior management; Refer to Toolkits #2 and #4)	<p><i>Stakeholders included residents, BHS, support staff, administration, GME, and funding sources.</i></p> <p><i>Stakeholder communication was centralized through the PI.</i></p> <ol style="list-style-type: none"> <li><i>1. Resident Champions (team members)</i> <ol style="list-style-type: none"> <li><i>a. FM Residents</i></li> <li><i>b. OB-GYN Residents</i></li> <li><i>c. IM Residents</i></li> </ol> </li> <li><i>2. BHS (E. Rutha)</i> <ol style="list-style-type: none"> <li><i>a. FM and OB-GYN faculty BHS facilitator</i></li> <li><i>b. IM BHS Post-Doctoral Fellow</i></li> </ol> </li> <li><i>3. Residency Program Directors and A. Gregg</i> <ol style="list-style-type: none"> <li><i>a. Residency Coordinators</i></li> <li><i>b. C. Kabir</i></li> </ol> </li> <li><i>4. Administration, Funding, GME (PI)</i></li> </ol>

VII.	Potential Challenges (engagement, budget, time, skills gaps, etc.; Refer to Toolkit #3)	<i>Lack of resources (budget, time)</i> <i>Resident buy-in (confidentiality, trust, safety, protected time)</i> <i>Engagement of all residency programs</i>
VIII.	Opportunities for Scholarly Activity (potential publications, conference presentations, etc.)	<i>AIAMC</i> <i>JGME</i> <i>JGIM</i> <i>Academic Medicine</i> <i>AAFP</i>
IX.	Markers (project phases, progress checks, schedule, etc.; Refer to <i>NI V Roadmap to 2019</i> which will be presented at Meeting One)	<i>See road map.</i>

Sections X thru XIII to be completed first quarter 2019 for “Final Proceedings” booklet:

X.	Success Factors	<i>The most successful part of our work was.... implementation of support groups, increased awareness among faculty and GME.</i>  <i>We were inspired by.... engagement of our residents to participate.</i>
XI.	Barriers	<i>The largest barrier encountered was.... protected time for residents to participate and lack of a “one-size-fits-all” support group.</i>  <i>We worked to overcome this by.... plan to have small groups review to identify ideal length, structure, and content.</i>
XII.	Lessons Learned	<i>The single most important piece of advice to provide another team embarking on a similar initiative would be.... customized toolbox to allow residents to self-select appropriate</i>

		<i>strategies</i>
XIII.	Expectations Versus Results	<p><i>On a scale of 1 to 10 (with "1" meaning nothing and "10" meaning everything), how much of what you set out to do was your team able to accomplish?</i></p> <p><i>1 2 3 4 5 6 7 8 9 <u>10</u></i></p>
XIV.	Sustainability and Next Steps	<p>What does your CEO need to know to help keep your work sustainable?</p> <p><i>Institutional and localized GME structures need closer partnership with wider wellness committee within organization</i></p>



# Wellbeing In Our Family Medicine Residency:

## Curricular Content and Experiences

J Gravdal, K Koo, N Pagoria, P Piper, H Razzaq

AdvocateAuroraHealth

Advocate Health Care Aurora Health Care®



NI VI Meeting #4 Tucson, AZ March 2019

### INTRODUCTION: Background

- Resident and faculty wellbeing and burnout have been recognized as an important subset of physician wellbeing and burnout.
- Faculty serve as role models both explicitly and via the 'Hidden curriculum'
- Residency is an opportune time to prepare residents with the skills to assess and foster their own wellbeing and influence the organizations in which they work.

### AIM: Purpose/Objectives

Increase awareness of the importance of faculty and resident wellbeing and implement a curriculum to improve knowledge of the importance of intentional focus on wellness and development of lifelong skills.

### METHODS: Interventions/Changes

#### Who (Subjects)

- Family Medicine Residency - Ongoing
- Organization (Hospital and System)
- ALGH Medical Staff

#### Interventions/Changes

- Institution of FMR Wellbeing Committee
- Curriculum development
- Implementation of curriculum

### METHODS: Measures/Metrics

#### Measure #1: FMR

- Retreats
- Wellness Wednesdays
- Self-care policy
- Wheel of life
- Huddle tools

#### Measure #2: Medical Staff

- Physician Wellness Committee
- Physician Wellness Week

#### Measure #3: Organization

- System Wellness Committee

### METHODS: Curriculum/Tools

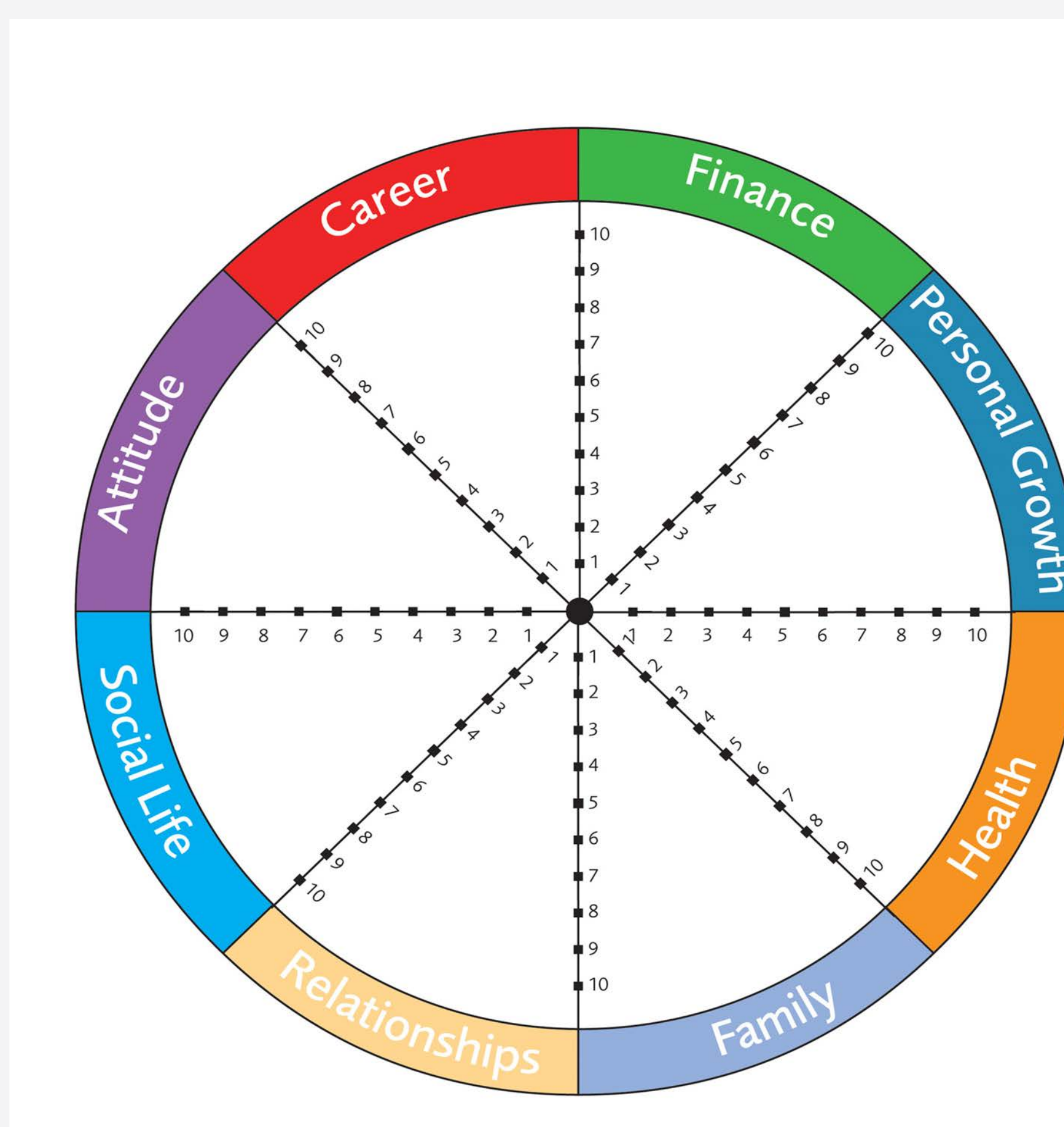
#### Curriculum

- Didactics
- Experiential learning
  - Retreats
  - Narrative medicine/Story telling
  - Mayo Wellbeing Index
  - Wheel of life – Individual and program tool
- Resources

#### I'M SAFE

- I** Illness – Do I have any symptoms?
- M** Medications – Have I been taking any Rx or OTC drugs?
- S** Stress – Am I under psychological pressure – from the job, from family, from financial concerns, from health concerns?
- A** Alcohol – Have I been drinking in the last 8 hrs/last 24 hrs?
- F** Fatigue – Am I tired and not adequately rested?
- E** Eating – Am I adequately nourished?

#### Wheel of Life



### RESULTS: Continued

#### Measure #1: FMR

- Participation
- Perception
- Progress toward a curriculum to be reviewed by PEC

#### Measure #2: Hospital Medical Staff

- Physician Wellness Week (included residents)

#### Measure #3: Organization

- System Wellness Committee
- System GME Director of Wellbeing, Academic Affairs

### DISCUSSION: Barriers & Strategies

#### Key Findings

- Resident and Faculty Wellbeing is important at many levels
- The system recognizes the importance
- Individuals have unique needs and perceptions at any given time.
- There are multiple overlapping initiatives amongst different departments with similar goals but working in silo's

#### Speed bumps

- Transitions in and lack of support from Research Department
- System merger
- Epic transition 12/1/2019
- Departmental Silos

#### Limitations

- Unintentionally, our work defaulted to Family Medicine only
- Competing equally important initiatives for team members time/energy

#### Next Steps and Sustainability

- Continue to develop and evaluate the FM curriculum
- Collaborate with other residencies

# Physician Attitudes about Professionalism at ALGH

K. Koo MD, H. Razzaq MD, N. Pagoria MD, J. Brom MD, J. Gravidal MD

Department of Family Medicine, Advocate Lutheran General Hospital



NI VI Meeting #4 Tucson, AZ March 2019



## INTRODUCTION: Background

- The ACGME defines professionalism as demonstrating excellence, humanism, accountability, and altruism through clinical competence, effective communication, and ethical behavior
- No consensus has been reached on a definition and there is also difficulty generating a curriculum and learning environment that foster the development of professionalism in residents in training
- In 2014, the ALGH Physician Commitment to Professionalism (PCP) was developed to provide specific behavioral oriented definitions that physicians could model
- This study examines what impact this document had on physician attitudes towards professionalism at ALGH

### References

- Brainard AH and Brislen HC. Learning professionalism: A view from the trenches. Acad Med. 2007;82:1010-1014.
- Ludwig S and Day S. New standards for resident professionalism: discussion and justification. [https://www.acgme.org/Portals/0/PDFs/jgme-11-00-47-51\[1\].pdf](https://www.acgme.org/Portals/0/PDFs/jgme-11-00-47-51[1].pdf)



Image: The Commitment to Professionalism statement that all team members sign.

## RESULTS: Continued

Gender	Status (attending vs. resident)
Stat sig questions (p < 0.5):	Stat sig questions (p < 0.5):
Q17 (Give full and undivided attention to the task at hand)	Q17 (Give full and undivided attention to the task at hand)
- Always M > F; Often and Sometimes M < F	- A > R
- P 0.001	- P 0.017
Q18 (Make eye contact, say hello, introduce myself by name and role, and explain what will happen)	Q30 (Use resources wisely seeking just and cost-effective distribution of finite resources)
- Always M > F; Often and Sometimes M < F	- Always and Often A > R
- P 0.27	- Sometimes and Rarely A < R
Q24 (Build trust and resolve conflicts promptly)	- P 0.012
- Always and Sometimes M > F; Often M < F	
- P 0.49	
Q33 (Contribute to Department, Hospital and System goal achievement)	
- Always M > F; Often M < F; Sometimes and Never M = F	
- P 0.25	
Q48 (Give full and undivided attention to the task at hand)	
- Always M > F; Often and Sometimes M < F	
- P 0.016	
Q56 (Maintain a professional setting and healing atmosphere by reducing noise and appropriately using electronic devices)	
- Always and Sometimes M > F; Often M < F	
- P 0.014	
Q62 (Honor and follow through on my commitments; always vs. often)	
- Always M > F; Often M < F	
- P 0.025 for 2 sided; p 0.012 for 1 sided	
Specialty	Status (attending vs. resident)
Stat sig questions (p < 0.5):	Stat sig questions (p < 0.5):
Q14 (Do you know of ALGH's Medical Staff Commitment to Professionalism)	Q17 (Give full and undivided attention to the task at hand)
- Primary care > Specialty	- A > R
- P 0.037	- P 0.017
Q48 (Give full and undivided attention to the task at hand)	Q30 (Use resources wisely seeking just and cost-effective distribution of finite resources)
- Always PR < Sp	- Always and Often A > R
- Often and Sometimes PR > Sp	- Sometimes and Rarely A < R
- P 0.031	- P 0.012

Image: All significant results (P<0.5) based on survey questions.

## Aim/Purpose/Objectives

To establish a definition of professionalism at ALGH and determine what impact signing the PCP had on professional attitudes through surveying all active attending and resident physicians.

## METHODS: Interventions/Changes

### Subject Demographics

All attending physicians who have active appointments to the medical staff at ALGH as well as all resident physicians and fellows that are actively enrolled in hospital-sponsored academic GME programs received the survey.

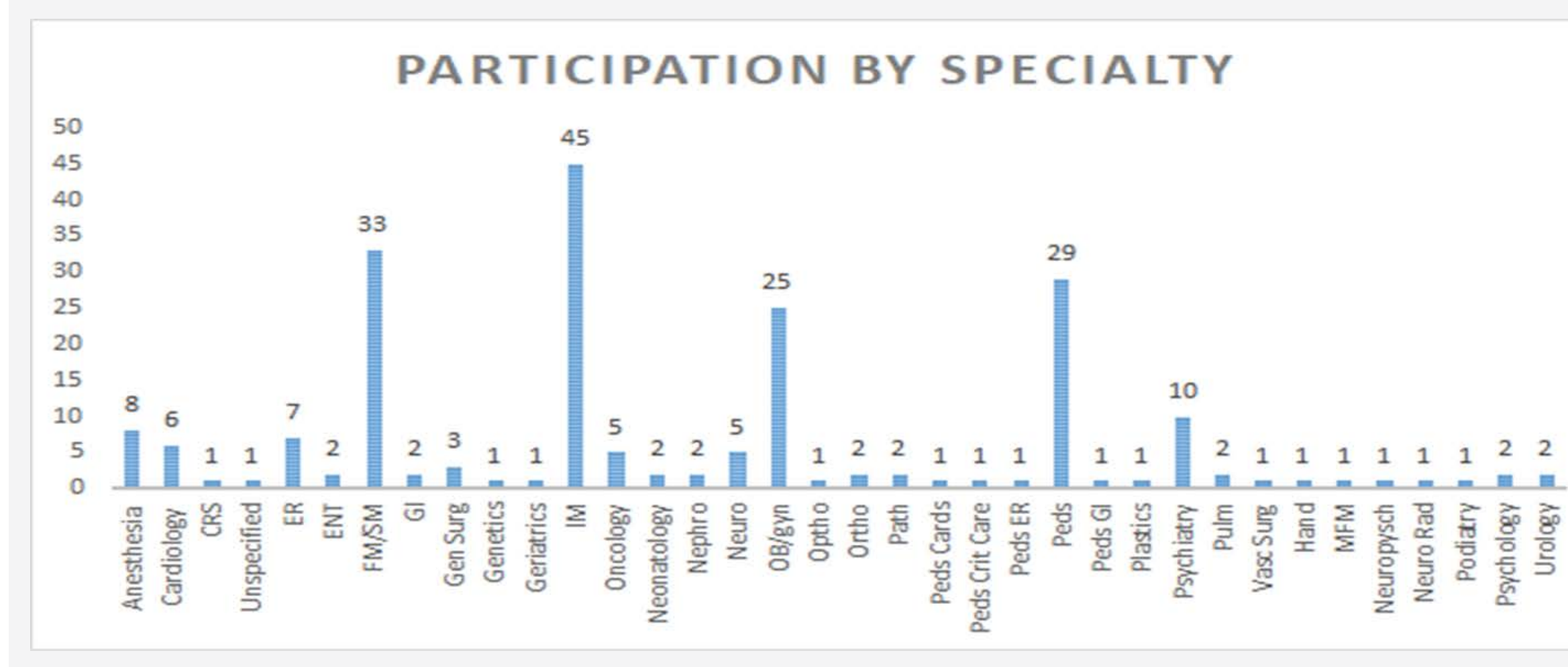
### Study Design

The electronic survey was created through the survey software called Qualtrics™. It was then emailed to all the subjects via their hospital-associated email addresses. Anonymous responses were gathered during three waves of emailing the link to the survey over period of 10 weeks (?).

### Statistical Analysis

Descriptive statistics (means and standard deviations) were reported for all continuous variables and frequencies for all categorical variables. All descriptive analyses will be performed using SPSS for Windows, version 22.0 (SPSS Inc., Chicago, IL).

## RESULTS



## Discussion: Barriers & Strategies

### Conclusions:

- Attending participation surpassed resident participation significantly
- Gender distribution was more equal
- In terms of specialty, primary care attending and resident participation was the highest
- There was no statistically significant difference between attending and resident awareness of the PCP
- Attendings and particularly male attendings perceived exhibiting professional behaviors more often
- The professional behavior most often observed was giving one's full and undivided attention to the task at hand

### Limitations:

- limited participation and resulting statistically significant data

### Next Steps:

- Based on further analysis of survey results, construct comprehensive definitions of professionalism at ALGH
- Determine what factors may be hindering the implementation of professionalism in the workplace
- Determine whether a different tool is needed in order to improve understanding and implementation of professionalism at ALGH

## Project Management Plan

Begin completing this Project Management Plan at Meeting One and complete it with your team following Meeting One, i.e., by November 2017. Teams will have the opportunity to review/revise their Project Management Plans throughout the 18-month Initiative at each of the on-site meetings. The collective data from all of the teams' completed project management plans will be invaluable as we share and learn from this collaborative experience.

Team: Advocate Lutheran General Hospital\_\_\_\_\_

Project Title: Tomorrow Begins Today\_\_\_\_\_

I.	<p>Vision Statement (markers of success by March 2019; Refer to Toolkit #5)</p>	<p><i>Increase awareness at multiple levels by March 2019 of</i></p> <p><i>1- The importance of faculty and resident wellbeing</i></p> <p><i>2- Strategies to optimize physician wellbeing at ALGH and at Advocate HealthCare</i></p>
II.	<p>Team Objectives (‘needs statement,’ project requirements, project assumptions, stakeholders, etc.)</p>	<p><i>1-Baseline ACGME Inventory of Elements of Institutional Wellbeing – C-suite, Program Directors, Residents, Faculty, Medical Staff Leadership.</i></p> <p><i>2-Survey on impact of our Physician Commitment to Professionalism as a component of and marker of wellbeing.</i></p> <p><i>3-Assessment of hospital and system resources.</i></p> <p><i>4-Development of Wellbeing Curriculum for the Family Medicine Residency</i></p>
III.	<p>Team Members &amp; Accountability (list of team members from Toolkit #6 and who is accountable for what)</p>	<p><i>J. Gravdal</i></p> <p><i>K. Koo</i></p> <p><i>P. Piper</i></p> <p><i>H. Razzaq</i></p> <p><i>N. Pagoria</i></p>

IV.	Necessary Resources (staff, finances, etc.)	Finances: We were fortunate to receive grant dollars to help defray the expenses of our work and to be able to access Departmental Restricted Funds. Time: We scheduled weekly meetings to reflect on progress and set goals.
V.	Measurement/Data Collection Plan	Survey – Qualtrix survey both paper and electronic.  ACGME Institutional Inventory  Wheel of Life – Qualitative measure for Family Medicine Residency  Family Medicine Residency Curriculum development with PEC oversight.
VI.	Stakeholder Communication Plan (may be helpful to draft a flow chart of team members & senior management; Refer to Toolkits #2 and #4)	Initial communication through meetings to complete ACGME Baseline Inventory of Elements of Institutional Wellbeing Ongoing communication with GME and hospital leadership Plan for final dissemination of our work
VII.	Potential Challenges (engagement, budget, time, skills gaps, etc.; Refer to Toolkit #3)	Unable to recruit resident from another program. Dr. L ‘burns out’, leaves practice at ALGH, NI VI team becomes FM only instead of multispecialty/multiprogram.  Multiple initiatives in physician well-being at ALGH and within Advocate. Challenge of identifying/agreeing on a single instrument to measure WellBeing  Research Institute challenges 1-Promised qualitative analysis but couldn’t provide. 2-Delay in getting analytic support from Research Institute 3-Contact at Research Institute left the organization April 2018 without good handoff to us or her replacement. Replacement unable to locate data. Difficulty connecting with research replacement to work on data and manuscript.  System merger  Did not receive year 2 grant funding to support our work and travel.

		EMR transition from Clinicare to Epic – planning and education October and November. Two of our team members are Superusers with significant time commitments and obligations. Epic go-live December 1, 2018.  Residency recruitment season.
VIII.	Opportunities for Scholarly Activity (potential publications, conference presentations, etc.)	Posters at our annual Family Medicine Research Forum. Poster at regional The Future of Primary Care: Hot Topics and Challenges Meeting 9/14/18. Paper in draft form for Professionalism and Wellbeing Survey.
IX.	Markers (project phases, progress checks, schedule, etc.; Refer to NI V Roadmap to 2019 which will be presented at Meeting One)	Completion of ACGME Inventory Completion of Professionalism Study Inventory of program, hospital and system activities and resources to support wellbeing Review of instruments to measure wellbeing

Sections X thru XIII to be completed first quarter 2019 for “Final Proceedings” booklet:

X.	Success Factors	<i>The most successful part of our work was.... Making sure the conversation about physician wellbeing was at the forefront at multiple levels. Quarterly Wellness Wednesdays the the Family Medicine Residency. Despite multiple challenges (an assaults to our wellbeing) we kept the work and conversations going. We were inspired by.... Conversations about various initiatives in individual programs and beginning steps toward a more systematic approach.</i>
XI.	Barriers	<i>The largest barrier encountered was....</i> The transition to EPIC consumed time, attention and energy and was a source of burnout.  Turnover and lack of support by our research department delayed progress on our data analysis and paper preparation.  NI VI team members had many other (often competing) commitments.

		<i>We worked to overcome this by... Persevering and raising the concerns to the highest level</i>
XII.	Lessons Learned	<i>The single most important piece of advice to provide another team embarking on a similar initiative would be.... Have a clear vision, both aspirational and pragmatic, and PERSEVERE understanding that Wellbeing is not an issue to be solved but to be addressed with a long-term commitment by both individuals and organizations.</i>
XIII.	Expectations Versus Results	<p><i>On a scale of 1 to 10 (with "1" meaning nothing and "10" meaning everything), how much of what you set out to do was your team able to accomplish?</i></p> <p><i>1 2 3 4 5 6 7 8 9 10</i></p>
XIV.	Sustainability and Next Steps	<p><i>What does your CEO need to know to help keep your work sustainable?</i></p> <p>Burnout is real, is really expensive and is actionable.</p> <p>Addressing Resident and Physician Wellbeing has a positive ROI on finances, patient safety and patient satisfaction.</p> <p>Recognize that the EMR will continue to be a primary source of physician burnout that needs to be addressed in many ways at many levels.</p> <p>There is a need to incorporate Wellbeing in the Strategic Plan.</p>

# Bridging effective communication of patient assignments between physicians and nursing to reduce stressors.



Niren Raval, DO; Teresa Smith, MBA; Rae Pierce; Greg Young, MBA; Jerome Dayao, MSN, RN, NEA-BC, CCRN;  
 Nanette Buenavidez, MSN/ED, RN, Joanne Alexander, RN; Ma. Christina Avendano, BSBA, RN; Kedar Challakere, MD;  
 Natalie Artinian, DO; Regina Lee, DO; Katherine Oakley, MD; Julie Smithwick, DO; Rory Smith, MD



NI VI Meeting #4 Tucson, AZ March 2019

## INTRODUCTION: Background

A survey was conducted to determine issues/concerns that might be affecting health care provider's well-being and could be addressed via an intervention. The prominent issue identified was nursing does not know the correct team assignments as patients are reassigned overnight after being admitted. An unresolvable technological system breakdown is at the root of the disconnect and has resulted in a high volume of erroneous calls from nursing to provider teams. Both licensed nurses and physicians identified this situation as a significant issue they face that is contributing to stress in the work environment.

## Aim/Purpose/Objectives

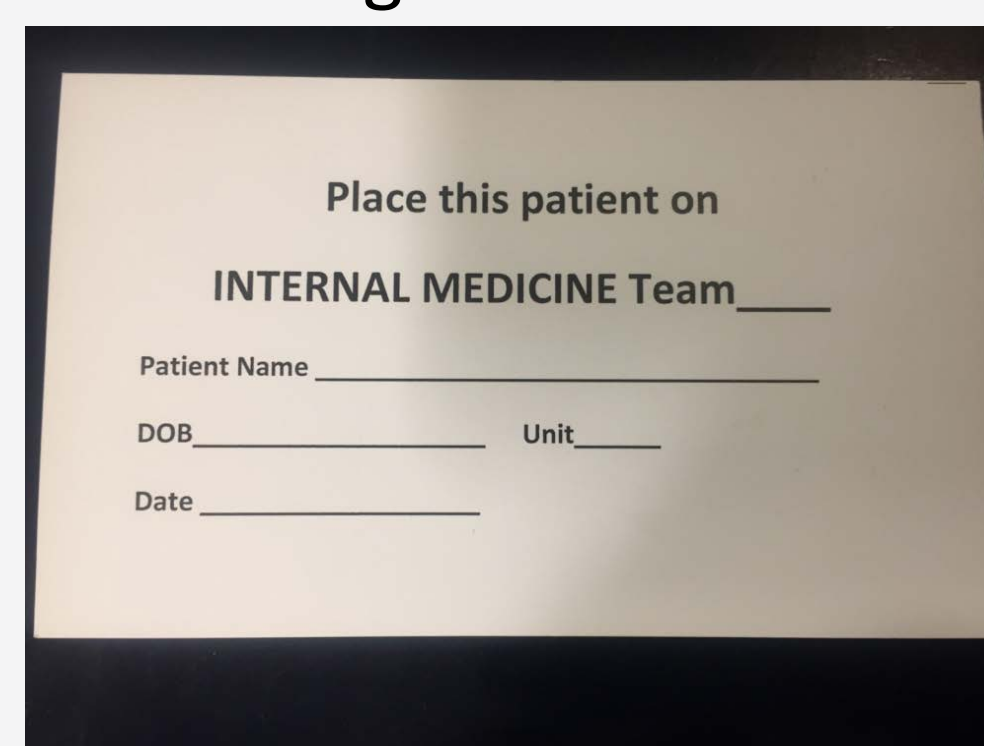
- Study and analyze potential causes of stress and burnout between residents and nursing in a clinical setting.
- Design a research study to test intervention to reduce stressors and improve measurable well-being.
- Conduct research study, analyze results, and publish findings.

## METHODS:

### Interventions/Changes/Measures/Metrics

- Two nursing units (a test unit and a control unit) were used to conduct study. In addition, two Internal Medicine Teams (a test team and a control team) were used.
- A survey to measure stressors was sent out via surveymonkey to licensed nurses on the test and control unit (n=60), as well as physician residents on the test and control teams (n=8) before (t1) and after (t2) study interventions.
- The survey consisted of a modified Maslach Burnout Inventory, an abbreviated Holmes and Rahe Scale Stress Scale, and two supplemental perception questions on the number of calls made per shift and the amount of time spent in order to identify the correct physician teams for a patient.
- The abbreviated Maslach Burnout Inventory also included three additional questions on satisfaction in medicine as a career choice.
- Admitting Internal Medicine test team completed Team Assignment Index Card to be given to Hospital Unit Assistant (HUA) on the patient units throughout the hospital upon team reassignment with the exception of the control nursing unit. HUA updated the outside of patient chart with correct Team Assignment.

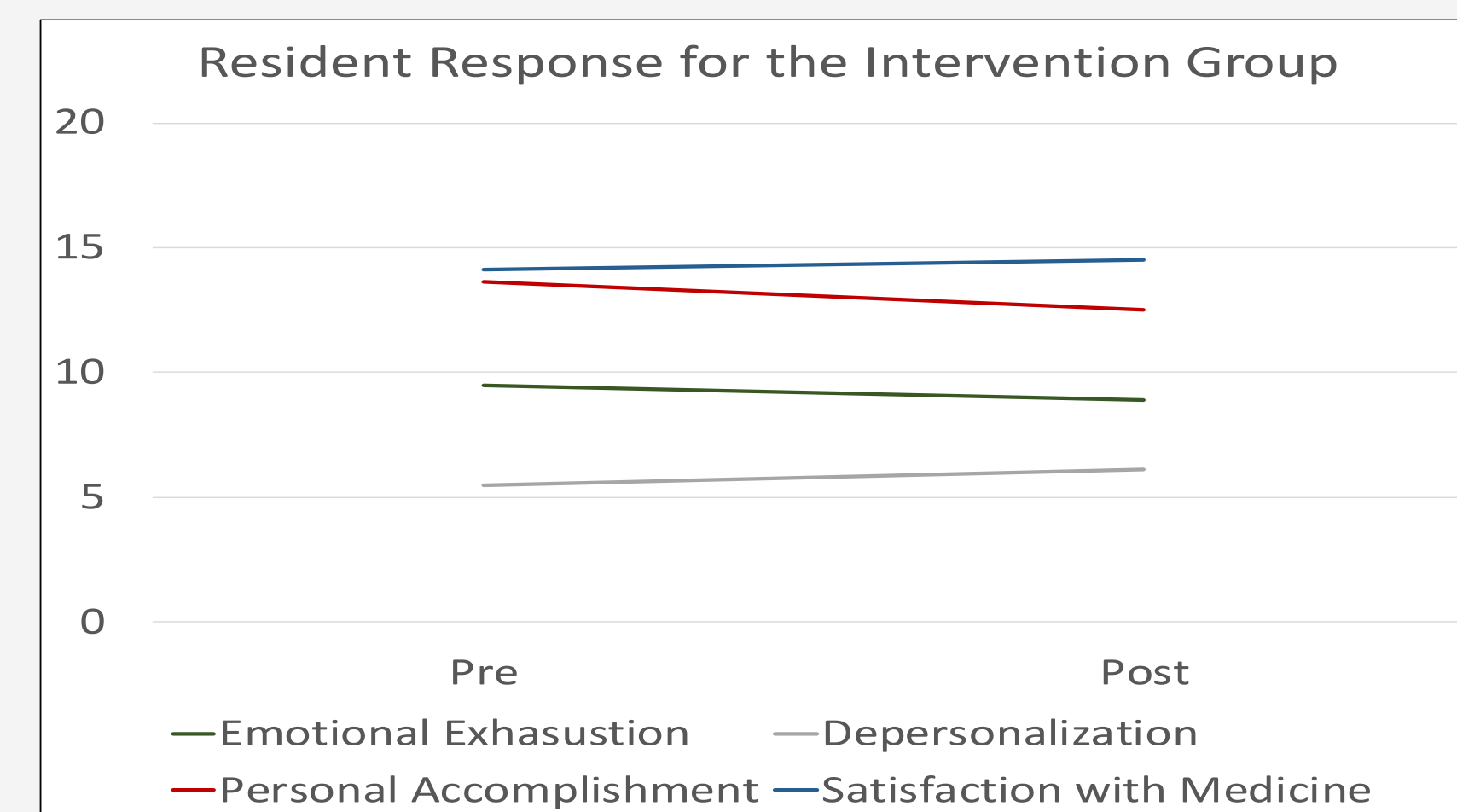
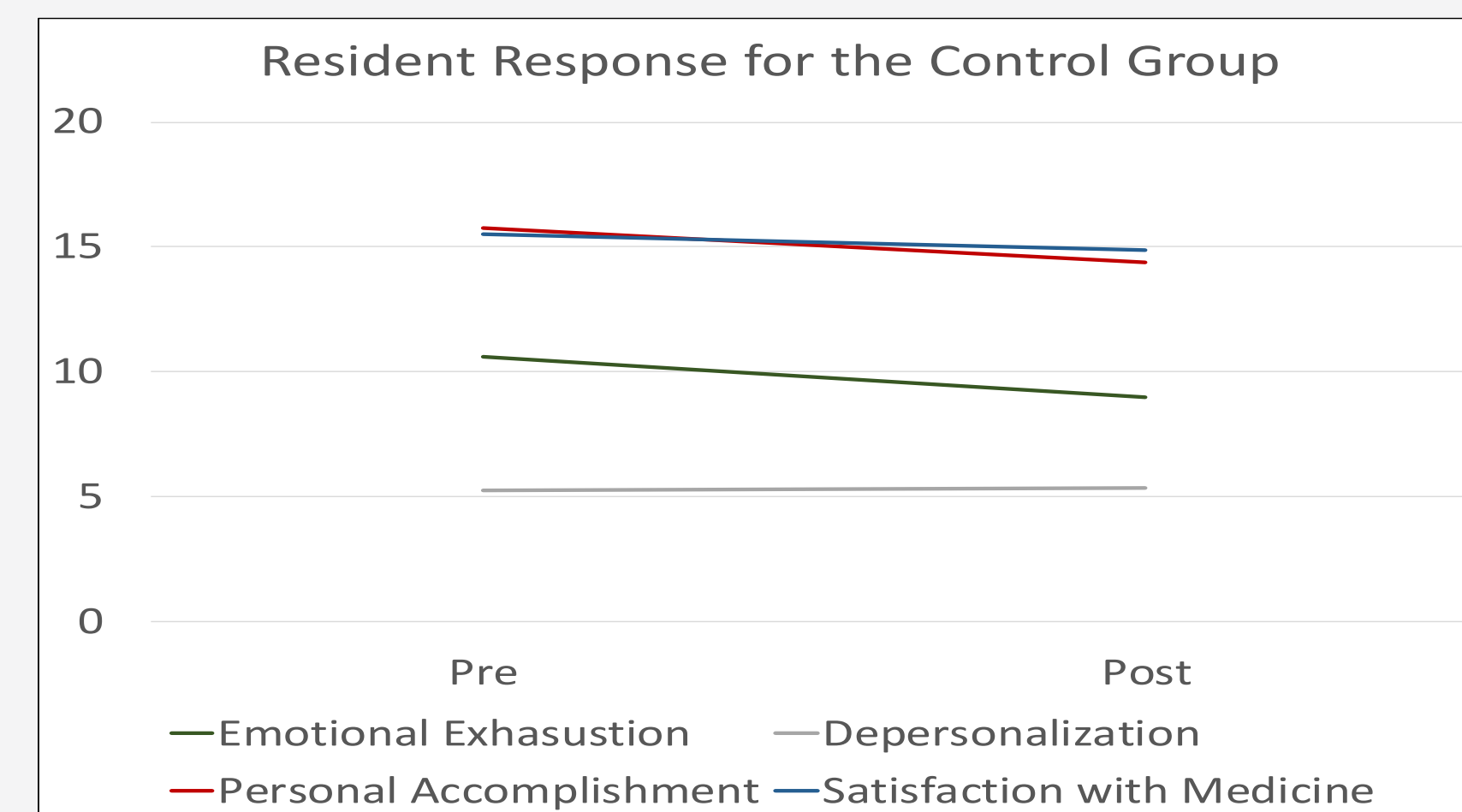
Team Assignment Index Card:



## RESULTS

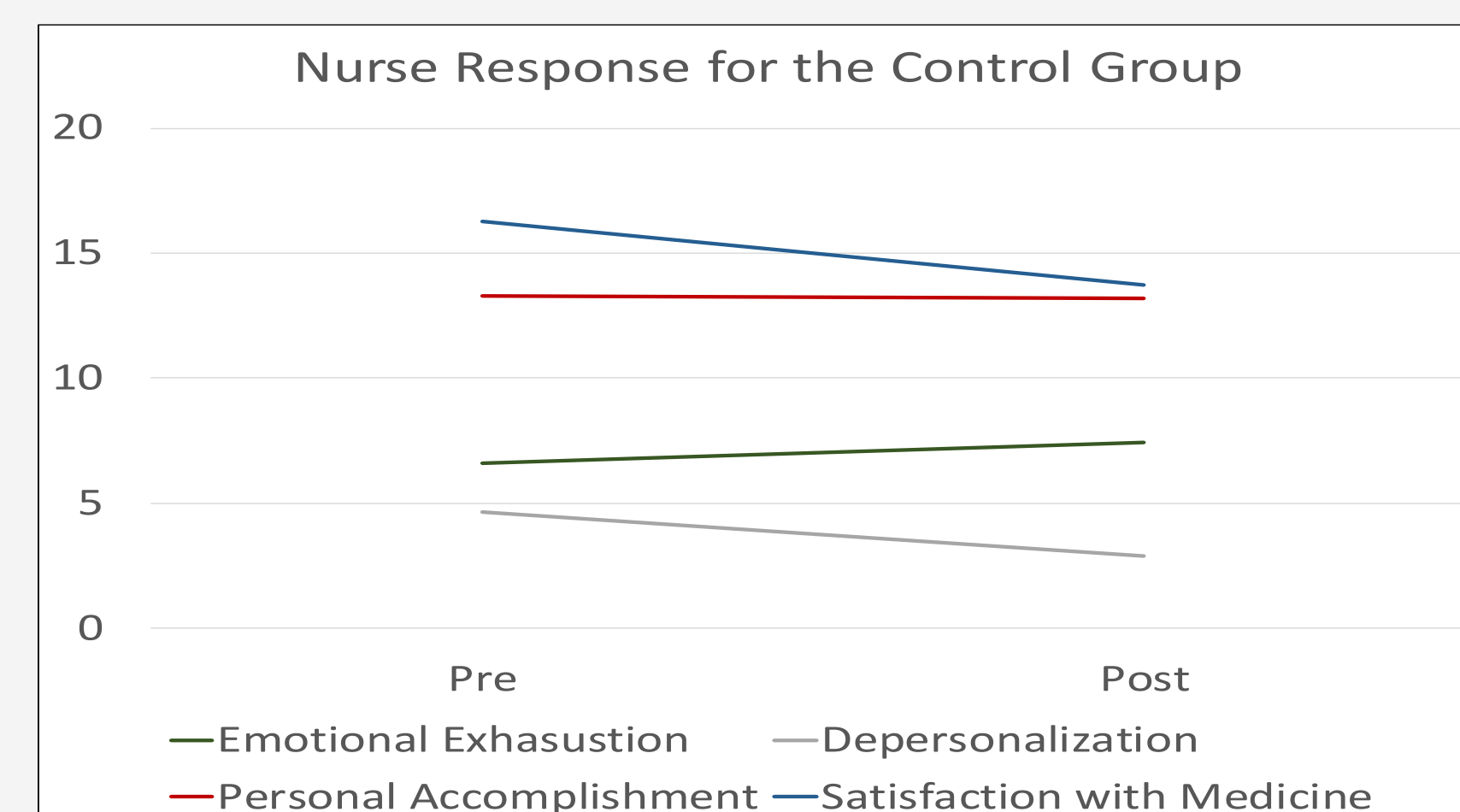
There was no statistically significant results from the surveys conducted. However we did have several promising trends that may warrant further study.

A total of 16 residents participated in the pre and post survey.

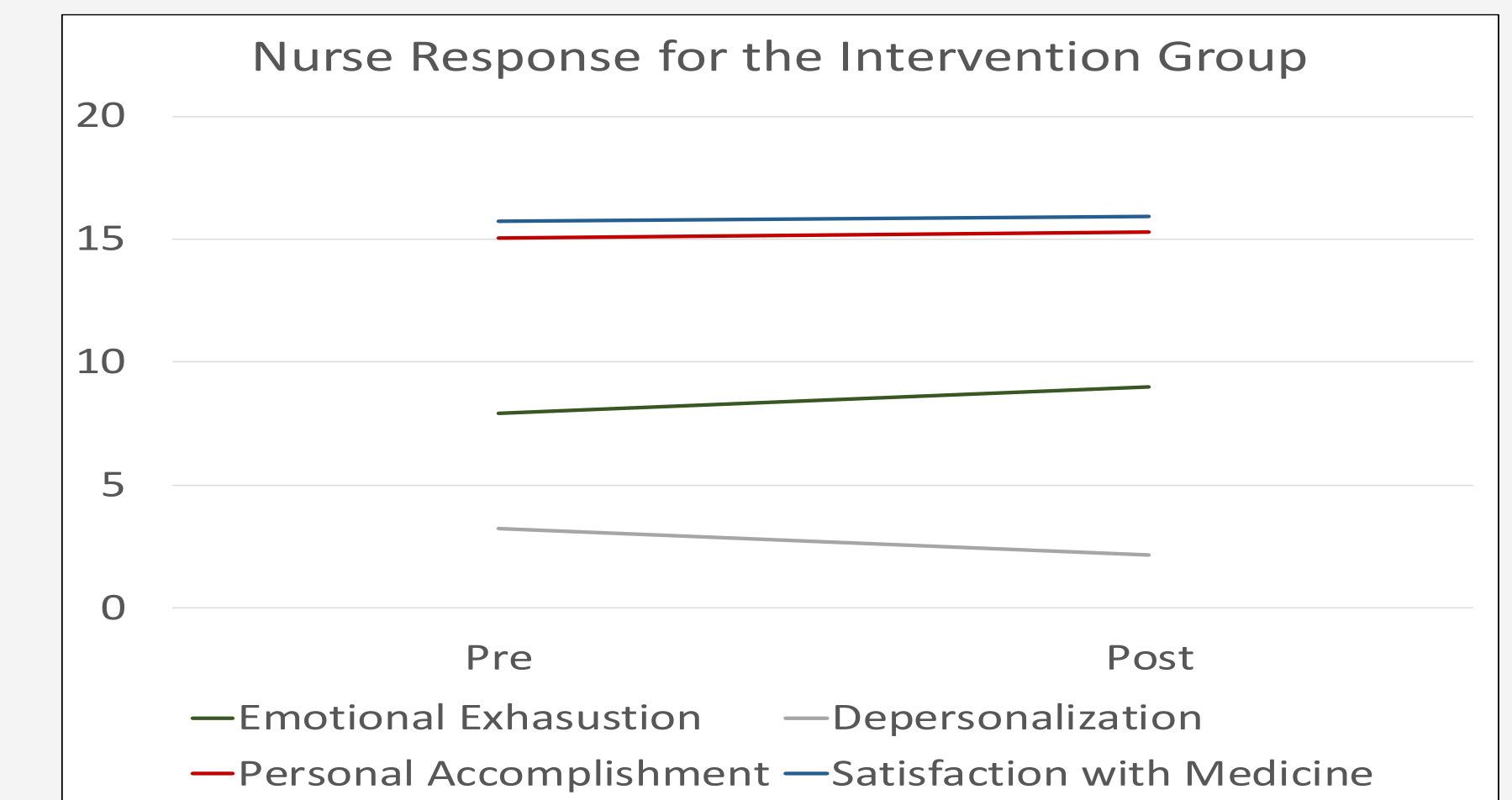


The scores for the three subsets of the Maslach Burnout Inventory showed similarities between the control and test teams. The study showed a positive trend in the Satisfaction with Medicine scores with the test team improving slightly while the control team experienced a decline.

35 nurses participated in the pre-survey; 24 nurses participated in the post-survey.



## RESULTS: Continued



The scores for Emotional Exhaustion and Depersonalization showed similarities between the control and test units. The study showed a positive trend in Personal Accomplishment and Satisfaction in Medicine scores with the test unit improving slightly while the control team experienced a decline.

Changes in scores between the Pre and Post surveys.

Change in MBI Scores from Pre to Post	Resident		Nurse	
	Control	Intervention	Control	Intervention
Emotional Exhaustion	-1.63	-0.63	0.85	1.10
Depersonalization	0.13	0.63	-1.76	-1.10
Personal Accomplishment	-1.38	-1.13	-0.08	0.26
Satisfaction with Medicine	-0.63	0.38	-2.54	0.17

## Discussion: Barriers & Strategies

### Key Findings

- No statistical significance between control and test groups
- Study detected some positive trends in three areas

### Limitations

- The sample size was too small
- There were challenges with subject participation in the study and timely survey completion.

### Next Steps and Sustainability

- Positive trends may warrant a larger pilot study to ascertain if the intervention is effective and sustainable

## Project Management Plan

Begin completing this Project Management Plan at Meeting One and complete it with your team following Meeting One, i.e., by November 2017. Teams will have the opportunity to review/revise their Project Management Plans throughout the 18-month Initiative at each of the on-site meetings. The collective data from all of the teams' completed project management plans will be invaluable as we share and learn from this collaborative experience.

Team: Arrowhead Regional Medical Center

Project Title: Stressors and Well-Being Improvement Project

I.	Vision Statement (markers of success by March 2019; Refer to Toolkit #5)	<i>To study the effects of systematic controls and flexibility surrounding transitions of care communications in our hospital setting and its effects on the well-being and burnout of resident physicians and nursing.</i>		
II.	Team Objectives (‘needs statement,’ project requirements, project assumptions, stakeholders, etc.)	<ol style="list-style-type: none"> <li>1. Study and analyze potential causes of stress and burnout between residents and nursing in a clinical setting.</li> <li>2. Design a research study to test intervention to reduce stressors and improve measureable well-being.</li> <li>3. Conduct research study, analyze results, and publish findings.</li> </ol>		
III.	Team Members & Accountability (list of team members from Toolkit #6 and who is accountable for what)	Name/Credentials	Position/Title	E Mail Address
		Teresa Smith, MBA	Team Leader, GME Manager	<a href="mailto:SmithTe@armc.sbcounty.gov">SmithTe@armc.sbcounty.gov</a>
		Niren Raval, DO	Interim DIO, Family Medicine PD	<a href="mailto:RavalN@armc.sbcounty.gov">RavalN@armc.sbcounty.gov</a>
		Greg Young, MBA, PMP	Assistant Team Leader, GME Analyst	<a href="mailto:Younggr@armc.sbcounty.gov">Younggr@armc.sbcounty.gov</a>
		Rae Pierce	GME Analyst	<a href="mailto:PierceRa@armc.sbcounty.gov">PierceRa@armc.sbcounty.gov</a>
		Jerome Dayao, MSN, RN, NEA-BC, CCRN	Chief Nursing Officer	<a href="mailto:Jerome.Dayao@armc.sbcounty.gov">Jerome.Dayao@armc.sbcounty.gov</a>
		Nanette Buenavidez, MSN/ED, RN	Associate Chief Nursing Officer	<a href="mailto:BuenavidezN@armc.sbcounty.gov">BuenavidezN@armc.sbcounty.gov</a>
		Joanne Alexander, RN	Nurse Manager	<a href="mailto:AlexanderJ@armc.sbcounty.gov">AlexanderJ@armc.sbcounty.gov</a>
		Ma. Cristina Avendano, BSBA, RN	Nurse Manager	<a href="mailto:MaCristina.Avendano@armc.sbcounty.gov">MaCristina.Avendano@armc.sbcounty.gov</a>
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		<table border="1"> <tr> <td></td> <td>Director</td> <td></td> </tr> <tr> <td>Regina Lee, DO</td> <td>Psychiatry Resident</td> <td><a href="mailto:LeeRegi@armc.sbcounty.gov">LeeRegi@armc.sbcounty.gov</a></td> </tr> <tr> <td>Natalie Artinian, DO</td> <td>Psychiatry Resident</td> <td><a href="mailto:ArtinianNa@armc.sbcounty.gov">ArtinianNa@armc.sbcounty.gov</a></td> </tr> <tr> <td>Katherine Oakley, MD</td> <td>Family Medicine Resident</td> <td><a href="mailto:OakleyKa@armc.sbcounty.gov">OakleyKa@armc.sbcounty.gov</a></td> </tr> <tr> <td>Julie Smithwick, DO</td> <td>Internal Medicine Resident</td> <td><a href="mailto:SmithwickJ@armc.sbcounty.gov">SmithwickJ@armc.sbcounty.gov</a></td> </tr> <tr> <td>Rory Smith, MD</td> <td>Internal Medicine Resident</td> <td><a href="mailto:Rory.Smith@armc.sbcounty.gov">Rory.Smith@armc.sbcounty.gov</a></td> </tr> </table>		Director		Regina Lee, DO	Psychiatry Resident	<a href="mailto:LeeRegi@armc.sbcounty.gov">LeeRegi@armc.sbcounty.gov</a>	Natalie Artinian, DO	Psychiatry Resident	<a href="mailto:ArtinianNa@armc.sbcounty.gov">ArtinianNa@armc.sbcounty.gov</a>	Katherine Oakley, MD	Family Medicine Resident	<a href="mailto:OakleyKa@armc.sbcounty.gov">OakleyKa@armc.sbcounty.gov</a>	Julie Smithwick, DO	Internal Medicine Resident	<a href="mailto:SmithwickJ@armc.sbcounty.gov">SmithwickJ@armc.sbcounty.gov</a>	Rory Smith, MD	Internal Medicine Resident	<a href="mailto:Rory.Smith@armc.sbcounty.gov">Rory.Smith@armc.sbcounty.gov</a>
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Rory Smith, MD	Internal Medicine Resident	<a href="mailto:Rory.Smith@armc.sbcounty.gov">Rory.Smith@armc.sbcounty.gov</a>																		
IV.	Necessary Resources (staff, finances, etc.)	<ol style="list-style-type: none"> <li>1. Resident and faculty involvement from three core residency programs at ARMC (Family Medicine, Internal Medicine, and Psychiatry).</li> <li>2. Involvement of nursing administration, unit managers, and licensed nurses on two nursing units at the hospital.</li> <li>3. Financial support from administration for costs associated with basic participation in the initiative. Additional resources available on a case by case basis.</li> </ol>																		
V.	Measurement/Data Collection Plan	<ol style="list-style-type: none"> <li>1. Issues survey will be conducted to help identify and validate potential issues that might serve as the focus of potential interventions.</li> <li>2. Baseline assessment of both the test unit and teams and the control unit and teams to establish pre-intervention data (using an abbreviated Maslach Burnout Inventory as the primary assessment tool).</li> <li>3. Re-assess baseline assessment of both teams after the intervention to see if any significant reduction in burnout has occurred.</li> </ol>																		
VI.	Stakeholder Communication Plan (may be helpful to draft a flow chart of team members & senior management; Refer to Toolkits #2 and #4)	<ol style="list-style-type: none"> <li>1. We will be communicating in person through staff meetings and unit huddles as well as through email with nurses, residents, and faculty members. These communications will happen throughout the different stages of the intervention (before, during, and post intervention).</li> <li>2. Additionally, we will be conducting in-person briefings to other ancillary departments such as bed management, patient experience, patient safety team, information management, and hospital administration. The frequency will vary depending on level of importance and needs.</li> </ol>																		

VII.	<p>Potential Challenges (engagement, budget, time, skills gaps, etc.; Refer to Toolkit #3)</p>	<p><i>The project faces many significant challenges.</i></p> <ol style="list-style-type: none"> <li>1. <i>Time commitment of staff</i></li> <li>2. <i>Execution of a planned intervention</i></li> <li>3. <i>Support of key administrators</i></li> <li>4. <i>Sufficient financial resources</i></li> <li>5. <i>Capturing relevant data</i></li> <li>6. <i>Identifying a problem and intervention that can be tested by this project</i></li> </ol>
VIII.	<p>Opportunities for Scholarly Activity (potential publications, conference presentations, etc.)</p>	<p><i>ARMC plans to publish at least one peer reviewed research paper related to this project. We plan to share our results in the following ways:</i></p> <p><i>ARMC Academic Day Presentation</i>  <i>ARMC Resident Newsletter</i>  <i>AIAMC Meeting/posters/publication</i>  <i>Peer-reviewed journals and publications</i></p>
IX.	<p>Markers (project phases, progress checks, schedule, etc.; Refer to <i>NI V Roadmap to 2019</i> which will be presented at Meeting One)</p>	<p><i>Key Project Milestones include:</i></p> <ol style="list-style-type: none"> <li>1. <i>Completion of issues survey</i></li> <li>2. <i>Selection of problem and identification of potential interventions</i></li> <li>3. <i>Submission of IRB application to IRB committee</i></li> <li>4. <i>Present storyboard at AIAMC meeting two</i></li> <li>5. <i>Schedule testing of intervention</i></li> <li>6. <i>Execute intervention</i></li> <li>7. <i>Review results</i></li> <li>8. <i>Attend AIAMC meeting three</i></li> <li>9. <i>Prepare poster and final publication</i></li> <li>10. <i>Present final poster and presentation of results at AIAMC meeting four</i></li> </ol>

Sections X thru XIII to be completed first quarter 2019 for "Final Proceedings" booklet:

X.	Success Factors	The most successful part of our work was the collaboration between physicians and nurses throughout our project. Initially, the team sought to include nursing in the study to address well-being throughout the clinical care team. The collaboration was a great success for the project. The team was inspired by the shared goals of providing the best patient care as a team.
XI.	Barriers	<p>The largest barrier encountered was voluntary participation in the study itself. While we received positive feedback about our efforts, unfortunately about half of nurses opted out of participating in the survey from the start. Additionally, some nurses expressed concerns specific to the survey questions and a few also opted out after receiving the survey. Finally, the team experienced great difficulty in getting both physicians and nurses to complete the surveys in a timely manner.</p> <p>We were able to overcome some of the concerns by having discussions with those individuals and in some cases we were able to alleviate their concerns. We overcame the slow response rate by having consistent and timely follow-up with the participants.</p>
XII.	Lessons Learned	The single most important piece of advice to provide another team embarking on a similar initiative would be to look at doing the intervention on the entire service and not simply a couple of the teams. We had concerns about our sample size being too small on the physician side but we hoped to have a much larger sample from nursing. However, when half of the nurses on our control and test unit opted out, it really made our sample much too small. Therefore, if we had to do it again we would recommend doing the entire service and all nursing units.
XIII.	Expectations Versus Results	On a scale of 1 to 10 (with “1” meaning nothing and “10” meaning everything), how much of what you set out to do was your team able to accomplish? <b>7</b>
XIV.	Sustainability and Next Steps	Our study identified a concern that is affecting communication, team cohesion, and most importantly patient care. While our intervention did not show statically significant results it did show some positive and promising trends. Given our relatively small sample size we would recommend a larger pilot study throughout the service and nursing units to ascertain if our intervention should be sustained permanently.

# Institutional and Resident-Led Wellness Interventions

R. Brent Stansfield, Rose Natheer, Tess McCreedy,  
Sherryl Wissman, Danielle Fabry, Lucinda Wenzlick,  
Jacob Salman, Firas Ido, Vera Pochtarev, Tsveti Markova



NI VI Meeting #4 Tucson, AZ March 2019



## INTRODUCTION: Background

- 25-75% of medical residents experience burnout.<sup>1</sup>
- We need more focus on wellness activities rather than solely on burnout prevention.<sup>2</sup>
- It is effective to empowering physicians to participate in their own wellness initiatives.<sup>3</sup>

### References

1. IsHak WW, Lederer S, Mandili C, Nikravesh R, Seligman L, Vasa M, Ogunyemi D, Bernstein CA. Burnout during residency training: a literature review. *Journal of graduate medical education*. 2009 Dec;1(2):236-42.
2. Eckelberry-Hunt, J, van Dyke, A, Lick, D, Tucciarone, J. Changing the conversation from burnout to wellness: physician well-being in residency training programs. *J Grad Med Ed*. 2009;1(2):225-230.
3. Shanafelt, TD, Noseworthy, JH. Executive leadership and physician well-being: nine organizational strategies to promote engagement and reduce burnout. *Mayo Clin Proc*. 2017;92(1):129-146.
4. Stansfield, RB, Giang, G, Markova, T. Development of the resident wellness scale for measuring resident wellness. *J Pat Cent Res Rev*. 2019;6(1):17-27.

## Aim/Purpose/Objectives

- Implement and assess a series of wellness interventions, involve residents in their design and instantiation.
- Collect quantitative and qualitative data to measure impact.
- Disseminate results in the medical education literature.

## METHODS: Interventions/Changes

### Institution-led interventions

- Orientation, website, CLER council
- EAP (Ulliance), Wellness Warriors, TIAA, etc.

### Program-led interventions

- Programs initiated their own wellness committees
- Faculty/resident partnership
- Planned and executed additional activities

### Some resident-led interventions

- *Fitbit Challenge*: residents/faculty compete for step-counts
- *Wellness Library*: residents and faculty donate and borrow books
- *Access to Hospital Gym*
- *Curbside Consult*: inter-program peer consult
- *Morning coffee*: residents meet before rounds
- *Intern Jackets*: resident-designed windbreakers with institutional logo
- *Wellness Mentors*: senior-junior assigned pairs
- *Yoga*: outside yoga instructor

1<sup>st</sup> Annual Professional Development Symposium, Feb. 2019

## METHODS: Measures/Metrics

### Developed and Published the Resident Wellness Scale (RWS)<sup>4</sup>

- Qualitative study to define Resident Wellness
- Quantitative scale development

### Developed and Deployed the Resident Wellness Semi-Structured Interview (RWSSI)

- 15-minute interview by third party from GME Office
- IRB-approved for qualitative analysis

### Periodic monitoring

- GMEC, monthly CLER Council meetings

## RESULTS

### Resident Wellness Scale data collected at 2 time-points:

- Late October/early November, 2017 and 2018
- Other data time-points excluded to control for seasonal variation

### Four subscores:<sup>4</sup>

#### Meaningful Work – Ability

i.e. "You felt connected to your work in a deep sense"

#### Life Security

i.e. "You felt your basic needs are met"

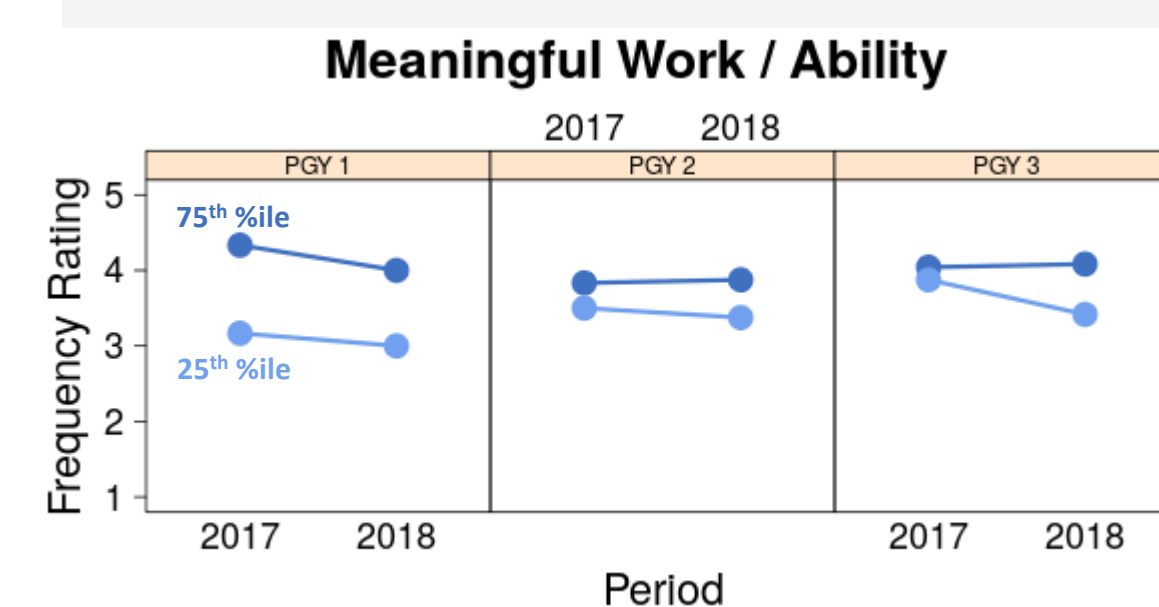
#### Institutional Support

"Knew who to call when something tragic happened at work"

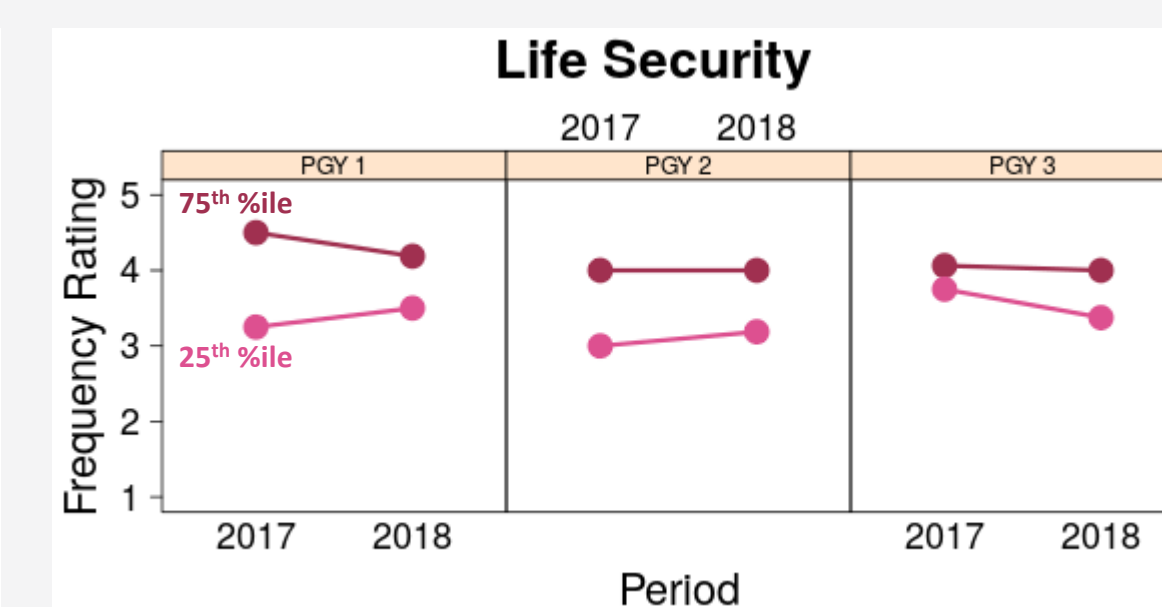
#### Social-Support – Personal Growth

i.e. "Felt supported by your co-workers"

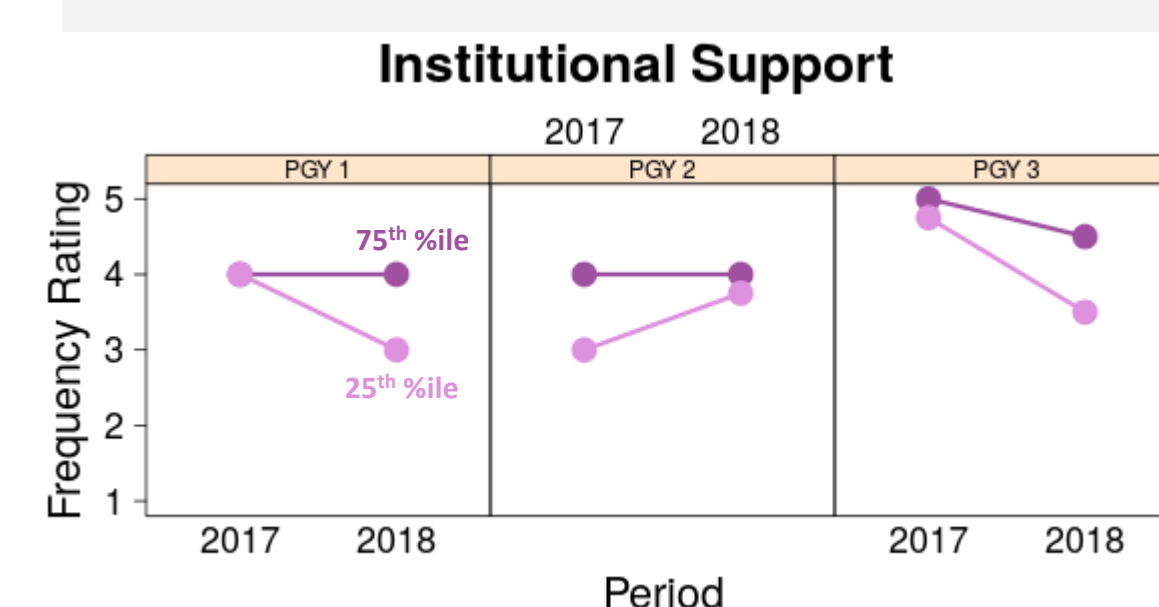
- Graphs below show 75<sup>th</sup> percentile (most well: dark color) and
- 25<sup>th</sup> percentile (least well: light color)



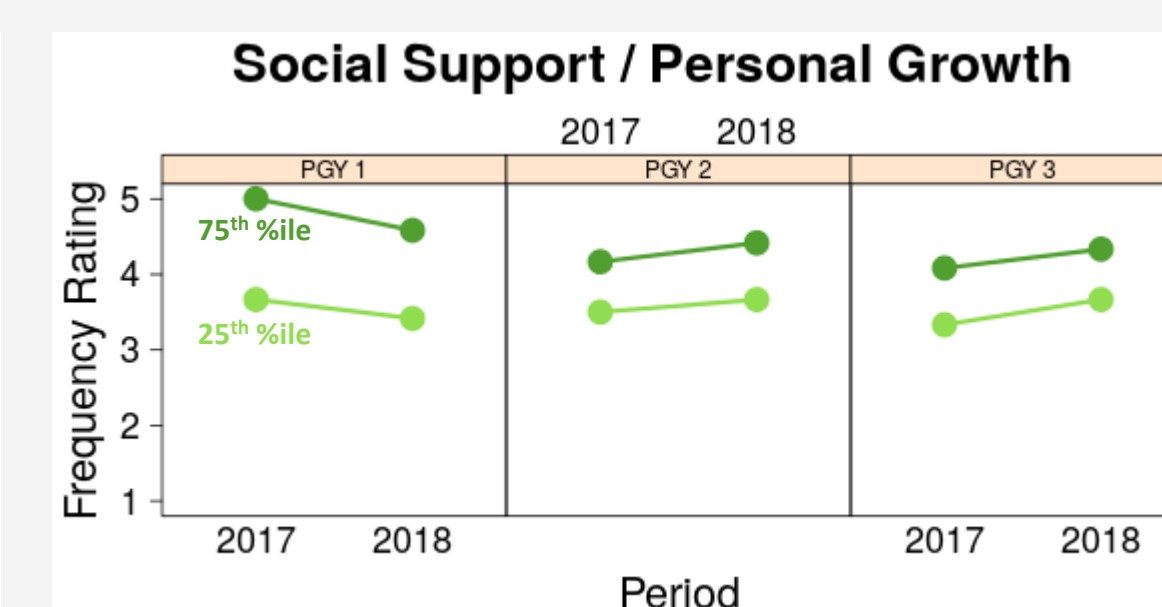
**Meaningful Work and Ability:** Lowest quartile gets more well each PGYear. Slight decrease in wellness during intervention period.



**Life Security:** Lowest quartile increases across intervention year for PGY1s and PGY2s. Overall LS is highest in PGY1 and declines: PGY2 has lowest LS.



**Institutional Support:** Variable over PGYear and across intervention year. Highest in PGY3s.



**Social Support and Personal Growth:** Increases across intervention year for PGY2s and PGY3s, both most and least well benefit. PGY1s start with high SS/PG.

## RESULTS: Continued

### Preliminary results from interviews: Social and Life Security themes identified

- A successful event is where everyone in the program participates: residents, faculty, and staff
- Looking forward to a wellness event had a positive effect itself
- Easing stress is important
- Having common experience with others in the program was beneficial

### Conclusions:

- **Social Support** improved during intervention. Interviewees noted that events create shared experience and improve contact between faculty, residents and staff.
- **Meaningful work scores** did not improve. PGY1s have the lowest and highest **MW** scores.
- Intervention showed increases in **Life Security** for PGY1s and PGY2s.

## Discussion: Barriers & Strategies

### Wellness is mostly stable over time

- Interventions associated with small gains in Social Support and Life Security

### Program-level interventions are powerful

- Connection between faculty and residents
- Anticipation and participation are important

### Limitations

- Small sample, 3 programs at one institution
- Many pilot programs need replication
- Self-selection in assessments may bias results

### Next Steps and Sustainability

- Program Wellness Committees are stable and sustainable
- Continue Resident Council engagement: Annual Professional Development Symposium

## Project Management Plan

Begin completing this Project Management Plan at Meeting One and complete it with your team following Meeting One, i.e., by November 2017. Teams will have the opportunity to review/revise their Project Management Plans throughout the 18-month Initiative at each of the on-site meetings. The collective data from all of the teams' completed project management plans will be invaluable as we share and learn from this collaborative experience.

**Team:** Crittenton/Ascension Providence Rochester

**Project Title:** Institutional and Resident-Led Wellness Interventions

I.	Vision Statement (markers of success by March 2019; Refer to Toolkit #5)	A sustainable culture of wellness driven by engaged, empowered residents and faculty.
II.	Team Objectives (‘needs statement,’ project requirements, project assumptions, stakeholders, etc.)	Implement and assess a series of wellness interventions, involve residents in their design and instantiation.  Collect quantitative and qualitative data to measure impact.  Disseminate results in the medical education literature.
III.	Team Members & Accountability (list of team members from Toolkit #6 and who is accountable for what)	GME Office: R. Brent Stansfield, Tsveti Markova  Program Faculty: Dr. Rose Natheer, Dr. Tess McCready  Hospital Leadership: Dr. Sherryl Wissman

		Residents: Dr. Jacob Salman, Dr. Lilia Peress, Dr. Vera Pochtarev, Dr. Danielle Fabry, Dr. Firas Ido, Dr. Lucinda Wenzlick
IV.	Necessary Resources (staff, finances, etc.)	Hospital engagement Program support Resident time and effort GME Office engagement and access Wellness fund for all programs
V.	Measurement/Data Collection Plan	Resident Wellness Scale, Resident Wellness Semi-Structured Interview Bi-monthly CLER Council meetings: discussion of wellness activities and issues APE and Annual GME Survey measuring learning environment
VI.	Stakeholder Communication Plan (may be helpful to draft a flow chart of team members & senior management; Refer to Toolkits #2 and #4)	Wellness discussed at monthly CLER Council meetings attended by hospital leadership (both the CMO of the hospital and QI Officer), program directors, faculty, residents, and GME Office leadership. GME Newsletter distributed to all residents and faculty. GME grant application process for wellness activities. GME Office solicitation of ideas and feedback through the GMEC, the subcommittee for compliance and improvement, a review of program evaluation systems, and the APE process.
VII.	Potential Challenges (engagement, budget, time, skills gaps, etc.; Refer to Toolkit #3)	Competing priorities of resident and faculty Budget Complexity of the definition of resident wellness Hospital independence from the sponsoring institution: they are in different systems which impedes the SI's reach toward the larger clinical culture (for instance physician and nursing wellness)

VIII.	<p>Opportunities for Scholarly Activity (potential publications, conference presentations, etc.)</p>	<p>Primary findings:</p> <ul style="list-style-type: none"> <li>Quantitative measure: Resident Wellness Scale (RWS) (published in 2019)</li> <li>Description of Crittenton/Ascension NI-VI implementation: the convergence of top-down and bottom-up leadership</li> </ul> <p>Ancillary findings:</p> <ul style="list-style-type: none"> <li>Qualitative data to refine and improve the RWS</li> <li>Integrating the RWS into program-level evaluation of the learning environment</li> </ul>
IX.	<p>Markers (project phases, progress checks, schedule, etc.; Refer to <i>NI V Roadmap to 2019</i> which will be presented at Meeting One)</p>	<p>Periodic quantitative assessments October with GME Survey Resident-led interventions building over time Qualitative data collection Progress checks at monthly CLER Council meetings</p>

Sections X thru XIII to be completed first quarter 2019 for “Final Proceedings” booklet:

X.	<p>Success Factors</p>	<p><i>The most successful part of our work was....</i> By empowering residents to generate their own wellness initiatives and by educating residents about institutional wellness resources, faculty became engaged and program-level Wellness Committees were formed. These Committees proved to be the most effective model for sustainable wellness activities by aligning resident enthusiasm with faculty support and program resources.</p> <p><i>We were inspired by....</i> Resident engagement was the inspiring element for faculty, program leadership, and the GME Office. When faculty stepped in to create active Wellness Committees, these initiatives were given more credence and program resources were allocated. The Resident Council envisioned a Professional Development Symposium, which they succeeded in implementing with help from the GME Office.</p>
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XI.	Barriers	<p><i>The largest barrier encountered was....</i></p> <p>The engaged residents represent a small percentage of the larger resident population. Competing priorities make it difficult to engage more stakeholders.</p> <p><i>We worked to overcome this by....</i></p> <p>By focusing on wellness as an aspect of professional development (the Professional Development Symposium) rather than as an extra-curricular consideration, more faculty were motivated to engage. There are limitations to this approach which are reflected in low attendance to some events. Because the Wellness Committees have institutional and resident support and exist at the program level, they become a vector for dissemination of wellness awareness.</p>
XII.	Lessons Learned	<p><i>The single most important piece of advice to provide another team embarking on a similar initiative would be....</i></p> <p>Faculty-resident partnerships are the key to driving change. Program directors and the GME Office have the authority to mandate participation, but this is not sufficient for active engagement. Residents have the perspective and motivation to effect change, but no access to resources. Faculty working with and on behalf of residents in Wellness Committees garner both the power of resident motivation and the legitimacy in the eyes of program leadership and the institution.</p>
XIII.	Expectations Versus Results	<p><i>On a scale of 1 to 10 (with "1" meaning nothing and "10" meaning everything), how much of what you set out to do was your team able to accomplish?</i></p> <p><i>1 2 3 4 5 6 7 8 9 10</i></p>
XIV.	Sustainability and Next Steps	<p><i>What does your CEO need to know to help keep your work sustainable?</i></p> <p>Hospital involvement in professional development for faculty and residents is necessary for implementing many wellness changes. Wellness Committees should be recognized by hospital executive leadership as engines for quality improvement. Many resident-led innovations (snacks in the breakroom, access to the hospital gym for residents, access to beds for sleep breaks, etc.) require hospital resources: these are often small-dollar allocations which can have large cost-savings in more engaged and clinically alert residents.</p>



# Improving Health, Inspiring Resiliency, and Promoting Well-Being: Building Resources for our Programs

Eric Anderson MEd, Suzette Caudle MD, Eric Ekwueme MPA, Vishal Goyal MD, Krystle Graham MD, Mary Hall MD, Yasemin Moore MHA, Sydney Primis MD, Dael Waxman MD

## INTRODUCTION: Background

Carolinas Medical Center (CMC) joined the AIAMC National Initiative VI to improve our learning environment through collaboration on efforts to enhance resident well-being. CMC Graduate Medical Education, in partnership with the Center for Physician and ACP Leadership and Development, originally planned to implement a sustainable mentoring program to promote resident lifelong well-being and resiliency skills, using community physician mentors.

By September 2018 we faced several barriers, as well as growing appreciation of the depth of ongoing independent evolution of well-being related activities in many of our residencies. Notably, these activities were not accompanied by development of activity leaders or objective measures of effectiveness or outcome. Our project shifted in October 2018, to identification, creation, monitoring and spread of resources to support our training programs' specific well-being initiatives.

## Aim/Purpose/Objectives

**Aim:** To improve and maintain high levels of resident resilience and well-being during training, and to instill necessary skills for lifelong maintenance, by providing institutional resources that support individual programs' efforts around well-being for their residents and fellows.

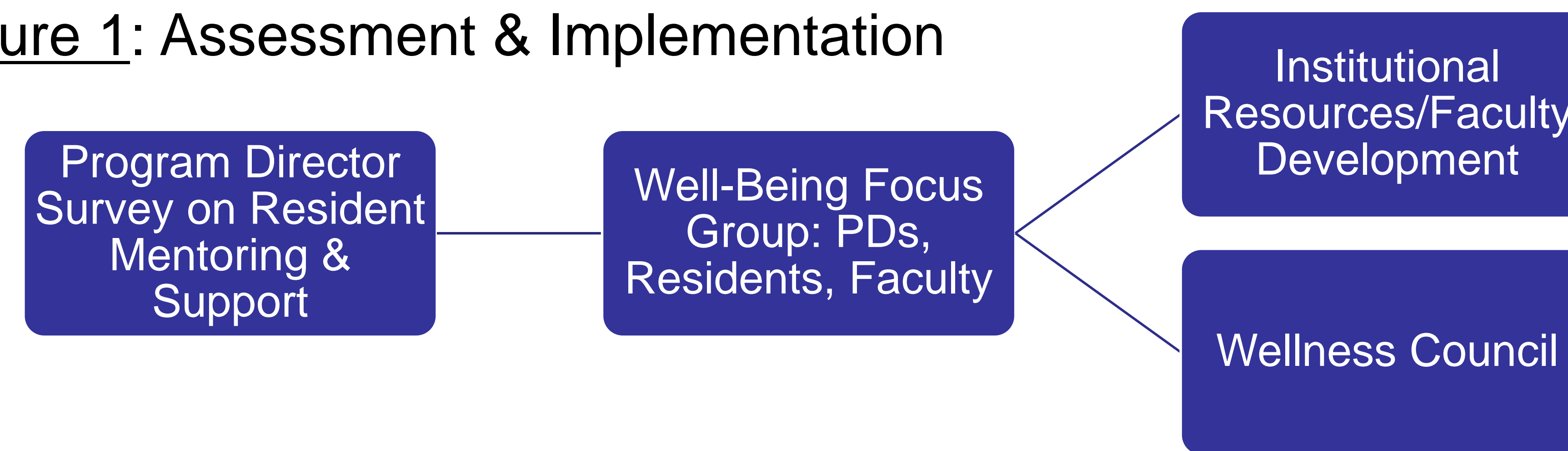
Our individual training programs have developed a variety of well-being initiatives, however, there is little training of faculty, mentors and intuitive leaders around well-being, and very little organized monitoring of well-being or outcomes of initiatives. Our goal is to provide central GME resources to support individual training programs' efforts, to promote objective monitoring of outcomes, to share best practices among programs and to establish an advisory group for future well-being initiatives.

### Objectives:

1. Perform a needs assessment of individual program activities and needs to support well-being initiatives.
2. Offer a mentor development program for faculty and peer mentors focused on developing overall mentoring skills that support mentee well-being.
3. Establish quarterly monitoring of program level well-being scores using the Mini-Z.
4. Establish a Wellness Council. The Council will consist of both faculty and trainee Wellness Champions and will meet monthly to bi-monthly for the purpose of gathering/sharing, learning and promoting trainee (and faculty) well-being, implementing, and assessing the efficacy of various interventions and wellbeing experiences.

## Methods: Interventions/Changes

Figure 1: Assessment & Implementation



## Results

### Mentor Development Workshop

- Program Directors refer faculty and peer mentors to Mentor Development workshops
- Workshops designed by Center for Physician Leadership and Development (CPLD) experts on mentoring
- Facilitated by CPLD and physician
- Interactive and case based
- Topics include :
  - Introduction to mentoring
  - Top 10 tips for effective mentoring, with focus on well-being
  - Case discussion
- Ongoing access to evolving Wellness Resource page maintained by CPLD

## Results

Figure 2: Survey Results

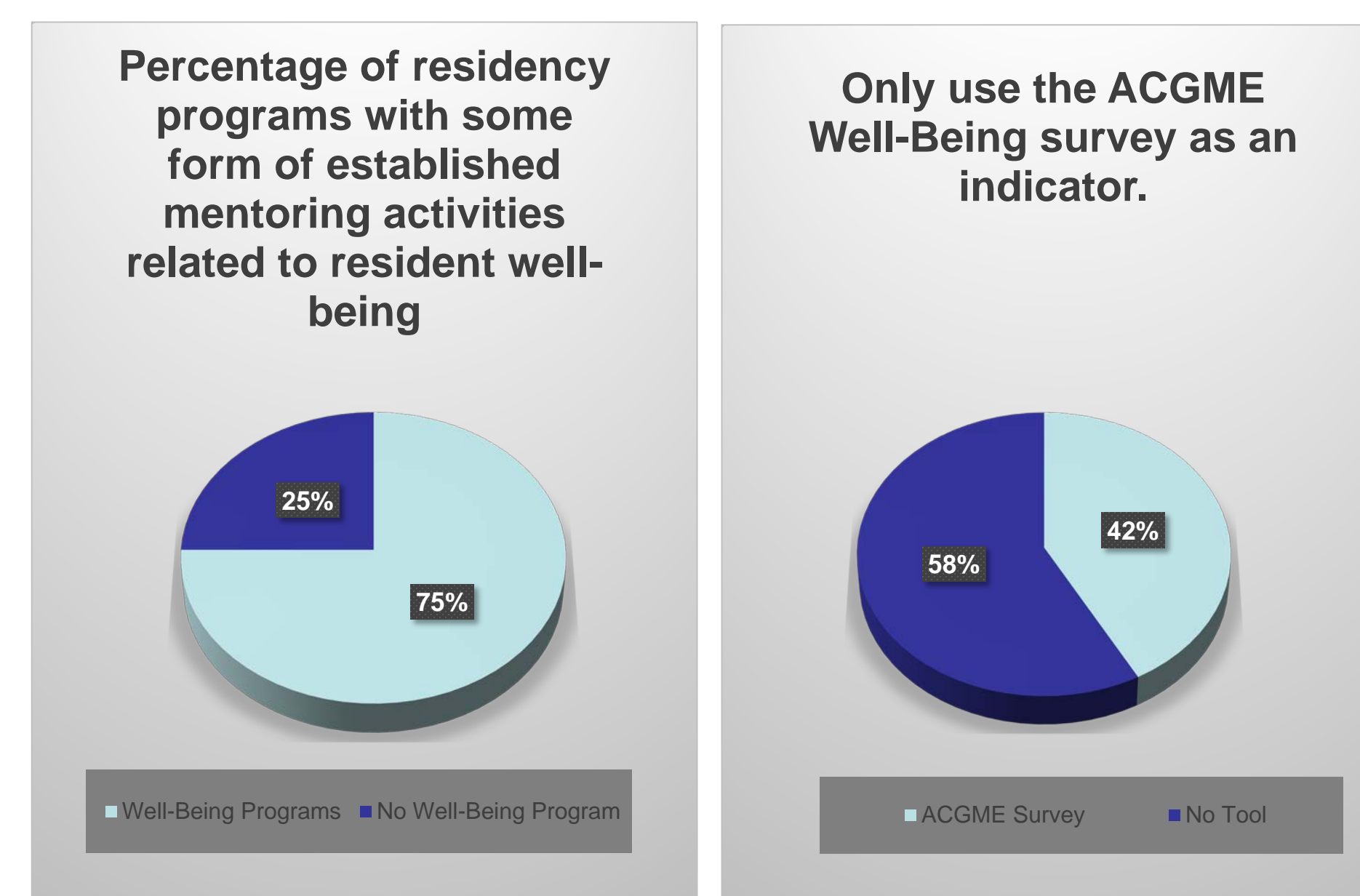
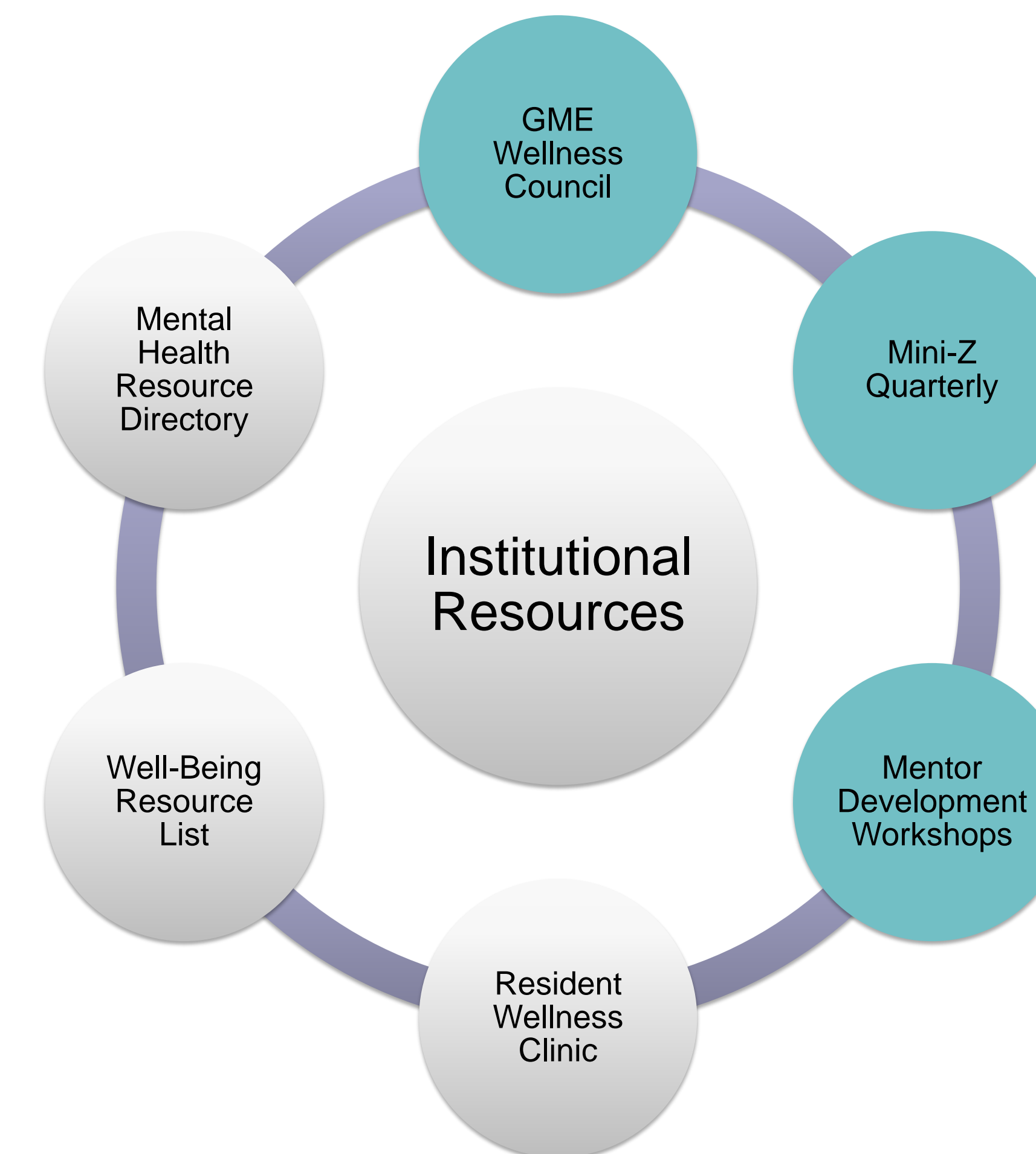


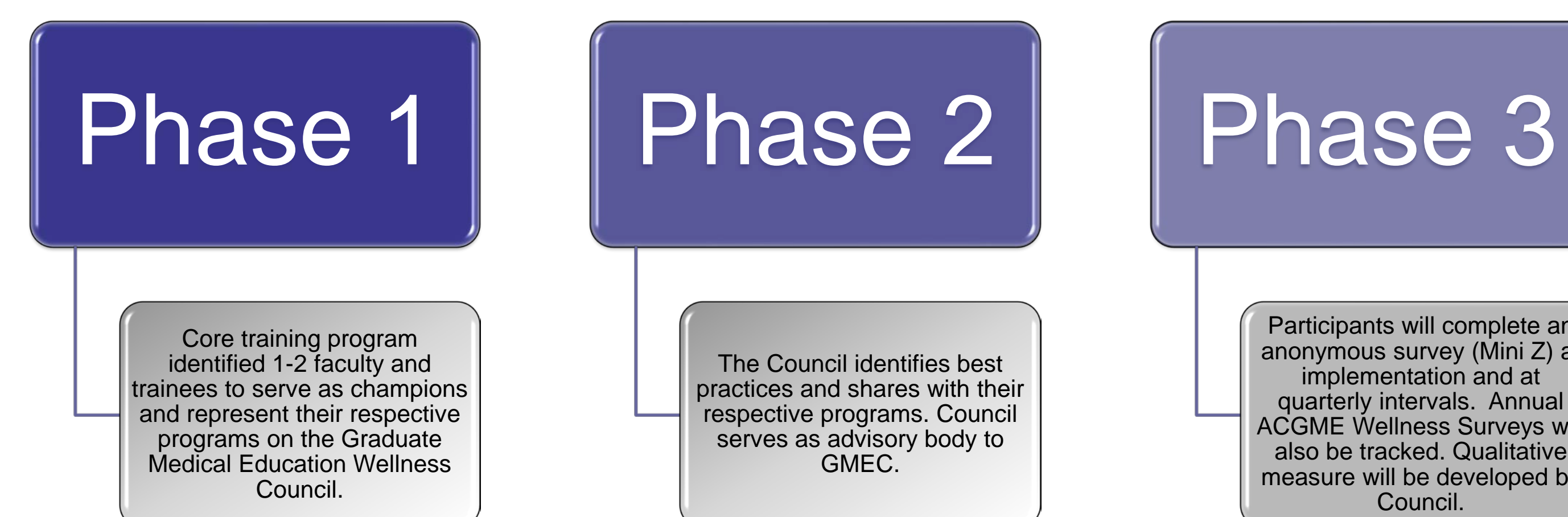
Figure 3: Institutional Resources



### Identified Opportunities for Improvement

- Faculty/Mentor Training
- Faculty/Mentor Support
- Logistics and keeping scheduled meetings
- Time

Figure 4: Graduate Medical Education Wellness Council



### Phase 1

Core training program identified 1-2 faculty and trainees to serve as champions and represent their respective programs on the Graduate Medical Education Wellness Council.

### Phase 2

The Council identifies best practices and shares with their respective programs. Council serves as advisory body to GMEC.

### Phase 3

Participants will complete an anonymous survey (Mini Z) at implementation and at quarterly intervals. Annual ACGME Wellness Surveys will also be tracked. Qualitative measure will be developed by Council.

## Discussion: Barriers & Strategies

1. Programs/Program Directors desire to have mentor development and more institutional resources around well-being.
2. GME desires more formal monitoring of effectiveness of well being activities at GME and institutional level.
3. All desire ongoing discussion of best practices and advisory group to GMEC on future growth and direction of well-being activities.
4. Strategies
  - Project management: Identifying Wellness leaders who can sustain the project.
  - Assign specific tasks to invested individuals.
  - Wellness Council reporting quarterly to GMEC
  - House Staff Liaison Committee report on resident wellness initiatives
  - Mini-Z: Conduct Mini-Z quarterly to assess impact of interventions on resident well-being
  - Ongoing assessment of mentoring workshop effectiveness
5. Barriers
  - Time for faculty and others to plan and participate in well being activities
  - Time for residents to participate in well being activities
  - Access to resources to easily accomplish desired activities


## Project Management Plan

Begin completing this Project Management Plan at Meeting One and complete it with your team following Meeting One, i.e., by November 2017. Teams will have the opportunity to review/revise their Project Management Plans throughout the 18-month Initiative at each of the on-site meetings. The collective data from all of the teams' completed project management plans will be invaluable as we share and learn from this collaborative experience.

**Team:** Atrium Health – Carolinas Medical Center **Project Title:** Improving Health, Inspiring Resiliency, Promoting Well-Being: Building Resources for our Programs

I.	<p>Vision Statement (markers of success by March 2019; Refer to Toolkit #5)</p>	<p><i>Vision Statement: The Whole and resilient physician of the future.</i></p> <p>Mission Statement:</p> <p>To improve the health, inspire resiliency, and promote well-being of residents, while creating a renowned clinical learning environment</p>
II.	<p>Team Objectives (‘needs statement,’ project requirements, project assumptions, stakeholders, etc.)</p>	<p><i>Objectives:</i></p> <ol style="list-style-type: none"> <li>1. Perform a needs assessment of individual program activities and needs to support well-being initiatives.</li> <li>2. Offer a mentor development program for faculty and peer mentors focused on developing overall mentoring skills that support mentee well-being.</li> <li>3. Establish quarterly monitoring of program level well-being scores using the Mini-Z.</li> <li>4. Establish a Wellness Council. The Council will consist of both faculty and trainee Wellness Champions and will meet monthly to bi-monthly for the purpose of gathering/sharing, learning and promoting trainee (and faculty) well-being. The team will also make recommendations to GME Office and the GMEC regarding ongoing well-being initiatives and assist in implementing, and assessing the efficacy of various interventions and wellbeing experiences.</li> </ol>

III.	Team Members & Accountability (list of team members from Toolkit #6 and who is accountable for what)	Name/Credentials	Position/Title	E Mail Address
		Suzette Caudle, MD*	Designated Institutional Official	<a href="mailto:Suzette.Caudle@carolinashealthcare.org">Suzette.Caudle@carolinashealthcare.org</a>
		Eric Anderson, M.Ed. (co-leader)	Associate Designated Institutional Official	<a href="mailto:Eric.Anderson@carolinashealthcare.org">Eric.Anderson@carolinashealthcare.org</a>
		Dael Waxman, MD	Physician leader for wellness activities, Center for Professional Leadership and Development	<a href="mailto:Dael.Waxman@carolinashealthcare.org">Dael.Waxman@carolinashealthcare.org</a>
		Yasemin Moore	Director, Center for Physician Development and Leadership	<a href="mailto:Yasemin.moore@carolinashealthcare.org">Yasemin.moore@carolinashealthcare.org</a>
		Mary N. Hall, MD	Chief Academic Officer/ Senior Vice President	<a href="mailto:Mary.Hall@carolinashealthcare.org">Mary.Hall@carolinashealthcare.org</a>
		Vishal Goyal, MD	Family Medicine Resident/ House Staff Liaison Committee President	<a href="mailto:Vishal.Goyal@carolinashealthcare.org">Vishal.Goyal@carolinashealthcare.org</a>
		Gary Little, MD	Chief Medical Officer	<a href="mailto:Gary.little@carolinashealthcare.org">Gary.little@carolinashealthcare.org</a>
		Krystle Graham, DO	Program Director, Psychiatry	<a href="mailto:Krystle.graham@carolinashealthcare.org">Krystle.graham@carolinashealthcare.org</a>
		Amy Boardman, MD	Program Director, Ob/Gyn	<a href="mailto:Amy.boardman@carolinashealthcare.org">Amy.boardman@carolinashealthcare.org</a>
		Sydney Primis, MD	Program Director, Pediatrics	<a href="mailto:Sydney.Primis@carolinashealthcare.org">Sydney.Primis@carolinashealthcare.org</a>
		Eric Ekwueme	Education and Development Specialist, Center for Physician Leadership and Development	<a href="mailto:Eric.Ekwueme@atriumhealth.org">Eric.Ekwueme@atriumhealth.org</a>
		Jordan Sestak, MD	Physical Medicine and Rehabilitation Resident	<a href="mailto:Jordan.Sestak@atriumhealth.org">Jordan.Sestak@atriumhealth.org</a>

IV.	<p>Necessary Resources (staff, finances, etc.)</p>	<p><i>Dr Caudle and Mr Anderson, with GME Office team, will manage general operations of project Over the course of project Dr Waxman received an ongoing small amount of protected time to assist Medical Education with Wellness activities.</i></p> <p><i>Yasmin Moore and Eric Ekwueme, as lead and team-member of Physician Leadership and Development, assist in this project including curriculum development of mentoring program and facilitation of focus groups.</i></p>
V.	<p>Measurement/Data Collection Plan</p>	<ol style="list-style-type: none"> <li>1. <i>Created and implemented survey of faculty on current program state of well-being and mentoring.</i></li> <li>2. <i>Conducted focus group of program directors, core faculty members, and residents following survey.</i></li> <li>3. <i>Quarterly Mini-Z assessment of all residents beginning March 2019.</i></li> </ol>
VI.	<p>Stakeholder Communication Plan (may be helpful to draft a flow chart of team members &amp; senior management; Refer to Toolkits #2 and #4)</p>	 <pre> graph TD     GMEOffice((GME Office)) --- CSuite((C-Suite))     GMEOffice --- MedEdLead((Medical Education Leadership))     GMEOffice --- ProgDir((Program Directors))     GMEOffice --- GMEC((GMEC))     GMEOffice --- HouseStaff((House Staff Liaison Committee))     GMEOffice --- ResFellows((Residents and Fellows))     GMEOffice --- WellnessCoun((Wellness Council))     MedEdLead --- AcadChairs((Academic Chairs))     </pre>

VII.	<p>Potential Challenges (engagement, budget, time, skills gaps, etc.; Refer to Toolkit #3)</p>	<p><i>Engagement of team was at times challenging – largely due to time factors and the many competing responsibilities that each team member is accountable for managing. The team picked up energy in the final quarter of the project as it energized around the evolving plan that began to “gel.”</i></p> <p><i>Engagement of PDs was, at times, similarly challenging, again almost exclusively related to time and their other responsibilities.</i></p> <p><i>Budget considerations guided many of our choices, without question, but for this particular project the main challenge around budget related to ability to send travel team.</i></p>
III.	<p>Opportunities for Scholarly Activity (potential publications, conference presentations, etc.)</p>	<p><i>Potential to share, through presentation and possibly publication, the mentor development program particularly, and depending on its evolution, the Wellness Council</i></p>
IX.	<p>Markers (project phases, progress checks, schedule, etc.; Refer to NI V Roadmap to 2019 which will be presented at Meeting One)</p>	

Sections X thru XIII to be completed first quarter 2019 for “Final Proceedings” booklet:

X.	<p>Success Factors</p>	<p><i>The most successful part of our work was....the development of the mentoring development workshop and the establishment of a Wellness Council</i></p> <p><i>We were inspired by....our programs and what they were continuously developing to assist their residents</i></p>
----	------------------------	--

XI.	Barriers	<p><b>The largest barrier we encountered was...</b>project management. Earlier on in the project we should have assigned specific tasks to individual(s) on the team to keep the project on track. Delegation and designation of a “project manager” would have ensured more structure and tracking of the project.</p> <p><b>We worked to overcome this by...</b>setting up standing meetings with the project team to discuss the different aspect of the project. Additional member of our Center for Physician Leadership and Development was added on to the project team to assist with the facilitation of the survey, focus group and faculty development.</p> <p>Other barriers were faculty time, faculty engagement (largely related to faculty time) Access to resources and finances influenced our decisions, but were not as significant, other than limitations on size of travel team, which hindered us at the collaborative meetings</p>
XII.	Lessons Learned	<p><i>The single most important piece of advice to provide another team embarking on a similar initiative would be....Talk to key stakeholders more than once, over and over again.</i></p>
XIII.	Expectations Versus Results	<p><i>On a scale of 1 to 10 (with “1” meaning nothing and “10” meaning everything), how much of what you set out to do was your team able to accomplish?</i></p> <p>1 2 3 4 5 6 7 8 9 10                      7 – its different from what planned, but we are happier with this plan</p>
XIV.	Sustainability and Next Steps	<p>What does your CEO need to know to help keep your work sustainable? That al that we do ultimately benefits our patients – improved safety by improving culture and well-being</p>

# Minimizing Burnout Through Three Resident Protected Time Approaches: Administrative, Personal Health, Connectedness

T. Harrington DO, J. Vogelgesang DO, V. Dinh MD, A. Siddiqui, W. Lehmann MD, C. deGrandville MD, D. Simpson PhD

## INTRODUCTION: BACKGROUND

**Well-being** is increasingly recognized as a critical issue for healthcare providers, with burnout rates measured as high as 63% among family physicians.<sup>1</sup>

**Indirect Patient Care Responsibilities** (visit notes, inboxes, phone calls) has been identified as a significant contributing factor for burnout:

- **Primary care physicians** who spend on average 6 hrs/wk on EHR work outside normal clinical time are 3x more likely to report burnout<sup>2</sup>
- **Family physicians cite EHR and other “paperwork”** as main causes of burnout<sup>3</sup>

**Our FM residents** identified lack of time to manage patient related “in-boxes” as a barrier to their well-being.

1. Shanafelt, T. et al. Changes In Burnout and Satisfaction With Work-Life Balance in Physicians and the General US Working Population Between 2011 and 2014. Mayo Clin Proc. 2015 Dec;90(12):1600-13.  
2. Robertson SL, et al. EHR Effects on Work-Life Balance & Burnout Within the I3 Population Collaborative. JGME. 2017;9(4):479-84.  
3. Medscape Physician Compensation Report 2017, [www.medscape.com](http://www.medscape.com)

## OBJECTIVE:

Design and implement a systems-based intervention(s) that improves resident wellness and prevents burnout.

## METHODS: INTERVENTIONS/CHANGES

**Aurora Health Care’s Family Medicine Residency Program** implemented 3 types of protected/dedicated half-days to improve wellness and prevent burnout:

1. To promote **Personal Health**:
  - One ½ day per quarter is allowed for residents to attend their own non-urgent health care visits/appointments
2. To promote a **Sense of Community** among residents
  - One ½ day per quarter is reserved for resident recreational activities (e.g., dining, golfing, hiking, board game day)
3. To reduce the **Burden of Administrative Tasks** outside of scheduled work hours:
  - One ½ day per week is allocated to complete indirect patient care responsibilities (e.g., phone calls, paperwork, chart completion, QI projects)

## METHODS: COMMUNICATION



**Resident Wellness 1/2 Days**

Are you using all your dedicated wellness time??

The 3 Types of Dedicated Wellness Times Are:

Resource 1/2 Days (NI-6)	Self-Care 1/2 Days (Aurora GME)	Wellness Afternoon (FM Program)
Weekly During Non-Call Blocks	Quarterly During Non-Call Blocks	Quarterly During Wednesday Didactic Time
You decide AFTER your clinic schedule is set. In place of preceptor time. Only let preceptor know, not chiefs or schedulers.	You decide BEFORE your clinic schedule is set. In place of clinic time. Email Sr. Chiefs and clinic schedulers to request.	Scheduled by Junior Chiefs and added to the didactic schedule. Event ideas always welcome.
Time to complete administrative and project related tasks: Epic Inbox, Notes, QI Projects, Evaluations, Research, etc.	Time to schedule and attend appointments for health care: PCP, Dental, Optometry, Program Requirements (TB), etc.	Time for residents to establish and build relationships among each other: Bowling, Lunch & Board Games, Grill in the Park, Yoga, etc.
<b>Purpose:</b> Reduce/eliminate residency workload during non-work time.	<b>Purpose:</b> Provide opportunity for self-care and role model for patients.	<b>Purpose:</b> Foster social connections and teamwork among residents.

If you are having trouble scheduling in your wellness 1/2 days contact your Junior Chiefs for help!

## RESULTS:

### CG-CAHPS Percentile for 2 FM Residency Clinics (FCC, FPC)

1. Between Visit Communication
  - FCC ↑ 5 points & FPC ↑ 4 points (June 2017 vs Dec 2018)
2. Test Results Communication
  - FCC ↑ 5 points & FPC ↑ 7 points (June 2017 vs Dec 2018)



## METHODS: MEASURES

### Outcomes:

1. **CG-CAHPS - Clinic metrics** for patient experience: test results and between visit communication
2. **Mayo Well-Being Index**

### Process Measures:

1. **End-of-rotation evaluation**
  - # of ½ days taken during rotation, scheduling barriers, how time was spent, degree to which ½ day “made me feel that things were more under my control”
2. **Resident Wellness Survey**
  - 7 Likert scale items adapted from existing surveys: ability to utilize EHR, balance b/w education & clinical demands, feeling overwhelmed, professional growth, coworker support, meaningful work, time spent on well-being

## DISCUSSION: BARRIERS & STRATEGIES

### Key Findings

- Protected time for personal health, community, and administrative tasks (i.e. inbox) improves residents sense of control, well-being, and patient quality care scores

### Limitations

- Data limited to 12-18 months, no long-term data available

### Next Steps and Sustainability

- Continue protected time as a “built-in” curriculum intervention
- Continue measuring resident perception of well-being, compare to national norms, and make adjustments accordingly
- Improve resident efficiency in administrative tasks (i.e. EHR)

# GME WIDE & PROGRAM SPECIFIC INITIATIVES TO STRENGTHEN A CULTURE OF WELL-BEING

Jacob Bidwell, MD, Tricia La Fratta, MBA, Nicole Eull, PsyD, Deborah Simpson, PhD,  
Timothy Lineberry, MD, GMEC Program Directors & Resident Council Representatives

NI VI Meeting #4  
Tucson, AZ March 2019

## INTRODUCTION: BACKGROUND

### NATIONAL DRIVERS FOR WELL-BEING

- Physician Burnout = safety, quality, workforce issue<sup>1</sup>
- ACGME Common Program Requirements
- ACGME CLER (Clinical Learning Environment Review)
- National Academies of Medicine (NAM) action collaborative on clinical well-being and resilience

### GME ACTION PLAN

- **STRATEGIC PLAN:** GME leaders convened a GMEC retreat to develop a well-being strategic plan with key system leaders attending
- **NEEDS ASSESSMENT:**
  - Prior to the retreat the ACGME's
    - *Inventory of Elements of Your Program's Well-Being Plan* was completed by each Residency & Fellowship Program
    - *Inventory of Elements of Your Institutional Well-Being Plan* was completed by GME Office
  - At the retreat
    - Each Program Director and the DIO presented key findings from their inventory and an action plan
    - Cross cutting themes were identified → GME specific aims

## PROJECT AIMS

- To serve as well-being system leaders through the development of clear GME protocols and procedures
- To identify and provide GME specific and system-wide resources/support to team members
- To improve resident and faculty well-being through residency/fellowship program specific initiatives

## METHODS: MATRIX

- **NI-6 Program**, **GME-Wide** and **System-Wide** actions
- Selected **Drivers of Burnout and Engagement** in Physicians from organizational/leadership approach<sup>2</sup>
- Assigned tasks to respective teams; monitor progress

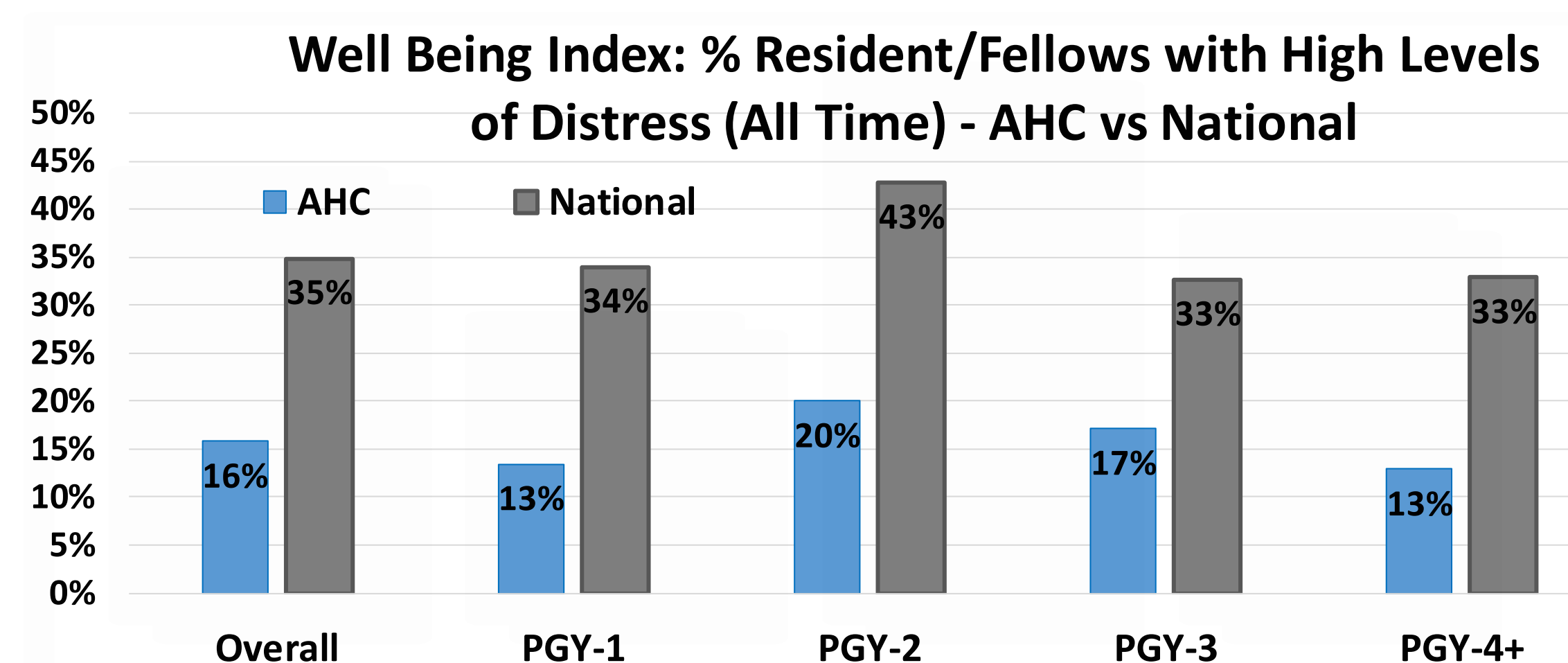
## METHODS & RESULTS: GME WELL-BEING MATRIX

DRIVERS	PROGRAM SPECIFIC	GME-WIDE	AURORA LEGACY /AAH
Workload & Job Demands	☑ OB/GYN Restructuring Weekend - Overnights	☑ Revise Faculty Contracts to reflect education roles	☑ Contracts Aligned with Medical Grp Policies
Efficiency & Resources	☑ FM Resource ½ Days	☑ Appoint Well Being Director ☑ Access to Confidential Behavior Health Services ☑ Contract and Implement Mayo Well Being Index (WBI) ☑ Add Well-Being Item to end of rotation evaluations	☑ Partner with System Leaders ☑ WBI Implemented System Wide
Social Support & Community at Work	☑ Radiology Redesign Journal Club / Lectures ☐ IM RAPS Program	☑ Expressions of Well-Being ☑ Soliciting Feedback AC <sub>2</sub> T Model <sup>®</sup> ☐ GME Lounge at all Sponsors	☐ Align AHC Legacy and AAH Clinician Well-Being Priorities ☐ Advocacy with Leadership
Work-Life Integration	☑ IM Wellness Challenges	☑ Quarterly ½ Days Well-Being ☑ Access to Exercise	

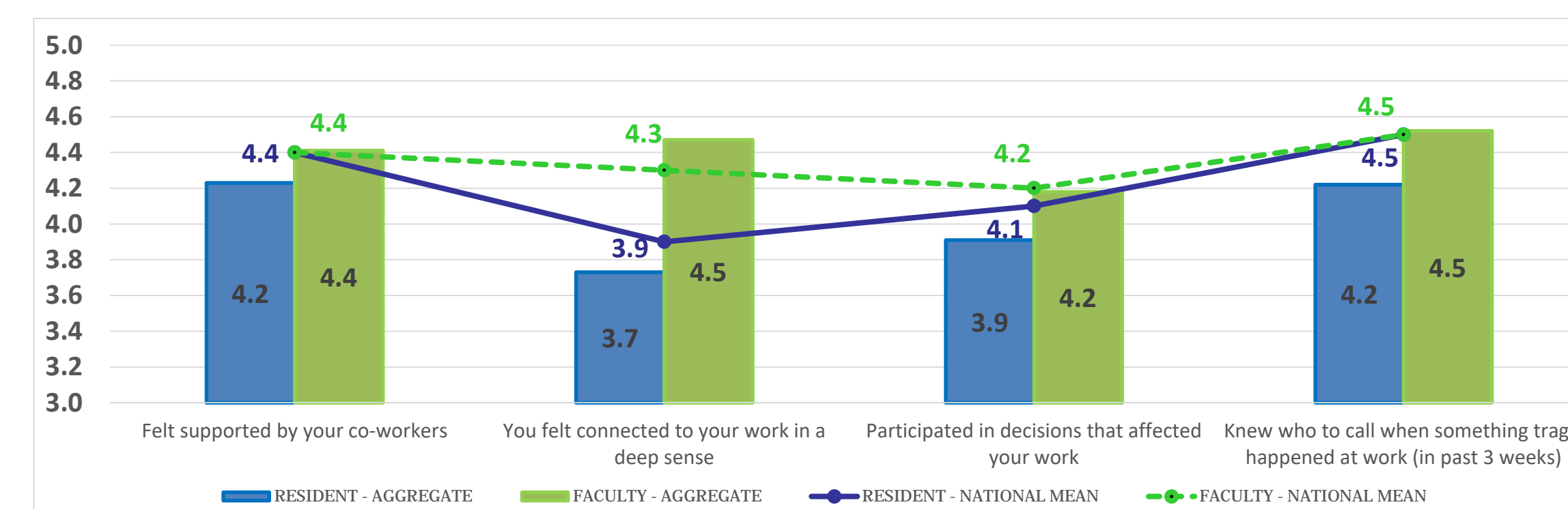
**LEGEND:** ☑ = Completed; ☐ = In Progress

### MAYO WELL-BEING INDEX

• % of at risk scores ↓ from 17.3% to 12.7% over 11 months



### ACGME WELL-BEING SURVEY



## Discussion, Barriers and Strategies

### Key Findings:

- Mayo Well-Being Index ≠ ACGME Well-Being Measures
- Program Level Interventions critical, complimenting GME system-wide efforts

### Limitations:

- Change in engagement survey due to AAH merger
- No WBI Baseline data at the time of interventions

### Go Forward Strategies:

- Monitor Mayo WBI resources usage
- Unify WB resources + action plan via AdvocateAurora Academic Affairs Well-Being Director
- Review APE (2/year) and well-being data and APE inventory at GMEC meeting

### References

1. Panagioti M, et al. Association between physician burnout and patient safety... JAMA IM. 2018;178(10):1317-30
2. Shanafelt TD, et al.. Executive leadership and physician well-being.... Mayo Clinic Proceedings 2017;92(1):129-146



# RUNNING AND RAPPING OUR WAY TO WELLNESS: INTERNAL MEDICINE

## RESIDENCY APPROACH TO PREVENTING BURNOUT

Siri Neelati, MD, Kathy Scigacz, MD, Prakash Nallani, MD, Richard Battiola, MD  
Tanya Shah, MD, Xiao Xiao Qian MD, Deborah Simpson, PhD

NI VI Meeting #4  
Tucson, AZ March 2019

### INTRODUCTION: BACKGROUND

#### PHYSICIAN BURNOUT & WELL BEING

- Between 22-60% of practicing physicians are reported to have experienced burnout<sup>1</sup>
  - Stems from lack of work satisfaction, overwhelming schedules, and loss of support from colleagues
  - Physician burnout has led to increased CV disease and shorter life expectancy, problematic alcohol use, depression as well as suicide
- Burnout in internal medicine (IM) ranks among the highest of all specialties with rates up to 76%<sup>1</sup>

#### DATA ON INTERVENTIONS:

- Residents recover from existential burnout by:<sup>1</sup>
  - Feeling validated
  - Forming connections with patients/colleagues
  - Increasing competence, career development initiatives
- Medical Students whose aerobic exercise and/or strength training habits are consistent w CDC guidelines appear:<sup>2</sup>
  - Less likely to experience burnout
  - Have higher quality of life

#### REFERENCES/RESOURCES

1. Abedini NC, et al. "It's Not Just Time Off": A Framework for Understanding Factors Promoting Recovery From Burnout Among Internal Medicine Residents. J Grad Med Educ. 2018;10(1):26-32.
2. Dyrbye LN, Satele D, Shanafelt TD. Healthy exercise habits are associated with lower risk of burnout and higher quality of life among US medical students. Academic Medicine. 2017 Jul 1;92(7):1006-11. Linzer, Mark, et al. "Predicting and preventing physician

### PROJECT AIMS

#### IMMEDIATE: Relationships w/Colleagues & Exercise

- To create a personal team for incoming residents to help with the transition into residency
- Education and promotion re: importance of personal health including exercise/diet it's impact on health

#### LONG TERM:

- To continue monitoring the effectiveness of our interventions during upcoming academic year
- To gain a better understanding on the ongoing trends of the contributions of resident burnout

### METHODS: INTERVENTIONS

#### AIM #1: PEER ADVISOR TEAM (RAPS)

- RAPS Team**
  - Form Resident Advising Program for Success (RAPS) Team
  - Faculty Advisor, Sr Resident, Jr Resident
- RAPS Match**
  - Assign incoming intern post NRMP Match Day) to PGY-II/III in continuity clinic and corresponding RAPS team (April 1<sup>st</sup>)
- RAPS Welcome**
  - Email to Intern from RAPS team including photo of their new team with fun facts about each team member (April 5<sup>th</sup>)
- Events**
  - Quarterly check-ins with team (team dependent)
  - 3 out of hospital "bonding" events (June, January, May)

#### AIM #2: WELLNESS CHALLENGE

**IT TAKES 21 DAYS TO BUILD A HABIT**

**SHARE YOUR ACHIEVEMENTS ON WHATSAPP (group will start January 6<sup>th</sup>)**

**PRIZE: A SECRET & SPECIAL REWARD FROM DR.BATTIOLA**

**HEALTHY RECIPES TO FOLLOW!**

**MINDBODY APP:** helps you find local fitness classes (free to download)

**RUNCLUB:** located in Sinai basement and its FREE.

**ACTVIV:** phone app directed treadmill and elliptical classes - free to start

**Jewkin App:** free for 30 days

**10ks Training Club:** \$50+ free workouts

**Grab a buddy and get sweeter!**

**Internal Medicine February Newsletter**

**Important Dates & Deadlines**

- 2<sup>nd</sup> - Groundhog Day (how long with this cold last...)
- 4<sup>th</sup> - Academic half day- Dr.Biswas (Patient Safety) @ Stajelader Auditorium (Sinai)
- 14<sup>th</sup> - Valentine's Day
- 28<sup>th</sup> - Vacation request deadline for blocks 12 & 13

**Looking ahead and reminders**

- March 5<sup>th</sup> - Academic half day followed by dinner at County Club (in honor of upcoming St. Patrick's Day)
- March 30<sup>th</sup> - Compliance & HIPPA module due
- April 11-13<sup>th</sup> - National ACP conference (Pittsburg)
- May 4<sup>th</sup> & 5<sup>th</sup> - UW POCUS course (check email from Ellie)
- May 30<sup>th</sup> - Resident Retreat and PGY-III Celebration
- June 7<sup>th</sup> - Graduation Day
- \*\* 12 PEAC modules to be completed by end of June

**Bi-rhythmic Symposium**

- 4<sup>th</sup> - Nigerian Theatre
- 14<sup>th</sup> - Nigerian Theatre

**What to do in MKC?**

- 7<sup>th</sup> - Aerobic PACE class
- 10<sup>th</sup> - Soccer/Foot
- 17<sup>th</sup> - Jam Jam
- 18<sup>th</sup> - Jamboree
- 19<sup>th</sup> - Fiddler on the Roof (Sinai Theatre)
- 21<sup>st</sup> - Travel Quiz
- 21<sup>st</sup> - Chess Quiz
- 24<sup>th</sup> - Culture
- 25<sup>th</sup> - Cirque du Soleil

**Choir**

- 27<sup>th</sup>, 28<sup>th</sup>, 29<sup>th</sup>, 30<sup>th</sup>

**Chorus**

- 27<sup>th</sup>, 28<sup>th</sup>, 29<sup>th</sup>, 30<sup>th</sup>

**Choir**

- 27<sup>th</sup>, 28<sup>th</sup>, 29<sup>th</sup>, 30<sup>th</sup>

### METHODS: METRICS

#### FIT<sub>4</sub>LIFE SURVEY

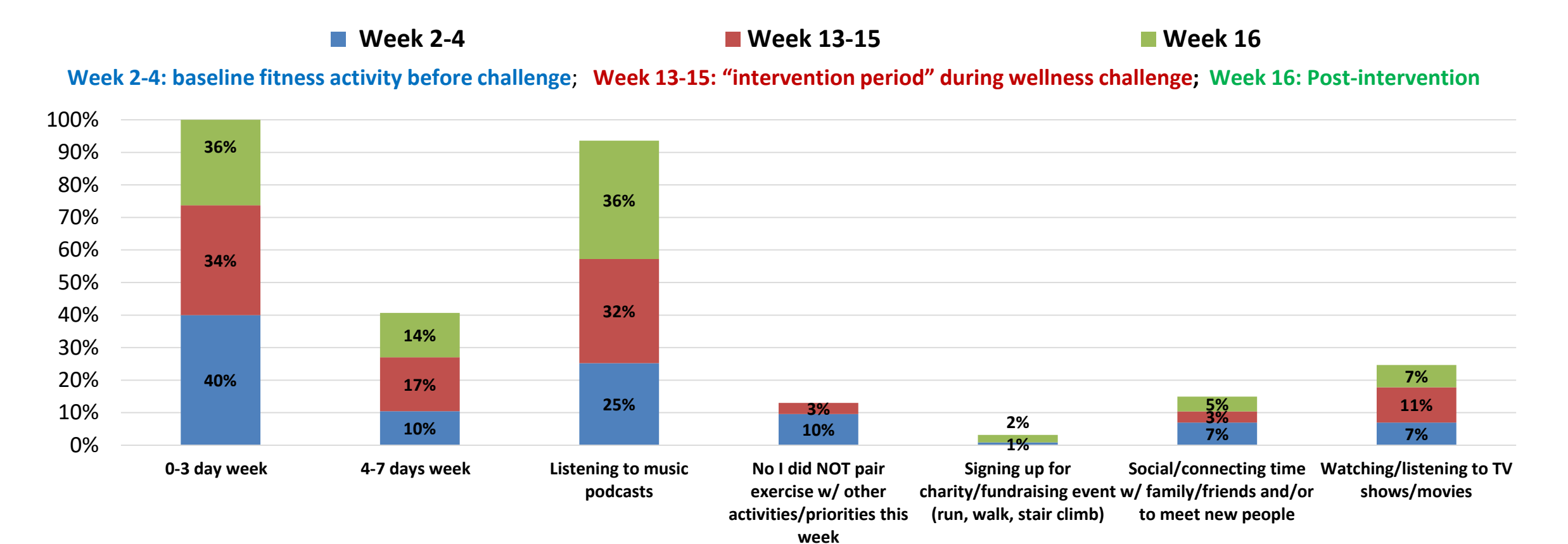
- 3 Item Survey sent 1/wk via MedHub per AHA guidelines
  - # days in last wk did you engage in > 30 minutes moderate AND/OR 25 minutes vigorously intensity exercise?
  - Did you pair exercise w other activities/priorities in your life?
  - Rate your overall health (physical, emotional) this past week?

#### RAPS PROGRAM

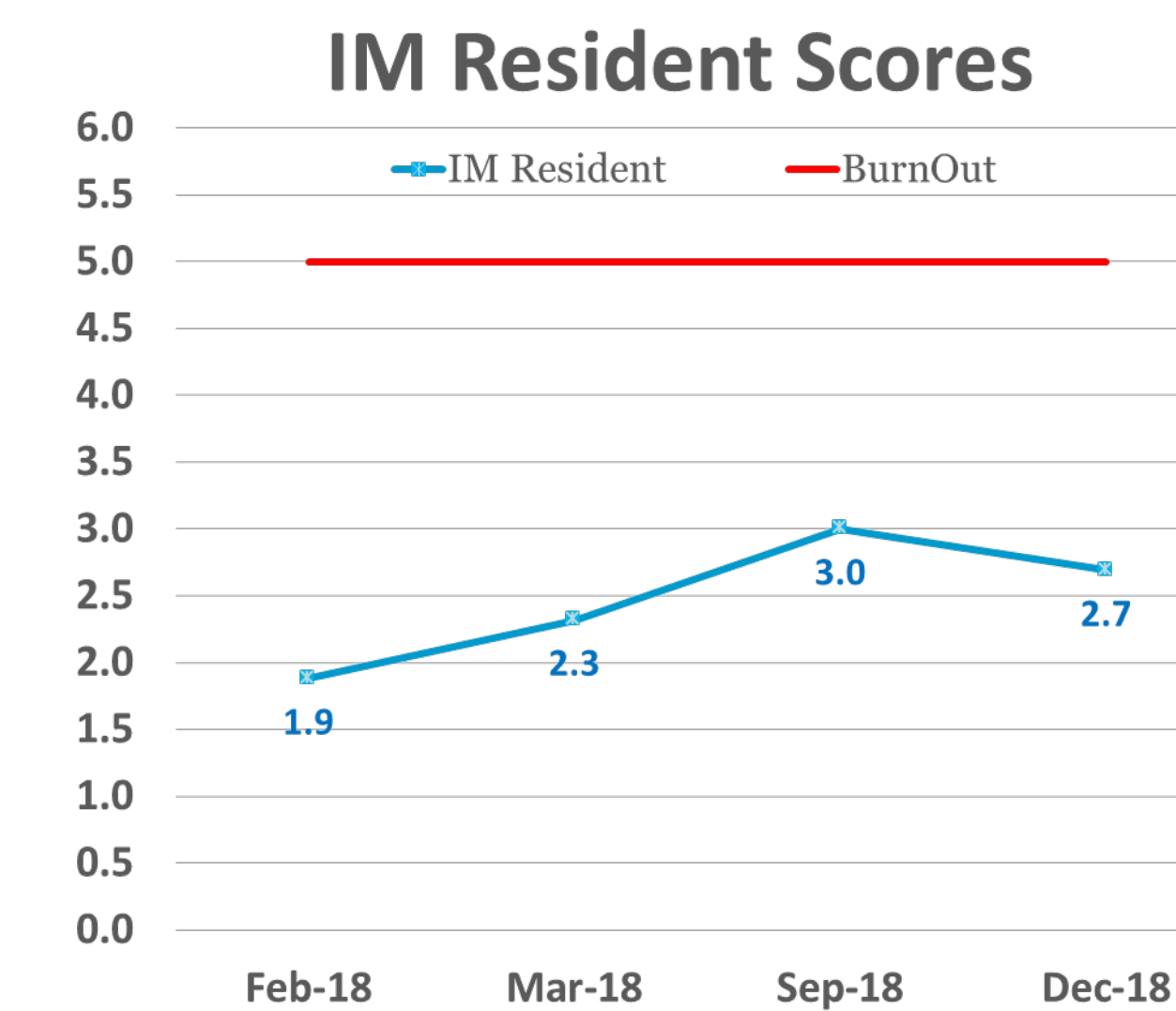
- Semi structured 3-5 minute individual interviews with interns re: overall value of RAPS

### RESULTS:

#### FIT<sub>4</sub>LIFE SURVEY



#### MAYO WELL-BEING INDEX



Scores  $\geq 5$  predict resident burnout and associated symptoms such as low mental quality of life, high fatigue, or recent suicidal ideation.

#### RAPS PROGRAM

##### Attendance at Events

- June 2018- 11 interns
- Jan 2019- 4 interns

##### Interns Interviewed (N=13)

- Overall Value
  - 85% (11) welcomed idea of a more structured peer advisor program
  - 15% (2) felt not necessarily helpful but potential
- # Meetings w peer advisor
  - 100% weekly (at clinic)
  - 0% outside clinic setting

### DISCUSSION, BARRIERS, STRATEGIES

#### KEY FINDINGS/DISCUSSION

- Initiating core teams before residency begins may be helpful in initial transition which could lead to long-term trusted relationships
- Simplicity is key and frequent reminders yielded higher completion rates but cumbersome for the team

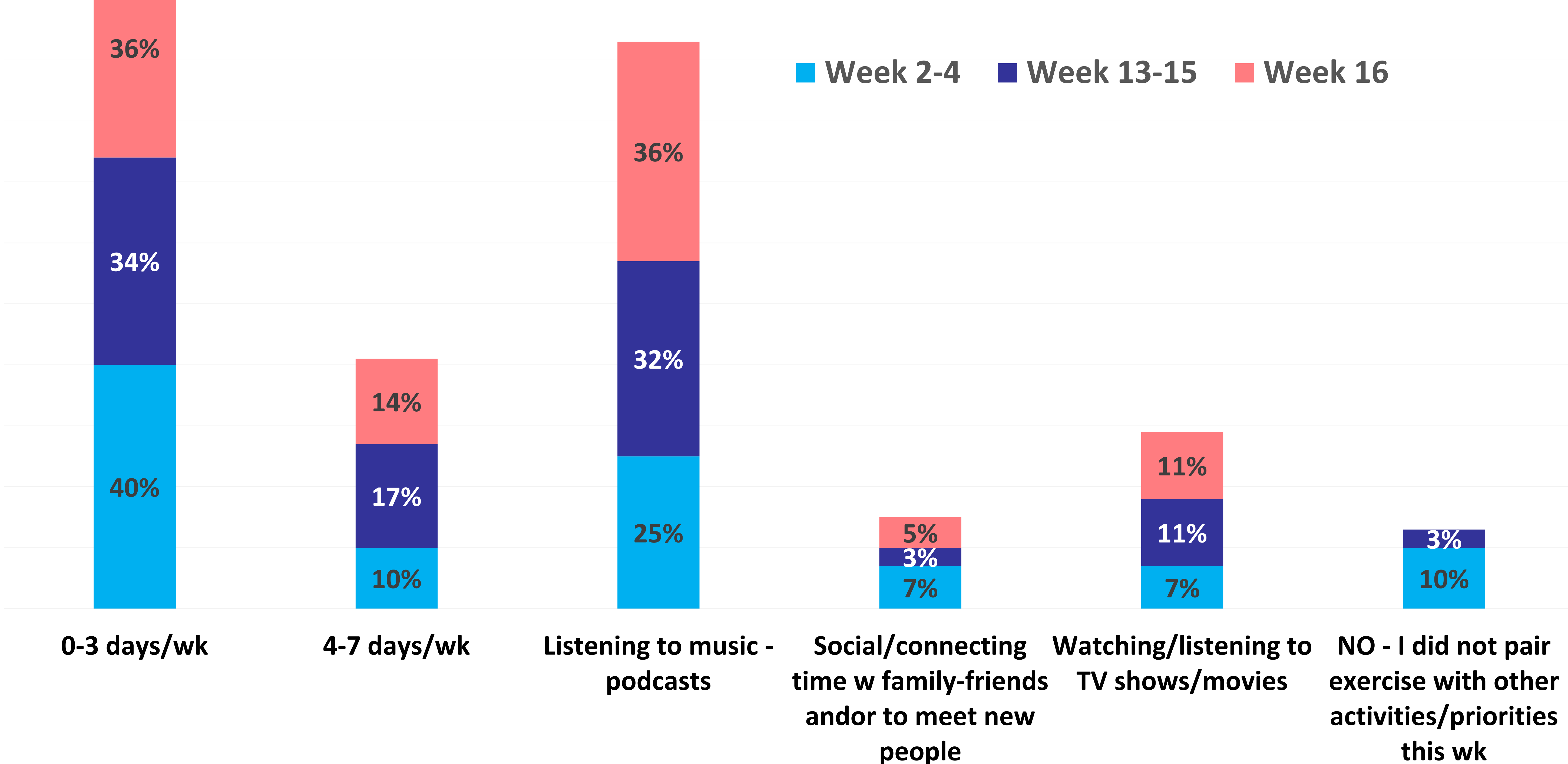
#### BARRIERS

- Limited data and attaining data with surveys may be increasing burnout by adding more to be done

#### STRATEGIES

- Formation of Residency Program Wellness Committee to continue to sustain/build interventions

# Fit4Life Survey Results

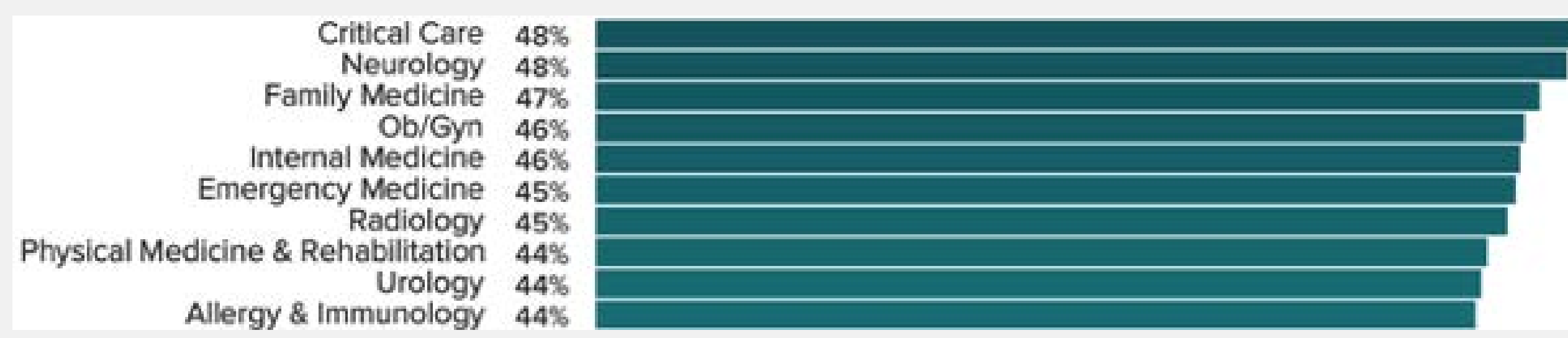


# Efficacy of Well-Being Self-Awareness and Departmental Interventions within a Single Radiology Residency Program

Mason Brown, M.D., S. Reimer, M.D., N. Patel, M.D., N. Dickson, D.O., W. MacDonald, M.D.  
Department of Radiology, Aurora St. Luke's Medical Center, Milwaukee, Wisconsin

## INTRODUCTION

- Burnout – a severe stress reaction to daily occupational responsibilities that may be associated with adverse mental health and work performance<sup>1</sup>
- Predisposing risk factors to resident physician burnout<sup>2</sup>
  - Intense work demands
  - Limited control
  - High degree of work-home interference
- Top 10 burnout specialties<sup>3</sup>
  - Radiology ranks 7<sup>th</sup> with a burnout rate of 45%
  - Medscape survey N= 15,000+ physician responses; 29 specialties



## PURPOSE

- Promote well-being self-awareness
- Identify program-specific contributing factors of burnout
- Implement departmental changes to improve well-being

## METHODS

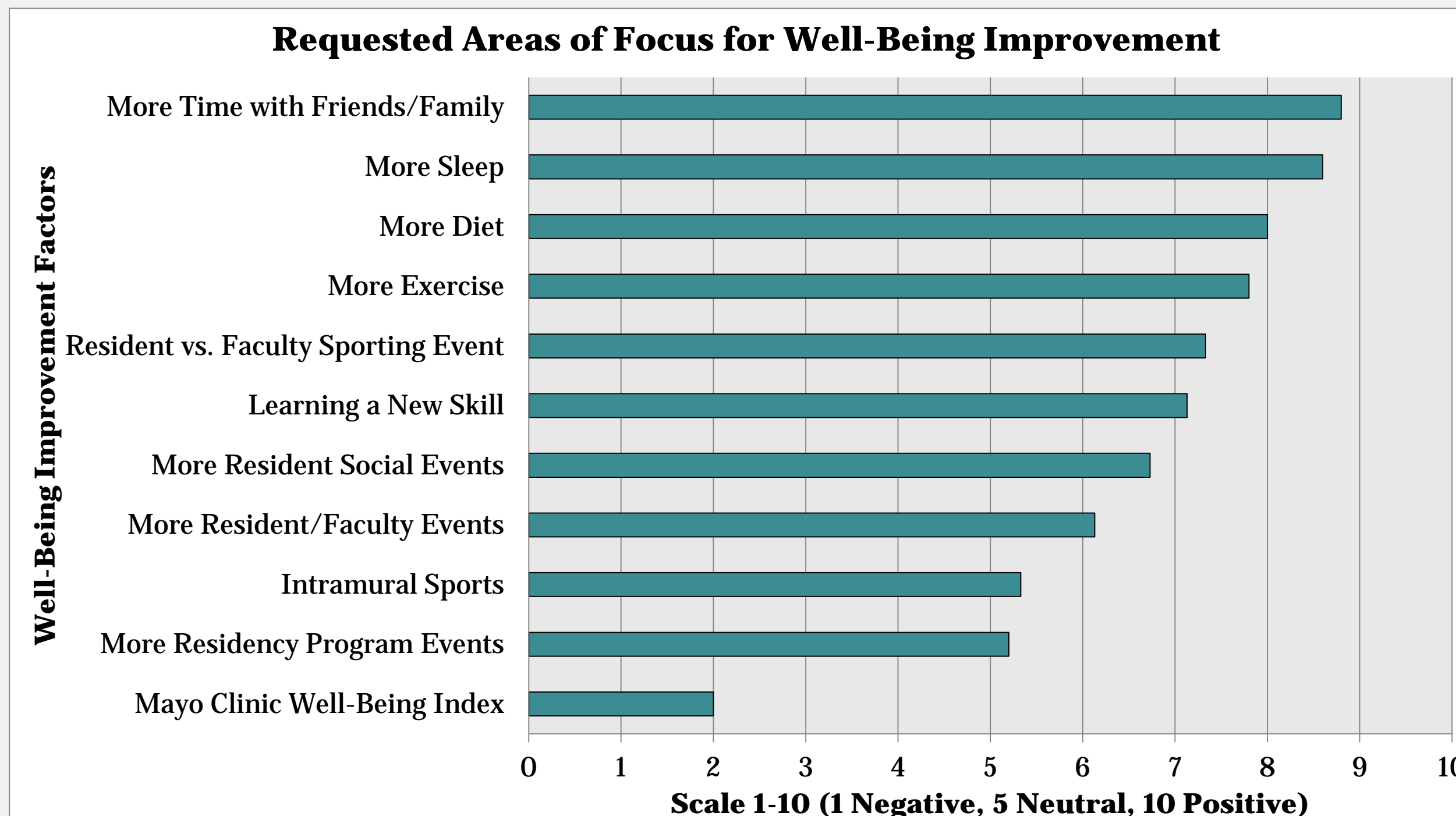
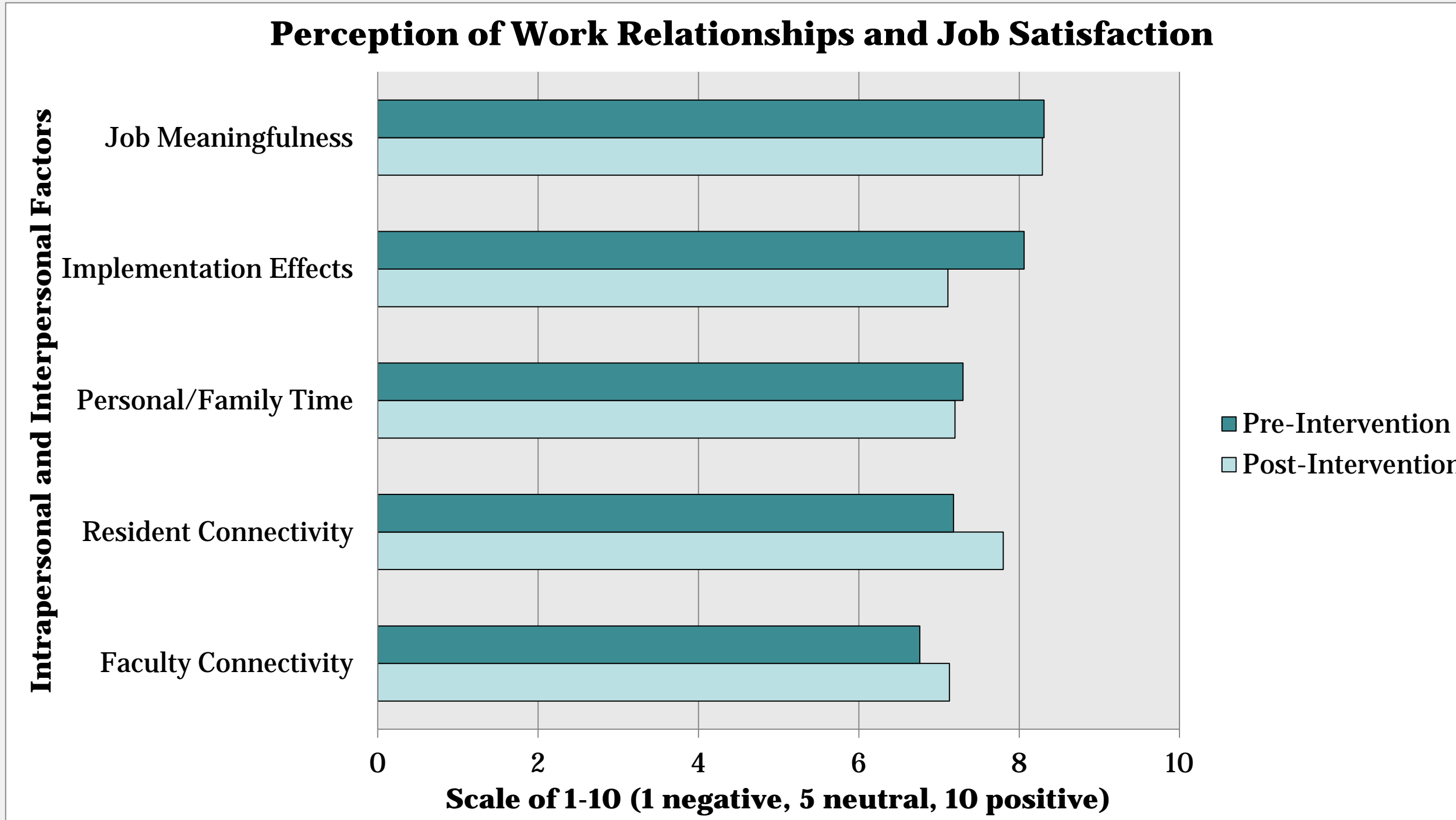
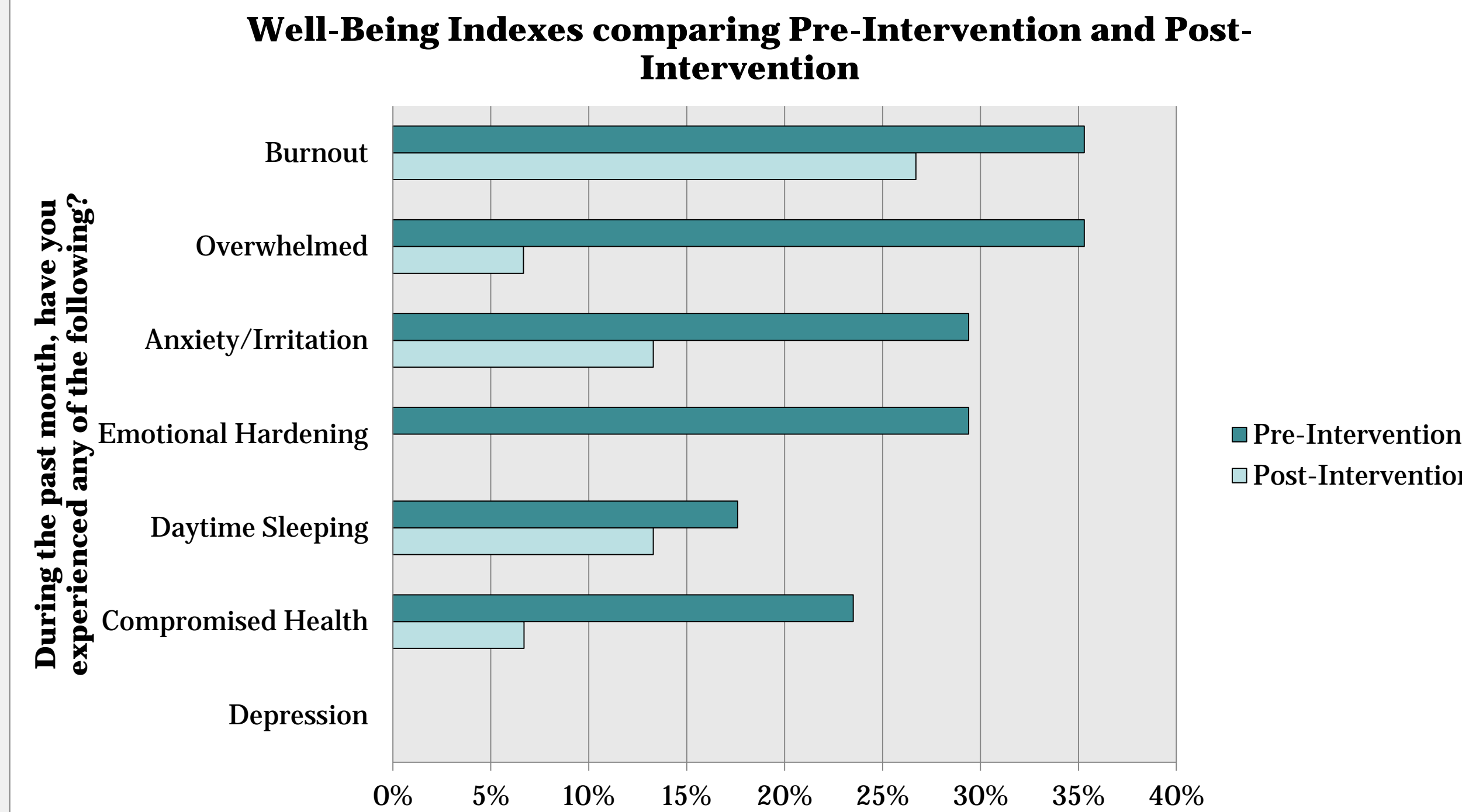
### INTERVENTIONS - QUALITY IMPROVEMENT PROPOSAL

- 1) After-hours journal club at a local restaurant
- 2) New resident welcome party hosted by faculty
- 3) Weekly CORE Radiology lecture series that focused on team-based exercises and resident camaraderie

### MEASURES

Instrument/Survey	Pre	Quarterly	Post
<b>Mayo Well Being Index:</b> <sup>4</sup> Voluntarily and anonymously completed by PGY2-5 radiology residents (83.3% participation) over 2 consecutive academic years	✓	✓	✓
<b>Work Relationships and Job Satisfaction Survey</b>	✓		✓
<b>Program Survey:</b> Efficacy of Well-Being awareness, implementations, additional risk factors, and possible future areas of improvement			✓

## RESULTS



## DISCUSSION

- Resident burnout, overwhelming, anxiety/irritation, emotional hardening, daytime sleepiness, and compromised health all demonstrated a decrease in monthly frequency after project interventions
- Job satisfaction and personal/family time remained unchanged
- Sense of resident to resident connectivity and resident to faculty connectivity increased
- Highest rated implementation was the new resident welcome party hosted by faculty
- Aside from known well-being modifiers<sup>5</sup>, a resident vs. faculty annual sporting matchup was most highly rated from a list of future implementations
- The Mayo Clinic Well-Being Index was not perceived as a helpful awareness or assessment tool

## CONCLUSION/FUTURE DIRECTIONS

### Key Findings

- Overall resident well-being improved over the course of 2 academic years while under surveillance and with 3 program interventions
- Increased time with friends and family was perceived to offer the most significant improvement to well-being

### Limitations

- The Mayo Clinic Well-Being Index was perceived negatively, thus, survey results might contain inaccurate responses
- Survey results were corrected for graduating and incoming residents but could not be utilized to reflect individual or PGY data changes due to the anonymous design

### Next Steps and Sustainability

- Assess interest for an annual sporting matchup between resident and faculty teams

### References

1. Thomas NK. Resident burnout. *Jama*. 2004;292(23):2880-9.
2. Lin DT, Liebert CA, Tran J, Lau JN, Salles A. Emotional Intelligence as a Predictor of Resident Well-Being. *Journal of the American College of Surgeons*. 2016;223(2):352-8.
3. Peckham, Carol. Medscape National Physician Burnout & Depression Report 2018. <<https://www.medscape.com/slideshow/2018-lifestyle-burnout-depression-6009235>>.
4. Mayo Clinic Well-Being Index. <<https://www.mededwebs.com/well-being-index>>.
5. Fargen KM, Spiotta AM, Turner RD, Patel S. The Importance of Exercise in the Well-Rounded Physician: Dialogue for the Inclusion of a Physical Fitness Program in Neurosurgery Resident Training. *World neurosurgery*. 2016;90:380-4.

# OB/GYN RESIDENT WELLBEING FOCUSED ON WORKLOAD & WELLNESS TIME: MEASURED USING A 3-ITEM WELL-BEING CHECK-IN CARD

Naomi Light, MD, Morgan Altinok, DO, Carla Kelly, DO, MMM, Deborah Simpson, PhD

NI VI Meeting #4  
Tucson, AZ March 2019

## INTRODUCTION: BACKGROUND

### PHYSICIAN BURNOUT & WELL BEING

- Between 22-60% of practicing physicians are reported to have experienced burnout<sup>1</sup>
- OB/GYN resident burnout has been reported at 90%<sup>2</sup>
- Duty hour limitations were implemented for patient safety:<sup>3</sup>
  - Associated with an increase in overall resident quality of life
  - Potential sacrifices in resident education and patient care
- Contributors to burnout (and drivers of engagement)<sup>4</sup>
  - Workload and job demands
  - Control and flexibility
  - Poor work-life integration
  - Check Box  Requirements (filling out surveys, module requirements, duplicates, paperwork)

### DATA RELATED TO WELL BEING

- **Multiple survey tools available** but may cost money and/or are time-consuming to complete
- **Existing/Archival Data:** Residents and faculty are required to complete multiple surveys annually/biennially:
  - Press Ganey Annual Engagement Survey (PG-ES)
  - ACGME Annual Survey

## PROJECT AIMS

- 1. Resident Well-Being Interventions:** To implement workload changes and time for wellness
- 2. Data Sets:** Identify existing data sets and/or develop a quick "check in" survey as process and outcome measures for resident/faculty well being

#### REFERENCES/RESOURCES

1. Shanafelt, Tait D., et al. "Burnout and satisfaction with work-life balance among US physicians relative to the general US population." *Archives of internal medicine* 2012;172(18):1377-1385.
2. Linzer, Mark, et al. "Predicting and preventing physician burnout: results from the United States and the Netherlands." *The American Journal of Medicine*. 2001;111(2):170-175.
3. Goitein, Lara, et al. "The effects of work-hour limitations on resident well-being, patient care, and education in an internal medicine residency program." *Archives of Internal Medicine*. 2005;165(22):2601-2606.
4. Shanafelt TD, Noseworthy JH. Executive leadership and physician well-being...*Mayo Clinic Proceedings*. 2017;92(1):129-146.

## METHODS:

### AIM 1: WELL-BEING INTERVENTIONS

- 1. Effective July 2, 2017 changed 3 workload protocols:**
  - **Weekend Rounding Protocols:** Residents continue to round on all antepartum and gyn patients at the end of each 24-hour shift but now faculty complete all postpartum rounding
  - **Weekday Postpartum Rounding Redistributed** decreasing number of patients per junior resident from >10 patients to maximum: 6-7 patients per resident
  - **No Resident Service Obligations on Sundays** and two months of no residents on night float
- 2. Effective Sept 2017 quarterly wellness mornings** began using protected education time for faculty and resident physicians

### AIM 2: DATA SETS TO EVALUATE INTERVENTIONS

- 1. Process Measure: Well Being Check-In Cards (WBCIC)**
  - 3-item WBCIC asks participants to periodically rate

**WELL-BEING CHECK-IN**  
Rate based upon your experience/feeling in the last week.

1. The amount of time I spend on personal well-being is: (circle one)

Pitiful      Less than I need      Adequate      Excellent

2. The work I do is meaningful to me:

Strongly DISAGREE      Strongly AGREE

3. The one thing I have done for well-being that is the most meaningful to me:

\_\_\_\_\_

(circle one)      PGY1-2      PGY3-4      FACULTY

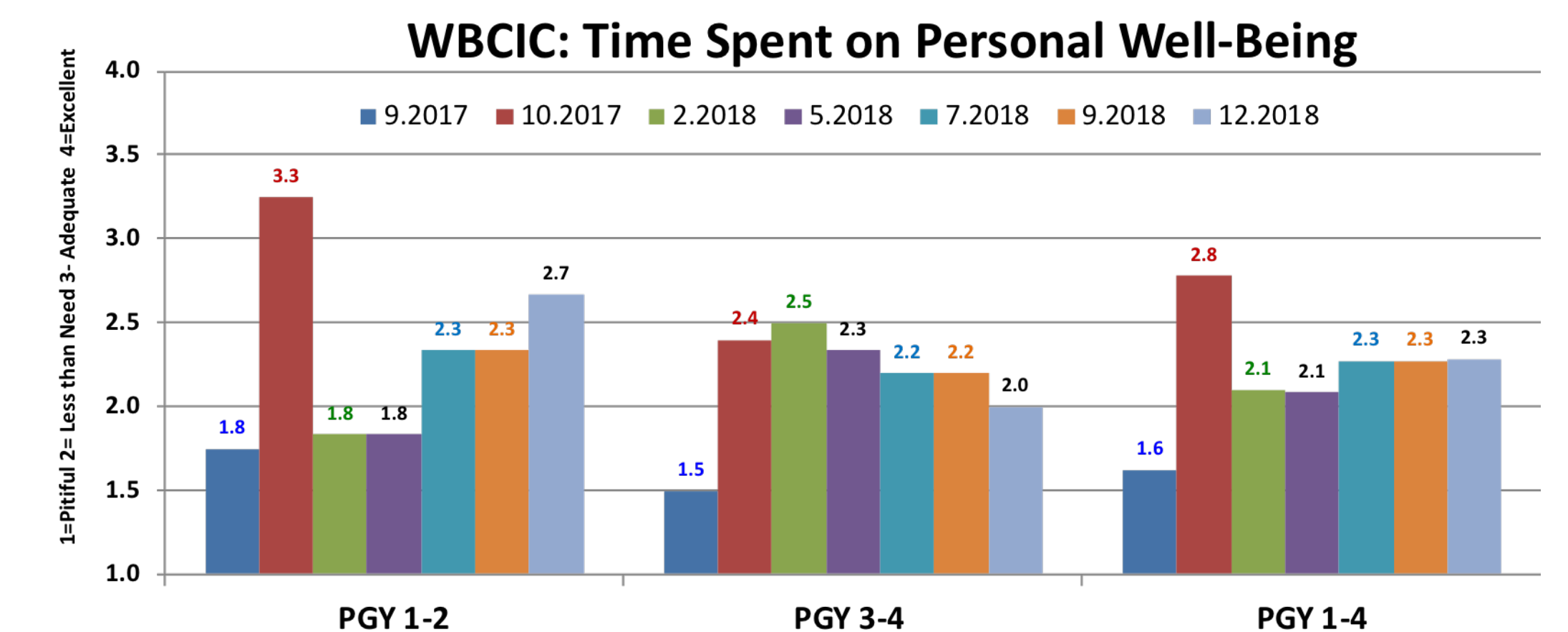
- 2. Outcome Measures: Press Ganey Engagement Survey (PG-ES) and Mayo Well Being Index (MWBI)**

- **PG-ES** identified crosscutting items/domains consistent with aim: engagement, organization, leadership/manager, etc.
  - PG-ES discontinued with organization merger
- **MWBI** individuals with scores  $\geq 5$  at risk of adverse outcomes due to poor quality of life, burnout and suicidal ideation

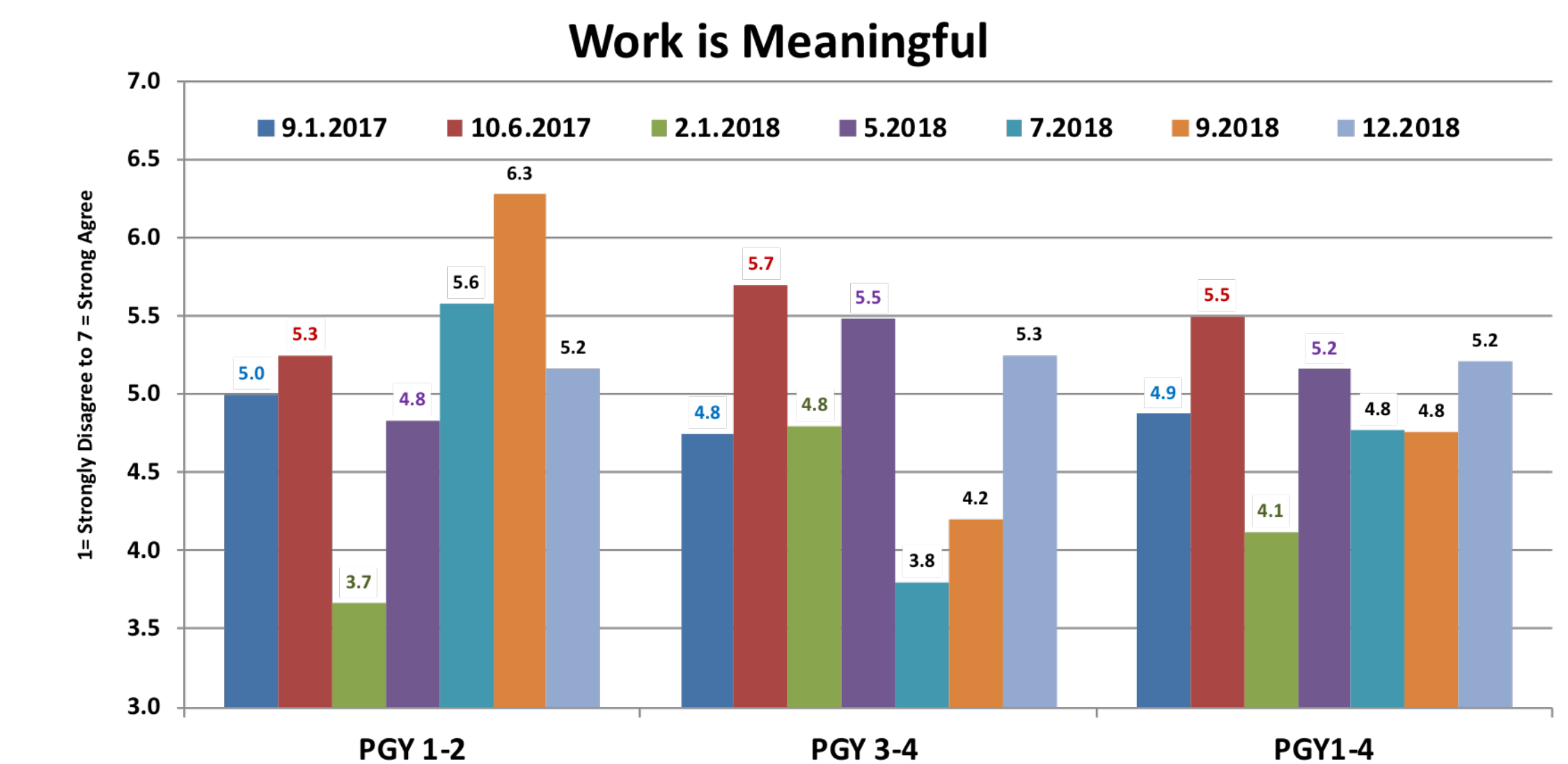
## RESULTS:

### WELL BEING CHECK-IN CARDS (WBCIC)

- 6 WBCICs Completed in Sept 2017-Dec 2018



- **Meaningful Well-Being Activities:** Eat, Sleep, Time with Friends/Family; Health appointments, Exercise (Squat Challenge), Travel, Read a book for fun



### MAYO WELLBEING INDEX

- ↓ from 3.2 to 2.9 over 6 months; ↑ by 1.0 in Dec to 3.8

## Discussion, Barriers and Strategies

### Key Findings:

- 3-item WBCIC provides on-going process measures
- MWBI provides a benchmark with national comparisons for Ob/Gyn residents and findings appear = WBCIC
- Scores by trainee level & time of year
- Barriers/Limitations:** Lack of concurrent data for faculty and data collection
- Strategies:** Use protected time for data collection; Continue to implement interventions; and add/adjust as needed

## Project Management Plan

Begin completing this Project Management Plan at Meeting One and complete it with your team following Meeting One, i.e., by November 2017. Teams will have the opportunity to review/revise their Project Management Plans throughout the 18-month Initiative at each of the on-site meetings. The collective data from all of the teams' completed project management plans will be invaluable as we share and learn from this collaborative experience.

**Team:** Aurora Health Care    **Project Title:** GME Wide and Program Specific Initiatives to Strengthen a Culture of Well-Being at AHC

I.	<p>Vision Statement (markers of success by March 2019; Refer to Toolkit #5)</p>	<p>AURORA HEALTH CARE'S GME programs will be nationally recognized for preparing our current and future physicians to help people live well – our patients, each other, and ourselves.</p>
II.	<p>Team Objectives (‘needs statement,’ project requirements, project assumptions, stakeholders, etc.)</p>	<p>We used ACGME Institutional and Program Specific Well Being Inventories along with ACGME annual data to identify <b>GME aims/objectives</b>:</p> <ul style="list-style-type: none"> <li>• To serve as well-being system leaders through the development of clear GME protocols and procedures</li> <li>• To identify and provide GME specific and system-wide resources/support to team members</li> <li>• To improve resident and faculty well-being through residency/fellowship program specific initiatives</li> </ul> <p>Each of our 4 participating programs then identified need using existing data and literature to identify their objectives/aims and submit to the steering committee for review.</p> <ul style="list-style-type: none"> <li>• <b>Internal Medicine:</b> (1) To create a personal team for incoming residents to help with the transition into residency and (2) Education and promotion re: importance of personal health including exercise/diet it's impact on health</li> <li>• <b>Ob/Gyn:</b> (1) To implement workload changes and time for wellness and (2) Identify existing data sets and/or develop a quick “check in” survey as process and outcome measures for resident/faculty well being</li> <li>• <b>Family Medicine:</b> (1) Design and implement a systems-based intervention(s) that improves resident wellness and prevents burnout</li> <li>• <b>Radiology:</b> (1) Promote well-being self-awareness; (2) Identify program-specific contributing factors of burnout; and (3) Implement departmental changes to improve well-being</li> </ul>

III.	<p><b>Team Members &amp; Accountability</b> (list of team members from Toolkit #6 and who is accountable for what)</p>	<p>We have GME wide activities and Program specific. A roster for each is provided at the end of this report.</p>
IV.	<p><b>Necessary Resources</b> (staff, finances, etc.)</p>	<p><b>Staff Resources include:</b> Time/support from DIO, GME Program Manager and Office, Directors of Medical Education and Well Being, System VP Med Staff Chief Med Officer, along with the Program Coordinators and Directors for each of our 4 targeted program activities.</p> <p><b>Resources/Finances:</b> System VP Med Staff Chief Med Officer was key advocate/leader in securing Mayo Well Being Index as a system-wide tool for physicians, nursing to complement our GME use. Expense for travel for 1 faculty and 1 resident member of each program to NI-VI meetings is provided by GME office; additional participants' travel is drawn from their program budget.</p>
V.	<p><b>Measurement/Data Collection Plan</b></p>	<p><b>GME Wide Tools</b></p> <ul style="list-style-type: none"> <li>• Mayo Well-Being Index (with reports available at program level for residents)</li> <li>• ACGME Program Surveys and Well-Being Data</li> <li>• A common GME required end of program evaluation (a well-being item added) is used by all programs</li> <li>• Key Items from System Engagement Survey (tool changed mid project due to merger so not easily available)</li> </ul> <p><b>Program Specific Tools</b></p> <ul style="list-style-type: none"> <li>• Most programs generated their own tools to monitor process</li> <li>• Check-In Check Out Card for Ob/Gyn to the Fit4Life MedHub (drawn from AHA guidelines)</li> <li>• Participation/Attendance Tracking at NI-VI related events/activities</li> </ul>
VI.	<p><b>Stakeholder Communication Plan</b> (may be helpful to draft a flow chart of team members &amp; senior management; Refer to Toolkits #2 and #4)</p>	<p><b>GME Wide Communication</b></p> <ul style="list-style-type: none"> <li>• GMEC meetings and retreats with PD's reporting findings to their faculty/residents (e.g., new policies such as quarterly wellness day)</li> <li>• Resident Council monthly meetings</li> <li>• Updates at monthly Shared Noon Conference attended by all programs; in May-June of each year, each NI-VI team provides a 5-7 min report on their project, outcomes, lessons</li> <li>• E-mail communications from Co-Project Directors (Simpson, Bidwell)</li> <li>• Academic Affairs/Medical Education 1/month newsletter – highlighting key activities</li> </ul>

		<p><b>Program Specific Communication</b></p> <ul style="list-style-type: none"> <li>Initially e-mails, reports at resident/faculty meetings by team leaders, calendaring of events/activities within each MedHub’s program site</li> <li>Over time all programs realized importance of on-going and multiple forms of communication building on ideas from Paul Plsek, Chair of Innovation, Virginia Mason Medical Center’s session at Meeting #3. Examples include:             <ul style="list-style-type: none"> <li>Internal Medicine’s Monthly Newsletter Update (adopting Virginia Mason idea) to minimize e-mails and have “1 source” for vital information</li> <li>Internal Medicine’s Fit4Life tracker – automated survey /e-mail every Monday to promote exercise initiatives</li> <li>Family Medicine’s Posters/Flyers explaining Resource ½ Day</li> </ul> </li> </ul>	
VII.	<p>Potential Challenges (engagement, budget, time, skills gaps, etc.; Refer to Toolkit #3)</p>	<p><b>Challenges</b></p>	<p><b>Strategies</b></p>
		<p>1. <b>Team Time:</b> Always, always a challenge...</p>	<ul style="list-style-type: none"> <li>Remind participants that time really means priority</li> <li>Established as Priority: Clinician Well Being is...             <ul style="list-style-type: none"> <li>Crisis and all clinicians are feeling it</li> <li>NI-6 is opportunity to address those barriers in one’s own, program, GME control</li> <li>ACGME CPR and CLER requirements</li> </ul> </li> <li>Sought opportunities to use existing meetings, video/phone conference and cloud-based warehouses to facilitate work</li> </ul>
		<p>2. <b>Metrics:</b> What can we use, is it meaningful, how to we get people to do it</p>	<ul style="list-style-type: none"> <li>Secured common GME wide and then system-wide well-being tool to have a cross-cutting standard (quick, easy, secure: no possibility of identity revealed)</li> <li>Reminders that there is “existing data” (ACGME, engagement, Press Ganey metrics)</li> <li>Emphasized “what data would convince you...” and expanded concepts of process and outcome data to support program specific metrics</li> <li>Strategies for data collection: Peer to peer ask, complete at existing meetings</li> </ul>
		<p>3. <b>Well Being is Complex &amp; Individualized</b></p>	<ul style="list-style-type: none"> <li>Concept of well-being is “clear” and “like art” – individuals know it when they see it/feel it.</li> <li>Continuously sought to clarify that well-being – at its core – starts with</li> </ul>

		<p>purpose/meaning supported by competence, autonomy, and connections – with individuals having choice – seemed to improve participation</p> <ul style="list-style-type: none"> <li>• Use of literature re: what interventions support well-being; it's impact on system issues (patient safety, quality, professionalism) and the individual, etc.</li> </ul>
VIII.	<p>Opportunities for Scholarly Activity (potential publications, conference presentations, etc.)</p>	<ul style="list-style-type: none"> <li>• Our NI-VI teams have program level, GME wide, and system opportunities to present their work: GMEC, Shared Noon Conference, and Aurora Scientific Day</li> <li>• Regional/national meetings including the AIAMC also provide a forum</li> <li>• To date, all five of our participating teams have presented their work in a scholarly venue</li> <li>• Specialty Specific / Med Ed Organizations scholarly work has been presented/published in an array of venues including Journal Patient Centered Research and Review, Family Medicine Midwest, Advocate Primary Care Transformation Collaborative Conference, American College of Obstetricians and Gynecologists (ACOG) – Wisconsin Chapter, and ACGME</li> </ul>
IX.	<p>Markers (project phases, progress checks, schedule, etc.; Refer to NI V Roadmap to 2019 which will be presented at Meeting One)</p>	<p>At the beginning of the project we established markers including:</p> <ul style="list-style-type: none"> <li>• AIAMC Mtg dates</li> <li>• Shared Noon Conference required presentations (Year 1 – Interventions and 1<sup>st</sup> PDSA cycle, Year 2 – 2<sup>nd</sup> PDSA Results and lessons learned)</li> <li>• Aurora Scientific Day Submission with opportunity for abstract publication in JPCRR</li> <li>• Specialty specific meeting calls</li> </ul>

Sections X thru XIII to be completed first quarter 2019 for “Final Proceedings” booklet:

X.	<p>Success Factors</p>	<p><i>The most successful part of our work....</i></p> <p>Our intentional design approach as outlined in our initial application was successful:</p> <ul style="list-style-type: none"> <li>• We created win-wins to reduce the “check box” burnout</li> <li>• We used the IHI Model for Improvement Model (e.g., aim, measures, 2 PDSA cycles, disseminate, and sustain) to</li> </ul>
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		<p>meet ACGME requirements;</p> <ul style="list-style-type: none"> <li>We met requirements for: (1) Quality Improvement: (2) Scholarly Activity (for residents and faculty)</li> <li>And our well-being scores are good – and we continue to strive to make them better – working with our health system leaders</li> </ul> <p><b>We were inspired by....</b></p> <p>The creativity, commitment, innovation, persistence and successes of our residency program team leaders and our GME successes in working with the system to accept clinician well-being as a crucial element to high quality, safe patient care.</p>
XI.	Barriers	<p><b>The largest barrier encountered was....</b></p> <p>Acceptance that well-being is vital to phenomenal patient care with actions/resources.</p> <p><b>We worked to overcome this by....</b></p> <p>We aren't done – and probably never will be. Thus, we see this as a journey where we must continue to work on the recognition that well-being is vital for our common goals of amazing health for patients, providers and populations. We must use multiple strategies – and are success in having the addition of a Director for Well Being for Academic Affairs will continue to expand our reach and possibilities.</p>
XII.	Lessons Learned	<p><b>The single most important piece of advice to provide another team embarking on a similar initiative would be....</b></p> <ul style="list-style-type: none"> <li>Over time a series of small steps and build recognition of the problem and identification/implementation of approaches at system and individual levels: Persistence, teamwork, data, and dissemination/spread.</li> </ul>
XIII.	Expectations Versus Results	<p><b>On a scale of 1 to 10 (with "1" meaning nothing and "10" meaning everything), how much of what you set out to do was your team able to accomplish?</b></p> <p>1 2 3 4 5 6 7 8 9 <u>10</u></p>
XIV.	Sustainability and Next Steps	<p><b>What does your CEO need to know to help keep your work sustainable?</b></p> <p>Addressing well-being is like Russian Stacking Dolls – each micro-unit is unique and yet has much in common with the next level up. To work it must be intentionally designed and aligned at all levels and phases. We in #meded have and will continue to work with all "dolls" to address this workforce/health system issue.</p>



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## INTRODUCTION: Background

Nationally and locally, burn-out among healthcare workers is increasingly prevalent, negatively impacting all elements of healthcare including quality of care, patient experience, healthcare costs and healthcare worker well-being. Surveys of our own resident population reflected that our trainees are not immune and are at risk for burnout.

In response, a resident-led group designed, implemented and is evaluating and augmenting a resident wellness program (ResWell) at Bassett Medical Center. ResWell aims to improve well-being and to decrease burn-out among all Bassett residents (internal medicine, general surgery, and transitional year trainees).

## Aim/Purpose/Objectives

We envisioned a healthy resident as a person who is healthy in professional, physical, social, marital, family, psychological, intellectual, and spiritual domains. ResWell was designed to engage residents in trainee-directed activities and interventions to elevate the resident community toward a higher level of well-being in these domains and create a culture of wellness. Next, we looked to measure the impact of these interventions on residents' levels of well-being and resilience. We inquired about medical errors and their psychological effects to direct interventions to address this particular area of stress. We solicited feedback about ResWell activities to improve the quality of the activities.

## METHODS: Interventions/Changes

### Formation of ResWell:

- Following the insightful observations of a transitional year resident in April, 2017, planning began to create a resident-directed group to improve resident wellness.
  - Recruited returning and new residents to form a Resident Wellness committee in June, 2017
  - Committee met regularly and collaborated institutional Well-Being leaders and advocates
  - Visioning session to develop a mission and vision statement
  - Funding secured from the Medical Education Endowment fund to implement wellness programming

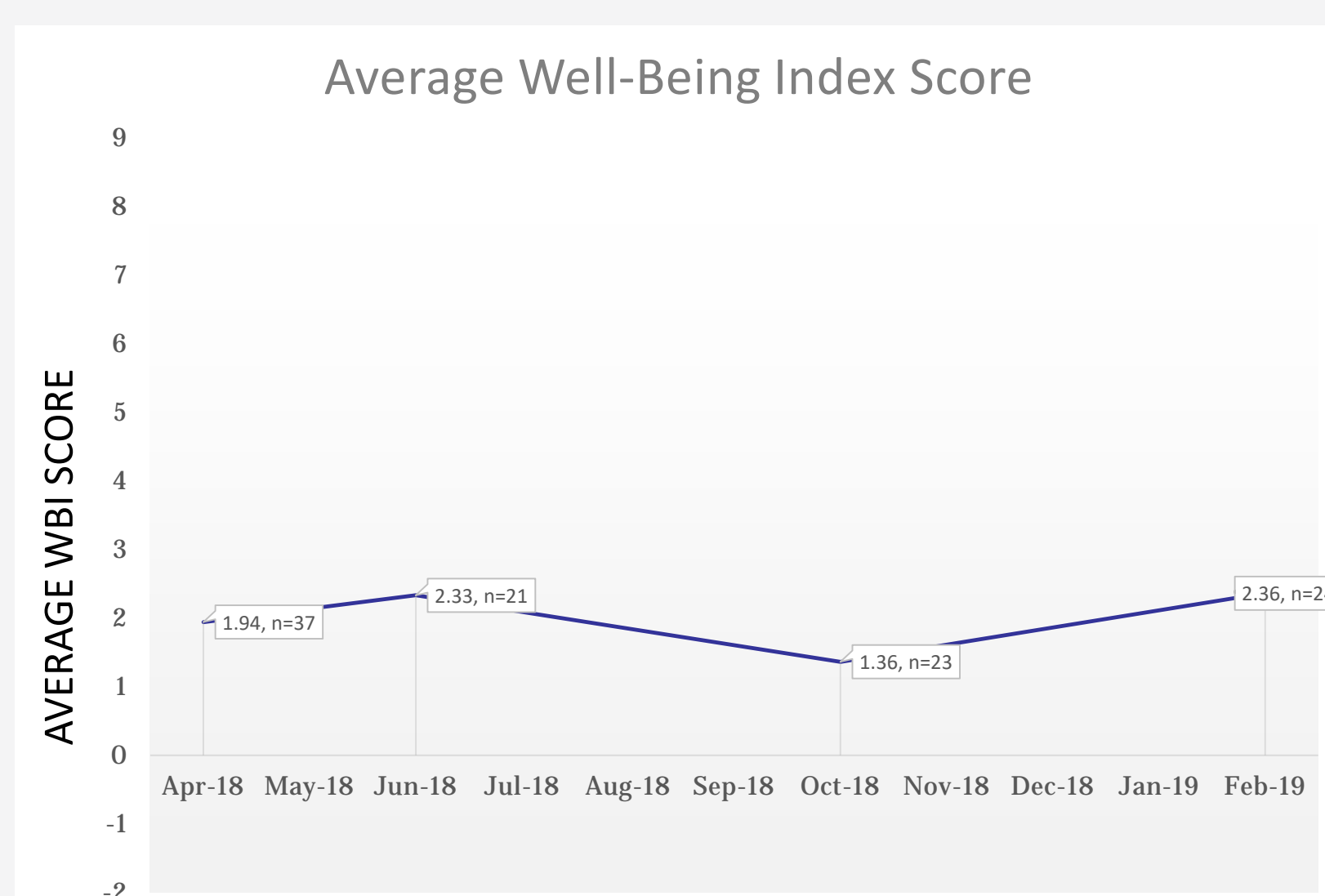
### Interventions/Changes

- Professional Growth: Dinner workshops including 'Narrative Medicine', 'Death over Dinner', and workshops for dealing with stressful situations; Initiated Peer and Faculty mentorship programs
- Physical Health: Zumba workshops, local hikes; Nutrition: Food subcommittee advocated for & attained healthier foods served at resident conferences; Smoothie days
- Mental Health and Stress Reduction: Mental Health services were strengthened, made more visible and residents receiving education regarding services; Pet assisted therapy; Arts in Healthcare (in collaboration with Nursing and Pastoral Care)
- Community Building and Communication: Facebook page, Celebrations including potlucks, movie nights, secular and religious holiday celebrations honoring diverse cultural and spiritual traditions.

## METHODS: Measures/Metrics

- Thrice annual administration of IRB approved (#2090) survey of resident wellness that combines Expanded Resident Well-Being Index, the Brief Resiliency scale, open questions regarding program culture and specific activities, medical error questions derived from the Stanford Professional Fulfillment Index along with open ended questions regarding the psychological effects of errors and help-seeking.
- Brief post-activity surveys soliciting feedback on the activity

## RESULTS



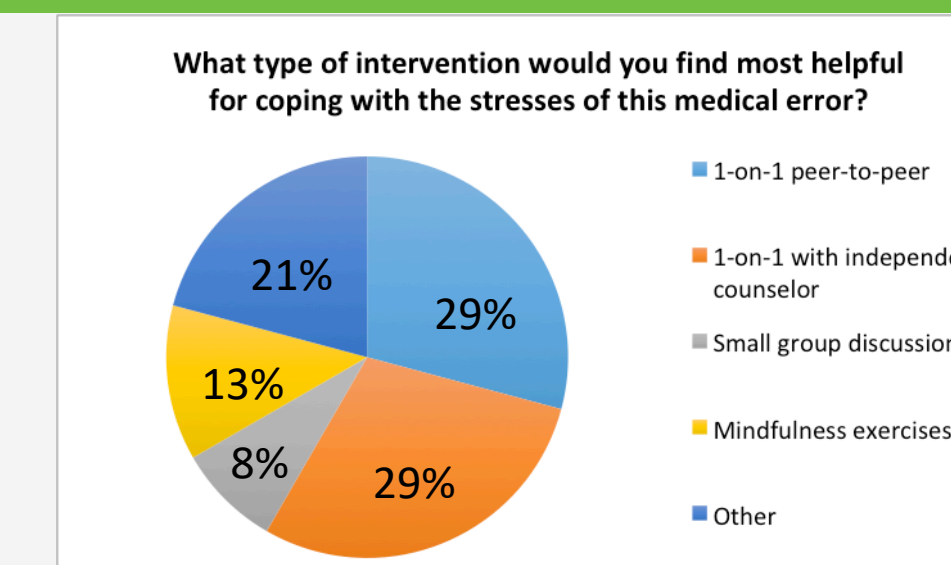
The Well-Being Index is a brief screening for multiple dimensions of distress including fatigue, depression, burnout, anxiety / stress and mental / physical quality of life. A higher score is associated with higher risks of reports a recent medical error, higher risk of suicidal ideation, higher risk of poor mental quality of life, higher risk of burnout and a higher risk of severe fatigue (Dyrbye, LN, Satele, D, Sloan, J, Shanafelt, TD (2014). "Ability of the Physician Well-Being Index to identify residents in distress." J Grad Med Educ 6(1): 78-84.)

The Brief Resiliency Scale measures the ability to bounce back from stressful situations (Smith, BW, Dalen, J, Wiggins, K, Tooley, E, Christopher, P, Bernard, J (2008). "The Brief Resilience Scale: Assessing the Ability to Bounce Back." International Journal of Behavioral Medicine, 15: 194-200). The mean BRS scale did not change significantly over the study period.

Residents are engaged with wellness activities. Post-activity feedback was generally positive, activities were felt to be meaningful to participants.

Resident led activities resulted in a collaboration between ResWell, Nursing and Pastoral Care resulting in the initiation of an "Arts in Healthcare" program, now a free-standing program open to employees across the medical center.

## RESULTS: Continued



Questions about errors, related emotions and help-seeking were added to the surveys starting in October, 2018. Resident responses provide insights into how residents manage errors emotionally and residents' help-seeking behaviors. Because of these results, resident mental health services were strengthened and made more visible, and residents are being educated about resources.

## Discussion: Barriers & Strategies

### Key Findings

- Designing and implementing resident-directed activities, and encouraging and responding to constructive and instructive feedback enhances resident participation in activities.
- Emotional and administrative support to the resident members of ResWell is paramount for the group to be sustainable and to prevent burnout and attrition of those actively trying to prevent burnout.
- Resident engagement in ResWell allow for multidisciplinary collaborations resulting in the development of well-being initiatives that benefit the broader organization.
- The well-being needle can move using an organized multi-faceted approach and a small investment of resources.

### Limitations

- Time conflicts and restrictions among residents create scheduling challenges and increase stress upon those working to improve well-being.
- Small program with the minority of residents responding to surveys (small sample size) incumbers interpretation of quantitative data.

### Next Steps and Sustainability

- Following a PDSA paradigm, ResWell will grow by encouraging engagement and responding meaningfully to feedback, functioning as a central player in the development and maintenance of resident-directed wellness activities and interventions.
- Increase administrative support to promote sustainability
- Reevaluate ways to better assess ResWell's impact on resident well-being
- Ongoing reassessment of interventions and activities to identify gaps in achieving the vision and mission of ResWell

## Project Management Plan

Begin completing this Project Management Plan at Meeting One and complete it with your team following Meeting One, i.e., by November 2017. Teams will have the opportunity to review/revise their Project Management Plans throughout the 18-month Initiative at each of the on-site meetings. The collective data from all of the teams' completed project management plans will be invaluable as we share and learn from this collaborative experience.

**Team: Bassett Medical Center**

**Project Title: The Effect of a Resident-led Program in Wellness (ResWell) on Well-Being and Burnout in a GME Program**

I.	<p>Vision Statement (markers of success by March 2019; Refer to Toolkit #5)</p>	<p>The Steering Committee for ResWell developed a vision of a “well” resident in its early meetings in 2017: A person who is healthy in professional, physical, social, marital, family, psychological, intellectual, and spiritual domains. We reflected these goals into the vision statement: The resident physician at Bassett Medical Center will be intellectually, emotionally, spiritually, and physically prepared to engage in a stimulating and fulfilling life and career. The mission for ResWell was and remains to engage residents in trainee-directed activities and interventions to elevate our resident community toward a higher level of well-being in these domains.</p>
II.	<p>Team Objectives (‘needs statement,’ project requirements, project assumptions, stakeholders, etc.)</p>	<p>ResWell will be a central player in the development of wellness activities and interventions for the residents at Bassett Medical Center. They will plan and organize activities that address each domain of well-being. The institutional GME office will include them in decisions and strategies that pertain to resident wellness. ResWell members will meet with the CLER site visitors when they are at Bassett. The Steering Committee will supervise and administer the wellness and resiliency survey, administered to residents three times annually. Resident participation in ResWell activities will be observed and feedback obtained. ResWell will receive administrative and financial support from the GME office.</p>
III.	<p>Team Members &amp; Accountability (list of team members from Toolkit #6 and who is accountable for what)</p>	<p><u>Steering Committee</u> Kristen Baker, M.D. – Resident (Medicine) leader of ResWell – organize residents and plan activities. Lead author of AIAMC poster presentations Ethan Talbot, M.D. – Resident (Surgery) leader of ResWell - organize residents and plan activities.</p>

		<p>Caroline Gomez-Dicesare, M.D., PhD – Faculty champion for wellness and resiliency – assist Steering Committee, develop and administer survey tool, coordinate ResWell with broader institutional efforts toward wellness</p> <p>Sara Albright – VP Human Resources – facilitate coordination of ResWell with broader institutional efforts directed at wellness.</p> <p>Melissa Hochbrueckner – Administrative Support for ResWell</p> <p>James Dalton, M.D. – DIO and Chair, Medical Education Endowment Committee – advocate for and secure financial support for ResWell; primary liaison with AIAMC</p> <p>Connor Davenport, M.D. – Resident (Transitional) – studying the psychology of errors and help-seeking among residents and organizing interventions to improve mental health support for residents</p> <p><u>Other ResWell Committee Resident Members At-Large</u> – discuss resident concerns, help plan activities:</p> <p>Drs.Elizabeth Jacob, Mahyar Afrooz, Eugene Carragee, Farah Deshmukh, Anfin Erickson, Patricia Escaler, Maryam Khavandi, Jennifer Kramer, Ploypin Lertjitbanjong, Konika Sharma, Lynn Shi, Sarah Smith, Kanramon Wattanasuntorn</p>
IV.	Necessary Resources (staff, finances, etc.)	<p>The central GME office provides administrative support to ResWell with the appointment of one of our administrative staff to the project.</p> <p>Bassett’s Medical Education Endowment Fund approved a grant proposal for \$10,000 for Year One. These monies pay for ResWell activities. ResWell will be encouraged to re-apply in subsequent years.</p>
V.	Measurement/Data Collection Plan	<p>Residents receive a wellness survey three times yearly. To date, ResWell administered four surveys.</p> <p>Resident participation in ResWell activities is observed and feedback is obtained.</p>
VI.	Stakeholder Communication Plan (may be helpful to draft a flow chart of team members & senior management; Refer to Toolkits #2 and #4)	<p>Monthly meetings of the Steering Committee.</p> <p>In a small GME program (60 residents), communication regarding ResWell activities is by announcement at regularly scheduled resident meetings, group emails and through a Facebook page. The resident leaders of ResWell share the responsibility to keep residents updated.</p>
VII.	Potential Challenges (engagement, budget, time, skills gaps, etc.; Refer to Toolkit #3)	<p>ResWell activities and programs need to be varied given a culturally diverse population of residents, as few projects and activities will have universal appeal. This diversity, of course, also offers opportunity for richer projects.</p> <p>The resident leaders have time constraints.</p>

		Residents have time constraints and competing commitments, which can make meeting and activity scheduling challenging. A small GME program of 60 residents is small population, which limits the ability to objectively measure and accurately interpret changes in well-being. Limited survey participation further constrains objective measurements of well-being.
VIII.	Opportunities for Scholarly Activity (potential publications, conference presentations, etc.)	We will have several data points each year. The small and ever changing demographic of our residency makes meaningful statistical analysis difficult, but the quantitative and qualitative data provide a platform for discussions and interventions that we believe may lead to more important qualitative studies over time. We will present our program and its evolution locally and at AIAMC.
IX.	Markers (project phases, progress checks, schedule, etc.; Refer to <i>NI V Roadmap to 2019</i> which will be presented at Meeting One)	We monitor the strength and value of activities with short-term feedback and periodic surveys. The Bassett Research Institute collects and interprets anonymous survey results three times annually. We will present the evolution and progress of ResWell is at the NI VI meeting 4 in Tucson in March 2019.

Sections X thru XIII to be completed first quarter 2019 for "Final Proceedings" booklet:

X.	Success Factors	The most successful part of our work was the recognition on the part of the residents that they are valued by the institution and that they have some control over their lives.  Residents are engaged with wellness activities and find value in the activities.  We are inspired by spin-off programs and interventions (such as Arts in Healthcare) which resulted from an interdisciplinary collaboration between nursing staff, Pastoral Services and ResWell.  Resident mental health services are strengthening and becoming more visible, residents are more aware of resources.
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XI.	Barriers	<p>The largest barrier encountered was attrition of resident participation in the ResWell steering committee. We are working to overcome this by providing the committee with more consistent administrative support.</p> <p>We receive limited responses to anonymous periodic surveys. We are working to overcome this by providing multiple mechanisms to access the surveys, utilizing ResWell committee members to encourage participation and by publicizing the survey results and the importance of and changes that are occurring because of these results.</p>
XII.	Lessons Learned	<p>Emotional and administrative support to the resident members of a group such as ResWell is paramount to make the group sustainable and to prevent burnout of those actively trying to prevent burnout. Resident participation in activities is enhanced by making the activity resident-directed and by encouraging and responding to constructive feedback.</p>
XIII.	Expectations Versus Results	7
XIV.	Sustainability and Next Steps	<p>Results of this project suggest that the needle can move in well-being with an organized, multi-faceted approach and a small investment of resources. By encouraging multidisciplinary collaborations with administrative sanction, a program for Well-Being can demonstrate commitment to all in the organization and promote Well-Being across the institution.</p>

## INTRODUCTION: Background

The years that trainees spend in medical school, residency, and fellowship are formative in the development of a physician's long-term identity and habits (both healthy and unhealthy) for managing the stressors of the modern health care environment.<sup>1</sup> The critical time to ensure that physicians are developing healthy habits of self-care and stress reduction occurs almost exclusively during training.<sup>2</sup> Our project's aim was to re-introduce trainees to simple strategies to maintain wellness across a variety of areas including community involvement, mental health, exercise, healthy eating, good sleep habits, and work/life balance.

### References

1. Nasca TJ. ACGME Update and Town Hall. Oral presentation at: 2018 AHME Institute; May, 2018; Phoenix, AZ.
2. Ludmerer KM. *Let Me Heal: The Opportunity to Preserve Excellence in American Medicine*. 1<sup>st</sup> ed. New York, NY: Oxford University Press; 2015.

## Aim/Purpose/Objectives

Our aim was to implement an annual wellness week to teach trainees a wide variety of strategies to combat burnout and improve wellness.

## METHODS: Interventions/Changes

We initiated an annual Wellness Week in April of 2018 where trainees were exposed to multiple resources that decrease stress and improve wellbeing. Activities included yoga, pet therapy, massages, creative art activities, and completing a self-care wheel. We also provided educational handouts on topics such as healthy snacks and meals available in the hospital, sleep hygiene, mindfulness and meditation, financial wellness, and tips for managing stress.

In response to feedback from trainees, we expanded wellness activities in the 2018-2019 academic year to include monthly activities in addition to a 2<sup>nd</sup> Annual Wellness Week that will be held in April of 2019. Monthly activities have included visits with the therapy pets, healthy snack breaks, holiday themed activities, and evening socials.

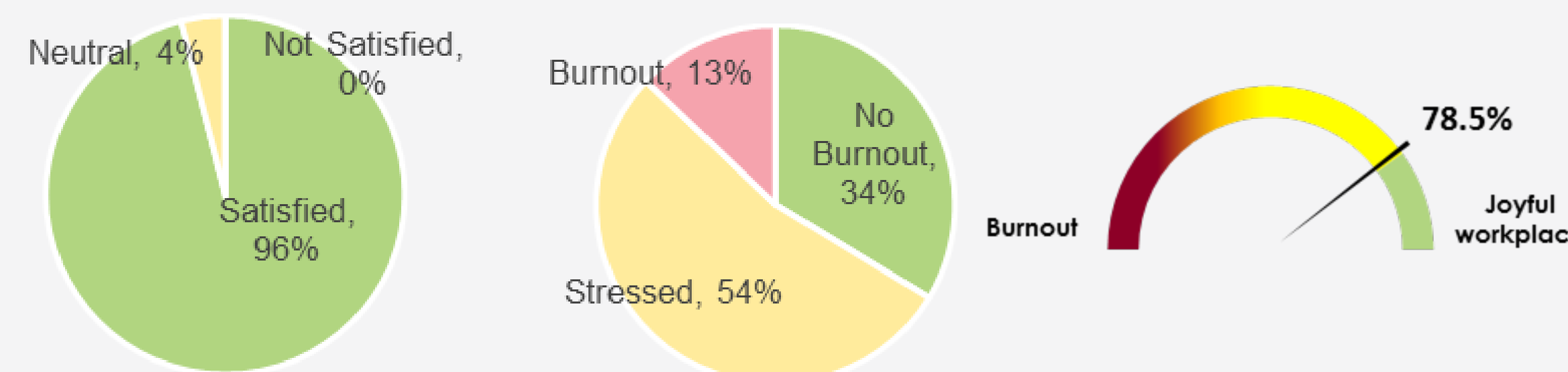
## METHODS: Measures/Metrics

When this project started, we did not have a measurement tool in place. Therefore, we were not able to collect baseline data. In September of 2018 (a few months after our first Wellness Week), we utilized the American Medical Association's Mini-Z Resident Physician Burnout Survey to obtain our first measurement of wellness in our institution. The timing of the survey was strategic, as we wanted to capture the wellness of all trainees, but were particularly interested in the wellness levels of first year residents and fellows entering our institution for the first time. We will give the survey again to graduates of our programs in the spring of 2019. Our ultimate goal is for trainees to graduate our programs as mentally healthy (or healthier) than when they started training. To measure this, we will continue to survey trainees right after they have started training and again right before they graduate.

## RESULTS

### Measure: AMA Mini-Z Resident Physician Burnout Survey

- 173 Trainees completed the survey (65% of our trainees)
- Average age of respondents: 28
- Gender: 58% Male, 40% Female



### Analysis

- 96% of trainees are satisfied with our workplace, 0% are unsatisfied.
- 34% describe themselves as having no symptoms of burnout, 54% feel at least some levels of stress, 13% qualify as burned out. This is significantly lower than the 33% seen among residents nationwide.
- The combined result of these two metrics gave us a Mini-Z score of 78.5%. 80% is the target for zero burnout and a joyful workplace.

## RESULTS: Continued

### Analysis (cont.)

Though we did not take a baseline measurement prior to Wellness Week, we are hopeful that the positive results on our first wellness survey were, in part, due to the Wellness Week project. We will continue to measure trainee wellness using this survey in the hopes of further driving down the percentage of trainees that are experiencing burnout and symptoms of stress.



## Discussion: Barriers & Strategies

### Key Findings

In post-Wellness Week surveys, trainees reported that it was helpful to be reminded of simple ways to decrease stress like taking a short walk or a snack break. During wellness week, trainees were able to reconnect with some activities that they enjoy, but hadn't made time for in a while (e.g. art, time with animals, time outside, and physical activity). Trainees reported a desire to continue to engage in similar activities on their own and requested that the institution host monthly wellness breaks in addition to a 2<sup>nd</sup> Wellness Week to provide year-round reminders.

### Limitations

- We did not do a wellness survey prior to Wellness Week, so we are unable to assess its impact on overall trainee health.
- Though we've had good attendance, many trainees have been unable to participate due to night shifts, vacations, and patient care responsibilities. Some specialties (e.g. Pathology) have had an easier time participating than others.

### Next Steps and Sustainability

- In the 2018-2019 academic year, we implemented monthly wellness events in addition to a planned 2<sup>nd</sup> Annual Wellness Week.
- Our intention is to make these activities a regular part of our culture.

# Project Management Plan

Begin completing this Project Management Plan at Meeting One and complete it with your team following Meeting One, i.e., by November 2017. Teams will have the opportunity to review/revise their Project Management Plans throughout the 18-month Initiative at each of the on-site meetings. The collective data from all of the teams' completed project management plans will be invaluable as we share and learn from this collaborative experience.

**Team:** *Baylor University Medical Center* \_\_\_\_\_ **Project Title:** *Trainee Wellness Week* \_\_\_\_\_

I.	<p><b>Vision Statement</b> (markers of success by March 2019; Refer to Toolkit #5)</p>	<p><i>As an institution, we would like to develop long term and innovative strategies to improve resident well-being across a variety of areas including community, mental health, exercise, healthy eating, good sleep habits, and work-life balance. Ideally, we would like to see healthy habits form during training that continue to aid our graduates in maintaining wellness and good health throughout their careers.</i></p>
II.	<p><b>Team Objectives</b> (‘needs statement,’ project requirements, project assumptions, stakeholders, etc.)</p>	<p><i>Needs Statement: Trainees need more tools and resources to identify and combat stress and burnout</i></p> <p><i>Project Requirements: Provide trainees with education on tools and resources through an annual wellness week.</i></p> <p><i>Project Objectives include:</i></p>

		<ul style="list-style-type: none"> <li>• Teach trainees a wide variety of strategies to combat burn-out and improve wellness</li> <li>• Ensure that trainees are able to self-identify when they are stressed, burned out, or struggling mentally/emotionally</li> <li>• Trainees use strategies to develop healthy habits and overall wellbeing improves</li> </ul> <p><i>Project Assumptions: Trainees likely have some exposure to identifying and combating stress but need reminders of the various and simple ways to improve overall wellbeing.</i></p> <p><i>Stakeholders: Trainees, Faculty, GME Office</i></p>
III.	<p>Team Members &amp; Accountability (list of team members from Toolkit #6 and who is accountable for what)</p>	<p><i>Cristie Columbus, MD – DIO and Project Leader</i></p> <p><i>Jennifer Olvera, MBA – Administrative Director for Medical Education</i></p> <p><i>Natalie Gittus, JD – Supervisor for Medical Education</i></p> <p><i>Tom Cox, PsyD – Trainee Education and Faculty Development Director</i></p> <p><i>Jennifer Jolly – GME Administrator</i></p> <p><i>Kaki Whitty, MD and Julia Berry, MD – Chairs of the Housestaff Council</i></p>
IV.	<p>Necessary Resources (staff, finances, etc.)</p>	<p><i>Resources required include time, space and scheduled wellness activities. We will utilize in-house resources (art therapy center, animal therapy volunteers, etc) to keep costs minimal.</i></p>

V.	Measurement/Data Collection Plan	<i>Over time, we expect burnout to decrease and wellness to increase. We will monitor this through the ACGME Wellness Survey and the AMA Mini Z Burnout Survey results.</i>
VI.	Stakeholder Communication Plan (may be helpful to draft a flow chart of team members & senior management; Refer to Toolkits #2 and #4)	<i>Our Wellness Plan and initiatives have been communicated to the GME Committee, Faculty and hospital Senior Leadership. The Housestaff Council has designed many of the wellness activities, to include our medical students as well.</i>
VII.	Potential Challenges (engagement, budget, time, skills gaps, etc.; Refer to Toolkit #3)	<i>Barriers to implementation of these initiatives remain, including Faculty buy in to allow trainees time to attend the events, scheduling/availability challenges, and engaging housestaff to participate.</i>
VIII.	Opportunities for Scholarly Activity (potential publications, conference presentations, etc.)	<i>This project has not yielded scholarly activity opportunities, yet.</i>
IX.	Markers (project phases, progress checks, schedule, etc.; Refer to NI V Roadmap to 2019 which will be presented at Meeting One)	<i>The first major phase of the project will be complete in late April 2018 with the conclusion of our first 'Wellness Week'. The second phase of the project involved regular wellness events throughout the year in addition to a 2<sup>nd</sup> 'Wellness Week' scheduled for the spring of 2019.</i>

Sections X thru XIII to be completed first quarter 2019 for “Final Proceedings” booklet:

X.	Success Factors	<p><i>The most successful part of our work was....</i>  <i>The amount of participation by trainees in various activities.</i>  <i>We were inspired by....</i>  <i>Trainee enthusiasm in the wellness events. How simple activities, like bringing in therapy dogs, were the most effective.</i></p>
XI.	Barriers	<p><i>The largest barrier encountered was....</i>  <i>Trainee engagement in the activities, including time to participate, and support from medical staff to allow them to participate</i></p> <p><i>We worked to overcome this by....</i>  <i>Utilizing Housestaff champions, overly communicating the schedule of activities, scheduling activities at different times of day, and including a raffle of donated prizes.</i></p>
XII.	Lessons Learned	<p><i>The single most important piece of advice to provide another team embarking on a similar initiative would be....</i>  <i>Get trainees involved in the planning</i></p>
XIII.	Expectations Versus Results	<p><i>On a scale of 1 to 10 (with “1” meaning nothing and “10” meaning everything), how much of what you set out to do was your team able to accomplish? 8</i></p> <p><i>1 2 3 4 5 6 7 8 9 10</i></p>
XIV.	Sustainability and Next Steps	<p><i>What does your CEO need to know to help keep your work sustainable?</i>  <i>Support from administration and the medical staff is important to encourage participation in trainee wellness activities.</i></p>

## INTRODUCTION: Background

Provider burnout has been identified as a public health crisis and efforts to study and improve wellness are being undertaken by most major academic medical centers. One of the strongest influences to improve prevent provider burnout and improve wellness is satisfaction at work and feeling appreciated. The relationships we build at work can make or break our work environment and make a significant difference between dreading work and enjoying it. When a provider dreads the work that they do and the environment they are in, then having empathy for our patients and coworkers is affected.

We believe we can improve empathy by building stronger relationships within the healthcare team through a shared understanding of our roles and how we can work better together through shadowing experiences.

## Aim/Purpose/Objectives

- Assess the short and long term impact on empathy, understanding and communications of existing Nurse-Resident shadowing experiences during orientation for our programs in Internal Medicine (IM), Pediatrics (Peds) and Obstetrics And Gynecology (OB/GYN).
- Expand the program to other residencies and programs to have residents shadowing each other across specialties.
- Expand the shadowing experience to other healthcare students and residencies and even wider into the system as part of the system wide provider orientation.
- Develop a program by which nurses can shadow residents and attendings to understand their workflow and structure.

## METHODS: Measures/Metrics

A semi-structured debriefing was recorded and transcribed for review.

The transcribed debriefing is undergoing a qualitative analysis for themes identified with the group.

## METHODS: Interventions/Changes

Incoming residents in IM, Peds and OB/GYN were scheduled to shadow floor nurses on their respective units.

The shadowing sessions were developed to be 4 hours in length with nurses who volunteered for the experience.

After each session, residents and nurses involved were debriefed with a pre-determined set of questions as well as open discussion on observations, lessons learned and commitments with their program leadership as well as a nurse manager.

## RESULTS

22 incoming Internal Medicine and Med/Peds Residents shadowed floor nurses for a period of 4 hours starting with a nurse to nurse sign-out.

There were separate debriefings with each of the three groups immediately after the experience that included both residents and nurses

Residents in Ob/Gyn were scheduled for a four-hour shadowing with volunteer nurses, but a misunderstanding by staff caused the residents to shadow senior residents for 4 hours instead.

## Key Findings

- Resident physicians are unaware of the level of involvement and expertise nurses have in the care of their patients
- Experiencing the work flow and demands of a nurse's day place on the team creates deeper understanding and appreciation for their role on the team.

## RESULTS: Themes Identified

### Nursing role on the healthcare team

- "We all have the same shared goal of doing best by our patients."

### Appreciation of nursing clinical knowledge and skills

- "Amazing how much they know"
- "Nurses are empowered to make some decision on their own"

### Work load of nursing Staff

- "I learned the time differential between the time that the nurse spends with the patient versus what the doctor spends with the patient. Doctor is in and out and [the nurses] are always with [the patients]"
- "[Nurses] have to do a lot of charting. Lots of and lots of documentation"
- "Doctors have a way to get away, but nurses don't."

### Source of learning

- "[The Nurse] knew everything about the patient, even about the patient's lives"
- "[Nurses] are a huge resource and wealth of information"

### Communication

- "[Nurses] know a lot about the patient, you'd be at a huge disadvantage if you do not reach out to your nurse and ask about what's going on with the patient."

### Safety

- "They have our (physicians) back"

## Discussion: Barriers & Strategies

### Barriers

- Recognition of the value of shadowing across the department.
- Building this experience into protected orientation time is very important.

### Next Steps and Sustainability

- Rework our structured debrief and debrief nurses and residents separately
- Complete a pre-experience interview to understand pre-experience knowledge
- Reassess practicality of surveying all residents on attitude

## Project Management Plan

Begin completing this Project Management Plan at Meeting One and complete it with your team following Meeting One, i.e., by November 2017. Teams will have the opportunity to review/revise their Project Management Plans throughout the 18-month Initiative at each of the on-site meetings. The collective data from all of the teams' completed project management plans will be invaluable as we share and learn from this collaborative experience.

Team: Baystate Medical Center

Project Title: Walk a Day in My Shoes

I.	<p>Vision Statement (markers of success by March 2019; Refer to Toolkit #5)</p>	<p><i>Provider burnout has been identified as a public health crisis and efforts to study and improve wellness are being undertaken by most major academic medical centers. One of the strongest influences to improve prevent provider burnout and improve wellness is satisfaction at work and feeling appreciated. The relationships we build at work can make or break our work environment and make a significant difference between dreading work and enjoying it. When a provider dreads the work that they do and the environment they are in, then having empathy for our patients and coworkers is affected.</i></p> <p><i>We believe we can improve empathy by building stronger relationships within the healthcare team through a shared understanding of our roles and how we can work better together through shadowing experiences.</i></p>
II.	<p>Team Objectives (‘needs statement,’ project requirements, project assumptions, stakeholders, etc.)</p>	<p><i>Assess the short and long term impact on empathy, understanding and communications of existing Nurse-Resident shadowing experiences during orientation for our programs in Internal Medicine (IM) and Obstetrics And Gynecology (OB/GYN).</i></p> <p><i>Expand the program to other residencies and programs to have residents shadowing each other across specialties.</i></p> <p><i>Expand the shadowing experience to other healthcare students and residencies and even wider into the system as part of the system wide provider orientation.</i></p> <p><i>Develop a program by which nurses can shadow residents and attendings to understand their workflow and structure.</i></p>



III.	<p>Team Members &amp; Accountability (list of team members from Toolkit #6 and who is accountable for what)</p>	<p><b>Kevin Hinchey, MD</b>, Assistant Professor of Medicine and DIO for Baystate Health  <b>Heather Z. Sankey, MD, MEd</b>, Assistant Professor of Medicine and Chair of the Department of OB/GYN  <b>Donald Kirton, MD</b>, Assistant Professor of Medicine and OB/GYN Program Director  <b>Reham Shaaban, DO</b>, Assistant Professor of Medicine and Internal Medicine Program Director  <b>Ryan Quarles, MD</b>, Academic Hospitalist</p>
IV.	<p>Necessary Resources (staff, finances, etc.)</p>	<ul style="list-style-type: none"> <li>• Dedicated orientation time with Medicine and OB/GYN Residents</li> <li>• Support of residency and nursing management and educators</li> <li>• Research assistant trained in debriefing residents to conduct the semi structured debrief</li> <li>• Transcription services for the debrief sessions</li> </ul>
V.	<p>Measurement/Data Collection Plan</p>	<p>Incoming residents in IM and OB/GYN were scheduled to shadow floor nurses on their respective units.</p> <p>The shadowing sessions were developed to be 4 hours in length with nurses who volunteered for the experience.</p> <p>After each session, residents and nurses involved were debriefed with a pre-determined set of questions as well as open discussion on observations, lessons learned and commitments with their program leadership as well as a nurse manager.</p> <p>The transcribed debriefing was then analyzed in a qualitative manor for themes identified with the research group.</p>
VI.	<p>Stakeholder Communication Plan (may be helpful to draft a flow chart of team members &amp; senior management; Refer to Toolkits #2 and #4)</p>	<p>Our residency program leadership for OB/GYN and Medicine are part of the NI VI team therefore have an interest in getting protected time during orientation however we will need to communicate the importance of this activity to the chief residents, interns and other members of the department so plans are not changed last minute or the activity seen as optional.</p>

		<i>Additionally, we will need to work with nursing leadership to coordinate time and logistics of shadowing on the floor with their staff.</i>
VII.	Potential Challenges (engagement, budget, time, skills gaps, etc.; Refer to Toolkit #3)	<p><i>Getting protected time for all incoming residents will be a challenge.</i></p> <p><i>Also, without telling the participants what we hope that they will get out of the experiences there may be varying experiences which will likely change the lessons learned.</i></p>
VIII.	Opportunities for Scholarly Activity (potential publications, conference presentations, etc.)	<i>There is only one publication on the qualitative analysis of pediatric residents shadowing nurses so there is ample room for publication of our results in these two initial departments and the expansion of the program to more specialties and later opportunities to have nurses shadow residents so the understanding of the roles is bilateral.</i>
IX.	Markers (project phases, progress checks, schedule, etc.; Refer to NI V Roadmap to 2019 which will be presented at Meeting One)	<p><b>June/July 2018</b> – Residents shadow nurses and are debriefed</p> <p><b>August – December 2018</b> – Transcriptions are analyzed</p> <p><b>January – June 2019</b> – Lessons learned are applied to planning for next orientation</p> <p><b>June/July 2019</b> – Orientation of next class will include original residencies and at least two new ones to begin our efforts to expand the program</p>
X.	Success Factors	<p><i>The most successful part of our work was the organic learning that occurred when the residents observed that many of their assumptions were incorrect and how they were able to build a better understanding of the nurses role and how to work with them better.</i></p> <p><i>We were inspired by the quality and quantity of reflection by the residents and how open the</i></p>

		<i>nurses and residents were to participating</i>
XI.	<b>Barriers</b>	<p><i>The largest barrier encountered as the recognition of the value of shadowing across the department.</i></p> <p><i>Assure that the whole department was aware of our intentions and goals with this activity and building this as a protected activity for more residents going into the next orientation period.</i></p>
XII.	<b>Lessons Learned</b>	<i>The single most important piece of advice to provide another team embarking on a similar initiative would be to build this experience into protected orientation time.</i>
XIII.	<b>Expectations Versus Results</b>	<p><i>On a scale of 1 to 10 (with "1" meaning nothing and "10" meaning everything), how much of what you set out to do was your team able to accomplish?</i></p> <p><i>1 2 3 4 5 6 <u>7</u> 8 9 10</i></p>
XIV.	<b>Sustainability and Next Steps</b>	<p>We hope that our leadership will see the importance of building strong relationships between the residents and nursing staff which will improve the employee engagement scores particularly in the areas of interprofessional cooperation.</p> <p>Our next steps are: Rework our structured debrief and debrief nurses and residents separately, complete a pre-experience interview to understand pre-experience knowledge and reassess practicality of surveying all residents on attitude</p>

## Introduction

The mission of the Billings Clinic Internal Medicine Residency Program is to train expert physicians to care for complex medically ill patients in rural environments. Successful recruitment and retention of physicians in these rural communities requires improved understanding of resilience and well-being to promote joy in practice.

- Advance undergraduate and post graduate medical education opportunities and research
- Optimize workforce planning
- Enable individuals through tools and training

Aligning with the Billings Clinic Physician Leadership strategy on physician well-being, two Resident physician lead projects were funded in part by the Harry B. & Leona M. Helmsley Charitable Trust to help improve our understanding of physician resilience and well-being.

## Primary Aims

### Decreasing Burnout in Medical Residency: Implementing a Balance Coaching Program

The purpose of this study is to examine whether Internal Medicine residents who participate in a program designed to improve resident coping and communication (“Balance Groups”) experience an improvement in their well-being scores and a decline in their burnout scores.

- What are the baseline, four month, and eight month well-being and burnout scores for residents in the Billings Clinic Internal Medicine Residency?
- Do residents who participate in “Balance Groups” experience an improvement in their well-being scores over the study time period?

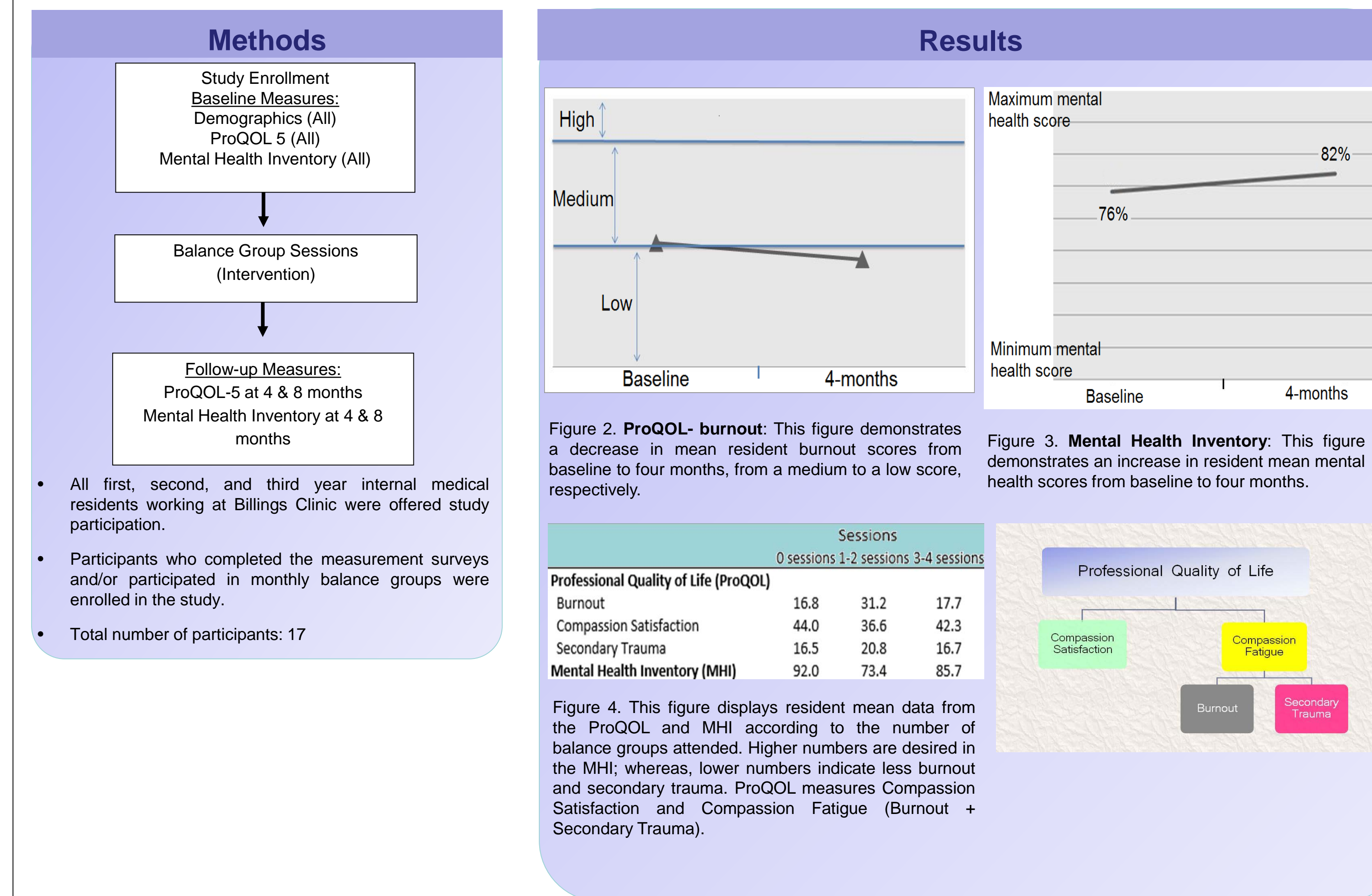
### Qualitative Analysis of Internal Medicine Physician Recruitment and Retention in Rural Montana and Northern Wyoming

The purpose of this study is to examine the common factors, which impact resiliency and well-being, that exist among Internal Medicine physicians practicing in rural MT/WY.

- This study uses the grounded theory research methodology to conduct data gathering and analysis.

## Project Descriptions

### Decreasing Burnout in Medical Residency: Implementing a Balance Coaching Program



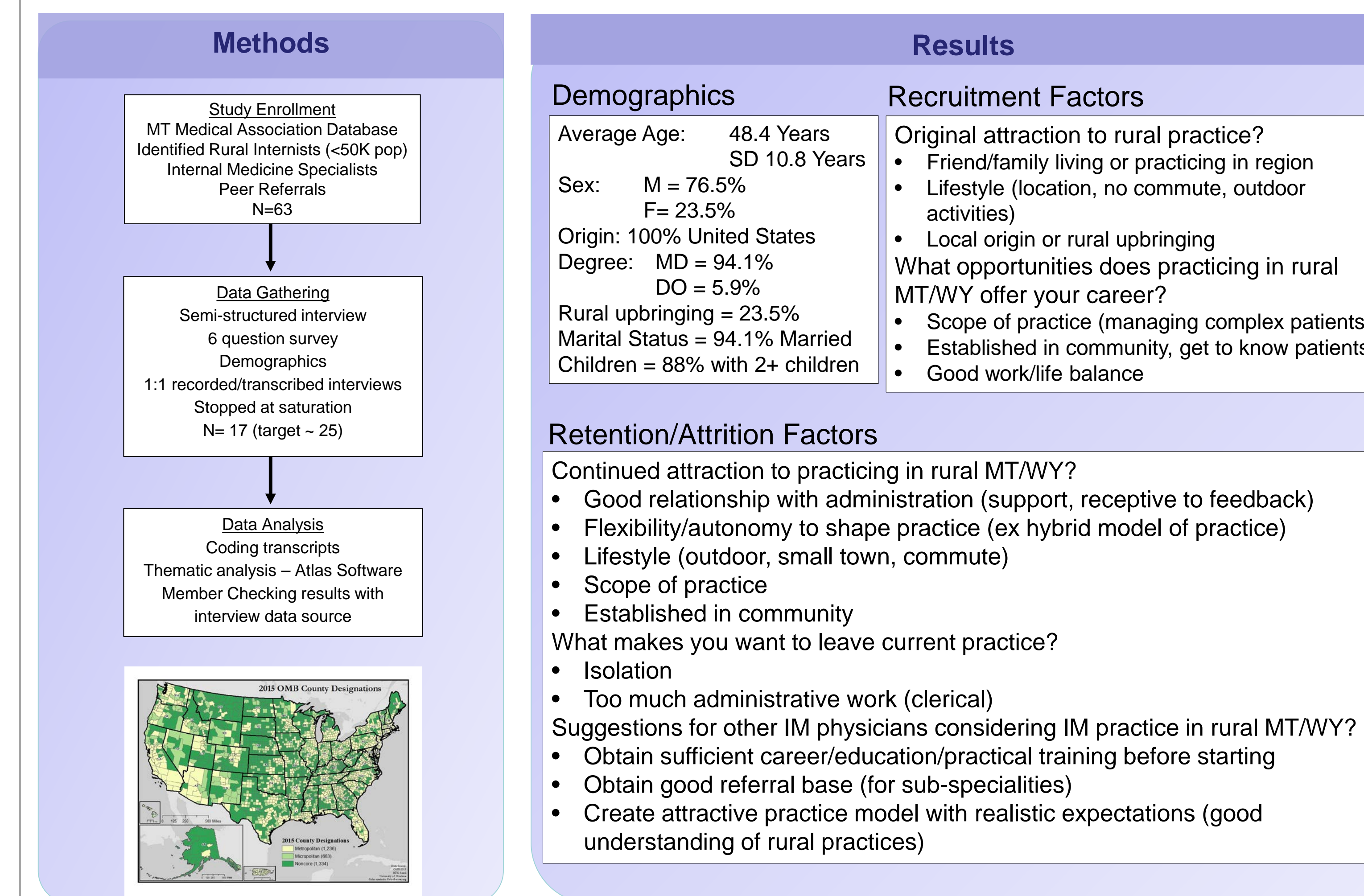
#### Barriers – Lessons Learned

- Scheduling conflicts – Difficulty ‘switching gears’ from patient care to self care
- Relevant topics – Occasional perceived dissonance between session topic and relevancy
- Group atmosphere – Mixed feeling about group/peer interactions
- Uncertain benefits – Occasional reported feelings that although wellness concerns were identified, solutions and interventions were difficult to implement
- Limitations include: small sample size, inconsistent attendance and survey completion, inability to adequately pair data, and selection bias.

#### Discussion – Next Steps

- Residents at Billings Clinic experienced a medium level of burnout at study onset.
- Early data shows no correlation between outcome measures and balance group attendance.
- Qualitative data suggests residents who attended balance groups enjoyed the opportunity for confidential, small group discussions with their peers.
- Data analysis of 8 month follow up
- Connected with Mayo Physician Well Being initiative

### Qualitative Analysis of Internal Medicine Physician Recruitment and Retention in Rural MT and Northern Wyoming



#### Coding Methodology

**Challenge** – Barrier to practice, Isolation, Lack of anonymity, Too close to patients  
**Continued Attraction** – Established in community, Flexibility, Autonomy, Environment  
**Practice Role** – Appealing practice model, Scope of practice, Barrier to practice  
**Recruitment** – Friend/family, Lifestyle, Local origin, Rural rotation  
**Rural Opportunity** – Complex patients, Variety of specialty practice  
**Satisfaction**  
**Other**

#### Barriers – Lessons Learned

- Data Gathering – Challenges in connecting with interviewee
  - Administrative office staff barriers
  - Scheduling conflicts with busy practices
  - Tendency to request face to face interviews
  - Lack of interest to involved in a resident study
- Geographic Barrier – Commute time in rural healthcare as a limitation
  - Paucity of rural airport access
  - Automobile commute times > 5 hours each way

#### Discussion – Next Steps

- Complete Data Analysis
- Scholarly dissemination - forthcoming
- Expansion of study to regional states to demonstrate consistency of observations in rural Internal Medicine practices

## Project Management Plan

Begin completing this Project Management Plan at Meeting One and complete it with your team following Meeting One, i.e., by November 2017. Teams will have the opportunity to review/revise their Project Management Plans throughout the 18-month Initiative at each of the on-site meetings. The collective data from all of the teams' completed project management plans will be invaluable as we share and learn from this collaborative experience.

Team: Billings Clinic

Project Title: Studies on Physician Resiliency and Well-Being in Rural Montana

I.	<p>Vision Statement (markers of success by March 2019; Refer to Toolkit #5)</p>	<p>Vision: We are a learning laboratory for the rural healthcare workforce of the future.</p> <p>Mission: Our graduates will be healthy and balanced experts in the care of complex, medically ill patients in rural environments.</p>		
II.	<p>Team Objectives (‘needs statement,’ project requirements, project assumptions, stakeholders, etc.)</p>	<p>Stakeholders: Residents, Physicians, Faculty of IMR, Leadership, staff, and patients.</p> <ul style="list-style-type: none"> <li>• Addresses challenges faced by residents to support resilience and well-being (Balance Groups)</li> <li>• Survey IM physicians in rural areas to examine factors associated with professional satisfaction in rural practice. (Rural Physician Survey)</li> </ul>		
III.	<p>Team Members &amp; Accountability (list of team members from Toolkit #6 and who is accountable for what)</p>	Name/Credentials	Position/Title	Accountability
		Virginia Mohl, MD, PhD	DIO, Medical Education Director	Team Lead
		Mark Lee, MD	IM Residency Program Director	Program Lead
		Ashely Dennis, PhD	Director, Office of Medical Education	Subject matter expert, scholarship and operation support
		Randy Thompson, MD	Chief Medical Information Officer	Data support and Collaboration liaison
		Robert Renjel, MBBS	Resident Physician	Rural physician project
		Kylie Ebner, DO	Resident Physician transition	Resident Balance Group program

			to faculty 2018	
		Dianna Linder	Director of Grants	Funding support. Logistics
		Shelli Lind	Director of Organizational Development	Support of Resident Balance Groups
		Kristina McComas	Medical Education Coordinator	Administrative support
IV.	Necessary Resources (staff, finances, etc.)	<p><u>Balance Groups</u> Shelli Lind to facilitate group. Location to hold sessions. Time out from normal duties to participate in group. Financial Support of staff time to support group.</p> <p><u>Rural IM Physician Survey</u> Resident time to call each physician. Staff to analyze data</p>		
V.	Measurement/Data Collection Plan	<p><u>Balance Groups</u> Mental Health Inventory and ProQOL R-IV. Measured prior to starting, at four months and eight months.</p> <p><u>Rural IM Physician Survey</u> Using Grounded Theory and Qualitative Analysis interview to be conducted in person or by Skype which will be audio taped. Notes and tapes will be analyzed to identify themes.</p>		
VI.	Stakeholder Communication Plan (may be helpful to draft a flow chart of team members & senior management; Refer to Toolkits #2 and #4)	Present findings of both projects at Primary Care Symposium, Big Sky Medicine Conference, Montana Osteopathic Medical Association Annual Meeting, and ACP annual meeting.		
VII.	Potential Challenges (engagement, budget, time,	<p><u>Balance Groups</u> Engagement</p>		

	skills gaps, etc.; Refer to Toolkit #3)	Time  <u>Rural IM Physician Survey</u> Engagement Getting enough interviews to be statistically significant.
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VIII.	Opportunities for Scholarly Activity (potential publications, conference presentations, etc.)	Both projects are potential papers and/or poster presentations.
IX.	Markers (project phases, progress checks, schedule, etc.; Refer to <i>NI V Roadmap to 2019</i> which will be presented at Meeting One)	Completed all steps of Roadmap to 2019 up to Project Sustainability and Post-Assessment

Sections X thru XIII to be completed first quarter 2019 for "Final Proceedings" booklet:

X.	Success Factors	<i>The most successful part of our work was....</i> Collaborating across our organization on physician engagement and wellbeing Creating program resident leaders and faculty mentors  <i>We were inspired by....</i> The opportunity to collaborate with other institutions and by our residents' engagement
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XI.	Barriers	<p><i>The largest barrier encountered was....</i> Transition to a new program director in the middle of this project</p> <p><i>We worked to overcome this by....</i> Working with our Office of Medical Education</p>
XII.	Lessons Learned	<p><i>The single most important piece of advice to provide another team embarking on a similar initiative would be....</i> Choose stakeholders thoughtfully</p>
XIII.	Expectations Versus Results	<p><i>On a scale of 1 to 10 (with "1" meaning nothing and "10" meaning everything), how much of what you set out to do was your team able to accomplish?</i></p> <p>1 2 3 4 5 6 7 8 <input checked="" type="checkbox"/> 10</p>
XIV.	Sustainability and Next Steps	<p><i>What does your CEO need to know to help keep your work sustainable?</i> Our CEO has been involved in this project from the beginning and has celebrated successes with us. Being transparent with the importance of this work and collaborative with others in our organization will contribute to the sustainability of this work.</p>





## INTRODUCTION: Background

Cedars-Sinai (CS) provides extensive well-being resources to housestaff. Input from housestaff indicated that they lacked awareness of many existing resources and were restricted to researching or accessing the resources from a campus-based computer. The focus of this project was to enhance access to the well-being resources offered to housestaff. The goal was to provide unlimited access 24-hours a day via smart phone or other personal device from any location.

## Aim/Purpose/Objective

- To provide housestaff with enhanced online access using handheld devices to a curated compilation of local and national wellness resources .

## METHODS: Interventions/Changes

- A multidisciplinary Resident Wellness committee was formed to assess current resources and limitations, and to research various options to enhance access to information on wellness resources.
- Housestaff focus groups established that housestaff lacked awareness of existing wellbeing resources and determined that accessing wellness information through their mobile devices would be helpful to increase their awareness and use of available resources.
- The Box file sharing system was selected as the most feasible option to manage and share wellness information.
- Information about, and links to, available resources were selected, compiled, curated, and categorized in a Box folder based on input from the Resident Wellness Committee.
- All housestaff were sent a personalized email invitation in to "join" the Box folder. This included incoming, continuing, and outgoing housestaff.
- New Housestaff Orientations June-August 2018 included a presentation/workshop on downloading the Box app and accessing the materials on attendees' mobile devices, and attendees were provided with in-person technical support to facilitate successful access to the materials.
- All continuing housestaff were provided with the presentation on downloading the app and were monitored for acceptance of the invitation to join the Box folder.

## METHODS: Measures/Metrics

- Rates of invitation acceptance by housestaff were monitored to assure that housestaff were aware of the opportunity to access the resources.
- Housestaff were surveyed approximately 10 months after the Box file resource became available to assess perceptions of usefulness and effectiveness of the information and to elicit personal level of burnout using a single validated question on the survey<sup>1</sup>.
- The IRB determined that the project was exempt from their oversight.

## RESULTS

### Box Invitation Acceptance

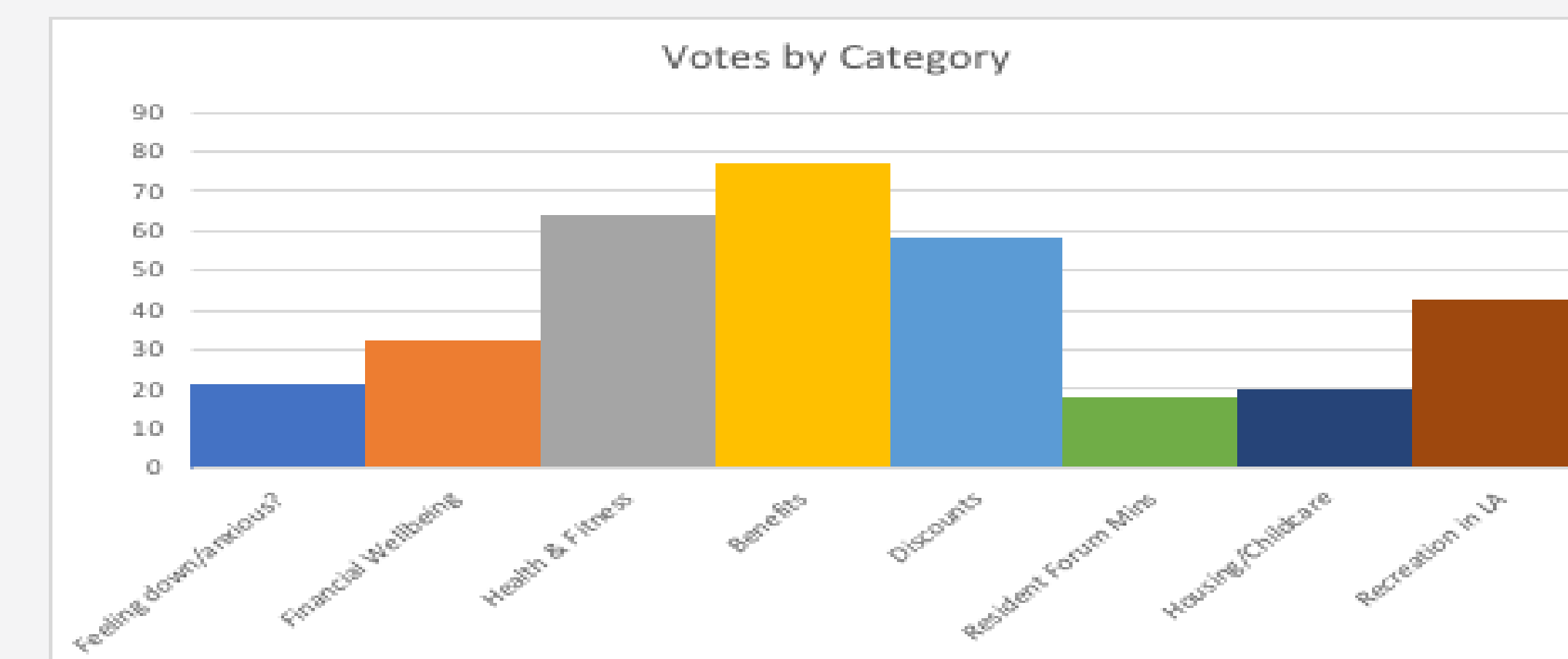
- 581 housestaff (436 new and continuing, and 145 terminating) were sent invitations to join the Wellness Resources folder in Box during May-August 2018. Of these, 513 (88%) accepted the invitation to access the folder.

### Survey of Housestaff

- 436 current housestaff were divided into two groups depending on whether they were new to CS at the beginning of AY 2019 (n=163) or were continuing in a CS GME program at the beginning of AY 2019 (n=273).
- For the new group there were 78 respondents, for a 48% response rate, and for the continuing group there were 154 respondents, for an 56% response rate. The overall response rate was 53%.
- Both groups were asked five of the survey questions. The continuing group was asked an additional question about their awareness of the wellness resources at CS prior to the availability of the app.
- Of those that responded to the survey, 81% of group that was new to CS downloaded the app to their smart phone while only 47% of those who were continuing downloaded the app.
- Of those who downloaded the app, 37% felt their wellbeing improved with the resources available through the app. 19% disagreed that the resources on the app improved their wellbeing, and 44% had no opinion of the impact on their wellbeing.
- Only 6% of those who responded to the wellness resources available on the app felt that the section on feeling down or anxious was used or useful.
- More than 60% of respondents did not feel burned out, 27% had 2 symptoms of burnout, and 9% had severe symptoms of burnout.

## RESULTS: Continued

- Both groups ranked the same four of the eight categories of wellness resources most useful:



## Discussion: Barriers & Strategies

### Key Findings

- Housestaff access to wellness resources can be improved by moving information from an intranet site to a smart phone resource platform.
- Providing settings where housestaff are directly shown how to download the resources onto their smart phones was more effective than reminding them to download through multiple emails and program director encouragement.
- Over a third of residents felt that wellness resources that can be accessed through their smart phones can improve their overall wellbeing.
- Wellness resources that focus on health, fitness, and activities outside of the hospital were the most popular.
- Downloading the wellness app did not have an impact on the level of burnout felt by trainees.
- Surprisingly, the "feeling down or anxious?" wellness resources, were not perceived by housestaff to have been as useful relative to other categories of resources.

### Limitations

- Measurements did not have adequate power.

### Next Steps and Sustainability

- Continue to monitor results of surveys to determine changes over time.
- Continue work of the subcommittee and collaborate with similar housestaff forum and medical staff initiatives.

<sup>1</sup>Dolan ED, Mohr D, Lempa M, et al. Using a single item to measure burnout in primary care staff: a psychometric evaluation. *J Gen Intern Med.* 2014;30(5):582-7.

## Project Management Plan

Begin completing this Project Management Plan at Meeting One and complete it with your team following Meeting One, i.e., by November 2017. Teams will have the opportunity to review/revise their Project Management Plans throughout the 18-month Initiative at each of the on-site meetings. The collective data from all of the teams' completed project management plans will be invaluable as we share and learn from this collaborative experience.

Team: Cedars-Sinai

Project Title: Improving Housestaff Access to Wellness Resources

I	<p>Vision Statement (markers of success by March 2019; Refer to Toolkit #5)</p>	<p><i>Leading the quest for physician wellness and professional fulfillment</i></p> <p><i>Our mission is to promote resident well-being by creating an environment that fosters resiliency, a positive work-life balance, and a supportive community</i></p>
II	<p>Team Objectives (‘needs statement,’ project requirements, project assumptions, stakeholders, etc.)</p>	<p><i>There is a myriad of resources available at CS, and information about them is available in multiple areas of our intranet site. The objective is to consolidate access to resources and enable them to be accessible in a resident-friendly mode, such as through a mobile application</i></p>
III	<p>Team Members &amp; Accountability (list of team members from Toolkit #6 and who is accountable for what)</p>	<p><i>The project team consists of a diverse group of medical leadership, residents, faculty, GME administration, HR, and program coordinators, including: Mark Noah, Betsy McGaughey, Jeff Mckelvey, Allison Rotter, John Kastendieck, Steven Jacobs, Edward Seferian, Jack Green, Niv Hakami-Majd, Aarshi Vipani, Michael Albert, Ik Jun, Christine Walsh, Farin Amersi, Amanda</i></p>

		<i>Ewing, Lili Shek, Lisa Jonsson, Timothy Daskivich, Debra Craig, Marc Cuenco, Mitch Martens, Sheryl Katzovitz, Kate Raastad, Joseph Frye, Halley Vora, Devin Patel, Ingrid He, Stacey Wilson, Van Chau, Michelle Neely, Elissa Rosenberg, Tamana Kaderi, Laura Simpler, Nikitha Reddy, Joshua Grischkan, Dana Sweeney, James Son, and Brittany Smith.</i>
IV	Necessary Resources (staff, finances, etc	<i>The underlying resources needed (i.e., the services that we are promoting) are already in place.</i>
V	Measurement/Data Collection Plan	<i>We monitored acceptance of the invitation to join the Box folder and developed a brief survey to gauge the usefulness of the resources after they were made available to residents and fellow</i>
VI	Stakeholder Communication Plan (may be helpful to draft a flow chart of team members & senior management; Refer to Toolkits #2 and #4)	<i>The multidisciplinary team leading the project helps to assure that word of the activities has been spread to many facets of the medical center.</i>
VII	Potential Challenges (engagement, budget, time, skills gaps, etc ; Refer to Toolkit #3)	<i>Our original concept of developing a unique app created challenges related to budget, time, and skills gaps in particular. With the app in its final format using the Box file sharing platform, there are challenges with getting housestaff to download the app and there were some concerns about confidentiality that were mitigated by having only two “owners” of the file of wellbeing resources.</i>
VIII	Opportunities for Scholarly Activity (potential publications, conference presentations, etc )	<i>In concert with AIAMC plans</i>
IX	Markers (project phases, progress checks, schedule, etc ; Refer to NI V Roadmap to 2019 which will be presented at Meeting One)	<i>Project conformed with the timeline established by AIAMC</i>

Sections X thru XIII to be completed first quarter 2019 for “Final Proceedings” booklet:

X	Success Factors	<p><i>The most successful part of our work was developing an enthusiastic multidisciplinary group that has engaged in providing wellbeing activities for housestaff beyond the project for the National Initiative.</i></p> <p><i>We were inspired by everyone’s sustained interest in promoting resident wellbeing</i></p>
XI	Barriers	<p><i>The largest barrier encountered was getting good data to judge the efficacy of the project.</i></p> <p><i>We had collected multiple administrations of the Resident Wellness Scale, but found at the end that this did not fit with evaluation of our project. Thus, we needed to come up with another data collection plan.</i></p>
XII	Lessons Learned	<p><i>The single most important piece of advice to provide another team embarking on a similar initiative is to plan usable data collection.</i></p>
XIII	Expectations Versus Results	<p><i>On a scale of 1 to 10 (with “1” meaning nothing and “10” meaning everything), how much of what you set out to do was your team able to accomplish?</i></p> <p><i>Probably about an “7.” We were able to accomplish our project, but we would have liked to have had better data about the outcome.</i></p> <p><i>1 2 3 4 5 6 7 8 9 10</i></p>
XIV	Sustainability and Next Steps	<p><i>What does your CEO need to know to help keep your work sustainable?</i></p> <p><i>That there is deep interest in wellbeing of all CS employees; but he already knows that.</i></p>

# A Comprehensive Systems Approach to Resident Wellbeing



Vanessa Downing, PhD, Mark Mason, PhD, Heather Farley, MD, MHCDS, FACEP, Greta Ehrhart, MPA,  
Sam Van Horne, PhD, Brian Levine, MD, Lisa Maxwell, MD, Margaret Kennan, PhD,  
John Donnelly, MD, Loretta Consiglio-Ward, MSN, Christina Edwards, Melissa Cummings, MD,  
Elizabeth Shy, MD, Heather Bari-Brown, MD



NI VI Meeting #4 Tucson, AZ March 2019

## INTRODUCTION: Background

Christiana Care Health System (CCHS) provides a clinical learning environment for more than 280 residents/fellows from over 31 residency and fellowship programs. In a systematic review of research on resident well-being, Raj (2016) reported deficits in wellbeing and high incidences of burnout among residents and early career physicians. The current health care environment, for a confluence of reasons, has made the practice of medicine challenging (Shanafelt et al., 2018).

In 2016, CCHS, aligned with our core organizational values of Love and Excellence and the Quadruple Aim (Bodenheimer & Sinsky, 2014), founded the Center for Provider Wellbeing (CPW) *to foster joy and meaning in work for providers and their teams*. Through a partnership with CPW and Academic Affairs, our NI VI team sought to address resident burnout rates in a proactive, comprehensive approach. The NI VI team had the explicit goals of: 1) going beyond simple assessment of burnout to understand more deeply the drivers of engagement/fulfillment and burnout across numerous residency programs, and 2) to begin a process of meaningful organizational and system change.

Interventions were guided by: 1) Stanford's WellMD model (2017) which includes three domains to promote wellness and professional fulfillment (e.g., Personal Resilience, Efficiency of Practice, and a Culture of Wellness), and 2) Mayo's Driver dimensions for engagement and burnout (Shanafelt & Noseworthy, 2017). In meta-analytic reviews, researchers have found evidence for the benefits of individual and organizational interventions (Panagioti et al., 2017; West et al., 2016)

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- Panagioti, M. et al. (2017). Controlled interventions to reduce burnout in physicians: A systematic review and meta-analysis, *JAMA Internal Medicine*, 177, 195-205.

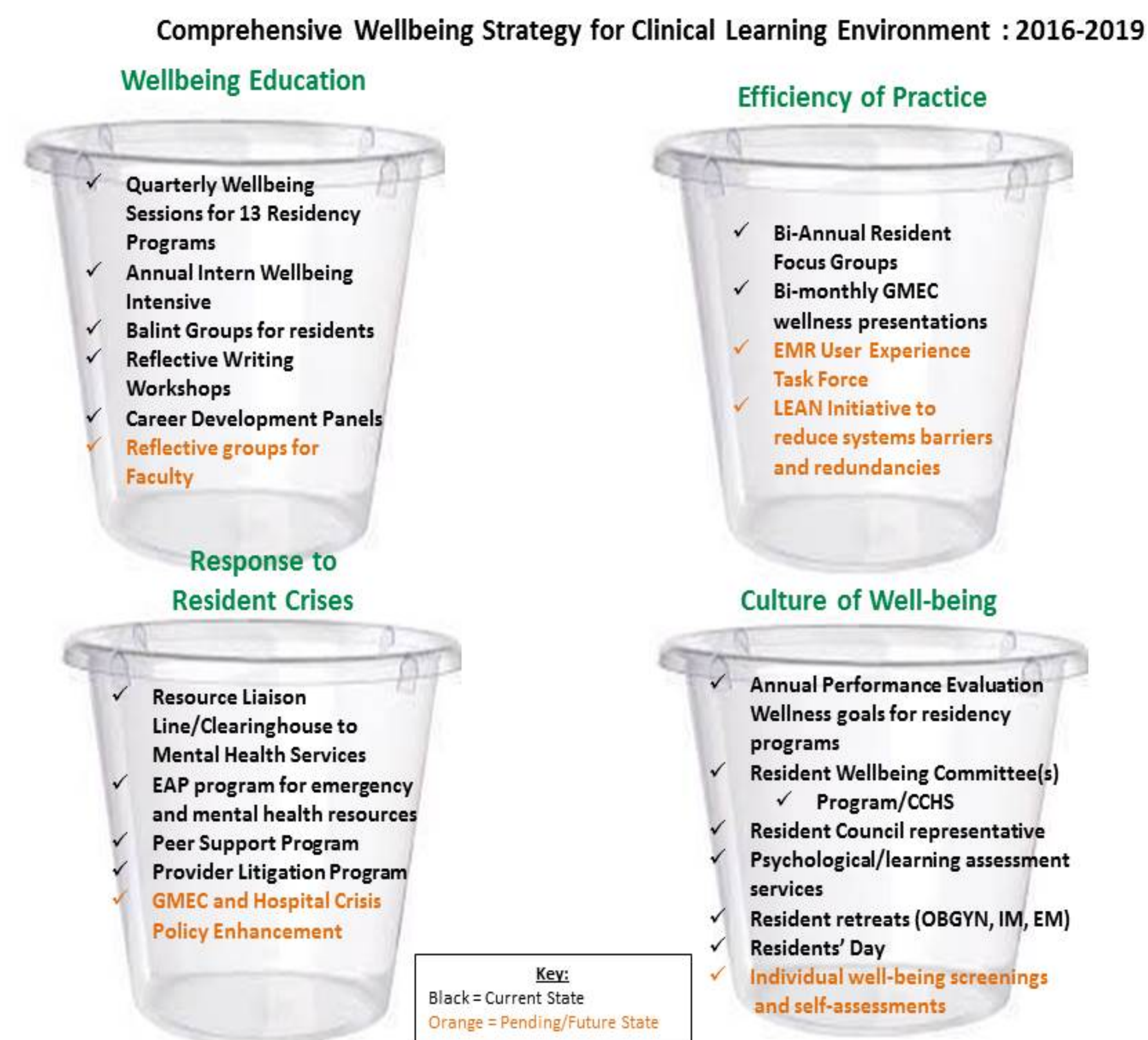
## Aim/Purpose/Objectives

Our aim was to address resident wellbeing at the individual, programmatic, and organizational and leadership levels of the institution consistent with the Charter on Physician Wellbeing (Thomas, Ripp, & West, 2018).

Objectives included:

- Engage residents in wellbeing education and programming
- Cultivate resilience and social support through quarterly psychologist-led sessions focusing on reflection/self-awareness
- Promote mental health/encourage help-seeking behaviors by developing institutional policies that protect clinicians' dignity, safety, and privacy, along with increasing access, familiarity, and exposure to psychologists
- Initiate clinical learning environment change via residency program Annual Performance Evaluation process with Academic Affairs

## METHODS: Interventions/Changes



## METHODS: Measures/Metrics

### Measure #1: Annual Provider Wellbeing Survey (PWS)

The PWS is an IRB-approved, cross-sectional survey offered by the Physician Wellness Academic Consortium (PWAC) and was administered in 2017 and 2018. Participants can consent to have their future responses matched for longitudinal analyses. This quantitative measure assesses burnout, professional fulfillment, and organizational-culture, individual, and resilience constructs, and is built upon Stanford's conceptual "WellMD" model.

### Measure #2: Resident/Fellow Focus Groups

Focus groups provided qualitative themes related to residents' perspectives on leadership, climate, satisfaction.

### Measure #3: "Resource Line Liaison" Help-seeking Contacts

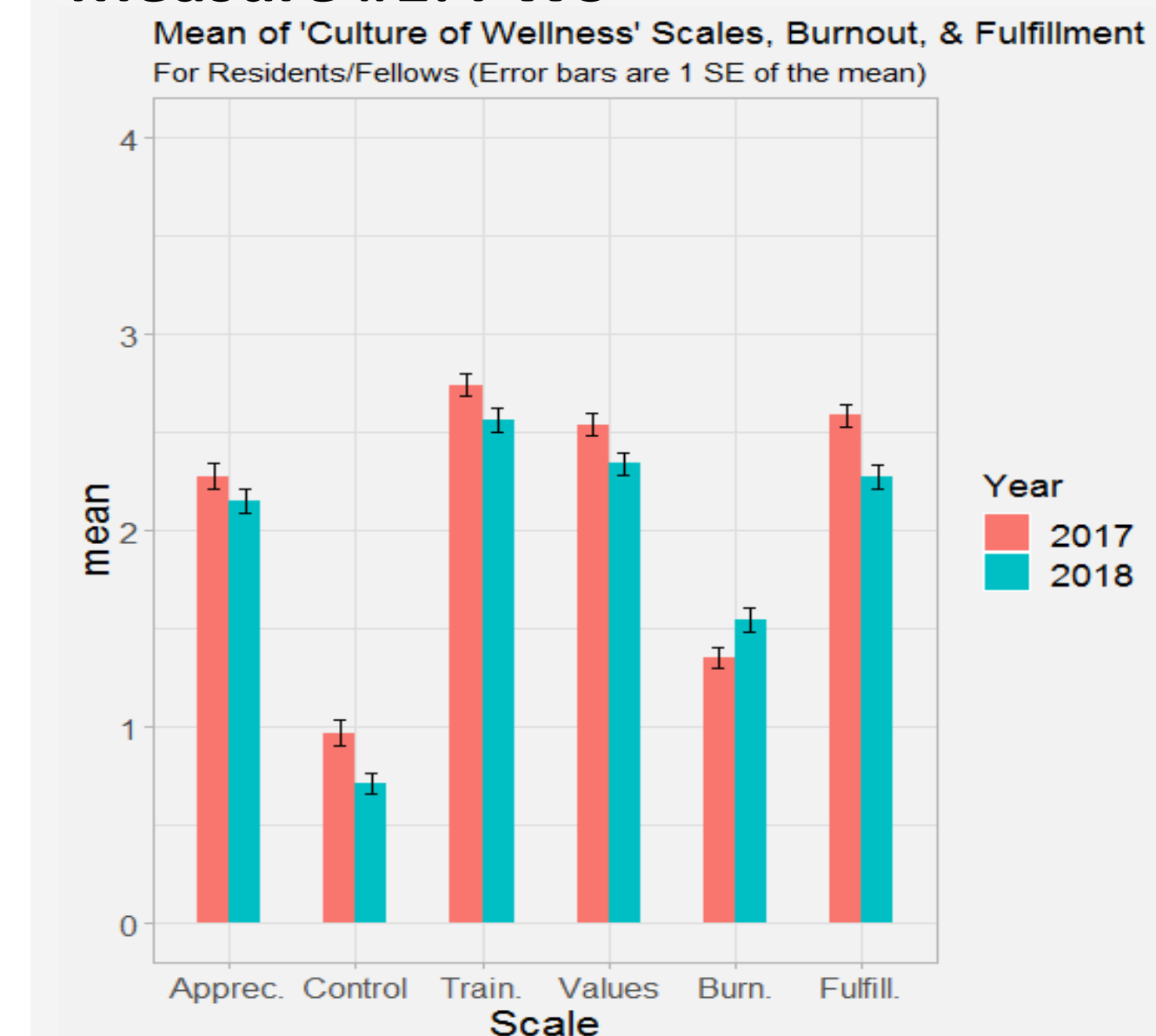
The Resource Liaison Line is a confidential, non-emergency referral line and clearinghouse staffed by clinicians who connect residents to treatment in the community.

### Measure #4: Annual Program Evaluation (APE) Wellbeing Goals

Academic Affairs co-conducts APEs annually with all established residency and fellowship programs across professional accreditations (e.g., ACGME). During Fall 2018, each program was asked to identify wellness goals that were co-created with resident wellbeing champions.

## RESULTS

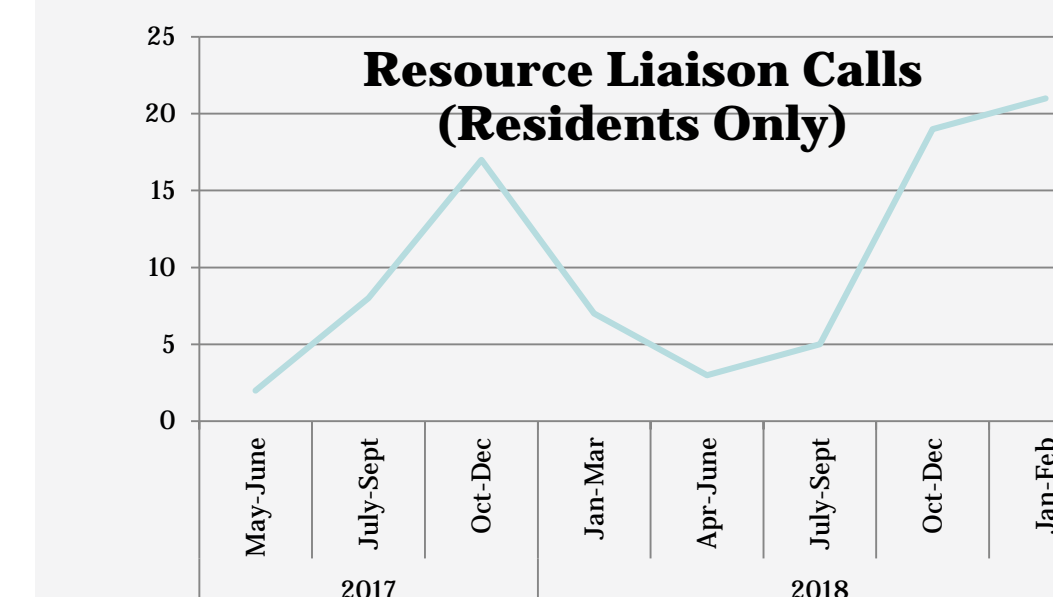
### Measure #1: PWS



### Measure #2: Participation in Quarterly Wellbeing Intervention/Focus Group

- 2 programs in FY17
- 10 programs in FY18
- 14 programs in FY19

### Measure #3: Resource Liaison Calls from May '17 to present



### Measure #4: Completion of APE Wellbeing Goal

- 93% of ACGME (n = 15) accredited programs
- 31% of non-ACGME (n = 16) accredited programs

## Discussion: Barriers & Strategies

### Key Findings

- For residents who answered survey in both years, there were declines in Professional Fulfillment and Control (after adjusting for program)
- Anticipated worse outcomes on quantitative; qualitative gave context that provided direction and specific by-program goal-setting
- APE goals varied in scope and focus, from Balint groups to new call room
- Limitations**
- Long, slow process, will be difficult to assess impact of culture change efforts and immediate benefit
- Steep learning curve associated with co-creation of wellbeing goals across residents, residency leadership, Academic Affairs, and CPW
- Next Steps and Sustainability**
- Quantitative data collection (PWS) for 2019 underway
- Wellbeing goals now standard aspect of APE process
- Will do residency program focus groups biannually as part of culture change assessment and redirection of resources
- APE wellness goals will be evaluated to determine achievability, impact, and co-creation with residents/fellows

## Project Management Plan

Begin completing this Project Management Plan at Meeting One and complete it with your team following Meeting One, i.e., by November 2017. Teams will have the opportunity to review/revise their Project Management Plans throughout the 18-month Initiative at each of the on-site meetings. The collective data from all of the teams' completed project management plans will be invaluable as we share and learn from this collaborative experience.

Team: Christiana Care Health System

Project Title: A Comprehensive Systems Approach to Resident Wellbeing

I.	<p>Vision Statement (markers of success by March 2019; Refer to Toolkit #5)</p>	<p>The clinical training environment is strengthened when wellbeing is approached proactively and comprehensively. Our vision is to connect the value of strategic investment in provider wellbeing to the advancement of our institution's core values of Love and Excellence and the Quadruple Aim, and to optimize the experience of providing care within our organization.</p>
II.	<p>Team Objectives (‘needs statement,’ project requirements, project assumptions, stakeholders, etc.)</p>	<p>In FY17, CCHS made several advances in resident wellbeing, including: 1) improving access to mental health resources via a physician-specific EAP service, 2) starting a resident wellbeing committee, and 3) piloting psychologist-led quarterly wellbeing sessions in 2 medical residencies. We also administered our first comprehensive resident and fellow wellbeing survey in January 2017 to assess needs and focus/direct our efforts. In these early efforts, it was apparent there were many opportunities for improvement as a system. We sought to expand our quarterly wellbeing sessions as a means to offer a setting for residents and fellows to discuss wellbeing topics such as self-awareness, social support/collegiality, burnout and professional fulfillment, work-life integration, joy/meaning in work, self-care, healthy climates, and institutional resources available. These quarterly wellbeing sessions became important wellness discussions conducted during protected resident education time, and connected learners directly to a psychologist who could refer them for treatment when necessary, and who could also begin to advocate on their behalf on a systems level.</p>
III.	<p>Team Members &amp; Accountability (list of team members from Toolkit #6 and who is accountable for what)</p>	<p>Vanessa Downing, PhD, Director of Content Development &amp; Training, AIAMC NI VI Team Lead Mark Mason, PhD, Resident Wellbeing Specialist, Resident and Program Leadership Engagement Heather Farley, MD, MHCDS, FACEP, Director of Provider Wellbeing, Key Stakeholder,</p>

		<p>management and senior leadership support  Greta Ehrhart, MPA, focus group facilitator and qualitative report production  Sam Van Horne, PhD, Senior Research Associate  Brian Levine, MD, Designated Institutional Official, Associate Chief Academic Officer  Lisa Maxwell, MD, Associate Chief Learning Officer, Academic Affairs  Margaret Kennan, PhD, Family Medicine Faculty  John Donnelly, MD, Internal Medicine Program Director  Loretta Consiglio-Ward, Safety &amp; Quality Education Specialist  Christina Edwards, Program Coordinator, Internal Medicine  Melissa Cummings, MD, Emergency Medicine resident alumna  Elizabeth Shy, MD, OB/GYN resident, PGY-3  Heather Bari-Brown, MD, Meds-Peds, PGY-3, Resident Wellbeing Committee Chair</p>
IV.	Necessary Resources (staff, finances, etc.)	<p>Since its inception in 2016, the Center for Provider Wellbeing has grown from one 0.75 FTE to 9 FTEs. Of these 9 roles, several support systemwide wellbeing initiatives that impact residents, fellows, and program directors, and a senior research associate studies interventions implemented in the clinical learning environment. A critical step, however, was the addition of a full time Resident Wellbeing Specialist (adoctoral level psychologist) whose time is dedicated to the creation of programming and interventions for residents, fellows, and program leaders. The functions of the Resident Wellbeing Specialist are integral to improving the clinical learning environments across 31 residency/fellowship programs.</p>
V.	Measurement/Data Collection Plan	<p>The team collected data and evaluated efforts through multiple means.  First, the Annual Provider Wellbeing Survey is a cross-sectional, IRB approved survey built on Stanford’s conceptual “WellMD” model and developed by the Physician Wellness Academic Consortium (PWAC). Participants were asked annually, beginning in 2017 and through 2019, to assess organizational/cultural/climate constructs and individual variables such as burnout, professional fulfillment, burnout, professional fulfillment, and resilience.  Second, focus groups with residents and fellows were co-conducted by Vanessa Downing, PhD and Greta Ehrhart in the Spring of 2018. Themes were identified and findings shared with residents and fellows as well as program leaders.</p>

		<p>Third, residency/fellowship programs were asked to co-create wellness goals in collaboration with resident and fellow wellbeing champions. Academic Affairs, resident/fellow program leaders, and the Center for Provider Wellbeing worked together to identify achievable, measureable, and actionable goals based on resident/fellow program feedback.</p> <p>Fourth, resource liaison frequency counts served as a means to measure resident help-seeking behaviors.</p>
VI.	<p>Stakeholder Communication Plan (may be helpful to draft a flow chart of team members &amp; senior management; Refer to Toolkits #2 and #4)</p>	<p>The Center for Provider Wellbeing partnered with Academic Affairs, residents/fellows, program leaders including directors and associate directors, and program coordinators from the earliest days of the project. Our multidisciplinary team met monthly to map out, implement, and evaluate a plan that was responsive to feedback from multiple stakeholders, including C Suite leaders and Human Resources, and communicated updates.</p>
VII.	<p>Potential Challenges (engagement, budget, time, skills gaps, etc.; Refer to Toolkit #3)</p>	<p>Despite programs initially agreeing to participate in quarterly wellbeing rounds during protected lecture time, clinical emergencies or other scheduling difficulties sometimes interfered with resident attendance. Norms and expectations for attendance needed to be established, while engagement and participation (open sharing) remained completely voluntary. Establishment of trust and decreasing of stigma took more time with some programs than others, but ultimately, feedback has been overwhelmingly positive. Additional residency programs have expressed interest in FY20 participation.</p> <p>A key goal for the team was promoting mental health and encouraging help-seeking for residents experiencing distress. A variety of resources are available for residents, including psychological/learning assessment, a physician-specific EAP program, and a newly established resource line managed by two CPW psychologists. Residents have expressed ongoing concerns about help-seeking behaviors related to time as well as fears about impacts on licensure, program disclosures, peer knowledge, consequences to coverage of clinical duties, and person-specific issues such as feeling vulnerable, less worthy, stigmatized, etc.</p> <p>Asking programs to develop wellbeing goals as part of the Annual Program Evaluation process was a significant attempt at culture change and has had varied results. First, the process of identifying wellness goals was new for program leaders. There was a significant learning curve</p>



		associated with digesting focus group feedback, co-creating goals with resident/fellow wellbeing champions, and developing achievable, actionable, measureable wellness goals for the first year. Second, it is difficult to assess the quality of wellness goals across programs because many of the goals are distinct and customized to the unique needs of the program and residents/fellows. Third, the impact of the APE wellness goals on resident/fellow wellbeing is difficult to evaluate, particularly in the short-term.
VIII.	Opportunities for Scholarly Activity (potential publications, conference presentations, etc.)	We intend to submit our project as a conference presentation and paper submission.
IX.	Markers (project phases, progress checks, schedule, etc.; Refer to <i>NI V Roadmap to 2019</i> which will be presented at Meeting One)	<p><u>Milestones (as highlighted in monthly team AIAMC National Initiative VI meetings)</u></p> <p>July 2016: piloting of psychologist-led quarterly wellbeing sessions</p> <p>February 2016: Inaugural Annual Intern Wellbeing Intensive</p> <p>January 2017: Provider Wellbeing Survey data collection</p> <p>July 2017: Expansion of psychologist-led quarterly wellbeing sessions to 10 residency and fellowship programs</p> <p>January 2018: Provider Wellbeing Survey data collection</p> <p>May 2018: Inaugural resident/fellow focus groups</p> <p>July 2018: expansion of psychologist-led quarterly wellbeing sessions</p> <p>August 2018: Hired Resident Wellbeing Specialist</p> <p>Fall 2018: Inaugural Annual Program Evaluation Wellness goals created for each residency/fellowship program in collaboration with Academic Affairs</p> <p>March 2019: Provider Wellbeing Survey data collection</p>

Sections X thru XIII to be completed first quarter 2019 for "Final Proceedings" booklet:

X.	Success Factors	The most successful parts of our work were: 1) the addition of wellbeing goals to the Annual Program Evaluation, a marker of significant partnership between GMEC, Academic Affairs, the Center for Provider Wellbeing, and residents/fellows, 2) increased consultation, involvement, and collaboration between program leadership and the Center for Provider Well-being, 3) increased help-seeking behaviors by residents and fellows in distress, and 4) continued
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		<p>expansion of quarterly wellbeing sessions (i.e., Ice Cream Rounds) to new residency and fellowship programs.</p> <p>We were inspired by:</p> <ol style="list-style-type: none"> <li>1. Collaborative, mutually respectful relationships among Academic Affairs, GMEC, CPW, and residency/fellowship program leadership;</li> <li>2. The openness, interest, engagement, and participation among residents and fellows in discussing topics such as burnout, wellness, and organizational culture;</li> <li>3. Senior leadership/CEO/C-Suite buy-in and institutional support;</li> <li>4. Christiana Care organizational values and shift toward Love and Excellence and the Quadruple Aim.</li> </ol>
XI.	Barriers	<p>The largest barriers encountered were:</p> <ol style="list-style-type: none"> <li>1. Fostering open communication and collaboration between resident wellbeing champions and program leaders</li> <li>2. Helping program directors to feel empowered to enact real organizational change</li> <li>3. Time: Program directors have many institutional and clinical responsibilities</li> </ol> <p>We worked to overcome this by:</p> <ol style="list-style-type: none"> <li>1. Attending and participating in monthly GMEC meetings</li> <li>2. Forming collaborative work groups and teams across departments and roles</li> <li>3. Promoting cooperation by framing our roles as collaborative consultants</li> <li>4. Collecting data to bolster initiatives</li> <li>5. Creating an FTE entirely dedicated to the wellbeing of those in the clinical learning environment</li> </ol>
XII.	Lessons Learned	<p>The single most important piece of advice to provide another team embarking on a similar initiative would be to develop data-driven initiatives for resident physician wellness at both the individual and organizational levels. It is clear that individual and organizational factors are highly interrelated. Focus group feedback illuminated important themes and trends related to resident wellness at the clinical learning environment level. Organizational climate change is best institutionalized through teamwork.</p>

XIII.	<p>Expectations Versus Results</p>	<p>On a scale of 1 to 10 (with “1” meaning nothing and “10” meaning everything), how much of what you set out to do was your team able to accomplish?</p> <p>1 2 3 4 5 6 7 8 <u>9</u> 10</p> <p>Overall, much of the original plan came to fruition. A dedicated FTE focused on resident wellness and healthy clinical learning environments was created. Quarterly, wellness-focused education was created for many residency/fellowship programs, and the effort continues to grow and expand (14 in FY19). Annual residency/fellowship program evaluations will include wellness goals each year. Biannual focus groups and the Provider Wellbeing Survey will be used to evaluate ongoing wellness efforts.</p>
XIV.	<p>Sustainability and Next Steps</p>	<p>What does your CEO need to know to help keep your work sustainable?</p> <p>Our CEO and other senior leaders are incredibly supportive of our work as evidenced by support for a dedicated FTE for the clinical learning environment in residency and fellowship programs and the growing CPW staff. It will be critical to report back to our CEO, senior leaders, and other stakeholders over time how their investment in wellbeing has enabled us to broaden and deepen our wellbeing efforts. Going forward, it will be important for our CEO to understand and appreciate the interrelated nature of individual, cultural, and systemwide interventions designed to foster engagement and fulfillment among physicians. Similarly, we will need to continue to encourage system efforts to improve workflow and practice efficiency improvements, and help leaders understand the important connections between individual wellbeing, the functionality of the workplace, and the ability of residents, fellows, and their faculty/leadership to remain engaged in meaningful work.</p>

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## INTRODUCTION

- According to Dyrbye et al, 50% of residents age 27-40 were burned out compared to 31% of their matched nonmedical peers.<sup>1</sup>
- In addition to mental health problems, burnout also has physical effects including a significant increase in motor vehicle accidents.<sup>2</sup>
- Others studies have tested different interventions to improve resiliency with varying levels of success.
- These interventions included workshops, debriefing after traumatic events, and annual training programs.<sup>3-5</sup>
- Unfortunately, no programs currently address caregiver resilience in a timely and consistent manner.

### References

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2. West, Colin P., et al. "Association of Resident Fatigue and Distress With Occupational Blood and Body Fluid Exposures and Motor Vehicle Incidents." *Mayo Clinic Proceedings*, vol. 87, no. 12, 2012, pp. 1138–1144., doi:10.1016/j.mayocp.2012.07.021.
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5. Martinchek, Michelle, et al. "Building Team Resilience and Debriefing After Difficult Clinical Events: A Resilience Curriculum for Team Leaders." *MedEdPORTAL Publications*, vol. 13, 2017, doi:10.15766/mep\_2374-8265.10601.

## OBJECTIVE

The objective of this project is to survey caregivers to assess current practices across residency programs related to caregiver wellness, determine gaps in support, as well as develop and implement a multi-pronged program to support resident and faculty resiliency.

## METHODS

### IRB Submission

- The project described herein was granted a Quality Improvement determination by the Cleveland Clinic Akron General (CCAG) Institutional Review Board.

### Subjects

- CCAG Residents and Core Faculty from Emergency Medicine, Family Medicine, General Surgery, Internal Medicine, Obstetrics and Gynecology, and Orthopedic Surgery training programs.

### Interventions/Changes

- Needs assessment administered to determine knowledge of existing resources, gaps in support, and desired resources.
- From the responses to the needs assessment, the following changes were implemented:
  - Integrated a "Caring for Caregivers" slide with QR Response Code in Morbidity/Mortality (M&M) conferences for respective programs.
  - Increased visibility of EAP in all training programs through more frequent didactic presentations.
  - Developed "Caring for Caregivers" laminated signs and posted in resident lounges, bathroom stalls, and call quarters.
  - Created a "Resources" intranet page that may be found by navigating the Medical Education intranet page.

## METHODS

### Measure #1: ACGME Well-Being Survey Questions

- Responses to ACGME Well-Being questions utilized as baseline measure of culture of resiliency support.
- Responses to ACGME Well-Being questions one-year following implementation (2020) of the changes will be used to determine a positive shift in the culture of resiliency support.

### Measure #2: Culture of Resiliency Support Needs Assessment

- An open-answer needs assessment was administered to all subjects to determine knowledge of existing resources, gaps in support, and desired resources.
- Responses were placed into categories according to underlying theme.
- Interventions were developed to address the most commonly occurring themes.

### Measure #3: "Caring for Caregivers" QR Code Utilization

- De-identified Caregiver responses were collected in a Google docs spreadsheet.
- Responses were placed into categories according to underlying theme.

### Measure #4: EAP Resident Utilization

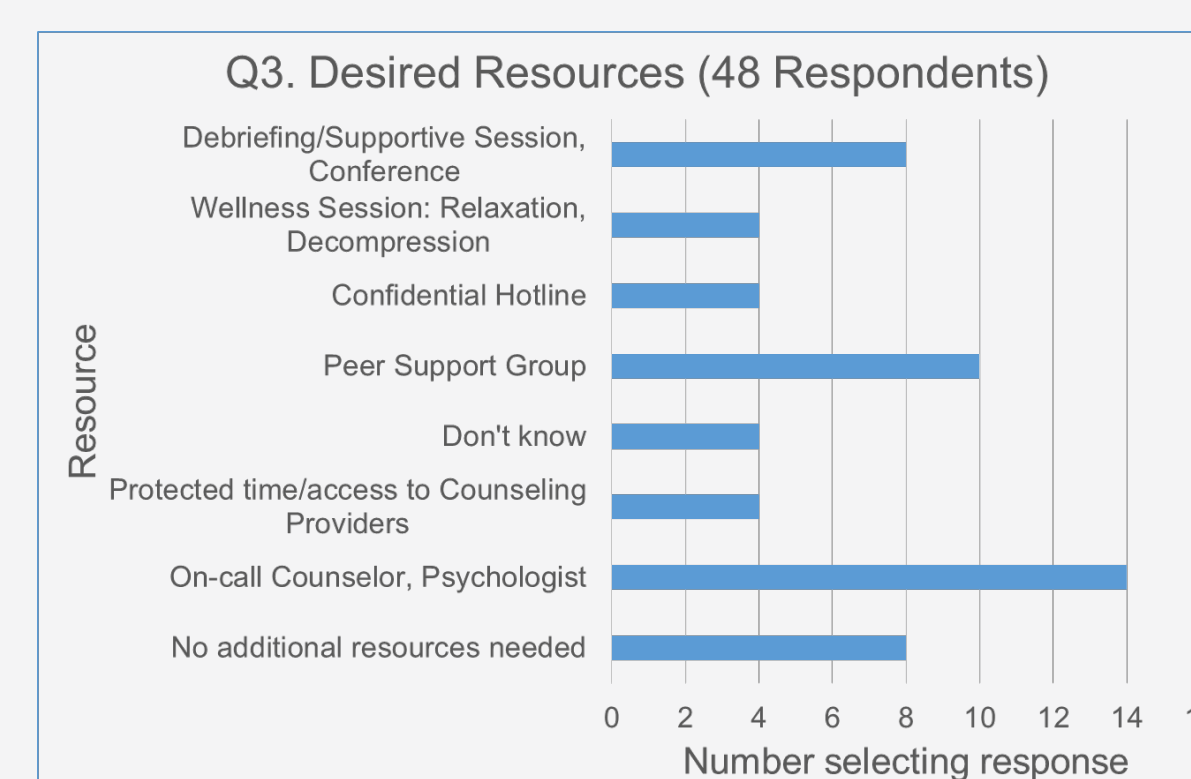
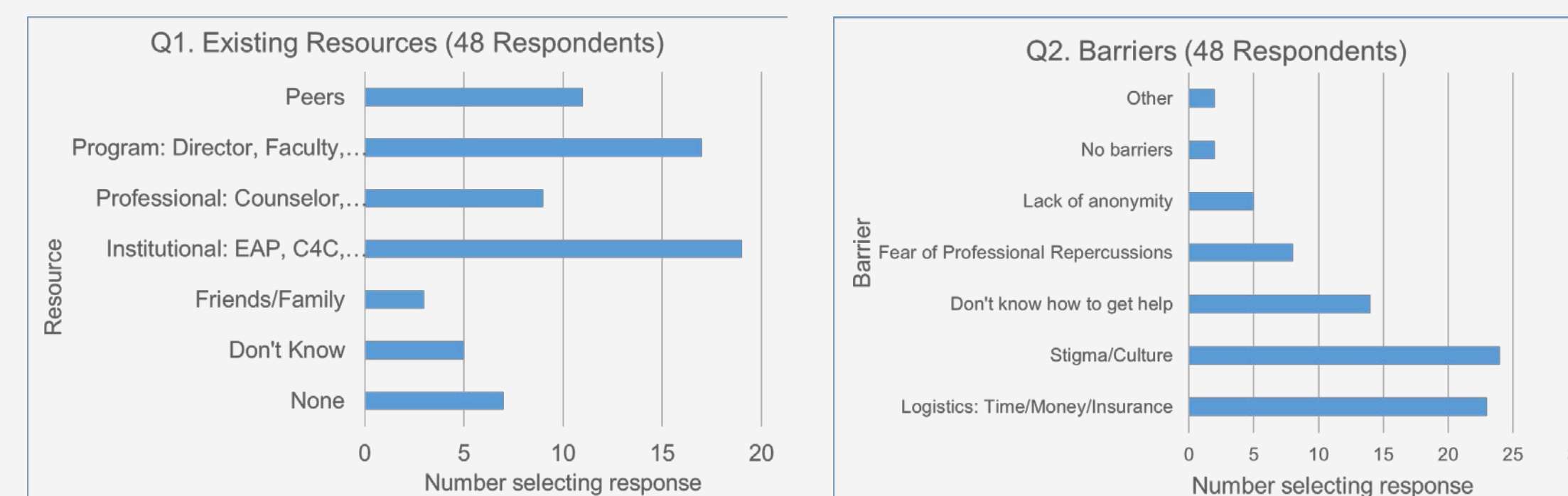
- Utilization (in %) before and after Initiative changes will be measured to assess the effect of increased visibility.

## RESULTS

### Measure #1: ACGME Well-Being Survey Questions

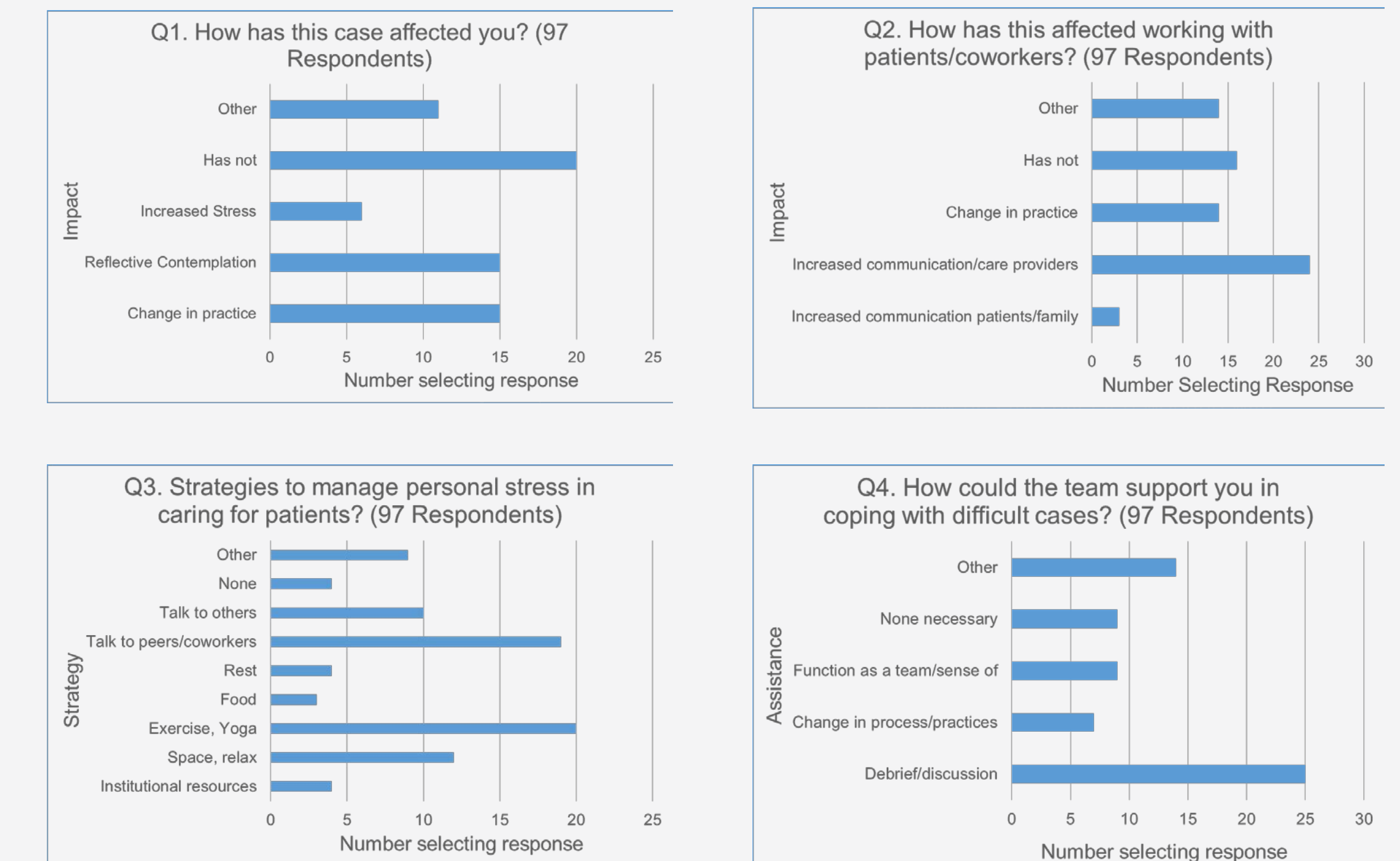
- Responses from ACGME Wellness questions were collected from the 2018 Survey (prior to implementing Initiative changes). These responses will be compared to responses for the same questions from the 2020 ACGME Survey (one-year post-implementation).

### Measure #2: Culture of Resiliency Support Needs Assessment



## RESULTS: Continued

### Measure #3: "Caring for Caregivers" QR Code Utilization



**Caring for Caregivers**  
(choose 1 or 2 questions to respond)

- How has your experience on this case affected you outside of the hospital?
- How has this case affected your ability to work with other patients and/or coworkers?
- What strategies do you use or might you use to manage the personal stress of caring for your patients?
- How could the team support you in coping with this and other difficult cases?



## DISCUSSION

### Key Findings

- Eliminating the stigma associated with seeking help is the first step to a change in the culture of resiliency at our institution.
- Fear of repercussion and lack of anonymity were key barriers to a successful culture of resiliency support.
- Many of the resources requested by residents and core faculty were already in place necessitating increased visibility and awareness.

### Limitations

- Due to the sensitive nature of this topic, responses from all measures are de-identified.
- A 100% response rate for each measure is not likely.
- The same residents and core faculty may not respond to or participate in any one measure; therefore, results may not reflect a true change from baseline.

### Next Steps and Sustainability

- Responses to ACGME Well-Being questions one-year following implementation (2020) of the changes will be used to determine a positive shift in the culture of resiliency support.
- Interventions made as a result of this Initiative will be adjusted based on the responses to the ACGME Well-Being survey questions.
- Protected time and insurance coverage will be essential to sustaining the culture of resiliency support.

## Project Management Plan

Begin completing this Project Management Plan at Meeting One and complete it with your team following Meeting One, i.e., by November 2017. Teams will have the opportunity to review/revise their Project Management Plans throughout the 18-month Initiative at each of the on-site meetings. The collective data from all of the teams' completed project management plans will be invaluable as we share and learn from this collaborative experience.

Team: Cleveland Clinic Akron General

Project Title: Creating a Culture of Resiliency by Standardizing M&M Conferences

I.	Vision Statement (markers of success by March 2019; Refer to Toolkit #5)	<i>Our vision is to create a culture of resilience for our caregivers in a safe environment where they feel empowered and supported when faced with the inevitable challenges of providing world class care for their patients.</i>
II.	Team Objectives (‘needs statement,’ project requirements, project assumptions, stakeholders, etc.)	<i>There are currently no standardized mechanisms within the GME apparatus to address caregiver resilience in a timely and consistent manner. The NI6 team will assess current practices in each of the residency programs related to caregiver wellness, survey caregivers to determine gaps in support and create a plan to address their needs.</i>
III.	Team Members & Accountability (list of team members from Toolkit #6 and who is accountable for what)	<i>Cheryl Goliath, PhD – Project Management &amp; Proof Reading Nairmeen Haller, PhD – Project Lead, Write Up Oversight &amp; Proof Reading Lori Smith, MBA- Poster Presentation Kristin Filipowicz, Med – Write Up Oversight &amp; Advisor Narine Sharkhatunyan, MD – Literature Review &amp; Background Nathan Hieb, MD – Survey/Background/Poster Presentation Jennifer DeMarco, MD – Literature Review &amp; Background Heather Snyder, DO – Data Entry &amp; Background Coda Derrig, PhD – Write Up Oversight &amp; Advisor Titus Sheers, MD – Advisor Elias Traboulsi, MD – Advisor Cory Chevalier, MD – Advisor</i>

IV.	Necessary Resources (staff, finances, etc.)	<i>-Currently AEP representative is on site 3 days. May need to increase presence to meet need.</i>
V.	Measurement/Data Collection Plan	<p><i>-ACGME Baseline Survey (1<sup>st</sup> &amp; 2<sup>nd</sup> qtr 2018)</i></p> <ul style="list-style-type: none"> <li>• Collected Jan – Feb: EM, FM, OB/GYN</li> <li>• Collected Feb-March: GS, OS, Uro</li> <li>• Collected March-April: IM</li> </ul> <p><i>-Culture of Support Survey (May 2018)</i></p> <p><i>-Assess New M&amp;M Findings (January 2019)</i></p> <p><i>-ACGME Survey (1<sup>st</sup> &amp; 2<sup>nd</sup> qtr 2019) (Findings not available until 5/2019)</i></p> <ul style="list-style-type: none"> <li>• Collected Jan – Feb: EM, FM, OB/GYN</li> <li>• Collected Feb-March: GS, OS, Uro</li> <li>• Collected March-April: IM (to be released)</li> </ul> <p><i>-Mid-Year Institutional Survey went out-no wellness questions (January 2019)</i></p> <p><i>-CCAG GME Post-Survey with ACGME Wellness Question (January 2019)</i></p>
VI.	Stakeholder Communication Plan (may be helpful to draft a flow chart of team members & senior management; Refer to Toolkits #2 and #4)	<p><i>-Educate Chief Residents and Program Directors on project/process</i></p> <p><i>-Create a new M&amp;M template with questions addressing caregiver resiliency</i></p> <p><i>-Distribute new template October 2018</i></p> <p><i>-Gather formative feedback on new template 4<sup>th</sup> qtr 2018</i></p> <p><i>-Communicate progress with C-Suite</i></p>
VII.	Potential Challenges (engagement, budget, time, skills gaps, etc.; Refer to Toolkit #3)	<p><i>-Engagement of Chief Residents/M&amp;M Presenter to reinforce usage of resiliency questions</i></p> <p><i>-Residency programs varied in the frequency of M&amp;M Conferences</i></p> <p><i>-Resident concern of anonymity of their responses</i></p> <p><i>-Sustained usage of QR Code access to questions throughout study period required frequent messaging</i></p>

VIII.	<p>Opportunities for Scholarly Activity (potential publications, conference presentations, etc.)</p>	<p>-Residents can development manuscript for publication (e.g. Ochsner Journal, Cleveland Clinic Journal of Medicine, Academic Medicine) -Resident(s) to present at conference(s) -Residents will present NI 6 Project at GMEC -Residents on NI 6 team required to report back to their respective programs as well as presenting to programs who participated but did not have residents on the NI 6 team</p>
IX.	<p>Markers (project phases, progress checks, schedule, etc.; Refer to NI V Roadmap to 2019 which will be presented at Meeting One)</p>	<p>-Regular checks with program usage of template -Regular checks with team members -Review formative feedback (November and December)</p>

Sections X thru XIII to be completed first quarter 2019 for “Final Proceedings” booklet:

X.	<p>Success Factors</p>	<p><i>The most successful part of our work was....</i> -We were very happy with our engagement with the residency programs and our response rate -Created a more visible presence for our EAP resources</p> <p><i>We were inspired by....</i> -The thoughtfulness of the resident responses to the resiliency questions</p>
XI.	<p>Barriers</p>	<p><i>The largest barrier encountered was....</i> - (1) Resident availability and follow up on team assignments</p> <p>- (2) Timing of Survey roll outs</p> <p><i>We worked to overcome this by....</i> - (1) Increased communication from team leadership</p>

		<p><i>-(1A) replaced two residents on the team who were not engaged in project</i></p> <p><i>-(2) Since we couldn't use the ACGME Survey as a post-survey due to May reporting schedule, we created a survey with just their Wellness questions and sent it out with a quick turnaround</i></p>
XII.	Lessons Learned	<p><i>The single most important piece of advice to provide another team embarking on a similar initiative would be....</i></p> <ul style="list-style-type: none"> <li><i>-Clear messaging as to the purpose of the project.</i></li> <li><i>-Might have been better to have NI 6 team members coming to resident meetings to inform the residents about the project rather than solely relying on Chief Residents and Program Directors to message the project</i></li> <li><i>-Utilization of the QR Code was very successful and made the process very accessible for the residents</i></li> </ul>
XIII.	Expectations Versus Results	<p><i>On a scale of 1 to 10 (with "1" meaning nothing and "10" meaning everything), how much of what you set out to do was your team able to accomplish?</i></p> <p><i>1 2 3 4 5 6 7 8 9 10</i></p>
XIV.	Sustainability and Next Steps	<p><i>What does your CEO need to know to help keep your work sustainable?</i></p> <ul style="list-style-type: none"> <li><i>-Report the engagement and findings of the NI 6 Project</i></li> <li><i>-Share the gaps identified through this process as well as our CLER Report</i></li> <li><i>-Suggestions for additional ways to change our culture as it pertains to physician wellbeing</i></li> <li><i>-Resources needed to sustain wellness initiatives</i></li> </ul> <p><i>Next Steps</i></p> <ul style="list-style-type: none"> <li><i>-Utilize ACGME Survey report in May to finalize manuscript for publication of NI6 project</i></li> <li><i>-Engage each of the residency programs to see if they want to keep using the M&amp;M template or if they have other ideas that would work for their departments to maintain a caregiver resiliency dialogue</i></li> <li><i>-Ensure that EAP continues to be scheduled routinely for didactic sessions in all residency programs for visibility and to gain trust.</i></li> <li><i>-Verify that all posted resource signs are still in place; Keep Resource intranet page updated.</i></li> <li><i>-Work with Medical Staff Services to begin identifying ways to address faculty wellbeing</i></li> </ul>



## INTRODUCTION: Background

- Community Health Network recently started a medical group center for physician well-being and joined the AIAMC National Wellness Initiative. Our institution is harnessing collaborative relationships with key stakeholders to implement initiatives for wellness on an institutional level.
- The AIAMC National Initiative GME group has a goal of identifying key factors in resident and faculty burnout, having a GME-wide systemic wellness intervention, and supporting individual residency program Wellness initiatives.

## Aim/Purpose/Objectives

Community Health Network has a goal of **decreasing resident burnout** as measured by the Wayne State University Resident Wellness Scale (RWS) by 5% from our baseline of 3.59 to 3.77 **over a period of 9 months** by giving residents a **half day of dedicated wellness time** along with all of the other residents at their level of training throughout the network to choose between an institutionally organized event or personal time dedicated to wellness in the fall, and another half day in the spring. We are also **encouraging program specific Wellness initiatives** within each of our residency programs.

Date	Event
January 2018	ACGME Resident and Faculty Survey administered
May 2018	Results received from ACGME Survey
July 2018	Baseline RWS to all residents
Aug/Sept 2018	Intervention 1 (PGY3: 8/23/18, PGY2: 9/6/18, PGY1: 9/20/18)
December 2018	Post-Intervention 1 RWS Survey
January 2019	ACGME Resident and Faculty Survey administered
February 2019	Intervention 2 (PGY3: 2/1/19, PGY2: 2/15/19, PGY1: 2/22/19)
March 2019	Post-Intervention 2 RWS Survey
May 2019	Results received from ACGME Survey

## METHODS: Measures/Metrics

- Residents will be surveyed using the 10-item Wayne State Resident Wellness Scale (RWS) and the annual ACGME Survey to monitor impact on wellbeing.
- RWS resident data is de-identified by the research coordinator, and all other investigators are blinded to the participants' data.
- Results were analyzed using a single factor ANOVA.

## METHODS: Interventions/Changes

- GME systemic intervention:
  - Residents across the network are given one dedicated half day for wellness in the fall and spring. On this day, they choose to engage in an organized wellness activity sessions OR a personal wellness activity of their choice.
  - A small number of residents unavailable for these standardized days (night float) will have an individually selected Wellness half day immediately following the night float rotation.
  - If a resident is on vacation during this half day, they will not have to take this half day from allotted vacation time.
- IRB Submission:
  - Project submitted to and accepted by IRB 07/2018.

## Discussion: Barriers & Strategies

### Barriers

- Current challenges and strategies
  - Support from fellow residents and preceptors/faculty for residents having time off
  - Scheduling GME wide AIAMC planning meetings
- Next Steps
  - See timeline
  - Expanding program to address faculty wellness
  - Further developing and supporting program specific Wellness Initiatives

## RESULTS: RESIDENT WELLNESS SURVEYS

Group	07/2018		12/2018		Change 07/2018-12/2018
	N	Avg Score	N	Avg Score	
<b>Results by PGY class</b>					
PGY1	13	3.51	11	3.51	0 (p = 0.402158)
PGY2	18	3.62	16	3.82	+0.20 (p = 0.022897)
PGY3	13	3.61	10	3.97	+0.36 (p = 0.00326)
Fellow	1	NA	0	NA	NA (insufficient sample size)
<b>Results by Residency program</b>					
East Family Medicine	25	3.40	22	3.66	+0.26 (p = 0.000502)
South Family Medicine	9	3.97	5	4.12	+0.15 (p = 0.838167)
Podiatry	5	3.72	5	4.02	+0.05 (p = 0.150607)
Psychiatry	5	3.68	5	3.62	-0.06 (p = 1)
Proctology	0	NA	0	NA	NA (insufficient sample size)
Hospitalist	1	NA	0	NA	NA (insufficient sample size)
<b>Results by Gender</b>					
Male	18	3.61	15	3.72	+0.11 (p = 0.018038)
Female	24	3.56	21	3.79	+0.23 (p = 0.014027)
Prefer not to answer	3	NA	1	NA	NA (insufficient sample size)

## Discussion: Key Findings

### Key Findings

- Overall slight improvement in scores from July to December 2018
- Residents preferred to have time alone for personal life activity rather than group activity when give choice
- Resident buy in was improved with focus on wellness, not burnout, and action instead of talking.
- Listening to what residents actually wanted, not what we thought they needed.
- Resident wellness officer was selected as part of resident council



## Project Management Plan

Begin completing this Project Management Plan at Meeting One and complete it with your team following Meeting One, i.e., by November 2017. Teams will have the opportunity to review/revise their Project Management Plans throughout the 18-month Initiative at each of the on-site meetings. The collective data from all of the teams' completed project management plans will be invaluable as we share and learn from this collaborative experience.

**Team:** Community Hospital Network – Indianapolis, IN

**Project Title:** We for Wellness

I.	<p>Vision Statement (markers of success by March 2019; Refer to Toolkit #5)</p>	<p>Vision: Our vision is to create an environment that fosters the well-being of both our learners and our instructors. We will strive to create a safe, inclusive, and supportive training environment for all involved.</p> <p>Mission: Our GME team will be engaged in multi-pronged effort, in collaboration with network resources (physician wellness lead, multidisciplinary education, HR initiatives) and culture of safety work across the network to support resident and faculty well-being and resilience.</p>
II.	<p>Team Objectives (‘needs statement,’ project requirements, project assumptions, stakeholders, etc.)</p>	<p>Community Health Network has a goal of <b>decreasing resident burnout</b> as measured by the Wayne State University Resident Wellness Scale (RWS) by 5% from our baseline of 3.59 to 3.77 <b>over a period of 9 months</b> by giving residents a <b>half day of dedicated wellness time</b> along with all of the other residents at their level of training throughout the network to choose between an institutionally organized event or personal time dedicated to wellness in the fall, and another half day in the spring. We are also <b>encouraging program specific Wellness initiatives</b> within each of our residency programs.</p>
III.	<p>Team Members &amp; Accountability (list of team members from Toolkit #6 and who is accountable for what)</p>	<p>Team leaders: Kathy Zoppi, DIO, and Jesse Clark, DO, APD Family Medicine</p> <p>Team members: E. Ann Cunningham, DO – PD Psychiatry Stephanie Nader, LCSW – GME Director of Behavioral Education Chrissy Hopps, DO – Psychiatry PGY2 Joanna Edwards, DO – Family Medicine PGY2</p>

		Blane Riley, DO – Family Medicine PGY2 Chris Basom, DO – Family Medicine PGY3 Britney Roberts, DPM – Podiatry PGY2
IV.	Necessary Resources (staff, finances, etc.)	GME agreement Funding for activities Time allocated Administrative staff to coordinate group meetings
V.	Measurement/Data Collection Plan	Residents will be surveyed using the 10-item Wayne State Resident Wellness Scale (RWS) and the annual ACGME Survey to monitor impact on wellbeing. RWS resident data is de-identified by the research coordinator, and all other investigators are blinded to the participants' data. Results will be analyzed using a repeated ANOVA. Data from ACGME Wellness Surveys will be analyzed
VI.	Stakeholder Communication Plan (may be helpful to draft a flow chart of team members & senior management; Refer to Toolkits #2 and #4)	Resident leaders from each program to communicate to residents Report out on progress and findings at GMEC meetings
VII.	Potential Challenges (engagement, budget, time, skills gaps, etc.; Refer to Toolkit #3)	Engagement of residents Buy in from faculty and preceptors Rotation demand limitations Scheduling time for committee to meet Time to devote to developing presentation
VIII.	Opportunities for Scholarly Activity (potential publications, conference presentations, etc.)	AIAMC presentations and posters Network Research Symposium presentations and posters Psych conference presentations ACGME presentations

IX.	Markers (project phases, progress checks, schedule, etc.; Refer to NI V Roadmap to 2019 which will be presented at Meeting One)	January 2018	ACGME Resident and Faculty Survey administered
		May 2018	Results received from ACGME Survey
		July 2018	Baseline RWS to all residents
		Aug/Sept 2018	Intervention 1 (PGY3: 8/23/18, PGY2: 9/6/18, PGY1: 9/20/18)
		December 2018	Post-Intervention 1 RWS Survey
		January 2019	ACGME Resident and Faculty Survey administered
		February 2019	Intervention 2 (PGY3: 2/1/19, PGY2: 2/15/19, PGY1: 2/22/19)
		March 2019	Post-Intervention 2 RWS Survey
		May 2019	Results received from ACGME Survey

Sections X thru XIII to be completed first quarter 2019 for “Final Proceedings” booklet:

X.	Success Factors	<p><i>The most successful part of our work was....</i>  <i>Resident recognition of efforts taken for resident wellness, appreciation of wellness half day.</i></p> <p><i>We were inspired by....</i>  <i>Buy-in from residents when we listened to their desire for autonomy</i></p>
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XI.	Barriers	<p><i>The largest barrier encountered was...</i>  <i>Time to meet to schedule and plan our events, time dedicated to our group</i></p> <p><i>We worked to overcome this by...</i>  Engaging appropriate administrative staff, learning who the key schedulers were at each program, making meetings well in advance.</p>
XII.	Lessons Learned	<p><i>The single most important piece of advice to provide another team embarking on a similar initiative would be...</i>  <i>Don't underestimate the value to having your whole planning committee together on a regular basis, preplan these meetings well in advance.</i></p>
XIII.	Expectations Versus Results	<p><i>On a scale of 1 to 10 (with "1" meaning nothing and "10" meaning everything), how much of what you set out to do was your team able to accomplish?</i></p> <p>8</p> <p>1 2 3 4 5 6 7 8 9 10</p>
XIV.	Sustainability and Next Steps	<p><i>What does your CEO need to know to help keep your work sustainable?</i>  The response from the residents, the need for dedicated wellness time.</p>

## Background

- Physician burnout is a national phenomenon that leads to poor quality of care, errors, diminished professionalism along with work-life integration
- Healthcare professionals are at risk, burnout may raise their risk of suicide and they may provide suboptimal care that attracts lower patient satisfaction
- This is an opportunity to address burnout in order to improve patient safety and quality of care and potentially lower turnover among physician trainee

## Aim/Purpose/Objective

To improve the well being of our internal medicine residents.

Reduce stress using the concept model of human coping reservoir (Dunn et al, 2008).

Identify stressors in residents via survey. Engage residents in wellbeing initiatives.

Provide interventions and perform periodic assessments.

## METHODS: Interventions/Changes

Fall 2017

- Faculty led interventions
- Graduate Medical Education (GME) activities
- Wellness with Psychology sessions
- Employee Assistance Program
- Program Director Dinner
- A group chat on Whatsapp

Spring 2018

- Resident led interventions
- Hockey night
- Ping pong table
- GME activities
- Wellness with Psychology sessions

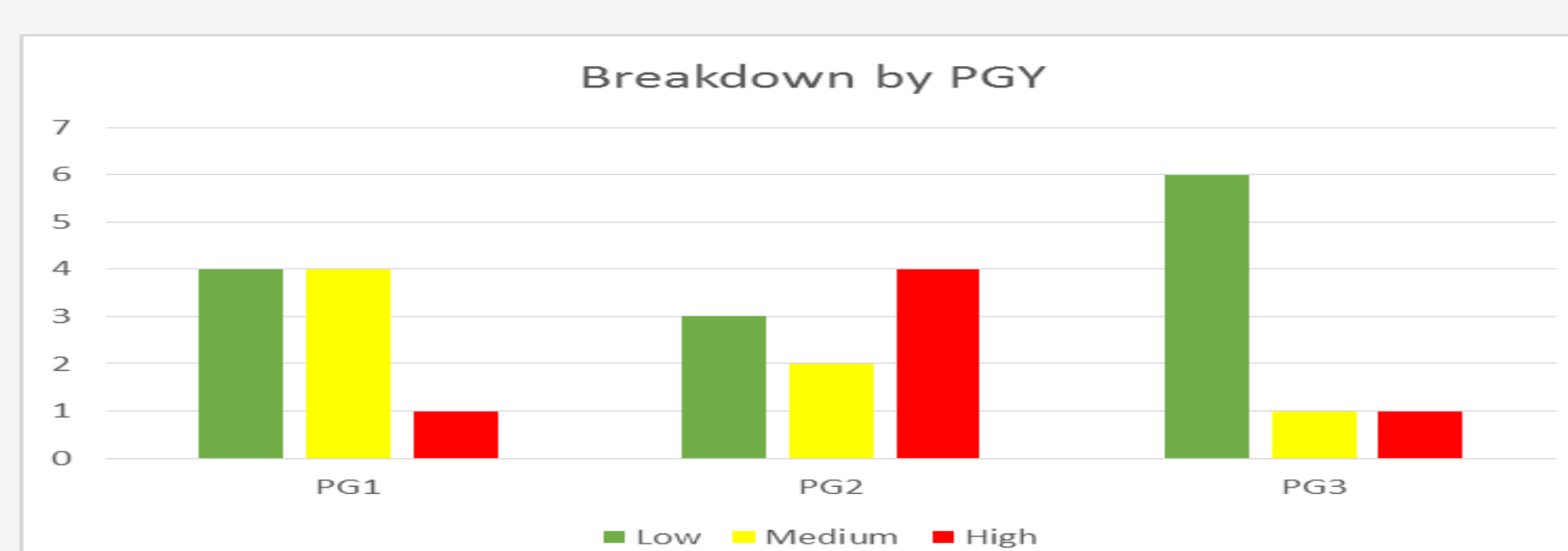
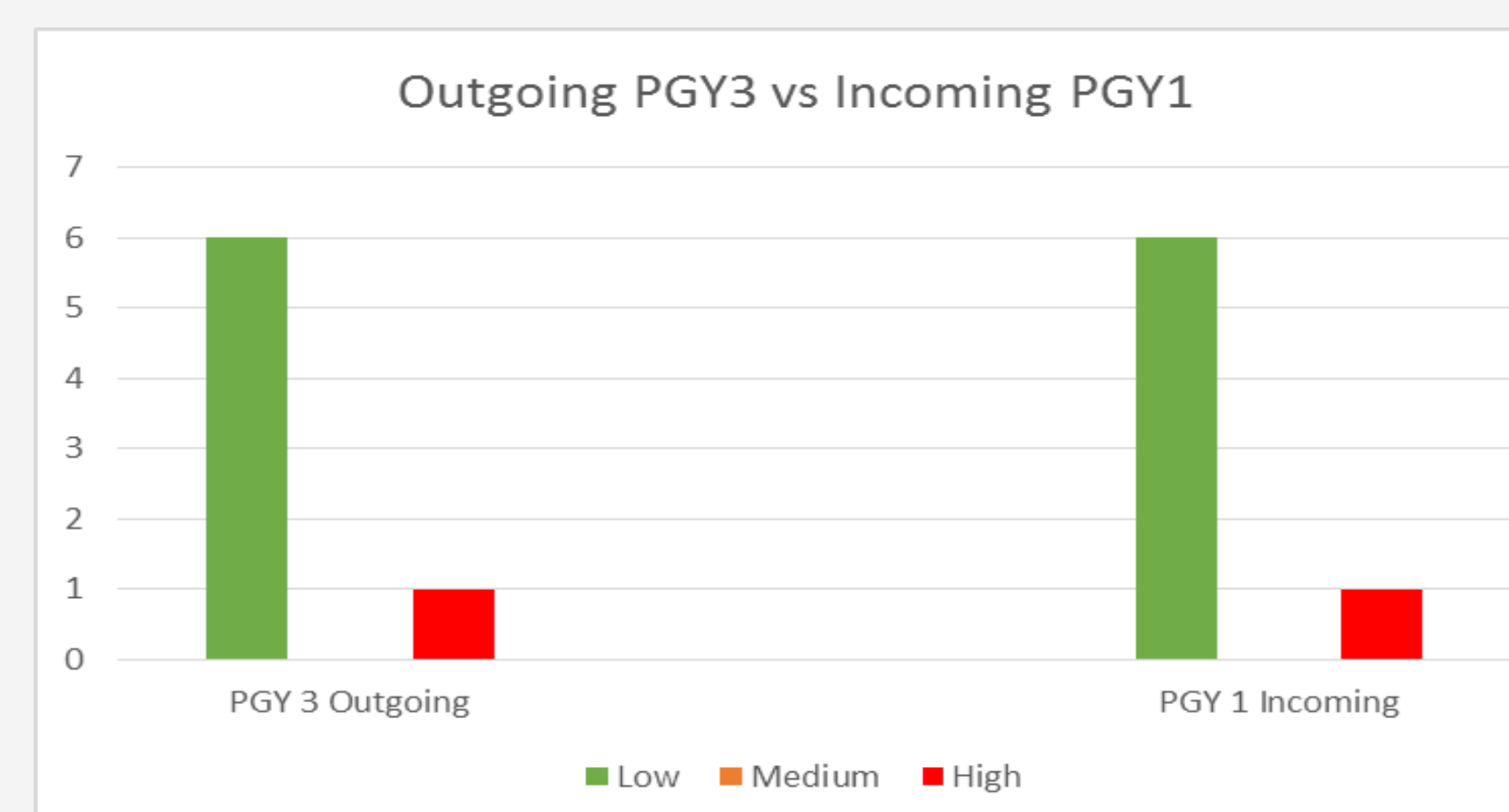
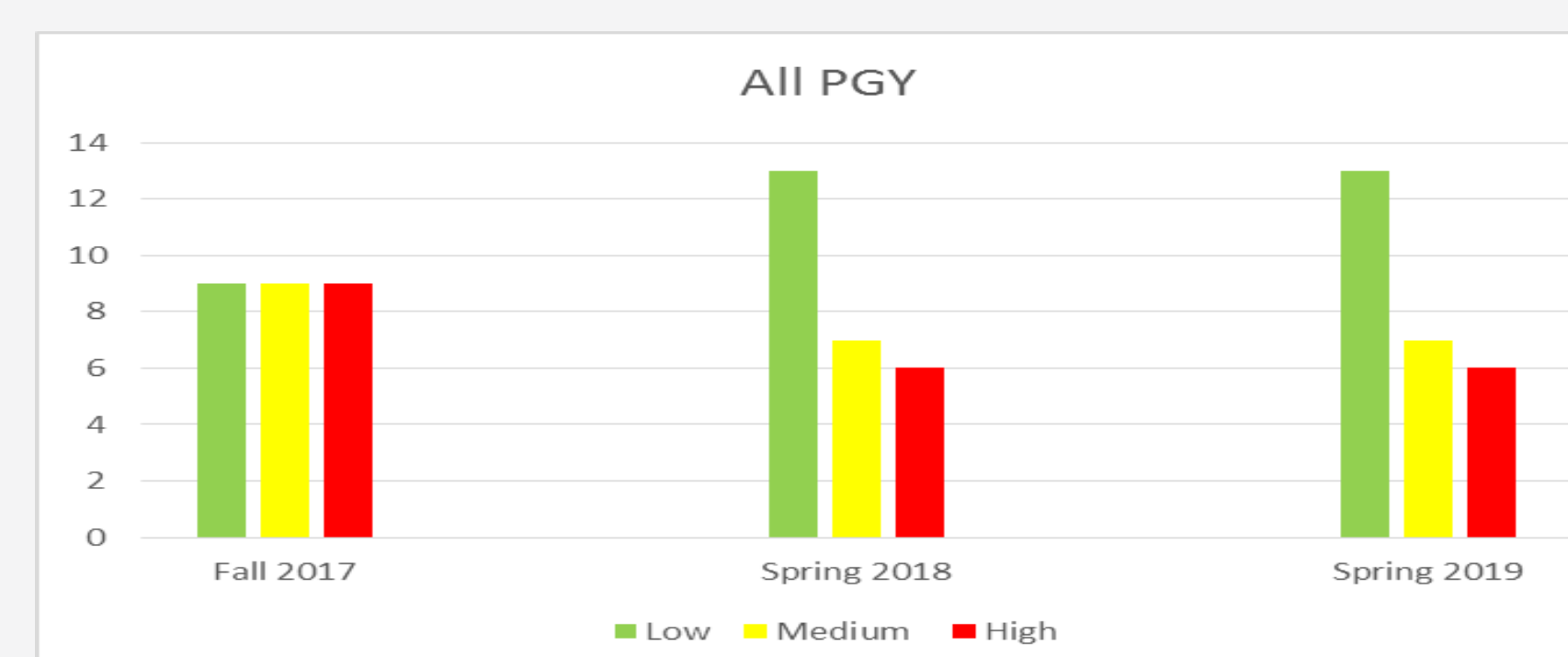
Spring 2019

- GME activities
- Pizza Night
- Ping Pong Tournament
- Gala at local Hotel
- Minor League Baseball Game

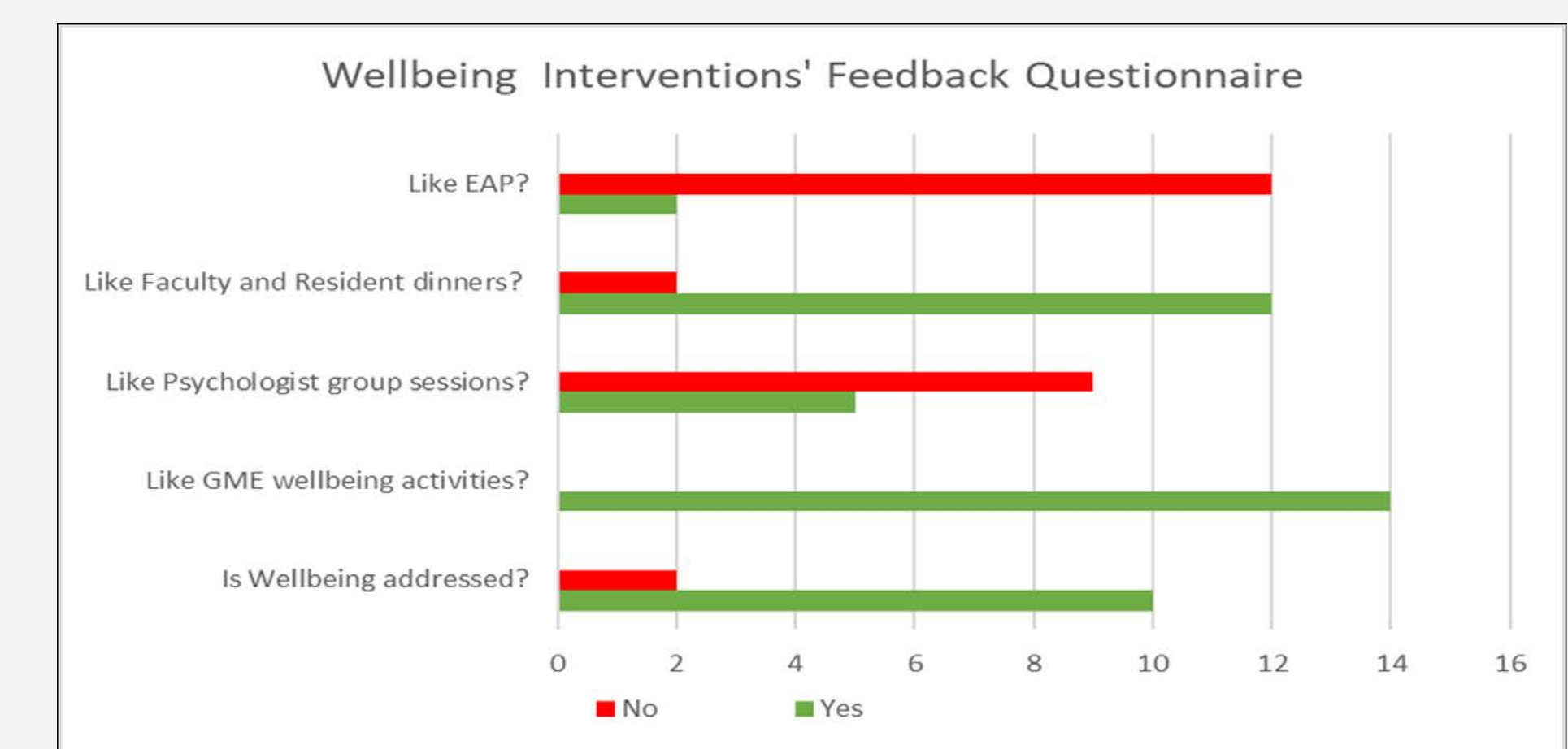
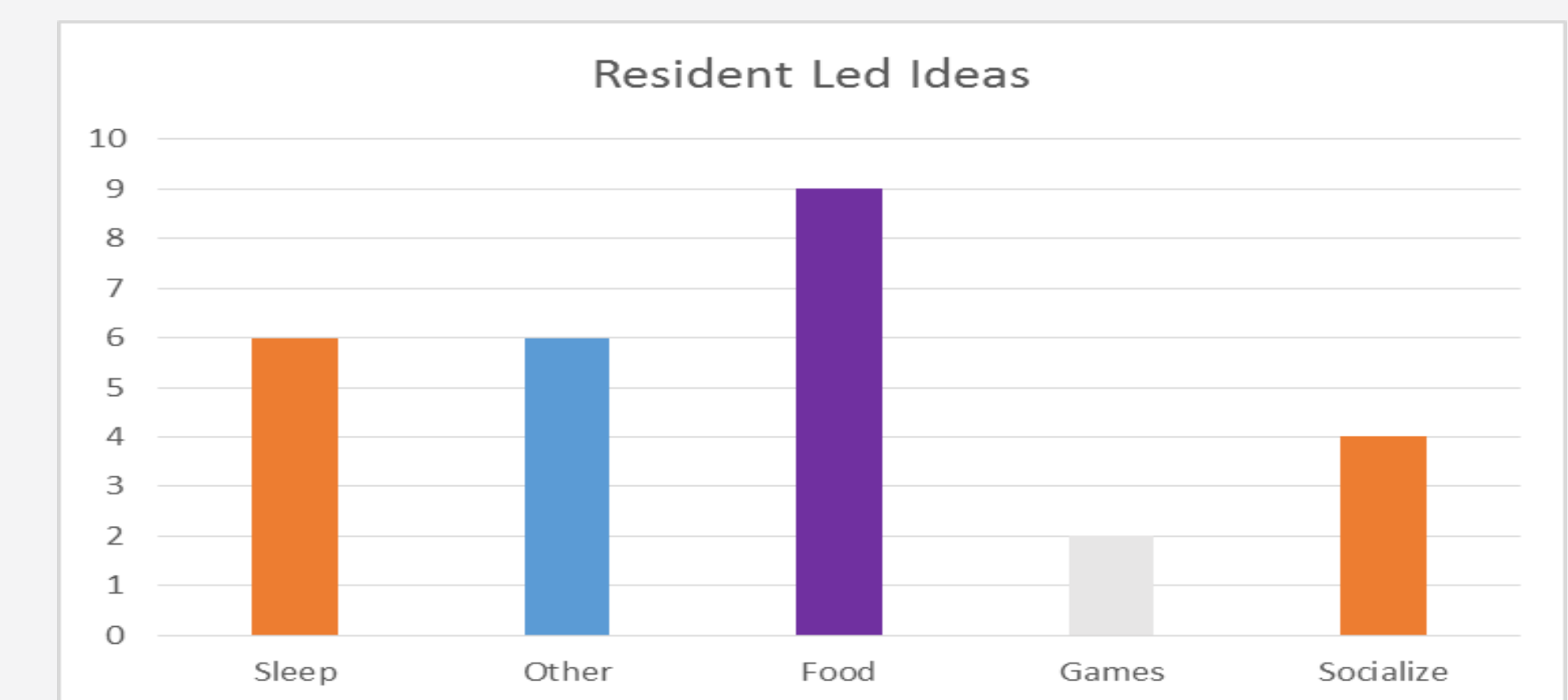
## METHODS: Measures/Metrics

- Subjects:** Internal Medicine Residents at Guthrie Clinic  
 Maslach Burnout Survey (MBI) measures emotional exhaustion, depersonalization and personal accomplishment
- Perform baseline MBI
  - Create Ombudsman position
  - Develop Wellness Interventions Feedback Questionnaire to evaluate if current interventions were enjoyable
  - Develop Resident Led Intervention Questionnaire to see what residents wanted given the choice
  - Performed interventions followed by periodic MBI

## RESULTS



## RESULTS: Continued



## Discussion: Barriers & Strategies

### Key Findings

- Residents improved and stayed at improved levels
- PGY2 were identified as having the most burnout
- Whatsapp had the most favorable and sustained response

### Limitations

- Limited cohesiveness amongst current residents results in low turnout at events

- Project was limited to small committee

### Next Steps and Sustainability

- Expand to Internal Medicine faculty and the other residencies
- Develop Wellness curriculum for faculty and incoming class
- Implement quarterly Wellness activities

### References

- Dewa et al., How does burnout affect physician productivity? A systematic literature review. BMC Health Services. 2014.
- Dunn, L.B., Iglewicz, A. & Moutier, C. A Conceptual Model of Medical Student Well-Being: Promoting Resilience and Preventing Burnout. Acad Psychiatry (2008) 32: 44.
- Epstein and Krasner. Physician Resilience: What it means, why it matters and how to promote it. Academic Medicine. 2013.

## Project Management Plan

Begin completing this Project Management Plan at Meeting One and complete it with your team following Meeting One, i.e., by November 2017. Teams will have the opportunity to review/revise their Project Management Plans throughout the 18-month Initiative at each of the on-site meetings. The collective data from all of the teams' completed project management plans will be invaluable as we share and learn from this collaborative experience.

Team: Guthrie Robert Packer Hospital

Project Title: Improving Well Being and Work Life Balance of Residents

I.	<p>Vision Statement (markers of success by March 2019; Refer to Toolkit #5)</p>	<p><i>We recognized that physicians care for others but also need to care for themselves. We want to foster a learning environment that promotes physician well-being, especially mentally. Our aim is to improve resiliency in our new physicians and find effective methods of reducing stress and ultimately burnout. We strive to enhance our culture of wellness and ultimately better our patient care through bettering ourselves.</i></p>
II.	<p>Team Objectives (‘needs statement,’ project requirements, project assumptions, stakeholders, etc.)</p>	<p><i>Our overall goal was to improve the well-being of our internal medicine residents. This inherently involved reducing stress amongst residents; this was done using the concept model of human coping reservoir (Dunn et al, 2008). We also identified stressors in residents via survey that was distributed before and after interventions involving the promotion of well-being, aimed at socializing and cognizance of mental well-being. These well-being initiatives</i></p>

		<p><i>involve various activities that promoted camaraderie across all PGY class years and allowed them to engage one another outside of a medical and work-oriented environment. With providing these interventions, as mentioned earlier, we performed periodic assessments to see how stress levels were for each PGY class during that specific moment in time in relation to the previous stress levels that were obtained.</i></p>
III.	<p><b>Team Members &amp; Accountability</b> (list of team members from Toolkit #6 and who is accountable for what)</p>	<p><i>John Pamula – team leader, responsible for assembling majority of the ideas</i></p> <p><i>Salman Khan – lead resident, responsible for data collection, carrying out most of the wellness activities and poster production</i></p> <p><i>Mahin Rehman – Co-resident assisting the project on the collection of data and execution of well-being sessions; social promoter/engager; PGY1 representative.</i></p>
IV.	<p><b>Necessary Resources</b> (staff, finances, etc.)</p>	<p><i>Staff and finances are key. Staff such as Tamara Davenport, is necessary; she helped set up monthly conference call and took notes during this process and other members like Mahin helped facilitate collection of data during social events and help promote these events.</i></p> <p><i>Finances are vital to allowing these events to take place with costs affecting food, rental of space, activities during these gatherings (such as a ping pong table, bowling, etc).</i></p>



V.	Measurement/Data Collection Plan	<i>Our plan involves the utilization of the MBI to screen residents. With our periodic assessments following our interventions, we get to see a graphical representation at a point in time for each class year regarding their stress levels and their overall mental well-being. MS Excel was used to numerically and graphical record, track, and analyze this data after obtaining it from the traditional survey format.</i>
VI.	Stakeholder Communication Plan (may be helpful to draft a flow chart of team members & senior management; Refer to Toolkits #2 and #4)	
VII.	Potential Challenges (engagement, budget, time, skills gaps, etc.; Refer to Toolkit #3)	<ol style="list-style-type: none"> <li>1) Major challenge was having a PGY2 as a lead on this project. PGY2 is a busy year with a rigorous schedule and running this project alone makes the multiple tasks hard to execute without support.</li> <li>2) Resident survey response needed to be reinforced by team and by PGY1 during interventions.</li> <li>3) Promotion of these events was never an issues but event turnout was. Some residents were on call and other residents had families to spend their free time with. Part of this could be that a significant portion of IM residents are IMGs and so there is a cultural divide that affects these turnouts.</li> <li>4) Finances are always an issue as the larger these events become, the more costly they are.</li> </ol>
VIII.	Opportunities for Scholarly Activity (potential publications, conference presentations, etc.)	<i>Our goal is to publish this data and our analysis; additionally, we aim to grow this project here at Guthrie by involving other residencies and subsequently, use that data and publish it and promote further QI projects. Will look at BMJ or QI project oriented journals.</i>
IX.	Markers (project phases, progress checks, schedule, etc.; Refer to NI V Roadmap to 2019 which will be presented at Meeting One)	<i>For now, our markers are identified by 1) number of interventions and 2) the turnout at these interventions. As these increase and more emphasis is placed on well-being as a key part of this IM residency, we believe that our end point will then be achieved and these markers represent clear growth of our initiatives.</i>

Sections X thru XIII to be completed first quarter 2019 for “Final Proceedings” booklet:

X.	Success Factors	<p><i>The most successful part of our work was...</i> The completion</p> <p><i>We were inspired by....</i> how accomplished everyone was at the other meetings</p>
XI.	Barriers	<p><i>The largest barrier encountered was....</i> Time management and resident turnout at these interventions</p> <p><i>We worked to overcome this by....</i> Dedicating a rotation for the PGY2 involved to carry out the remainder of this project and recruiting a PGY1 to facilitate these events and aid in data collection and social promotion of well-being</p>
XII.	Lessons Learned	<p><i>The single most important piece of advice to provide another team embarking on a similar initiative would be....</i> Form a committee to help implement a plan and make these events more frequent</p>
XIII.	Expectations Versus Results	<p><i>On a scale of 1 to 10 (with “1” meaning nothing and “10” meaning everything), how much of what you set out to do was your team able to accomplish?</i></p> <p>1 2 3 4 5 6 7 8 9 10 ----- → <u>8</u></p>
XIV.	Sustainability and Next Steps	<p><i>What does your CEO need to know to help keep your work sustainable?</i></p> <p>That it should be standardized with all residencies and costs minimal to sustain, such as small budget for food or recreational activities</p>

## INTRODUCTION: Background

- Recent data reporting increasing rates of resident depression, suicide, and burnout highlights the importance of a curriculum directed towards resident well-being.
- This project will determine the effectiveness of a new wellness program at our institution, The S.H.O.RE (Stress & Health Optimization for REsidents) Program, run by peer resident wellness champions from each department.
- We hypothesized that providing protected time for residents to learn and practice wellness exercises on a weekly basis will help enhance their well-being and resilience.

## Aim/Purpose/Objectives

To investigate whether 3 months of weekly “protected” time for residents to learn and practice wellness activities improves their wellness, degree of burnout and professional fulfillment.

## METHODS:

### Interventions/Changes

#### Subjects: Selection, Recruitment

Residents at various programs at Hackensack Meridian Health (HMH), including Obstetrics and Gynecology, Pediatrics, Internal Medicine, Podiatry, Surgery, Pharmacy (Jersey Shore University Medical Center, Neptune, New Jersey) and Family Medicine and Psychiatry (Ocean Medical Center, Brick, New Jersey) were recruited into this program.

#### Interventions/Changes

- The residents participated in brief wellness sessions on a weekly basis for approximately 12 weeks, run by peer resident “wellness champions” in each department.
- The wellness sessions occurred during didactic time and was protected by the participating program directors in their respective departments.
- During each session, 3 wellness exercises were led and reinforced by the wellness champions.
- The curriculum focused on evidence-based, short, and effective exercises that decrease burnout and increase resiliency and happiness.

## METHODS: Measures/Metrics

The *Stanford Physician Wellness Survey*, a validated tool focusing on physician wellness, burnout and professional fulfillment, was administered at the beginning and end of the program. 75 pre-surveys and 41 post-surveys were completed. 29 pairs were analyzed for changes. The outcome measurements included: Professional fulfillment, Emotional exhaustion, Interpersonal disengagement and Self defined burnout. Our project has been approved by the HMH IRB.

## RESULTS

TABLE 1: Outcome Measurements	Before S.H.O.RE. (n=75)	After S.H.O.RE. (n=41)
<u>Emotional exhaustion:</u> “During the past two weeks, I have felt emotionally exhausted at work”		
A lot	13.33% (10)	14.63% (6)
Extremely	4.00% (3)	2.44% (1)
Moderately	30.67% (23)	39.02% (16)
Very Little	34.67% (26)	26.83% (11)
Not at all	17.34% (13)	17.07% (7)
<u>Self defined burnout:</u> I am definitely burning out and have one or more symptoms of burnout, such as physical and emotional exhaustion.”	26.67% (20)	34.15% (14)
“I enjoy my work. I have no symptoms of burnout.”	9.33% (7)	7.32% (3)
“I feel completely burned out and often wonder if I can go on. I am at the point where I may need some changes or may need to seek some sort of help.”	1.33% (1)	0% (0)
“Occasionally I am under stress, and I don’t always have as much energy as I once did, but I don’t feel burned out.”	58.67% (44)	51.22% (21)
The symptoms of burnout that I’m experiencing won’t go away. I think about frustrations at work a lot.	4.00% (3)	7.32% (3)

TABLE 2: Pairs	After				
<b>Before</b>	I am definitely burning out and have one or more symptoms of burnout, such as physical and emotional exhaustion.	I enjoy my work. I have no symptoms of burnout.	I feel completely burned out and often wonder if I can go on . . .	Occasionally I am under stress, and I don’t always have as much energy as I once did, but I don’t feel burned out.	The symptoms of burnout that I’m experiencing won’t go away. I think about frustrations at work a lot.
I am definitely burning out and have one or more symptoms of burnout, . . .	10.34%	0.00%	0.00%	17.24%	3.45%

## Discussion: Barriers & Strategies

#### Key Findings:

Table 1:

- Approximately, 27% of residents felt definitely burning out and the majority felt emotionally exhausted.
- There was no difference in distribution (pre and post surveys) for Emotional exhaustion (P=0.876, Fisher exact test) and Self defined burnout (P=0.767, Fisher exact test).

Table 2:

- 14/29 residents (48.3%) did not change their status of “burnout” between the pre and post survey
- 5 /29 residents (17.2%) reported some improvement in the post-survey (“I don’t feel burned out.”)

#### Limitations

- Variations used by wellness champions
- Compliance of residents with program
- Program ending during the winter (associated with higher rates of depression)
- Post-surveys completed during the middle of the year, when residents may be more burned out.
- More residents completed the pre-survey than the post-survey.

#### Next Steps

- Compare post-survey responses based on number of sessions attended, year of training and subspecialty
- Develop new curriculum focusing on areas residents liked

#### Sustainability

- Resident Wellness Champions are cost-effective to teach these skills.
- Funding from outside sources (i.e. our Medical Executive Committee is interested in expanding this program to our entire medical and dental staff)

## Project Management Plan

Begin completing this Project Management Plan at Meeting One and complete it with your team following Meeting One, i.e., by November 2017. Teams will have the opportunity to review/revise their Project Management Plans throughout the 18-month Initiative at each of the on-site meetings. The collective data from all of the teams' completed project management plans will be invaluable as we share and learn from this collaborative experience.

**Team:** Jersey Shore University Medical Center

**Project Title:** Resiliency in Residency - A "SHORE" Thing

I.	<p>Vision Statement (markers of success by March 2019; Refer to Toolkit #5)</p>	<p>Our vision is that resilience and wellness will be incorporated and integrated into all aspects of our training environment. Our mission is to foster a culture of well-being for our resident physicians and fellows by creating a curriculum based on the needs of our trainees to enhance and maintain their resilience and wellness. The curriculum will provide an array of services designed to encourage healthy lifestyles, optimal work-life balance and build resilience. The knowledge, skills, and attitudes obtained by our house staff through this program will prevent compassion fatigue and serve as an essential foundation for lifelong physical and mental well-being for themselves and their patients.</p>
II.	<p>Team Objectives (“needs statement,” project requirements, project assumptions, stakeholders, etc.)</p>	<p>To investigate whether 3 months of weekly “protected” time for residents to learn and practice wellness activities improves their wellness, degree of burnout and professional fulfillment</p>
III.	<p>Team Members &amp; Accountability (list of team members from Toolkit #6 and who is accountable for what)</p>	<p><b>Paul Schwartzberg, DO, MBA</b> - Team Leader <b>Srividya Naganathan, MD</b> – Assisted team leader, organization of project/curriculum, trainer for wellness activity, assistance with wellness “kick-off”, focus group moderator, IRB submission, poster presenter at NI VI meeting <b>Yen-Hong Kuo, PhD</b> - IRB submission and statistical analysis <b>Melissa Calt, MD</b> – Psychiatry Resident Wellness Champion, organization of project/curriculum for psychiatry residents, assistance with wellness “kick-off”, IRB submission, poster presenter at NI VI meeting</p>

		<p><b>Nicole Fiore, MD</b> - Pediatric Resident Wellness Champion, organization of project/curriculum for pediatric residents, assistance with wellness “kick-off”, IRB submission, poster presenter at NI VI meeting</p> <p><b>David Kountz, MD, MBA</b> - Organization of project/curriculum</p> <p><b>Alan Cabasso, MD</b> – Organization of project/curriculum</p> <p><b>Stacy Dumas, MD</b> - Organization of project/curriculum for psychiatry residents, focus group moderator, assistance with wellness “kick-off”</p> <p><b>Amy Frieman, MD, MBA</b> - Organization of project/curriculum, focus group moderator, assistance with wellness “kick-off”, IRB submission</p> <p><b>David Leopold, MD</b> - Focus group moderator</p> <p><b>Kelly Kronhaus, MD</b> - Organization of project/curriculum for Family Medicine residents</p> <p><b>Justine Alim, MD, MBA, Kristen Symansky, DO, Emily Eyerluss, MD</b> – Pediatric Resident Wellness Champions, assistance with wellness “kick-off”</p> <p><b>Joanna Stanton</b> – Pharmacy Resident Wellness Champion, assistance with wellness “kick-off”</p> <p><b>Anmol Cheema, MD, Tejas Patel, MD</b>- Internal Medicine Resident Wellness Champions, assistance with wellness “kick-off”</p> <p><b>Erin Curcio, MD</b> – OB/GYN Resident Wellness Champion, assistance with wellness “kick-off”</p> <p><b>Tayyaba Hasan, DPM</b> – Podiatry Resident Wellness Champions, assistance with wellness “kick-off”</p> <p><b>Meha Halari, MD</b> -Family Medicine Resident Wellness Champion, assistance with wellness “kick-off”</p> <p><b>Victoria Grille, MD</b> – Surgery Resident Wellness Champion, assistance with wellness “kick-off”</p> <p><b>Danette Meyer</b> - Organization of project/curriculum, assistance with wellness “kick-off”</p>
IV.	<p><b>Necessary Resources (staff, finances, etc.)</b></p>	<p>Residents enjoy group activities as wellness. Finances for the “kick-off” event were allocated toward food, entertainment, and activities. Perhaps, finances could be set aside for a “closing event”, leading to better compliance on post-wellness surveys.</p>

V.	Measurement/Data Collection Plan	<p>The Stanford Physician Wellness Survey, a validated tool focusing on physician wellness, burnout and professional fulfillment, was administered at the beginning and end of the program to each participating resident. The weekly sessions of this program were the research intervention and the Stanford survey was used to evaluate this intervention. The dependent variables in this study are wellness, burnout and professional fulfillment among physicians in residency training based on the following domains in this survey: professional fulfillment, emotional exhaustion, interpersonal disengagement and self-defined burn-out.</p>
VI.	<p>Stakeholder Communication Plan (may be helpful to draft a flow chart of team members &amp; senior management; Refer to Toolkits #2 and #4)</p>	<p><u>Senior Management:</u>          Kenneth Sable, MD, MBA, Regional President          Brian Erler, MD, MBA, PhD, Medical Staff President          Kim Carpenter, MD, Vice President of Clinical Effectiveness          David Kountz, MD, MBA, DIO</p> <p><u>Patient Safety/Quality Officers:</u>          Douglas Campbell, BS, MM, CPHRM          Sr. Manager, Operations/Risk Management/Security &amp; Safety          Brenda Capoano, RN, CPHQ          Outcomes Manager          Carol (Russell) Hayes, MS CPHQ          RPI (Robust Process Improvement) Specialist          Six Sigma Black Belt</p> <p><u>Team Members:</u>          Paul Schwartzberg, DO, MBA - Team Leader          Srividya Naganathan, MD          Yen-Hong Kuo, PhD          Melissa Calt, MD          Nicole Fiore, MD          Alan Cabasso, MD          Stacy Doumas, MD          Amy Frieman, MD, MBA          David Leopold, MD</p>

		<p>Kelly Kronhaus, MD Justine Alim, MD, MBA Kristen Symansky, DO Emily Eyerkuss, MD Joanna Stanton Anmol Cheema, MD Tejas Patel, MD Erin Curcio, MD Tayyaba Hasan, DPM Meha Halari, MD Victoria Grille, MD Danette Meyer</p>
VII.	<p>Potential Challenges (engagement, budget, time, skills gaps, etc.; Refer to Toolkit #3)</p>	<ul style="list-style-type: none"> <li>• Each subspecialty had a different “wellness champion” leading the 12-week curriculum, and therefore there may have been slight variations in the implementation style of the wellness activities between subspecialties.</li> <li>• Different subspecialties have different expectations/commitments which may have contributed variations in participation among residents in the wellness sessions.</li> <li>• Difficulties in getting the residents to complete the post-intervention survey</li> </ul>
VIII.	<p>Opportunities for Scholarly Activity (potential publications, conference presentations, etc.)</p>	<p><b>National Conferences</b> – ACGME (Accreditation Council for Graduate Medical Education), APPD (Association of Pediatric Program Directors), Group on Resident Affairs (GRA) and Organization of Resident Representatives (ORR) Meetings</p> <p><b>Regional Meetings</b> – Hackensack Meridian Health Research Day, Hackensack Meridian Health Quality Research Conference</p>

IX.	<p>Markers (project phases, progress checks, schedule, etc.;; Refer to <i>NI V Roadmap to 2019</i> which will be presented at Meeting One)</p>	<b>Pre-work/Background</b>
		Pre-Assessment: ACGME Inventory of Elements of Your Institutional Well-Being Plan
		Six toolkits
		<b>Measurement</b>
		Identify data, its sources and collection plan, analyze baseline data
		Define improvement goal and measures of success
		<b>Methods</b>
		List of potential solutions; prioritize solutions; action planning
		Evaluate and choose implementation methodology
		IRB submission
		Prepare storyboard for April's AIAMC Annual Meeting and NI VI Meeting Two
		Assess and plan for potential resource needs
		Reassess data needed, collection method, and plan during implementation
		Action plan implementation timeline
		<b>Implement - Measure - Adjust - Sustain</b>
		Interpret results; data presentation plan
		Revise implementation based upon ongoing data analysis
		Prepare poster for March's AIAMC Annual Meeting and NI VI Meeting Four
		Interpret results; data presentation plan
		Revise implementation based upon ongoing data analysis
Project sustainability; path forward		
Post-Assessment: ACGME Inventory of Elements of Your Institutional Well-Being Plan		



Sections X thru XIII to be completed first quarter 2019 for “Final Proceedings” booklet:

X.	Success Factors	<p>The most successful part of our work was gathering all our residents together in one room for a “kick-off” event to wellness in which they were asked to complete the survey either online or via paper form. In addition, we brought more awareness to the issue of burnout and resiliency in residency and emphasized the importance of wellness through grand rounds, the kick-off event and the 12-week program. Overall, this project was successful in introducing wellness tools to our residents.</p> <p>We were inspired by the active interest of our residents across subspecialties in this wellness initiative and other studies that have shown positive outcomes to implementing a wellness program.</p>
XI.	Barriers	<ul style="list-style-type: none"> <li>• Each subspecialty had a different “wellness champion” leading the 12-week curriculum, and therefore there may have been slight variations in the implementation style of the wellness activities between subspecialties.</li> <li>• Due to less than anticipated participation on post-surveys, we were not able to compare all the data.</li> <li>• We tried to overcome some of these barriers by creating a standardized training manual for all the resident champions to follow. We also sent email reminders to our residents to complete the post-surveys.</li> </ul>
XII.	Lessons Learned	<p>The single most important piece of advice to provide another team embarking on a similar initiative would be to implement a “closing session”. This would be an opportunity (similar to the “kick-off”) to gather residents in a group setting to complete the post- survey.</p>
XIII.	Expectations Versus Results	<p>On a scale of 1-10, we accomplished a 8:</p> <ul style="list-style-type: none"> <li>• Wellness initiative kickoff session was successfully held, with successful administration of the pre and post surveys</li> <li>• The 12-week program was implemented by wellness champions across subspecialties with varied attendance to all sessions across subspecialty programs</li> <li>• Data was successfully collected</li> </ul>
XIV.	Sustainability and Next Steps	<p>Sustainability: In order to sustain this program, we plan to continue to use our Resident Wellness Champions</p>

		<p>as a cost-effective method to teach wellness and resilience skills. Additionally, we hope to obtain additional funding from our Medical Executive Committee (MEC) and President of our Medical and Dental staff. Our President is committed to supporting this program and feels it can be the basis for a larger effort benefiting the entire medical and dental staff. He believes there would be interest in allocating specific funds for such an institutional program in the future. We will use the information gathered from our initial SHORE program to propose expanding effective wellness activities and strategies on a much larger scale in our institution. We hope to obtain additional funding from our MEC to support these activities for all staff and resident.</p> <p>Next Steps:</p> <ul style="list-style-type: none"><li>• Compare post-survey responses based on number of sessions attended, year of training and subspecialty</li><li>• Develop new curriculum focusing on areas residents liked: gratitude, yoga, breathing exercises</li><li>• Continue to use Resident Champions to train other residents</li><li>• Seek additional funding to expand the program (include physicians and staff)</li><li>• Seek outside consultants/resources</li><li>• Look to develop more group wellness activities</li></ul>
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# Faculty Understanding Resident Burnout (FURB)

Flynn, M.G., Johnson, J., McMan, L., Livingston, S.

Hart, L. 3724

## INTRODUCTION: Background

Burnout rates are high across all areas of medicine, but are particularly high in trainees and are reported to be higher in female physicians (Linzer et al. 2002). Resident and physician burnout are not new concerns, but active strategies to address the problem are relatively new. Concerns about mistakes related to resident duty hours received national media attention, but Lefebvre (2012) concluded that duty hour changes intended to induce quality of life improvements, needed to be balanced against perceived negative impact on training quality and patient care. Thus, it appears that resident and wellness burnout issues are more complex than simply altering duty hours. In fact, duty hour restrictions require residents to complete their work in a shortened time frame, which could add to residents' stress.

Rates of burnout in faculty and program directors are lower than in residents, but we questioned the ability of distressed faculty to identify signs of burnout or to address these issues in their residents. Indeed, 27% of internal medicine program directors reported emotional exhaustion, with 28.7% reporting burnout (West et al. 2013). In addition, burnout scores (emotional exhaustion, depersonalization, and lack of personal accomplishment) were highest in residents/fellows and medical students, but the differences between trainees and early career physicians was negligible (West et al. 2013). Thus, efforts to raise awareness and mitigate burnout among residents and early career physicians may be needed. The ACGME has focused a portion of the required curriculum on addressing resident wellness/burnout concerns.

An intervention to promote physician well-being and job satisfaction resulted in lower burnout scores than both controls or non-intervention subjects (West 2014). However, there is insufficient research in which the approach of using faculty to identify and address resident burnout has been addressed.

•Dyrbye, L.N., Satele, D. and Shanafelt, T. Ability of a 9-item well-being index to identify distress and stratify quality of life in US workers. *JOEM* 58(8); 810-817, 2016.

•Dyrbye, L.N., Satele, D., Sloan, J., and Shanafelt, T.D. Ability of a physician well-being index to identify residents in distress. *J Graduate Med Educ.* 6(1): 78-84, 2014.

•Lefebvre, D.C. Resident Physician Wellness: A New Hope. *Academic Medicine*, 8(5): 598-602, 2017.

•Linzer, M. McMurray, J.E., Visser, M.R., Oort, F.J., Smets, E., and de Haes, H.C. Sex differences in physician burnout in the United States and The Netherlands. *J Am Med Womens Assoc.* 57(4): 19103, 2002.

•West, C.P., Halvorsen, A.J., Swenson, S.L., and McDonald, F.B. Burnout and distress among internal medicine program directors: results of a national survey. *J Gen Intern Med.* 28(8): 1056-1063, 2013.

•West, C.P., Dyrbye, L.N., Rabatini, J.T., Call, T.G., Davidson, J.H., Multari, A., Romanski, S.A., Hellyer, J.M., Sloan, J.A., and Shanafelt, T.D. Intervention to promote physician well-being, job satisfaction, and professionalism: a randomized clinical trial. *JAMA Intern Med.* 17(4): 527-533, 2014.

## Aim/Purpose/Objectives

- 1) Assess baseline knowledge of burnout among faculty.
- 2) Quantify existing burnout among faculty and residents.
- 3) Provide faculty training to recognize signs of burnout and implement strategies for burnout reduction.
- 4) Compare baseline and post-training burnout among faculty and residents.

## METHODS

We viewed our faculty as the first line of defense against resident burnout and were concerned about the ability of faculty who may be experiencing burnout, to address the needs of the residents. Therefore, we developed a **faculty workshop** to improve their understanding of signs and symptoms of burnout and equip them with strategies needed to address burnout in their residents. The workshop (~75-90 min) detailed and addressed signs of burnout, methods and strategies for managing burnout, and actions to take for residents who experience burnout. After obtaining approval from the VCOM IRB ( #1213724-2 2018-027):

## METHODS: (CONTINUED)

- Faculty and residents at four GME sites in HCA South Atlantic Division were invited to complete (online) the 9-item Well-Being Index (WBI, Dyrbye et al. 2014, 2016).
- GME Faculty was invited to complete an online knowledge check, to assess their knowledge about burnout.
- Faculty members were invited to attend the well-being workshops, held January and February 2019.
- Faculty attending the workshop were invited to complete the post-workshop knowledge check, within ~one week.
- Faculty and residents will complete the WBI three months after the workshops (April and May 2019).

Table 1. Timeline of FURB project



## RESULTS

### Well-Being Index (WBI):

- WBI surveys completed by faculty (n=68) and residents (n=83) (Figure 1).
- Higher proportion of faculty (42.6%) were “at risk” than residents (27.2%), according to respective WBI thresholds (physicians, WBI ≥ 3; residents WBI ≥ 5), (Table 2).
- A higher proportion of PGY 1 (39.9%) were “at risk” compared with other resident cohorts (Table 2).
- Female residents and faculty were more likely to have “at risk” threshold scores than male residents and faculty (Figure 2).

### Knowledge Check Quiz Scores:

- Pre-workshop score: 70% correct (n=80)
- Post workshop score: 84% correct (n=36)

Table 2. Number and percentage of residents and faculty with an expanded well-being index (WBI) score ≥ 5 (at risk threshold for residents) or ≥ 3 (at risk threshold for physicians).

	Faculty	PGY1	PGY 2	PGY 3	PGY 4 and 5	All Residents
Completed WBI	68	33	24	17	9	83
WBI ≥ 5	15	13	5	3	1	22
% WBI ≥ 5	22.0%	39.9%	20.8%	17.6%	11.0%	27.2%
WBI ≥ 3	29	16	14	6	1	37
% WBI ≥ 3	42.6%	48.4%	58.3%	35.2%	11.0%	44.6%

## RESULTS: (CONTINUED)

Pre-Workshop WBI Surveys Completed by Residents and Faculty

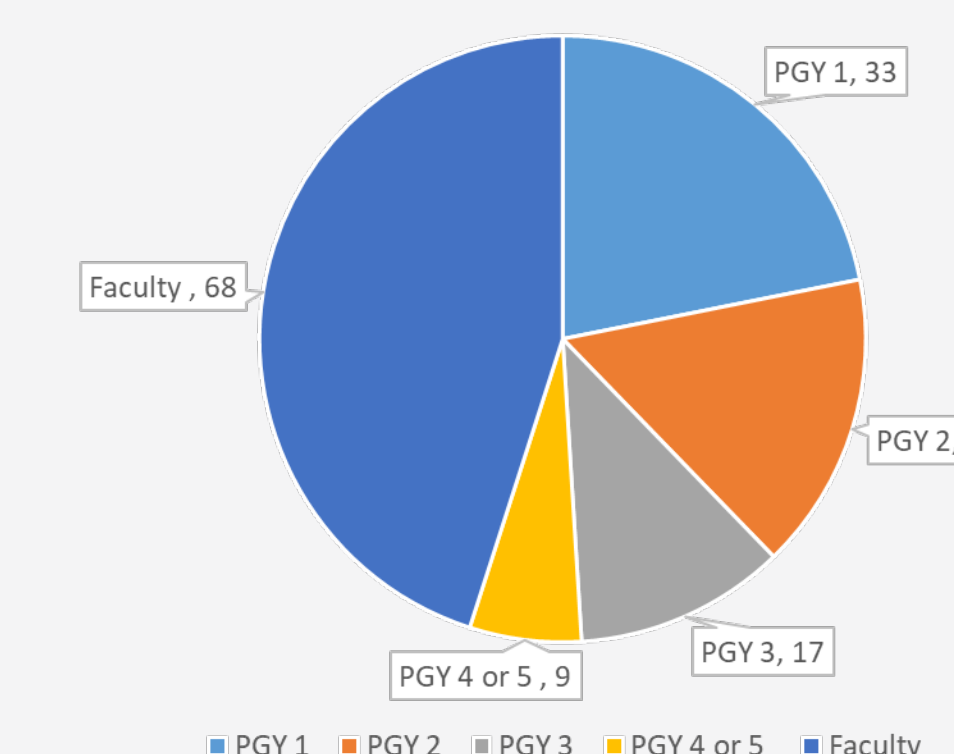


Figure 1. Number of residents, by PGY, and faculty to complete pre-workshop survey.

WBI and Sex

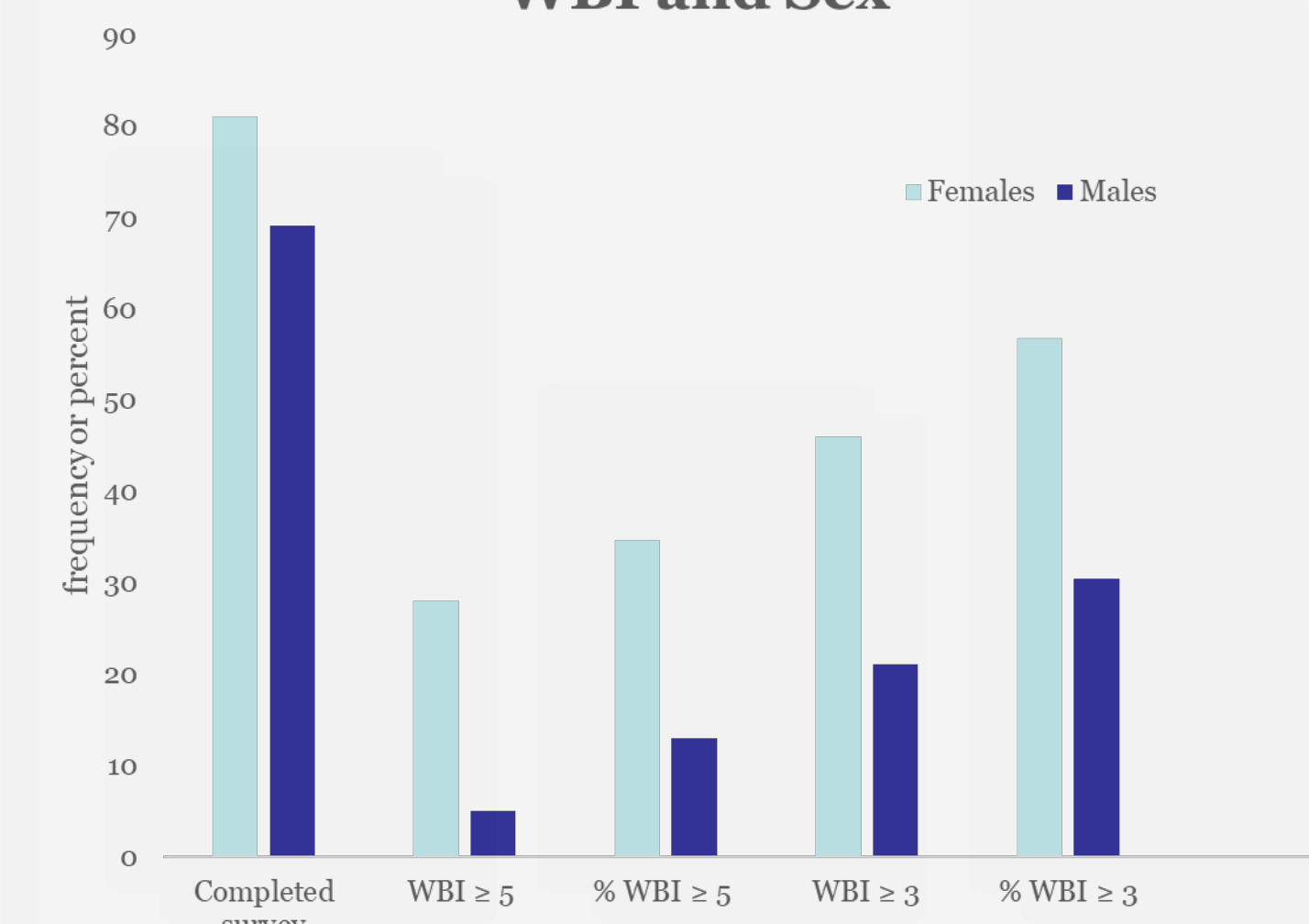


Figure 2. Frequency and percentage of male and female faculty and residents (pooled data) at the “at risk” threshold for residents (WBI ≥ 5) or the “at risk” threshold for faculty (WBI ≥ 3).

## Discussion:

We developed faculty workshops, delivered by behavioral health specialists, during which faculty were engaged in an interactive program to help them identify signs of burnout, in themselves and their residents. The expanded 9-item WBI (Dyrbye et al. 2016) administered to residents and faculty before the faculty workshops, revealed that roughly 27% of our residents were “at risk,” compared to 43% of faculty. The expanded WBI uses a different “at risk” threshold for physicians (WBI ≥ 3) than for residents (WBI ≥ 5). Nevertheless, these preliminary findings support our decision to train the faculty to recognize signs of burnout.

Dyrbye et al. reported that residents with scores above their respective WBI threshold (≥ 5) had greater risk for recently reported medical error (2-fold), suicide ideation (2-fold), poor mental quality of life (3-fold), burnout (4-fold), and severe fatigue (2-fold). Physicians with scores above their respective threshold (WBI ≥ 3) were also at an increased risk for these outcomes.

Our preliminary findings revealed a higher frequency of female residents and faculty above their respective “at risk” threshold than male residents and faculty, which is supported by previous research (Linzer et al. 2002).

We will invite faculty and residents to complete post-workshop surveys roughly three months after the pre-surveys were completed.

## INTRODUCTION: Background

Residency is a great time of learning and growth, but it is also a great time of stress. Studies have shown medical students and residents to have a high percentage of depression, and a significant number of residents each year think about suicide—with suicide being the number two cause of death for residents<sup>1,2</sup>. Despite knowing this information and programs promoting wellness, we wonder if more needs to be done to assess resident well-being during training to get at-risk residents the help they need before it is too late.

1. Prevalence of Depression, Depressive Symptoms, and Suicidal Ideation Among Medical Students: A Systematic Review and Meta-Analysis. Rotenstein LS, Ramos MA, Torre M, Segal JB, Peluso MJ, Guille C, Sen S, Mata DA. JAMA. 2016 Dec 6;316(21):2214-2236

2. Causes of Death of Residents in ACGME-Accredited Programs 2000 Through 2014: Implications for the Learning Environment. Yaghtmour, Nicholas A. MPP; Brigham, Timothy P. MDiv, PhD; Richter, Thomas MA; Miller, Rebecca S. MS; Philibert, Ingrid PhD, MBA; Baldwin, DeWitt C. Jr MD; Nasca, Thomas J. MD Academic Medicine: July 2017 - Volume 92 - Issue 7 - p 976-983

## Aim/Purpose/Objectives

- Primary aim: To incorporate a well-being self-assessment into each resident's semi-annual evaluation process
- Secondary aims:
  - To trial having residents visit our hospital resiliency center
  - Create a section of the GME website dedicated to wellness and key resources for residents (ex: Resident Assistance Program, wellness center etc.)

## METHODS: Interventions/Changes

In 2018 the Emergency Medicine PGY1 and PGY2 residents completed the Wayne State Resident Wellness Scale self-assessment prior to their semi-annual program evaluations.

Additionally, they visited our hospital resiliency center.

Lastly, our hospital GME created a wellness section of their website to highlight and house wellness resources for the residents.

## METHODS: Measures/Metrics

Following our incorporation of the well-being self assessment and resiliency center visit, we asked the residents to share their thoughts on these areas through an optional SurveyMonkey™ survey

## RESULTS

55% of the residents felt doing the well-being self-assessment was helpful.

Supportive comments included:

- Good to think about wellness/bring to awareness
- It was a good way to reflect on my wellness and what coping skills I like to use.
- I liked how it addressed different aspects of wellness and made me pay attention to things I maybe wouldn't think of as dimensions of wellness (diet, exercise, how I feel about my patients and how I feel about my work).

72% of the residents though it was helpful to visit the hospital resiliency center.

Supportive comments included:

- Familiarizing with the options available there. Great thing to do once so people know what kind of support is available there and can have return visits if they feel it is helpful.
- I like how calm it is. I like that there was a structured time set aside to address wellness.
- Good exposure to some resources and a nice area to de-stress

63% of the residents though it would be helpful to require the residents to visit the resiliency center for a 30 minute orientation once during their intern year, to make them aware that it exists and to learn more about the available resources.

The Hospital GME website did add a new wellness section, highlighting wellness resources in our system

## Discussion: Barriers & Strategies

### Key Findings

- We were successful in incorporating a free well-being self-assessment into Emergency Medicine residents semi-annual evaluations (Wayne State Resident Wellness Scale)
  - <http://www.gme.wayne.edu/wellness/>
  - Most residents found completing the self-assessment to be helpful
- We were successful in trialing having residents visit our hospital resiliency center
  - Most residents found visiting the resiliency center to be helpful, and recommended we require this visit for new interns
- We were successful in adding a wellness section to our GME website
- **Limitations**
  - This pilot project was only completed in one training program in our system (Emergency Medicine)
  - We did not get feedback regarding the wellness resource section of the GME website
- **Next Steps and Sustainability**
  - Given the free nature and ease of use of the Wayne State Resident Wellness Scale, Emergency Medicine has formally incorporated this into their semi-annual evaluation process, and our GME system will recommend that other programs do as well.
  - Emergency Medicine has also now required that their interns all visit the hospital resiliency center for a 30 minute orientation session, and other programs are considering this as well.
  - After the initiation of our project, the ACGME has new common program requirements starting in July of 2019, including a well-being requirement for programs to 'provide access to appropriate tools for self-screening'. All programs will now be required to do what we are doing, which we believe is a good thing!

## Project Management Plan

Begin completing this Project Management Plan at Meeting One and complete it with your team following Meeting One, i.e., by November 2017. Teams will have the opportunity to review/revise their Project Management Plans throughout the 18-month Initiative at each of the on-site meetings. The collective data from all of the teams' completed project management plans will be invaluable as we share and learn from this collaborative experience.

**Team:** HealthPartners

**Project Title:** Assessment of Resident Well Being

I.	<p>Vision Statement (markers of success by March 2019; Refer to Toolkit #5)</p>	<p><i>At HealthPartners, we aim to assess our residents well-being on a regular basis and support them in any way we can during their training time with us!</i></p>		
II.	<p>Team Objectives (‘needs statement,’ project requirements, project assumptions, stakeholders, etc.)</p>	<p>We plan on incorporating a well-being survey into each residents semi-annual evaluation process, and then taking the results to get them any additional help or resources they may need.</p> <p>Our organization is aware of the data regarding depression and suicide in resident trainees, and wants to focus efforts on assessing and helping our residents in any way we can.</p>		
III.	<p>Team Members &amp; Accountability (list of team members from Toolkit #6 and who is accountable for what)</p>	<p>*Cullen B. Hegarty, M.D.</p>	<p>Program Director, Emergency Medicine (EM) Residency</p>	<p><a href="mailto:Cullen.B.Hegarty@Healthpartners.com">Cullen.B.Hegarty@Healthpartners.com</a></p>
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		<p>Cecily Spencer</p>	<p>Operations &amp; Development Manager, OPHE</p>	<p><a href="mailto:Cecily.D.Spencer@Healthpartners.com">Cecily.D.Spencer@Healthpartners.com</a></p>
		<p>Mary Wagner, M.D.</p>	<p>Assistant Program Director, Family Medicine Residency</p>	<p><a href="mailto:Mary.Wagner@ParkNicollet.com">Mary.Wagner@ParkNicollet.com</a></p>
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		EM Residency	
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	Bret Haake, M.D.	VP Medical Affairs, Regions Hospital	<a href="mailto:Bret.C.Haake@HealthPartners.Com">Bret.C.Haake@HealthPartners.Com</a>
	Rebecca Rossom, M.D., M.S.	Senior Investigator, HealthPartners Institute	<a href="mailto:Rebecca.C.Rossom@HealthPartners.Com">Rebecca.C.Rossom@HealthPartners.Com</a>
	Seth Wolpert, M.D.	Surgical Site Director at Regions Hospital for the University of Minnesota Surgery Residents	<a href="mailto:Seth.I.Wolpert@Healthpartners.com">Seth.I.Wolpert@Healthpartners.com</a>
	Sarah Anderson, M.D.	Site Director at Regions Hospital for the University of Minnesota Orthopedic Surgery Residents	<a href="mailto:Sarah.A.Anderson@healthpartners.com">Sarah.A.Anderson@healthpartners.com</a>
	Scott Oakman, M.D.	Program Director, Hennepin-Regions Psychiatry Residency Program	<a href="mailto:Scott.A.Oakman@Healthpartners.com">Scott.A.Oakman@Healthpartners.com</a>
	Psychiatry Resident	TBD	
	Family Medicine Resident	TBD	
	Jonathan Sellman	Occupational Medicine Resident	<a href="mailto:Jonathan.S.Sellman@Healthpartners.com">Jonathan.S.Sellman@Healthpartners.com</a>
	Brooke Campbell	Regions Fitness Center Manager, Well-Being Health Coach	<a href="mailto:Brooke.M.Campbell@Healthpartners.com">Brooke.M.Campbell@Healthpartners.com</a>
	Felix Ankel	VP and Executive Director of Health	<a href="mailto:Felix.K.Ankel@Healthpartners.com">Felix.K.Ankel@Healthpartners.com</a>

		Professional Education	
		Kristi Grall, M.D. Assistant Program Director, EM Residency	<a href="mailto:Kristi.J.Grall@Healthpartners.com">Kristi.J.Grall@Healthpartners.com</a>
		<i>Team leader = Cullen Hegarty.</i>	
IV.	Necessary Resources (staff, finances, etc.)	<p><i>Resources needed:</i></p> <ul style="list-style-type: none"> <li>-people (see list above)</li> <li>-GME support</li> <li>-explore budget if needed for wellness resources (ex: website, resiliency center, well being survey etc.)</li> </ul>	
V.	Measurement/Data Collection Plan	<i>Post project survey of residents regarding the utility of a well-being self-assessment survey, as well as other wellness initiatives trialed during this project</i>	
VI.	Stakeholder Communication Plan (may be helpful to draft a flow chart of team members & senior management; Refer to Toolkits #2 and #4)	<i>We did a combination of in-person meetings as well as emails to keep the team informed on how the project was going.</i>	
VII.	Potential Challenges (engagement, budget, time, skills gaps, etc.; Refer to Toolkit #3)	<i>Given the size of our group and varied backgrounds (physicians and residents from different specialties, GME staff, hospital administrators, hospital wellness champions), our biggest challenge was likely going to be getting everyone together for meetings.</i>	

VIII.	<p>Opportunities for Scholarly Activity (potential publications, conference presentations, etc.)</p>	<p><i>Yes—are plans are:</i>  <i>1: submit a manuscript to the Journal for Graduate Medical Education detailing the new Common Program Requirement for resident well-being self-assessments, options for doing this, and our institutions experience during our pilot project during NI VI.</i>  <i>2: submit our data from our pilot for hopeful poster presentation at an Emergency Medicine conference</i></p>
IX.	<p>Markers (project phases, progress checks, schedule, etc.;</p> <p>Refer to <i>NI V Roadmap to 2019</i> which will be presented at Meeting One)</p>	<p>We mapped out a concept of our project to mirror the timeframe of NI VI (18 months). Goal was to spend the first 6 months getting our project ready, and they using the next 6 months to implement the project. The final 6 months would be to fine tune our system based on lessons learned.</p>

Sections X thru XIII to be completed first quarter 2019 for “Final Proceedings” booklet:

X.	<p>Success Factors</p>	<p><i>The most successful part of our work was....</i></p> <ul style="list-style-type: none"> <li><i>-implementing the well-being self-assessments</i></li> <li><i>-implementing resident visits to our hospital resiliency center</i></li> <li><i>-having our GME website add a wellness tab/section</i></li> <li><i>-getting feedback from residents on our project</i></li> <li><i>-completing our project!</i></li> </ul> <p><i>We were inspired by....</i></p> <ul style="list-style-type: none"> <li><i>-the willingness of the hospital to help us with this project!</i></li> </ul>
XI.	<p>Barriers</p>	<p><i>The largest barrier encountered was....</i></p> <ul style="list-style-type: none"> <li><i>-we started out hopeful to have more than one residency trial our project, but due to schedules/meeting times Emergency Medicine was the only program that participated in the</i></li> </ul>



		<p><i>project from start to finish.</i></p> <p><i>We worked to overcome this by....</i></p> <p><i>-in the end, actually doing this with one residency program worked well. It was the right size program to trial a few things and get feedback, that we can now use throughout our GME system.</i></p>
XII.	Lessons Learned	<p><i>The single most important piece of advice to provide another team embarking on a similar initiative would be....</i></p> <p><i>-keep the project to a realistic size and timeframe. We completed our project because we kept the focus small and the trial group small.</i></p> <p><i>-get the key hospital personnel involved (in our case, getting the Director of the Health and Wellness Center involved)</i></p> <p><i>-get GME buy in for the project (they were a great support for us)</i></p>
XIII.	Expectations Versus Results	<p><i>On a scale of 1 to 10 (with "1" meaning nothing and "10" meaning everything), how much of what you set out to do was your team able to accomplish?</i></p> <p><i>10</i></p>
XIV.	Sustainability and Next Steps	<p><i>What does your CEO need to know to help keep your work sustainable?</i></p> <p><i>-luckily a few things have happened since the beginning of our project:</i></p> <p><i>1: The ACGME starting in July 2019 has a requirement for residency programs to provide residents with a tool for well-being self-assessments.</i></p> <p><i>2: The Wellness Scale we use is free, so really doesn't need CEO support financially!</i></p> <p><i>-in addition to our core part of our project (the well-being scale), we did trial exposing the residents to the hospital resiliency center, and creating a new section of the GME website dedicated to wellness. Those would need to be supported by the hospital/CEO.</i></p>

## INTRODUCTION: Background

- Physician burnout and professional dissatisfaction have reached epidemic proportions in healthcare. Addressing these issues in proactive, sustainable ways is a priority of multiple medical organizations including the ACGME.
- Evidence (1, 2) supports the benefits of improved personal resiliency and enhanced social connectedness in the reduction of burnout risk.
- PROJECT ASSUMPTION: Enhanced ability to empathize and build relationships contributes to the wellbeing of caregivers by increasing their overall resilience, flexibility, “social connectedness”, and ability to self-regulate.

### References

- Higher levels of reported empathy were associated with lower risk for reported burnout symptoms (95% CI, 0.99-0.99). Dyrbye LN, Burke SE, Hardeman RR, et al. Association of clinical specialty with symptoms of burnout and career choice regret among US resident physicians. JAMA. 2018;320(11):1114-1130.
- Nguyen et. al. at Beth Israel Deaconess Medical Center reported that they found “some of the most impactful solutions” to the burnout problem shared the common feature of community building. (Combating Clinician Burnout with Community – Building, 7/31/18)

## Aim/Purpose/Objectives

•PROJECT GOAL: Develop, implement and cultivate a culture of resiliency throughout HonorHealth and its residency programs. Our assessment and intervention plan initially targeted Graduate Medical Education across all programs.

### Aim & Purpose:

- Enhance resident physician and caregiver engagement and alignment
- Prevent caregiver burnout; thereby reducing adverse patient outcomes and improving patient and provider satisfaction
- Promote a trauma informed culture and responses to secondary trauma
- Promote and support healthy team work and a compassionate culture

### Objectives:

- Identify and map a resident centric wellbeing program for all GME programs
- Create and implement a sustainable empathy education/training program
- Develop accessible prevention and treatment resources
- Develop processes and resources for caregiver crisis management

## METHODS: Interventions/Changes

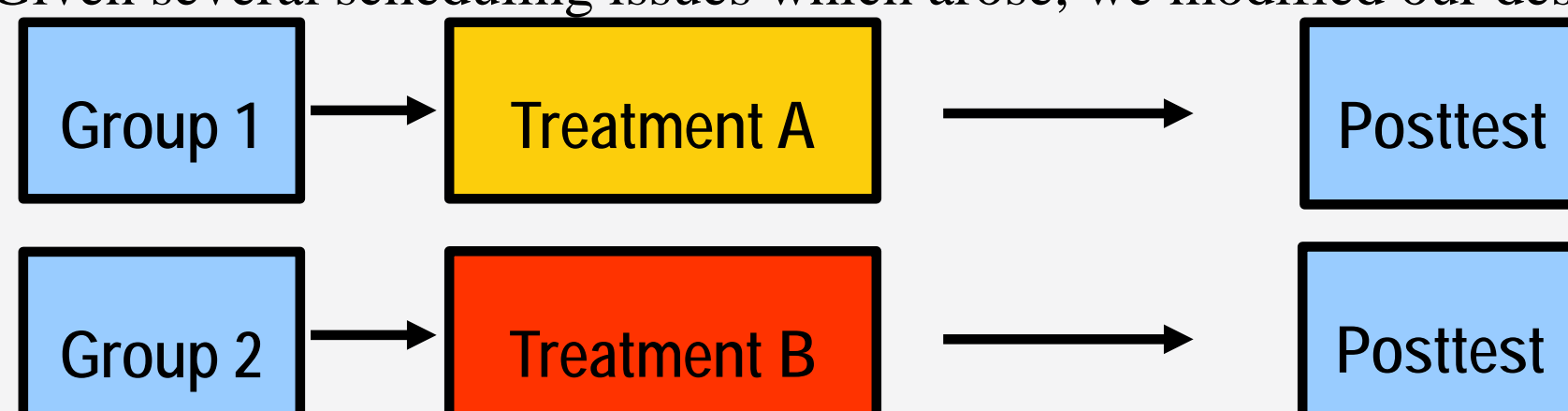
Our initial plan was an experimental multi-method repeated-measures design with baseline & post-intervention data collection.

### Subjects: Selection, Recruitment

- All HonorHealth residents were randomly assigned to the education (intervention) or no education group.
- As residents’ availability conflicts arose, we ran a second randomization of the available residents; so in essence, this was a convenience sample.

### Interventions/Changes

- Given several scheduling issues which arose, we modified our design to the following:



## METHODS: Measures/Metrics

IRB Submission: We received expedited approval as an exempt educational project. A baseline measure of three scales were disseminated via electronic survey (Qualtrics). All respondents created a unique personal identifier to assure anonymity.

- Connor-Davidson Resiliency Scale
- Toronto Empathy Questionnaire
- Multidimensional Scale of Perceived Social Support

One month after the educational training intervention, data from these scales was again collected via electronic survey. Multiple e-mail reminders and PD encouragement to respond were sent out to all programs. In spite of our best efforts, we only had 10 paired respondent samples for data analysis. (~20% response rate) Of these 8 paired (pre and post) response sets were from 8 of the 19 residents who participated in the educational workshop. Two residents from the non participant group submitted both pre and post surveys.

Given the small sample of our pilot, we know that our ability to detect difference on the scales before and after the workshop is limited. However, there was a statistically significant increase in the empathy scores of the 8 people who participated in the workshop. In the course of our project, it became apparent that:

- 1)Each individual program within GME had a unique set of needs which led to locally designed existing efforts to address those needs that were consistent with their local culture and work flow,
- 2)Attempts to target interventions that focused on individual prevention and behavioral changes, were met with a great deal of push back by the residents and seen as “re-victimizing the victim”.
- 3)Residents consistently expressed a request to “fix the broken system not us”. This anticipatory disengagement fit with issues being addressed at the institutional level.

Given the above, along with other data collection difficulties, we shifted our plan to include looking at our sample’s baseline data which we could then incorporate into our larger institutional initiatives, collaborations and efforts.

## RESULTS

Baseline means and standard deviations were calculated for all of the program participants to assess initial scores on each of the components.

### Descriptive Statistics

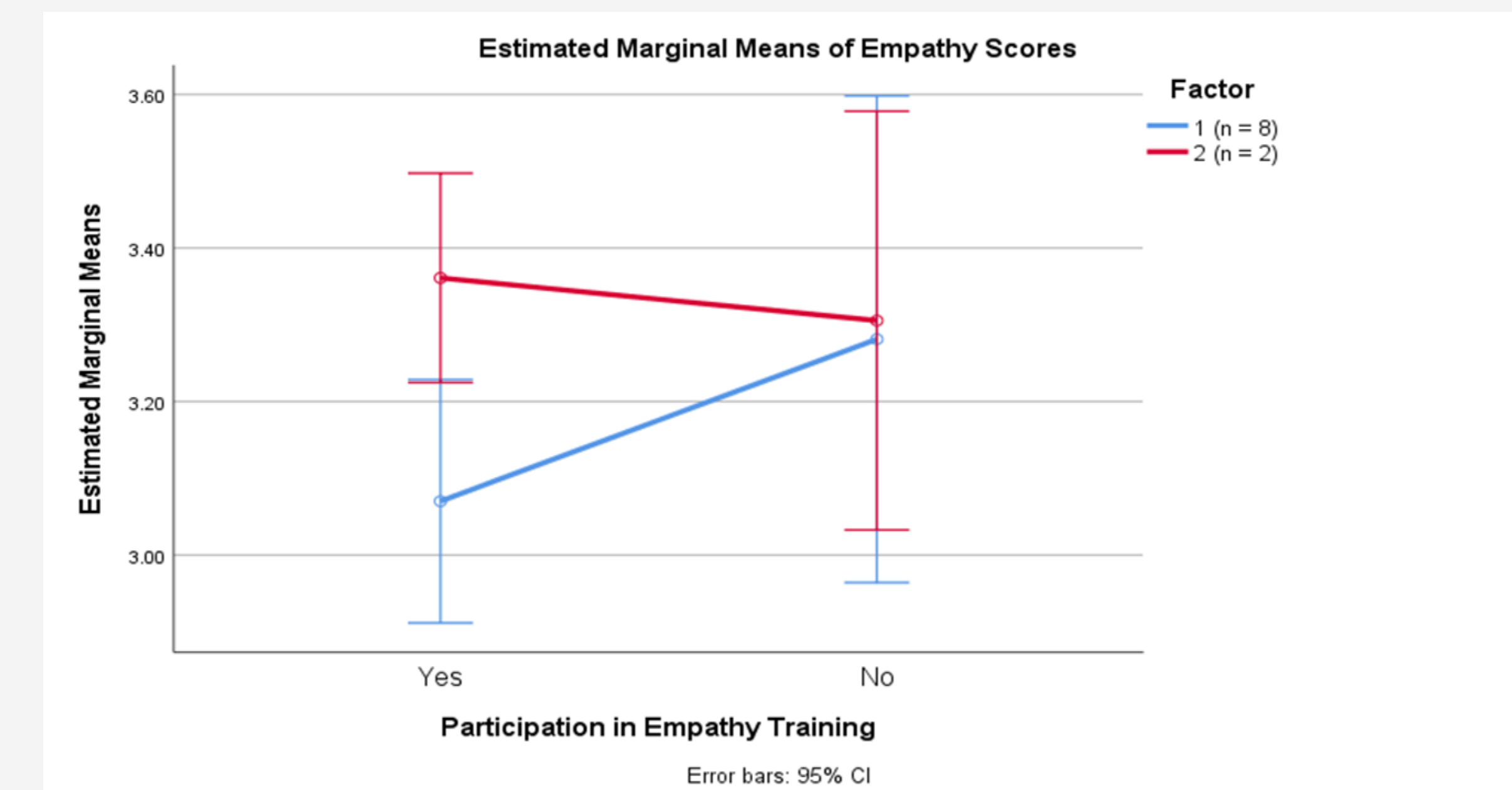
	N	Range	Minimum	Maximum	Mean	Std. Deviation
Toronto Empathy Questionnaire	37	.75	2.75	3.50	3.0777	.18305
Connor-Davidson Resiliency Scale	37	3.00	4.00	7.00	6.1036	.64052
Multidimensional Scale of Perceived Social Support	37	1.92	3.00	4.92	4.0541	.43125

•NOTE: All three scales are self-rating rating scales

- TEQ: 0=never, 1= rarely, 2=sometimes, 3=often, 4= always
- C-DRS: higher scores reflect greater self - assessed resilience
- MSPSS: mean scale of 1-2.9, considered low support; 3-5 moderate support, 5.1- 7 high support

## RESULTS: Continued

A significant increase was seen from pre (M = 3.07, SD = 0.17) to post-test (M = 3.36, SD = 0.14) on empathy scores for those undergoing the training,  $t(7) = 3.79, p = .007$ .



At the training and days later, participants agreed that they enjoyed and benefitted from the training workshop.

Independent of this pilot project, we asked residents to provide answers to the open ended question of what they felt would enhance their own wellbeing. General themes which emerged from their responses were:

- PHYSICAL FITNESS: Work site exercise facilities, free gym memberships, bike racks.
- PROTECTED SOCIAL TIME: At work with colleagues and away from duties, more free time, more autonomy in general.

## Discussion: Barriers & Strategies

### Key Findings

- It is possible to create educational interventions that foster and enhance physician empathy.
- Survey fatigue is a real phenomenon in medical education and likely among providers in general.
- Utilize qualitative over quantitative data collection methods whenever possible.
- Raises the question of how to foster individuals' intrinsic motivation for personal prevention of burnout and disengagement.
- Limitations
- Time and schedule availability
- Survey Fatigue
- Motivation & buy – in for individual prevention improvement efforts vary over the course of residency training, programs and sub-specialty.
- In reviewing the C-DRS mean scores, there may have been somewhat of a ceiling effect with the baseline mean score (6.10) at the high end of the range which may have limited the ability to see significant change (in addition to a low n).

### Next Steps and Sustainability

- Discover, honor and embrace local preferences and cultures.
- Openly communicate and demonstrate action based upon feedback from stakeholders. Keep everyone informed.
- GMEC Wellbeing Work Group formed.
- System wide transformative, scalable wellbeing initiatives have begun! ICARE stands for Innovation, Collaboration, Accountability, Respect and Empathy = HonorHealth core values.

## Project Management Plan

Team: Honor Health

Project Title: Building Resiliency via Empathy Training

I.	<p>Vision Statement (markers of success by March 2019; Refer to Toolkit #5)</p>	<p>We are committed to advancing and supporting a culture of wellbeing across our institution and specifically in the newest generation of medical providers. We firmly believe that to successfully champion a physician wellbeing culture, we must articulate, develop and implement a proactive, sustainable approach to nourishing a culture which values and enhances strengths, balance, resilience and well-defined resources as opposed to simply trying to “fix” accumulated stress and burnout after the fact.</p>
II.	<p>Team Objectives (‘needs statement,’ project requirements, project assumptions, stakeholders, etc.)</p>	<p><u>Institutional need:</u></p> <ul style="list-style-type: none"> <li>➤ Make HonorHealth the employer of choice</li> <li>➤ Develop an enhanced program for prevention of caregiver burnout</li> <li>➤ Develop processes and resources for caregiver crisis management</li> </ul> <p><u>Departmental (Academic Affairs) need:</u></p> <ul style="list-style-type: none"> <li>➤ Identify and map a resident centric wellbeing program for all GME programs</li> <li>➤ Create and implement a sustainable empathy education/training program</li> <li>➤ Develop accessible prevention and treatment resources</li> </ul> <p><u>Project assumptions:</u> Enhanced ability to empathize contributes to the wellbeing of caregivers by increasing their overall resilience, flexibility, “social connectedness” and ability to self-regulate when dealing with stress.</p> <p><u>Objectives:</u></p> <ul style="list-style-type: none"> <li>➤ Enhance resident physician and caregiver engagement and alignment</li> <li>➤ Prevent caregiver burnout: thereby reducing adverse patient outcomes and improving patient and provider satisfaction</li> <li>➤ Promote a trauma informed culture and response to secondary trauma contributing to caregiver burnout</li> <li>➤ Promote and support healthy team work and a compassionate culture</li> </ul>

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III.	<p>Team Members &amp; Accountability (list of team members from Toolkit #6 and who is accountable for what)</p>	<ul style="list-style-type: none"> <li>➤ Dr. Ellis – team leader</li> <li>➤ Drs. Ellis &amp; Kegowicz - program intervention project champions</li> <li>➤ Alicia Brandon, and Dr. Kegowicz – interface with GME and AA</li> <li>➤ Dr. Radhakrishnan- Academic Affairs executive sponsor</li> <li>➤ Dr. Snell and Dr. Ellis – Honor Health system interface, empathy education trainers</li> <li>➤ Samantha Easterly, MS IV – literature review &amp; medical student team member</li> <li>➤ Dr. Arie DeGrio – resident representation and resident interface/champion</li> <li>➤ Dr. Kevin Gosselin– Biostatistics and Research</li> </ul>
IV.	<p>Necessary Resources (staff, finances, etc.)</p>	<ul style="list-style-type: none"> <li>➤ Institutional support from the C-Suite and Leadership</li> <li>➤ Program Directors’ support for the empathy training intervention(s)</li> <li>➤ Financial support – purchase of licensed, copyrighted survey instruments and scoring</li> <li>➤ Protected time within the residency programs for training and data collection</li> </ul>
V.	<p>Measurement/Data Collection Plan</p>	<p>Complete pre-test to establish baselines for each training year (PGY 1, 2 and 3) utilizing three measures:</p> <ol style="list-style-type: none"> <li>1) Toronto Empathy Questionnaire</li> <li>2) Multidimensional Scale of Perceived Social Support</li> <li>3) Connor – Davidson Resiliency Scale</li> </ol> <p>Questionnaires will be administered anonymously with demographic identifiers only: program specialty, PG year, date administered, gender, age, allopathic or osteopathic training.</p> <p><u>Time Line</u></p> <p>Pretest data collection February 2018  Empathy Training Spring 2018 ( March – April)  Post test data collection May 2018  Second data set collection Summer 2018  Second empathy training September – October 2018  Post test data collection February 2019</p>
VI.	<p>Stakeholder Communication Plan (may be helpful to draft a flow chart of team</p>	<p>Existing Programs Inventory and Communication/Collaboration:</p> <ul style="list-style-type: none"> <li>➤ Honor Excellence Program</li> </ul>

	members & senior management; Refer to Toolkits #2 and #4)	<ul style="list-style-type: none"> <li>➤ EAP &amp; Employee Benefits</li> <li>➤ GME Program Directors &amp; House Leadership Council</li> <li>➤ Medical Staff Leadership</li> <li>➤ Chief Experience Officer, Chief Medical Officer, Chief Quality and Safety Officer, Chief Academic Officer</li> </ul>
VII.	Potential Challenges (engagement, budget, time, skills gaps, etc.; Refer to Toolkit #3)	<ul style="list-style-type: none"> <li>➤ System Buy In</li> <li>➤ Academic Affairs/ GME – financial support for purchase of survey instruments ( ~ \$600.00 maximum depending upon programs participating)</li> <li>➤ Individual Programs (FM, IM, Surgery) support- Protected time for intervention/ training and protected time for pre and post test data collection</li> <li>➤ IRB Expedited Approval (Educational Intervention)</li> <li>➤ Protected Scheduling for data collection and training/intervention</li> <li>➤ Coordinated Communication</li> <li>➤ Residents’ motivation for participation</li> </ul>

VIII.	Opportunities for Scholarly Activity (potential publications, conference presentations, etc.)	<ul style="list-style-type: none"> <li>➤ AIAMC, STFM Annual Meeting</li> <li>➤ Academic Medicine</li> <li>➤ Inter-institutional collaborations</li> <li>➤ Regional Academic Excellence Day presentation</li> </ul>
IX.	Markers (project phases, progress checks, schedule, etc.; Refer to NI V Roadmap to 2019 which will be presented at Meeting One)	<ol style="list-style-type: none"> <li>I. Literature Review</li> <li>II. Intervention Workshop Format &amp; Content</li> <li>III. Presentation to GMEC and each residency program</li> <li>IV. Roster of Participants</li> <li>V. Randomization &amp; Group Assignment</li> <li>VI. Formatting, Upload &amp; Programming of 3 Surveys</li> <li>VII. Monitoring of Pre-Test Data Collection</li> <li>VIII. Workshop Intervention</li> <li>IX. Post – Test data collection</li> <li>X. Data Analysis &amp; review</li> </ol>

	XI. Preparation and Presentation of Deliverables
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Sections X thru XIII to be completed first quarter 2019 for "Final Proceedings" booklet:

X.	Success Factors	The most successful part of our work was gaining a commitment from our institution for a system wide sustainable, scalable wellbeing program. We were inspired by everyone's unique stories of resilience and collaboration and their desire to build upon and enhance these.
XI.	Barriers	The largest barrier encountered was lack of accessibility to and time with residents due to their various/unique schedules. This led to our pilot project having a revised timeline, schedule, and a smaller "N" than anticipated.  We worked to overcome this by soliciting buy-in and support from Program Directors and House Council Leadership.
XII.	Lessons Learned	The single most important piece of advice to provide another team embarking on a similar initiative would be... <ul style="list-style-type: none"> <li>➤ Utilize qualitative over quantitative data collection methods whenever possible. Honor and value the multiple existing resources as well as the diversities encountered.</li> <li>➤ Be open and willing to adapt and change initial plans as work unfolds.</li> <li>➤ Openly communicate and demonstrate action based upon feedback from stakeholders. Keep everyone informed.</li> <li>➤ Continually reassess and enhance engagement.</li> <li>➤ Remember that a sense of community and connectedness is the underpinning of success and the key to project sustainability.</li> </ul>
XIII.	Expectations Versus Results	On a scale of 1 to 10 (with "1" meaning nothing and "10" meaning everything), how much of what you set out to do was your team able to accomplish?  What we initially set out to do yielded a number of insights and learnings which have now provoked a system wide transformative initiative.



		1 2 3 4 5 6 7 <u>8</u> 9 10
XIV.	Sustainability and Next Steps	<p>What does your CEO need to know to help keep your work sustainable?</p> <p>This work has not only informed but sparked the development of our institution-wide well-being initiatives for not only GME programs, but for all caregivers. There is tremendous energy and enthusiasm around well-being efforts across all departments and among system stakeholders. This work is in harmony with our system's strategic goals, values and vision. Our CEO's support and belief in our efforts are very much appreciated!</p>

## INTRODUCTION: Background

### Why the issue is important?

- High stress and burnout among resident trainees affects mental health, self-care and patient care. There are increased rates of suicidal ideation, high stress, and depression among residents with burnout.<sup>1</sup>
- The Main Line Health System (MLHS) 2018 Strategic Plan emphasized the need to: plan for the workforce of the future; foster a culture of lifelong learning and sharing; and maximize the potential of residency and fellowship programs.
- MLHS believes that wellness will propagate patient satisfaction, safety, and quality.

### What has other work/literature shown? Nationally/Locally

- Interventions such as decreasing shift length, facilitating sessions on stress management and self care, communication skills education and structural interventions have shown to decrease burnout, emotional exhaustion, and depersonalization in both attending and resident physicians.<sup>2</sup>

### What is the gap/need

- Several institutions have employee assistance programs available to residents, but it is unknown if the programs are utilized, if residents know the programs exist, if the programs can be adapted to residents' needs, or if the programs are adequately addressing burnout and wellness in residents as a subpopulation of all health care employees.

### References

1. Lebares CC, Guvva EV, Ascher NL, O'Sullivan NL, Harris HW, Epel ES. Burnout and stress among US surgery residents: Psychological distress and burnout. *J Am Coll Surg.* Jan 2018;226(1):8090.
2. West CP, Dyrbye LN, Erwin PJ, Shanafelt TD. Interventions to prevent and reduce physician burnout: a systemic review and meta-analysis. *The Lancet.* Nov 2016;388(10057):p2272-2281

## Aim/Purpose/Objectives

### Purpose:

- Facilitate connecting residents and fellows with services and resources available through the Main Line Health System Employee Assistance Program (EAP), **FirstCall**.

### Aim:

- Assess the degree of burnout among residents and fellows of varying specialties, assess the awareness of services that are offered by **FirstCall**, and determine if the **FirstCall** EAP program can adequately address the needs of trainees to decrease burnout and enhance wellness.

## METHODS:

### Interventions

- Administer baseline burnout/wellness survey.
- Educate trainees about **FirstCall** services tailoring the topics to the needs of residents/fellows.
- **FirstCall** will create a flyer to promote the services that would be most often needed by trainees.
- **FirstCall** will direct trainees to their clinical coordinator for high-touch follow up interactions, depending on their needs.

### Measures

1. Collect basic demographic information and evaluate awareness of services offered through **FirstCall**
2. Areas of Worklife Survey
3. Maslach Burnout Inventory

## RESULTS

### Demographics of residents and fellows

- Gender – 43% male, 45% female, 1% other, 11% didn't disclose
- Residency programs – 20% family medicine, 32% internal medicine, 8% general surgery, 7% OBGYN, 10% podiatry, 6% radiology, 17% fellowships
- Supportive relationships – 73% yes, 14% no, 13% didn't disclose
- Age – 28% ages 25-29, 31% ages 30-35, 41% didn't disclose

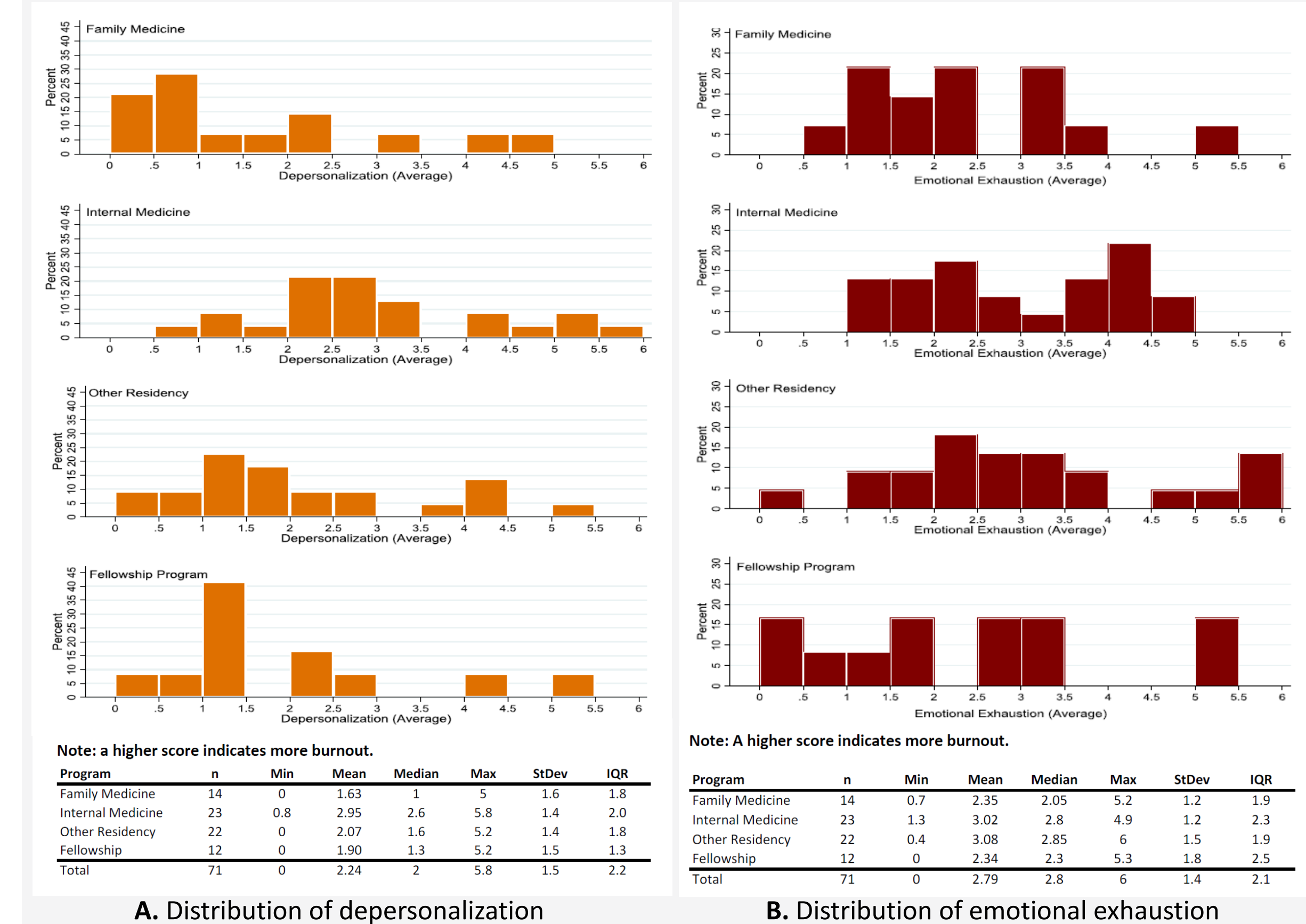
**Table 1.** Awareness of Employee Assistance Program services, by Program Type (n=71); Column percentages shown

	Family Medicine	Internal Medicine	Other	Fellows	Total (mean)
Services	n = 14	n = 23	n = 22	n = 12	n = 71
Crisis Intervention	28.6	30.4	45.5	16.7	32.4
Substance Abuse	42.9	30.4	27.3	25.0	31.0
Behavioral Health Support	21.4	17.4	36.4	16.7	23.9
Short Term Counseling Services	21.4	26.1	31.8	16.7	25.4
Conflict Mediation	14.3	17.4	13.6	16.7	15.5
Education and Webinars	14.3	8.7	18.2	16.7	14.1
Financial Support	28.6	17.4	27.3	25.0	23.9
Legal Support	35.7	17.4	13.6	16.7	19.7
Support For Child or Elder Care	14.3	13.0	4.6	8.3	9.9

- Less than 50% of trainees were aware of **FirstCall** services
- Less than 75% of trainees were aware of behavioral health support and conflict mediation

## RESULTS: Continued

**Figure 1.** Representative subsections of Maslach Burnout Inventory results



A. Distribution of depersonalization

B. Distribution of emotional exhaustion

### Additional Results:

- Trainees from all programs (50-82%) agree or strongly agree that they have so much work to do that it takes them away from personal interests.
- 65% of trainees feel emotionally drained from their work at least a few times a month; 39% feel this at least a few times a week.
- 17% of Internal Medicine residents said they're callous every day.

## Discussion: Barriers & Strategies

### Key Findings

- Treating patients like impersonal objects and increased callousness are common among trainees.
- Trainees are mostly unaware of available resources.
- Despite depersonalization and burnout, trainees feel exhilarated when working directly with patients and a sense of accomplishment at work.

### Limitations

- Initial survey done at high stress time during rollout of new EMR.
- Availability and expertise of **FirstCall** to address trainee-specific needs.

### Interventions

- Awareness – **FirstCall** will create trainee-specific presentations and offer them at orientation and various times throughout the year.
- Evaluation – Ongoing assessment of the impact **FirstCall** has on trainee burnout and wellness.
- Education – Enhance GME Expertise within **FirstCall** staff.



## Project Management Plan

**Team:** Main Line Health System (MLHS)    **Project Title:** Improving Resident Wellness with FirstCall Assistance

I.	Vision Statement	<p><b>MLHS is committed to a Continuous Learning Environment which must be nurturing and attentive in order to promote wellness.</b></p> <p><b>MLHS will be a thought leader in this area and takes measures to decrease burnout and promote wellness in residents, faculty and health system employees.</b></p> <p><b>MLHS believes that wellness will propagate Safety and Quality.</b></p>		
II.	Team Objectives	<p>The AIAMC NI VI Team requires MLHS to support: dedicated <b>People</b> (see III below), dedicated <b>Time</b> for local and national meetings and phone calls, Budget (<b>Money</b>) for travel and related costs, AIAMC Membership and NI VI participation fee.</p>		
III.	Team Members & Accountability	Name/Credentials	Position/Title	Role/accountability
		Joseph A. Greco, MD, FAAFP	GME Advisor Program Director of FM Residency	Physician Champion, Team Leader
		Barry Mann, MD	Chief Academic Officer	AIAMC Liaison, MLHS Networking and guidance
		Chinwe Onyekere, MPH	DIO	GME oversight
		Sharon Iannucci	GME Manager	GME/residency/fellowship oversight
		Sandra Ross, LSW	Manager, Undergraduate Education Program Manager, Educational Outreach	Data interpretation and research fellow mentorship

		Dan Buckalew	Manager Employee Health Management	HR and EAP link to GME, pave the way to collaboration and priorities therein.
		Kelly Campanile, Psych D	Behaviorist	Expertise in wellness curricula and input regarding approach to survey results.
		Katherine Corvi, Psych D	Psychologist	Coordinate meeting with Lankenau Institute for Medical Research and biostatisticians.
		April Lockley, DO	PGY2 FP resident	Provide resident input.
		Vishal Shah, DO	Surgical resident	Edit and implement wellness survey
		Jonah Klein, MD	Surgical resident	Work with Sandra Ross on poster and capstone presentation.
IV.	Necessary Resources	<p>Assumptions are made about interdepartmental collaboration primarily among Graduate Medical Education, Human Resources, Employee Assistance Program Staff and the C-Suite.</p> <p>Stakeholders including The Departments listed in the immediately preceding sentence, the residents and fellows and their families and patients.</p>		
V.	Measurement/Data Collection Plan	<p>Survey returned results and meeting was set to discuss with experts in population management and community health along with the help of statisticians from Lankenau Institute of Medical Research.</p>		
VI.	Stakeholder Communication Plan	<p>National Initiative VI project description and goals are presented at <u>local</u> GMEC meetings, program faculty meetings, at <u>system level</u> GME Steering Committee and at the Research and Education Committee. Updates will follow on meeting agendas in an ongoing fashion.</p> <p>The project will be present verbally and in written format to the Medical Executive Committee during annual GME report.</p>		

		Daniel Buckalew will lead with Relationship Building with Human Resource and EAP leadership.
VII.	Potential Challenges	<p>The engagement of residents varies from program to program. Resident desire for confidentiality directly conflicts with the ability to continually improve the services requested by residents.</p> <p>Co-ownership/overlap between GME and HR/EAP blurs lines related to budgetary items.</p> <p>Two geographically distinct campuses make organizing and communication to residents across the system a logistical challenge.</p> <p>Faculty Development Needed</p>
VIII.	Opportunities for Scholarly Activity	The project undertaken provides a landscape of the various factors which possibly encourage residents to seek help from First Call. The results of the wellness survey articulated coping mechanisms employed by residents which are alarming. (intentionally becoming more callous for example) More targeted interventions can be designed to measure specific interventions and their effects.
IX.	Markers	<p>Convene local team, narrow project focus, customize survey, administer survey, interpret results with statisticians.</p> <p>Determine next steps: re-administer survey to residents and fellows s/p intervention. Administer survey to faculty as well.</p> <p>Identify opportunities for scholarly activities (presentations and article publication)</p>
X.	Success Factors	<p>The most successful part of our work was administering the burnout tool to residents and to begin a healthy dialogue with Human Resources about resident specific needs within the Employee Assistance Program.</p> <p>We were inspired by the willingness of residents to be honest and frank about their level of</p>

		burnout in their responses to the survey. Since they are sharing the truth, we are compelled to honor that by addressing the issues.
XI.	Barriers	<p>The largest barrier encountered was we were not able to demonstrate the impact of our intervention within the timeframe provided for the project. We encountered barriers with FirstCall implementing some of our suggested interventions (tracking resident use of services, flyers/presentations specific to residents, etc.). FirstCall was not able to meet with all residency/fellowship programs to provide education about their services during the project timeline.</p> <p>We are still working to overcome this by organizing some feedback sessions between GME and HR/EAP. The Internal Medicine program hired a Wellness Director. This new position should help to bridge the perceived gap between our two departments.</p>
XII.	Lessons Learned	The single most important piece of advice to provide another team embarking on a similar initiative would be.... Encourage residents to assume leadership roles in the project and ensure that Program Directors designate time for residents to participate in meetings.
XIII.	Expectations Versus Results	<p><b>Q: On a scale of 1 to 10 (with “1” meaning nothing and “10” meaning everything), how much of what you set out to do was your team able to accomplish?</b></p> <p>A: Six.</p>
XIV.	Sustainability and Next Steps	<p><b>Q: What does your CEO need to know to help keep your work sustainable?</b></p> <p>A: Teaching residents in a system which promotes burnout and not wellness encourages residents to establish practice elsewhere upon graduation. However, when trained in a demanding, yet still nurturing and responsive Continuous Learning Environment, residents are more likely to perpetuate self-care practices and stay locally on the medical staff. This effect will lead to a cultural change that “Promotes Joy and Happiness in order to propagate enthusiasm.”(MLHS NIVI team’s mission statement)</p>

# Investigating Gender Bias at an Independent Academic Medical Center

Kalli Varaklis MD, MEd, Katherine Rizzolo, MD, Thomas van der Kloot MD, Bob Bing-You MD, MBA, MEd



NI VI Meeting #4 Tucson, AZ March 2019



## INTRODUCTION: Background

In 2017, Maine Medical Center underwent a CLER site visit by the ACGME. An unexpected finding in the report was that: "In the group setting, several residents from a variety of programs, confirmed by faculty, reported that there is significant gender bias at MMC, such that female residents are treated worse than their male counterparts". There are multiple published reports describing the effect of gender bias in graduate medical education.

## Objectives

- To gauge baseline resident perception of gender bias and effect on wellness metrics
- To develop a series of interventions to address perceived gender bias discrimination among housestaff

## METHODS: Interventions/Changes

### Interventions/Changes

- New position of Title IX Officer created
- New position of GME Social worker created and funded, as wellness resource for residents and fellows
- Senior nursing leadership engagement for nursing response
- Sexual harassment e-learn training for 19,000 + employees
- Engagement with the new MMC Diversity/ Equity/ Inclusion (D/E/I) committee
- D/E/I session at Intern Orientation

## REFERENCES

Pololi LH, Civian JT, Brennan RT, Dottolo AL, Krupat E. Experiencing the culture of academic medicine: gender matters, a national study. *J Gen Intern Med.* 2012;28(2):201-7.

Bruce AN, Battista A, Plankey MW, Johnson LB, Blair Marshall M. Perceptions of gender-bias discrimination during surgical training and practice. *Med Educ Online* 2015;20:10.3402/meo.v20.25923.

## METHODS: Measures/Metrics

**Maine Medical Center** is an independent academic medical center in Portland Maine with ~276 residents and fellows in 24 training programs

### Measure #1: Validated anonymous survey

A validated survey exploring gender bias in surgical residents was modified to assess incidence of experienced and observed perceived gender bias, as well as effect on wellness metrics: burnout, stress, ability to work in an inter-professional team, clinical work quality and job satisfaction (Bruce, 2015)

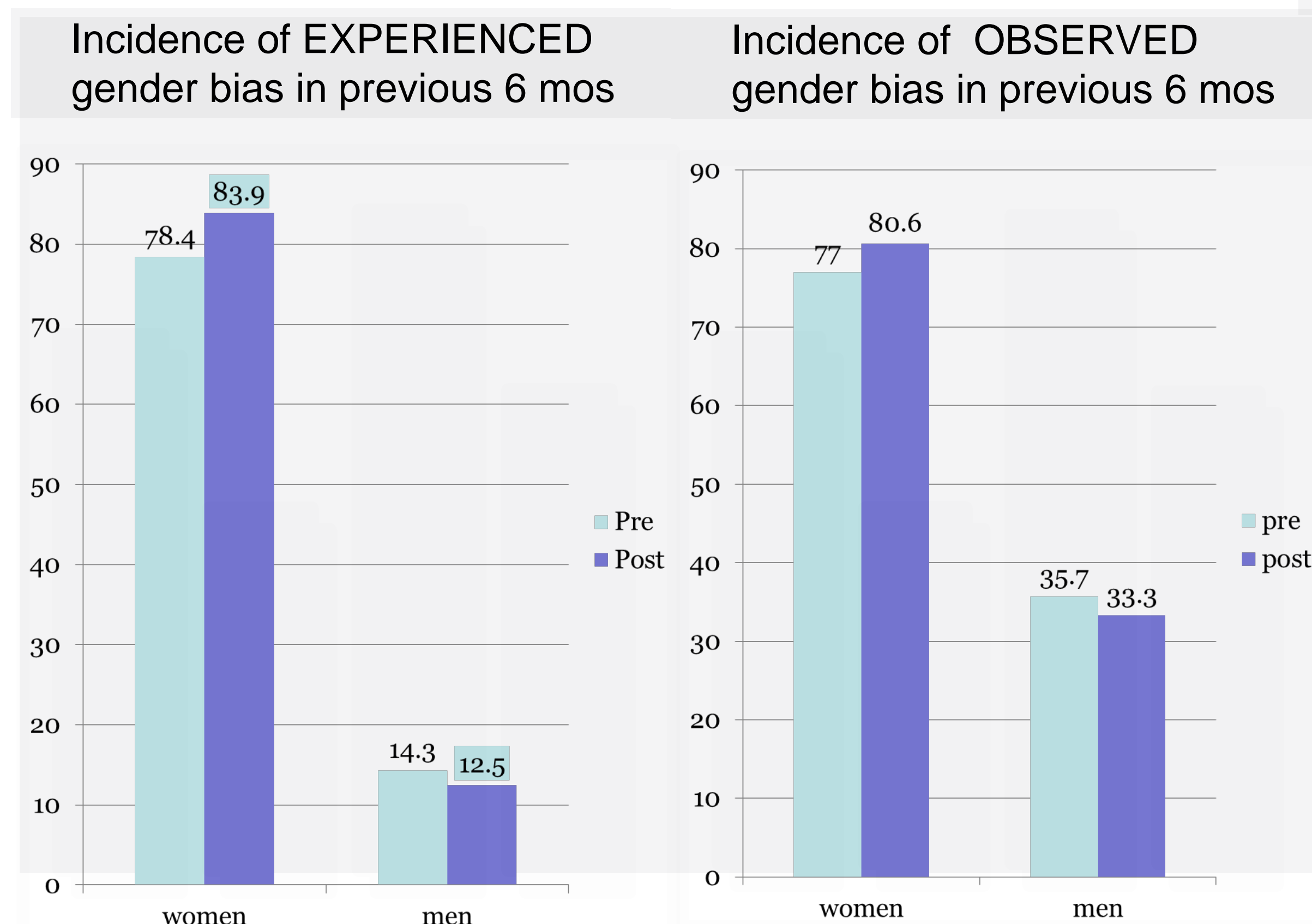
### Measure #2: Focus Groups

- DIO met with residents and fellows from most programs before and after intervention, and a resident forum was held
- **Statistical Analysis**  $\chi^2$ , continuity corrected Fisher's exact test

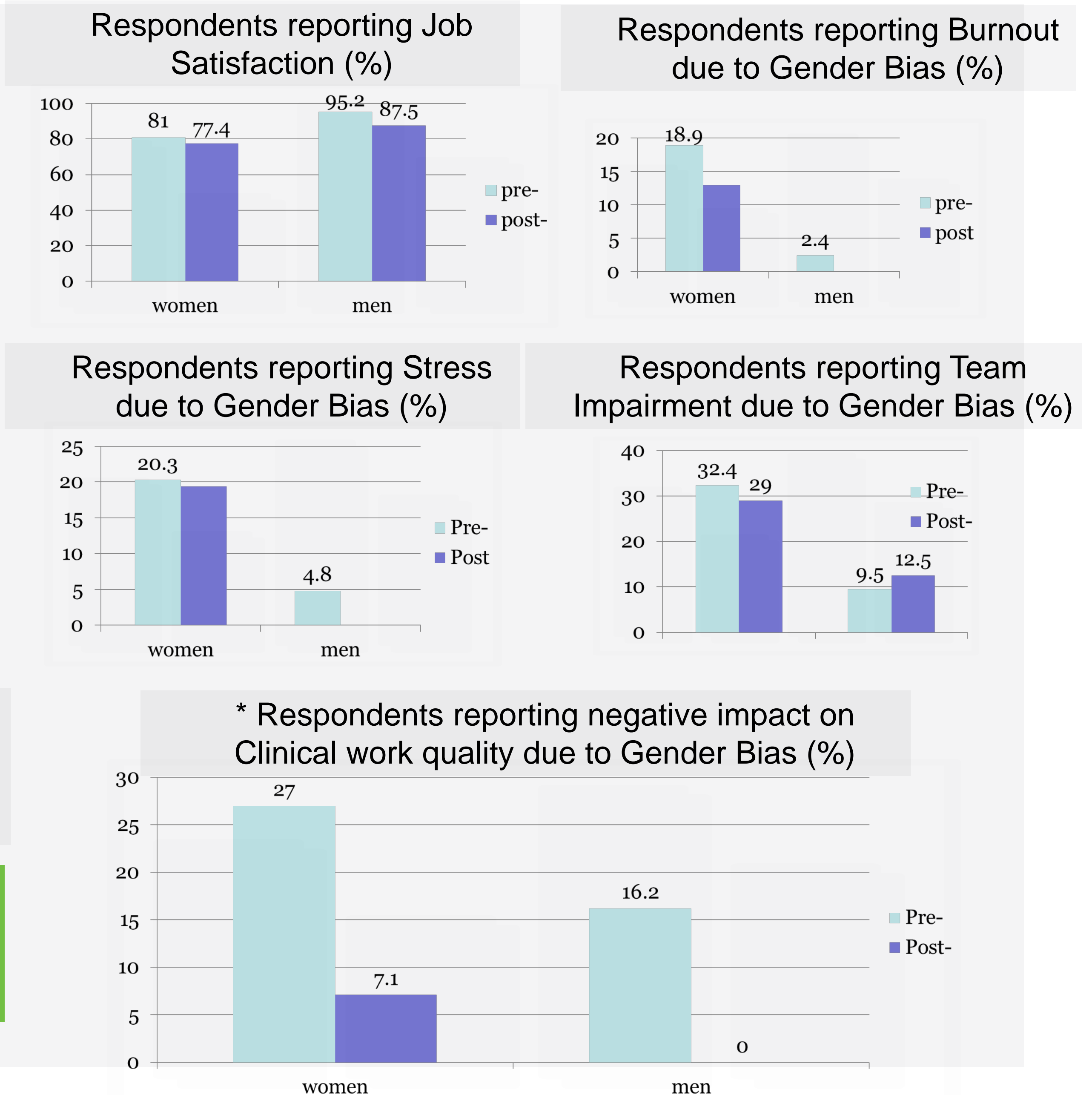
## RESULTS:

**Baseline survey:** 119 trainees (45.4%) completed  
**Post-intervention survey:** 55 trainees (19.9%) completed  
**Focus group** data not yet complete

## INCIDENCE OF EXPERIENCED AND OBSERVED PERCEIVED GENDER BIAS (%)



## RESULTS: PRE- AND POST-INTERVENTION



## Discussion: Barriers & Strategies

### Key Findings

- The perception of gender bias was not different before and after intervention
- \* There was a trend towards an **improved** perception of quality of clinical work being negatively affected by perceived gender bias after interventions
- **Limitations**
  - Not sampling the same trainee group one year to the next
  - Lower response rate in the follow up survey
- **Next Steps and Sustainability**
  - Project to be transitioned to the institutional 'Diversity/ Equity/Inclusion' committee for oversight and applicability of lessons learned to non-GME community

## Project Management Plan

**Team:** Maine Medical Center    **Project Title:** Investigating Gender Bias at an Independent Academic Medical Center

I.	Vision Statement (markers of success by March 2019; Refer to Toolkit #5)	Our vision is that our clinical learning environment will be free of gender bias such that every member of the health care team is treated with respect and equity.
II.	Team Objectives (‘needs statement,’ project requirements, project assumptions, stakeholders, etc.)	Our Mission is provide a better institutional understanding of the scope and nature of gender inequity experienced by physician trainees at MMC, if any, and will allow us to design targeted interventions. In the future, this same instrument could be shared with other interprofessional and interdisciplinary leaders within our institution to investigate the experience and extent of gender bias among other MMC stakeholder groups.
III.	Team Members & Accountability (list of team members from Toolkit #6 and who is accountable for what)	<ul style="list-style-type: none"> <li>• Designated Institutional Official</li> <li>• VP, Medical Education</li> <li>• Director Clinical Learning Environment</li> <li>• President, Resident Housestaff Committee</li> <li>• President, Housestaff Quality Committee</li> <li>• VP, Patient Safety Quality Improvement</li> <li>• Chief Academic Officer</li> </ul>
IV.	Necessary Resources (staff, finances, etc.)	<ul style="list-style-type: none"> <li>• Time for team meetings, presentations, data analysis</li> <li>• Resident engagement</li> <li>• Research navigator</li> </ul>
V.	Measurement/Data Collection Plan	This project utilized both qualitative and quantitative measures. The DIO met with resident groups from 20 out of 22 training programs and asked one scripted question regarding potential gender bias discrimination. A follow up validated survey adapted from Bruce et al (2015) was sent to all residents to investigate the relationship

VI.	Stakeholder Communication Plan (may be helpful to draft a flow chart of team members & senior management; Refer to Toolkits #2 and #4)	<ul style="list-style-type: none"> <li>• Senior hospital leadership (CMO)</li> <li>• Academic Leaders, including Chairs and Program Directors</li> <li>• Residents and fellows</li> <li>• Senior nursing leadership</li> </ul>
VII.	Potential Challenges (engagement, budget, time, skills gaps, etc.; Refer to Toolkit #3)	<ul style="list-style-type: none"> <li>• Lack of local, internal experts on gender bias</li> <li>• Limited budget to engage outside consultants</li> </ul>
VIII.	Opportunities for Scholarly Activity (potential publications, conference presentations, etc.)	<ul style="list-style-type: none"> <li>• Local presentations               <ul style="list-style-type: none"> <li>○ Housestaff forum</li> <li>○ Academic Leader’s Group</li> <li>○ Board of Education Committee</li> <li>○ Medical Education Executive Committee</li> <li>○ Medical Staff Meeting</li> </ul> </li> <li>• AIAMC final meeting</li> <li>• Publication</li> </ul>
IX.	Markers (project phases, progress checks, schedule, etc.; Refer to <i>NI V Roadmap to 2019</i> which will be presented at Meeting One)	<ul style="list-style-type: none"> <li>• Phase I: Baseline Data Collection               <ul style="list-style-type: none"> <li>○ DIO meets with residents and fellows from all residency and fellowship programs</li> <li>○ Anonymous, modified validated survey sent to all trainees</li> </ul> </li> <li>• Phase II: Interventions</li> <li>• Phase III: Post-intervention Data collection</li> <li>• Phase IV: Dissemination               <ul style="list-style-type: none"> <li>○ Locally</li> <li>○ AIAMC final meeting</li> <li>○ Publication</li> </ul> </li> <li>• Phase V: Sustainability</li> </ul>

Sections X thru XIII to be completed first quarter 2019 for “Final Proceedings” booklet:

X.	Success Factors	<ul style="list-style-type: none"> <li>• Engagement from trainees</li> <li>• Overall positive response from institutional leaders</li> <li>• Trend towards improved perception of quality of clinical work being negatively affected by perceived gender bias after interventions</li> <li>• Creation of 2 new positions: Title IX Officer and dedicated GME social worker</li> </ul>
XI.	Barriers	<ul style="list-style-type: none"> <li>• Rare response from leaders either undermining effort or discounting report</li> <li>• Lack of local expertise</li> <li>• Significantly decreased response rate from trainees in the post-intervention survey</li> </ul>
XII.	Lessons Learned	<ul style="list-style-type: none"> <li>• Communicate early and frequently with senior leaders</li> <li>• Understand that GME learners are employees – and that Human Resources needs to be involved early and often in a sensitive topic such as this one</li> <li>• Engage local experts</li> </ul>
XIII.	Expectations Versus Results	<ul style="list-style-type: none"> <li>• Did not anticipate the response rate for initial survey, the degree of gender bias perception reported by female housestaff or the extent to which perceived gender bias negatively impacted wellness metrics.</li> </ul> <p><i>How much of what you set out to do was your team able to accomplish? 9</i></p>
XIV.	Sustainability and Next Steps	<ul style="list-style-type: none"> <li>• This project will be transitioned to the newly created, institutional ‘Diversity/ Equity/ Inclusion Committee’</li> <li>• Expand exposure at orientation, including micro-aggression training</li> <li>• Continue roll out of newly created Title IX Officer</li> <li>• Follow up survey in 2 years</li> <li>• Publish findings and modified validated survey for use in other institutions</li> </ul>



## INTRODUCTION: Background

- Burnout (a mixture of exhaustion and depersonalization) among clinical practitioners is prevalent, and leads to employee turnover, adverse events, and increases risk in patient care. Many even come to regret their career choice.
- 45% of residents experience at least one major symptom of burnout, with wide variability by specialty, anxiety, and organizational/familial support structure
- We aim to implement a hospital-wide wellbeing initiative that adequately meets the needs of all clinical practitioners

### References

1. Burnout During Residency Training: A Literature Review- Journal of GME, 2009
2. Nearly Half of Resident Physicians Report Burnout- Mayo Clinic, 2018

## Aim/Purpose/Objectives

- To increase the collective wellbeing score by 10% if at least 70% of measured groups
- To incorporate and de-stigmatize wellness through monthly correspondence and education

## METHODS: Interventions/Changes

Several key projects were implemented to enhance overall access and knowledge of wellbeing resources at Monmouth Medical Center

- **Interventions/Changes**
- Presentations on BHealthy (in-house wellness program) and rewards to all groups
- Replacement of equipment in Fitness Facility to align with needs of employees
  - Additionally, working on access to facility, expanding hours for clinicians who work different hours, and surveillance/security
- Creation of Resident Lounge, stocked with light foods during hours cafeteria is not open
- Improved access to EAP, Financial services, with presentations and services specifically for residents

## METHODS: Measures/Metrics

- Metrics to be gathered by Mayo Wellbeing Index, administered quarterly

**Subjects: All MMC Residents, Nurses, and Staff Physicians**

### Measure #1: Residents' Wellbeing

- Specialty
- Year
- Hours/week

### Measure #2: Physicians' Wellbeing

- Specialty
- Age
- Percentage of time spent on administrative tasks
- Majority Inpatient vs. Outpatient

### Measure #3: Nurses' Wellbeing

- Employment Status (Part time/Fulltime)
- Hours/week
- Highest level of education

## RESULTS

### Sample Sizes:

- Residents- 120
- Physicians- 856
- Nurses- 937

### Measurements:

- Wellbeing Index to be administered Thursday, March 21, 2019 for residents
- Monday March 25 for Physicians and Nurses
- Data to be benchmarked against national averages, re-assessed quarterly and after interventions

## RESULTS: Continued

### Resident Lounge:

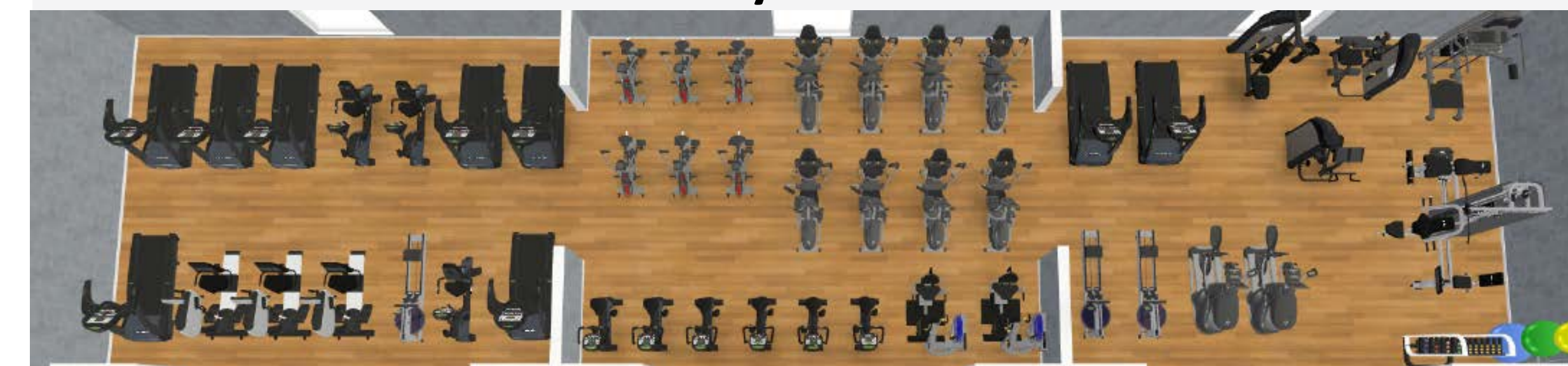


### Updated BHealthy Programs

**RWJBarnabas  
HEALTH**

**BHealthy**

### Re-modeled Fitness Facility:



## Discussion: Barriers & Strategies

### Key Findings

- Access to healthy and readily available food options is a high priority
- Lack of awareness of existing initiatives, options, and rewards offered through existing Wellness Program

### Limitations

- Organizing across hospital effectively and consistently
- Varying schedules/needs of different stakeholders
- Funding (Wellbeing Index, Resident Lounge, Fitness Facility)

### Next Steps and Sustainability

- Put well-defined communication tree in place to disburse information
- Continue to administer Wellbeing Index with support from leaders and representative champions

## Project Management Plan

Begin completing this Project Management Plan at Meeting One and complete it with your team following Meeting One, i.e., by November 2017. Teams will have the opportunity to review/revise their Project Management Plans throughout the 18-month Initiative at each of the on-site meetings. The collective data from all of the teams' completed project management plans will be invaluable as we share and learn from this collaborative experience.

Team: Monmouth Medical Center

Project Title: AIAMC NI VI: Stimulating a Culture of Well-being

I.	Vision Statement (markers of success by March 2019; Refer to Toolkit #5)	<i>A medical education experience committed to an encouraging, supportive, and healthy pursuit of knowledge, learning, training and growth. As a health care organization, we are devoted towards a healthier community that acknowledges and is prepared to address wellbeing, including of our own residents and staff.</i>
II.	Team Objectives (‘needs statement,’ project requirements, project assumptions, stakeholders, etc.)	<i>To increase the collective wellbeing score by 10% of at least 70% of measured groups To incorporate and de-stigmatize wellness through monthly correspondence and education To build a scalable program extending throughout the hospital, and eventually, the system with support from Physician Leaders and the C-Suite</i>
III.	Team Members & Accountability (list of team members from Toolkit #6 and who is accountable for what)	<i>Dr. Joseph Jaeger- CAO/DIO Pranoy Mohapatra, MHA- Project Manager Manager Ane Swartz- Onsite Health Coach Program Coordinators/Directors Residents Rose Polasky, RN, Nursing Julie Villa, RN, Nursing</i>

IV.	<p>Necessary Resources (staff, finances, etc.)</p>	<p><i>Representation from: Nursing, Medical Education/Residents, Physician Staff</i></p> <p><i>Finances for Wellbeing Index, Resident Lounge, Fitness Facilities Upgrades</i></p> <p><i>Institutional Buy-in, accountability to keep project moving forward given scope and scale</i></p>
V.	<p>Measurement/Data Collection Plan</p>	<p><i>Administering Wellbeing Index one month after Orientation, and quarterly thereafter. May also do segmented tests of certain groups before/after intervention, such as implementing self care plan or in conjunction with BHealthy “Journeys”</i></p>
VI.	<p>Stakeholder Communication Plan (may be helpful to draft a flow chart of team members &amp; senior management; Refer to Toolkits #2 and #4)</p>	<p><i>Material and efforts presented to Wellbeing Steering committee, representatives disburse relevant information to their constituents</i></p> <p><i>Re-enforcement/Planned Redundancy through GMEC, Staff Meetings, Flyers, Emails</i></p> <p><i>Program Coordinators and Directors to channel information to their residents</i></p> <p><i>“Wellness Board” in Residents Lounge once completed</i></p>
VII.	<p>Potential Challenges (engagement, budget, time, skills gaps, etc.; Refer to Toolkit #3)</p>	<p><i>Widespread, coordinated engagement- Communication difficult across disciplines</i></p> <p><i>Budget</i></p> <p><i>Clarity and precision in execution- ensure all parties understand and are committed to wellbeing as an institution, and take action as part of this initiative</i></p>
VIII.	<p>Opportunities for Scholarly Activity (potential publications, conference presentations, etc.)</p>	<p><i>Once data is collected, presentation accepted for Drexel University School of Medicine</i></p>
IX.	<p>Markers (project phases, progress checks, schedule, etc.; Refer to NI V Roadmap to 2019 which will be presented at Meeting One)</p>	<p><i>Milestones:</i></p> <p><i>Implementation of Wellbeing Index, Quarterly administration</i></p> <p><i>Opening of Resident Lounge</i></p> <p><i>Monthly “Resident Wellness” presentation/seminar</i></p> <p><i>Refurbishing of Fitness Facility/extension of hours</i></p>

Sections X thru XIII to be completed first quarter 2019 for “Final Proceedings” booklet:

X.	Success Factors	<p><i>The most successful part of our work was.... Increased participation, awareness, and specificity of wellness efforts, and investment in infrastructure to support sustainable wellness culture</i></p> <p><i>We were inspired by.... Making progress on milestones</i></p>
XI.	Barriers	<p><i>The largest barrier encountered was....</i>  <i>Keeping a consistent group moving forward on multiple projects at once. Accountability was difficult to maintain as well as projects would slow down and hit barriers at different points across the initiative, many times out of the control of the Steering Committee’s hands</i></p> <p><i>We worked to overcome this by.... Using several smaller, focused meetings rather than Steering Committee meetings which often ended up with different constituents each time, resulting in repetition of past meeting information and competing priorities/agendas</i></p>
XII.	Lessons Learned	<p><i>The single most important piece of advice to provide another team embarking on a similar initiative would be.... Broad, hospital wide initiatives are great for the culture, but information still must be delivered specifically, curated towards intended targets. Ensure leadership is committed and lends significance, finance, and importance to the efforts</i></p>
XIII.	Expectations Versus Results	<p><i>On a scale of 1 to 10 (with “1” meaning nothing and “10” meaning everything), how much of what you set out to do was your team able to accomplish?</i></p> <p><i>1 2 3 4 5 6 7 8 9 10</i></p>
XIV.	Sustainability and Next Steps	<p><i>What does your CEO need to know to help keep your work sustainable?</i></p> <p><i>Employee health and wellbeing is an ongoing process, and each employee must feel that their individual needs are being addressed, in an earnest and honest manner</i></p>

## INTRODUCTION: Background

### 2017, Spring:

- Multidisciplinary training (2.5 days) on Patient Safety & QI/PI sponsored by Ochsner GME & Quality, & facilitated by the Institute for Healthcare Improvement (IHI)
- >100 attendees: physicians, nurses, residents, fellows, medical students, & allied health
- GME well-being; 1 of 11 PDSA projects chartered & prioritized by program
- Assess well-being, resilience, and supportive resource awareness of residents: **40% residents unaware of existing supportive resources**

### 2017, Summer to Fall:

- Ochsner Health System initiated a Wellness Task Force for physicians & mid-level providers
- Deployed Maslach Burnout Inventory (MBI)
- Assembled focused listening groups, **but excluded resident/fellows from project scope**
- Ochsner GME established team to assess and improve resident well-being across system

### 2018:

- Deployed Maslach Burnout Inventory (MBI) to residents and fellows
- Scores suggested some residents may be "at-risk"**
- Existing well-being screening was not effective in identifying "at-risk" residents**
- Conducted resident forums to assess & prioritize potential strategies

## Aim/Purpose/Objectives

*Improve the condition of resident well-being at Ochsner through the enhancement of wellness infrastructure, its accessibility, and awareness.*

## METHODS: Interventions/Changes

### Subjects: Selection, Recruitment

- All Residents sponsored by OCF requested to participate
- MBI Survey: Anonymous survey link to MBI site
- Awareness Survey: Survey Monkey link

### Interventions/Changes:

- Revised resident on-boarding to include both available resources and where to reference on Intranet if needed; deployed for AY18-19 class
- Added priority link on the resident's RMS home page with the wellness information
- Conduct DIO/AVP rounding in resident areas
- Conduct resident well-being forums & assess proposed strategies
- Improve mechanism for dissemination of existing wellness resources to residents
- Established institutional Provider Wellness Office

## Interventions: Continued

### Planned Actions:

- Integrate residents into Ochsner-employed physician wellness initiatives
- Create best-practice database and share between programs
- Conduct initial cross-program engagement "mixer"
- Deploy a 6-month check of new residents by cross-specialty well-being mentor/liason
- Inventory resident hobbies/interests and share between residents
- Revise the resident well-being screening
- Facilitate a comprehensive program of informal engagement opportunities across residency programs
- Assign residents to social "krewes", similar to the "best practice" societies established for the University of Queensland medical students at the Ochsner Clinical School
- Expand mentoring/liason programs across, not within, programs
- Develop a patient/workload management simulation course
- Evaluate the use of professional "coaching" for early intervention when the stigma of engaging medical professionals exists as a barrier for self-help
- Promote removal/revision of psychological history disclosure in medical license applications

## METHODS: Measures/Metrics

**Measure #1: Resident awareness of supportive resources (%)**

**Measure #2: Maslach Burnout Inventory (MBI) Measures**

- 2A: Emotional Exhaustion Score ( $\bar{x}$ ); variance to Ochsner-employed physician MBI
- 2B: Depersonalization Score ( $\bar{x}$ ); variance to Ochsner-employed physician MBI
- 2C: Personal Accomplishment Score ( $\bar{x}$ ); variance to Ochsner-employed physician MBI

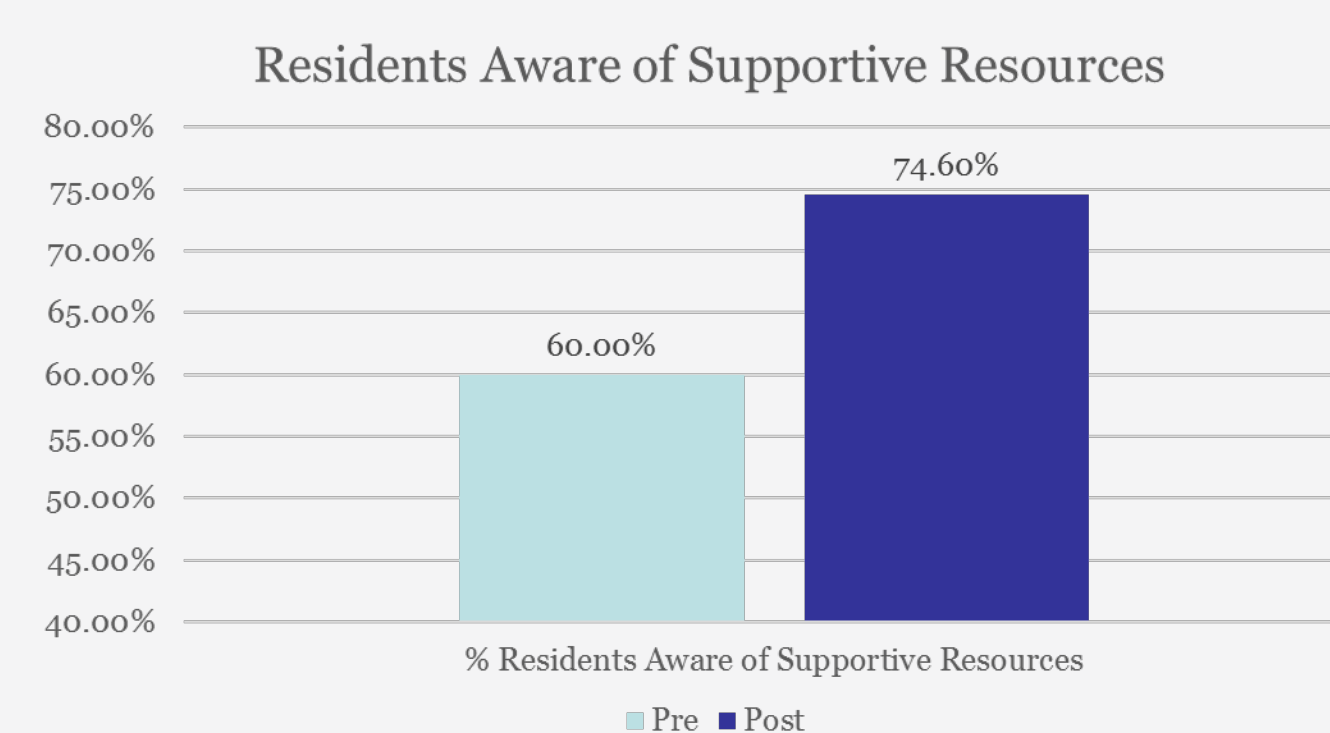
**Measure #3: Respondents below "burnout"/at-risk threshold (%)**

**Measure #4: Programs with formal wellness plan (%)**

**Measure #5: Residents in programs with formal wellness plan (%)**

## RESULTS

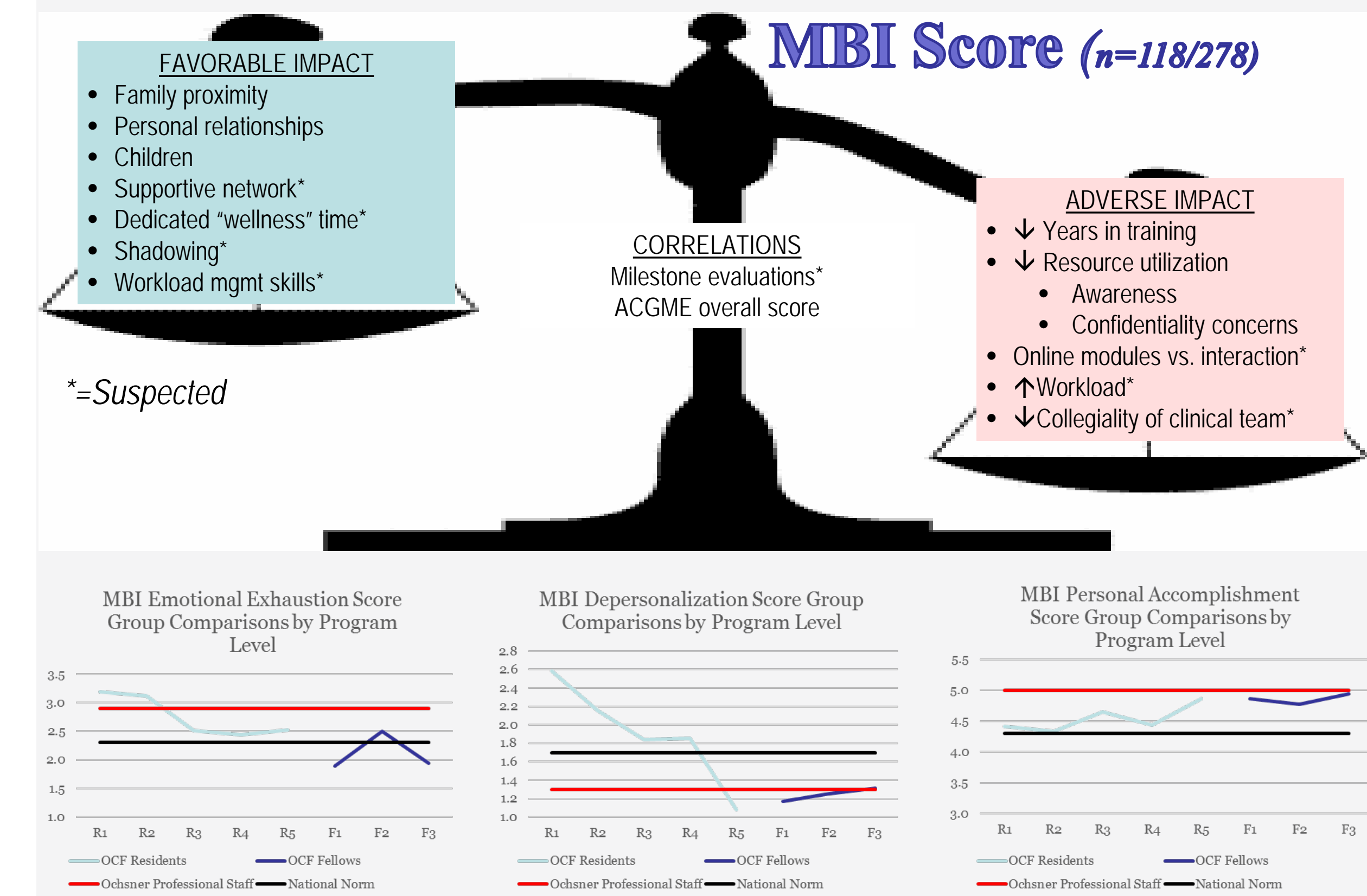
Objective:  $\uparrow$ % of residents aware of supportive resources by 50%. ( $n=63/278$ )



\*Special note: Two (2) GME participant "saves" occurred after their activation of resources during the project.

- Enhanced new resident orientation
- Added wellness resource links on RMS home page
- Added wellness to weekly DIO huddle agenda

## RESULTS: Continued



## Discussion, Barriers & Strategies

### Key Findings

- OCF resident scores on the MBI correlate directly to the tenure of resident experience
- OCF resident scores on the MBI are worse than the national peer norms for Emotional Exhaustion and Depersonalization early in tenure. Resident scores are better than national norms for Personal Accomplishment for all levels.
- OCF resident scores are worse than OHS professional staff early in tenure, but generally match scores later in experience
- OHS professional staff scores are worse than the national peer norms for Emotional Exhaustion and Depersonalization, but not Personal Accomplishment.
- Certain demographic characteristics of residents correlated with adverse scores, including long proximity to family and lack of a local support system.
- Interventions to promote wellness resources improved resident awareness of those resources

### Limitations

- MBI Survey response rate was only 48%, and the awareness survey only 23%.
- Low resident participation in initiative, including focus groups
- Follow-up MBI campaign pending until key interventions deployed

### Next Steps and Sustainability

- Complete deployment of interventions in AY2019-2020 class
- Repeat MBI campaign to determine effectiveness of interventions

## Project Management Plan

Begin completing this Project Management Plan at Meeting One and complete it with your team following Meeting One, i.e., by November 2017. Teams will have the opportunity to review/revise their Project Management Plans throughout the 18-month Initiative at each of the on-site meetings. The collective data from all of the teams' completed project management plans will be invaluable as we share and learn from this collaborative experience.

Team: Ochsner Health System

Project Title: Innovating Resident Well-being

I.	Vision Statement (markers of success by March 2019; Refer to Toolkit #5)	Improve the condition of resident well-being at Ochsner through the enhancement of wellness infrastructure, its accessibility, and awareness. Measure success through improvements in MBI measures.
II.	Team Objectives (‘needs statement,’ project requirements, project assumptions, stakeholders, etc.)	<ul style="list-style-type: none"> <li>• Complete an MBI baseline and post-intervention survey</li> <li>• Implement wellness and awareness strategies</li> <li>• Complete a follow-up survey on resident awareness of wellness resources</li> <li>• Complete inventory of all existing wellness strategies in programs</li> </ul>
III.	Team Members & Accountability (list of team members from Toolkit #6 and who is accountable for what)	Stuart Hart, MD – Team Leader; recruit residents Ron Amedee, MD – Engage PDs; recruit residents Shelly Monks – Resources and executive sponsor William “Tex” Walker – Project Manager Residents – develop strategies; provide consultation
IV.	Necessary Resources (staff, finances, etc.)	<ul style="list-style-type: none"> <li>• Funding for MBI survey</li> <li>• Resident participation on teams</li> <li>• Protected time to work on project</li> <li>• Possible funding for interventions</li> </ul>
V.	Measurement/Data Collection Plan	<ul style="list-style-type: none"> <li>• Maslach Burnout Inventory – Pre &amp; Post Campaign</li> <li>• Survey Monkey – Resident awareness of wellness resources</li> </ul>

VI.	Stakeholder Communication Plan (may be helpful to draft a flow chart of team members & senior management; Refer to Toolkits #2 and #4)	
VII.	Potential Challenges (engagement, budget, time, skills gaps, etc.; Refer to Toolkit #3)	<ul style="list-style-type: none"> <li>• Time to work on project</li> <li>• Resident involvement in project</li> <li>• Funding for potential interventions</li> <li>• Residents fear of anonymity in survey responses</li> </ul>
VIII.	Opportunities for Scholarly Activity (potential publications, conference presentations, etc.)	Change in MBI dimension categories
IX.	Markers (project phases, progress checks, schedule, etc.; Refer to <i>NI V Roadmap to 2019</i> which will be presented at Meeting One)	<ul style="list-style-type: none"> <li>• April 18, 2018 - meeting 2</li> <li>• August 2018 – complete resident focus groups</li> <li>• October 18, 2018 - meeting 3 (begin initiation of action plans)</li> <li>• Jan-Feb 2019 – Follow-up MBI</li> <li>• March 19 meeting 4</li> </ul>

Sections X thru XIII to be completed first quarter 2019 for “Final Proceedings” booklet:

X.	Success Factors	<p><i>The most successful part of our work was...</i></p> <p>Moving up the timeline for resident integration into the institution’s provider wellness initiative and new Office of Provider Wellness.</p> <p><i>We were inspired by...</i></p> <p>Resident sincerity and openness during focus groups</p>
XI.	Barriers	<p><i>The largest barrier encountered was...</i></p> <p>lack of resident interest/time in participating in the project.</p> <p><i>We worked to overcome this by...</i></p> <p>continuing to recruit participants, and modified focus group times to encourage participation</p>

XII.	Lessons Learned	<p><i>The single most important piece of advice to provide another team embarking on a similar initiative would be....</i></p> <p>Ensure protected time from other operational commitments to sustain project momentum</p>
XIII.	Expectations Versus Results	<p><i>On a scale of 1 to 10 (with "1" meaning nothing and "10" meaning everything), how much of what you set out to do was your team able to accomplish? <b>Six</b></i></p> <p><i>1 2 3 4 5 6 7 8 9 10</i></p>
XIV.	Sustainability and Next Steps	<p><i>What does your CEO need to know to help keep your work sustainable?</i></p> <p>The importance of maintaining resident well-being in their provision of quality of care to the hospital's patients.</p>



# Even Better Yet...Refining Resident-Led Initiatives to Successfully Mitigate Burnout

Emily Gorman DO, Charlotte Venious DO, Stephen Auciello MD, Laurie Hommema MD, Emily Stansbury, Anand Gupta MBBS, MPH



NI VI Meeting #4 Tucson, AZ March 2019



## INTRODUCTION: Background

In response to high levels of resident burnout in 2014-2015, Riverside Family Medicine (FM) implemented a wellness curriculum targeting the 3 components of burnout. This curriculum focused on faculty-led improvement of the clinical learning environment and reduced dedicated didactic time to allow for resident-led wellness initiatives and activities.

This curriculum successfully reduced FM resident burnout over the last 4 years, while burnout across medical education remained the same. This year, a wellness committee was formed due to increased resident engagement, which focused on improving the wellness curriculum.

## Aim/Purpose/Objectives

Continue to decrease burnout among the 18 family medicine residents by refining existing wellness initiatives as measured by the modified Maslach Burnout Index (mMBI).

## METHODS: Measures

From 2012-2019, a resident well-being survey was distributed annually to all residents at our institution. This has included an mMBI, as well as questions addressing communication and working environment. Results from 2015-2019 were analyzed to track changes in burnout scores.

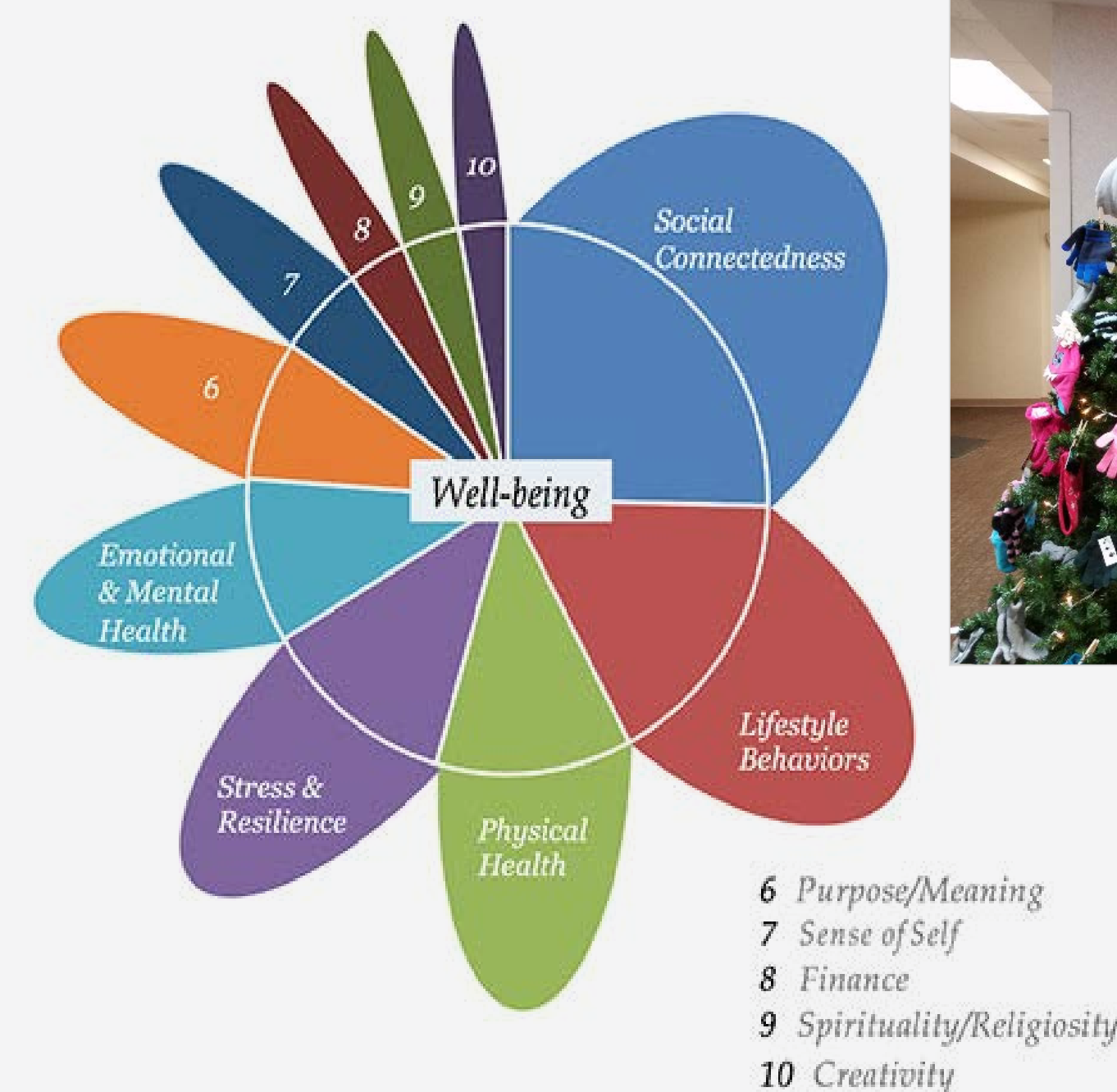
### IRB Submission

Resident well-being survey: mMBI, attitudes toward communication and burnout recognition/support, and perception of wellness initiatives/ideas for future interventions

## METHODS: Interventions

### Interventions

- Continue protected wellness time of one hour per block in lieu of didactics, 4 protected afternoons for scheduled events each year, as well as “Doctor Days”
- Intentional selection of events based on 10 domains of well-being as outlined by Stanford's Catherine Heaney, PhD.<sup>1</sup>
- More advanced planning of wellness events driven by wellness committee
- Integration of office staff and faculty into events
- Refining “Doctor Day” policy – moving from a set schedule to a more flexible and individualized model



\*We added an 11<sup>th</sup> domain of giving  
Reference: <https://bewell.stanford.edu/domains-well-being/>

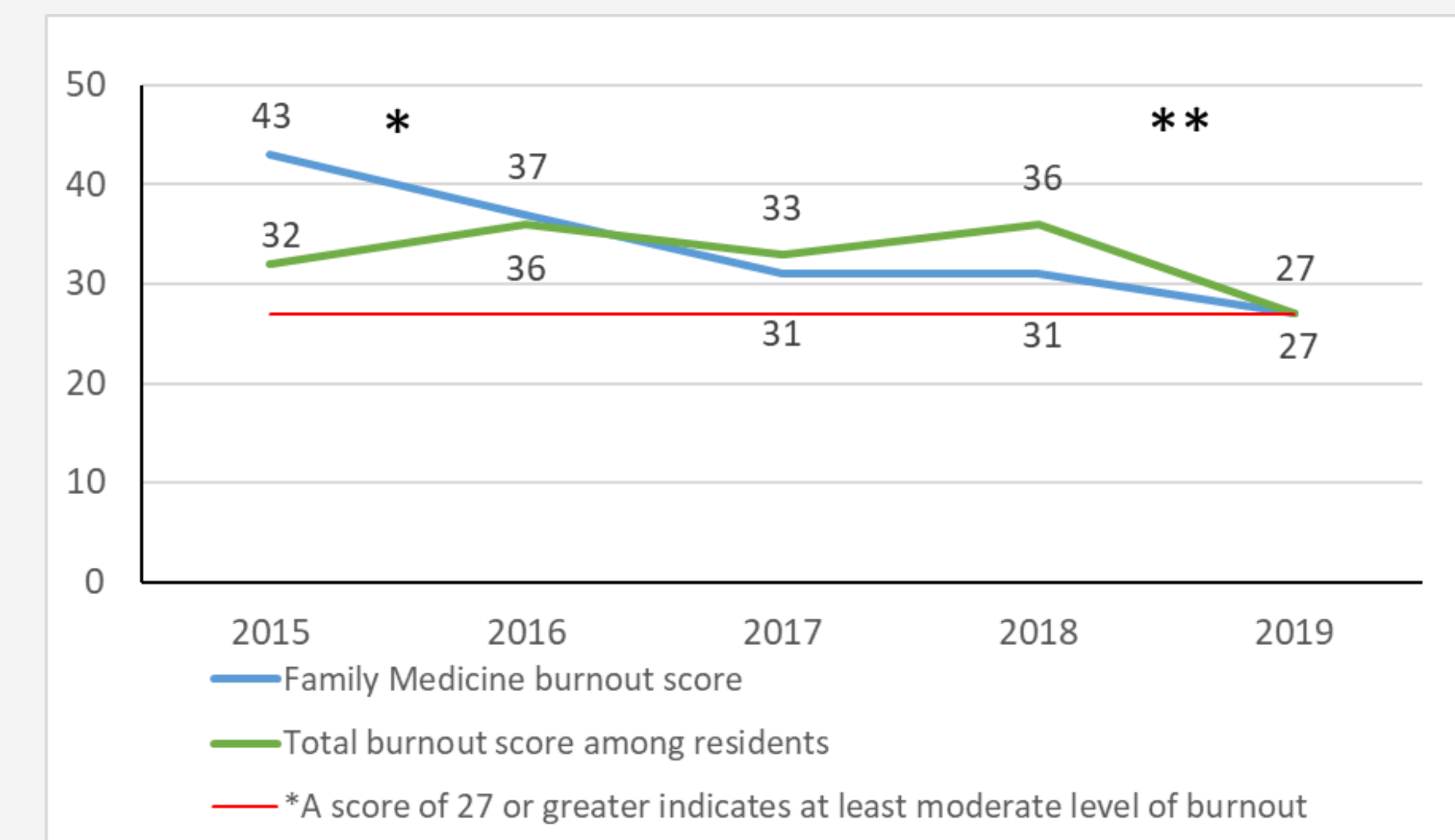


### Examples of events

- A ‘giving tree’ was set up during the holiday season for residents to contribute to patients
- Office-wide volunteer and team-building events
- Ice skating with faculty, students and residents
- Residents participated in self-reflection exercises

## RESULTS: Continued

### Mean mMBI – FM versus all residents, 2015-2019



\*FM wellness curriculum implemented between 2015-16  
\*\*Medical Education wellness framework implemented between 2018-2019

## Discussion: Barriers & Strategies

### Key Findings

- Refinement of the FM wellness curriculum resulted in continued reduction of resident burnout
- Success of the FM model wellness curriculum was lateralized to other programs within medical education at Riverside

### Limitations

- Once a year survey, anonymous
- Many residents still experience burnout

### Next Steps and Sustainability

- Establish schedule of successful events into a structure for future academic years
- Utilize wellness committee for continuous improvement
- Move to a more “real time” measurement tool

## INTRODUCTION: Background

Wellness in medical education has been a focus at Riverside Methodist Hospital (RMH) for the last several years as the modified Maslach Burnout Inventory (mMBI) revealed moderate levels of burnout in all residency programs. Over the last year, the Internal Medicine (IM), Preliminary Medicine (PM), and Transitional Year (TY) residency programs have embraced a comprehensive focus on wellness and have implemented multiple resident-led interventions.

Program	Program Director	Residents	# of residents per program
Internal Medicine	Thomas Boes, MD	Nick Mizenko, DO (chief resident '17-'18), Emma Gano, DO & Andrew MacMillan, DO (chief residents '18-'19), Deep Patel, DO, Alex Ramaniuk, DO, Geno Kordic, MD	46
PM/TY	Brian Zeno, MD	Stephanie Green, DO ('17-'18), David Arnold, DO ('18-'19)	10/12

\*Table: all NI VI IM/PM/TY resident and faculty representatives

## Aim/Purpose/Objectives

Decrease burnout among IM and PM/TY residents as demonstrated by improved mMBI scores by implementing resident-driven interventions.

## METHODS: Measures/Metrics

RMH has been tracking resident burnout via an IRB exempt annual survey (anonymous, voluntary), consisting of an mMBI, communication, and peer support questions.

Internal Medicine implemented several curricular changes and wellness interventions to have a more comprehensive focus on resident well-being over the last two years.

Of note, the PM/TY programs usually have the highest level burnout scores of any residency program at RMH. Previous efforts have focused on including them within IM and medical education wellness interventions. For academic year '18-'19, we implemented a monthly PM/TY reflective group.

## METHODS: Interventions/Changes

### IM and PM/TY interventions:

- Point-based resident incentive system to reward wellness and scholarly activity
- Institution of a fatigue mitigation/transition of care policy, with travel reimbursement for residents too fatigued to drive home after 24 hour/night shifts
- Resiliency rounds after ICU rotation to help decompress and process thoughts/struggles
- Monthly board game nights and social activities
- Shifting scheduled didactic time to wellness

### IM targeted interventions:

- "4+2" curriculum to make calls more predictable and separate inpatient/outpatient responsibilities
- Quarterly wellness days to attend doctor appointments or other personal needs

### PM/TY targeted interventions:

- Monthly reflective lunch group focusing on group identity and unique challenges of PM and TY residents

## RESULTS: Continued

### Comments from residents:

"Make sure we treat each other well, feed us from time to time, and have our backs if we need to battle the system that delays and frustrates our care for patients."

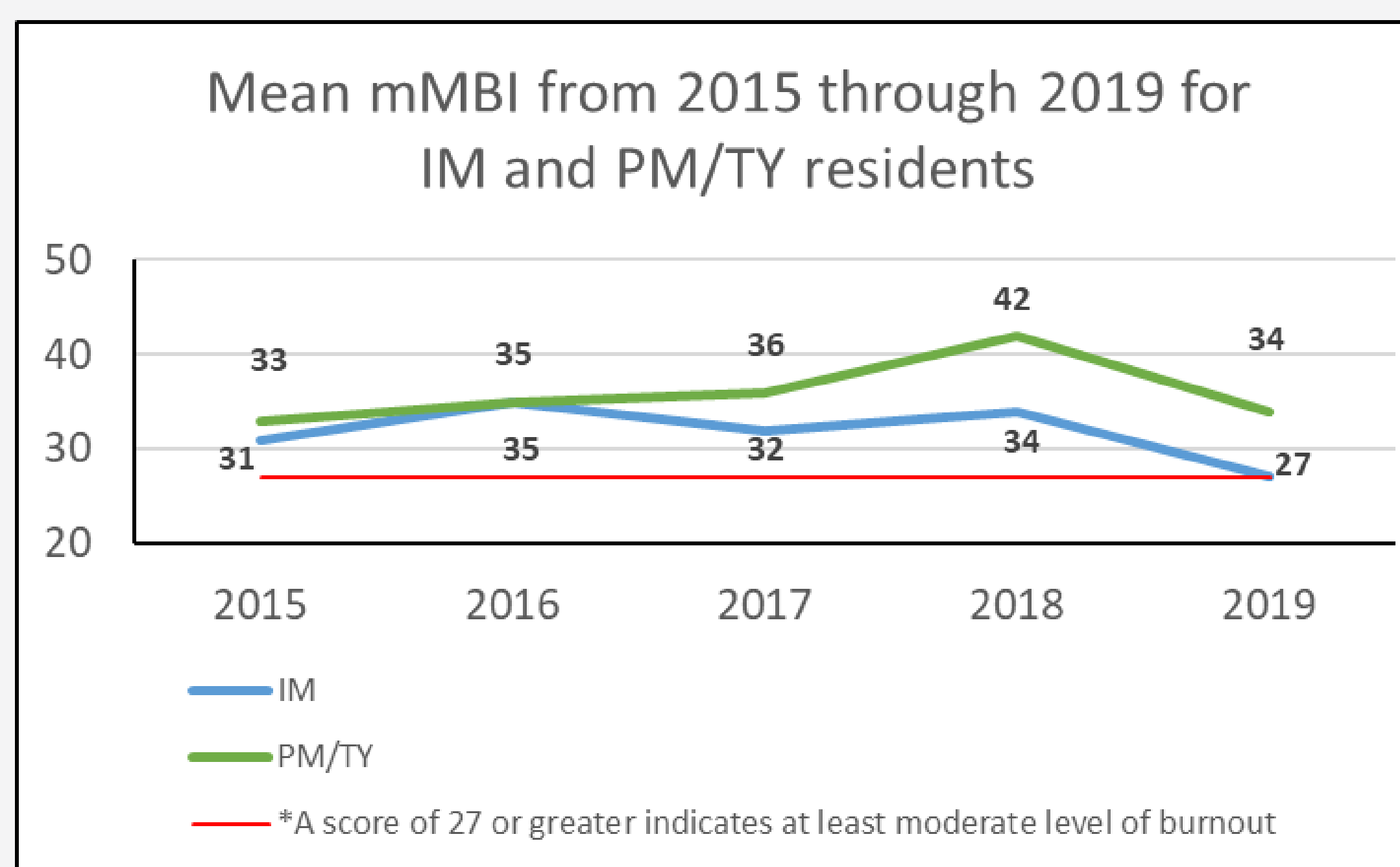
"I feel that our half day wellness days are very helpful in reducing burnout, and giving the residents the feeling of 'a light at the end of the tunnel'"

"Med Ed should continue to do what it does now to make the workplace a little more like home, to feed us from time to time and host events for us to do outside the hospital."

"Continued focus on wellness and lasting interventions adjusted to each year's needs."

I think the most important aspect of maintaining a culture of wellness is ensuring that senior residents and attendings recognize when interns or those below them are overwhelmed and then attempt to help. Even if the senior can only help a little it is encouraging to have the support. I think that the residency program fosters this culture 99% of the time.

## RESULTS



## DISCUSSION: Barriers & Strategies

### Key Findings

- A comprehensive support of wellness within a residency program with multiple targeted wellness interventions led to decreased mean mMBI scores.
- Involvement of IM chief residents in wellness was seen as a key component of successful interventions.
- Giving PM/TY residents a group identity may decrease burnout, but a lack of inclusion in interventions of other programs may increase burnout as well

### Limitations

- Many residents are now identifying systemic drivers of burnout, which are much more challenging to change
- Variability of resident and faculty buy-in
- Financial limitations

### Next Steps and Sustainability

- Identifying which interventions made the most impact on wellness, and ensuring sustainability
- Better engagement of faculty in wellness offerings

## INTRODUCTION: Background

Wellness in medical education has been a focus at Riverside Methodist Hospital (RMH) for the last several years, but burnout levels worsened from 2012 through 2016 despite initial interventions. Communication breakdowns and perception of peer/faculty support were significantly correlated with burnout. In 2016, a more focused and comprehensive wellness curriculum within the Family Medicine (FM) program brought significant reductions in burnout, while other programs worsened or stayed the same.

With this National Initiative, we lateralized the principles of the FM wellness curriculum across medical education at Riverside. This framework was based on principles of faculty-led change agents, resident champions who led program-level interventions, and acting on resident feedback to reduce drivers of burnout.

## Aim/Purpose/Objectives

- Create a wellness framework across medical education
- Support targeted wellness interventions and resident/faculty champions within each residency program
- Reduce burnout among residents at RMH
- Enhance our culture of wellness within RMH medical education

## METHODS: Interventions/Changes

- Creation of a wellness framework with resident and faculty representatives across medical education and within each program.
- Consistent use of interdisciplinary resident time to gather feedback and support a culture of well-being
- Act on resident suggestions for enhancing well-being (more access to snacks and computers, protected study space)
- Begin to engage residency faculty and teaching physicians in wellness offerings

## METHODS: Measures/Metrics

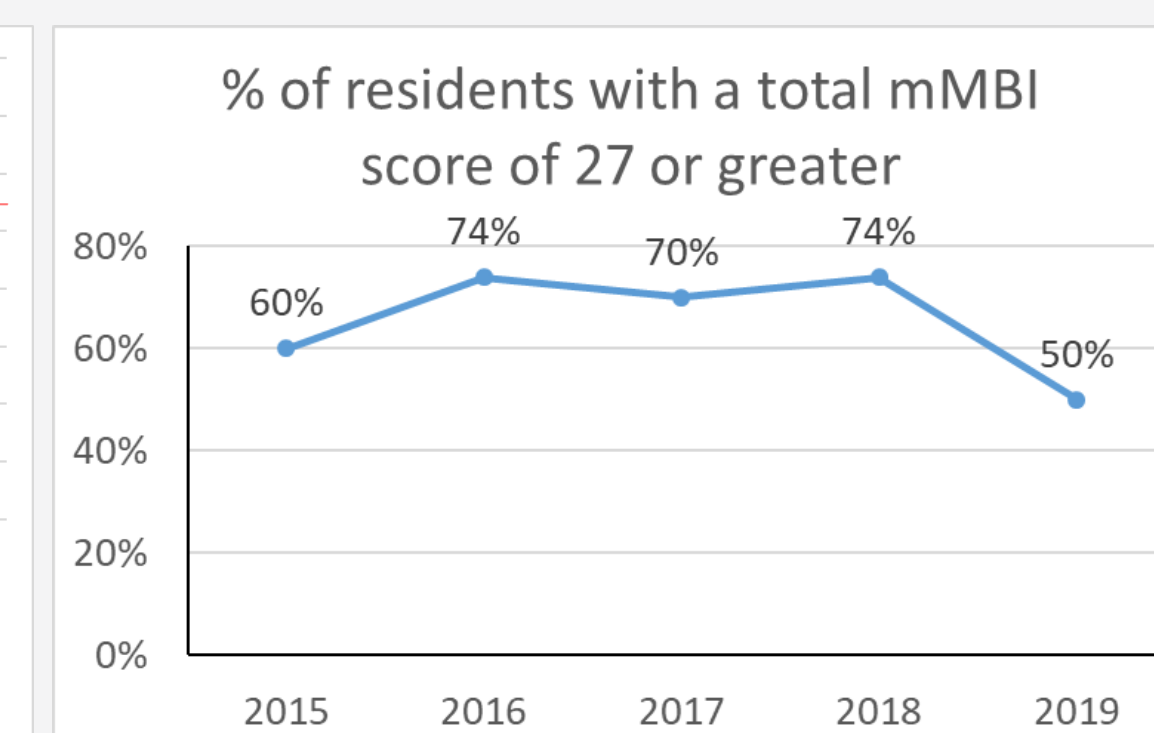
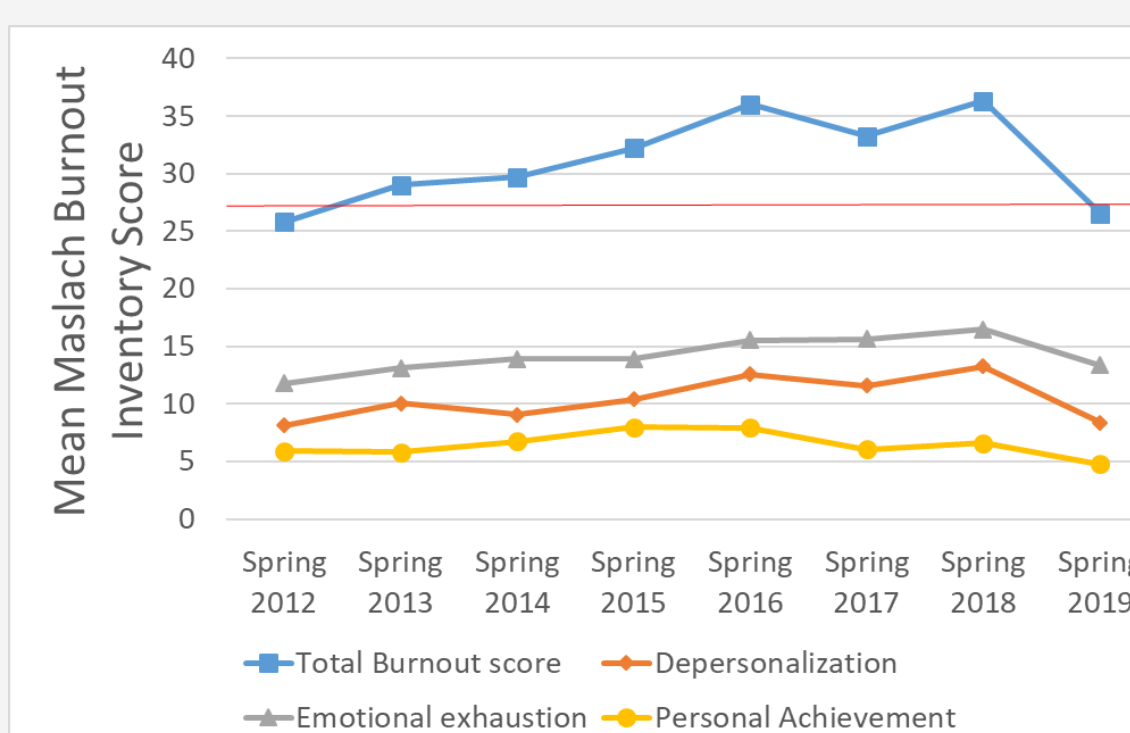
### IRB Approval

- Yearly IRB-approved Modified Maslach Burnout Inventory (mMBI) index, attitudes toward communication and burnout recognition/support, and perception of wellness initiatives/ideas for future interventions

### Markers of success:

- Creation of medical education wellness framework
- Decreased mean burnout scores (via mMBI)
- Enhanced perception of “culture of wellness” among residents and faculty within medical education
- Improved resident perception of peer/faculty support and burnout recognition
- Sustainable resident-owned interventions

## RESULTS



\*A score of 27 or greater indicates at least moderate level of burnout



Newly constructed Medical Education Conference Center, including an additional computer lab

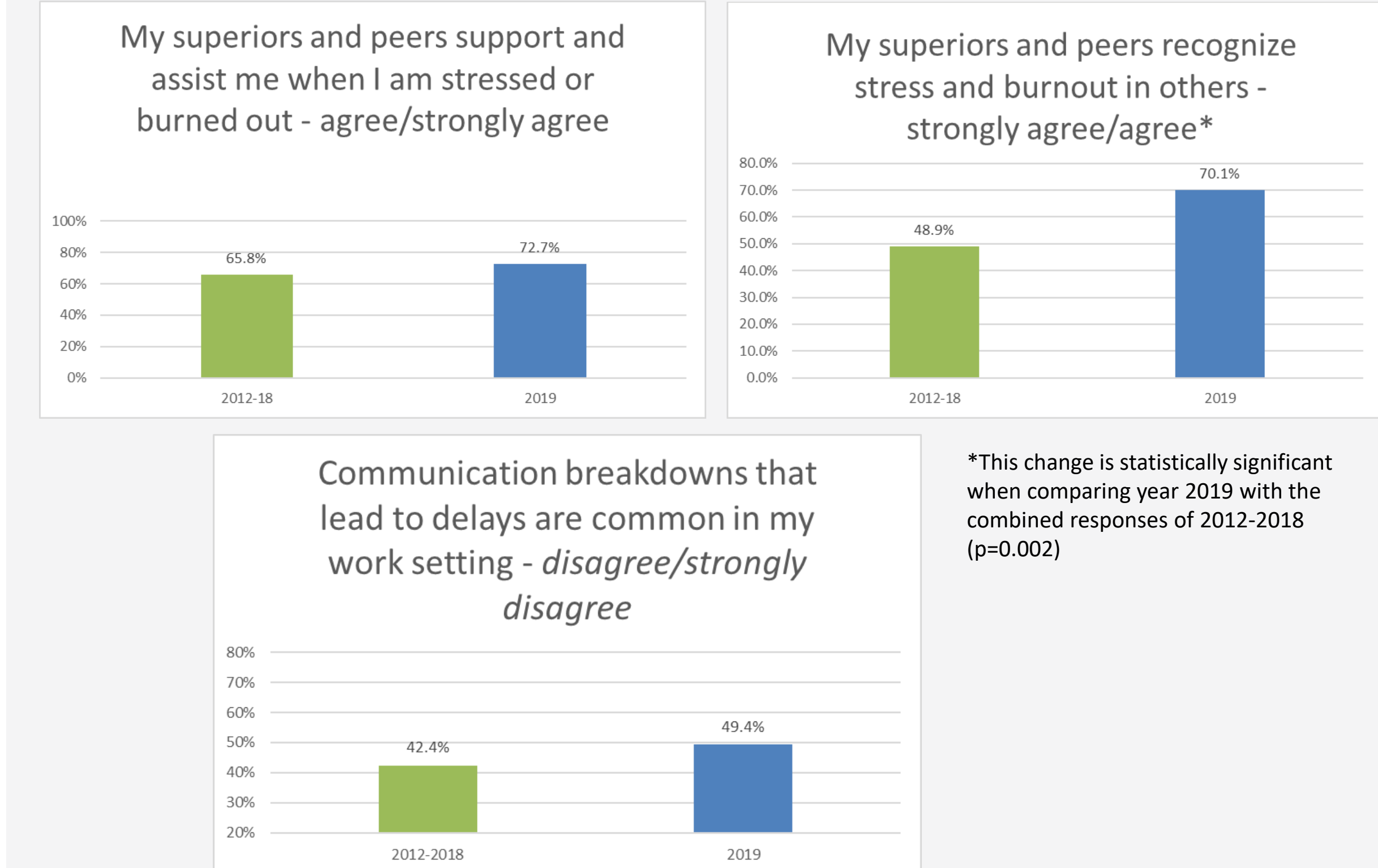


Annual Medical Education Halloween party



## RESULTS: Continued

### Perception of culture of wellness:



\*This change is statistically significant when comparing year 2019 with the combined responses of 2012-2018 (p=0.002)

## DISCUSSION: Barriers & Strategies

### Key Findings

- A comprehensive wellness framework with faculty support, protected time for wellness, and resident-led interventions can lead to reductions in burnout rates and measurable culture change
- Though initial interventions may not be successful, long-term support of resident wellness can engage and excite residents to be an active part of this change

### Limitations

- **Faculty involvement:** Faculty availability and interest varied by program
- **Systemic workplace factors:** Addressing the work compression and role of residents in a large hospital system
- **Financial constraints**

### Next Steps and Sustainability

- Ensure successful interventions are sustainable
- Better engage faculty in wellness offerings and evaluation
- Help enhance system-level support of wellness programs

## INTRODUCTION: Background

During the medical education wellness efforts at Riverside Methodist Hospital, the OB/GYN residency program was noted to have the highest Modified Maslach Burnout Inventory (mMBI) score among all programs, and residents reported current interventions were not meeting their needs.

These findings prompted a focused intervention within the OB/GYN residency, supported by medical education, and led by faculty and residents within the OB/GYN program.

### References

Dyrbye LN, Satele D, Sloan J, Shanafelt TJ. Ability of the physician well-being index to identify residents in distress. *J Grad Med Ed* 2014;6(1): 78-84.  
West CP, Dyrbye LN, Erwin PJ, Shanafelt TD. Interventions to prevent and reduce physician burnout: a systemic review and meta-analysis. *Lancet* 2016;388(10057):2272-2281.

## Aim/Purpose/Objectives

- Reduce OB/GYN resident burnout and enhance well-being
- Evaluate the effectiveness of targeted program-specific and resident-driven interventions

## METHODS: Measures/Metrics

Riverside Methodist Hospital has been tracking resident burnout via an IRB exempt annual survey (anonymous, voluntary), consisting of an mMBI, communication, and peer support questions.

A pilot sub-study was approved in September 2018 to address high levels of resident burnout among the 19 OB/GYN residents, consisting of multiple targeted interventions based on an initial focus group of residents. A pre-intervention survey was conducted in September 2018 consisting of the Mayo Well-Being (WBI) index and assessment of targeted interventions. A post-intervention survey was completed in January 2019 in conjunction with the annual mMBI survey.

## METHODS: Interventions/Changes

### Intervention #1: Pager-Free Didactics

- Covering attending will carry call pager during didactics in order to allow residents to remain in educational events during protected time

### Intervention #2: Additional resident added to call team

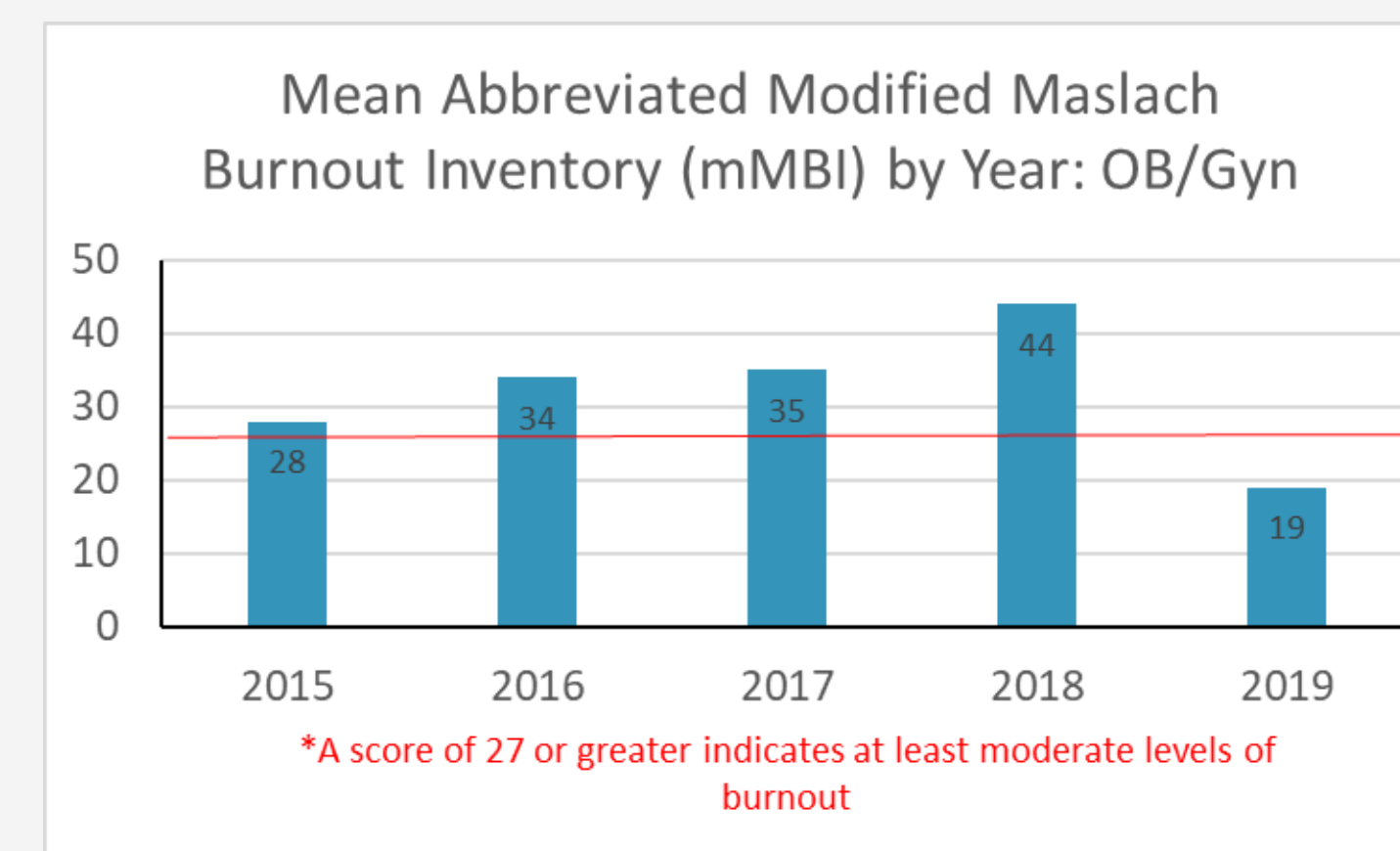
- Call team has traditionally consisted of 2 residents at our institution. A 3<sup>rd</sup> resident was added to the call team in order to manage increasing volume

### Intervention #3: Mentorship Program

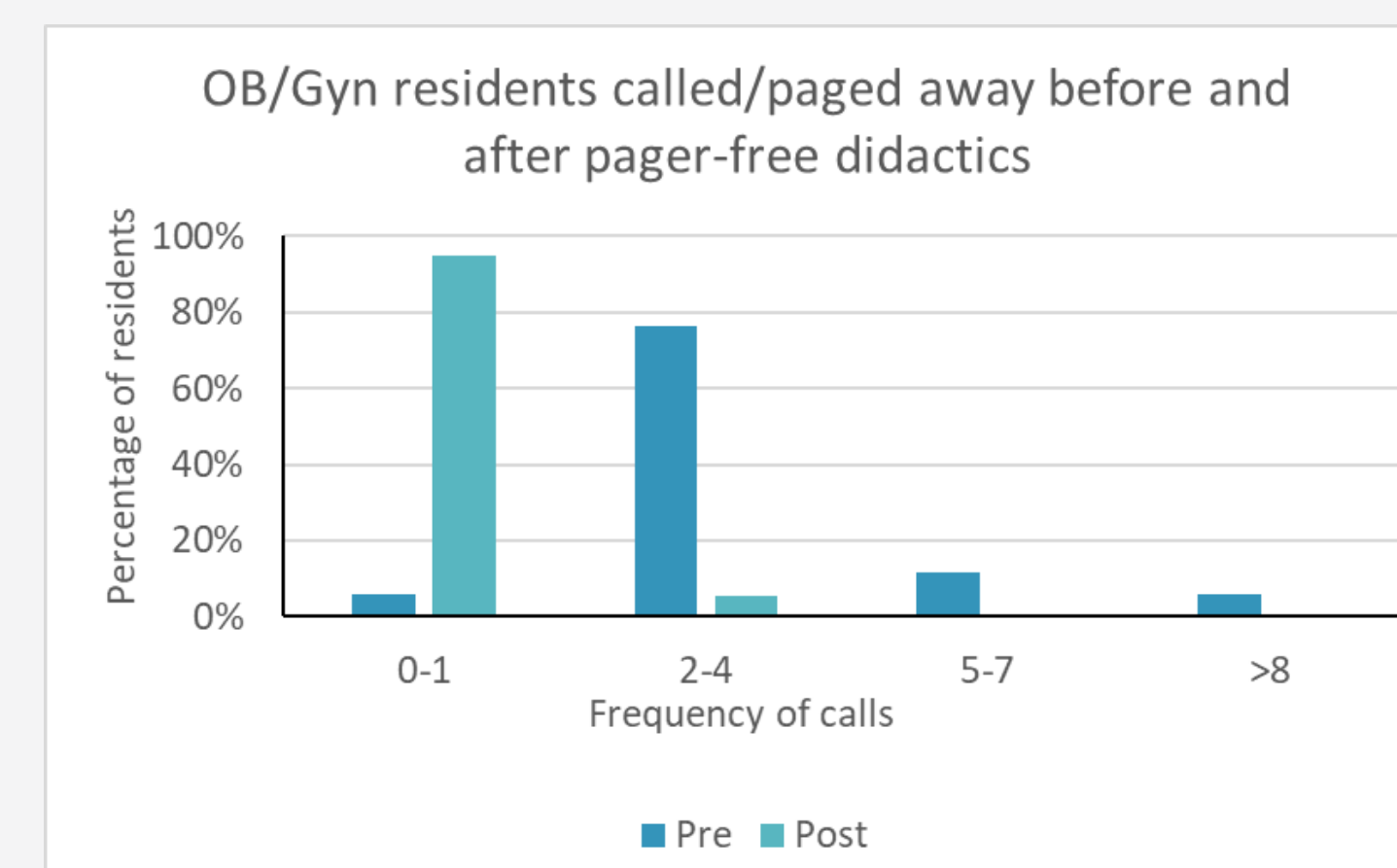
- Formal mentorship program in which residents are paired with attending mentors

## RESULTS

### Primary Objective: Reduce OB/GYN Resident Burnout



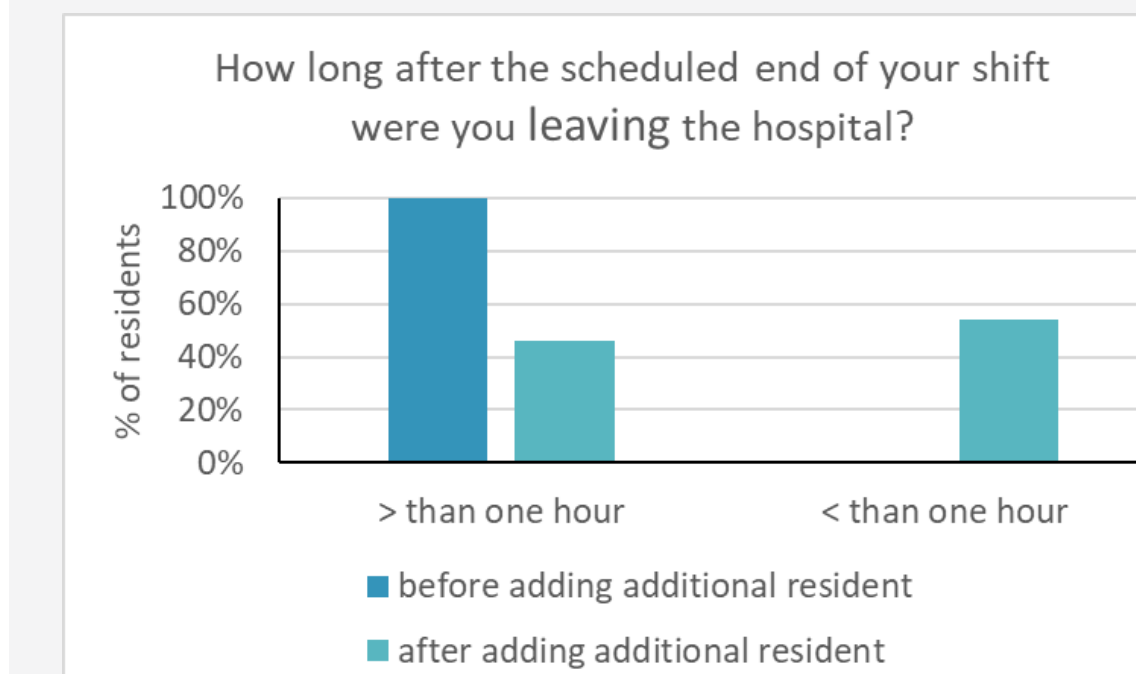
### Intervention #1: Pager-Free Didactics



90% of respondents felt that their learning had been enhanced by pager-free didactics

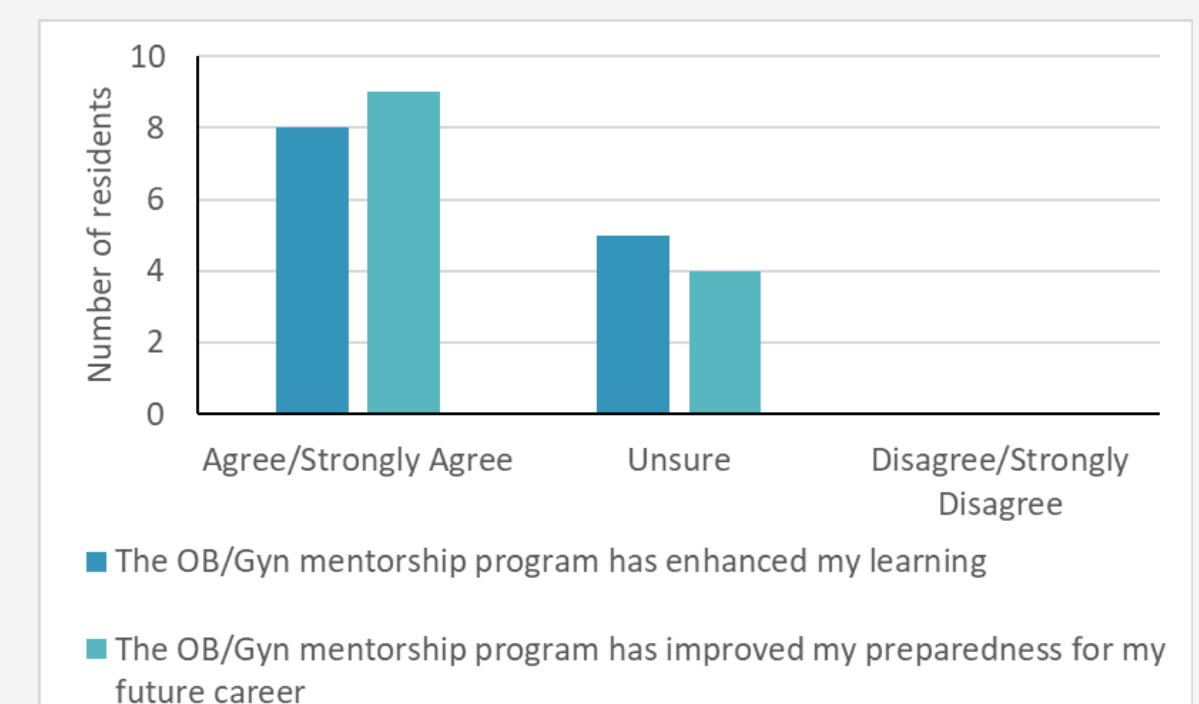
## RESULTS: Continued

### Intervention #2: Additional resident added to call team



- 92% of respondents felt that the quality of patient care had improved after adding an additional resident on call
- The number of residents who stayed >1 hour after the end of their shift decreased from 100% to 46.1% (p=0.005)

### Intervention #3: Mentorship Program



## DISCUSSION: Barriers & Strategies

### Key Findings

- There was a statistically significant decrease in mean mMBI within the OB/Gyn residency program
- Most residents reported the targeted interventions enhanced learning, improved patient care, and assisted with future career preparations
- There was not a significant change in mean overall Mayo WBI, but there was a decrease in residents who felt overwhelmed, despite the post-survey occurring at a more stressful part of the academic year (53% versus 31% of respondents)

### Limitations

- Initial Mayo WBI administered after mentorship and pager-free didactics had already been started
- Focus group revealed some hard truths, and may have resulted in some residents being less truthful in surveys

### Conclusions and Sustainability

- Interventions created and sustained by program faculty and residents, within medical education/organization support, appear to be an effective strategy to decrease burnout
- Sustain interventions and refine based on resident feedback

## Project Management Plan

Begin completing this Project Management Plan at Meeting One and complete it with your team following Meeting One, i.e., by November 2017. Teams will have the opportunity to review/revise their Project Management Plans throughout the 18-month Initiative at each of the on-site meetings. The collective data from all of the teams' completed project management plans will be invaluable as we share and learn from this collaborative experience.

**Team:** Riverside Methodist Hospital – OhioHealth

**Project Title:** Better Me, Better WE

I.	<p>Vision Statement (markers of success by March 2019; Refer to Toolkit #5)</p>	<p>To strengthen our culture of wellness in order to become the place where physicians want to teach, trainees want to learn, and people receive high-quality community-centered care.</p>
II.	<p>Team Objectives (‘needs statement,’ project requirements, project assumptions, stakeholders, etc.)</p>	<ul style="list-style-type: none"> <li>- <b>Mission statement:</b> <i>Deliver a comprehensive and innovative wellness curriculum across medical education targeted to the needs of each residency program.</i></li> <li>- <b>Objectives:</b> <ul style="list-style-type: none"> <li>o Decrease burnout among residents and faculty.</li> <li>o Offer a consistent and transparent wellness framework across medical education, driven by resident leadership and ideas, and supported by faculty.</li> <li>o Support targeted interventions within each residency program.</li> <li>o Enhance awareness of burnout as a system/environmental issue, a workplace hazard</li> <li>o Enhance our culture of wellness within medical education where impediments of wellness are recognized and faculty/residents work to remove the impediments.</li> </ul> </li> <li>- <b>Project requirements:</b> <ul style="list-style-type: none"> <li>o Meaningful participation from residents and faculty across medical education</li> <li>o Support staff</li> <li>o Measurement tools, ability to analyze data for meaningful change</li> <li>o Connection with system resources and concurrent projects</li> </ul> </li> <li>- <b>Project assumptions:</b></li> </ul>

		<ul style="list-style-type: none"> <li>○ Physician burnout is a prevalent issue in medical education, and contributes to errors, worsened patient care, and poor physician satisfaction.</li> <li>○ Our residents experience burnout at rates similar to other residency programs across the United States (supported by our data).</li> <li>○ Residents want to participate in wellness programs that meet their needs.</li> <li>○ Residents best understand the drivers of burnout within their program and across medical education, and most intervention ideas should come from them.</li> </ul> <p>- <b>Stakeholders:</b></p> <ul style="list-style-type: none"> <li>○ Graduate Medical Education Dept.</li> <li>○ Program Directors across all Riverside residency programs</li> <li>○ Resident physicians</li> </ul> <p>Patients receiving care from our residents</p>
<p>III.</p>	<p>Team Members &amp; Accountability (list of team members from Toolkit #6 and who is accountable for what)</p>	<ul style="list-style-type: none"> <li>- Medical education team:             <ul style="list-style-type: none"> <li>○ Team Lead: Steve Auciello MD</li> <li>○ Core Team Members: Sara Sukalich MD (DME, DIO), Laurie Hommema MD (PD FM, Resilience Committee), Emily Stansbury (project manager)</li> <li>○ Medical education support team (Kelly Skillman, Julie Dill)</li> <li>○ Hospital leadership (Tom Harmon MD, VPMA, Sara Sukalich MD, Brian Zeno MD (Chair, GMEC)</li> <li>○ System wellness support (Kristi McClure (project manager, quality and safety), Kellie Rath MD, Laurie Hommema MD)</li> <li>○ Resident GMEC shared governance</li> </ul> </li> <li>- 1 Faculty and 1-2 residents within each program, leading targeted residency interventions.             <ul style="list-style-type: none"> <li>○ IM: Tom Boes MD (PD), Nick Mizenko DO (chief resident '17-'18), Emma Gano (chief resident '18-'19)</li> <li>○ OB/Gyn: Karen D'Angelo MD, residents</li> <li>○ FM: Steve Auciello MD, residents</li> <li>○ Surgery: Nirav Rana MD, residents</li> </ul> </li> </ul>

		<ul style="list-style-type: none"> <li>○ PM/TY: Brian Zeno MD (PD), residents</li> </ul>
IV.	Necessary Resources (staff, finances, etc.)	<ul style="list-style-type: none"> <li>- Project management/administrative support:</li> <li>- Faculty support and buy-in</li> <li>- Time (residents, faculty)</li> <li>- Protected Didactic Time</li> <li>- Money               <ul style="list-style-type: none"> <li>○ Foundation support</li> <li>○ Budgeted into medical education operations</li> <li>○ Administrative support (medical education renovation)</li> </ul> </li> <li>- Biostatistics support</li> </ul>
V.	Measurement/Data Collection Plan	<ul style="list-style-type: none"> <li>- Modify existing IRB exempt survey (modified MBI, support/recognition, participation in interventions)               <ul style="list-style-type: none"> <li>○ Distribute survey in Feb 2018, repeat in Jan/Feb 2019</li> <li>○ Analyze trends from 2018 to 2019, as well as comparison to previous years</li> </ul> </li> <li>- Trend of In-house survey/ACGME (service versus education, fear of retaliation/trust)</li> <li>- Qualitative data with formal questions (6 month reviews, exit interviews, program-specific questions)</li> <li>- Qualitative data collection at interdisciplinary conferences (intervention ideas, what is working, what we can do better)</li> <li>- Pilot study with OB/Gyn residency due to high mean mMBI on baseline data Feb 2018 with focus group, Mayo WBI.</li> <li>- Pilot Mayo WBI across all programs Jan 2019, compare to mMBI</li> </ul>
VI.	Stakeholder Communication Plan (may be helpful to draft a flow chart of team members & senior management; Refer to Toolkits #2 and #4)	<ul style="list-style-type: none"> <li>- Up to administration               <ul style="list-style-type: none"> <li>○ Dr. Harmon main conduit to c-suite, will get through GMEC</li> <li>○ RET (Riverside Exec Team), core team to report periodically to team (initial, before CLER visit in Spring, PRN)</li> </ul> </li> <li>- From residents to faculty/leadership               <ul style="list-style-type: none"> <li>○ Shared governance, reports GMEC, standing item</li> </ul> </li> </ul>

		<ul style="list-style-type: none"> <li>○ Interdisciplinary conferences</li> <li>- Individual residency interventions             <ul style="list-style-type: none"> <li>○ Resident reports to faculty, and team lead to periodically reach out and help as needed</li> <li>○ Resident business meetings (standing item)</li> <li>○ Possible individual meetings with dinner</li> </ul> </li> <li>- Team meetings/calls</li> </ul>
VII.	Potential Challenges (engagement, budget, time, skills gaps, etc.; Refer to Toolkit #3)	<ul style="list-style-type: none"> <li>- Time</li> <li>- Engagement (faculty, residents)</li> <li>- Work compression, how do we take things</li> <li>- Protected time</li> </ul>
VIII.	Opportunities for Scholarly Activity (potential publications, conference presentations, etc.)	<ul style="list-style-type: none"> <li>- Survey data pre-post publications, presentations             <ul style="list-style-type: none"> <li>○ Academic Medicine, JGME</li> </ul> </li> <li>- Protected time for medical writing</li> </ul>
IX.	Markers (project phases, progress checks, schedule, etc.; Refer to <i>NI V Roadmap to 2019</i> which will be presented at Meeting One)	<ul style="list-style-type: none"> <li>- <u>Timeline:</u> <ul style="list-style-type: none"> <li>○ <b>Meeting 1 (Oct 2017)</b></li> <li>○ November 2017:                 <ul style="list-style-type: none"> <li>▪ Interdisciplinary town hall meeting (gather data, brainstorm, make it fun)</li> <li>▪ Gather current wellness initiatives within each residency program, and ideas for interventions.</li> <li>▪ Clarify and define current and planned GMEC-wide interventions</li> <li>▪ Direction of crisis management team</li> <li>▪ Subjective assessment of current state of wellness from residents.</li> </ul> </li> <li>○ January 2018:                 <ul style="list-style-type: none"> <li>▪ Build medical education framework for wellness</li> <li>▪ Define planned interventions across medical education and within each program.</li> </ul> </li> <li>○ February 2018:</li> </ul> </li> </ul>



		<ul style="list-style-type: none"> <li> <ul style="list-style-type: none"> <li>▪ Team lead to meet with each residency team to discuss planned intervention for AY 2018-2019.</li> <li>▪ Distribute wellness survey (baseline data), begin to analyze data.</li> <li>▪ Finalize Riverside wellness framework</li> </ul> </li> <li>○ March 2018:           <ul style="list-style-type: none"> <li>▪ Distribute wellness framework, ensure residents understand all offerings.</li> <li>▪ Begin to implement planned interventions</li> <li>▪ Discuss barriers, review 2018 data.</li> </ul> </li> <li>○ <b>Meeting 2 (April 2018)</b></li> <li>○ April-May 2018:           <ul style="list-style-type: none"> <li>▪ Modify and support interventions as needed, touch base with residency teams, address barriers.</li> <li>▪ Build schedule for 2018-2019 medical education wellness initiatives (interdisciplinary conferences, etc)</li> </ul> </li> <li>○ June-July 2018:           <ul style="list-style-type: none"> <li>▪ Introduction to NI VI to all incoming interns</li> <li>▪ Distribution of baseline survey to incoming interns</li> </ul> </li> <li>○ August-September 2018:           <ul style="list-style-type: none"> <li>▪ Analyze subjective success of interventions, barriers, change/modify as needed.</li> <li>▪ Address barriers or obstacles encountered.</li> <li>▪ Begin scholarly activity, abstracts, etc. Identify residents/faculty interested in posters/presentations.</li> <li>▪ Start pilot study focusing on OB/Gyn, with focus group and baseline Mayo WBI.</li> </ul> </li> <li>○ <b>Meeting 3 (Oct 2018)</b></li> <li>○ Nov 2018 – Dec 2018:           <ul style="list-style-type: none"> <li>▪ Continue to support interventions</li> </ul> </li> </ul>
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		<ul style="list-style-type: none"> <li>▪ Feedback on interventions, which ones should continue, stop, or spread to other residency programs</li> <li>▪ Explore how to sustain successes, reduce barriers going forward.</li> <li>▪ Support scholarly activity, prepare posters/presentations.</li> <li>○ Jan 2019 - Feb 2019:             <ul style="list-style-type: none"> <li>▪ Distribute wellness survey, preliminary analysis of data</li> <li>▪ Distribute post Mayo WBI to OB/Gyn</li> <li>▪ Discuss transitions of processes going forward, how to sustain successes</li> </ul> </li> <li>○ March 2019:             <ul style="list-style-type: none"> <li>▪ Full analysis of data</li> <li>▪ Scholarly activity support, poster finalization, presentation/publication submissions</li> </ul> </li> <li>○ <b>Meeting 4 (April 2019)</b></li> </ul>
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Sections X thru XIII to be completed first quarter 2019 for “Final Proceedings” booklet:

X.	Success Factors	<p>The most successful part of our work was engaging residents into a culture of residents. We saw a change in resident attitudes with this initiative compared to previous years of trying to reduce burnout. Residents across various programs became engaged in creating new wellness initiatives, diving deeper into existing issues, and taking initiatives started by other programs and making it better.</p> <p>We were inspired by the success of some early interventions, and watched as interest snowballed into action.</p>
XI.	Barriers	<p>The largest barrier encountered was the differences between the residency programs. Each program encountered unique challenges, and our wellness initiatives needed to be program-specific. We also had inconsistent faculty support in some programs. Residents also started to identify more systemic and hospital drivers of burnout outside of medical education, which will need much more time and effort to fix.</p> <p>We worked to overcome this by individualizing efforts within each program, and supporting our resident and faculty champions within each program.</p>

XII.	Lessons Learned	<p>The single most important piece of advice to provide another team embarking on a similar initiative would be that meaningful change takes time and persistence. We were met with initial negativity and residents who were “burned out talking about burnout”. But as we continued to ask our residents how to help them and acted on their suggestions, a spirit of friendly competition and a desire to engage in making things better emerged. We now have resident and faculty champions led various interventions targeted to their needs, and a consistent support from medical education will keep that driving forward.</p>
XIII.	Expectations Versus Results	<p>On a scale of 1 to 10 (with “1” meaning nothing and “10” meaning everything), how much of what you set out to do was your team able to accomplish?</p> <p>8</p>
XIV.	Sustainability and Next Steps	<p>What does your CEO need to know to help keep your work sustainable?</p> <p>Medical education has put a great deal of time, money, and effort into our wellness initiatives over the past few years. To continue to sustain and make this even better, we need a Chief Wellness Officer who can lead some of these initiatives, and continue to provide support for our residents and faculty that have engaged in well-being initiatives.</p>

K. Ayesu, MD; Y. Olivera Arencibia, MD; H. Le, MD;  
M. Madruga, MD; M. Senne, PhD; M. Griffin, MHA

## INTRODUCTION: BACKGROUND & CONTEXT

Burnout amongst learners is reported to be ~60% and rising. There is an urgent need for academic programs to embark on initiatives to combat burnout and promote well-being.

Adverse effects of burnout on physicians are far reaching and negatively impact patient and provider safety. Burnout has also been associated with decreased professionalism. Recent ACGME promotion of well-being highlights the seriousness of this problem.

Prior to initiating our project, there was no database on prevalence of burn-out amongst learners and there was no direct GME engagement on this issue. The focus will be to #1 establish a baseline prevalence of burnout amongst learners and #2 promote programs that will enhance well-being.

## MISSION/VISION STATEMENT

Orlando Health as an organization will be a place where all employees, and more so learners, will find balance in personal and professional goals.

To create awareness within supportive programs tethered to each branch of our organization, to improve physician burn-out rates and develop resilience.

## AIM/PURPOSE/OBJECTIVES

To decrease physician burnout by 10% within 6 months and in the process, promote resilience and a joyful working environment.

To promote Wellness across all Residency/Fellowship programs at Orlando Health (OH) spearheaded through GME (Graduate Medical Education) leadership.

## METHODS/INTERVENTIONS/CHANGES

- Method: A baseline determination of burnout rates using the Mini-Z Burnout survey (from the AMA) via New Innovations, for 14 GME programs. Repeat surveys every 6 months to assess, subsequently with PD evaluations.
- Director of Physician wellness embarked on group meetings, wellness and burnout lectures to all the individual programs.
- Individual programs were allowed to pursue their program specific approaches to address wellness and burnout
- GMEC passed requirement for all learners to visit with the Director of wellness twice a year before PD evaluations
- Residents identified causes and suggested solutions to reduce burnout
- Protected time (IM only); social events

## METHODS: MEASURES/METRICS

- Burnout rates pre and post interventions
- Effectiveness of program specific strategies in coping with burnout and wellness

## RESULTS: PROGRESS TO DATE

### Results (Internal Medicine only)

- **Pre/Baseline:**
  - Completion rates: Questionnaires  
100% for all PGY levels
  - Burnout rates:  
PGY I - 7% (1/15), PGY II - 8% (1/13), PGY III - 25% (3/12)
- **Post Intervention:**
  - Completion rates – Questionnaire  
PGY I - 87% (11/15), PGY II - 31% (4/13), PGY III - 67% (8/12)
  - Burnout rates:  
PGY I - 0% (0/11), PGY II - 25% (1/4), PGY III - 13% (1/8)

**PGY III** - nearly 25% decrease in Burnout rates after intervention

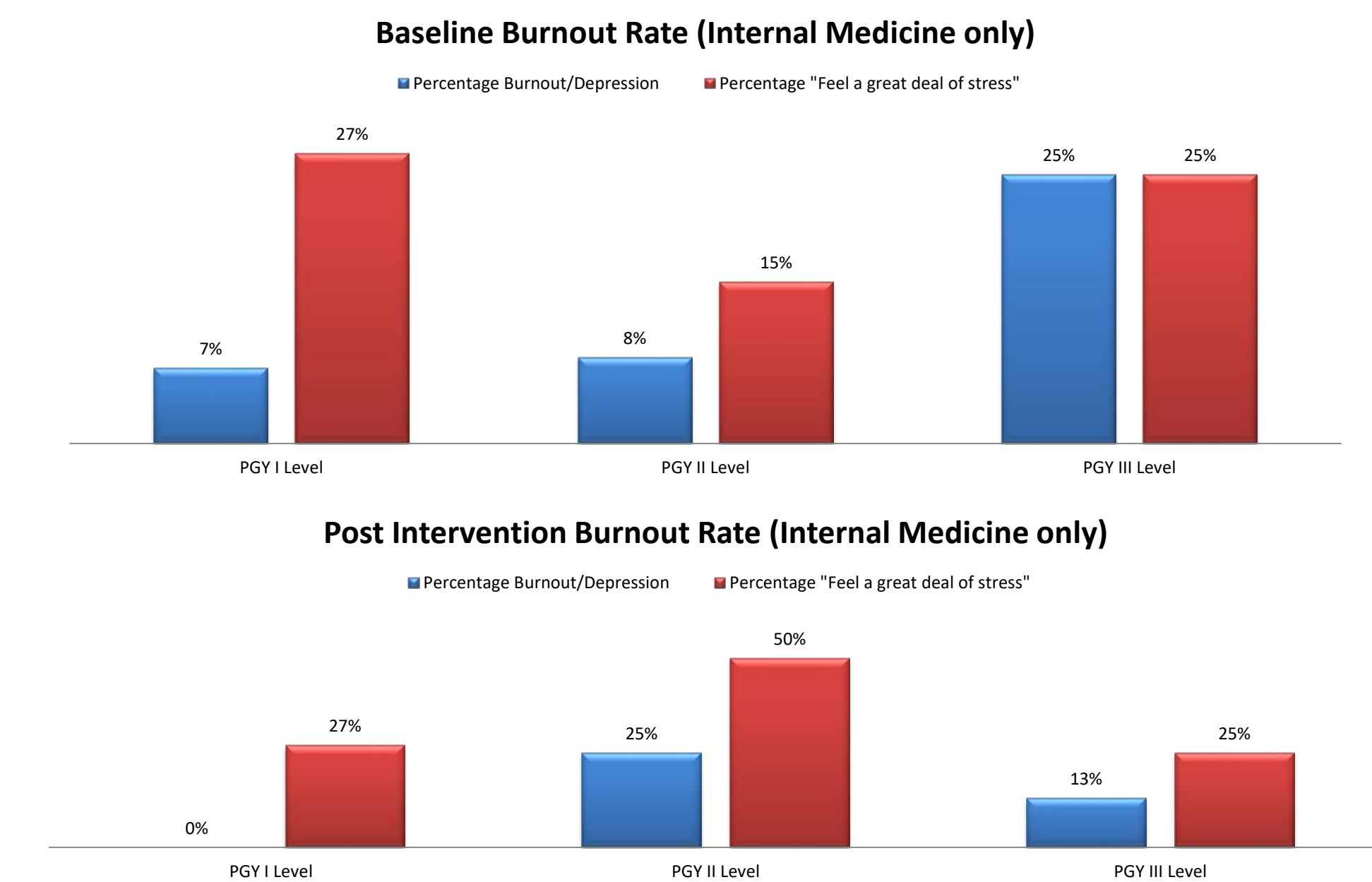
**PGY II** - Burnout rates worsened after intervention

**PGY I** - Showed improvement in Burnout rates

Almost 25% Residents in each PGY level responded yes to a single question on feeling a great deal of stress on the job, which did not change with intervention.

Baseline and post intervention data for all the other GME Programs at OH is ongoing

## RESULTS CONTINUED



## DISCUSSION: BARRIERS & STRATEGIES

### Discussion

- Our project team established, for the first time, a database for burnout rates across all GME Programs in our Institution – Orlando Health.
- In promoting Wellness, curricula as well as joint events were established in collaboration across GME Programs.
- OH launched a Wellness Program Website for physicians run - by 2 Physician Coaches and our Graduate Medical Education team was involved in the production.
- Implemented 2 hour resident protected time for wellness and resilience once a month – Internal Medicine
- It is very difficult to interpret our results without assuming some respondents were not forthcoming with their answers. Post intervention rate of 0 in PGY I and worsening in PGY II respondents are in contrast to the 25% of residents across all PGY levels/programs responding positively to job related stress.

### Barriers

- Challenges in choosing an appropriate tool for assessing burnout
- Skepticism on the part of residents answering honestly in fear of punitive measures
- Stigma of being labeled with psychiatric diagnosis with some responses
- Deterrents of survey online due to fear of lack of anonymity
- Identifying most cost effective intervention to decrease burnout rates

### Lessons learned

- Not to underestimate the degree of skepticism and fear of stigmatization by learners.
- The importance of ensuring privacy and also reassuring learners of anonymity/ privacy of responses to questionnaire
- Lessons learned were utilized to establish baseline burnout data for all programs with an ongoing data collection post intervention

## Project Management Plan

Begin completing this Project Management Plan at Meeting One and complete it with your team following Meeting One, i.e., by November 2017. Teams will have the opportunity to review/revise their Project Management Plans throughout the 18-month Initiative at each of the on-site meetings. The collective data from all of the teams' completed project management plans will be invaluable as we share and learn from this collaborative experience.

Team: ORLANDO HEALTH

Project Title: WELLNESS AT ORLANDO HEALTH

I.	Vision Statement (markers of success by March 2019; Refer to Toolkit #5)	<i>Orlando Health as an organization will be a place where all employees, and more so learner, will find balance in personal and professional goals.</i>  <i>To create awareness within supportive programs tethered to each branch of our organization, to improve physician burnout rates and develop resilience.</i>
II.	Team Objectives (‘needs statement,’ project requirements, project assumptions, stakeholders, etc.)	<i>To decrease physician resident burnout by 10% within 6 months and in the process, promote resilience and a joyful working environment.</i>
III.	Team Members & Accountability (list of team members from Toolkit #6 and who is accountable for what)	<i>K. Ayesu – Project Leader Y. Olivera Arencibia – Data Analyst H. Le – Coordinator – across programs M. Madruga – GME Lead person M. Senne – Physician Coach/Psychologist M. Griffin – Data analyst; liaison officer – deputy coordinator</i>
IV.	Necessary Resources (staff, finances, etc.)	<ul style="list-style-type: none"> <li>- <i>Orlando Health Physician Support Services</i></li> <li>- <i>Program Coordinators – GME (Residencies and Fellowships)</i></li> <li>- <i>Orlando Health IT Staff</i></li> </ul>

V.	Measurement/Data Collection Plan	<ul style="list-style-type: none"> <li>- <i>Electronic Database / New Innovations – Mini Z</i></li> <li>- <i>Completing Surveys prior to Semi-Annual evaluations</i></li> <li>- <i>Percentage of Burnout amongst Residents/Fellows/Faculty</i></li> </ul>
VI.	Stakeholder Communication Plan (may be helpful to draft a flow chart of team members & senior management; Refer to Toolkits #2 and #4)	<ul style="list-style-type: none"> <li>- <i>Establish Channel of communication through champions</i></li> <li>- <i>Select 2 champions from each program to serve on Resident Quality Advisory Council</i></li> <li>- <i>Engage program coordinators in process through education</i></li> <li>- <i>Engage GMEC-Program Directors</i></li> <li>- <i>C-Suite involvement via DIO</i></li> </ul>
VII.	Potential Challenges (engagement, budget, time, skills gaps, etc.; Refer to Toolkit #3)	<i>Time constraints competing with resident schedules completing surveys on New Innovations. ACGME variability in scheduling for Semi-Annual appointments with Program Directors/Academic Heads of Department</i>
VIII.	Opportunities for Scholarly Activity (potential publications, conference presentations, etc.)	<ul style="list-style-type: none"> <li>- <i>Poster presentation – AIAMC</i></li> <li>- <i>Conference presentation – OH Quality Retreat</i></li> <li>- <i>OH Wellness Website</i></li> </ul>
IX.	Markers (project phases, progress checks, schedule, etc.; Refer to NI V Roadmap to 2019 which will be presented at Meeting One)	<p>10/2017 – Mini Z Survey uploaded on New Innovations</p> <p>01/2018 – Initiation of Interventions – Resident Wellness protected time (2 hrs. once a month), social events with other programs, recreational activities Wellness-Resilience lectures etc. etc.</p> <p>07/2018 – Survey - Semiannual</p> <p>12/2018 – Survey - Semiannual</p>

Sections X thru XIII to be completed first quarter 2019 for “Final Proceedings” booklet:

X.	Success Factors	<p><i>The most successful part of our work was....</i></p> <p><i>Establishing a database for Burnout rates across all programs in our Institution – Orlando Health; Participating in establishing Website for Wellness for entire organization</i></p>
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		<p><i>We were inspired by...</i> GME/DIO support to encourage residents to engage with Physician Coaches</p>
XI.	Barriers	<p><i>The largest barrier encountered was...</i> Skepticism on the part of residents answering questionnaire honestly – especially very small programs</p> <p><i>We worked to overcome this by...</i> Reassurance through lectures, champions, small group settings, website for GME Well-being</p>
XII.	Lessons Learned	<p><i>The single most important piece of advice to provide another team embarking on a similar initiative would be...</i> Educate, engage and reassure Residents/Fellows/Subjects the confidentiality of responses</p>
XIII.	Expectations Versus Results	<p><i>On a scale of 1 to 10 (with “1” meaning nothing and “10” meaning everything), how much of what you set out to do was your team able to accomplish?</i></p> <p>1 2 3 4 5 6 7 8 9 10</p>
XIV.	Sustainability and Next Steps	<p>What does your CEO need to know to help keep your work sustainable? To continue to support and expand Physician Coaching Services</p>

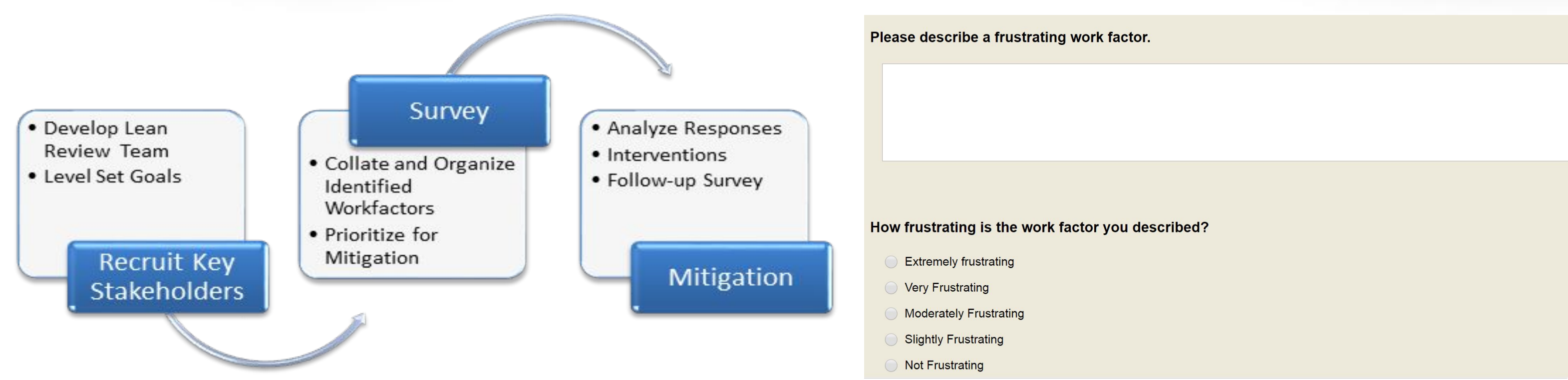


Photo courtesy of Dr. Steven Ullenius  
UICOMP Class of 1996

## INTRODUCTION

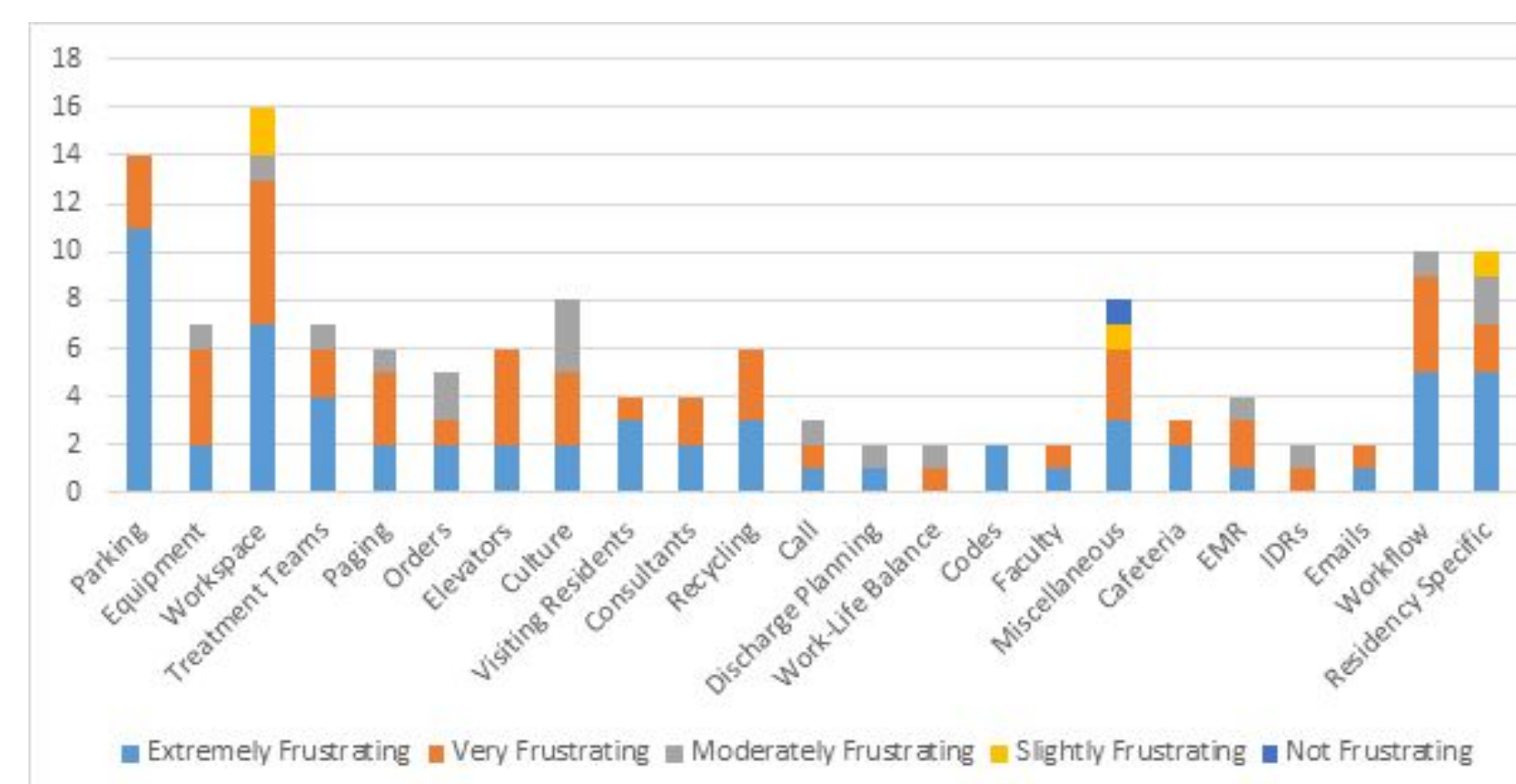
Burnout amongst physicians is a widely recognized crisis in healthcare. The following three dynamics demonstrate the crisis: (a) 28% of resident physicians experience a major depressive episode during training<sup>1</sup> (b) 23% of interns experience suicidal ideation<sup>2</sup> and (c) healthcare executives face an increasingly disillusioned workforce with career burnout rates over 50%<sup>3</sup>. In order to improve physician burnout 2 approaches are necessary: improving individual physician's resilience to stress, as well as, reduction of stressful stimuli that lead to burnout<sup>4</sup>. Most systems are addressing the issue of physician burnout but focusing on resilience training. This may be ineffective as we are treating the symptoms of burnout but not the underlying causes<sup>5</sup>. The aim of this project is to develop and implement a methodology to identify and mitigate frustrating work factors that can be scaled across any level of a health-care system.

## METHODS



- 67 responses from 290 total house staff members
- 130 frustrating work factors identified grouped into 21 categories
- 18 specific interventions identified as areas for action
- Feeling of undervalue
- Ineffective communication regarding policies and current efforts

## RESULTS



## DISCUSSION

This initial survey provided various areas to improve house staff well-being and reduce burnout. The primary focus at this point will be to determine an effective mode of communication for house staff and administration to ensure current efforts are understood. The next steps of this study will be to follow through on the 18 interventions identified from stratifying responses. Afterwards, a follow-up survey will be sent to house staff to determine the effects of these efforts. Most importantly, this survey provided insight to the house staff feeling of undervalue that is likely contributing to burnout and provides a venue to communicate their issues to institutional leaders. Furthermore, we believe this relatively simple process can be easily scaled to any aspect of a healthcare enterprise.

## ACKNOWLEDGEMENT

Team members:  
-Dr. Robert Sparrow  
-Dr. Gregory Blume  
-Dr. Stephen Tsoraides  
-Dr. Aviva Whelan  
-Dr. Jacob Porter  
-Lisa Collins

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# From Burnout to Resilience: A feasibility study to improve resident physician burnout and incorporate a curriculum to increase wellness by fostering compassion for oneself and others

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## INTRODUCTION: Background

- Physician burnout is at an all time high and on the rise<sup>1</sup>
- Burnout is defined by emotional exhaustion, depersonalization, and diminished feelings of personal accomplishment<sup>2</sup>
- Severity is related to empathy, compassion, prescribing and referral habits, professionalism, and likelihood of making medical errors<sup>3</sup>
- One potential wellness curricula to mitigate burnout is CBCT<sup>®</sup>
- CBCT<sup>®</sup> is a secular adaptation of traditional Indo-Tibetan methods for cultivating compassion for the self and others through increased attitudes of impartiality and gratitude
- Previous CBCT<sup>®</sup> research has demonstrated improvements in depression, anxiety, biological stress markers, empathic skills, and compassion in various populations including medical students<sup>4, 5, 6, 7, 8, 9</sup>

References available by request.

## METHODS: Interventions/Changes

### Subjects: Selection, Recruitment

- Resident physicians from various UICOMP residency training programs elected to take CBCT<sup>®</sup>
- CBCT<sup>®</sup> was advertised via email to all residents

### CBCT<sup>®</sup> (Cognitively-Based Compassion Training)

- Developed by Dr. Lobsang Tenzin Negi at Emory University in 2004
- Cultivates greater well-being by teaching structured and progressive contemplative exercises
- Promotes a greater sense of closeness and connectedness with others, strengthening compassionate concern while protecting against empathic fatigue and distress
- Delivered in 75-min and 90-min classes across 8 or 6 weeks, respectively
- Times and locations varied to accommodate as many residents as possible
- Taught by CBCT<sup>®</sup> certified teachers/UICOMP faculty

## RESULTS

### Participant Demographics

- 50% male/female; Mage = 28 yrs; 67% PGY1 and PGY2
- 27 residents enrolled in CBCT<sup>®</sup>

### Feasibility/Acceptability Data & Course Feedback

(rated 1 = strongly disagree to 5 = strongly agree)

- Changed my mind regarding meditation. *M* = 3.9 (1.1)
- I feel more capable of responding in a healthier and more helpful way to challenges. *M* = 4.1 (0.9)
- I believe it would be a benefit to me to keep practicing CBCT. *M* = 4.3 (0.8)
- CBCT<sup>®</sup> should continue to be offered on a yearly basis to all residents. *M* = 4.4 (0.8)
- What prevented attendance? “Patient care responsibilities, post-call, rotations, time of day”
- How useful were the guided meditations? “I LOVE THEM,” very helpful, essential”

### Additional comments

- “I suffer from anxiety & the practices helped ease my mind.”
- “Self compassion is the hardest & one I need to cultivate the most.”
- “In a short period of time it provided me tools to deal with high stress situations better.”

### Outcome Measures (N=12 matched sample)

	Pre M (SD)	Post M (SD)	Control M (SD); N = 36
MBI	99.0 (14.9)	99.2 (19.6)	95.4 (11.3)
DASS	36.5 (10.0)	32.8 (16.6)	32.4 (9.0)
COM	76.0 (7.35)	79.2 (8.0)	67.0 (10.1)

## Aim/Purpose/Objectives

- To assess the feasibility and acceptability of integrating CBCT<sup>®</sup> into resident wellness curriculum at UICOMP
- Pre- and post-outcome measures of stress, depression, anxiety, compassion, wellbeing and resilience among resident physicians enrolled in CBCT<sup>®</sup> and those in an attention control group were also collected

### Hypotheses:

- CBCT<sup>®</sup> could be effectively adapted and implemented into a variety of physician residency training program curricula and that residents would receive it favorably
- Residents who participated in CBCT<sup>®</sup> would report decreased levels of perceived stress and associated symptoms and improved quality of life after participation

## METHODS: Measures/Metrics

A Qualtrics Survey developed by the authors was administered pre- and post-CBCT<sup>®</sup> to assess feasibility and acceptability. Clinical outcomes were measured using the following self-report measures administered at the same time.

### Maslach Burnout Inventory

- 22 items designed to assess occupational burnout

### DASS-21

- 21-item assessment of depression, anxiety and stress

### Compassion Scale

- 21-item measure of compassion towards self and others

### IRB Submission

- Institutional IRB approval was obtained on 09/11/2017

## Discussion: Barriers & Strategies

### Key Findings

- CBCT<sup>®</sup> received favorably by residents who elected to take it
- Difficult to find ideal time of day for all residents
- Nonsignificant decreases in depression & anxiety and increases in compassion post-CBCT<sup>®</sup>, no changes in levels of burnout
- Nonsignificant lower levels of compassion, burnout, depression & anxiety observed in residents who elected not to take CBCT<sup>®</sup> – possibly related to interest in course?
- Limitations = small sample size, attendance and survey compliance

### Next Steps and Sustainability

- Due to difficulty with regular consecutive attendance, offer “drop-in” meditation sessions covering CBCT<sup>®</sup> topics.

# Collaborative Task Force to Restore the Joy in Medicine

Keith Rhynes, MD, Laurinda Calongne, EdD, Rebecca Horn, PhD,  
Eva Mathews, MD, Rumneet Kullar, DO, & Lauren Mulligan, MD

## INTRODUCTION: Background

Staff physicians and residents at Our Lady of the Lake are diverse in their backgrounds and experiences. The purpose of this project is to address physician wellness across the system for physicians and residents of all personal and practice backgrounds by soliciting input from them and then using that input to design wide-sweeping as well as targeted interventions to achieve our aims (as stated below).

## Aim/Purpose/Objectives

- Increase wellness knowledge and self-care skills in our physicians and resident physicians
- Provide wellness resources to our physicians and resident physicians.
- Create an organizational culture that values and prioritizes physician well-being and spiritual growth

## METHODS: Interventions/Changes

- Baseline Measurement *[complete]*
  - Anonymous online survey
- Intervention Design *[complete]*
  - Collaborative Design Sessions with consultants
- Intervention Implementation *[in progress]*
  - Wide-sweeping interventions for top 3 issues
  - Targeted interventions for specific sub-groups of physicians
- Post-Intervention Measurement
  - Anonymous online survey
  - Performance metrics

## METHODS: Measures/Metrics

- Abbreviated Maslach Burnout Inventory
- Depression Screener items
- Open-ended response items
- Performance Metrics
  - Retention/turnover rate
  - Press Ganey results

## RESULTS

### Baseline Measurement:

- Participation
  - 58% of physicians, 50% of residents
- Burnout rate
  - 46% of physicians
  - 59% of residents

### Input Sessions:

- Organizational Factors
  - Efficiency of Practice
  - Organizational Values
- Work Unit Factors
  - Efficiency of practice
- Personal Factors
  - Work Life Balance
  - Resilience

## RESULTS: Continued

### Organizational Leaders:

- Culture of Wellness: Executive Rounding, Schwartz Rounds, etc.
- Efficiency of Practice: Ambulatory Tap'n'Go, communication apps

### Task Force Physicians:

- Culture of Wellness : Professional growth/education sessions, Town Hall revamp, standardized huddles, etc.
- Efficiency of Practice: Medical scribes, pre-visit planning, EPIC coaching and optimization
- Personal Resilience: Physician wellness fair, Physician socialization opportunities, presentations by national speakers

## Discussion: Barriers & Strategies

### Key Findings

- No two physicians have exactly the same wellness needs. The organization must develop flexible initiatives to fully impact all those who need it.

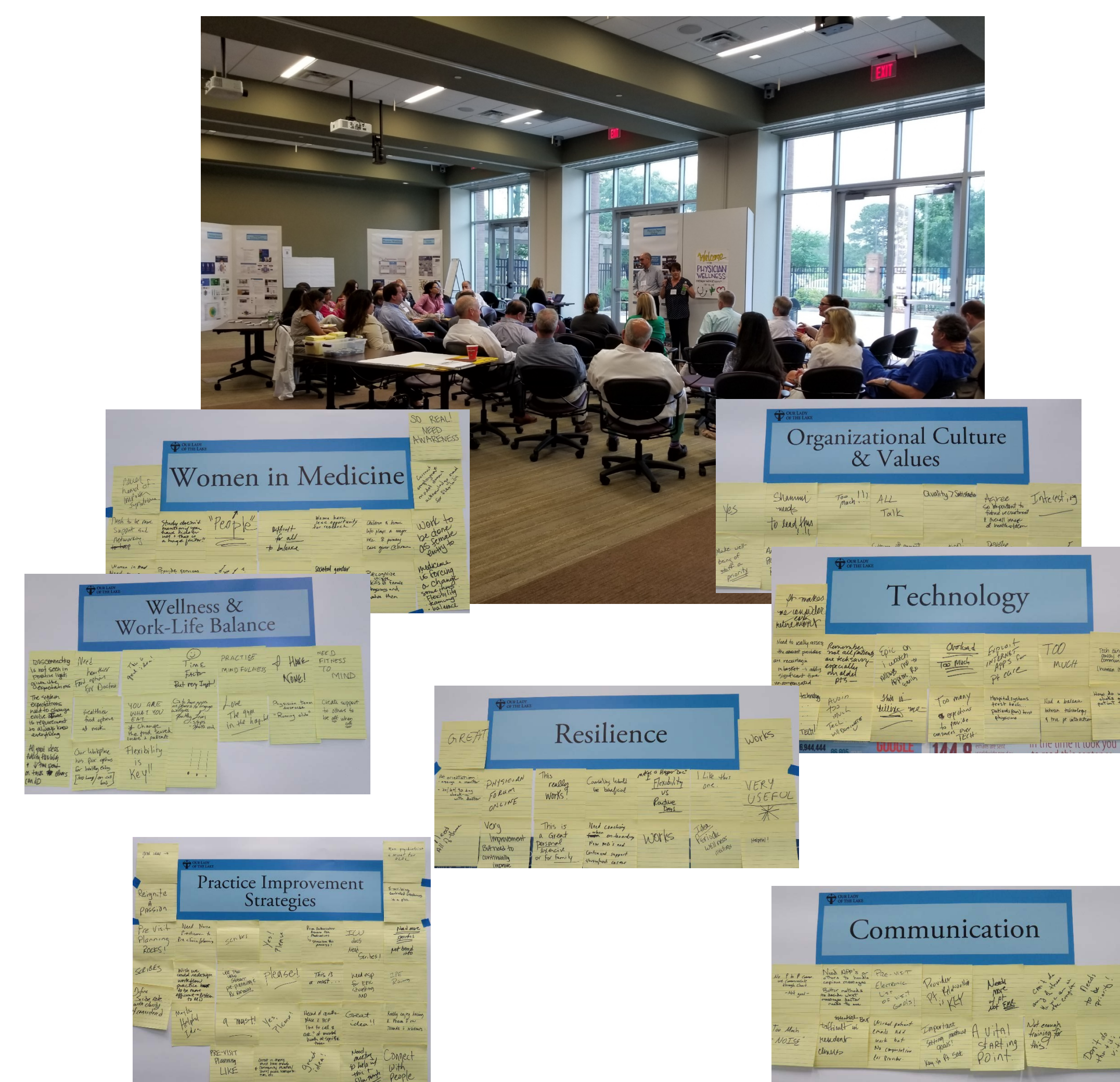
### Limitations

- Change in culture, particularly at the system level, takes time under any circumstance
- Recent changes in leadership structures have caused delays in ensuring the sustainability and implementation of the initiatives

### Next Steps and Sustainability

- Task Force members and C-Suite leadership taking on ownership of the components of the wellness initiative
- Grow resources for physicians and residents

### Designing Physician Wellness



## Project Management Plan

Begin completing this Project Management Plan at Meeting One and complete it with your team following Meeting One, i.e., by November 2017. Teams will have the opportunity to review/revise their Project Management Plans throughout the 18-month Initiative at each of the on-site meetings. The collective data from all of the teams' completed project management plans will be invaluable as we share and learn from this collaborative experience.

Team: OLOL RMC

Project Title: System-Wide Physician Wellness Task Force

I.	Vision Statement (markers of success by March 2019; Refer to Toolkit #5)	<i>In relentless pursuit of "Better," Our Lady of the Lake will work to enhance the well-being of our physicians and residents by providing them with the tools to better address their personal needs. We will also work to create an organizational culture that values and prioritizes physician well-being and spiritual growth.</i>
II.	Team Objectives (‘needs statement,’ project requirements, project assumptions, stakeholders, etc.)	<i>The project needs buy-in and commitment from physicians and the C-Suite.</i>
III.	Team Members & Accountability (list of team members from Toolkit #6 and who is accountable for what)	<i>Laurinda Calongne, EdD, DIO – Overall vision and obtaining buy-in from C-Suite, transition from NI VI project to health system initiative; Rebecca Horn, PhD – team leader, data analysis; Keith Rhynes, MD – Physician leader for the Task Force; Eva Mathews, MD – physician Task Force member; Rumneet Kullar, DO, and Lauren Mulligan, MD – developing resident wellness as part of the Task Force</i>
IV.	Necessary Resources (staff, finances, etc.)	<i>This project requires 1) physicians input and buy-in, 2) physician leadership/ownership of the Task Force, and 3) financial commitment and buy-in from the leadership of the health system.</i>

V.	Measurement/Data Collection Plan	<i>Pre-surveys were sent out prior to any Task Force actions. A consultant was also brought in to conduct design sessions for a system-wide physician wellness initiative.</i>
VI.	Stakeholder Communication Plan (may be helpful to draft a flow chart of team members & senior management; Refer to Toolkits #2 and #4)	<i>Regular updates regarding task force was sent by our CMO, President of the Physician group, and the Medical Director of GME. We also sent our surveys to gauge and prioritize action plans. There was a lull in communication when the leadership group merged with 3 other groups and restructured its leadership model. We are working with the marketing and communication team to develop a report of all the things that we have accomplished with the Joy in Medicine initiative.</i>
VII.	Potential Challenges (engagement, budget, time, skills gaps, etc.; Refer to Toolkit #3)	<i>Cynicism regarding the possibility for real culture change. Coordinating and properly communicating about such a large-scale effort.</i>
VIII.	Opportunities for Scholarly Activity (potential publications, conference presentations, etc.)	<i>Data to write up for publications would include: changes in physician engagement surveys, and future post-intervention measurements after more services roll out and thus more physicians are impacted by the wellness program.</i>
IX.	Markers (project phases, progress checks, schedule, etc.; Refer to NI V Roadmap to 2019 which was presented at Meeting One)	<i>Pre-survey was completed Design sessions were completed Task Force was formed Task Force divvied up wellness program components for sub-committees Sub-committees are currently organizing and implementing wellness interventions Post-survey to follow when more physicians have been impacted by the interventions</i>

Sections X thru XIII to be completed first quarter 2019 for “Final Proceedings” booklet:

X.	Success Factors	<i>The most successful part of our work was....Convincing the C-Suite of the importance of physician wellness.  We were inspired by....The willingness of our physicians to engage with the Task Force and share their personal wellness concerns.</i>
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XI.	Barriers	<p><i>The largest barrier encountered was....Unforeseen leadership changes that delayed C-Suite decision-making related to the implementation of the wellness initiative.</i></p> <p><i>We worked to overcome this by....Really the only solution is time and patience with the process. We gave the leaders the time they needed to focus on the change and then continued with our work.</i></p>
XII.	Lessons Learned	<p><i>The single most important piece of advice to provide another team embarking on a similar initiative would be....Be as clear as you can be what your measures of success will be before you begin.</i></p>
XIII.	Expectations Versus Results	<p><i>On a scale of 1 to 10 (with "1" meaning nothing and "10" meaning everything), how much of what you set out to do was your team able to accomplish?</i></p> <p><i>1 2 3 4 5 6 7 8 9 10</i></p>
XIV.	Sustainability and Next Steps	<p><i>What does your CEO need to know to help keep your work sustainable? Physicians and leaders must take ownership of the various components of the work of the Task Force to ensure it continues.</i></p>

## INTRODUCTION

Consistent with Saint Francis Hospital and Medical Center's increased focus on wellness and stress-management, this project tracks the impact of targeted education sessions for residents. A Wellness Curriculum was created for Ob/Gyn and Family Medicine residents, and bi-annual surveys assessed resident self-report of burnout and resiliency.

## AIM

Specific wellness activities and sessions can demonstrate our institution's commitment to resident health and impact resident burnout, resilience and coping skills.

## METHODS

**INTERVENTION:** A wellness curriculum was collaboratively developed by residency leaders in Family Medicine and Ob/Gyn, Academic Affairs leaders, and the Chief Wellness Officer. Joint educational sessions occurred with residents from the two programs bi-monthly for 18 months.

Curriculum addressed data on physician burnout and specific coping strategies, including mindfulness, resiliency techniques, cognitive flexibility training, self-care activities, and journaling. Curriculum impact was assessed with a brief, anonymous questionnaire related to resident wellness, distributed to residents twice yearly, from June 2017 to February 2019.

**MEASURES:** Three dimensions of burnout (Accomplishment, Depersonalization, and Emotional Fatigue) were assessed using 3 question subscales from the Brief Maslach Burnout Inventory, scored from 0 (never) to 6 (every day). Resilience was measured by the Brief Resilience Scale, scored from 1 (strongly agree) to 6 (strongly disagree), with scores reverse-coded as appropriate. Higher scores indicate more accomplishment, depersonalization, or higher resilience. Overall burnout was assessed by combining depersonalization and emotional fatigue (0-36).

## RESULTS

54 Ob/Gyn and Family Medicine residents participated between June 2017 and February 2018 (Year 1), and 44 between June 2018 and February 2019 (Year 2). Of the 98 participants, 76.5% were female, 41% identified as an ethnic minority, and 62.2% were 30 years of age or younger.

Maslach Emotional Fatigue was significantly lower ( $p=0.014$ ) and Resilience significantly higher in Year 2 compared to Year 1 ( $p=0.003$ ). Differences in median Maslach Accomplishment and Depersonalization subscales were not statistically significant ( $p>0.050$ ).

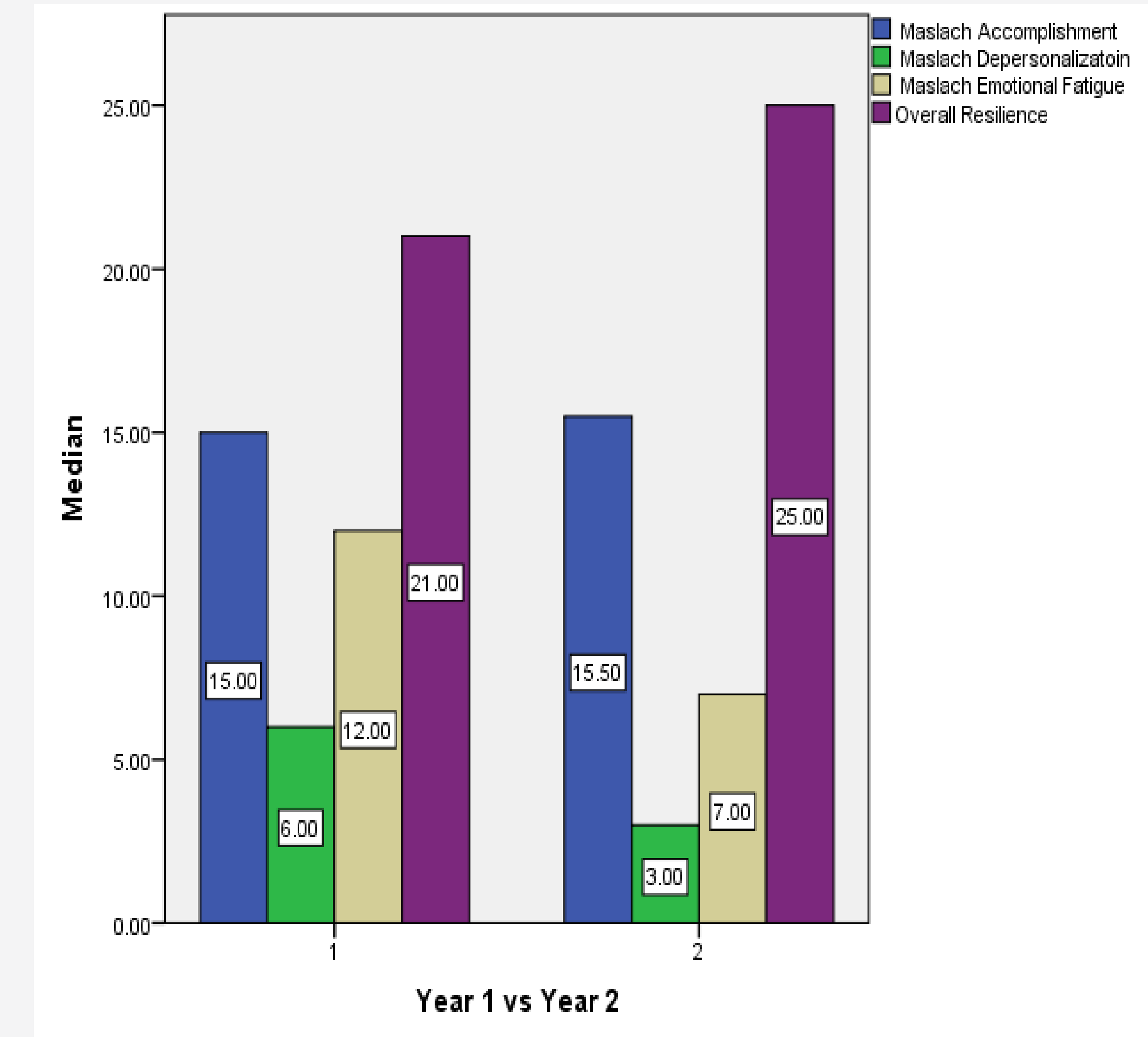
Compared to PGY 1 residents, PGY 2 residents had significantly higher depersonalization, emotional fatigue, and overall burnout scores ( $p<0.001$ ).

**Table 1. Median Scores, Maslach Subscales and Brief Resilience Scale**

Variable	Median (range) or Mean $\pm$ standard deviation	P-value
<b>Maslach Accomplishment</b>		0.273
Year 1 (n=46)	15.00 (8-18)	
Year 2 (n=39)	15.50 (6-18)	
<b>Maslach Depersonalization</b>		0.069
Year 1(n=46)	6.0 (0-14)	
Year 2 (n=39)	3.00 (0-13)	
<b>Maslach Emotional Exhaustion</b>		0.014*
Year 1 (n=46)	12.00 (1-17)	
Year 2 (n=38)	7.00 (0-17)	
<b>Overall Burnout</b>		
Year 1 (n=46)	16.43 $\pm$ 7.22	0.016*
Year 2 (n= 38)	10.50 $\pm$ 7.69	
<b>Overall Resilience</b>		0.003*
Year 1 (n=23)	21.00 (12-25)	
Year 2 (n=39)	25.00 (10-33)	

\*Statistically significant

**Figure 1. Median Scores for the Brief Resilience Scale and Maslach Subscales**



## DISCUSSION: Barriers & Strategies

- Different scheduled didactic times impact feasibility of multi-disciplinary training.
- Clinical responsibilities and resident choice for their own wellness impact session attendance.
- Residents provided feedback that they prefer activities, not just discussion. Examples include providing them journals and instruction, and personal experience of stress-reduction activities.
- Program Directors continue to collaborate to offer this curriculum for future years.

## Project Management Plan

Begin completing this Project Management Plan at Meeting One and complete it with your team following Meeting One, i.e., by November 2017. Teams will have the opportunity to review/revise their Project Management Plans throughout the 18-month Initiative at each of the on-site meetings. The collective data from all of the teams' completed project management plans will be invaluable as we share and learn from this collaborative experience.

Team: Saint Francis Hospital and Medical Center

Project Title: Creating a Culture of Wellness

I.	Vision Statement (markers of success by March 2019; Refer to Toolkit #5)	<i>The AIAMC project will raise awareness and provide specific tools to enhance trainee well-being throughout our institution.</i>
II.	Team Objectives (‘needs statement,’ project requirements, project assumptions, stakeholders, etc.)	<i>Assess trainee well-being, develop and implement programs and resources, and advocate for the importance of addressing trainee and physician well-being throughout the institution.</i>
III.	Team Members & Accountability (list of team members from Toolkit #6 and who is accountable for what)	<i>Jeri Hepworth, PhD Vice President of Academic Affairs, Trinity Health Of New England / DIO Ashley Negrini, MS Manager, Medical Education Brian Riley, DO, MPH Program Director, OB/GYN Adam Perrin, MD Director of Resident Wellness, Family Medicine Rebecca Crowell, PhD Director of Research, SFHMC Kendra Mahoney, MD Resident, OB/GYN Alisha Lall, MD Resident, Family Medicine Jessica Perez, MD Resident, Family Medicine</i>
IV.	Necessary Resources (staff, finances, etc.)	<i>Protected time for scheduling, staff commitment, speakers for sessions, budget for food and speakers</i>
V.	Measurement/Data Collection Plan	<i>A brief, anonymous questionnaire related to resident wellness was distributed to Saint Francis residents every 6 months.</i>

		<i>Burnout was measured using the Brief Maslach Burnout Inventory (scale of 0 to 6; a higher score = more of a parameter), and resilience using the Brief Resilience Scale (BRS) (scale of 1 to 6, two scores reverse coded; higher score = greater resilience).</i>
VI.	<i>Stakeholder Communication Plan (may be helpful to draft a flow chart of team members &amp; senior management; Refer to Toolkits #2 and #4)</i>	<i>We have kept leadership informed of our progress through regular meetings between Dr. Hepworth and our President, Dr. Rodis, and with GMEC. We have collaborated with our Chief Wellness Officer for several of the joint sessions and with institutional initiatives which help to sustain our efforts regarding resident participation.</i>
VII.	<i>Potential Challenges (engagement, budget, time, skills gaps, etc.; Refer to Toolkit #3)</i>	<i>Time and scheduling, engagement</i> <ul style="list-style-type: none"> <li>• <i>Different scheduled didactic times impact feasibility of multi-disciplinary training.</i></li> <li>• <i>Clinical responsibilities and resident choice for their own wellness impact session attendance.</i></li> </ul>
VIII.	<i>Opportunities for Scholarly Activity (potential publications, conference presentations, etc.)</i>	<i>Saint Francis Hospital and Medical Center Research Day poster presentation.</i>  <i>Potential to expand the pilot project into resident wellness initiatives and activities for all programs, internal and external.</i>
IX.	<i>Markers (project phases, progress checks, schedule, etc.; Refer to NI V Roadmap to 2019 which will be presented at Meeting One)</i>	<i>Each 6-month survey interval was a good checkpoint to evaluate and plan next steps. We had regular monthly team meetings to plan the joint sessions.</i>



Sections X thru XIII to be completed first quarter 2019 for “Final Proceedings” booklet:

X.	Success Factors	<p><i>The most successful part of our work was engaging the residents on topics of importance to them and their wellness. It was important for us to get their feedback on what they wanted.</i></p> <p><i>We were inspired by the institutional culture change and strong focus on wellness that aligned with our efforts.</i></p>
XI.	Barriers	<p><i>The largest barrier encountered was scheduling sessions that worked well for both residency programs, and attendance.</i></p> <p><i>We worked to overcome this by working closely with the programs, who worked hard to protect time that aligned and to promote the sessions.</i></p>
XII.	Lessons Learned	<p><i>The single most important piece of advice to provide another team embarking on a similar initiative would be to include the residents in planning sessions for them. Find out what they want.</i></p> <p><i>The residents provided feedback that they prefer activities, not just discussion.</i></p>
XIII.	Expectations Versus Results	<p><i>On a scale of 1 to 10 (with “1” meaning nothing and “10” meaning everything), how much of what you set out to do was your team able to accomplish?</i></p> <p><i>1 2 3 4 5 6 7 (8) 9 10</i></p>
XIV.	Sustainability and Next Steps	<p><i>What does your CEO need to know to help keep your work sustainable?</i></p> <p><i>Wellness has become part of our institutional culture, and along with this initiative there were other wellness programs and sessions that supported our goals. It is important that the residents be involved in the planning of wellness sessions intended for them. Getting their input is key, and being flexible with scheduling is critical.</i></p>

## INTRODUCTION

In the fall of 2016, the Sinai Hospital of Baltimore Graduate Medical Education established a GME Well-Being Sub-Committee. Its purpose was to guide the institution's response to the ACGME's newly revised Working and Learning Environment guidelines and address the growing evidence that medical students, residents and attending physicians were experiencing burnout at alarming rates [1].

After conducting an inventory of institutional and departmental programs focused on physician and resident well-being, we saw that there was a lack of coordination, focus, and consistency across departments.

We established six goals for our project. We completed three of these goals to address this issue. We encountered a number of challenges fall 2018 and spring 2019.

### References

1. Shanafelt, T.D. et al. Potential Impact on Burnout on the US Physician Workforce. Mayo Clinic Proceedings. Volume 91, Issue 11, pp. 1667-1668.

## OBJECTIVES

We sought to establish a baseline for burnout among Residents and Faculty in six ACGME residency programs to better understand the work environment and to guide the development of policies, practices and programs to create an institutional culture of well-being.

## METHODS

### Subjects:

- Customized the AWS+MBI-HSS Survey to capture program, role, age, gender, length of service data
- IRB Submission: Exempt Status Granted November 5, 2018, Department of Research Sinai Hospital of Baltimore.
- Invited residents and core faculty to participate in the survey N= 221; 149 Residents and 72 Faculty from the Sinai Hospital of Baltimore
- The data presented are for our survey group as a whole
- We will be analyzing the data by variables and conducting focus group interviews in AY 20

## RESULTS

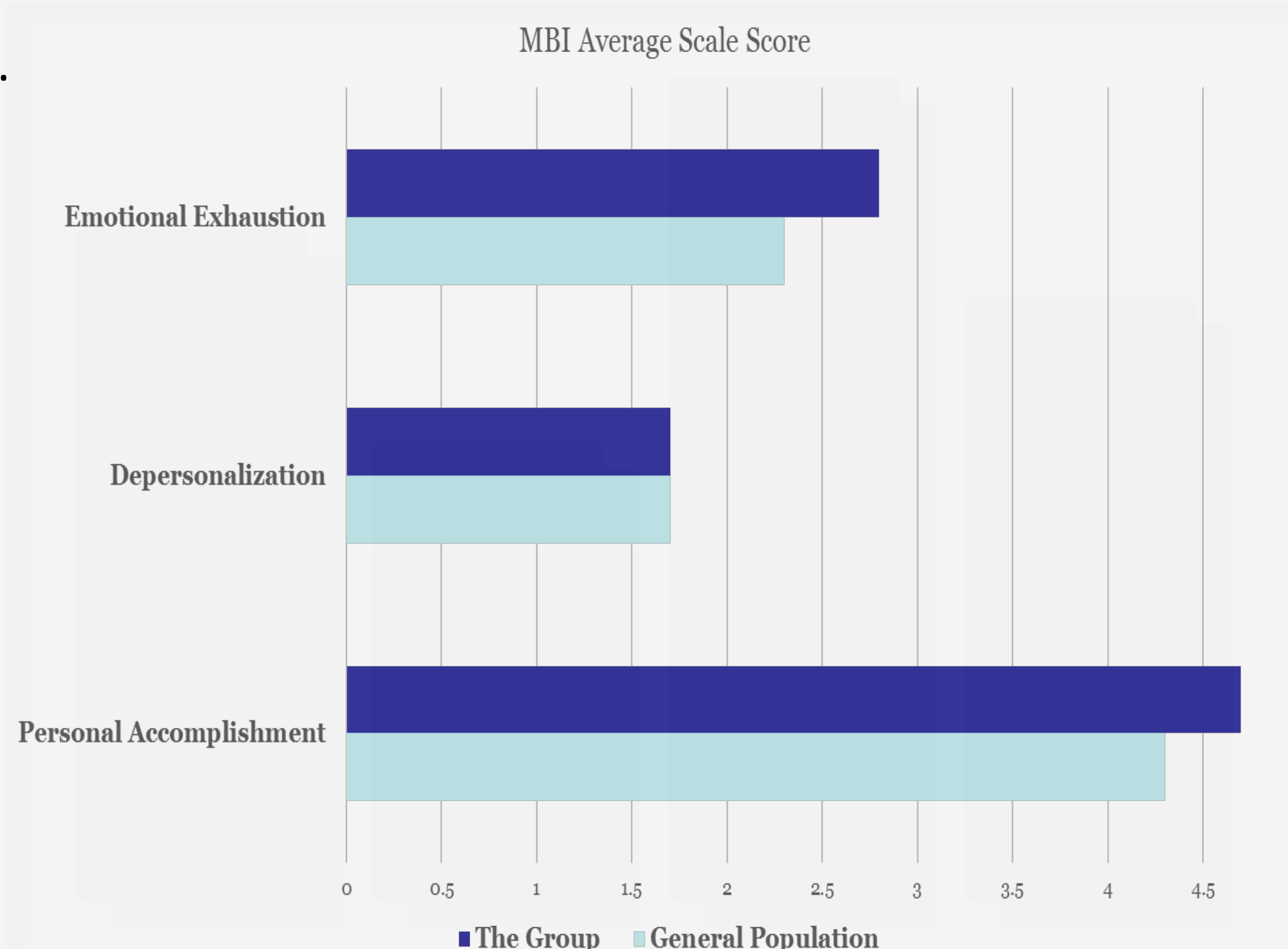
We obtained an overall participation rate of 56% (N=124):  
52% of residents participated in the survey (N=78)  
63% of faculty participated in the survey (n=46)

### Participants by Years in Practice Participants by Department

Overall	124	Overall	124
1 year	23	Internal Medicine	32
2 years	26	OB/GYN	22
3 years	28	Ophthalmology	10
4 years	11	Pediatrics	29
5 years	2	Physical Medicine and Rehabilitation	17
6 to 10 years	5	Surgery	14
11 to 16 years	9		
17+ years	20	<b>Participants by Gender</b>	
		Overall	124
		Female	63
		Male	60
		Other	1

The Group average scores for the three MBI-HSS (MP) scales as compared to 11,000+ people in the human services professions are shown in the chart below.

Scale: 0= never, 1 = a few times a year, 2= once a month or less, 3=a few times a year, 4=Once a week, 5= A few times a week and 6= Every day

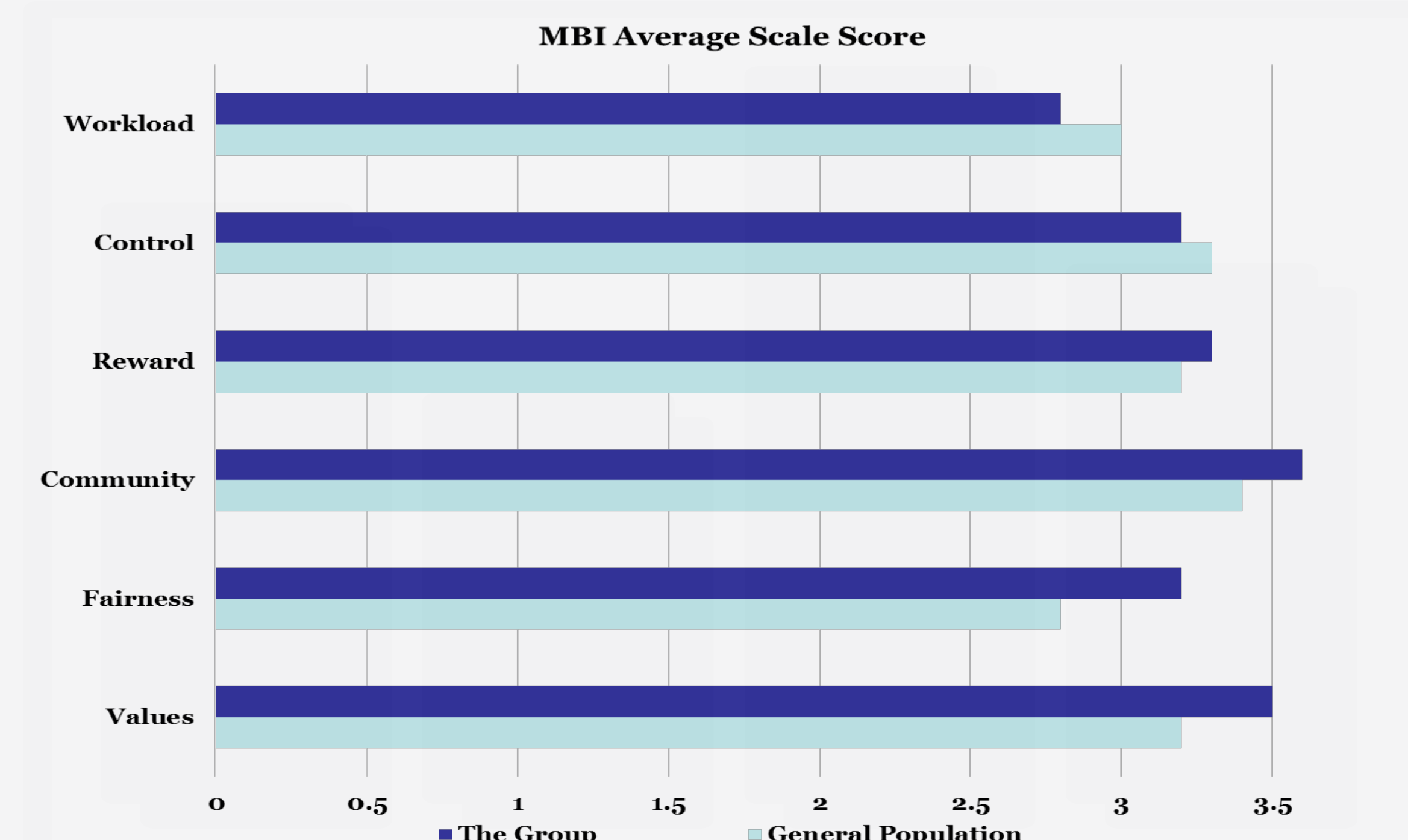


• Note: Higher Emotional Exhaustion and Depersonalization contribute to burnout, while higher Personal Accomplishment reduces burnout

## RESULTS

• The following chart shows the match between participants and their organizations.

• Scale: A score of 2 or less (Disagree) indicates a mismatch. The 5 point scale is 1= Strongly Disagree to 5= Strongly Agree.



• Originally, we envisioned our project beginning with the administering the AWS +MBI-HSS followed with a train-the-trainer program for faculty to provide the tools to integrate resilience training into our residency training programs to be followed by a second administration of the AWS+MBI-HSS.

• Due to a number of challenges, we were unable to implement the plan. We regrouped and decided that to gain a deeper understanding of the levels of burnout among our residents and faculty, to move forward with the AWS + MBI-HSS survey.

## Discussion: Barriers & Strategies

### Lessons Learned:

- It takes time and effort to bring about change.
- Team members often found that their commitments to teaching or administering residency programs trumped the time needed to implement the project.
- Stakeholders from other areas often did not have the resources to become fully participating partners.
- It would have been useful to have started with the AWS +MBI-HSS survey immediately. As we begin to review and analyze the data, we can see that it is critical for developing and implementing a plan and assessing the level of resources needed.

## Project Management Plan

Begin completing this Project Management Plan at Meeting One and complete it with your team following Meeting One, i.e., by November 2017. Teams will have the opportunity to review/revise their Project Management Plans throughout the 18-month Initiative at each of the on-site meetings. The collective data from all of the teams' completed project management plans will be invaluable as we share and learn from this collaborative experience.

**Team:** Sinai Hospital of Baltimore - Dr. Asha Thomas, Dr. Donald Abrams, Dr. Diane Maloney-Krichmar, Diane Johnson, Tina Gionet, Lucretia Wilson, Dr. Melanie Contois, Dr. En Yaw Hong

**Project Title:** Promoting Resident and Faculty Well-being: The 3 Ps: Policy, Practices and Programs

I.	Vision Statement (markers of success by March 2019; Refer to Toolkit #5)	<i>Sinai Hospital of Baltimore promotes a culture of well-being that supports and strengthens the ability of resident physicians, faculty physicians and all health care team members to grow and thrive in their professional and personal lives.</i>		
II.	Team Objectives (‘needs statement,’ project requirements, project assumptions, stakeholders, etc.)	<i>Our objective is to develop policies, practices and programs that equip resident physicians and faculty physicians with resources and practical skills that build self-awareness and flexible thinking, promote regulation of emotions and energy levels, and build connections that promote community at work and improve the clinical and educational environment.</i>		
III.	Team Members & Accountability (list of team members from Toolkit #6 and who is accountable for what)	<i>Asha Thomas, MD*</i>	<i>Chair, Associate Program Director Internal Medicine Residency Program Chair GMEC Well-Being Sub Committee</i>	<i>asthomas@lifebridgehealth.org</i>
		<i>Donald A. Abrams, MD</i>	<i>Vice President Graduate Medical Education and</i>	<i>dabrams@lifebridgehealth.org</i>

		<p><i>Diane Johnson, MBA, BSN, RN, CENP</i></p> <p><i>Tracey Clark, MD</i></p> <p><i>Diane Maloney-Krichmar, Ph.D.</i></p> <p><i>Tina Gionet, RN, MS</i></p> <p><i>En Yaw Hong, MD</i></p> <p><i>Melanie Contois, MD</i></p> <p><i>Lucretia Wilson, MS</i></p>	<p><i>DIO, and Ophthalmologist-in-Chief</i></p> <p><i>Vice President, Patient Care Services and CNO</i></p> <p><i>Program Director Pediatrics Residency (former)</i></p> <p><i>Director Medical Education</i></p> <p><i>Patient Safety Officer, Department of Quality and Risk Management</i></p> <p><i>PGY 3 Surgery Residency Program and Resident Patient Safety Champion</i></p> <p><i>PGY 1 OB/GYN Residency Program</i></p> <p><i>Residency Coordinator PM&amp;R Residency Program</i></p>	<p><i>djohnson@lifebridgehealth.org</i></p> <p><i>tclark@lifebridgehealth.org</i></p> <p><i>dkrichma@lifebridgehealth.org</i></p> <p><i>tgionet@lifebridgehealth.org</i></p> <p><i>eyhong@lifebridgehealth.org</i></p> <p><i>mcontois@lifebridgehealth.org</i></p> <p><i>lawilson@lifebridgehealth.org</i></p>
IV.	Necessary Resources (staff, finances, etc.)	<p><i>Staff:</i> <i>The Committee Members, Residency Program Directors and Administrators</i></p> <p><i>Resources: Funds are needed for Trainers and Workshop Presenters, to send faculty and residents to training sessions and to support institutional and departmental well-being initiatives and activities.</i></p>		
V.	Measurement/Data Collection Plan	<p><i>-Review and revise current GMEC House Staff Policies relative to the ACGME Well-being guidelines by December 31, 2017</i></p> <p><i>-Complete an IRB Submission by March 30, 2018</i></p> <p><i>-Assess the current levels of burnout among resident physician and faculty physician in our six residency programs using the Areas of Worklife + MBI-HSS surveys by July 30, 2018</i></p>		

		<p><i>-Conduct six focus group interviews with residents by August 31, 2018 and again by February 28, 2019</i></p> <p><i>-Provide faculty physician with training on skills that promote resilience and optimism.</i></p> <p><i>Administers the AWS +MBI-HSS every six months.</i></p>
VI.	Stakeholder Communication Plan (may be helpful to draft a flow chart of team members & senior management; Refer to Toolkits #2 and #4)	<p><i>President of Sinai Hospital</i></p> <p><i>Vice President Graduate Medical Education (GME), DIO and Chair GME Committee</i></p> <p><i>Chair, GMEC Well-Being Subcommittee</i></p> <p><i>Chair, Sinai's NI VI Team</i></p> <p><i>Director Medical Education</i></p>
VII.	Potential Challenges (engagement, budget, time, skills gaps, etc.; Refer to Toolkit #3)	<p><i>Potential Challenges include finding a training partner for the Faculty Train-the-Trainer Intervention</i></p> <p><i>Budget of training projects</i></p>
VIII.	Opportunities for Scholarly Activity (potential publications, conference presentations, etc.)	<i>The team hopes to present the results at professional conferences and to publish a paper on the project.</i>
IX.	Markers (project phases, progress checks, schedule, etc.; Refer to NI V Roadmap to 2019 which will be presented at Meeting One)	<i>Once we were unable to secure a training partner, we had to scale back our original plan and readjust our time lines. We were able to continue education and training for our residents and faculty, provide support for well-being activities and initiatives and conduct research using AWS-MBI survey data.</i>

Sections X thru XIII to be completed first quarter 2019 for “Final Proceedings” booklet:

X.	Success Factors	<i>The most successful part of our work was raising awareness of the complexity of the drivers of burnout and engagement among residents and physicians and getting the GME community at our hospital engaged in the process of creating working and learning environments to combat burnout and support engagement.</i>
XI.	Barriers	<p><i>We had a very difficult finding a training partner for the Faculty Train-the-Trainer aspect of our project. In addition, the time needed to fully implement this project ultimately was beyond the time team members could devote to the project.</i></p> <p><i>We worked to overcome this by scaling back our project to focus on surveying our faculty and residents to determine their levels of burnout and stress and continued to provide education, training and support to our residency programs for well-being activities and initiatives.</i></p>
XII.	Lessons Learned	<i>The single most important piece of advice to provide another team embarking on a similar initiative would be either select a small project or get a commitment for leadership to assign a staff member full-time to the project.</i>
XIII.	Expectations Versus Results	<p><i>On a scale of 1 to 10 (with “1” meaning nothing and “10” meaning everything), how much of what you set out to do was your team able to accomplish?</i></p> <p>5</p>
XIV.	Sustainability and Next Steps	<p><i>What does your CEO need to know to help keep your work sustainable?</i></p> <p><i>Dedicated staff and budgeted resources are needed to sustain creating a culture of well-being within the institution.</i></p>

# Creating Camaraderie and Connectedness at Christ Hospital

Aurora Rivendale MD, Gopal Koneru MD, Alexandra Macpherson MD, Melissa Mefford MD, Annette Lewis, Jennifer Reemtsma, John Schroder MD

## INTRODUCTION: Background

Resident and physician burnout have been highlighted as crises in national news and around the world. Wellness programs and curricula have been implemented in attempts to mitigate these effects. What remains clear is that this is a product both of the demands of the job and the changing nature of medicine in a modern age of EMR and blurred boundaries between work life and home life. Given this, our program has chosen to focus on ways to build camaraderie, connectedness and resiliency among peers through wellness events and providing resources.

## Aim/Purpose/Objectives

- Hold at least 4 wellness events
- Foster connection and camaraderie between residencies and fellowship
- Create more direct and robust connection between residents and GME office
- Create sustainability for future initiatives-residency committees become sub group of GMEC
- Provide tools for resilience and resources for wellness

## METHODS: Interventions/Changes

We have hosted 4 events thus far. 3 on campus, each with a specific focus. The most recent event was held in January and was off campus. It was called a winter Gala and was a huge success. 30 individuals RSVPed and at least 47 residents and spouses came.

### Subjects: Selection, Recruitment

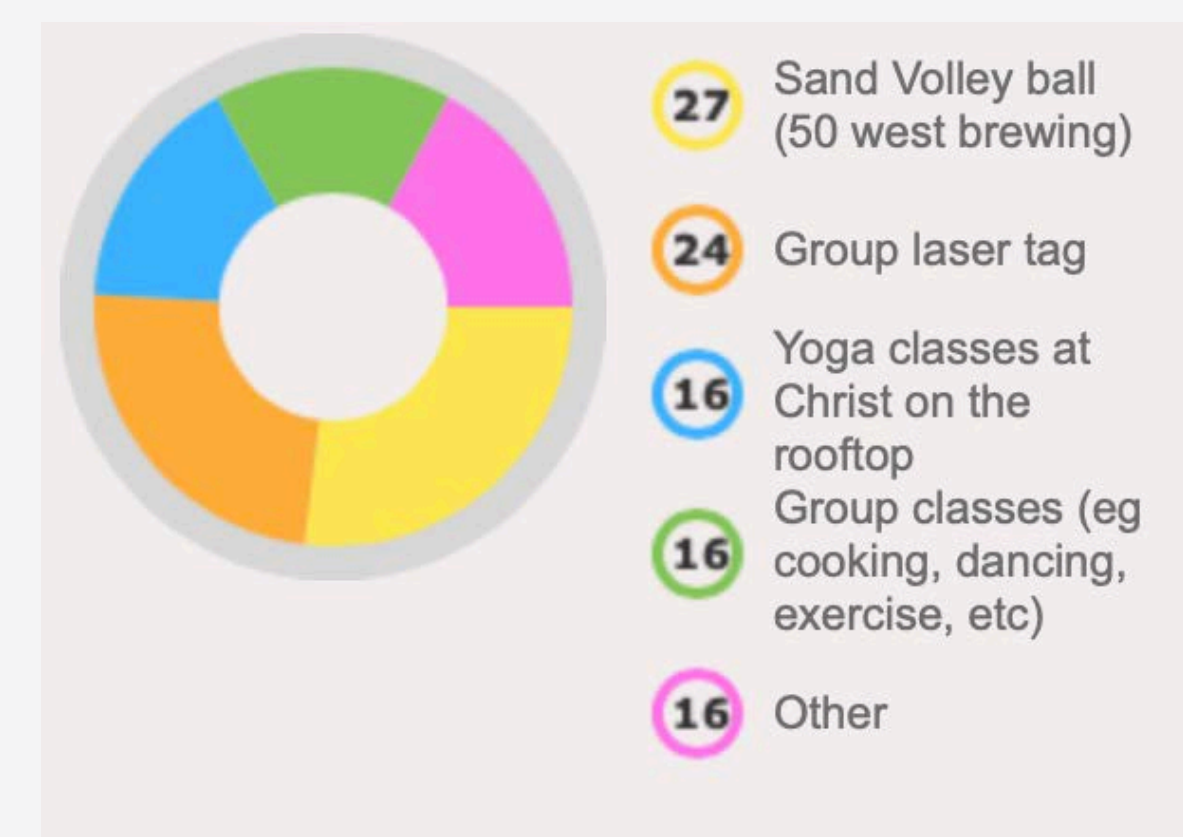
- All residents and fellows from residency programs at The Christ Hospital were invited to attend events
- Interventions/Changes
- Multiple wellness events on site and off campus
- Wellness resource page was created and distributed
- Surveys were sent out to assess needs/wants of residents
- Events were sponsored by GME committee

## METHODS: Measures/Metrics

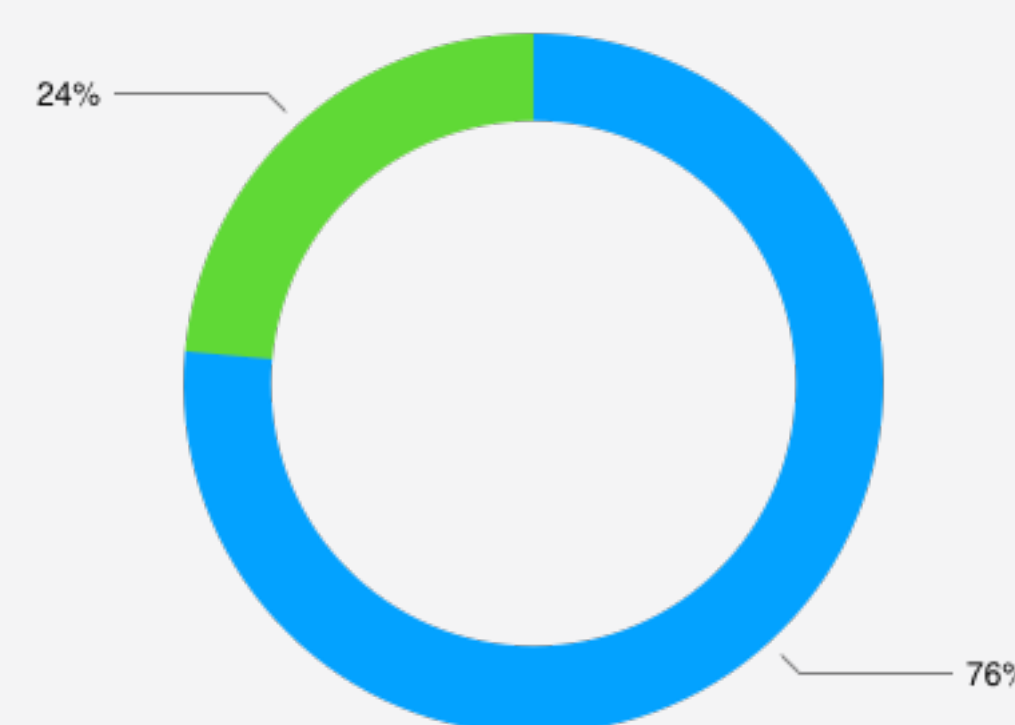
We performed an initial poll at first event, and did a mid-year survey. We also asked for in person feedback at meetings with residents and at the events. Response to initial poll was good, response to survey was limited. We chose not to do a formal research study. We will continue to discuss wellness initiatives during yearly retreats and request feedback from residents.

### Measure #1

- Poll at event. N=28, asked about timing of events, type of events, frequency, and demographics of class, residency/fellowship. Did live at first event 1 year ago in March.
- Activities requested



## RESULTS



### Measure #1: n=28

- Received feedback on what kind of future events people would like
- **Measure #2: Small response to survey, however results are still coming in (n=18)**
- Asked, Did you attend an event? Did it benefit your wellness/camaraderie? What would you like in the future?
- 13 attended event 5 did not, of total 76% found event increased wellness. There were no negative comments.

## RESULTS: Continued

### Measure #3: Feedback from individuals

- "I can honestly say that over my three years as a resident here, the interaction with and camaraderie with residents from the other programs here at Christ has improved to all the recent wellness events and I am very grateful for the institutional support. In summary, thank you for supporting our residency wellness"
- "I feel like the events we have now are very well put together and help the morale out a lot."



## Discussion: Barriers & Strategies

### Key Findings

- Qualitatively residents and staff both reported increased sense of camaraderie and connectedness. We received several responses that the events were well received and appreciated. Wellness committees are now integrated into GMEC
- **Limitations**
- Difficult to get clear feedback with low yield on surveys due to likely email/survey fatigue from residents. Direct conversation and word of mouth were best. Difficult for residents to plan and sustain all events.
- **Next Steps and Sustainability**
- Plan next event, incorporate requests from residents and fellows, look for outside staffing for yoga/dance classes.
- Requested onsite gym facilities, and concierge services
- Ideally have a position within the GME office that focuses on wellness to help maintain continuity over the years to come

## Project Management Plan

Begin completing this Project Management Plan at Meeting One and complete it with your team following Meeting One, i.e., by November 2017. Teams will have the opportunity to review/revise their Project Management Plans throughout the 18-month Initiative at each of the on-site meetings. The collective data from all of the teams' completed project management plans will be invaluable as we share and learn from this collaborative experience.

Team: The Christ Hospital

Project Title: Camraderie and Connectedness at The Christ Hospital

I.	<p>Vision Statement (markers of success by March 2019; Refer to Toolkit #5)</p>	<p>We recognize the individual nature of each person's whole health. As physicians we hope to be models for our patients, and we hope to care for ourselves so we can best serve others. We as a group will strive to foster a community and culture that is diverse, supportive in times of adversity, connected and reaffirming of each person's goals and dreams. Wellness is multifaceted, as is burnout. We envision providing both the intangible and tangible resources needed to maintain wellness and resilience during the challenging period of residency and beyond. There is much that is beyond one's control in residency, but where possible we will foster peer connection, a sense of meaning in one's work, recognition of our success, and resilience in the day to day struggles.</p> <p>As a group we intend to create events that span across the different residency programs. These events will serve many functions and be composed of stress reduction activities such as yoga, mindfulness, as well as social events and community service. The aim is to bring us together as a larger community. These events will be periodic and scheduled so that as many as possible can attend over time. Our hope is that by connecting the different programs we will have a better sense of collegiality and camaraderie at work which will aid in clear communication, positive morale and excellent patient care. We also envision creating a site that will provide resources for wellness in the community from places to eat, religious communities to attend, athletic pursuits and family activities as well as mental and physical health recommendations.</p>
II.	<p>Team Objectives (‘needs statement,’ project requirements, project assumptions, stakeholders, etc.)</p>	<ul style="list-style-type: none"> <li>-Create on site events that bring different residencies and fellowships together.</li> <li>-Provide resources about health and mental counseling</li> <li>-Requires funding and some organization from GME office and residents in each class</li> </ul>



		Main stake holders include: GME staff, DIO, residents/fellows from different programs who have chosen to participate in initiative.
III.	Team Members & Accountability (list of team members from Toolkit #6 and who is accountable for what)	<p>Dr. Schroder-Institutional representation, direct communication to hospital administrators</p> <p>Annette Lewis, GME Supervisor: Coordination of food and facilitated scheduling of events on and off site.</p> <p>Aurora Rivendale: Family Medicine-Psychiatry resident, co-coordinator and assisted planning events and developing surveys/polls for colleagues</p> <p>Gopal Koneru: IM resident, main communicator with IM residents and organized wellness events within IM residency</p> <p>Melissa Mefford: FM residency Co-coordinator of events</p> <p>Alexandra Macpherson: Co-coordinator of events</p>
IV.	Necessary Resources (staff, finances, etc.)	<p>-In an idea world having a wellness coordinator at the staff level for the residency programs would increase wellness for residents and demonstrate institutional support.</p> <p>-GME has some funding, will measure across the year to formulate budget for future events</p>
V.	Measurement/Data Collection Plan	<p>Decided against formal research and took more of a QI/PDSA approach</p> <p>-Surveys/polls given over the past year to do an initial needs assessment and assess interest and efficacy of events over the course of the year.</p>
VI.	Stakeholder Communication Plan (may be helpful to draft a flow chart of team members & senior management; Refer to Toolkits #2 and #4)	<p>Point of contact for planning events was GME supervisor Annette Lewis</p> <p>Dr. Schroder DIO worked with office at institutional levels to help build support</p> <p>Residents were main drivers for activities</p>
VII.	Potential Challenges (engagement, budget, time, skills gaps, etc.; Refer to Toolkit #3)	<p>-Time for residents to plan</p> <p>-Meeting needs of many different groups</p> <p>-Engagement of residents</p> <p>-Sustainability of efforts</p>

VIII.	Opportunities for Scholarly Activity (potential publications, conference presentations, etc.)	-We mainly presented at the AIAMC conference, however Dr. Mefford presented a poster at our Family Medicine research day when we were first implementing the events.
IX.	Markers (project phases, progress checks, schedule, etc.;; Refer to <i>NI V Roadmap to 2019</i> which will be presented at Meeting One)	-Intermittent satisfaction surveys and polls -Resident retreats for wellness building assessment

Sections X thru XIII to be completed first quarter 2019 for "Final Proceedings" booklet:

X.	Success Factors	<p>The most successful part of our work was seeing more residents engaging with one another outside of these events in the cafeteria and on the floors. Getting positive feedback and requests for new and different events.</p> <p>We were inspired by other residencies within the system and what they have already started doing to inspire and foster wellness in their residents.</p>
XI.	Barriers	<p>The largest barrier encountered was time and energy to organize events and to get both those of us organizing events together and the residents to attend events. Word of mouth seemed the best way to motivate people to come to events, emails worked somewhat but notifying folks in person made the biggest difference.</p>

		We worked to overcome this by having multiple reminders at meetings by residents who were involved. We also had official invites sent out to the event that was off campus and people rsvped appropriately to that.
XII.	Lessons Learned	The single most important piece of advice to provide another team embarking on a similar initiative would be have a team leader and delegate roles early on and have people stick to the roles. Recognize that residents schedules are very chaotic and it is often very useful to have a point person in the GME office to focus on planning and organizing events. We were very lucky to have someone willing to do that!
XIII.	Expectations Versus Results	<p><i>On a scale of 1 to 10 (with "1" meaning nothing and "10" meaning everything), how much of what you set out to do was your team able to accomplish?</i></p> <p>1 2 3 4 5 6 <u>7</u> 8 9 10</p>
XIV.	Sustainability and Next Steps	<p>What does your CEO need to know to help keep your work sustainable?</p> <p>Like in any well run company it is helpful to know that those at the highest position care legitimately and deeply about the wellness of their employees. Providing funding for a Wellness Officer and resources on site such as concierge services and a work out facility would greatly improve that sense of caring on the behalf of residents and all medical staff.</p>

David Dhanraj MD, MBA, Elizabeth Beiter, MD, Kimberly Bethea MD, Rachel Bramblet DO  
 Becky Fleig, Neha Gandhi, MD, Kevin Grannan, MD, Laura Hampel MD, Michael Holbert MD  
 Helen Koselka MD, Michelle Lopez MD, John Mitko MD, Chadd Todd MD, Peter Tran MD, Barbara Wexelman MD  
 Erin Worden MD, Muhammad Zubair MD, Steven Johnson MD, Erin Maetzold MD

NI VI Meeting #4 Tucson, AZ March 2019

## INTRODUCTION: Background

TriHealth is in the midst of a transformation in culture including the way physicians interact with and lead our health care teams. In order to support this transformation, we aim to focus on improving physician wellness, collegiality, and engagement.

The unique perspectives of our residents and our training faculty are often overlooked. Utilizing the voice of GME, we believe our efforts around physician wellness and collegiality will have a more robust and lasting outcome in our organization. Our participation in this initiative will help us move towards a culture that promotes physician well-being, a supportive work environment, decreased physician turnover, and improved patient outcomes.

### Our Mission:

*We envision TriHealth being a place where our physicians (residents, faculty, attendings) come to work feeling energized, refreshed, and engaged in our overall mission of patient care. We desire creating a healthcare environment that is able to identify factors associated with physician frustration and burnout and works systematically to reduce or eliminate these factors, knowing that this has been shown to improve patient outcomes.*

## Aim/Purpose/Objectives

By March 1<sup>st</sup> 2019, we will have implemented a process in GME that will measurably improve collegiality and satisfaction in the consultation process. We believe this will improve patient care and model behavior for our entire medical staff. The project will include improvements of our EMR and Information Systems to facilitate physicians finding one another as well as engaging in a collegial interaction.

We will help lead the physician wellness journey of our organization and represent TriHealth in our city-wide physician wellness coalition. We will implement a yearly wellness fair for our physicians to help them become aware of resources in our system to assist them in personal wellness.

## METHODS: Measures/Metrics

- Consultation Process**
  - Developed Consultation Compact for GME
  - IRB approved
  - Consultation survey distributed to residents and faculty attendings from Family Med, IM, OB/GYN, and Surgery
  - Repeat survey every quarter
- Inventory of Program-Specific Wellness Activities Shared**
- Physician Wellness Fair**
  - Implemented yearly fair featuring system resources for physician wellness
- Citywide Coalition for Physician Wellness**
  - Improved resource availability for physician crisis intervention



### Compact Consult Checklist

- Reviewed the on-call list for the specialty (online or in epic)
- Contacted the consultant directly (phone/doc halo)
- Referring physician included his/her name and number/doc halo on the consult. If this physician is signing out shortly then the number of the person on call
- Reason for consult clearly stated
- Urgency of the consult noted
  - STAT - respond within 1 hour and by phone call or doc halo
  - Urgent - by afternoon (if put in the morning) - respond with phone call or doc halo
  - Routine - within 24hrs - respond with phone call or doc halo
- Consultant included a direct contact number or pager at the bottom of their note (ideally not an office number)



### Consultation Survey (5 Point Likert Scale)

- How satisfied are you, overall, with the consultation process?*
- Direct provider-to-provider communication occurs during consultation process.*
- The interaction between providers during the consultation process is collegial.*
- Consultants clearly addressed the clinical question for which they were consulted.*
- Consultants provided appropriate care for my patient.*
- Consultants provided care within an appropriate time frame.*

## RESULTS:

### 1<sup>st</sup> quarterly Consultation Survey

- While the overall satisfaction level of the consultation process appears to be good. A large portion of both consultants and consulting physicians report low levels of direct interaction
- Based on initial screening, consulting physicians appear to have a generally higher level of satisfaction than do consultant physicians with regards to the overall consultation process.

TRIHEALTH - Consultation Survey - Referring Providers SEPTEMBER 1-December 31, 2018 Responses: 48						
	1 Not at all satisfied	2	3	4	5 Extremely satisfied	Avg. Std.
How satisfied are you, overall, with the consultation process?	4.17%	6.25%	31.25%	43.75%	14.58%	3.58 1
Direct provider-to-provider communication occurs during the consultation process.*	4.17%	29.17%	43.75%	14.58%	8.33%	2.94 1
The interaction between providers during the consultation process is collegial.*	2.08%	4.17%	14.58%	56.25%	22.92%	3.94 0.9
Consultants clearly addressed the clinical question for which they were consulted.*	2.08%		18.75%	58.33%	20.83%	3.96 0.8
Consultants provided appropriate care for my patient.*	2.08%		8.33%	52.08%	37.50%	4.23 0.8
Consultants provided care within an appropriate time frame.*	2.08%		10.42%	56.25%	31.25%	4.15 0.8

TRIHEALTH - Consultation Survey - Consulting Providers SEPTEMBER 1-December 31, 2018 Responses: 78						
	1 Not at all satisfied	2	3	4	5 Extremely satisfied	Avg. Std.
How satisfied are you, overall, with the consultation process?	16.67%	15.38%	38.46%	26.92%	2.56%	2.83 1.1
Direct, provider-to-provider communication occurs during the consultation process.*	5.13%	39.74%	35.90%	16.67%	2.56%	2.92 0.9
The interaction between providers during the consultation process is collegial.*	2.56%	30.77%	60.26%	6.41%	3.71	0.6
When consulting with you, referring providers clearly communicate the clinical question(s) they want you to address.*	8.97%	19.23%	35.90%	32.05%	3.83%	3.03 1
When consulting with you, referring providers clearly communicate what is expected of you (i.e. "I am being asked to order order" or "I am being asked to provide recommendations."*)	12.82%	25.64%	34.62%	24.36%	2.56%	2.78 1
The consultation requests I receive are appropriate.*	8.97%	43.59%	42.31%	5.13%	3.44	0.7

### Additional Project Outcomes

- Resident Wellness Fair, and planning for this to be an annual event
- Program Inventories of Wellness activities completed and will be annually updated
- GME Wellness subcommittee formed to develop common program initiatives around wellness

## Discussion: Barriers & Strategies

### Key Findings:

- Collegiality and effective communication are key drivers for wellness/burnout for resident physicians in our institution
- Difficult to improve the overall consultation experience without the adoption of the process outside of GME
- Significant variation among programs in how they address wellness

### Limitations

- Engagement and support of this initiative outside of GME
- Late implementation of new physician finder and communication platform at our institution
- Lack of effective and standardized communication outside of GME
- Lack of ability to give feedback during positive and negative interactions
- System-wide tool for evaluating wellness was transitioned by our organization mid-project

### Next Steps and Sustainability

- Continue to measure consultation process quarterly
- Partnership with physicians and departments outside of GME (will begin with ICU)
- Present results to TriHealth Patient Care Committee for implementation hospital wide
- Yearly Wellness Fair to be continued by newly formed Resident Council
- Integrating EAP/Behavioral Health into curriculum to normalize use of these services

## Project Management Plan

Begin completing this Project Management Plan at Meeting One and complete it with your team following Meeting One, i.e., by November 2017. Teams will have the opportunity to review/revise their Project Management Plans throughout the 18-month Initiative at each of the on-site meetings. The collective data from all of the teams' completed project management plans will be invaluable as we share and learn from this collaborative experience.

Team: TriHealth

Project Title: Physician Collegiality and Wellness

I.	<p>Vision Statement (markers of success by March 2019; Refer to Toolkit #5)</p>	<p><i>By March 1<sup>st</sup> 2019, we will have implemented a process in GME that will measurably improve collegiality and satisfaction in the consultation process. We believe this will improve patient care and model behavior for our entire medical staff. The project will include improvements of our EMR and Information Systems to facilitate physicians finding one another as well as engaging in a collegial interaction.</i></p> <p><i>We will help lead the physician wellness journey of our organization and represent TriHealth in our city-wide physician wellness coalition. We will implement a yearly wellness fair for our physicians to help them become aware of resources in our system to assist them in personal wellness.</i></p>
II.	<p>Team Objectives (‘needs statement,’ project requirements, project assumptions, stakeholders, etc.)</p>	<p><b>Need Statement:</b> <i>The TriHealth residents identified that lack of communication and collegiality during the consultation process was contributing to the burnout, and that improving this process could contribute to wellness.</i></p> <p><b>Project Requirements:</b></p> <ol style="list-style-type: none"> <li><i>1. Develop a consultation “compact” with expected behaviors for all of the physicians within GME.</i></li> <li><i>2. Inventories of current wellness initiatives from each program</i></li> </ol> <p><b>Stakeholders:</b> <i>Representative from all residency programs, GME and CMO Leadership, IT</i></p>
III.	<p>Team Members &amp; Accountability (list of team members from Toolkit #6 and who is accountable for what)</p>	<p><i>David Dhanraj MD, MBA, Elizabeth Beiter, MD, Kimberly Bethea MD, Rachel Bramblet DO, Becky Fleig, Neha Gandhi, MD, Kevin Grannan, MD, Adam Grisak, Laura Hampel MD, Michael Holbert MD, Helen Koselka MD, Michelle Lopez MD, John Mitko MD, Chadd Todd MD, Peter</i></p>

		<i>Tran MD, Barbara Wexelman MD, Erin Worden MD, Muhammad Zubair MD, Steven Johnson MD, Erin Maetzold MD</i>
IV.	Necessary Resources (staff, finances, etc.)	<i>Research Support, IT Support, Funding for refreshments for our Wellness Fair</i>
V.	Measurement/Data Collection Plan	<ol style="list-style-type: none"> <li>1. <i>Systemwide Physician Wellness survey (Mini Z, changed to Mayo Wellness Index) Annually</i></li> <li>2. <i>Consultation Survey: administered quarterly</i></li> <li>3. <i>ACGME Survey Wellness questions/report</i></li> </ol>
VI.	Stakeholder Communication Plan (may be helpful to draft a flow chart of team members & senior management; Refer to Toolkits #2 and #4)	<i>Monthly NI6 Team Meetings, Program specific Didactic Sessions, GME Grand rounds sessions Meetings with Patient Care Committee and senior quality leaders</i>
VII.	Potential Challenges (engagement, budget, time, skills gaps, etc.; Refer to Toolkit #3)	<ol style="list-style-type: none"> <li>1. <i>Impact on wellness and collegiality without broader participation from physicians outside of GME</i></li> <li>2. <i>Concurrent initiatives in the organization</i></li> <li>3. <i>Transition of wellness measurement tools and communication platforms occurring in the middle of this project</i></li> </ol>
VIII.	Opportunities for Scholarly Activity (potential publications, conference presentations, etc.)	<ol style="list-style-type: none"> <li>1. <i>We plan publish our survey data for our GME programs.</i></li> <li>2. <i>There are now opportunities for collaboration outside of GME which would allow for additional scholarly work</i></li> <li>3. <i>Presentation at AIAMC Annual meeting this year, and planning for presentation of the completed project at a venue to be determined</i></li> </ol>
IX.	Markers (project phases, progress checks, schedule, etc.; Refer to NI V Roadmap to 2019 which will be presented at Meeting One)	<i>Each NI 6 meeting served as our progress check, as well as the monthly cohort meetings.</i>

Sections X thru XIII to be completed first quarter 2019 for “Final Proceedings” booklet:

X.	Success Factors	<p><i>The most successful part of our work was....</i>          Finding consensus among the representative residents and faculty around the need to improve the consultation process to reduce burnout and improve satisfaction in the work of patient care.</p> <p><i>We were inspired by....</i>          The stories, both good and bad about how collegiality (or lack thereof) affected patient care.</p>
XI.	Barriers	<p><i>The largest barrier encountered was....</i>          Much of the frustration and difficulty in the consultation process originated from physician staff outside of GME.</p> <p><i>We worked to overcome this by....</i>          Late in the project we found a physician leader was independently working a project similar to ours in his department. We have agreed to work together to work alongside and to establish our compact in the ICU</p>
XII.	Lessons Learned	<p><i>The single most important piece of advice to provide another team embarking on a similar initiative would be....</i>          When your project coincides with a systemwide change that you intend to be part of your work, make certain that the timelines being promised by your organization are realistic and fit the timeline of your project. A large portion of our project was dependent on platforms that were delayed in their deployment by our organization.</p> <p><i>If you are considering a project that involves making a significant change (especially behavior) in your organization, it’s critical to enlist key stakeholders from outside of GME to actively participate in your project.</i></p>
XIII.	Expectations Versus Results	<p><i>On a scale of 1 to 10 (with “1” meaning nothing and “10” meaning everything), how much of what you set out to do was your team able to accomplish?</i></p> <p>1 2 3 4 5 6 7 8 9 10</p>

XIV.	Sustainability and Next Steps	<p><b>What does your CEO need to know to help keep your work sustainable?</b></p> <p>Our CEO and CMO have instituted an effort towards reducing error, improving quality, and all the physicians functioning as members of one system. One of the areas that is now a goal of the system is improving communication between physicians. A new communication platform was just launched but it still does not address the need for accurate information on available/on-call colleagues for clinical collaboration. Our GME programs are willing partners for developing effective utilization of technology and determining how to address the needs of our system. We believe from our work in NI6 that we can make the case that improved communication as well as setting behavior expectation for our consultation process will improve well-being for our physicians and hospital staff.</p>
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# Developing and Improving An Institutional Approach to Resident Well-Being

Catherine H. Renner, Elizabeth A. Bolten, Chanteau Ayers, Hayden L. Smith, Maheen Shakoor, Mohamed Elfeki, Hope Villiard, William J. Yost

## INTRODUCTION: Background

- Six community hospital-based residency programs (Internal Medicine, Pediatrics, Family Medicine, General Surgery, Transitional Year, and Podiatric Surgery), with varying sizes of residents, have no institutional regulated policies on monitoring and guiding resident wellness.
- Programmatic activities to address resident wellness exists with no common institutional approach. Also, there was a lack of institutional clear cut support or commitment to the well-being of residents.

## Aim/Purpose/Objectives

- Educate residents on the self-assessment tools to use during residency and independent practice.
- Survey residents institutionally to measure wellness at regular intervals.
- Develop a GMEC Subcommittee to lead the development of institutional policies that provide a systematic approach for measurement of wellness and interventions to assess and address resident wellness.
- The GMEC Subcommittee will inform institutional strategy on resident well-being activities and develop a Core Curriculum.

## METHODS: Interventions/Changes

### Subjects: Selection, Recruitment

- All Residents from six residency programs (Family Medicine, Internal Medicine, General Surgery, Pediatrics, Podiatry, and Transitional Year)
- Four surveys distributed and one Focus group over two academic years.
- Survey completion is optional and responses reported by program year (i.e., PGY-1, PGY-2, PGY-3:5).
- High response rates generally for all surveys, though rate started declining towards end of project.

### Interventions/Changes

- Implemented core conference curriculum during second year of project. This allows the institution to provide well-being tools and resources to residents throughout the academic year in hopes of addressing/minimizing well-being issues.
- Creation of GMEC Wellness Subcommittee comprised of Institutional leaders, faculty, residents, and Employee Assistance Director.

## METHODS: Measures/Metrics

- Initially measured depression, dependence, exhaustion and burnout using Maslach Burnout Inventory (MBI), CAGE questionnaire, Epworth Sleepiness Scale, and the Zung Self-Rating Depression Scale.
- Subsequent surveys were shortened, eliminating the Epworth Sleepiness Scale and the CAGE questionnaire. Attempted to facilitate 6 focus groups of 6-10 residents each between the second and third surveys. Only one focus group was successful and the results mirrored the survey. Therefore, we decided not to repeat the focus groups as a method of measure.
- Issued the surveys in June 2017, December 2017, May 2018 and December 2018.

### IRB Submission

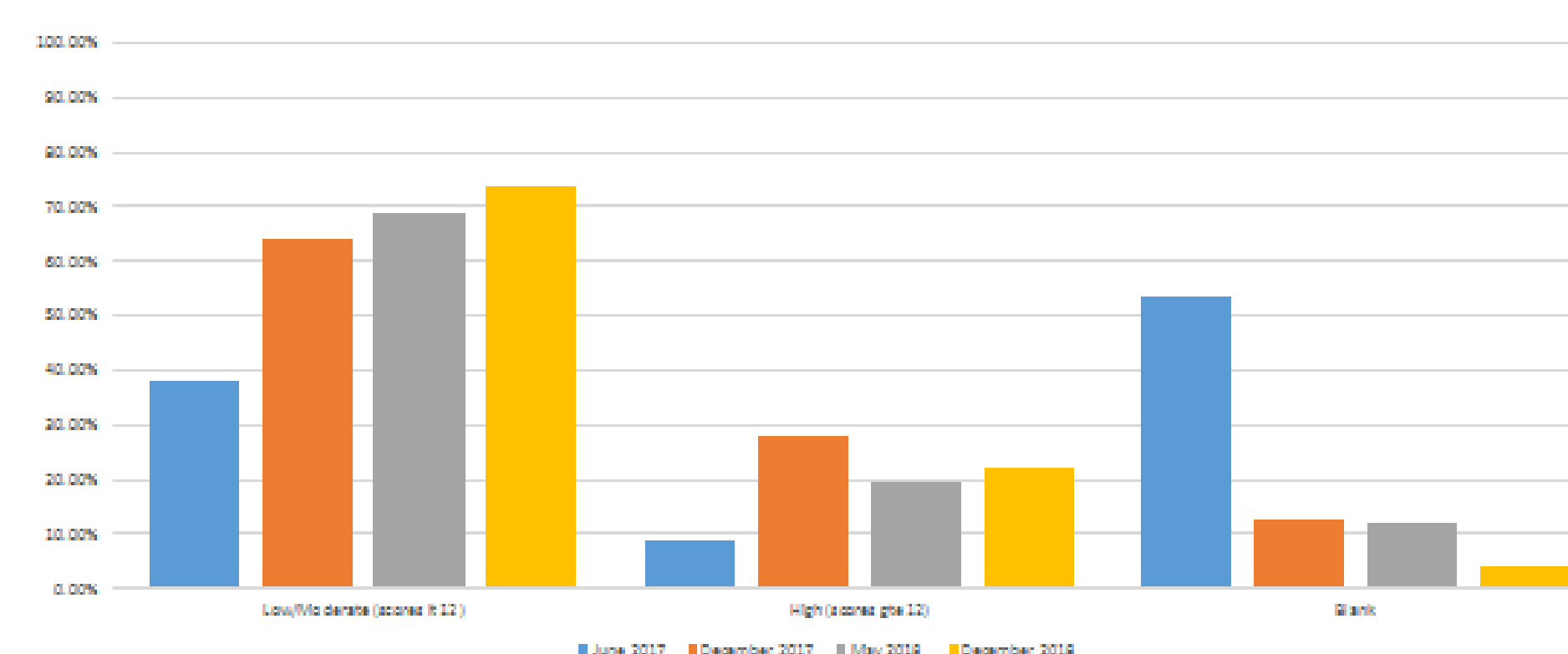
- The project was submitted to the IRB and approved in June 2017.

## RESULTS

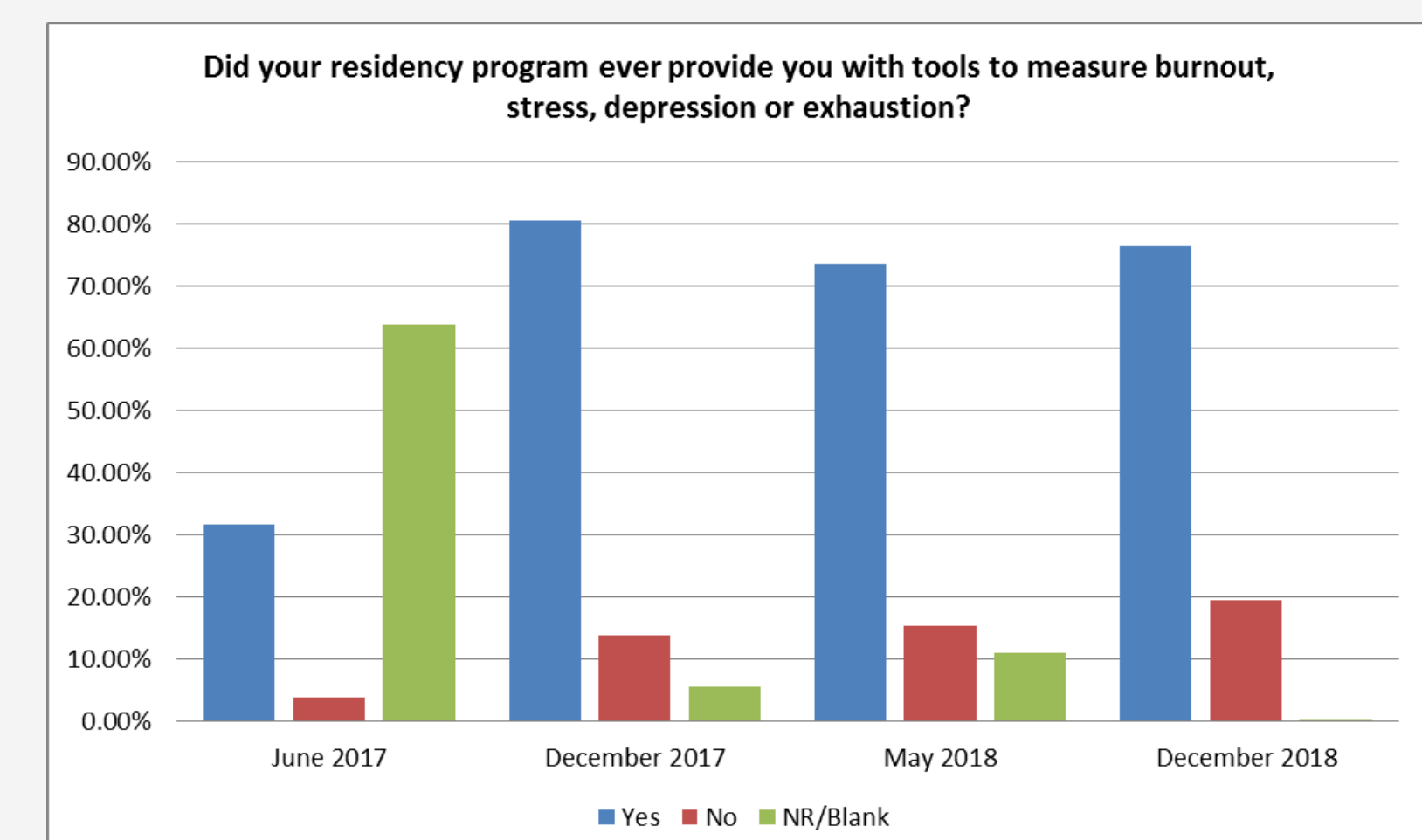
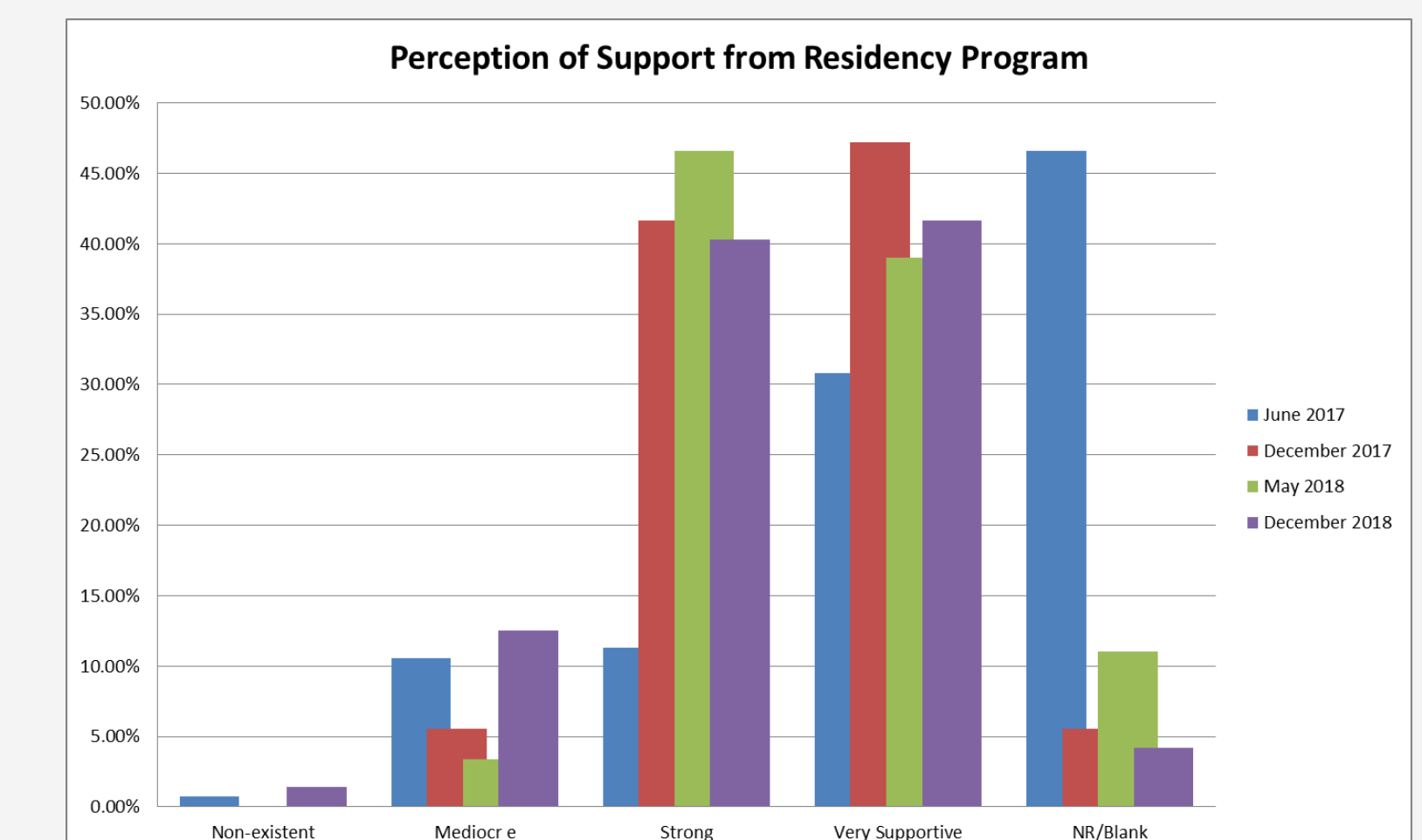
### Analysis

- Though our objective was to provide residents tools to measure burnout, stress, depression, and exhaustion, resident awareness of this objective declined with each survey iteration.
- Resident perceptions of program support had higher responses for STRONG and VERY SUPPORTIVE.
- Results for Depersonalization and Emotional Exhaustion are corroborative.

### Maslach: Depersonalization Categories



## RESULTS: Continued



## Discussion: Barriers & Strategies

### Key Findings

- Addressing resident well-being is complex and multifactorial task, which may benefit from small incremental changes.

### Limitations

- Developing institutional surveys that are voluntary, self-reported, and analyzed to create "One Size Fits All" interventions distributed across programs.

### Next Steps and Sustainability

- Multiple efforts have been made to embed well-being actions into medical education, expanding to include faculty, staff, and medical students.

## Project Management Plan

Begin completing this Project Management Plan at Meeting One and complete it with your team following Meeting One, i.e., by November 2017. Teams will have the opportunity to review/revise their Project Management Plans throughout the 18-month Initiative at each of the on-site meetings. The collective data from all of the teams' completed project management plans will be invaluable as we share and learn from this collaborative experience.

**Team:** UnityPoint Health – Des Moines

**Project Title:** Development and assessment of resident well-being evaluation processes and interventions

I.	<p>Vision Statement (markers of success by March 2019; Refer to Toolkit #5)</p>	<p><i>By obtaining and analyzing mental wellness within residents in each program, we hope to establish interventions that aid in the reduction of depression, sleep deprivation, and other stressors. We also intend to educate residents on the tools available for self-assessment and recognize depression, dependence and sleep deprivation. With this project, we will attempt to provide mechanisms to handle these issues when confronted by them.</i></p>	
II.	<p>Team Objectives (‘needs statement,’ project requirements, project assumptions, stakeholders, etc.)</p>	<p><i>In order to address mental health and wellness in residents, we will develop institutional interventions that to be used by programs when residents are known to have issues and as regularly planned activities. We will educate residents on the tools available to self-assess so that they are prepared once they are practicing independently.</i></p>	
III.	<p>Team Members &amp; Accountability (list of team members from Toolkit #6 and who is accountable for what)</p>	<p><u>Name/Credentials</u></p> <ol style="list-style-type: none"> <li>1. *Chanteau Ayers, JD*</li> <li>2. William J. Yost, MD</li> <li>3. Hayden Smith, PhD</li> <li>4. Elizabeth Bolten, MHA</li> <li>5. Catherine Renner, PhD</li> <li>6. Maheen Shakoor, DO</li> <li>7. Mohamed Elfeki, MD</li> <li>8. Hope Villiard Guzzo, MD</li> <li>9. Kelly Breffle, MHA</li> </ol>	<p><u>Position/Title</u></p> <p>Director, Med Ed Administration DIO Resident Research Coordinator Pediatric Residency Program Coordinator Director, Research Pediatric Resident Internal Medicine Resident General Surgery Resident Administrative Director, Univ of Iowa Branch Campus</p>

IV.	<p>Necessary Resources (staff, finances, etc.)</p>	<ul style="list-style-type: none"> <li>• Survey Monkey account as a surveying platform. Cost associated with this.</li> <li>• Maslach Burnout License as a surveying tool. Cost associated with this.</li> <li>• Funds for travel to conferences.</li> <li>• Access to the Employee Assistance Program counselors. This included in benefits.</li> <li>• Skype for Business webinar and recording software. Cost associated with this.</li> <li>• Access to the network shared files to store recorded resident wellness seminars.</li> </ul>
V.	<p>Measurement/Data Collection Plan</p>	<p>Initially, we planned to use 4 survey tools and distribute the survey quarterly. The first survey included the four tools, making it very long and laborious to complete. We decided to condense the survey to include only two tools for the second distribution. After the third distribution and an attempt at focus group meetings, we decided to also dial back the number of administered surveys each year to three times a year. We are considering further abbreviating the survey and continue collecting and analyzing resident wellness data.</p>
VI.	<p>Stakeholder Communication Plan (may be helpful to draft a flow chart of team members &amp; senior management; Refer to Toolkits #2 and #4)</p>	<p>Dr. Yost prepares a letter immediately before the dissemination of the surveys, notifying residents of the survey and the intent for collecting these data. Dr. Yost also notifies all program directors before each survey to solicit their encouragement for residents to complete the survey. Dr. Yost meets with each program at the beginning of each academic year to discuss the surveys, review past results, and to prepare residents for the new academic year of surveys.</p> <p>The survey is distributed by the Director of Research using the Survey Monkey tool. Dr. Renner is the only person with access to the survey results, so as to maintain the confidentiality of the respondents. She attaches Dr. Yost's prepared letter to the email sent with the link to complete the survey. She continues to communicate with residents throughout the survey response window, continuing to encourage participation until response rate plateaus. Dr. Renner then analyzes the information and prepares a report with aggregated results. The team meets to review the aggregated results and to strategize on interventions. Dr. Yost then reports out to residents, program directors, and the GMEC regarding the results of each survey.</p>
VII.	<p>Potential Challenges (engagement, budget, time,</p>	<p>Several challenges exist, including that data is self-reported and dependent on the honesty and self-awareness of the resident. Furthermore, survey participation is voluntary with no</p>

	skills gaps, etc.; Refer to Toolkit #3)	<i>incentive for responding and response rates are variable. As participation has dwindled slightly, we consider offering monetary/gift-like incentives, which will produce the challenge of lack of budget. Variability of resident experience in relation to survey distribution timing is another challenge as we attempt to develop institutional level interventions. A surgery resident's stressors are not necessarily similar to a pediatric resident, nor a PGY 1 with a PGY 3, or a resident on an elective rotation relative to a resident on an emergency medicine month. Therefore, it is hard to find a one-size fits all approach to addressing programmatic stressors in seven programs.</i>
VIII.	Opportunities for Scholarly Activity (potential publications, conference presentations, etc.)	<i>Continued results and program processes can be documented and submitted/disseminated at appropriate graduate medical education conferences (e.g., ACGME, AHME, AIAMC).</i>
IX.	Markers (project phases, progress checks, schedule, etc.; Refer to NI V Roadmap to 2019 which will be presented at Meeting One)	<i>Seasonal surveys (Summer, Fall/Winter, Spring). Monthly Wellness Core Conferences, quarterly meetings to review and analyze data, and biannual national meetings.</i>

Sections X thru XIII to be completed first quarter 2019 for "Final Proceedings" booklet:

X.	Success Factors	<p><i>The most successful part of our work was....</i></p> <p><i>Two successes resulted from this project:</i></p> <ol style="list-style-type: none"> <li><i>1. The creation of the GMEC Wellness Subcommittee. This committee is comprised of residency faculty, residents, GME leadership, medical school leadership, and an Employee Assistance representative.</i></li> <li><i>2. The development of a Wellness Core Conference Curriculum. This series of lectures was created to address common issues/stressors identified through surveys. These lectures are open to all residency programs and recorded for those who are not able to attend.</i></li> </ol> <p><i>We were inspired by....</i></p> <p><i>The comments provided by responders giving some insights into challenges presented to residents and the engagement of faculty in addressing these issues.</i></p>
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XI.	Barriers	<p><i>The largest barrier encountered was....</i></p> <p><i>Time and project evaluation are the largest barriers. The time needed between collecting and analyzing data from surveys and implementing interventions is a challenge. It is hard to determine if the intervention directly affected the data from the follow-up survey.</i></p> <p><i>We worked to overcome this by....</i></p> <p><i>We are strategizing on how to assess interventions in proximity to the implementation. This would allow us to better assess correlation.</i></p>
XII.	Lessons Learned	<p><i>The single most important piece of advice to provide another team embarking on a similar initiative would be....</i></p> <p><i>Communicating results to residents is essential to the success of survey longevity. It is apparent from repeated surveys that some residents are not aware of interventions implemented as a result of the initiative. We think it is important to continue this dialogue and ensuring that we are connecting the dots of the survey/intervention relationship.</i></p>
XIII.	Expectations Versus Results	<p><i>On a scale of 1 to 10 (with "1" meaning nothing and "10" meaning everything), how much of what you set out to do was your team able to accomplish? I would rate a 7.</i></p>
XIV.	Sustainability and Next Steps	<p><i>What does your CEO need to know to help keep your work sustainable? Mental wellness as a concern is not restricted to GME and should be a priority organization-wide.</i></p>

## INTRODUCTION: Background

Virginia Mason Medical Center's 2017 CLER review by the Accreditation Council for Graduate Medical Education (ACGME) found that 61% of residents would "power through" the end of their shift and only 28% residents would notify their supervisor of fatigue.

Compelled by these findings, a team comprised of residents, faculty and Graduate Medical Education (GME) leaders identified three domains for improvement work: 1) Make it easier to **ask for help** and provide support when they do; 2) **Improve access** to resources; and 3) **Increase connectedness**.

Improvement work in these areas supports one of Virginia Mason's current organizational goals - "Respect for People" and the Graduate Medical Education vision to shape the future of healthcare by transforming medical education.

## METHODS: Interventions/Changes

Three strategies were identified to further develop VM's culture of resident wellbeing:

- 1) Improve access to and awareness of wellness resources;** methods - resident survey, improve website tools, improve awareness of Employee Assistance Program services; define "sick/leave/vacation" time off policies by program
- 2) Asking For Help;** bi-weekly intern to intern groups; monthly "Death Rounds" in the ICU
- 3) Creating Connections;** institute monthly "Grief Pauses" in the critical care unit and add multidisciplinary resident led "rounds" a.k.a. M&M case reviews.

IRB review was conducted and Quality Improvement Publication Worksheet was completed for these three areas.

## RESULTS

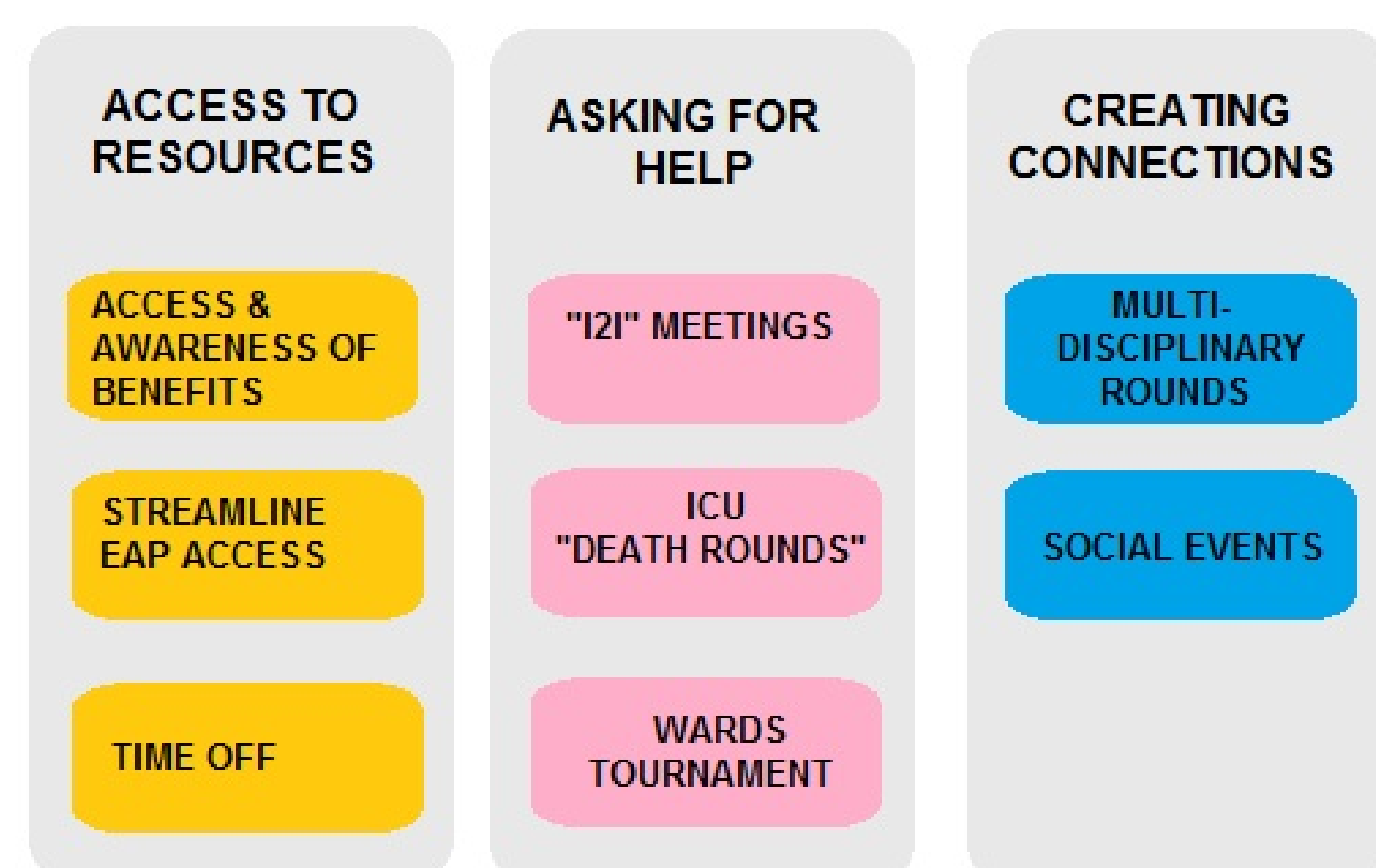
- "Big Dot" Metric = ACGME Survey Expected May 2019
  - Preliminary Data obtained from Pulse Surveys
    - 87% report feeling supported by other residents (up from 84%)
    - 66% report pride in their work (down from 80%)
    - 58% report vitality to do work (down from 74%)
    - 38% are eager to return to work each day (down from 66%)
    - 32% feel like they make the world better (down from 65%)
- "Intern to Intern" groups are facilitated bi-weekly. After participating, interns reported:
  - 32% increase in resiliency
  - 42% increase in morning energy levels.
- "Death Rounds" are facilitated monthly
  - 60% of senior residents have participated and completed Experience Based Design surveys.
  - 85% of responses reflected positive personal benefit from the intervention.
- Two "Multidisciplinary Rounds" were held.
  - Improvements and adjustments made from first to second PDSA. Planning to retest with smaller groups focusing within two programs each session
- Organization-wide change is underway as a result of the 8 Initiatives
  - "Auto-Pause" (triage, replacement from duties, recover) when emotionally taxing care events occur and
  - Increased awareness of the organization's EAP physician/resident tailored services.

## Aim/Purpose/Objectives

Improving the culture of wellbeing and building lifelong resilience among residents and faculty will require a multi-modal approach that will need sustained work over the coming years. The following hallmarks guide this project's aims:

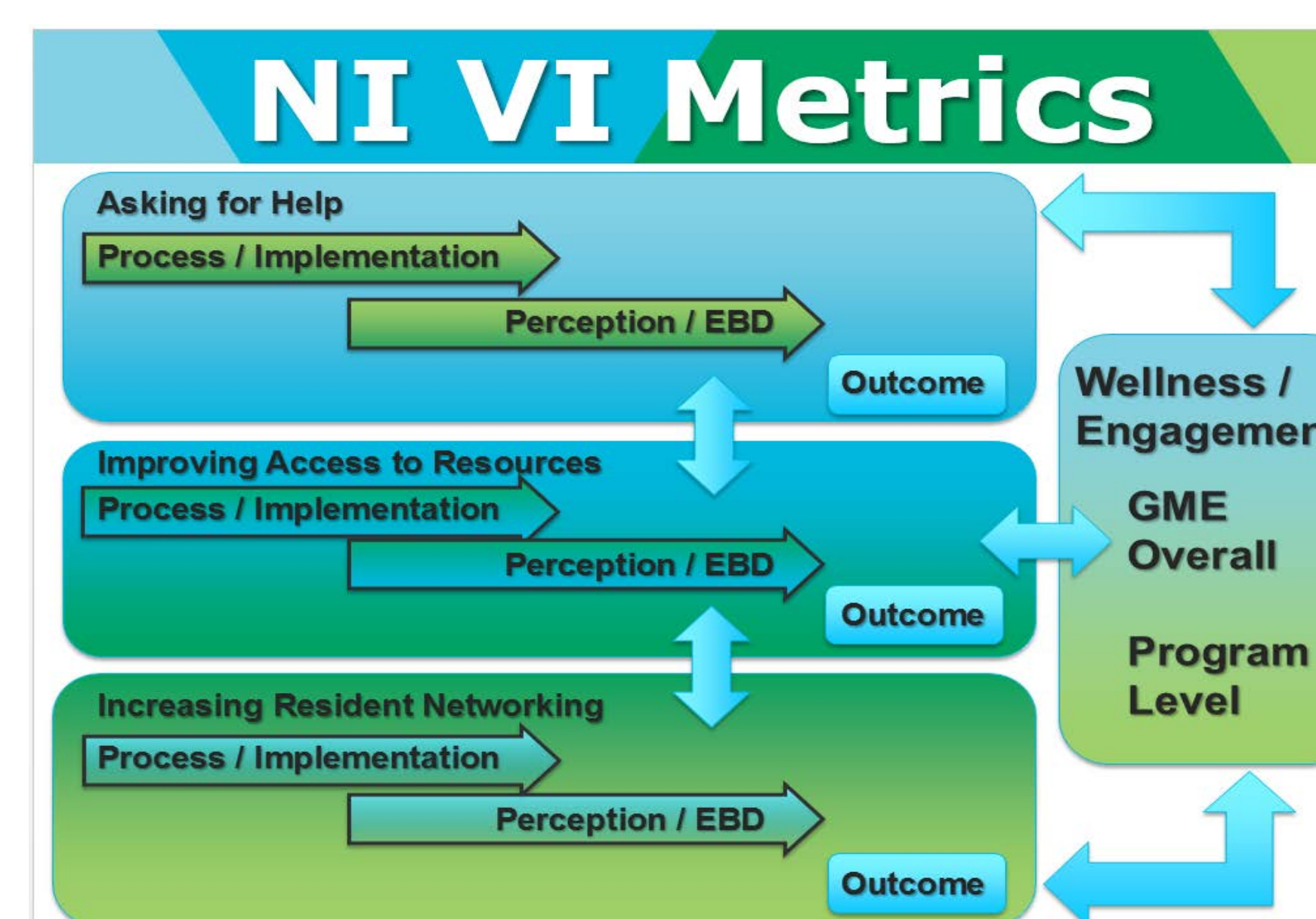
- ❖ Trust and support defines the relationship among residents and faculty.
- ❖ There is no hesitation to ask for help in the graduate medical education program.
- ❖ When help is needed, it is available.
- ❖ The processes for how to support residents are transparent, fair, and well understood by residents and faculty.
- ❖ Residents feel connected to their purpose in medicine.

The project's 8 initiatives are categorized into three domains:



## METHODS: Measures/Metrics

Because a multi-modal, multi-year approach is undertaken, the efficacy of the initial 8 initiatives will be monitored using three approaches to understanding the impact and effectiveness of the initiatives. Guided by the following model, many metrics are employed.



Examples of metrics being monitored:

- Improved sense of teamwork – survey - Target = 50% positive responses post intervention.
- Death Rounds–Residents report personal benefit - Target = 50% improvement pre to post intervention.
- Awareness of EAP Benefits – Process Metric – Target = EAP Flyer created and distributed
- Availability of Sick/Leave/Vacation Policies – Target = 100% of programs have policies written out and available online

## Discussion: Barriers & Strategies

### Key Findings

Survey results may differ based on venue vs. seasonal variations (ACGME survey in the summer vs. Pulse Surveys in the Fall/Winter)  
 Projects come in many shapes and sizes – not all lend themselves to the same types of metrics

### Limitations

Operationalizing of resources, freeing the funds, providing leadership for management (eg. social worker for "I to I")  
 Time and competing priorities.

### Next Steps and Sustainability

- Continued maintenance the GME website
- Continue to increase awareness for use of available benefits
- Continue increasing awareness of EAP benefits for residents.
- Third PDSA in Fall 2019 of multidisciplinary learning event involving two residency programs at a time, rather than every program at once.
- PDSA to build sustainable, resident-centric opportunities for fun.

## Project Management Plan

Begin completing this Project Management Plan at Meeting One and complete it with your team following Meeting One, i.e., by November 2017. Teams will have the opportunity to review/revise their Project Management Plans throughout the 18-month Initiative at each of the on-site meetings. The collective data from all of the teams' completed project management plans will be invaluable as we share and learn from this collaborative experience.

**Team:** Virginia Mason Medical Center

**Project Title:** Creating a Culture of Resident Wellbeing: Access, Support, and Connection

I.	<p>Vision Statement (markers of success by March 2019; Refer to Toolkit #5)</p>	<p>Inspire others to work towards respect, support, and wellness for all people.</p>
II.	<p>Team Objectives (‘needs statement,’ project requirements, project assumptions, stakeholders, etc.)</p>	<p>Improving the culture of wellbeing and building lifelong resilience among residents and faculty will require a multi-modal approach that will need sustained work over the coming years. The following hallmarks guide this project’s aims:</p> <ul style="list-style-type: none"> <li>❖ Trust and support defines the relationship among residents and faculty.</li> <li>❖ There is no hesitation to ask for help in the graduate medical education program.</li> <li>❖ When help is needed, it is available.</li> <li>❖ The processes for how to support residents are transparent, fair, and well understood by residents and faculty.</li> <li>❖ Residents feel connected to their purpose in medicine</li> </ul>
III.	<p>Team Members &amp; Accountability (list of team members from Toolkit #6 and who is accountable for what)</p>	<p>Gillian Abshire, RN MS - Dir. GME Project Team Leader            Jeffrey Rouse, MD – Fellow, Pain Medicine Resident/Fellow Initiative Team Lead            Sarah Nobles, MD – Resident, Radiology Resident/Fellow Initiative Team Lead            Meriah Moore, MD – Resident, Internal Medicine Resident/Fellow Initiative Team Lead            Kelly Hendershot, MD – Resident, Radiology Project team member            Alex Ajeto, MD – Resident, Internal Medicine Project team member            Alvin Calderon, MD – IM Program Core Faculty Project team member            Nicketti Handy, MD – Resident, Gen. Surgery, Project Team Member            Jennifer Richards, Admin. Director, Human Resources Project Team member</p>

		Ryan Pong, Deputy DIO & PD of TY program, Project Team member and Advisor Joyce Lammert, DIO, Project Team Member and Advisor
Te	Necessary Resources (staff, finances, etc.)	VM’s GME budget has clearly designated necessary resources for supporting initiatives requiring funding (Intern to Intern, Wards Tourney) and will continue to work to designate FTE/time resources where control resides in departments outside the purview of GME (social work) is underway. Each budget year will assess the business case for continued support and best use of resources.
V.	Measurement/Data Collection Plan	Because a multi-modal, multi-year approach is undertaken, the efficacy of the initial 8 initiatives will be monitored using three approaches to understanding the impact and effectiveness of the initiatives. Guided by the following model, many metrics are employed. Examples of metrics monitored: Improved sense of teamwork – survey - Target = 50% positive responses post intervention. Death Rounds–Residents report personal benefit - Target = 50% improvement pre to post intervention. Awareness of EAP Benefits – Process Metric – Target = EAP Flyer created and distributed Availability of Sick/Leave/Vacation Policies – Target = 100% of programs have policies written out and available online.
VI.	Stakeholder Communication Plan (may be helpful to draft a flow chart of team members & senior management; Refer to Toolkits #2 and #4)	Medical Center Leadership: via Executive Leadership reports and meetings and Quarterly CEO and Board reports. To GME Leadership: via GMEC meetings – reports from residents to the committee. To VM Residents: information via internal weekly newsletter (“The SOUP”). Individual initiatives all require very specific process communication which will occur using the organization’s internal communication systems, together with targeted communication as the initiative dictates (see Project Readiness Forms for each initiative).
VII.	Potential Challenges (engagement, budget, time, skills gaps, etc.; Refer to Toolkit #3)	Group time – Difficult to gather key project team members together to accomplish forward momentum on projects, this likely will continue to be a challenge to the team. Sustaining the gains will face challenges with regards to identifying “champions” to continue the work and to manage the logistics of each of the different initiatives. Resources may be needed from departments that are not primarily serving residents (Social Work) and leadership will be working to overcome the barriers relevant to need for time and managing capacity in order to continue the work.



VIII.	<p>Opportunities for Scholarly Activity (potential publications, conference presentations, etc.)</p>	<p>Each of the 8 projects are excellent examples of independent projects which residents are considering as potential for scholarly presentation. The Project Readiness forms are designed specifically to help the residents direct their work to include elements required for such scholarly endeavors. Mentors of this project will be exploring resident interest and capacity to bring the projects to a final product worthy of presentation. All are anxiously awaiting “big dot” metrics in May in order to proceed. Fortunately, many of the residents engaged in this project will be advancing to additional years of residency at VM and will be positioned to pursue this option.</p>
IX.	<p>Markers (project phases, progress checks, schedule, etc.; Refer to <i>NI V Roadmap to 2019</i> which will be presented at Meeting One)</p>	<p>All implementation stages of the project have been completed, save the final conclusions which are awaiting the results of “big dot” metric – anticipated for availability in May 2019. Once received, the final work will be to analyze results, apply learnings to each of the initiatives, make adjustments to the processes in place in order to improve outcomes. Finally, residents will be encouraged to pursue scholarly presentation of their initiative work, relating the initiative to the larger goals. They will be assisted to present, at minimum, to their resident group, and also to select leadership groups within Virginia Mason. Ideally at least two scholarly presentations will be submitted at national or regional conferences in the 2019-20 academic year.</p>

Sections X thru XIII to be completed first quarter 2019 for “Final Proceedings” booklet:

X.	<p>Success Factors</p>	<p><i>The most successful part of our work was....</i> Realizing that the work of the residents was impacting other target populations within the organizations (providers and multidisciplinary teams). For example the deep dive into understanding a process which had been created but had fallen into latency, resulted in the re-ignition of that process and it’s spread to also apply to providers (S.O.S – became the topic of an RPIW which resulted in “AUTO PAUSE”). <i>We were inspired by....</i>receptivity of our multidisciplinary team members to partner with us to tackle the issues, seek solutions and jump in to “try” a few things (e.g.: “Intern to Intern” social workers, “Wards Tourney: - Hospitalists and Med Students, “Death Round”s – Palliative Care attending).</p>
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XI.	Barriers	<p><i>The largest barrier encountered was....</i>lack of designated time for residents to be freed to work together in teams, off-site rotations takes valuable team members off-line for big chunks of time.</p> <p><i>We worked to overcome this by....</i>having multiple team members and sharing the tasks through handoffs, selecting team members that have at least 2-3 years left in their tenure at the organization.</p>
XII.	Lessons Learned	<p><i>The single most important piece of advice to provide another team embarking on a similar initiative would be....</i> Trust the process –make small incremental improvements, steadfastly with joy and patience. And also....use your existing internal tools.</p>
XIII.	Expectations Versus Results	<p><i>On a scale of 1 to 10 (with “1” meaning nothing and “10” meaning everything), how much of what you set out to do was your team able to accomplish?</i></p> <p><b>7</b> This rating may change once we have the results of our “big dot” metric.</p>
XIV.	Sustainability and Next Steps	<p><i>What does your CEO need to know to help keep your work sustainable?</i></p> <p>Resident wellness and resilience improvements at VM have made significant initial strides and will always be part of the conversation when considering the health and wellbeing of our GME programs as we move into the future.</p>