The AIAMC National Initiative:

Improving Patient Care through Medical Education

PROCEEDINGS OF NATIONAL INITIATIVE VII

March 2021

National Initiative

AiAMC
Alliance of Independent Academic Medical Centers

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OVERVIEW OF THE AIAMC NATIONAL INITIATIVES

Why a National Initiative?
The AIAMC advances the development and application of innovative educational solutions to drive better clinical outcomes. Through networking, sharing of information, roadmaps, research and best practices, the Alliance equips members to find and implement effective solutions to their care quality and patient safety challenges. These endeavors include participating in AIAMC National Initiatives, achieving compliance with policies and regulatory imperatives, and realizing GME-supported operational improvements.

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. Approximately 80 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 V were published in the March 2018 issue of the Ochsner Journal, the official publication of the AIAMC National Initiatives and the American Journal of Medical Quality.

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.

Results from NI VI were published in the March 2020 issue of the Ochsner Journal, the official publication of the AIAMC National Initiatives and the Journal of Patient-Centered Research and Reviews (JPCRR).

National Initiative VII:
Teaming for Interprofessional Collaborative Practice (IPCP) launched in the fall of 2019 with 31 AIAMC member teams. Despite a 100-year pandemic, 26 of those teams successfully completed the Initiative. Three of the four meetings were held virtually, with foci on the micro-, meso-, and macro-environment approach to teaming. This Initiative helped us to better understand the concepts of teaming for interprofessional collaborative practice (IPCP) and the relationship to health care outcomes.

Results from NI VII will be published in the March 2022 issue of the Ochsner Journal, the official publication of the AIAMC National Initiatives as well as various other publications in progress.

National Initiative VIII:

Applications for J.E.D.I.: *Justice, Equity, Diversity, and Inclusion* will be available in mid-April 2021. We hope you will join us for this timely and critically important work.

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-seven hospitals and health systems and more than 1,200 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.

The Ochsner Journal is the official journal of the AIAMC and our National Initiatives.

For more information on the AIAMC National Initiatives in the AIAMC, contact Executive Director Kimberly Pierce Burke at kimberly@aiamc.org or 312.836.3712

NI VII Participating Institutions

AdventHealth - Orlando Orlando, FL	Guthrie Robert Packer Hospital Sayre, PA
Advocate Lutheran General Hospital Park Ridge, IL	Hackensack Meridian Health – Ocean Medical Center Brick, NJ
Arrowhead Regional Medical Center Colton, CA	HealthPartners Institute Minneapolis, MN
Aurora Health Care Milwaukee, WI	HonorHealth Scottsdale, AZ
Bassett Medical Center Cooperstown, NY	Kaiser Permanente Northern California Oakland, CA
Baylor Scott & White Temple, TX	Main Line Health Bryn Mawr, PA
Baystate Health Springfield, MA	Monmouth Medical Center - RWJBH Long Branch, NJ
Billings Clinic Billings MT	Ochsner Health System New Orleans, LA
Cedars Sinai Los Angeles, CA	OhioHealth Riverside Methodist Hospital Columbus, OH
ChristianaCare Newark, DE	Our Lady of the Lake Regional Medical Center Baton Rouge, LA
Cleveland Clinic Akron General Akron, OH	St. Luke's University Health Network Bethlehem, PA
Cleveland Clinic Cleveland, OH	TriHealth Cincinnati, OH
Community Health Network Indianapolis, IN	UnityPoint Health – Des Moines Des Moines, IA
Good Samaritan Hospital Vincennes, IN	

Improving the transition of care from ICU to step-down unit

Dwayne Gordon MD, Jian Guan MD, Luis Isea MD, Xuan Guan MD, Sumayyah Shah MD and Mengni Guo MD

AdventHealth | Graduate Medical Education

National Initiative

NI VII Meeting #4

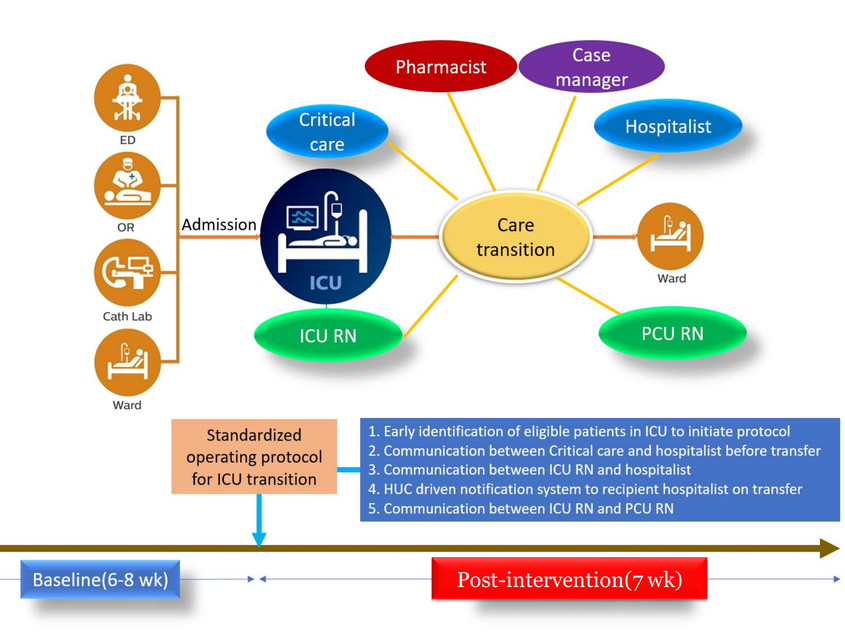
INTRODUCTION

- Timely transitioning patients from costly ICU environment to step-down units is a promising domain for cost-effectiveness improvement.
- An optimal flow is critical to ensure high-quality care. Engaging healthcare professionals across different clinical settings is vital to successful implementation of this strategy.
- We hypothesize improving the handover process from ICU to step-down unit will lead to improved transition of care.

OBJECTIVES

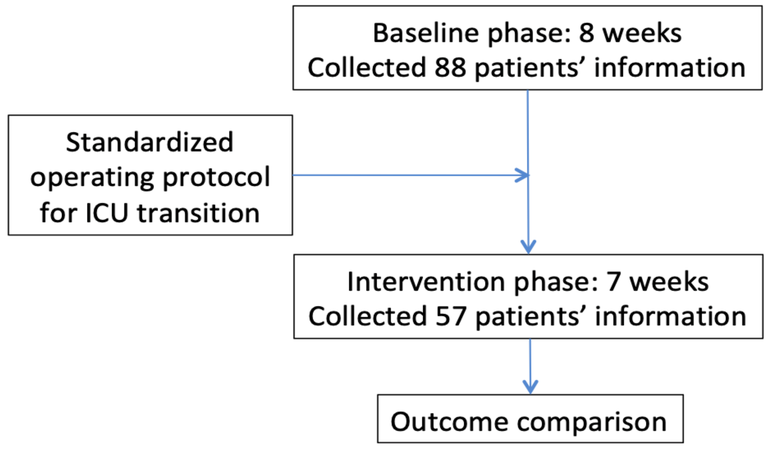
- To bridge gaps in communication between the ICU and step down via a multidisciplinary approach

METHODS: Interventions/Changes



METHODS: MEASURES

- Timing of consulting hospitalist
- Communication between CCM and hospitalist
- Standardized ICU nurse to PCU sign off protocol
- ICU RN to identify and communicate with receiving hospitalist
- Questionnaire to assess ICU RN's perception on current ICU to PCU care transition

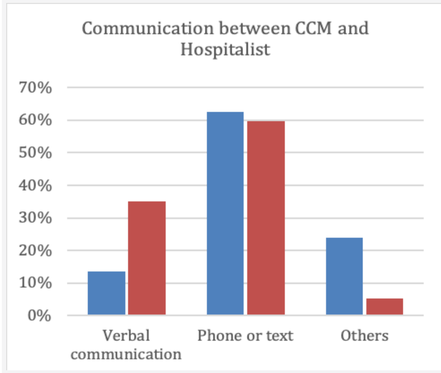


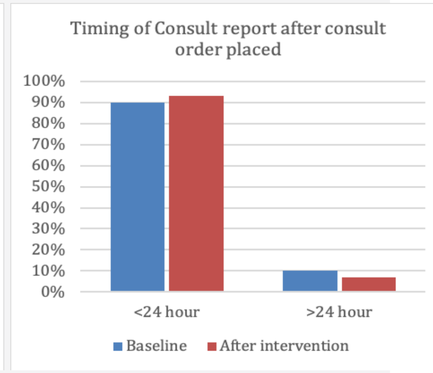
RESULTS

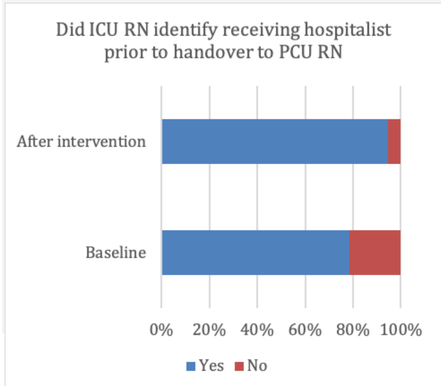
A total of 145 patients were included in the analysis, with 88 patients in the baseline phase and 57 patients after the intervention phase.

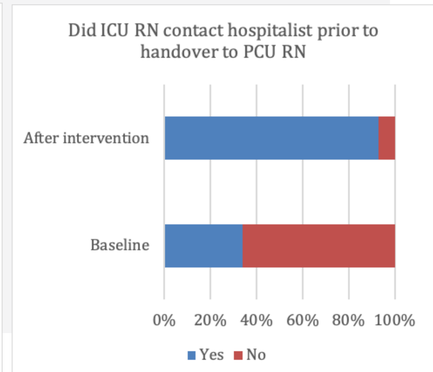
Outcome measurements		Baseline	Post-intervention
Communication between ICU and hospitalist	Verbal communication	12 (14%)	20 (35%)
	Phone or text	55 (62%)	34 (60%)
	Others	21 (24%)	3 (5%)
ICU RN contacted hospitalist prior to handover to PCU RN	Yes	30 (34%)	53 (93%)
	No	58 (66%)	4 (7%)
ICU RN identified hospitalist prior to handover to PCU RN	Yes	69 (78%)	54 (95%)
	No	19 (22%)	3 (5%)
Interval between consult order and first hospitalist note	<24 hours	79 (90%)	53 (93%)
	>24 hours	9 (10%)	4 (7%)

RESULTS: Continued









DISCUSSION

- Our data suggests there is significant communication gap between intensivists and hospitalists, as well as between critical care RNs to step-down unit RNs, which leads to delayed care during the transition.
- By implementing a systematic work-flow we demonstrated that improving patient handover process effectively closed the communication gap, with tremendous potential to reduce cost and improve quality.
- Due to time limitation, further analysis including ICU LOS, hospital LOS and ICU readmission rate are still in process.
- How to improve PCU RN to patient ratio is a challenge we face to improve care transition further.

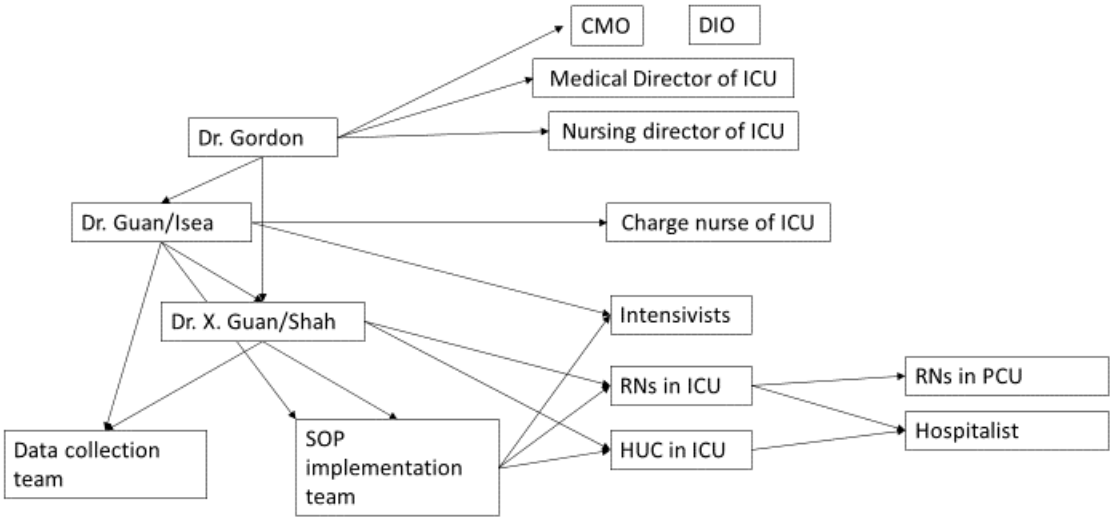
Project Management Plan

Begin completing this Project Management Plan at Meeting One and complete it with your team following Meeting One, i.e., by November 2019. 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 Orlando **Project Tile:** Improving the transition of care from ICU to step-down unit

I.	Vision Statement (markers of success by March 2021; Refer to Toolkit #6 after meeting one)	*The vision of our team is to create smooth highways of communication amongst a multi - disciplinary team of providers to form an environment that is patient centric, with an emphasis on safety and quality during transitions of care.*
II.	Team Objectives ('needs statement,' project requirements, project assumptions, stakeholders, etc.)	*to use the tools of teaming to provide a systematic method to transition patients from the ICU to the step-down unit, by bridging gaps in communication between the ICU and step down multidisciplinary teams. Improving communication enhances patient care, safety, and sense of wellbeing, as well as decreases potential sentinel events and care gaps.*
III.	Team Members & Accountability (list of team members from Toolkit #7 [after meeting one] and who is accountable for what)	*Team Leader:* ***Dr. Dwayne Gordon****-responsible for conceptualization, initiation, and supervision of this QI project. He was also accountable for communication with C-suite people and RN leaders.* *Team members:* ***Dr. Jian Guan****-responsible for organizing team meeting, data collection, implementation of SOP, data analysis. He was also accountable for communication with ICU charge nurse and intensivists.* ***Dr. Luis Isea****- responsible for organizing team meeting, data collection, implementation of SOP, data analysis. He was also accountable for communication with ICU charge nurse and intensivists.* ***Dr. Xuan Guan****- responsible for data collection, implementation of SOP, data analysis. He was also accountable for communication with ICU residents and intensivists.*

		Dr. Sumayyah Shah*- responsible for data collection, implementation of SOP, data analysis. She was also accountable for communication with ICU RN for surveys.* ***Dr. Mingni Guo****-responsible for data collection, implementation of SOP, data analysis and manuscript preparation*
IV.	Necessary Resources (staff, finances, etc.)	*Staff:* *C-suite people: Associated CMO, Medical director of Critical care, Designated institutional official (DIO) of Adventhealth Graduate Medical Education, Nurse manager of Critical Care* *Project leaders: Dr. Dwayne Gordon, assistants: Dr. Jian Guan and Dr. Luis Isea* *Data collection team: Residents in ICU rotation and Dr. Xuan Guan/Dr. Sumayyah Shah* *SOP implementation team: Residents in Research rotation and Dr. Xuan Guan/Dr. Sumayyah Shah* *ICU team: Intensivists, charge nurse, RNs, Hospital Unity Coordinator (HUC)* *Finances:* *All the staffs involved in this project provided volunteering work without compensations. No institutional or outside funding.*
V.		*1 Timing of consulting hospitalist (less than 24 hour of ICU admission)* *2 Communication between CCM and hospitalist (In person vs. Phone/text vs. others)* *3 Standardized ICU nurse to PCU sign off protocol (Nurse leader input, key components including receiving hospitalist group and HUC driven notification system)* *4 ICU RN to identify and communicate with receiving hospitalist on the day of PCU transfer* *5 Questionnaire to assess ICU RN's perception on current ICU to PCU care transition* *6 Length of stay, cost, readmission rate-can be done retrospectively*

VI.	Stakeholder Communication Plan (may be helpful to draft a flow chart of team members & senior management; Refer to Toolkits #3 and #5)	
VII.	Potential Challenges (engagement, budget, time, skills gaps, etc.; Refer to Toolkit #4)	*Engagement: To convincing leadership that there is a problem that is relevant to patient care and safety; to convince ICU charge nurse, RNs and intensivists that the proposed SOP QI project is worthwhile to pursue; to convince ICU residents to integrate the SOP to the daily routine; to convince data collection team and ICU RNs to overcome fatigue* *Budget: All based on volunteering work, no compensation* *Time: Obstacle: COVID-19 pandemic, ICU RN turnover, Busy clinical duties for both RNs and Residents.* *Skill gaps: We have monthly group meeting organized by Dr. Gordon to discuss skills gaps and other important issues.*

VIII.	Opportunities for Scholarly Activity (potential publications, conference presentations, etc.)	*One abstract was already submitted to ACP FL chapter Annual meeting and Adventhealth Orlando GME Research Day for competition* *Manuscript is under preparation*
IX.	Markers (project phases, progress checks, schedule, etc.; Refer to *NI VII Roadmap to 2021* which will be presented at Meeting One)	*We have completed both phase 1 and phase 2.*

Sections X thru XV to be completed first quarter 2021 for "Final Proceedings" booklet:

X.	Success Factors	*The most successful part of our work was improved communication and teamwork* *We were inspired by the fact that all participants shared the same mission: to enhance patient safety during the transition of care from ICU to PCU step-down units*
XI.	Barriers	*The largest barrier encountered was the implementation of a standardized protocol for transition of patient care.* *We worked to overcome this by getting the support from ICU nursing and physician leadership, and C-suite*. We demonstrated our QI project would improve the transition of patient care from ICU to PCU units, leading to enhanced patient safety and better patient outcomes. ICU leadership was very receptive to the project and helped us implement the new patient transition protocol.
XII	Surprises	*What surprised you and why?* *1) Communication gaps* *- Most of the ICU RN failed to contact the hospitalist when patient was transferred out of ICU.*

		It was difficult for the ICU RN to figure out the exact hospitalist who will be seeing the patient in the PCU step-down unit due to a different call schedule. *2) Resistance from ICU team in terms of consulting hospitalist when patients were admitted to ICU* *-They worried about inappropriate/unnecessary orders placed by the hospitalist* *3) More than 50% RN were worried about patient's safety during transition of care on the initial survey* *- RNs stated several reasons for a potentially ineffective transition of care, including: inappropriate RN-patient ratio in PCU, lack of a standard protocol, inability to talk to the PCU RN due to lack of time in busy shifts.* *- Difficult to communicate with hospitalist*
XIII.	Lessons Learned	*What would be the single most important piece of advice to provide another team embarking on a similar initiative and how to be successful?* - *Get early on the support from people in C-suite as well as unit leadership*
XIV.	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 and how were your results the same or different from your expectations?* *1 2 3 4 5 6 7 8 9 10*
XV.	Sustainability and Next Steps	What does your CEO need to know to help keep your work sustainable? We need to present the data from this QI project to demonstrate the effectiveness of this standard transition of care protocol, including but not limited to: improved metrics, RN satisfaction, patient outcomes

An approach in teamwork - COPD Multidisciplinary Clinic

Farah Chaus, MD; Judith Gravdal, MD; Erica Zak, MD

Advocate Lutheran General Hospital
We are AdvocateAuroraHealth

National Initiative

NI VII Meeting #4

INTRODUCTION: Background

Chronic obstructive pulmonary disease (COPD) has significant patient morbidity and mortality. This leads to high health care resource utilization and cost. Many health professionals do not feel comfortable or have the time to address proper inhaler administration with patients.

Aim/Purpose/Objectives

The COPD Multidisciplinary Clinic offers comprehensive care for patients with COPD. Sponsored by the Advocate Medical Group, ALGH and Advocate Physician Partners, the team includes physicians, pharmacists, social workers, respiratory therapists and LPNs who provide holistic care. The goals of our program are to: reduce symptoms, improve exercise tolerance, educate patients about their disease so that they can lead fuller and better lives, prevent future complications, and educate residents and other team members in the team model.

METHODS: Interventions/Changes

The AIM of this pilot multidisciplinary clinic is to

1- improve our patients' understanding of COPD

2- improve patient compliance with recommendations.

3- decrease emergency room visits and hospital admission by 50% over the next five years (2016-2021)

METHODS: Measures/Metrics

IRB ID: 6687
Quality Improvement Project Around Education of COPD Disease and Medications

❑ Once a month clinic

❑Clinic model staffing

➢PSR, MA/LPN, Patient Advocate: Social worker or Care manager, Respiratory therapist, Pharmacist and a physician

❑ Session Structure

➢Rotating individual appointment with physician, respiratory therapist, and patient advocate
- Initial Intake: 30 mins per individual appointment
- Follow ups: 15 mins per individual appointment

❑ Patient Demographics

➢Looking at high risk utilizers of ED and high risk for hospital readmissions

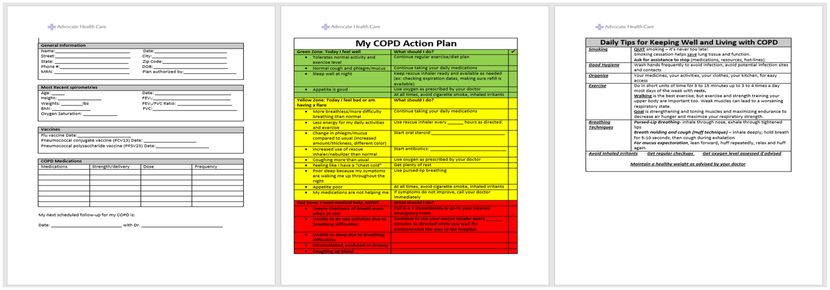
RESULTS: Continued

➢Effectiveness of the clinic

- ○Patient Surveys
  - ✓*In process*
  - ✓*Small sample size due to COVID*
- ○Look at metrics of decreasing ED visits and readmission risks
  - ✓*Data currently processed by finance department*
  - ✓*No results yet*

➢Effectiveness of teaming

- ○*Team survey*
- ○*Evaluation of effective communication within team*



COPD Action Plan created as part of our project

Discussion

Barriers
❑Patient enrollment
❑**COVID pandemic!!**
❑ New inpatient EMR implementation on February 9, 2020.
❑Care management engagement/communication across inpatient and outpatient setting
❑ Need for a project manager to identify and review readmission data
❑ Continued engagement with leaders of organization to ensure commitment and support for the project

Accomplishment
❑ Received Advocate Lutheran General Health Plan Endowment Grant
❑ plan to increase number of patients and provide technological upgrades to the clinic

Future Goals

❑Education of residents rotating through the clinic by working with the pharmacist for didactic lectures

❑Invited transition care team to be part of the discussion

❑Looking into Group Visits for patients enrolled in the clinic

❑Create system wide protocols for standardization of paperwork on discharge in inpatient and outpatient setting

❑Automatic Referrals through inpatient into clinic in EMR

❑Need tool(s) for measuring team effectiveness

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 2019. 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 **Project Tile: An Approach in Teamwork – COPD Multidisciplinary Clinic**

I.	Vision Statement (markers of success by March 2021; Refer to Toolkit #6 after meeting one)	
II.	Team Objectives ('needs statement,' project requirements, project assumptions, stakeholders, etc.)	
III.	Team Members & Accountability (list of team members from Toolkit #7 [after meeting one] and who is accountable for what)	
IV.	Necessary Resources (staff, finances, etc.)	
V.	Measurement/Data Collection Plan (Refer to Toolkit #2)	

VI.	Stakeholder Communication Plan (may be helpful to draft a flow chart of team members & senior management; Refer to Toolkits #3 and #5)	
VII.	Potential Challenges (engagement, budget, time, skills gaps, etc.; Refer to Toolkit #4)	
VIII.	Opportunities for Scholarly Activity (potential publications, conference presentations, etc.)	
IX.	Markers (project phases, progress checks, schedule, etc.; Refer to *NI VII Roadmap to 2021* which will be presented at Meeting One)	

Sections X thru XV to be completed first quarter 2021 for "Final Proceedings" booklet:

X.	Success Factors	*The most successful part of our work was….* Teaming and navigating the obstacles with the COVID pandemic and ability to provide telehealth services *We were inspired by….* Our Team! The resilience shown by the team to continue to give the best care possible to the patient given pandemic circumstances
XI.	Barriers	*The largest barrier encountered was….* COVID pandemic! Unable to meet in person to have pre clinic huddles and not have everyone

		available due to deployment to other departments or availability only virtually *We worked to overcome this by….* With increase in vaccination of team members and updated CDC guidelines, bringing the team back together to renew the COPD clinic
XII	Surprises	*What surprised you and why?* Team members ability to navigate the constraints placed by COVID pandemic Decrease in number of patients seeking care due to the pandemic, so resulting in fewer hospitalizations or ED visits. It is yet to be seen how this has impacted their health
XIII.	Lessons Learned	*What would be the single most important piece of advice to provide another team embarking on a similar initiative and how to be successful?* Scheduled meetings to update team members and coordinate care so you can keep track of the progress of your project and also have a timeline/deadline to achieve target goals
XIV.	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 and how were your results the same or different from your expectations?* *1 2 3 4 5 6* ***7*** *8 9 10* Received grant for the Clinic which was a win! Results are still in process – finance team reviewing effect on readmission rates of seeing patients in COPD clinic
XV.	Sustainability and Next Steps	What does your CEO need to know to help keep your work sustainable? Grant award should help with monetary assistance Support with running the clinic with a project manager and research team to help run the data points

Expanding the role of the PCP in Hospital Medicine

Patrick Piper, MD
Judi Gravdal, MD
Franklin Chang, MD
Ben Kyi, DO

AdvocateAuroraHealth

National Initiative
NI VII Meeting #4

INTRODUCTION: Background

Our original project focused on improving the rates of completed advanced directives on hospitalized patients. This was identified as a need by numerous hospital departments. Hospital realignment, advancing technology including a new electronic health record, and the COVID pandemic created the opportunity for a broader and, perhaps, more impactful project. Our hospital continued to lag established goals in inpatient length of stay, readmission ratios and HCAHPS scores. We saw an opportunity to utilize technology and the skill set of primary care physicians to augment those of the hospitalists in improving our lagging metrics. Numerous prior studies highlighted the potential advantages and disadvantages of utilizing primary care physicians as consultants in hospital care. [1,2,3,4]. Many of the disadvantages cited related to the availability and time constraints of outpatient primary care physicians. However, none of the studies examined the potential impact of technology, specifically video visits, to mitigate this problem. One study did demonstrate a positive impact of primary care physicians in relation to discharges to home and mortality rates [1].

References

1. Stevens JP, Nyweide DJ, Maresh S, Hatfield LA, Howell MD, Landon BE. Comparison of Hospital Resource Use and Outcomes Among Hospitalists, Primary Care Physicians, and Other Generalists. *JAMA Intern Med*. 2017;177(12):1781-1787. doi:10.1001/jamainternmed.2017.5824
2. Gorell AH, Hunt DP. Bridging the Hospitalist-Primary Care Divide through Collaborative Care. *N Engl J Med.* 2015;372;4:308-309
3. Beresford L. Continuity Visits by Primary Care Physicians Could Benefit Inpatients. *The Hospitalist.* 2015 April;2015 (4)
4. Durkin, M. PCPs in the Hospital. *ACP Hospitalist.* March;2018

Aim/Purpose/Objectives

Utilize the skill set of primary care physicians to augment those of our hospitalists in improving lagging hospital metrics. Specifically, we hope to move patient satisfaction scores 50% closer to stated target and decrease our readmission ratios to system targeted goals

METHODS

Transition to a pilot project - A timeline

-System realignment created loss of key constituents in original project
-Pandemic limited PCP involvement in hospital but created new opportunities

METHODS: CONTINUED

-Adult Down Syndrome specialist recruited to consult on specific patient population utilizing video conferencing technology
-Objective and subjective results of Down Syndrome Specialist intervention provided positive encouragement
-Realization of technological advancements along with declining hospital-wide metrics spurred new idea
-Plan strongly encouraged by system leadership but limited support among other key constituents
-Request by leadership to initiate pilot project focused on feasibility at resident clinic
-Trial run of technology on selected patient "hello" successful
-Identification of "Full Risk" patient population
-Recruitment of PCP volunteers
-Retrial of technology given change in software availability
-Recruitment of new team member to assist in scheduling and utilization of technology
-Pilot project initiated with solicitation of informal feedback from patients and PCP volunteers

RESULTS

End of Life Documentation intervention
-Sample of 10 Adult Down Syndrome Charts revealed all 10 patients with documented end of life document
-Prior sampling on 20 patients of general population at 40%
-Confounding factors
-consulted for specific task; work already in progress on 6 patients
-Positive feedback from hospitalists and intensivists

1st Technology trial
-No significant issues
-Positive feedback from PCP and

Recruitment of PCP volunteers
3/6 PCPs engaged; other 3 with time constraint concerns
-all 3 positive greater than 10 years practice
-all 3 negative less than 10 year

RESULTS: Continued

2nd Technology Trial
-Unexpected software barriers not present on first trial run
-Epic no longer available on unit iPads
-Video conferencing function no longer activated for inpatients

-Computer work arounds created unforeseen confusion with clinic nursing staff

-Connectivity issues

-Positive feedback from all PCP participants and patients
-Improved PCP's availability for follow up
-PCP felt more prepared for upcoming follow-up visit
-All patients expressed gratitude for PCP's virtual presence

Discussion

Key Findings
- Targeted groups of primary care physicians find concept as vital to the role of primary care but significant concerns among younger physicians
- Patient Satisfaction highly likely to be impacted in meaningful way
- Technologically feasible
- **Limitations**
- No hard data yet given small size of pilot project
- Pilot group size much more manageable logistically
- Impact on length of stay and readmission data needed
- Process and technologic skills limited to small group of project participants
- **Next Steps and Sustainability**
- Incorporate identification of qualified patients into daily rounds
- Implement patient and provider satisfaction surveys
- Partner with nursing and train on process
- Recruit initial volunteers to gain more clinic wide acceptance
- Present findings at system wide

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 2019. 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 Project Tile: Expanding the Role of the PCP in the Hospital

I.	Vision Statement (markers of success by March 2021; Refer to Toolkit #6 after meeting one)	*We plan to utilize the skill set of primary care physicians to augment those of our hospitalists to improve lagging hospital metrics and to improve overall patient care. Specifically, we hope to move patient satisfaction scores 50% closer to stated target and decrease our readmission ratios to system targeted goals*
II.	Team Objectives ('needs statement,' project requirements, project assumptions, stakeholders, etc.)	*To engage primary care physicians and hospitalists in a new view of patient care. Such efforts require buy in at the system level, particularly our managed care organization, as well as buy in from our 2 hospitalists groups and select primary care offices. Technologic advances appear to have made virtual PCP hospital visits possible and such technology is available in hospital units and PCP offices. Project will require process training for physicians and nursing staff.*
III.	Team Members & Accountability (list of team members from Toolkit #7 [after meeting one] and who is	*Patrick Piper, MD – Plan lead; overall project management*

	accountable for what)	*Judi Gravdal, MD – System promotion, project consult* *Franklin Chang, MD – Identification of patient opportunities; technology implementation;* *resident recruitment and buy-in* *Benjamin Kyi, DO - Identification of patient opportunities; technology implementation; resident* *recruitment and buy-in*
IV.	Necessary Resources (staff, finances, etc.)	*Ideally: non-clinical project lead, RVU credit/allowance from medical group, assistance from* *Clinical Excellence department and APP (ACO) for data collection and analysis, nursing training* *to act as intermediaries/set-up visit, access to unit ipads with EPIC access*
V.	Measurement/Data Collection Plan (Refer to Toolkit #2)	*HCAHP patient satisfaction scores and readmission data available through Provider Pulse/Department - may be limited by lower ability to parse data at individual level with correct patient attribution* *At Pilot Level – Physician and patient satisfaction sores using Likert-based satisfaction, perceived value and time requirements; limited by smaller number of physicians in pilot with bias towards project concept and success*
VI.	Stakeholder Communication Plan (may be helpful to draft a flow chart of team members & senior management; Refer to Toolkits #3 and #5)	*Team leader in direct communication with AMG Chief Medical Officer and APP (ACO) leadership with assistance of Family Medicine and Internal Medicine department chairs* *Resident physicians in communication with Resident co-chiefs and resident team at resident business meetings*

VII.	Potential Challenges (engagement, budget, time, skills gaps, etc.; Refer to Toolkit #4)	*Large scale of new project; presence of ongoing pandemic has continued negative impact on number of patients to enroll in project* *Increasing responsibilities of team members* *Ongoing organizational changes with loss of key stakeholders/project champions*
VIII.	Opportunities for Scholarly Activity (potential publications, conference presentations, etc.)	*Pilot study to be submitted to system administrative leadership* *Both pilot study and ensuing larger project to be presented at national workshops/conferences*
IX.	Markers	Smaller scale pilot project to assess technologic feasibility - Completed Larger scale pilot project with patient and physician satisfaction scores – In Progress Implementation of clinic wide project to assess impact on patient satisfaction scores and readmission ratios – Pending

Sections X thru XV to be completed first quarter 2021 for "Final Proceedings" booklet:

X.	Success Factors	*The most successful part of our work was buy-in and expressed support of system senior leadership - "This should be the way we are practicing."* *Encouraging patient and physician response to initial pilot study* *Increased awareness of technologic capability*

XI.	Barriers	*Loss of key stake holders shortly after initiation of project* *Pandemic created negative impact by limiting access to patients* *Changes in availability of technology* *Increase of competing priorities of team* *Change into much larger scale project not likely to be completed by original target date* *We worked to overcome this by focusing of overall buy-in on project vision and ongoing commitment to work in small steps to achieve larger scale project – viewing completion of NI VII project as beginning of larger impact project*
XII	Surprises	*Largest surprise was hesitance by hospitalist groups who were originally thought to be most receptive; broad variability in project feasibility among PCPs; Varied interest among disciplines/hierarchy; Higher expectations from C-Suite*
XIII.	Lessons Learned	*Need for contingency plans particularly with respect to leadership roles; Be willing to adapt as circumstances change and always look for new opportunities; always keep eyes open for others who may become project champions; Buy in may take time*
XIV.	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 and how were your results the same or different from your expectations?* *1 2 3* ***4*** *5 6 7 8 9 10*
XV.	Sustainability and Next Steps	Pilot project appears to show promise but needs broadened scale. Once accomplished, can start data to analyze longer term impact on patient care and results of key target areas

Teaming Perspectives from the COVID-19 Global Pandemic

Curtis Converse, DO; Vivian Ngo, MD; Kiran Matharu, MD; Monique Lopez, MD;
Niren Raval, DO; Joachim Brown, DO; Teresa Smith, MBA; and Greg Young, MBA, PMP

National Initiative
NI VII Meeting #4

INTRODUCTION: Background

In 2019, Arrowhead Regional Medical Center (ARMC) embarked on the AIAMC National Initiative with a project originally focused on patient discharge planning. However, as the team prepared for the implementation of the project in the winter of 2020, the medical center and the world began to experience the COVID-19 global pandemic. Due to restrictions and responses to surging COVID numbers, the team had to abandon the planned project. The team worked toward a revised project over the summer but also had to be scrapped due to a larger surge in the Fall of 2020. As a result, the team decided to adopt a perspectives approach to the initiative due to lack of time to salvage a regular project. The team worked with the AIAMC and developed a set of four questions and asked key stakeholders at different levels for their perspectives on the crisis and for the future.

Question One

What surprised you or made you realize 2020 was going to be different?

In January 2020, when we learned that a plane was landing in the Inland Empire with American citizens who might be infected with a novel coronavirus. This was the first tip-off that 2020 would not be a typical year. From that point on we moved quickly into the grip of the pandemic. Thanks to our excellent leadership team and physicians Arrowhead was able to pivot quickly to meet all challenges thrown at us during COVID-19.

– William Gilbert, ARMC CEO

The realization that we were going to have to deal with a pandemic that would affect all of society, not just the US, but throughout the world. In the past, most disease outbreaks or significant scope tend to be limited to other parts of the world and have not directly affected the US as much. This time, however, it was not just the US that was affected, but each and every one of our own individual worlds and communities.

– David Lanum, MD, ARMC Family Medicine Department Chair

The severity of cases at Arrowhead, the news surrounding the world-wide shutdowns, the sheer number of unfortunate deaths…in combination this culminated in my realization that 202 was going to be [very] different.

– Ali Darwish, MD, ARMC Internal Medicine Resident and House Staff President

Once we started hearing about how COVID-19 was impacting New York and Italy, we knew it was only a matter of time before we would be impacted. As the true front-line providers, Emergency Medicine residents and faculty knew that they would be in the thick of things. Heavy media coverage of front-line providers in New York dying of COVID-19 only fueled their anxiety and concerns for safety, but every one of the providers stepped up and saw it as their duty to serve those in need. We also experienced many “side effects” of COVID-19 that we in our department. One was a sudden and almost precipitous drop in our ED patient volume; some of this was due to the strict shutdown mandated by the government and some were due to patients’ fear of being in ED. ED visits normally caused by injuries and accidents suddenly dropped off. We saw very few patients presenting with “minor” complaints, such as minor wounds, minor aches, etc. Those presenting were most often critical ill, so they really had no choice but to visit ED. The end result was that we had higher acuity patients in our ED but our overall volume was less than in the past. Another surprise was that because of the wide impact COVID-19 had on the medical community in general in terms of patient volume, our graduating residents had a very difficult time finding jobs (hardly anyone was hiring). I find this very ironic as the “frontline heroes” were not only affected by the safety concerns/conditions, but also were faced with financial and professional challenges by the pandemic.

– Carol Lee, MD, ARMC Emergency Medicine Program Director

Question Two

What did your organization or program do to respond to the challenges of COVID-19?

Pivoted to using telehealth for the first time ever within 33 hours. Institute rigorous PPE training programs and adherence protocols. Ensure that enhanced communication tools were used across the Department to try to make up for the fact that we could no longer meet in person, and information that needed to be disseminated was changing rapidly, sometimes by the hour. Thus, setting up secure messaging systems to allow for information being sent by text and e-mail up to several times daily, including chat and question forums to allow best practices and information to be shared. We also looped the Infectious Disease and Pulmonary Critical Care specialists into these chains. Faculty began holding weekly 1 hour Zoom meetings to ensure that not only medical issues could be communicated, but physician well-being issues could also be addressed. The Department brought in a private professional Coaching and Support service to allow all faculty 24/7 access to support and tangible resources for themselves and family members.

– David Lanum, MD, ARMC Family Medicine Department Chair

We held weekly meetings, cancelled physical didactics and moved to online learning/communication. The department heads supported the residents throughout especially in ensuring proper PPE – this was paramount and appreciated by all the residents and fellows.

– Ali Darwish, MD, ARMC Internal Medicine Resident and House Staff President

Lots of education of safety precautions, efforts to secure additional PPE (our department on our own bought masks, collected donations from friends and family), daily communication/updates regarding everything COVID, restructuring ED workflow to keep staff and patients safe. We also developed elaborate back up/call systems to accommodate quarantining and isolating residents and attendings. Our residency program did a weekly “check in sessions” to not only address concerns and provide communication but to address wellness/burnout issues. The institution declared ACGME Emergency Declaration, so we did have less providers in the ED at one time (IM residents were pulled off for example).

– Carol Lee, MD, ARMC Emergency Medicine Program Director

Arrowhead responded quickly and decisively by conducting daily meetings, collaborating with other county agencies, community stakeholders, hospitals, and the state. Arrowhead initiated its incident command system, which is still currently in place. Team members worked 24/7 to meet each challenge, whether it was retrofitting patient rooms to be negative pressure rooms; searching worldwide for PPE supplies; organizing and standing up an alternative care site on the hospital campus; providing COVID-19 testing to staff and the community and extending the ER with tents and temporary buildings to handle the winter surge.

– William Gilbert, ARMC CEO

Question Three

What did you/your team do during this pandemic that previously you would have never imagined?

Lots of people refused to go home because of concerns for family. Some slept in call rooms, some in hotels, some in donated RV’s. Our department/hospital provided extra call rooms, resources for free or reduced rate hotel rooms, etc. We also pulled all non-essential people from the department, including medical students, shadowing students, visitors, etc. We had dying patients whose families were unable to be with them. Many providers had to notify family members of patient’s death via telephone because family members could not visit. We faced many challenges as we attempted to identify and “isolate” potential COVID patients or COVID confirmed patients. The triaging of these patients proved challenging at times as we did not have enough capacities for negative pressure rooms.

– Carol Lee, MD, ARMC Emergency Medicine Program Director

Telephone visits. I had never done telephone visits prior to the pandemic. I do think that some clinics are running more efficiently with phone calls rather than face to face visits.

- Carlyn Estrella, MD, ARMC Family Medicine Resident

Care for patients with a communicable disease for a protracted period of time (now approaching one year), for which at the time no known cure or good treatment was known. It was also one of the first times that almost everyone on the care team shared the same level of experience and expertise, as so little was actually known about Covid-19. As such, it was good team-building as whether you were the attending, resident or medical student – all had something to contribute and all were learning alongside each other.

– David Lanum, MD, ARMC Family Medicine Department Chair

We broke down silos between county agencies and worked together as a team to get through the pandemic. This included working and collaborating with other hospitals. ARMC took a leadership position in the County’s acute care hospital system response by facilitating and supporting the development of a communications platform that included all key major stakeholders. This platform encouraged real time information sharing across the County and with the hospital association and state partners. It provided forums to discuss proposed response actions delineated above, many of which were implemented with the support of the group. Through the holiday surge it provided a real time forum to hear urgent hospital resource needs so that resources (staff and PPE) could be sourced and secured.

– William Gilbert, ARMC

Question Four

What are your hopes for the future as we move beyond 2020 and what would you do if you knew you could not fail?

Hoping the vaccine works and that we can go back to normal.

- Carlyn Estrella, MD, ARMC Family Medicine Resident

That society would use any future pandemics to demonstrate care and concern for the most vulnerable, follow evidence and science, and resist the urge to make such issues political in nature. We should all be less concerned about ourselves as individuals, and more about our fellow human beings as a whole.

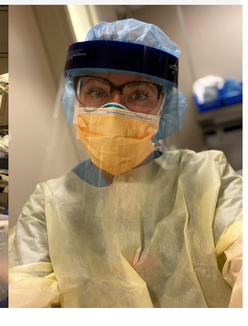
– David Lanum, MD, ARMC Family Medicine Department Chair

Hopes for the future include continuing the successful relationships and collaborations with other hospitals and health agencies. In addition, our COVID-19 response set a solid ground of preparation for any disaster/incident that may come our way in the future. We now have a template to build off for future incident planning. We learned that strong relationships in the community are essential and working together rather than in silos is the key.

– William Gilbert, ARMC CEO

Widely available Vaccination and herd immunity; resumption of normal activities including educational activities and social events, etc. We are looking forward to scheduling our graduation, retreats, journal clubs, traveling for academic events, etc., really soon.

– Carol Lee, MD, ARMC Emergency Medicine Program Director



Project Management Plan

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Team: Arrowhead Regional Medical Center **Project Tile: Teaming Perspectives from the COVID-19 Global Pandemic**

Project Management Plan Not Included Here Due to Change to Perspectives Approach.

We eventually had to abandon the project due to COVID-19 pandemic and the restrictions on meetings at our institution

INTERPROFESSIONAL COMMUNICATION AND FEEDBACK IN THE CARDIAC CATHETERIZATION LABORATORY

NI VII Meeting #4

Matthew McDiarmid DO, Charnai Sherry PA-C, Jodi Zilinski MD, Tonga Nfor MD, Deborah Simpson, PhD, Renuka Jain MD

Cardiovascular Disease Fellowship - Milwaukee, Wisconsin

INTRODUCTION: Background

- The Structural Heart Team works in a dynamic, fast paced, high procedural volume environment with multiple team members

- Highly recognized for successes in:
  - Patient outcomes
  - Patient satisfaction
  - Continued growth in procedural volume & innovative tech in the Cardiac Catheterization Laboratory (CCL) → increased complexity of CCL fellowship training

Aim/Purpose/Objectives

- Improve communication and feedback between fellows ↔ faculty
- Improve the effectiveness and efficiency of the CCL

METHODS: Interventions/Changes

- Explicitly defined CCL fellow's role by PGY status
  - Delineated levels of supervision x whom (attending, IC fellow)
  - Feedback frequency, formality, timing (pre-post procedure)
- Promote in office procedural consent - goal >70% outpatient
- Earlier procedural case assignment to the fellows
- Fellow confirmation of procedure and access site

METHODS: Measures/Metrics

- CCL data regarding volume, transition, and delays
- Clinical Learning Environment Quick Survey (CLEQS)
- Mayo Well-Being Index
- ACGME annual fellows survey re: feedback

FELLOW EXPECTATIONS/PROGRESSION

CARDIAC CATH LAB PGY Year and Rotation/Semester → Objectives w Levels of Supervision ↓	1st Yr PGY4/Fel1	2nd Year PGY5/Fel2			3rd Year PGY6/Fel 3	Interv PGY7	
	No formal lab rot	1st & 2nd Blk	3rd & 4th Blk	5th & 6th Blk		1st Sem	2nd Sem
Level of Supervision*		A	B	C	D	E	F
Communication/feedback #		A	B	C	D	E	E
MEDICAL KNOWLEDGE: ASSUMES PRIOR LEVEL KNOWLEDGE UNLESS OTHERWISE NOTED							
1. Coronary anatomy as pertaining to LV function and wall motion	1						
2. Coronary anatomy and role with patients presenting with Acute Coronary Syndrome	1						
3. Indications for invasive diagnostics	1						
4. Basic understanding Coronary Angiogram films and views o Identification of view and projection o Identification of coronary anatomy o Identification of basic angiographic abnormalities	1						
5. Procedural H&P, sedation note, AUC, consent			1				
5.1. Procedural H&P, sedation note, AUC		1					
6. Pertinent patient information; including prior surgical		1					
7. Review of prior angiogram results and/or images independently					1		
7.1. Review of prior angiogram results and/or images with IC fellow/attending		1					
8. Understanding of fluoroscopy and radiation safety		1					
PROCEDURAL SKILLS:							
20. Develop understanding in the setup, use, and interpretation of advanced equipment (ie, Atherectomy, Impella)						1	
20.1. Proficiency in appropriate coronary equipment selection						1	
20.2.Complete competency in setting up patient and equipment for procedure			1				
21. Proficiency in sterile scrub technique and procedural draping		1					
21.1. Setting up procedural area: drape, manifold connections, zoll, etc		1					
22. Development of proficiency in peripheral vascular equipment selection						1	
23. Independent conscious sedation administration			1				

* **Level of supervision:** A = Close, immediate oversight by the attending; B= Close, immediate oversight by the IC fellow and/or attending; C= Limited; D = Diagnostic studies= independent & Advanced/interventional procedures= Direct; E= Diagnostic studies= independent & Advanced/interventional procedures= Direct; F = limited → independent for diagnostic and advanced/interventional procedures

\# **Communication/feedback:** A = verbal, before and after case. Write post op report with attending; B= verbal. Write post op report with attending/IC fellow; C = verbal, pre and post op brief with attending. Independently write post op report; D = verbal, in person, two-way assessment; E= verbal, in person, Pre-Post PCI brief;

RESULTS

CCL EFFICIENCY & EFFECTIVENESS*

- Perceived increase in outpatient CCL consents

CLINICAL LEARNING ENVIRONMENT QUICK SURVEY (CLEQS)*

- 7%-8% Decrease Fall 2019 to Feb 2021 in scores
  - Professional Candidness
  - Perceived level of respect in the CCL lab
  - Perceived teamwork effectiveness

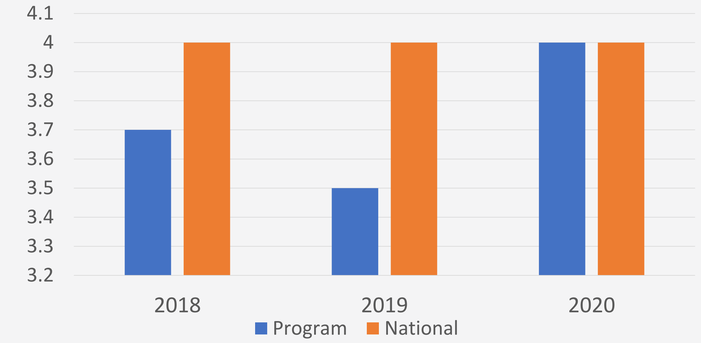
MAYO WELL BEING INDEX SCORES

- 0.42 Improvement in Cardiology Fellows score between Sept 2020 & Jan 2021
- Jan 2021 average score was 0.70 better than specialty rating

* Data results area composite of Attending Physicians, Fellow Physicians, Nurse Practitioners/Physician Assistants, Nurses, Radiology Techs, others

RESULTS: Continued

ACGME Fellow Perspectives re: Faculty Feedback



Top Obstacles Hindering Teamwork

1. High volume & scheduling
2. Pace and transition
3. Hierarchical structure

Discussion

KEY FINDINGS

- Improvement on 3-4 metrics (small decrease in CLEQS)

LIMITATIONS

- Change in fellows, staff, and attendings in the lab during different times in academic year
- Data potentially impacted by pandemic – time away from CCL lab and then very active since restart

NEXT STEPS AND SUSTAINABILITY

- Continue to instruct all CCL stakeholders on fellows' roles and expectations
- Seek strategies to increase faculty/fellow investment in project and avoid stake holder burnout
  - Establish policies/ incentives to promote change

Final Project Management Plan

Project Title: Interprofessional Communication and Feedback in the Cardiac Catheterization Laboratory
Report Submitted by: Matthew McDiarmid, DO – Cardiology, Electrophysiology, and Interventional Cardiology Fellowship Programs
Sponsoring Organization: Aurora Health Care – Advocate Aurora Health
Presenter NI-VII Mtg #4 (Cohort #2): Matthew McDiarmid, DO

Project Team Members (*Leader)

Name/Credentials	Position/Title	E Mail Address
Renuka Jain, MD	Faculty – CV Disease Fellowship (Non-invasive Card)	Renuka.Jain@aah.org
Matthew McDiarmid, DO MPH*^	Fellow	Matthew.mcdiarmid@aah.org
Tonga Nfor, MD	Assoc PD – CV Disease Fellowship (Interventional Card)	tonga.nfor@aah.org
Charnai Sherry, PA-C	Cardiothoracic Surgery	Charnai.Sherry@aah.org
Deborah Simpson, PhD	Director Education – Academic Affairs	deb.simpson@aah.org
Jodi Zilinski, MD	Faculty – CV Disease Fellowship (Electrophysiology)	Jodi.Zilinski@aah.org

1. **What did you hope to accomplish?**
   - Improve communication/feedback between fellows and faculty
   - Improve the effectiveness and efficiency of the Cardiac Cath Lan (CCL)

2. **What were you able to accomplish?**

   COMMUNICATION
   - Explicitly defined CCL fellow's performance expectations based on PGY status, with level of supervision x whom (attending, IC fellow) [See Figure 1 last page]
   - Provided feedback training with faculty highlighting need for actionable, brief feedback
   - Highlighted need for feedback frequency, formality, timing (pre-post procedure) with improved CCL communication

   EFFICIENCY
   - Increased frequency of earlier procedural case assignment to the fellows
   - Increase in procedure consent secured for in office for outpatient procedures through improved workflows

3. **What surprised you and why?**
   - Rather than through team meetings, team participation occurred as project leader worked one-on-one with members
   - Attendings appear to be providing increased feedback despite extremely busy clinical practice – there is time

4. **Knowing what you know now, what might you do differently?**

- Establish clear expectations for team participation with clear accountabilities supported by each interprofessional team members respective supervisors to avoid things occurring at last minute
- Focus post cath procedure feedback by creating and posting small short lamented feedback checklist to assure key features are addressed. These structured expectations would build on the success of the fellows' expectations by block x PGY year – providing both fellows and faculty with clear expectations and accountabilities

5. **Success Factors**
   - *The most successful part of our work was…* making all parties aware of the communication problems within cath lab with targeted areas of improvement
   - *We were inspired by*…to make the cath lab a safe environment for patients and fellows ultimately in improved care

6. **Barriers**
   - *The largest barrier we encountered was…* all of the participants are already burdened with excessive metric analysis and data platforms (multiple emails, surveys from system) which was accentuated during pandemic hindering participation in local improvement efforts
   - *We worked to overcome this by…*working face-to-face, through one-on-one interactions emphasizing the importance of the local improvement efforts to their individual role and well-being

7. **Lessons Learned - The single most important piece of advice to provide another team embarking on a similar initiative would be…**
   - Explicitly align baseline and on-going data collection and with aims to demonstrate change (eg, office base informed consent for outpatient procedures)

8. **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?

1	2	3	4	5	6	**7**	8	9	10
Nothing									**Everything**

   Explain: Changing the culture of a high-volume procedure lab (eg, cardiology) occurs over time. Visible progress was made towards achieving our aims with more work to be done.

9. **Sustainability and Next Steps** - What does our Chief Executive Officer (CEO) need to know to help keep your work sustainable?
   - Limit the number of leadership/system communications sent to clinicians as the volume of communication dilutes their impact as its time exhausting and accelerates e-mail fatigue. It's the same phenomenon as in the ICU, the more alarms you have the less likely you are to attend to them. Less important information can be highlighted in the systems on-line portal.

Figure 1: CCL Team Member Expectations with Levels of Supervision x Fellows Block by Training Year

CARDIAC CATH LAB PGY Year and Rotation/Semester → Objectives w Levels of Supervision ↓	1st Yr PGY4/Fel1	2nd Year PGY5/Fel2			3rd Year PGY6/Fel 3	Interv PGY7	
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Seeking to Improve HTN in Young Adults within Two Family Medicine Clinics… During a Pandemic

Milwaukee, Wisconsin

Chella Bhagyam DO, Keyonna Taylor-Coleman MD, Lawrence Moore MD, Kim Schoen MSW, Catherine de Grandville MD, Pamela Graf MBA, Wilhelm Lehmann MD, Bonnie Bobot MD, Steven Murphy MD, Rambha Bhatia MD, Sarah Bowlby, Deborah Simpson PhD

Aurora Health Care
We are AdvocateAuroraHealth

National Initiative
NI VII Meeting #4

INTRODUCTION

- Hypertension (HTN) is a chronic disease impacting 1/3 of U.S. adults[1]
- Primary care physicians typically are the 1st to identify & treat HTN[1]
- Two family medicine residency clinics analysis of HTN patients:
  - Younger adult population (age 18-49) had high rates of uncontrolled HTN per system quality metrics (> race / gender)
  - Controlling HTN in younger patients has significant long-term health impacts
- Successful models for treating HTN use an interprofessional collaborative team approach including regular huddles[2]

1. Ashman JJ, Rui P, Schappert SM, Strashny A. Characteristics of Visits to Primary Care Physicians by Adults Diagnosed With Hypertension. National health statistics reports. 2017 Sep(106):1-4.
2. Guck TP, Potthoff MR, Walters RW, Doll J, Greene MA, DeFreece T. Improved outcomes associated with interprofessional collaborative practice. The Annals of Family Medicine. 2019 Aug 12;17(Suppl 1):S82.

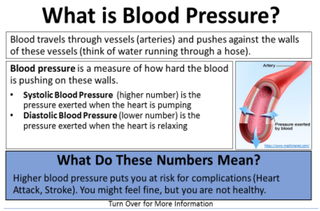
AIMS

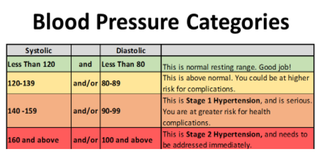
Aurora Aim

- Apply tested interventions to facilitate a safer environment for patients and clinicians

Family Medicine Project Aims & Objectives

- **Original:** Reduce age disparity gap between our younger patients (age 18-49) vs our older patients (age ≥ 50) who have controlled hypertension by 5%
  - Baseline < 70% are controlled in age 18-49 vs 80% in age 50+
  - Ultimately seek to cut the age disparity in half
- **Pivot Aims (Covid-19)**
  - Increase patient awareness of hypertension- related sequela
  - Standardize clinician response to elevated BP virtual/ in person
  - Develop creative solutions to push toward achieving these aims despite pandemic restrictions/disruptions





METHODS: Interventions

PHASE 1: EDUCATION OF CLINICIANS AND CLINIC STAFF

A. Baseline Survey of Clinic Physicians & Residents Revealed:

- ☑ Clinicians felt comfortable prescribing HTN medications for patients with average age of 27 yrs = current JNC 8 guidelines
- ☒ Clinical Inertia – Unlikely to prescribe HTN medications to younger adults (various reasons noted)

B. Education

- Residents: Didactics on HTN and appropriate management (applicable to all ages with emphasis on young adults)
- Res/Fac Annual Educ Meeting: Review data & strategies to improve HTN including Motivational Interviewing
- Clinic Huddles: Introduction and reiteration of HTN goal and residency-wide initiative; delineate roles

PHASE 2: PATIENT EDUCATION & WORKFLOW

- Create laminated BP card
- MAs circle BP risk on BP card
- Physicians or MA's recheck BP
- Discuss JNC 8 management options

PHASE 3: IMPLEMENT & SUSTAIN MOMENTUM

- Identify MA & Nurse champions (role specificity)
- Monitor quality metrics and adjust
- Monthly Res/Fac meeting discussion on progress | strategies

PHASE 4: PATIENT OUTREACH

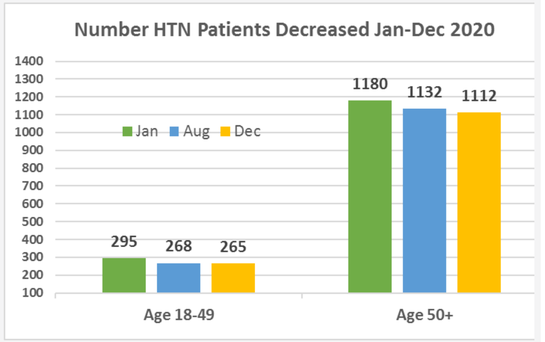
- Identify mechanisms for "COVID" outreach via online patient portal "MyAurora" during pandemic to check on high risk patients | offer appointments (virtual, phone, F2F in clinic)
- Secured foundation funds to purchase home BP cuffs to give to uncontrolled BP patients per priorities
  - In targeted age group, Returning Citizens project
  - Patient doesn't want to come to clinic, white coat HTN

RESULTS

ALL CLINICS	JANUARY 2020				AUGUST 2020				December 2020			
	Control	Un Controlled	% Control	Age Disparity Gap	Control	Un controlled	% Control	Age Disparity Gap	Control	Un-controlled	% Control	Age Disparity Gap
Age 18-49	206	89	69.8%	10.8%	194	74	72.4%	6.3%	177	88	66.8%	12.1%
Age 50+	951	229	80.6%		891	241	78.7%		877	235	78.9%	

RESULTS: Continued

- Decreased age disparity gap from 10.8% in Jan-Aug to 6.3%
  - However this age gap increased to 12.1% Aug-Dec 2020
- Decreased number HTN patients in both age groups Jan-Dec 2020
- MyAurora account activation in HTN patients differed
  - Age 18-49 = 49%
  - Age 50+ = 27%



DISCUSSION

Key Findings

- Pandemic's impact on patient & team's engagement with its "starts", "stops" and "pivots" make data interpretation difficult
- Initial success in decreasing age disparity, offset by increase
- Younger HTN patients more likely to have activated MyAurora

Limitations

- Fluctuation in number of HTN patients via system QI data cumulative data makes it difficult to tease out variables impacting scores
- Redeployment |resident rotations changes
- One clinic relocated from easily accessible outpatient building to more difficult hospital-based setting in Sept 2020

Phase 5: Sustainability

- Secured funding for home BP monitors & cuffs
- Successfully recruited medical student to the team (in medical school track on training for urban /underserved patients)

Final Project Management Plan

Project Title: Seeking to Improve HTN in Young Adults within Two Family Medicine Clinics… During a Pandemic
Report Submitted by: Wilhelm Lehmann, MD & Deborah Simpson, PhD – Family Medicine Residency Program
Sponsoring Organization: Aurora Health Care – Advocate Aurora Health
NI-VII Meeting #4 Presenter: Wilhelm Lehmann, MD

Project Team Members & Leaders*

Name/Credentials	Position/Title	E Mail Address
Chella Bhagyam, DO*	Resident – Family Medicine	Chella.Bhagyam@aah.org
Rambha Bhatia, MD	Faculty Physician, FPC	Rambha.Bhatia@aah.org
Bonnie Bobot, MD	Associate PD/Medical Director FCC	Bonnie.Bobot@aah.org
Sarah Bowlby	Supervisor Clinical Opp – FPC	Sarah.Bowlby@aah.org
Cathy de Grandville, MD	Associate PD/Medical Director FPC	Catherine.degrandville@aah.org
Pamela Graf, MBA	Manager Clinical Operations FPC/FCC	Pamela.graf@aah.org
Wilhelm Lehman, MD, MPH*	Prog Dir/Chair –Family Medicine	wilhelm.lehmann@aah.org
Lawrence Moore, MD	PGY 1 -Family Medicine	Lawrence.Moore@aah.org
Steven Murphy, MD	Medical Director – Walker's Point	Steven.Murphy@aah.org
Kim Schoen, MSW	Prevention Specialist, FCC	Kim.schoen@aah.org
Deborah Simpson, PhD	Director Education – Academic Affairs	Deb.simpson@aah.org
Keyonna Taylor-Coleman, MD	PGY 2 Resident in Family Medicine	Keyonna.Taylor-Coleman@aahorg

1. **What did you hope to accomplish?**
   - Original Aim: Improve BP control in younger hypertensive patients to reduce the age disparity
   - Pivot Objectives II^{o} Covid 19: 1) Increase patient awareness of hypertension-related sequelae; 2) Standardize clinician response to elevated BP during clinic visits (virtual/in-person); 3) Develop creative solutions to push toward achieving these aims despite pandemic disruptions.

2. **What were you able to accomplish?**

   INTERVENTIONS:
   - Resident/Physician Education/Staff Education on HTN Management with emphasis on use of medications in younger adults.
   - Created and distributed patient education cards given to patients with elevated BP
   - Designed team-based workflow (MAs, RNs, physicians)
   - Utilized EPIC reporting functionality to define at risk population within individual clinicians' panels and their use of patient portal.
   - Created a "Covid-19" outreach using EPIC based patient portal for those registered with a scripted-and-personalized patient messaging to offer virtual or (as able) in person visits for at risk patients.
   - 20 Residents/Faculty successfully completed CME HTN related project activities resulting in ABFM performance improvement credits.

AIM:

- Decreased the age disparity gap from 10.8% in January 2020 to 6.3% in August 2020 in our two-Family Medicine Residency Clinics which appears to be partially associated with an increase in uncontrolled BP in adults Age50+. However HTN age disparity gap increased between August-December 2020 to 12.2% with change almost exclusively due to 5.6% increase in uncontrolled among patients ages 18-49. A number of factors may have contributed to phenomena including one clinic moving from an out-patient building to a 5th floor hospital location, the challenges in using system QI data (eg, the denominator changes monthly, if a patient is seen within our system but in another setting such as in ED, urgent care clinic and/or specialists, those BP rates are used with primary care clinic having accountability).

ALL CLINICS	JANUARY 2020				AUGUST 2020				December 2020			
	Control	Un Controlled	% Control	**Age Disparity Gap**	Control	Un controlled	% Control	**Age Disparity Gap**	Control	Un-controlled	% Control	**Age Disparity Gap**
Age 18-49	206	89	69.8%	**10.8%**	194	74	72.4%	**6.3%**	177	88	66.8%	**12.1%**
Age 50+	951	229	80.6%		891	241	78.7%		877	235	78.9%	

NEXT PHASE: SUSTAINABILITY

- Secured funding for home BP cuff (and battery purchase) to distribute in next phase to patients age 18-49 to support as home BP reporting is now accepted in EHR.
- Successfully recruited a medical student to join the team who is enrolled in medical school track that focuses on Training for Urban Medicine and Public Health (TRIUMPH) that focuses on underserved patients.

3. What surprised you and why?

- Disparity increased in targeted age group between August-December 2020 particularly at clinic which moved its location at the end of summer (September 1)
- Percentage of patients in targeted age disparity gap who had signed up to use MyAurora, our online patient portal given this is a high disparity population (Age 18-49 = 49% vs Age 50+ = 27%).

4. Knowing what you know now, what might you do differently?

- Avoid the pandemic!! Starts, stops, and pivots, make interprofessional teamwork on non-pandemic related project difficult. While sustaining team member project engagement remains a challenge in normal times (eg, if "assign" responsibilities to individuals who are an established group with existing meeting times such as program leaders and chiefs) they may not be interested in the projects. If volunteers, the challenges of finding team meeting and work time during a pandemic are accelerated.
- Recognize that our QI data is constantly changing which makes it difficult to tease out variables impacting scores (eg, clinic relocation, pandemic waves/surges impacting patients' ability to access care).

5. Success Factors

- *The most successful part of our work was…* being agile to reframe our project to do outreach with our age disparity patients via EHR patient portal during the late spring 2020 offering virtual visits that over time (Sept 2020) home BP cuff measurement was allowed enabling us to successfully pursue funding to purchase home BP Cuffs.
- *We were inspired by…* resilience, agility, and persistence of the team to continue to seek ways to improve patients BP control during pandemic.

6. Barriers

- *The largest barrier we encountered was…* difficultly of getting sustained team engagement, accentuated with pandemic and its starts/stops.
- *We worked to overcome this by…* seeking to build this into schedule/dedicated calendar that accounts for residents changing patience care schedules. We are seeking to overcome this challenge by: 1) having a "slot" within the curriculum protected time (applicable to other projects) for QI projects; and 2) expanding the team to include a medical student as an 24 to 36 month team member with dedicated roles and responsibilities and additional faculty.

7. Lessons Learned - The single most important piece of advice to provide another team embarking on a similar initiative would be…

- BE AGILE: Plan for things to change – as unexpected always happens. We shifted from thinking about community-based approach given our population (eg, barber shop), then with pandemic lock down needed to shift.
- STRUCTURED ON-BOARDING – rather than informal - of new members to the team (purpose, goals). For example use a "flow chart" to orient them to project (and all its pivots and intricacies) and defining the roles and responsibilities (who does what, when and new team member's role) – perhaps using a RACI model (Responsible, Accountable, Consult, Inform).

8. 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?

1	2	3	4	5	6	**7**	8	9	10
Nothing									**Everything**

Explain: Limited ability to achieve project aim, but we did a number of sub projects successfully. Good work that emerged will continue to be used (awareness of disparities, use of patient education cards, use of EHR portal to communicate with patients, purchase of BP cuffs). We made a significant improvement in August and had momentum accomplishing significantly more than we anticipated but then other variables intervened (eg, clinic move to hospital setting, reassignment of staff due to pandemic).

9. Sustainability and Next Steps - What does our Chief Executive Officer (CEO) need to know to help keep your work sustainable?

SUSTAINABILITY & NEXT STEPS

- Improving patient care requires 30-45 min dedicated time to work on QI initiatives in order to sustain project momentum, complete tasks, make decisions, and be agile. Considering allocated dedicated QI project time during residents protected core curriculum weekly blocks.

- With system foundation funding we secured 44 home monitoring BP Cuffs and successfully recruited a medical student to become an active team member. Aim of pilot project is to demonstrate improved BP control in younger patients with home BP monitors to support ongoing funding with appropriate staffing in our clinics including those that have a dedicated BP clinic.

CEO 1 MINUTE ELEVATOR

- We should all be proud of all the QI efforts we do as an organization. Yet deeper dives into the data shows that there are REAL disparities that require targeted interventions like our focus on BP control in younger adults. We need more system attention to providing that deep data … other wise we are designing to solve QI issues for "system scores" but not truly addressing our patients' disparities (eg, team had to hand pull data to identify disparities but as system held accountable for overall). If a disparity was listed on our QI dashboard, we would be more accountable. For example, can you tell me if younger patients across the system had significantly greater rates of uncontrolled BP have significantly controlled? How can we work with you to support system-wide disparity dashboards by quality metric?

Mock Drills to Practice Teaming for Potential "Physician Crisis"

Aurora Health Care
We are AdvocateAuroraHealth

National Initiative
NI VII Meeting #4

N Eull PsyD, J Bidwell MD, T La Fratta MBA, E Santana C-TAGME, D Simpson PhD, K Taylor-Coleman MD, D Faucett, P Sharma MD
Graduate Medical Education Council - Milwaukee, Wisconsin

INTRODUCTION: Background

- Approximately 300 to 400 practicing physicians die by suicide annually[1]
- Medical residents are at high risk for depressive disorders, depressed mood, burnout, and suicidal ideation[2-4]
- ACGME endorsed an "After a Suicide" toolkit to use in time of crisis[5]
  - Aurora GME approved a 4-page *Crisis Communication Plan*
  - Uses a 4-Level (by risk of harm) decision/action tree
  - Outlines key roles for GME & system leaders (eg, security, legal, EAP, PR, HR)
- As part of extensive prevention interventions, it is vital to prepare PDs APDs, Coordinators, Chiefs for appropriate response in a time of crisis[5]
- Mock drills provide opportunity to simulate high stakes practice[6]

1. Center C, Davis M, Detre T, et al. Confronting depression and suicide in physicians: A consensus statement. JAMA. 2003;289:31613166.
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5. After Suicide a Suicide: A Toolkit for Physician Residency/Fellowship Programs (American Foundation for Suicide Prevention - AFSP) http://www.acgme.org/Portals/0/PDFs/13287_AFSP_After_Suicide_Clinician_Toolkit_Final_2.pdf
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Aim/Purpose

Aurora Aim: Apply tested interventions to facilitate a safer environment for patients and clinicians

NI-7 Project Aim: To design/implement key GME stakeholders' Crisis Communication Plan (CCP) *Mock Drills* to optimize plan utilization during an emergency/crisis (eg, roles, responsibilities, exceptions)

METHODS: Interventions

Phase 1: Develop Mock Drills - Crisis Communication Plan (CCP)

- Identify 3 realistic drill scenarios associated with key CCP key elements
- Develop an assessment rubric and drill to assess each GME program's leadership responses approved by GME leadership and HR
- Pilot, reconcile assessor differences, and revise

Phase 2: Implement Mock Drills

- Conduct a mock drill (with 3 scenarios) within individual residency program's leadership team (e.g., PDs APDs, Coordinators, Chiefs) with two assessors for each drill

Phase 3: On-Going Education with Deliberate Practice

- Analyze data → identify gaps →revise CCP as needed
- Periodic review and practice of plan with GME Leader
- Creation of an Unexplained Absence Plan
- Real-life use of Crisis Communication Plan with distressed trainee

METHODS: Measures/Metrics

MEASURE #1: Mock Drill Scorecard

- 3 Mock Drills with scoring rubric implemented
  - Unexplained absence, attempted suicide and suicide
- Participants rated on ability to:
  - Access plan (all available in MedHub)
  - Communicate appropriately to colleagues
  - Attend to confidentiality
  - Utilize GME Leadership Support
  - Follow the Crisis Communication Timeline

NI-7 GME Mock Drill Master Scoring Sheet

Program Name: **Date:** **Reviewer:**

Drill #1: Resident 1 did not show up for impatient shift today. Supervising physician has called & paged R1. Chief resident has called and paged R1. Three hours have passed, & no one has heard from R1 who was assigned to a core clinical rotation.

Drill #1 Items	Ideal Answer	Rating Pass=1/Fail=0	Notes
POLICY Part A:			
1. Is there a formal plan for handling this situation?	Yes		They should access the Unexplained Absence Plan
2. What is the name of the Plan?	Unexplained Absence Plan – Must Show on Screen		The CCP does not apply at this stage.
3. Access the plan now from the location where residents, faculty can get to it.	Access policy (in MedHub)[1]		If they cannot access policy, help them find it.
ACTIONS TAKEN			
4. What's the 1st thing you would do in this scenario per the plan? If a. Coordinator b. Chiefs c. PDs	a. Coordinator: Call PD or if not available APD b. Chiefs call PD/Coordinator and determine coverage/advise/assist with contact up to 2-hour mark. c. PD will attempt to reach resident up to 3-hour mark		All or nothing. Everyone must answer correctly to get the point.
5. If unsuccessful in reaching the resident, who do you contact next and when?	a. PD/APD (or coordinator): Call Public Safety & GME Manager or DIO		If no contact within three hours, Assess Risk with Public Safety
6. Are there any additional people that may need to know about this issue?	Programs Leadership (PD, APD, Coordinator, Chief, Residents sharing rotation or called in for coverage.)		Chiefs need to be involved as need to attend to scheduling/communication. Each role should be informed based on what they need to know to proceed with patient care and duty coverage and ensuring safety of the missing trainee. Score: All roles must be identified to receive one point. If role missing = 0

MEASURE #2: Clinical Learning Environment Quick Survey (CLEQS)

- 10 Item evidence-based survey framed to match 4 learning environment domains[7]

IRB Determination

Sponsoring Institution's Research Subject Protection Program determined that this type of work does not constitute human subject research

7. Simpson D, McDiarmid M, La Fratta T, Salvo N, Bidwell JL, Moore L, Irby DM. Preliminary Evidence Supporting a Novel 10-Item Clinical Learning Environment Quick Survey (CLEQS) Under Review J Grad Med Educ.

RESULTS

PARTICIPATION

- 100% of GME Programs participated in mock drill sessions:
  - 14 residency and fellowship departments
  - All programs had a PD and Coordinator present
  - Some had an APD and a Chief Resident

RESULTS: Continued

MEASURE #1: Mock Drill Scores

- Majority of programs unaware of CCP or its location
  - Note: CCP presented at GMEC and emails sent prior to mock drills
- Many programs lacked documented policy/procedure for handling unexplained absences
- Majority scored well in maintaining confidentiality

MEASURE #2: CLEQS Survey

- Post-test survey results demonstrated that program leadership felt increased sense of engagement and support from GME Leadership

INFORMAL RESULTS:

- Successful activation of the CCP soon after drills were held (in response to distressed resident)
- CCP use expanded:
  - Launched at Illinois sites with mock drill sessions held to orient faculty
  - Mock drills held to orient Undergraduate Medical Education and they are now revising CCP to respond to unique needs of students
- System-wide Resident/Fellow Unexplained Absence Plan was drafted and launched
- Key success of work was awareness building with system and program leaders through dedicated time to address and raise importance of this critical issue

DISCUSSION

KEY FINDINGS:

- Critical/important policies should be "mock drilled" to assure our GME leader's understanding and ability to take appropriate actions
- Multiple communications channels are necessary to guarantee awareness and ability to correctly implement new policies

LIMITATIONS:

- As we connected within our GME leadership and hospital wide, we discovered multiple ambiguities in policies around crisis response
  - When to contact emergency contact, who should be informed of the details, leave of absence considerations
- Formalize rater training prior to conducting the mock drills

NEXT STEPS AND SUSTAINABILITY:

- From GME perspective, medicine is a high stress profession and it is vital that we all have opportunity to practice how to enact the processes and procedures for unexpected events (suicide, unexpected no show) with safe feedback
- Critical to involve/prepare all GME program leadership teams to enact policies with strong and visible organizational support

Final Project Management Plan

Project Title: Using Crisis Response Mock Drills to Prepare Leaders and Enhance Policies
Report Submitted by: Nicole Eull, PsyD, Jacob Bidwell, MD
Sponsoring Organization: Aurora Health Care – Advocate Aurora Health
Capstone Presenter: Keyonna Taylor-Coleman, MD (Esmeralda Santana, TAGME – Backup)

Project Team Members [Project Leads*]

Name/Credentials	Position/Title	E Mail Address
Nicole Eull, PsyD*	Dir of Wellbeing for Academic Affairs	Nicole.eull@aah.org
Jake Bidwell, MD*	DIO	Jacob.Bidwell@aah.org
Dawn Faucett	VP of Human Resources	Dawn.faucett@aah.org
Tricia La Fratta, MBA	Manager of Medical Education	Tricia.Lafratta@aah.org
Esmeralda Santana, TAGME	Lead Coordinator – GME, Fam Med	Esmeralda.santana@aah.org
Payal Sharma, MD	Resident in Internal Medicine	Payal.Sharma@aah.org
Deborah Simpson, PhD	Director Education Acad Affairs	Deb.simpson@aah.org
Keyonna Taylor-Coleman, MD	Resident in Family Medicine	Keyonna.Taylor-Coleman@aah.org

1. **What did you hope to accomplish?**
   - Engage GME program leaders in how to appropriately respond if an untimely death, absence, or a suicide occurs.
   - Refine our standardize process and policies for early recognition and response to concerns based on mock drills experience.

2. **What were you able to accomplish?**
   - All GME program leaders (including PDs, coordinators, APDs, Chiefs as appropriate) completed a series of mock drills to evaluate if their actions and processes for unexplained absence, suicide and an attempted suicide were consistent with GME policies.
   - Identified and refined gaps in our current policies related to this topic and created a new policy specific to unexplained absence.
   - Internal Spread: (1) A real life scenario with a medical student, resulted in faculty contacting a PD who then initiated the process. Mock drill approach has subsequently been adopted by our medical student leaders are underway. UME adapting the crisis communication plan and other policies to medical student education cognizant of medical schools' policies. (2) Beginning to run mock drills with residency program leaders with Advocate DIO support.

3. **What surprised you and why?**
   - Surprised how difficult it was to author the cases and scoring guide to assure participants highlighted the appropriate elements of the process and consistent with policy.
   - Participants knew there was a policy and where it was located (MedHub) yet many didn't know where to find it or action related steps within the policies.

- How engaged and appreciative all participants in the mock drill. Participants spent 45-60 minutes doing the drills and getting feedback virtually! Our results revealed that critical/important policies should be "mock drilled" to assure our GME leader's understanding and ability to take appropriate actions.
- Substantive improvement in the policy clarity based on participant feedback and actions during the mock drills (eg, was a form of "think aloud" approach used in other assessment/evaluation approaches).
- Surprised that one program director perceived that the drill pushed too hard on following the process with limited flexibility. Active dialogue during the drill challenged PD's inaccurate assumptions about actions and highlighted the need to create psychologically safe learning environments.

4. **Knowing what you know now, what might you do differently?**
   - Additional pilots to "test run" the policy to clarify the ambiguities in the policy prior to the mock drills.
   - Initiate formal rater training for mock drills.
   - Use multiple communication channels to orient mock drill participants to the purpose and approach as a few were initially surprised by the approach/purpose.
   - Bring hydration refreshments (or another approach to create a psychologically safe environment)!

5. **Success Factors**
   - *The most successful part of our work was*… awareness building with system and program leaders through dedicated time to address and raise the importance of this critical health crisis (eg, unexpected death of a resident, suicide).
   - *We were inspired by*… engagement of all the programs and recognition of the project's importance.

6. **Barriers**
   - *The largest barrier we encountered was*… the inconsistency of the policies across the system required the team to collate and met with all key stakeholders to obtain their perspectives (eg, HR, legal, EAP, government affairs, PR, loss prevention/security). The end result was the creation of a clear system policy and protocol.
   - *We worked to overcome this by*…persistence and awareness building/education and relationship building to our system level.

7. **Lessons Learned - The single most important piece of advice to provide another team embarking on a similar initiative would be…**
   - The importance of practicing the enactment of formal policies related to suicide/unexpected death as it provides opportunities for discussion and anticipatory guidance on uncomfortable/difficult topics.

8. **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?

1	2	3	4	5	6	7	8	9	**10**

Nothing **Everything**

Explain: We were able to successfully complete 3 mock drills with all GME program leadership teams and continue to educate them based on our findings – accomplishing all we set out to so and more!

9. **Sustainability and Next Steps** – What does our Chief Executive Officer (CEO) need to know to help keep your work sustainable?
    - From a GME, perspective medicine is a high stress profession and it is vital that we all have opportunity to practice with feedback on how to enact the processes and procedures for unexpected events (suicide, unexpected no show). It is critical to involve/prepare all GME program leadership teams to enact policies with strong and visible organizational support.

ADVANCED DIRECTIVES IN AN INTERNAL MEDICINE RESIDENCY PROGRAM

TANYA SHAH, MD; RAMANDEEP DHALIWAL, MD; ZEBA SHETHWALA, DO; HENOK HARDILO, MD;
JASMINE WEBSTER, MSW; DAVID HAMEL, MD; DEBORAH SIMPSON, PHD

Aurora Health Care
We are AdvocateAuroraHealth

National Initiative
NI VII Meeting #4

INTRODUCTION

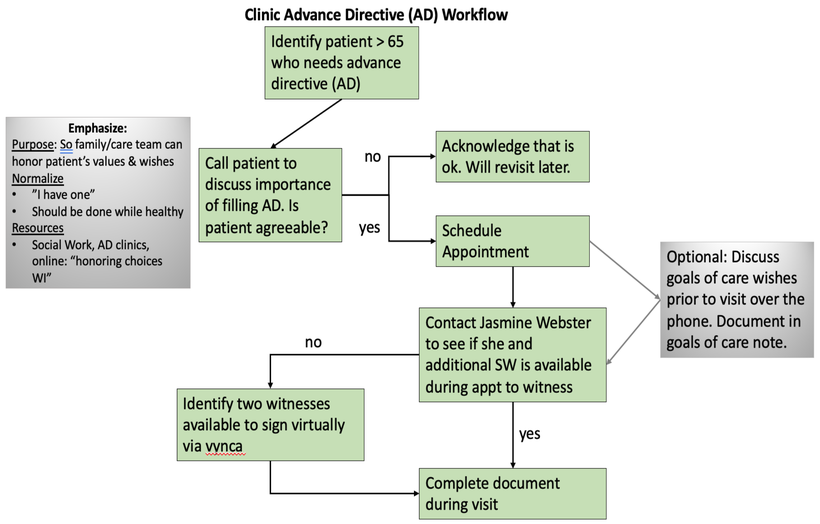
- Advance directives are considered to be important tools for promoting patient autonomy, dignity, reassurance, and empowerment[1,2]
- However only 15% - 25% of adults complete advance directives in U.S.[1,3,4]
- Advance directive completion in patients 65 or older increased nearly three fold following discussion with primary care physician or nurse[5]
- When primary care physician initiates an advance directive discussion within clinic visit, it normalizes the discussion, enhances relationship and improves patient satisfaction[6]
- Only **47%** of patients ≥65 years old have completed AD in our internal medicine residency clinic

AIM

To increase our advance directive (AD) completion numbers for patients ≥ 65 years old in the Internal Medicine Residency Clinic at Sinai to >59% by project completion.

METHODS: Interventions

- Create standardized clinic AD completion work flow
- Hold educational sessions for residents to learn/teach advance directive and goals of care conversations
- Incentivize residents to discuss need for AD over the phone with the patient and schedule office visits for AD completion
- Regular 1-on-1 follow up with each clinic pod basis, sharing updated list of their >65 years old patient's without ADs
- Project mid-point: Establish online AD completion tool (VYNCA), begin to train staff in its use



METHODS: Measures

1. Number of AD uploaded at residency intervention clinic compared to control clinic
2. Mayo Well Being Index (Resident well being) completed at mid-point and end point.
3. Clinical Learning Environment Quick Survey (CLEQS)[7] 10 item on-line form completed by interprofessional team members at project start (Oct-Dec 2019); midpoint (Aug-Sept 2020); and endpoint (Jan 2021)
   - Focused on 4 items of particular relevance to this project

RESULTS

Measure #1: Advance Directive Numbers:

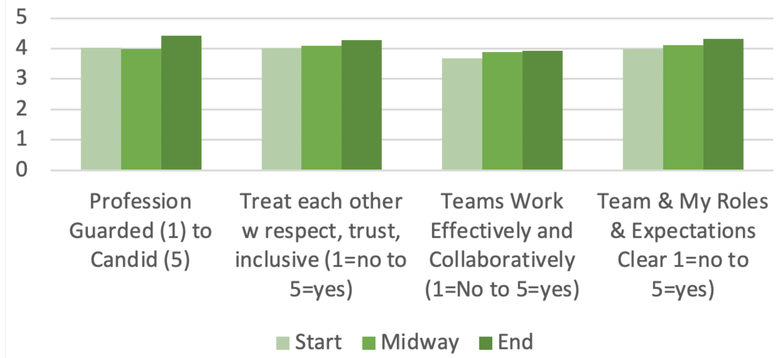
- Increased by 2% (+4% compared to our controls)
- Number of Advance Directive conversations and specific appointments with patients

RESULTS: Continued

Measure #2: Mayo Well-Being Index

- Mayo Well Being Index score improved 0.9 between project mid- and end-point (and better than national specialty comparison group mean at both timepoints)

Measure #3: CLEQS Survey Results N=29-39 per admin



DISCUSSION

KEY FINDINGS

- Percentage of ADs completion - minimal change
- Clinic learning environment (CLEQS) improved

LIMITATIONS

- Wisconsin's 2-witness rule for document completion
- Limited social work support in clinic
- Global Pandemic halting in person visits

NEXT STEPS AND SUSTAINABILITY

- Refocus efforts on virtual completion with VYNCA
- Continue training new employees on work flow
- Incentivize early steps in work flow

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Final Project Management Plan

Project Title: Advancing Advance Directives in Internal Medicine Residency Clinic

Report Submitted by: Zeba Shethwala, DO

Sponsoring Organization: Aurora Health Care – Advocate Aurora Health

NI-VII Meeting #4 Presenter: Tanya Shah, MD

Project Team Members & Leader(s)*

Name/Credentials	Position/Title	E Mail Address
Ankoor Biswas, MD	Internal Medicine Faculty – QI Lead	Ankoor.Biswas@aah.org
Ramandeep Dhaliwal, MD	Internal Medicine PGY-3	Ramandeep.Dhaliwal@aah.org
Kayla Dodds	Care Management	Kayla.Dodd@aah.org
David Hamel, MD*	Internal Medicine Program Director	David.Hamel@aah.org
Henok Hardilo, MD	Internal Medicine PGY-1	Henok.Hardilo@aah.org
Tanya Shah, MD	Internal Medicine PGY-3	Tanya.Shah@aah.org
Zeba Shethwala, DO	Internal Medicine PGY-2	Zeba.Shethwala@aah.org
Deborah Simpson, PhD	Director – Education Acad Affairs	Deb.Simpson@aah.org
Jasmine Webster MSW	Social Worker	Jasmine.Webster@aah.org

1. **What did you hope to accomplish?**
   Our goal when establishing the Advance Directive project was to increase the percentage of patients above the age of 65 who have a completed advance directive on file within our health care system. In order to raise our QI score, we had set a goal of >59% completion rate.

2. **What were you able to accomplish?**
   - By the end of our project, we saw a 1% increase in our advance directive rate January – December 2021 with an additional 1% increase in January 2021.
   - Aside from this direct measure, we were also able to provide invaluable education to residents about the advanced directive completion process.
     - Participants in our project became more comfortable with discussing the topic of advance directive.
     - We familiarized ourselves with the clinic's social work staff as we learned the steps necessary to successfully complete an advance directive.

- Most importantly, we have been able to incentivize other residents and members of our patient care team to advocate for the completion of an advance directive document for patients age 65 and older.

3. What surprised you and why?

- The biggest surprise during our project was the start of the pandemic; especially the resulting clinic closures and patient visit limitations which significantly impacted our strategy.
- Additionally, we were surprised that despite the willingness expressed by most patients to discuss an advance directive, they remained hesitant to document their wishes in a "legal document".
- We did anticipate the difficulty for patients of obtaining two witness signatures (compliant with Wisconsin law).
- On a positive note, we found that Vynca, an online platform for advance directive completion adopted by our health care organization, was relatively easy to use for providers and patients alike. And we have been selected as one of initial ambulatory clinic role out sites.

4. Knowing what you know now, what might you do differently?

Reflecting back on our project, there are areas that we could have improved upon which may have resulted in better outcomes.

- We found that scheduling visits dedicated to the discussion of advance directive documentation resulted in a greater frequency of completion.
- Conversations regarding an advance directive should be initiated early on in a provider-patient relationship.
- We were more successful with advance directive completion in patients with whom the topic was discussed on at least 2 separate occasions (telephone encounter or in person visit).
- Incentivize resident/faculty teams to initiate the early steps towards advance directive completion is critical given the overall complexity of the process.

5. Success Factors

- The most successful part of our work was resident education regarding advance directives. As residents, we are still in the midst of training. Many of us were hesitant and unsure how to begin this conversation initially. However, with time and repetition, it has become much easier. Growing comfortable with having conversations about such an important, yet often overlooked, topic has been a great success for us.
- We were inspired by how well we were able to engage all of our clinic staff in working towards our goal. Front desk and scheduling staff were able to assist with reaching out to patients to set appointments specifically focused on advance directive completion. Our medical assistants and nurses helped with having copies of the advance directive document readily available to share with any scheduled

patients that met our study criteria. Despite our limited social work team, they were very willing to follow up with patients and be present during our visits as needed.

6. **Barriers**
   - The largest barrier we encountered was needing to cancel clinic visits for during the pandemic.
   - Many patients' ability to complete their AD was limited by their inability to access potential witnesses. Sometimes patients resided in a facility where they were not allowed to have visitors or family and/or felt it unsafe to visit, making it difficult to get witness signatures on the document.
   - Many residents did not have established relationships with the patients they were engaging in advance directive completion, making the conversation more difficult.
   - We worked to overcome these barriers by implementing a few different measures. We relied on Vynca and virtual visits to facilitate witness signatures given that visitor restrictions for our clinic. We doubled our efforts to contact our patients to discuss advance directive once clinic re-opened.

7. **Lessons Learned - The single most important piece of advice to provide another team embarking on a similar initiative would be…**
   Clearly define the necessary steps in completion of this complex process so there is a streamlined plan of action that everyone can easily adopt, while specifically incentivizing the first step.

8. **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? Circle or BOLD**

1	2	3	**4**	5	6	7	8	9	10
Nothing									**Everything**

   Explain: We were unable to increase in completion rates to the degree specified in our aim. Yet we made progress made towards improving the process and educating providers and patients on the topic.

9. **Sustainability and Next Steps - What does our Chief Executive Officer (CEO) need to know to help keep your work sustainable?**
   - Having a greater social work presence in the clinic will help reduce the strain on our current SW staff.
   - Continuing to expose incoming residents and staff on the topic of advance directive will further establish this an important and necessary goal in patient care.

Building a Psychologically Safe and Collaborative Working Environment on L&D

NI VII Meeting #4

Shant Adamian, DO, Callie Cox Bauer, DO, Nicole Salvo, MD, Deborah Simpson, PhD, Jennifer Vollstedt, RN, Cynthia Wick, RN
Ob/Gyn Residency Program, Milwaukee, Wisconsin

INTRODUCTION: Background

- L&D is an intense, high stakes environment where communication between and amongst health professions is critical for the safety and well-being of health care professionals and patients
- Improper communication is cited by the Joint Commission as a key contributor of negative sentinel events[1]
- Use of simulations and practice scenarios to demonstrate different perspectives as a short term intervention with the opportunity to develop a better understanding of goals among team members[2]
- Creating a culture of safety requires individuals from all aspects of the healthcare team unifying under a common goal to foster an environment of respect, curiosity, and accountability[2]

1. Lyndon, A., PHD, Rn, Johnson, M., CNM, MS, Bingham, D., PhD, Rn, Napolitano, P., MD, Joseph, G., MD, Maxfield, D., BA, O'Keeffe, D., MD. Transforming communication and safety culture in intrapartum care. Obstetrics & Gynecology. May 2015.
2. Lyndon, A., PhD, Rn, Zlatnik, M., MD, MMS, Wachter, R., MD Effective physician-nurse communication: a patient safety essential for labor and delivery. American Journal of Obstetrics and Gynecology. August 2011

Aim/Purpose/Objectives

Aurora Aim: Apply tested interventions to facilitate a safer environment for patients and caregivers

OB/GYN Aim: Create a collaborative, interdisciplinary learning environment where team members feel confident to speak up without fear of being put-down or retribution

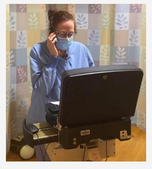
METHODS: Interventions

Participants

- Active members of L&D:
  - Resident Physicians
  - Attending Physicians
  - Registered Nurses
  - Certified Nurse Midwives
  - Medical Students
  - Nursing Students

Interventions

- SBAR Scenarios:
  - Handouts
  - Videos
  - Live Demonstrations
- Participant incorporation of SBAR into daily routine



METHODS: Measures/Metrics

Utilize SBAR to Create Collaborative Learning Environment

- SBAR: Situation Background Assessment Recommendation
- Extra focus on the Assessment and Recommendation to develop collaboration regardless of role/training level

Measure #1: CLEQ Surveys

- Clinical Learning Environment Quick Survey[3,4]
- 10 questions
- Pre-intervention (Aug 2020) Post-intervention (Feb 2021)

Measure #2: Participant feedback

- During the post-intervention survey, participants were asked about SBAR and it's impact on achieving the aim of the project

Response Rate → Role ↓	08/2020 (N)	02/2021 (N)
Resident	14	11
Attending	4	7
Nurse	43	24
Total	**61**	**42**

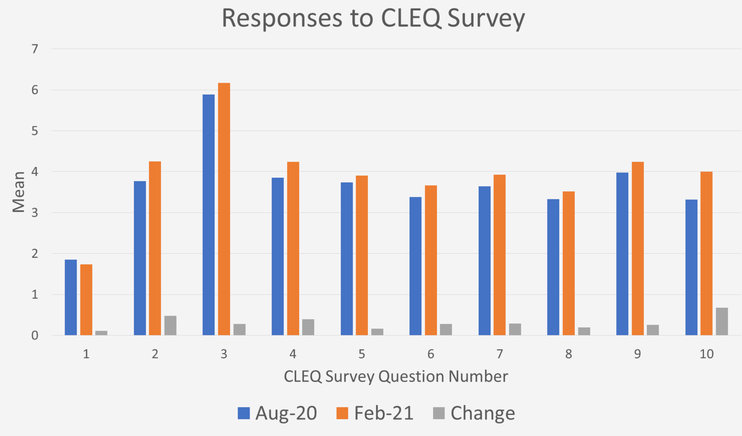
IRB Submission

- Monitoring the CLE and quality/safety interprofessional project teams are accreditation requirement, Sponsoring Institution's Research Subject Protection Program determined that this type of work does not constitute human subject research.

3. Simpson D, McDiarmid M, La Fratta T, Salvo N, Bidwell JL, Moore L, Irby DM. Preliminary Evidence Supporting a Novel 10-Item Clinical Learning Environment Quick Survey (CLEQS) Submitting as Educational Innovation. Under Review J Grad Med Educ.
4. Gruppen LD, Irby DM, Durning SJ, Maggio LA. Conceptualizing Learning Environments in the Health Professions. Acad Med.2019;94:969-974.

RESULTS

Measure #1: CLEQ Surveys



RESULTS: Continued

Measure #1: CLEQ Survey Social Domain

ITEM	SCALE	Mean 08/20	Mean 02/21	Change
I feel supported by team/unit members in my/team's everyday on-going learning.	1 = Strongly Disagree 5 = Strongly Agree	3.85	4.24	0.39
People in this work area/unit treat each other with respect, trust each other and are inclusive.	1 = Strongly Disagree 5 = Strongly Agree	3.74	3.90	0.16
The inter-professional teams in this area/unit work together effectively using ongoing communication, collaborative decision making and coordinated team-based care.	1 = Not at All Effective 5 = Extremely Effective	3.38	3.66	0.28

Measure #2: Participant Feedback

Survey Items	Overall (N=40)	Nurses (N=20)	Residents (N=9/12)	Faculty (N=6/9)
My SBAR use has increased by ____ % over last 6-8 months (August 2020)	39%	58%	25%	17%
Other team members' SBAR use has increased by ____ % over last 6-8 months (August 2020)	31%	57%	26%	17%
Use of SBAR on L&D has _____ influenced the creation of a collaborative, Interdisciplinary learning environment where team members feel confident to speak up without fear of being put-down or retribution (1=Very Negatively to 5 = Very Positively)	3.7	3.9	3.5	3.3

Discussion

Key Findings

- Improvement noted in every CLEQ question, particularly in the social domain, which is most applicable to project theme
- Subjective improvement in SBAR usage
- Respondents endorsed a positive impact of SBAR on project AIM

Limitations

- Cannot determine causation as other factors changed during the study period (i.e. new nursing management)
- Different team members were surveyed pre and post intervention, which may change results

Next Steps and Sustainability

- After COVID, can resume in-person demonstrations to foster more participation
- Make additional scenarios for handouts and videos
- Expand the project to include post-partum

Final Project Management Plan

Project Title: Building a Psychologically Safe and Collaborative Working Environment on L&D
Report Submitted by: Shant Adamian, DO – Obstetrics and Gynecology Residency Program
Sponsoring Organization: Aurora Health Care – Advocate Aurora Health
NI-VII Meeting #4 Presenter: Shant H. Adamian, DO

Project Team Members & Lead*

Name/Credentials	Position/Title	E Mail Address
Shant Adamian, DO*	OB/GYN Resident PGY2	Shant.adamian@aah.org
Callie Cox Bauer, DO	Assoc Program Director – OB/GYN	Callie.CoxBauer@aah.org
Nicole Salvo, MD	Program Director – OB/GYN	Nicole.salvo@aah.org
Deborah Simpson, PhD	Director – Academic Education	Deb.simpson@aah.org
Cynthia Wick, RN	RN – L&D	Cynthia.Wick@aah.org
Jennifer Vollstedt, RN	L&D Nurse Educator	Jennifer.Vollstedt@aah.org

1. **What did you hope to accomplish?**
   - The project aim was to create a collaborative, interdisciplinary learning environment where team members feel confident to speak up without fear of being put-down or retribution.
   - Utilizing SBAR, the initial plan was to create practice scenarios that would be acted out by residents and nurses, with the goal that most nurses and residents would eventually participate. The use of SBAR was to allow individuals to provide an assessment and recommendation, to ensure that patient care is collaborative, and that everyone's voices are heard.
   - Live in-person SBAR practice scenarios changed secondary to the COVID-19 pandemic, necessitating modification to the use of virtual mediums. Short, < 2-minute videos were produced and distributed via links to a YouTube channel to increase accessibility by nurses, residents, etc. on L&D. These videos were complimented by half-page written SBAR scenarios provided as colorful handouts and left in L&D team meeting rooms for members to review during down time at work.
   - By utilizing these alternative delivery platforms, we retained our primary aim: to have team members incorporate SBAR into their daily practice, and thus increase collaboration on labor and delivery.

2. **What were you able to accomplish?**
   - As previously described, Pre-COVID, created role play scenarios and enacted them live with resident/faculty and a nurse during am transitions. During COVID, produced and disseminated SBAR videos and handouts both highlighting effective/ineffective uses of SBAR.

- **RESULTS:** Increased interprofessional dialogue during transitions of care using SBAR (per survey responses January 2021)

Survey Items ↓	**Overall (N=40)**	**Nurses (N=20)**	**Residents (N=9/12)**	**Faculty (N=6/9)**
MY SBAR use has increased by ___% August 2020	39%	58%	25%	17%
OTHER team members SBAR used has increased by ____%	31%	57%	26%	17%
Use of SBAR on L&D has _____ influenced the creation of a collaborative, interdisciplinary learning environment where team members feel confident to speak up without fear of being put-down or retribution (1=Very Negatively to 5 = Very Positively)	3.7 (.56)	3.9 (.50)	3.5 (.50)	3.3 (.45)

  - Collaboration and sense of teamwork with nurses in providing Assessment and Recommendation
    - From Baseline (August 2020) to Present (January 2021), improvements were noted in all 10 Clinical Learning Environment Quick Survey (CLEQs) items.[1]
    - All 3 CLEQS items in the Social Domain[2] demonstrated an increase between .16-.39 rating points: 1) Feel supported by Team/Unit members…; 2) People in this unit treat each other with respect, trust each other, and are inclusive; 3) Interprofessional teams in this unit work together effectively through communication, collaborative decision-making and coordinated team-based care.

3. What surprised you and why?

- How difficult it is to effect change when focus is on interpersonal communication between professions, especially when interventions are not F2F.
- Strong support of nurse educators for the project, providing communications channels to other nurses when not F2F.
- Nurses self-reported SBAR increased use and improvement was juxtaposed with residents still perceiving communication challenges.
- Adaptability of project during a pandemic that restricted interpersonal interactions. With numerous obstacles that arose over the year, the project was able to adapt with alternative mechanisms of dissemination of information

4. Knowing what you know now, what might you do differently? (See Poster – Success Factors/Lessons Learned, and Barriers Encountered/Limitations)

- Be prepared for team member departures/changes: two of early nursing leads changed roles/left the organization, residency program director transitions/maternity leaves, etc.
- Actively Engage Team members: Enlist more help and identify specific roles for each team member with accountabilities supported by their supervisors
- Attempt to ensure that the same team members are surveyed pre and post to have most accurate data

5. **Success Factors**
   - *The most successful part of our work was*…ability to adapt and pivot how to do continue the project with impacts of Covid-19 on no face-to-face meetings resulting in endurable resources (videos, handout) rather than using gatherings to demonstrate effective SBAR use.
   - *We were inspired by…* the tenacity and resilience of resident project leader in continuing the project and willingness of others to participate in the face of multiple competing demands to "on the drop of a dime" shoot the videos.

6. **Barriers**
   - *The largest barrier we encountered was…*changing project interventions mid-stream
   - *We worked to overcome this by*… team members working together to create endurable resources that could be used/distributed virtually (video) along with SBAR reminders (laminated, colorful tabletop scenarios highlighting SBAR use).
   - *Changing team participation*…multiple individuals that were involved in the project left their roles at the hospital
   - *We worker to overcome this by*… finding new team members in similar roles that were interested in supporting the success of the project. Additionally, recommendations were made for specific individuals that would be good replacement team members from the leaving team members.

7. **Lessons Learned - The single most important piece of advice to provide another team embarking on a similar initiative would be…**
   - Make the "ASK" for task specific help with quick turnaround timelines (within 1-2 weeks) so that it actually meets your actual timeline (1 month). Numerous times during the implementation of the project, critical benchmarks were delayed secondary to scheduling and resource conflicts among team members and participants. Use stricter and shorter timelines to facilitate individuals to meet goals even in the setting of delays.

8. **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?

1	2	3	4	5	**6**	7	8	9	10

Nothing **Everything**

Explain: The original project intended to have more interactive huddle practices so that there is opportunity for feedback and growth as that is more likely to result in sustained behavior change. Pivoting to virtual minimized opportunities for practice.

9. **Sustainability and Next Steps** - What does our Chief Executive Officer (CEO) need to know to help keep your work sustainable?
   - Our residency program had opportunity to change the communication culture on L&D and are committed to continuing this work. Looking forward to *your expedited recruitment of nursing leaders and support* with these nursing and physician leaders to help with accountability so that we can achieve a collaborative, interdisciplinary learning environment where team members feel confident to speak up without fear of being put-down or retribution

[1] Simpson D, McDiarmid M, La Fratta T, Salvo N, Bidwell JL, Moore L, Irby DM. Preliminary Evidence Supporting a Novel 10-Item Clinical Learning Environment Quick Survey (CLEQS) Submitting as Educational Innovation. Under Review J Grad Med Educ.

[2] Gruppen LD, Irby DM, Durning SJ, Maggio LA. Conceptualizing Learning Environments in the Health Professions. Acad Med.2019;94:969-974.

Radiation Exposure, Reduction Techniques, & Standardization of Swallow Study Evaluations

Mason A. Brown, MD[1], Shelly Reimer, MD[1], Leah Presper[2], Theresa Ackerman[2], and William MacDonald, MD[1]
Aurora St. Luke's Medical Center, [1]Department of Radiology, [2]Department of Speech Pathology, Milwaukee, WI

Aurora Health Care
We are AdvocateAuroraHealth

National Initiative
NI-VII Meeting #4

INTRODUCTION

- **Swallow Study Evaluation – Fluoroscopic Procedure**
  - Most frequent fluoroscopic procedure performed in radiology department
  - Patient drinks contrast while being assessed under real-time X-ray
  - Required a Team: (1) Radiology resident who controls the radiation; (2) Fluoroscopy technician who controls the positioning of the X-ray machine; and (3) a speech pathologist who administers the contrast
- **Long-term exposure** to ionizing radiation from fluoroscopic procedures can lead to side effects[1]
  - Standardization of lead aprons and thyroid shields
  - However the eyes are currently the most at-risk organ
- **No literature** on residents' cumulative radiation exposure over the course of training
  - Badge-dosimeter is inconsistent and thus unreliable
- **Personal protective equipment** recommended by Occupational Safety and Health Administration (OSHA)[2]
  - Lead aprons/vests, thyroid shields, lead gloves, and safety goggles

PURPOSE

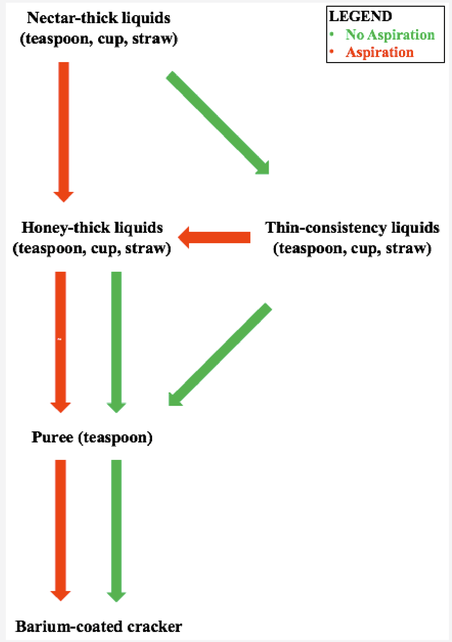
To retrospectively establish a fluoroscopic radiation exposure baseline and monitor prospective reduction techniques.

METHODS

- **Interventions**
  - Replaced/Provided personal protective equipment per OSHA guidelines to all medical personnel involved in swallow study evaluations (eg, new leaded glove for speech pathology; radiation safety goggles for the fluoroscopy technicians)
  - Developed a standardized swallow study evaluation flowchart in conjunction with the speech pathology department
    - Barium contrast is the agent of choice as its effects (if aspirated) are lesser than other contrast agents, (eg, gastrograffin)
    - Patients trial different consistencies of thin liquids, nectar-thick liquids, honey-thick liquids, puree, barium pill, and crackers in order to evaluate risk of laryngeal penetration or aspiration
    - Aspiration increases the risk of developing pneumonia
- **Data Analysis**
  - Baseline: Swallow studies performed by 1 resident during Oct 2018 & Feb 2019
  - Midpoint: Completion of *Clinical Learning Environment Quick Survey* (CLEQS) to evaluate teamwork and at midpoint
  - Post Intervention: Swallow study evaluations performed by same resident in Sept 2020 + CLEQS

RETROSPECTIVE AND PROSPECTIVE RESULTS

Swallow Study Flowchart



	Prior to Implementations			After Implementations		
Patient Radiation Exposure		**Time (minutes)**	**Radiation (mGy)**	**Runs**	**Time (minutes)**	**Radiation (mGy)**	**Runs**
	Average	1.9	7.9	13.5	1.8 ↓	8.3 ↑	14.1 ↑
	Median	1.8	7.2	13	1.9 ↑	7.8 ↑	15.5 ↑
	Range	0.3 – 4.3	1.5 – 24.3	1 – 26	0.4 – 3.3 ↓	1.9 – 21.8 ↓	4 – 27 ↑

		Prior to Implementations			After Implementations	
Resident Radiation Exposure		**Time (minutes)**	**Radiation (mGy)***		**Time (minutes)**	**Radiation (mGy)***
	Extrapolated Exposure per 4-week Rotation	183.7	21.2		174 ↓	22.3 ↑

MEASURES/METRICS

- Absorbed Dose: Ionizing radiation absorbed per unit mass, measured in Grays (Gy)
  - X-ray machine records patient radiation exposure into patient's chart
  - Due to a variety of complications, badge-type dosimeter readings were unable to be utilized for comparison in this study
- Extrapolated radiation exposure was calculated using the inverse square law (Intensity = 1/distance^2)
  - Patients seated approx 0.5 meters from the C-arm emitter
  - Residents were stationed approx 3 meters from the C-arm emitter

Clinical Learning Environment Quality Survey (CLEQS)

Radiology	N	Supported by team/unit 1= SDA - 5 SA	Treat each other w respect, trust, inclusive 1=SDA- 5 SA	IP Teams Work effectively, Collaborative DM 1=Not at all Effective 5=Extremely Effective	Access to info, Resources Equip 1=SDA - 5 SA	Team & my Roles & Expectations clear 1 SDA - 5 SA
MidPoint	18	4.0	4.1	3.7	4.3	4.0
Post	17	4.2	4.3	3.8	4.4	4.2
Δ		**0.2**	**0.2**	**0.1**	**0.1**	**0.2**

REFERENCES

1. Mooney et. al. Absorbed dose and deterministic effects to patients from interventional neuroradiology. *British Journal of Radiology*. 10.1259/bjr.73.871.11089467JO.
2. Safety and Health Topics: Ionizing Radiation – Control and Prevention. *Occupational Safety and Health Administration*. https://www.osha.gov/SLTC/radationionizing/preventi on.html.

DISCUSSION

Key Findings

- Implementing a standardized swallow study flowchart did not have a significant effect on decreasing fluoroscopy time or care team member radiation exposure
- Providing fluoroscopic technologists with radiation safety goggles in addition to individually and directly promoting radiation safety awareness did not increase goggle usage, and thus, radiation exposure to their eyes did not significantly change
- Radiation dosimetry badges were unreliable (eg, responsible department not collecting/recording data, technologists wearing resident leads without changing the badges, incorrect monthly badge updates/turn-ins)

Limitations

- Speech pathology perceived Swallow Study Flowchart as an over-simplified restraint instead of as an efficiency tool
- Limited use of radiation safety goggles due to COVID PPE (face shields)
- Radiation exposure side effects occur long-term; safety ignored

Next Steps and Sustainability

- Improve badge-dosimetry reporting and documentation
- Continue to encourage proper use of radiation safety equipment

Final Project Management Plan

Project Title: Radiation Exposure, Reduction Techniques, and Standardization of Swallow Study Evaluations
Report Submitted by: Mason A. Brown, MD
Sponsoring Organization: Aurora Health Care – Advocate Aurora Health
Capstone Presenter: Mason A. Brown, MD

Project Team Members [Project Lead*]

Name/Credentials	Position/Title	E Mail Address
RADIOLOGY: TO RETROSPECTIVELY ESTABLISH A FLUOROSCOPIC RADIATION EXPOSURE BASELINE AND MONITOR PROSPECTIVE REDUCTION TECHNIQUES.		
Tony Brown, MD*	Radiology PGY4	mason.brown@aah.org
Shelly Reimer, MD*	Radiology PGY5	shelly.reimer@aah.org
Theresa Acherman	Fluoroscopy Tech & Superv Rehab Services	theresa.acherman@aah.org
Leah Presper	Speech Pathology	leah.presper@aah.org
William MacDonald, MD	Diagnostic Radiology Program Director	william.macdonald@aah.org

1. **What did you hope to accomplish?**
   Our project aim was to retrospectively establish a fluoroscopic radiation exposure baseline and then monitor exposure rates following safety interventions. The retrospective portion consisted of analyzing past swallow study procedures performed by a single resident over the course of their PGY2 fluoroscopy rotations. The prospective portion consisted of analyzing swallow study procedures performed by that same resident following project interventions including: (1) developing a standardized swallow study evaluation flowchart in conjunction with speech pathology department and (2) replacing/providing care team members with proper radiation safety equipment (goggles and gloves).

2. **What were you able to accomplish?**
   We were able to establish an estimated resident radiation exposure baseline by analyzing radiation exposure recorded by the C-arm emitter of one resident's patient panel. These findings were then extrapolated to estimate the resident's exposure via the inverse square law. We were also able to identify difficulties in badge-dosimetry reporting.

3. **What surprised you and why?**
   Despite radiation safety goggles being provided to fluoroscopic technologists and gloves for speech pathologists, the non-resident team members rarely if ever chose to wear them. When quired team members reported that it was "inconvenient" and/or too much of an added burden with pandemic PPE.

4. **Knowing what you know now, what might you do differently?**
   Proper badge-dosimetry data would have been valuable in comparing our extrapolated results to the standardized radiation exposure reporting system. However, the availability and integrity of that data was a concern.

5. **Success Factors**
   - The most successful part of our work was establishing an estimated radiation exposure baseline to complement existing swallow study evaluation metrics (radiation exposure time, patient exposure, and runs).
   - Providing our care team with updated radiation safety equipment.

6. **Barriers**
   - The largest barrier we encountered was cooperation.
   - We attempted to overcome this by persistent radiation safety awareness, as well as leading by example.

7. **Lessons Learned -** *The single most important piece of advice to provide another team embarking on a similar initiative would be:*
   - to understand that because team members do not immediately experience the long-term side effects of radiation exposure it is difficult to change their behavior specific to utilizing radiation exposure protections.

8. **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?

1	2	3	4	5	**6**	7	8	9	10
Nothing									**Everything**

   - Swallow studies occur in an interprofessional team environment with speech pathologists, fluoroscopic technologists, and radiology residents working together with the patient, all in the same room. While badge-dosimetry data should calculate each individual team member's radiation exposure, this data appeared to be inconsistent for a variety of reasons.
   - A resident on this required rotation participates in all/almost all swallow studies over a 4-week period, whereas the participation level of speech pathologists and fluoroscopic technicians varies during this time period.
   - This project started out ambitiously as there was no literature reporting on radiology resident radiation exposure. Analyzing resident exposure data was a convenient and accessible proxy measure for interprofessional team members exposure rates.
   - Participation in both swallow study flowchart efficiency and proper safety equipment usage proved to be a challenge. This is likely due to a busy workflow schedule, interaction across multiple different/rotating care team members, and inconvenience.

9. **Sustainability and Next Steps** - What does our Chief Executive Officer (CEO) need to know to help keep your work sustainable?
   Work with hospital leaders to improve badge-dosimetry reporting/documentation and the proper use of radiation safety equipment.

Utilizing a Multidisciplinary Team to Improve Communication with Patients in the Hospital, as Measured by HCAHPS scores

Daphne Monie, PhD; Suzanne Olson, CPXP; Russell Moore, MD; Julie Hall, RN; Omid Shah, MBChB; Stacy Wicks, PharmD; Caroline Gomez-Dicesare, MD; James Dalton, MD

Bassett Healthcare Network
Bassett Medical Center

National Initiative
NI VII Meeting #4

INTRODUCTION: Background

Bassett Medical Center (BMC) has, for nearly a century, been the primary health care source for a large portion of the people in central New York State. It has been valued for the care it provides for its neighbors and "family". For this reason, we have been unhappy with recent HCAHPS scores, particularly as they relate to communication with hospitalized patients by physician and nursing staff. It is our impression this change has come about, at least in part, because of fragmented care among various parts of the healthcare team.

It is important to improve the patient experience – first because it is the right thing to do for patient outcomes; and second, because it has real economic implications for the institution. Our aim was to see if multidisciplinary rounding improved patients' ratings of BMC communication.

Aim/Purpose/Objectives

The BMC National Initiative VII project aimed to develop a team rounding system on the inpatient hospital Internal Medicine service. The goal was to improve communication among different disciplines on the healthcare team and, more importantly, to improve communication (including consistency in communication) with our patients, as measured by internal surveys and HCAHPS scores over a 12 month period. The primary goal of this study was a 10% improvement in HCAHPS scores by the end of 2020.

METHODS: Interventions/Changes

One of the inpatient Internal Medicine teaching teams (Silver) changed its daily rounding schedule on the 2Medicine unit.

Phase 1 *January – March 2020:*

a) Intern: Intern with Patient
b) Table: Attending, Residents, Coder
c) Bedside: Physicians, Nurse, CM, Pharmacist, Patient

Phase 2 *September – November 2020:*

a) Pre-Round: Residents, CM, Pharmacist, Coder
b) Bedside: Attending, Residents, Nurse, CM as needed

METHODS: Measures/Metrics

- *Staff Survey*: Physicians, nurses, case managers (CM), and pharmacists completed the Relational Coordination Survey (RCS) assessing relationships with each of the other groups pre & post participation in team rounding.
- *Patient Survey*: An internal inpatient survey, assessing several communication domains on a 5 point Likert scale, was developed and administered prior to discharge.
- *HCAHPS*: particularly the measure of "Staff worked together to care for you," were monitored continuously.
- Patient survey results were to be compared pre and post team rounding between the Silver team (intervention) and Tan internal medicine teaching team (control).
- This study was granted exemption by the institutional IRB.

RESULTS

The COVID-19 pandemic required a massive restructuring of inpatient services and precluded "teams" of people in patient rooms. As a result, the intervention had to be put on hold twice during the study. There were two main intervention periods, with the format changing slightly for Phase 2 based on feedback from Phase 1.

- Patients and family members liked getting a consistent message from the whole team at once
- Communication of the physicians with nurses and CM improved with decreased need for paging physicians
- Team rounding took a lot of time – for Phase 2, pharmacists and CM checked in during pre-rounds instead of attending bedside rounding for every patient
- It was difficult to coordinate the physician rounding with nurses, as many nurses cover Silver team patients – for Phase 2 increased geographic care was attempted
- Interns found rounding based on nurse schedules extended their day and Physicians found Table rounds often redundant with Bedside rounds – for Phase 2 we condensed Table or Teaching rounds with the Bedside rounds to save time and eliminate redundancy

SURVEY RESULTS

- *Staff Survey (RCS n = 73; Feedback Survey n = 18)*
  - Post scores trended up for all roles except Pharmacist
  - Post scores were significantly higher for frequency of communication with CM (3.4 pre to 4.0 post, p = 0.039)
  - 72% felt communication & 61% felt relationships improved
- *Patient Survey (n = 74)*
  - Silver Team Pre vs. Post: no significant differences
  - Silver vs. Tan Team: no significant differences
  - Differences were likely hard to detect as scores were high
- *HCAHPS % Top Box Scores (n = 33)*
  - Trended down, but there were no significant changes
  - Staff worked together to care for you: 58% pre to 43% post
  - Communication with Nurses: 74% pre to 50% post
  - Communication with Doctors: 75% pre to 69% post

Discussion

Key Findings

- Patients liked team rounding and a majority of staff felt it improved communication and relationships.
- Time was the biggest limitation to allow integration of team rounding into the schedules of nurses, CM, & Pharmacists.

Limitations

- The COVID-19 pandemic caused the study to be put on hold and modified to reduce the number of people in teams.
- Geographic care was difficult to maintain, resulting in more nurses per Medicine team and decreasing the number of Silver patients that were able to be assigned to 2Medicine, which limited the number of patients in the study.
- Pharmacy lost staff and was no longer able to provide a pharmacist for inpatient rounding.
- Patient surveys were put on hold causing small sample sizes.
- COVID-19 is a major confounder in interpreting HCAHPS results, with mask wearing, limited visitation, and strained resources resulting in decreases in most scores.

Next Steps

- Restart team rounding implementing changes based on what we learned in the pilots.

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 2019. 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 Tile:** Utilizing a Multidisciplinary Team to Improve Communication with Patients in the Hospital, as Measured by HCAHPS scores

I.	Vision Statement (markers of success by March 2021; Refer to Toolkit #6 after meeting one)	**Vision** Within two years Bassett Medical Center will be a model of integrated interdisciplinary team based rounding. This will result in excellent and efficient patient care as well as exemplary workforce engagement and satisfaction.
II.	Team Objectives ('needs statement,' project requirements, project assumptions, stakeholders, etc.)	We have an institutional commitment to improve HCAHPS scores, which are lower than we want. One of the areas is in patient report of communication from their physicians and among their providers. The project will require buy-in from Internal Medicine faculty and residents, case management, nursing on the designated unit, and pharmacy. These, the patients, and the institution are the stakeholders. Our assumptions are that this project will adjust the way time is spent rounding on the inpatient unit and that it will result in an improved sense of communication with patients and among caregivers.
III.	Team Members & Accountability (list of team members from Toolkit #7 [after meeting one] and who is accountable for what)	Omid Shah, MBChB, Chief Resident IM: Scripting of multidisciplinary rounds, communication with residents Daphne Monie, PhD: Survey design, distribution and collection Russell Moore, MD: Faculty Hospitalist, Scripting of multidisciplinary rounds, communication with hospitalists Suzanne Olson, CPXP, Director of Patient Experience: Internal survey design and distribution, HCAHPS Julie Hall, RN, Director of Inpatient Nursing and Case Management, communication with nursing and case management.

		Stacy Wicks, PharmD: Integration with hospital pharmacists Jill Stoecklin: Project coordination James Dalton. MD. DIO/PD for IM: Project oversight
IV.	Necessary Resources (staff, finances, etc.)	Portable EMR workstation (already in place) Log books Time for survey distribution, collection and analysis
V.	Measurement/Data Collection Plan (Refer to Toolkit #2)	HCAHPS data collected by Press-Ganey and reported to BMC monthly. Looking specifically at physician communication with the patient and with the patient's perspective of communication among caregivers. Internal survey of patient satisfaction was developed and administered day two or three of hospital stay for patients on Silver and Tan (control) teams. Internal relational survey of caregivers (faculty, residents, case managers, pharmacists and nurses) regarding relationships among one another. This was to be done on a regular basis, determined by the group an individual represented and how frequently they were on the service. Daily log of participants in multidisciplinary rounds, completed by residents. At end of project, assessment (using time and resource assumptions) of cost of project.
VI.	Stakeholder Communication Plan (may be helpful to draft a flow chart of team members & senior management; Refer to Toolkits #3 and #5)	Project team will meet once or twice monthly throughout the project and steering committee will be invited quarterly or more often as needed (steering committee includes BMC President, Chief of Internal Medicine, CNO, VP for Performance Improvement, Chief of Hospitalist Division). Project will be a standing agenda item on Hospitalist Division meetings and IM residency meetings.
VII.	Potential Challenges (engagement, budget, time, skills gaps, etc.; Refer to Toolkit #4)	Anticipated challenges were: 1. Disruptions to the current workflow by all participants 2. Possible longer time for rounding 3. There is always pushback with a new method for doing things

VIII.	Opportunities for Scholarly Activity (potential publications, conference presentations, etc.)	1. Study has potential for QI/PI presentation within BMC with possible rollout to other services if successful. 2. While limited in generalizability due to small numbers and unique institutional characteristics, the study design is controlled and has potential for publication or presentation as a pilot.
IX.	Markers (project phases, progress checks, schedule, etc.; Refer to *NI VII Roadmap to 2021* which will be presented at Meeting One)	The initial plan was to develop scripting for team rounding and roll out education in time to start the project in January of 2020 and to continue following internal relational surveys, internal patient surveys, and HCAHPS through February of 2021. The coronavirus pandemic derailed the schedule in March of 2020 due to reorganization of resident duties and the inability to have teams of people at the patient bedside. We resumed the project with some modifications in late September 2020 and had to put it on hold again in December of 2020. As of now (March 2020) we are planning to resurrect the project when our community Covid rates are down to a low level and all caregivers are vaccinated and restrictions are relaxed.

Sections X thru XV to be completed first quarter 2021 for "Final Proceedings" booklet:

X.	Success Factors	The most successful part of our work was the enthusiasm at the beginning of the project on the part of nursing staff. We were inspired by everyone's willingness to collaborate and the flexibility in trying to make it work.
XI.	Barriers	The largest barrier encountered was the pandemic. It was impossible to do the work we had planned if teams could not physically be together with the patient. We worked to overcome this by starting and stopping.
XII	Surprises	What surprised you and why? As Monty Python would say "Nobody expects the Spanish Inquisition (Coronavirus pandemic)!"

XIII.	Lessons Learned	What would be the single most important piece of advice to provide another team embarking on a similar initiative and how to be successful? Be persistent and modify the plan as necessary.
XIV.	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 and how were your results the same or different from your expectations?* *1 2 3 4 5 6 7 8 9 10*
XV.	Sustainability and Next Steps	What does your CEO need to know to help keep your work sustainable? Our initial subjective reports were that interprofessional relationships benefited and it was what the patients said that they wanted. The limited data that we do have suggests that interprofessional relationships improved in this project and that communication was better.

The ART of Teaming

Incorporating Teaming for Long-Term Sustainment of a Communication Program

Megan Newman MD, Wendy Hegefeld PhD, Martha Howell, EdD

National Initiative
NI VII Meeting #4

Introduction

It is reported that dysfunctional team dynamics lead to ~70% of medical errors.[1] It has also been reported that patients whose surgeons had higher numbers of coworker reports about unprofessional behavior had more surgical and medical complications.[2]

Improving experiences for our patients and for the healthcare environment is important to our institution and aligns with several initiatives currently underway to improve our overall culture. Our project will focus on the avoidable suffering realm of Press Ganey's Compassionate Connected CareModel™ [3] by focusing strategies on miscommunication, lack of empathy and lack of patient engagement.

The Academy of Communication in Healthcare (ACH) [4] is an interprofessional organization committed to improving communication and relationships in healthcare. As a member of the ACH since 2016, our institution has trained and certified our course facilitators to use an evidence-based approach to enhance relationship-centered communication skills of our healthcare providers. An 8-hour program, ART of Communication (Ask, Respond, Tell), focuses on evidence for relationship-centered communication (RCC) and builds communication skill sets and practice for effective relationship-centered care was developed to achieve this goal. ART of Communication has been incorporated into the Internal Medicine (IM) resident orientation beginning in June 2018 (class of 2021). The effects of the initial workshop on internal medicine interns indicated an achievement in mastery of communications milestones sooner than previous peers who did not receive the training; however, reinforcement of this education quickly became important to ensure sustainability.

References

1. Mitchell R, Parker V, Giles M, Boyle B. The ABC of health care team dynamics. Health Care Management Review. 2014;39(1):1-9. doi:10.1097/hcm.0b013e3182766504
2. Cooper W, Spain D, Guillamondegui O, et al. Association of Coworker Reports About Unprofessional Behavior by Surgeons With Surgical Complications in Their Patients. JAMA Surg. 2019;154(9):828-834. doi:10.1001/jamasurg.2019.1738
3. https://www.pressganey.com/docs/default-source/default-document-library/compassionate_connected_care.pdf
4. https://achonline.org/

Project Aim

We aim to reinforce the lessons from the ART of Communication program for our rounding team composed of diverse healthcare workers to sustain the educational impact and improve communication of the entire team.

Methods

ART of Communication trainers reinforced PEARLS (Partnership, Emotion, Apology/Appreciation, Respect, Legitimization, Support) during two morning report sessions for IM residents in August and September 2020. Four communication milestones (measure #1) were compared for residency classes who did not receive this training.

Measure #1: IM Communication Milestones

- SBP1 – works effectively within an interprofessional team
- PROF1 – has professional & respectful interactions with patients, caregivers and members of the interprofessional team
- ICS1 – communicates effectively with patients and caregivers
- ICS2 – communicates effectively in interprofessional teams

PEARLS will also be included at huddles and staff meetings for nurses on the internal medicine hospitalist unit primarily staffed by residents. Results of PEARLS implementation will be compared (measures #2 & #3) to a non-resident driven unit, not receiving the intervention.

Measure #2: BSWH People Survey

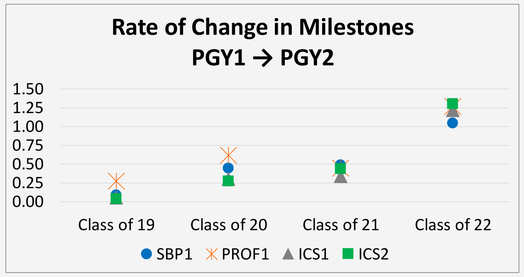
The 2020 Baylor Scott & White Health (BSWH) People Survey included questions that addressed BSWH as a whole and employees' senior leaders, direct supervisors and their unit. The survey is conducted once per year. We will compare results of unit specific communication questions before and after PEARLS have been fully implemented. Selection of questions below.

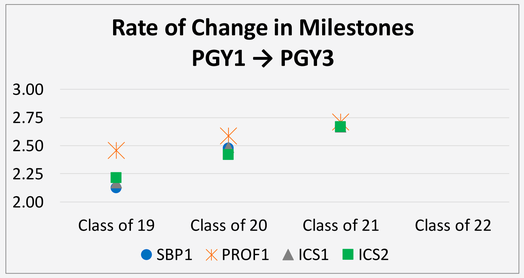
- Staff will freely speak up if they see something that may negatively affect patient care.
- There is a spirit of cooperation and teamwork within my unit
- Staff are afraid to ask questions when something does not seem right.
- There is good teamwork and cooperation between my department and other departments we depend on
- Where I work, we are treated with respect
- I feel free to speak my mind without fear of negative consequences

Measure #3: HCAHPS

- During this hospital stay, how often did doctors…
  - treat you with courtesy and respect?
  - listen carefully to you?
  - explain things in a way you could understand?

Results





December communications milestone data indicate that rate of change was insignificant when no intervention was provided.

Class of 21 shows an increased rate of change with the addition of the ART of Communication program during the intern year.

The rate of change for Class of 22 nearly doubled with the addition of PEARLS.

Class of 19 & 20 – received no intervention
Class of 21 – received ART of Communication training during their intern year
Class of 22 – received ART for Communication training during their intern year + PEARLS

Discussion

Key Findings

- While the addition of a communication training program to the IM residency orientation did impact milestone data, we see a two-fold increase in rate of change when our intervention is included, indicating that our residents will become 'practice ready' quicker.
- As training resumes, we expect a continued increase in the rate of change in communication milestones for all classes

Limitations

- Only two sessions of PEARLS were incorporated due to limitations in in-person education post-COVID and those or forced to virtual, so complete impacts of PEARLS have not yet been measured
- PEARLS have not been implemented at nurse huddles and staff meetings

Next Steps and Sustainability

- Continue PEARLS reinforcement in IM residency program monthly and initiate in monthly nursing huddles/meetings
- After success and sustainability are reached in IM, we will work with our DIO to spread to other GME programs
- Collect December 2021 milestones data for the class of 22 & 23

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 2019. 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 Scott and White **Project Tile: The ART of Teaming: Incorporating Teaming for Sustainment of a Communication Program**

I.	Vision Statement (markers of success by March 2021; Refer to Toolkit #6 after meeting one)	*We envision Baylor Scott & White Medical Center as a sacred space for healing for our patients. To that end, our teams of healthcare professionals will foster a culture of respect, communication, and collegiality that makes patient safety and high-quality care an inevitable outcome of our Healthy Workforce.*
II.	Team Objectives ('needs statement,' project requirements, project assumptions, stakeholders, etc.)	*Aim: We hope to reinforce the lessons from the Art of Communication workshop for our rounding team composed of diverse healthcare workers to sustain the educational impact and improve communication of the entire team.* *Project Requirements: Academy of Communication in Healthcare (ACH) trained and certified course facilitators; time to conduct training; nursing unit buy-in* *Stakeholders: Austin Metting, MD- PD IM Residency, Erin Stanley, RN- 7N Nursing Director, additional team members listed below.* *Higher Leadership: Dr. Steven Sibbitt- CMO, Dr. Christian Cable- DIO, Dr. Tresa McNeal- Chair of Internal Medicine*
III.	Team Members & Accountability (list of team members from Toolkit #7 [after meeting one] and who is accountable for what)	*Megan Newman, MD- Associate Program Director, Internal Medicine Residency.* *Shannon Johnson, RN- Director, Quality Management Program* *Wendy Hegefeld, PhD- Director, Education Innovation & Scholarship* *Courtney Shaver, MS- Biostatistician* *Martha Howell, EdD- Art of Communication Program Manager* *Jamie Sodek, RN- Quality Nurse Manager* *Jordan Buess, MD- VA Chief Resident of Quality/Safety*

IV.	Necessary Resources (staff, finances, etc.)	• *Art of Communication trainers to reinforce PEARLS (Partnership, Emotion, Apology/Appreciation, Respect, Legitimization, Support) during morning report sessions for residents and during staff meetings for nurses on one internal medicine hospitalist unit* • *Time for training of both residents and nurses, and permission to meet in larger groups (this has been our biggest hurdle post-COVID)* • *People Survey data* • *Milestone data* • *HCAHPS data*
V.	Measurement/Data Collection Plan (Refer to Toolkit #2)	• *We will collect unit specific institutional People Survey AHRQ questions pre- and post-communication reinforcement to provide staff perspectives on communication* • *ACGME Internal Medicine Communication Milestone (3 questions) – last three classes had Art of Communication training; will pull three classes prior to that* • *Units will receive monthly provider communication HCAHPS data for 7 North. Since this data is captured and reported slowly, we will look at six months pre-intervention and six months post-intervention to determine improvement* • *Qualitative data will also be collected from participants to learn if they find success with the taught communication approach and capture its practical usefulness and limitations. This will help with adapting sustainability plans and moving to additional units.*
VI.	Stakeholder Communication Plan (may be helpful to draft a flow chart of team members & senior management; Refer to Toolkits #3 and #5)	• *Initial approval from Drs. Sibbitt, Cable, and McNeal.* • *Meet with Dr. Christian Cable and Dr. Tresa McNeal every 6 months for project approval and subsequent updates.* • *Quarterly meetings with identified stakeholders, monthly email updates* • *Monthly meeting with Project Team members*
VII.	Potential Challenges (engagement, budget, time, skills gaps, etc.; Refer to Toolkit #4)	• *Permission to meet has been the single largest challenge to our efforts. Our intervention has not been adaptable to the digital learning environment, due to the need for role-play activities and observation of non-verbal communication behaviors.* • *We also had one of our core team members let go during the budget crisis caused by COVID* • *Going forward, a reinforcement plan will be necessary for all professions participating.*

VIII.	Opportunities for Scholarly Activity (potential publications, conference presentations, etc.)	*We have planned to submit a QI manuscript for publication, as well as submission for presentations of our efforts at Texas ACP, APDIM, and ACGME meetings.*
IX.	Markers (project phases, progress checks, schedule, etc.; Refer to *NI VII Roadmap to 2021* which will be presented at Meeting One)	*Original schedule had to be placed on hold as COVID overtook our efforts. We plan to begin our educational intervention as soon as larger in person gatherings (In-person didactics) can take place.*

Sections X thru XV to be completed first quarter 2021 for "Final Proceedings" booklet:

X.	Success Factors	**The most successful part of our work was**…. *Identifying stakeholders, extensive project planning and refining so that we will be ready to go when COVID restrictions lift.* **We were inspired by….** *The continued need in our institution for our project. COVID only magnified the need for good interprofessional communication among our teams.*
XI.	Barriers	**The largest barrier encountered was**…. *The inability to meet for our didactic sessions. This made us unable to perform our intervention.* **We worked to overcome this by….** *We did 2 digital sessions where the material was covered, but it became clear that it would be better to put this work on hold until we could meet in person to do the training justice.*
XII	Surprises	**What surprised you and why?** *I was not expecting to be incapable of enacting a simple educational didactic session. Also, many team members lost bandwidth required to help with our project as other COVID demands on their time came to the forefront.*
XIII.	Lessons Learned	**What would be the single most important piece of advice to provide another team embarking on a similar initiative and how to be successful?**

		Sometimes, the timing of the project is just wrong. That doesn't mean it's a bad project, but it may be better to let it wait for the appropriate time. Also, don't do a project that's too big- better to start small and go bigger if you can than have to scale back or completely change a large ambitious project.
XIV.	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 and how were your results the same or different from your expectations?** *2- Our team ended up planning a completely different intervention that was better suited to our learner group. The project later had to be put on hold for later due to the inability to hold large educational gatherings.* *1* ***2*** *3 4 5 6 7 8 9 10*
XV.	Sustainability and Next Steps	**What does your CEO need to know to help keep your work sustainable?** *This project is low cost, low maintenance, and fulfills a critical need. All we need is meeting time and space to make it happen. I look forward to being able to fulfil our project aims in the future when we can meet together again.*

Teaching Teaming, Leadership, and Conflict Resolution skills to improve the culture and attitudes of OB case review

Donald Kirton, Audrey Psaltis, Kathaleen Barker,
Michelle George, Ryan Quarles

Baystate Health | UMASS. University of Massachusetts Medical School

National Initiative
NI VII Meeting #4

INTRODUCTION: Background

In our labor and delivery unit residents, faculty, nurses and midwives work together in patient care but do not train or learn together. There are Obstetric case reviews that are meant to foster shared mental models, systems-based practice and teamwork, but they are poorly attended. Furthermore, some attendees have reported that these reviews can lead to tension and conflict amongst disciplines.

Aim/Purpose/Objectives

- To improve attendance and attitudes towards obstetric case review by adding education components
- To compare existing hospital survey data pre and post-intervention about the culture of labor and delivery.
- To compare pre- and post-intervention surveys about labor and delivery culture, as well as comfort of teaming, conflict resolution and leadership skills.

METHODS: Interventions/Changes

- We initially planned to roll out "Teaming" Curriculum in short sessions during the OB Case Reviews (these occur for 1 hour every other week). The goal was to use real life case to reiterate the teaching points and to make these sessions interactive. However, the pandemic halted these sessions for a time and then they were reintroduced in the new virtual world, which impacted the time for education.
- Leaders involved in the OB Case review, residency program, midwifery group and nursing utilized "Teaming" by Amy Edmonsdson as a reference to teach key concepts during case reviews as opportunity allowed.
- Wording of all communications related to OB Case Review was updated to be more inclusive and p
  - For example, "Your case has been flagged for OB Case review" -> "Your case has been chosen to be presented at OB Case review"

Topics To Consider
Teaming as a verb
Collective Learning
Organizing to execute
The Process Knowledge Spectrum
Speaking Up
Collaboration
Reflection
Fundamental Attribution Error
Conflict Resolution
Psychological Safety and Accountability
Spectrum of Reasons for Failure
Visible and Invisible Boundaries
Execution as learning
"Teaming" by Amy C. Edmondson, 2012

METHODS: Measures/Metrics

- Data from questions in the AEIX and Press Ganey annual hospital surveys that pertain to labor and delivery unit culture will be compared pre and post-intervention. Post data to be analyzed in the future.
- A survey was created and sent to all faculty, midwives, residents and nurses who work in labor and delivery asking about overall culture, attitudes towards OB Case review, and personal comfort with teaming, conflict resolution and teaming skills.
- We had planned to track attendance to note improvement, but this became a challenge with virtual meetings (call ins, unidentified computer logins, etc)
- We planned to roll out the curriculum for approximately 1 year but our timeline was cut short due to the pandemic. We restarted in Jan 2021, and sent the post-survey without the time and ability to cover all teaching points.
- Summary of Key Points for Each review session was distributed via a centralized bulletin board and a newsletter.

IRB Submission

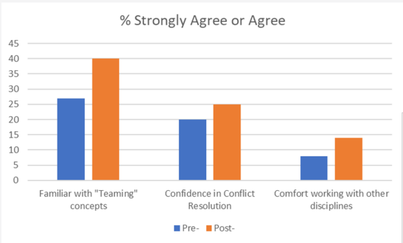
- Deemed IRB exempt

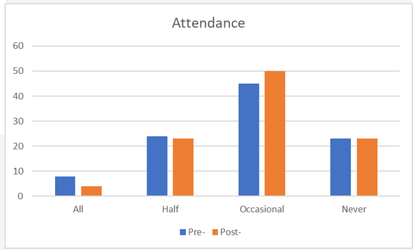
RESULTS

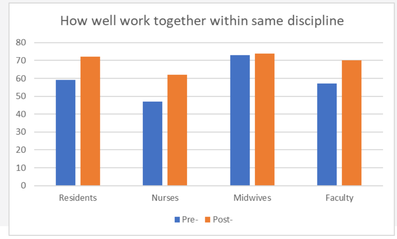
- We sent a total of 205 surveys
- The pre-intervention survey has an approx. 40% response rate. The post-survey had approx. 27% response rate

- Self-reported attendance of OB case reviewed showed no changes.
- There has been an improvement in familiarity with Teaming concepts, comfort working in interdisciplinary groups, and confidence in conflict resolution skills (see graphs).
- There was no change in the perception of LDRP culture as a whole (positive vs negative), but a slight decrease in negative perceptions (10% down to 3%).
- Overall there was no difference in the perception of how well various disciplines work together, but there has been improvement within disciplines ((See graph)

RESULTS: Continued







Discussion

Key Findings:

Incorporating key concepts and teaching points into an interdisciplinary case review meeting shows promise in learners becoming more familiar and comfortable with teaming skills.

- **Limitations**
- The initial plan and timeline for the project was changed dramatically, so we did not achieve a complete curriculum, nor have the time to really see an impactful change.
- Survey response was not ideal, particularly the post-survey. This likely has many reasons, (time, fatigue).
- Our team was composed of leadership in the department, which was pulled away in many different directions.Recruitment to grow the team was not successful despite numerous attempts.

- **Next Steps and Sustainability**
- This project plans to continue forward. Once we are able to gather in groups we can have the in person, interactive education sessions linked to OB Case reviews as planned. We will be able to monitor attendance and participation as well.
- Our timeline was greatly modified and we have only had approx. 2 months of our project plan so far. As more teaching points are rolled out we hope to show a great impact in further surveys of our department, as well as the national surveys.

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 2019. 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: UMMS-Baystate Medical Center
Project Tile: Teaching Teaming, Leadership, and Conflict Resolution skills to improve the culture and attitudes of OB case review

I.	Vision Statement (markers of success by March 2021; Refer to Toolkit #6 after meeting one)	*Obstetric case review will be a "can't miss" opportunity for nurses, midwives, residents and faculty because of the depth of learning from actual cases to improve patient care and the opportunity to develop their own teaming, conflict resolution, and leadership skills.*
II.	Team Objectives ('needs statement,' project requirements, project assumptions, stakeholders, etc.)	Objectives: 1) To improve attendance and attitudes towards obstetric case review by adding education components. 2) To compare existing hospital survey data pre and post-intervention about the culture of labor and delivery. 3) To compare pre- and post-intervention surveys about labor and delivery culture, as well as comfort of teaming, conflict resolution and leadership skills. Assumptions: 1) There are staff that view OB Case Review as a negative experience. 2) Our staff will benefit from education about teaming, as well as leadership and conflict resolution skills. Stakeholders: All staff on labor and delivery.

III.	Team Members & Accountability (list of team members from Toolkit #7 [after meeting one] and who is accountable for what)	Donald Kirton – Team Leader. Coordinating Surveys, Review of Teaming concepts, Participate in OB Case reviews Audrey Psaltis – Development of content. Kathaleen Barker – Teaching content during OB Case reviews. Summary point to be distributed. Michelle George - Teaching content during OB Case reviews. Summary point to be distributed. Ryan Quarles – Mentorship, Guidance and support.
IV.	Necessary Resources (staff, finances, etc.)	Time – to develop content, teach and dispense teaching points. Space – Location and format to relay teaching materials.
V.	Measurement/Data Collection Plan (Refer to Toolkit #2)	Pre and Post intervention surveys Press Ganey Survey Data Attendance of OB Case Review
VI.	Stakeholder Communication Plan (may be helpful to draft a flow chart of team members & senior management; Refer to Toolkits #3 and #5)	Those who attend OB Case review (Physicians, Nursing, Midwives, Residents) will hear information directly. A bulletin board will be used to relay information. A Newsletter containing key points was also developed in the wake of COVID to further relay key points form each OB Case Review.
VII.	Potential Challenges (engagement, budget, time, skills gaps, etc.; Refer to Toolkit #4)	Engagement/Time – For staff to attend Review meetings. To read and absorb materials afterwards. To respond to surveys. The pandemic greatly altered our ability to carry out the project, so it needed to be redesigned for the virtual world and modified.
VIII.	Opportunities for Scholarly Activity (potential publications, conference presentations, etc.)	The next part of the project may warrant presentations and possible publication if it is successful as we build a more rigorous curriculum into a Team STEPPS model. Our current modified project will be presented locally.
IX.	Markers (project phases, progress checks, schedule, etc.; Refer to *NI VII Roadmap to 2021* which will be presented at Meeting One)	We were able to keep on task initially with planning and development, but the pandemic delayed our start as the focus of our project (OB Case reviews) were stopped for several months. It returned virtually so we had to reassess our plans. We were able to complete parts of the project and hope to continue moving forward when we are able to have in person meetings/gatherings.

Sections X thru XV to be completed first quarter 2021 for "Final Proceedings" booklet:

X.	Success Factors	*The most successful part of our work was….* The ability to incorporate learning points organically in discussions about real patient care. Respondents felt more comfortable with teaming and conflict resolutions skills, and felt more comfortable working with new people towards common goals. The addition of a newsletter was well received and use of the bulletin board to relay information was key to relaying information to those who could not attend OB Case reviews in person. The concepts have led to better working relationships amongst disciplines. *We were inspired by….* The adaptability of the project during the pandemic. The entire concept had to shift to the virtual world.
XI.	Barriers	*The largest barrier encountered was….* One of our major goals was to increase attendance of OB Case reviews, but the same time constraints applied. While it seemed more staff would be able to log in to a virtual meeting, the reality is that the same time restrains applied (patient care in particular). *We worked to overcome this by….* The creation of a newsletter and updating a centralized bulletin board with the key take home points from each care review meeting.
XII	Surprises	*What surprised you and why?* In review of the survey data, we had hoped that all questions about working together amongst the disciplines would have improved, particularly since the comfort with concepts had improved. However, only within disciplines was a culture shift felt.
XIII.	Lessons Learned	*What would be the single most important piece of advice to provide another team embarking on a similar initiative and how to be successful?* Having built in practice time (simulation) for staff to practice the concepts themselves or be asked to highlight them during the case reviews, rather than being taught them, may have had

		a bigger impact. We had initially also hoped to highlight key concepts in mini-education sessions at the start or end of OB case reviews, but decided to roll them in due to the additional constraints of moving to a virtual setting. I would suggest having time for specific teaching and practice of the core concepts.
XIV.	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 and how were your results the same or different from your expectations?* *4* We had hoped for more in person discussions, practice and education. With the realities of the pandemic we had to move everything into a virtual world. While we may have shown some improvement, we hope to include these concepts into a version of Team STEPPS being developed for better results. We had also hoped that more folks would be able to participate not only in the review sessions, but also to build a bigger team to roll out the materials, but it was a hard time to recruit help with the added stresses and changes in our day to day lives.
XV.	Sustainability and Next Steps	What does your CEO need to know to help keep your work sustainable? We will need lots of time and support to develop a good Team STEPPS program to roll in the key concepts of teaming, leadership and concept resolution. Even moreso, the time, space and support to then train the department will be key.

Interprofessional Teaming in the context of COVID-19

Sarah Mete DO, Tya Campbell MD, James Jackson MD, Yvonne Mullowney, Candice Wells RN, MSN, MBA,
Alexis Robinson PharmD, Christopher Dietrich DO, Virginia Mohl MD, PhD, Ashley Dennis PhD

Billings Clinic

National Initiative

NI VII Meeting #4

INTRODUCTION: BACKGROUND

- Interprofessional collaborative practice (IPCP) has been identified as key to providing safe and effective care [1]
- The World Health Organization (WHO) has defined Interprofessional Practice as the "practice that occurs when health care workers from different professional backgrounds work together to deliver the highest quality of care" [2]
- The emergence of COVID-19 has had a significant impact on healthcare across the globe and it is likely that the disruptions it has caused will impact interprofessional teaming.
- It is important to explore the concepts of teaming for IPCP in the rising complexity of the clinical learning environment during COVID-19

AIM / PURPSOSE / OBJECTIVE

This study aims to explore the impact of COVID-19 on health care team members' experiences of interprofessional teaming in the clinical learning environment.

Research Questions

- What are health care professionals' experiences of interprofessional teaming before and in the context of COVID-19, and how has this influenced their views toward interprofessional teaming in the clinical learning environment?
- What are the similarities and differences in experiences and understandings across different interprofessional participants (e.g., pharmacist versus resident) and settings (e.g., inpatient versus outpatient)?
- What are participants' suggestions for improving interprofessional teaming in the clinical learning environment?

METHODS

Participants

- Team members from four interdisciplinary professions:
  - Internal Medicine Faculty and Residents
  - Care Management
  - Nursing
  - Pharmacy
- Inclusion criteria: Team members must specifically work with internal medicine residents

Recruitment

- Employed multiple methods of recruitment to maximize participation including: (1) email; (2) snowballing through trainee organizations; (3) face-to-face recruitment during formal curricula; (4) flyers

Procedure

- Conducted focus groups in person or virtually via Microsoft Teams lasting approximately 60 mins
- Each focus group was profession-specific and included approximately four team members
- Participants were asked to recall their experiences of interprofessional teaming before COVID-19 as well as experiences since COVID-19 emerged

Analysis

- All focus groups and individual interviews were digitally audio-recorded and transcribed anonymously
- Thematic Framework Analysis was used to determine content- and process-related themes
- Qualitative data analysis software (e.g. Atlas-Ti) helped identify patterns across data

RESULTS: PRELIMINARY

Preliminary data demonstrated the following themes among the interprofessional teams:

- Importance of adaptability and clarifying new roles
- Challenges of getting to know new team members, personally and professionally
- Importance of intentional communication with an increase in communication barriers (e.g. masks, physical distances)
- Clinical learning environment supported all interprofessional team members in learning to manage COVID-19 as a healthcare team and system
- Technology as a barrier and facilitator

DISCUSSION

Key Findings

- COVID-19 created significant complexity for the interprofessional team in the clinical learning environment
- However, it also facilitated innovative ways to learn and interact as an interprofessional team

Limitations

- Difficulty conducting interviews in the setting of social distancing and busy schedules providing patient care
- Small qualitative study at a single facility

Next Steps

- Continue conducting interviews and gathering data
- Complete analysis and interpretation of data
- Publications

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1. Institute of Medicine. (2003). Health professions education: A bridge to quality. Washington, DC; The National Academies Press.
2. World Health Organization. (2010). Framework for action on interprofessional education and collaborative practice. Retrieved from http://apps.who.int/iris/bitstream/10665/70185/1/WHO_HRH_HPN_10.3_eng.pdf.
3. Edmondson, AC. (2012). "Teamwork on the Fly: How to Master the New Art of Teaming." Harvard Business Review (April):72–80.

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 2019. 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 Tile: Exploring experiences of interprofessional teaming in the clinical learning environment during COVID-19

I.	Vision Statement (markers of success by March 2021; Refer to Toolkit #6 after meeting one)	Create a learning environment where patient safety is culturally embedded through the support of effective interprofessional (IP) teaming practices.
II.	Team Objectives ('needs statement,' project requirements, project assumptions, stakeholders, etc.)	Improve relational coordination to increase appropriate patient safety net filings; Improve IP discharge processes ultimately decreasing medication errors; Improve readmissions rates
III.	Team Members & Accountability (list of team members from Toolkit #7 [after meeting one] and who is accountable for what)	James Jackson (Team Lead: Coordination of research teams, project management, NI VII representation, production and dissemination of scholarship) Ashley Dennis (Team Lead: Coordination of support teams and steering committee, NI VII representation, production and dissemination of scholarship) Keith Davis (DDEMAP Faculty) Tya Campbell (DDEMAP Resident, primary clinical research lead) Alexis Robinson (DDEMAP Faculty) Chris Dietrich (M&M Faculty) Matt Neimeyer (M&M Faculty) Sarah Mete (M&M Resident, primary research lead) Alexis (DDEMAP Faculty)

		Candice Wells (Safety filing lead, M&M – PSN review and data collection, DDEMAP – Potential for Med rec data) Jennifer Potts (RCS tool liason and oversight) Laurie Smith (Responsible for Nursing culture on inpatient side, getting nursing stakeholders involved) Ginny Mohl (GME oversight, liaison to C-suite) Mark Lee (IMR oversight, liaison to C-suite) Kristina McComas (admin support) Bob Merchant (CMO/CEO inpatient/institutional support) Chad Miller (Operations support) Paula Roos (Quality and Patient Safety)
IV.	Necessary Resources (staff, finances, etc.)	Food – initial meetings, encouraging survey completion Financial – food, travel, time for staff/faculty/residents, potential supplies Staff – data mining/processing, stats Logistics – spaces for research work, space for discharge rounds, space/time for M&M IPE training, HRO leveraging
V.	Measurement/Data Collection Plan (Refer to Toolkit #2)	**M&M** RCS (Level 1: Problem of Interest - Teaming: assumption that improved teaming leads to improved culture of patient safety) PSN filings (Level 2: Intended improvement – assumption increase in PSN filings is a reflection of an improved culture of safety; need – figure out appropriateness, grading scale? medication/transitions of care: red, complaint: green, communication: yellow) Attendance (Level 3: Implementation – is this actually happening?) **DDEMAP** RCS between teams (Level 1: Problem of Interest – Teaming: assumption that improved teaming leads to improved coordination of discharge)

		RCS patient perception of discharge coordination of care (Level 1: Problem of Interest – Teaming: assumption that improved teaming leads to improved coordination of discharge) 30-day IMR Readmission Rates (Level 1: Problem of Interest – Likely won't affect immediately, but one intervention to change over time) Medication Errors at Discharge (Level 2: Intended improvement) Severity of Errors at Discharge (Level 2: Intended improvement) Participation of assigned teams with accurate DDEMAP, IP member presence at discharge rounds (Level 3: Is it actually happening?)
VI.	Stakeholder Communication Plan (may be helpful to draft a flow chart of team members & senior management; Refer to Toolkits #3 and #5)	Primary form of communication: Email (Slack?) Circles of communication Discuss frequent low stake huddles BOA updates (GME, senior leadership, operations) Core/research (research team, faculty, resident, GME) How often do we need to get the whole band together? – Quarterly
VII.	Potential Challenges (engagement, budget, time, skills gaps, etc.; Refer to Toolkit #4)	Engagement We will need leadership engagement to support blocking clinical time for initiative Finance Time Research team time for work IP time Logistics How do we get people to M&M? How do we coordinate discharge rounds with so many teams? Skills gap – scholarship Clinical Informatics transition

VIII.	Opportunities for Scholarly Activity (potential publications, conference presentations, etc.)	Potential publication, plan to present at several conferences (e.g. AIAMC, AMEE)
IX.	Markers (project phases, progress checks, schedule, etc.; Refer to *NI VII Roadmap to 2021* which will be presented at Meeting One)	Step one: Project/Proposal Development (Sept 2019-December 2019) Step two: IRB submission/Approval (January-February 2020) Step three: Project implementation/Data collection (February-September 2020) Step four: Data Analysis (October-December 2020) Step five: Project write-up (January-March 2020)

Sections X thru XV to be completed first quarter 2021 for "Final Proceedings" booklet:

X.	Success Factors	The most successful part of our work was our resilience and our ability to transform the focus of our project significantly amid the COVID-19 pandemic. As a result, we have been able to redesign, obtain IRB approval, and begin data collection on a different project in constrained time limits with success. We were inspired by the responses we've obtained on how COVID has transformed interprofessional relationships and teaming in our institution.
XI.	Barriers	The largest barrier we encountered was COVID. The COVID-19 pandemic affected our projects dramatically. Our initial projects were based on bringing groups of people physically together (time outs, multidisciplinary rounding, M&M conferences), but the pandemic required us to be distance as much as possible. As a result, every aspect of our project had to be redesigned and evolve, which also was hindered by constrained time limits at this point in the NI VII timeline. We worked to overcome this by combining the guidance of the NI VII cohorts/leadership with a qualitative approach to obtain focus-group data around discussing participant's experiences with IP teaming during the pandemic. Our ability to do so came from a similar interprofessional effort of our research team members to collaborate and achieve these goals as a group.

XII	Surprises	*What surprised you and why?* Our nonclinical team members were surprised by what they've learned about how the clinical team and environment were affected and persevered during the height of the pandemic, as well as how our clinical learning environment has been supportive in fostering collaborative IP teaming. Our clinical team members were surprised that IP relations overall were not seen as being more strained in the pandemic and, again, how supportive the clinical learning environment has been.
XIII.	Lessons Learned	*What would be the single most important piece of advice to provide another team embarking on a similar initiative and how to be successful?* Working together as a team in every step and specifically with data collection, has been a large key to our successful momentum to this point.
XIV.	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 and how were your results the same or different from your expectations?* 5 - What we set out to achieve has transformed completely, but we have been able to begin to analyze the current state of IP teaming at our institution, which will allow us to rework strategies to address areas for growth in the era of COVID at Billings Clinic.
XV.	Sustainability and Next Steps	What does your CEO need to know to help keep your work sustainable? The clinical learning environment greatly matters and makes a difference for not just medical education learners, but every individual that is a part of it.

Evaluation of Toolkit to Enhance Team Performance

Betsy McGaughey, MS, EdD; Lili Shek, MD, MHDS; Peachy Hain, RN, MSN; Bryna Harwood, MD; Mark Noah, MD

NI VII Meeting #4

INTRODUCTION: Background

Cedars-Sinai Medical Center launched the MD-RN Collaborative in 2000 to foster improved relationships and communication between physicians and nurses. Since then, the Collaborative has grown to include nearly 80 inpatient unit-based groups that meet regularly and participate in a broad range of unit-initiated quality improvement activities. The teams are led by pairs of physician/nurse champions in addition to a multidisciplinary team of health professions, such as pharmacists, dietitians, case managers, and therapists. Although successful quality improvement projects were borne out of this Collaborative, many MD/RN groups identified a need for more structured approaches to successful team performance and lacked guidance around teaming principles.

Aim/Purpose/Objectives

We developed a toolkit for MD/RN collaboratives to use to improve team performance and enable effective integration of multidisciplinary health care providers. The content of the toolkit was derived from principles in five teaming dimensions.[1,2] The toolkit provided succinct explanations of each of the principles and included questions that teams could use to discuss the dimension as it applies to their team and suggest improvements to their team functioning. Although the COVID-19 pandemic severely limited time for application of the toolkit, we sought to assess the effectiveness and feasibility of the toolkit after a pilot trial with a convenience sample of MD/RN units.

METHODS: Interventions/Changes

With the support of the MD/RN Collaborative chair, we recruited six MD/RN units to test the toolkit by applying it to their respective current unit-based projects. Due to the COVID-19 pandemic and inpatient clinical priorities, recruitment time was shortened and not randomized with a control group. Participating units were asked to complete the toolkit as it pertains to an ongoing unit-based project. Once the toolkit was used, units were asked to complete nine question survey that assessed the effectiveness of the toolkit in engendering more effective team performance as well as the usability and feasibility of the toolkit itself.

METHODS: Measures/Metrics

Measure #1: Toolkit feasibility and ease of use

- Three of the nine question survey assessed whether the toolkit itself was easy to use and addressed the MD/RN Collaboratives' needs. A five-point agreement scale was used.

Measure #2: Effectiveness of toolkit to enhance team performance

- Six of the nine question survey assessed whether key teaming principles were clearly presented and instructional in improving team function. A five-point agreement scale was used.

Measure #3: Comments/suggestions to improve toolkit

- One survey question asked respondents to make comments/suggestions to help improve the toolkit and provide the answer in free text.

RESULTS

The evaluation was sent out to 36 MD/RN Collaborative members after their teams met and used the toolkit. Sixteen responses were received for an overall 44% response rate. Respondents included 13 nurses (81%), one physician (6%), and two (12.5%) that identified as "other" but did not specify their profession.

Measure #1: Toolkit feasibility and ease of use

Components of Toolkit Assessed	Strongly Agree %	Agree %	Neither Agree nor Disagree %	Disagree %	Strongly Disagree %
Clear Aims	25	43.8	12.5	12.5	6.3
Appropriate for needs (of unit-based project)	25	43.8	6.3	18.8	6.3
Good use of time to complete toolkit	12.5	37.5	18.8	18.8	12.5

RESULTS: Continued

Measure #2: Effectiveness of toolkit to enhance team performance

Components of Toolkit Assessed	Strongly Agree %	Agree %	Neither Agree nor Disagree %	Disagree %	Strongly Disagree %
Clear description of principles of effective teams	25	62.5	12.5	0	0
Helped identify team goals	37.5	18.8	12.5	18.8	12.5
Helped assign member roles and responsibilities	25	43.8	0	18.8	12.5
Helped team members work better together and engender trust	31.3	18.8	25	12.5	12.5
Improve communication amongst team members	25	43.8	12.5	12.5	6.3
Helped with effectiveness of the MD/RN Collaborative team	25	43.8	18.8	6.3	6.3

Measure #3: Comments/suggestions to improve toolkit:

- Toolkit shared useful evidence-based information about teamwork
- Calling it a toolkit was misleading – it was more of a self-reflection guide
- There seemed to be a lot of questions and some were repetitive
- Identifying shared goals was useful

Discussion

Key Findings

- Overall ratings of the toolkit were positive, especially on the dimension of it providing clear descriptions of the principles of effective teams
- Even during an unprecedented health crisis, there was strong interest and desire for more formal training and education around effective teaming techniques
- Toolkit content provided more self-reflection of effective teamwork rather than guidance on executing teaming principles

Limitations

- The small sample size of the survey
- Survey respondents not representative of all participants involved in the MD/RN Collaboratives

Next Steps and Sustainability

- Conduct structured interviews to further investigate improvements needed to toolkit
- Revise toolkit and develop facilitation guide for team leaders

References

[1]Mitchell P, Wynia M, Golden R, McNellis B, Okun S, Webb CE, Rohrbach V, Von Kohorn I. Institute of Medicine Discussion Paper. Core Principles & Values of Effective Team-Based Health Care. https://nam.edu/wp-content/uploads/2015/06/VSRT Team-Based-Care-Principles-Values.pdf. Published October 2012. Accessed December 23,2020.

[2]National Academies of Practice. State of the Science: a Synthesis of interprofessional collaborative practice research https://nap.memberclicks.net/assets/docs/NAP%20State%20of%20the%20Science%20-%20Final%20for%20publication.pdf. Published January 2019. Assessed December 12, 2020.

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 2019. 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 Medical Center** **Project Tile:** **Evaluation of Toolkit to Enhance Team Performance**

I.	Vision Statement (markers of success by March 2021; Refer to Toolkit #6 after meeting one)	*Initial Vision: Establishing sustainable interprofessional collaborative relationships involving residents and fellows through team-building initiatives that are patient-centered and serve to fulfill the institutional goal of high-quality healthcare delivery.* *Mission: By engendering interprofessional collaboration amongst physicians, physician trainees, nurses, pharmacists, social workers, and other healthcare providers, we will be able to: (1) Build upon well-established MD/RN Collaboratives, (2) teach teaming concepts to MD/RN Collaboratives for real-time application to inpatient unity-based projects, and (3) engage trainees in graduate medical education to participate in MDRN Collaborative initiatives.*
II.	Team Objectives ('needs statement,' project requirements, project assumptions, stakeholders, etc.)	*Our objectives focused on development of team-building resources and activities that could be used by our existing MD/RN Collaborative groups to enhance the performance of their teams and better enable them to be more inclusive of resident and fellow team members.* *Specifically, our goal was to develop and evaluate a tool that could be used by teams to self-facilitate improvements to their team functioning through analysis of the current state across five key teaming dimensions and development of an action plan to address proposed changes.*
III.	Team Members & Accountability (list of team members from Toolkit #7 [after meeting one] and who is accountable for what)	*Bryna Harwood, MD – Co-Team Leader- overall project* *Lili Shek, MD, MHDS – Co-Team Leader-overall project and objectives* *Peachy Hain, RN, MSN – MD/RN Collaborative Leader* *Mark Noah, MD – Oversight* *Betsy McGaughey, EdD, MS –Development of Educational material and evaluations, administrative support*

IV.	Necessary Resources (staff, finances, etc.)	*We leveraged the resources that were already set in place by the well-established MD/RN collaboratives.*
V.	Measurement/Data Collection Plan (Refer to Toolkit #2)	*The plan was to pilot test the "Toolkit to Enhance Team Performance" with several existing teams of the MD/RN Collaborative at Cedars-Sinai Medical Center and ask team members from various disciplines to complete an evaluation of the toolkit itself after pilot use.*
VI.	Stakeholder Communication Plan (may be helpful to draft a flow chart of team members & senior management; Refer to Toolkits #3 and #5)	*We plan to share the results of the pilot with the existing MD/RN Collaborative teams in the near future through participation in a virtual meeting of the team leaders. Additionally, we plan to revise the Toolkit based on the input we receive from the pilot assessment survey. This will help us communicate the ongoing need for team development to additional teams that did not participate in the pilot project and we anticipate that use of the toolkit will help teams that have been inactive during the pandemic to reconvene and resume their work. Additionally, we will be further addressing integrating more residents and fellows into the MD/RN Collaborative teams and their performance improvement efforts.*
VII.	Potential Challenges (engagement, budget, time, skills gaps, etc.; Refer to Toolkit #4)	*The major challenge we have had to deal with over the course of this initiative has been having to prioritize the realities of changing almost all of our entire operations due to the pandemic. This has included significant redeployments of staff (including residents and fellows) and units, and the moratorium on MD/RN Collaborative team meetings, which is only now just beginning to be lifted. Thus, engagement and time were the major underlying challenges.*

VIII.	Opportunities for Scholarly Activity (potential publications, conference presentations, etc.)	*Our plans for scholarly activity at this time are limited to those available through the AIAMC. However, if the toolkit proves to be useful in its future iterations, it may be suitable for publication through MedEdPortal or a similar resource.*
IX.	Markers (project phases, progress checks, schedule, etc.; Refer to *NI VII Roadmap to 2021* which will be presented at Meeting One)	*We have struggled to keep up with the Roadmap timeline due to the pandemic. Our current accomplishments represent what would have been an initial phase of the project as it was originally envisioned. Over the course of the initiative, we have had to rein in the scope of the project multiple times in order to be able to complete at least part of the project as it was originally planned.*

Sections X thru XV to be completed first quarter 2021 for "Final Proceedings" booklet:

X.	Success Factors	*The most successful part of our work was being able to interface with the MD/RN Collaborative through its outstanding leadership and their support for the project. Throughout some very, very tough times for most of the project team members, together we were able to accomplish development of suitable teaming resources and perform an initial evaluation.* *We were inspired by the leadership of the medical center, which helped to share the stories, triumphs, and tragedies of all of the staff and patients, and helped to keep some of the frustrations and disappointments encountered by the NI VII team in perspective.*
XI.	Barriers	*The largest barrier encountered was the pandemic and the shifting priorities that have gone along with it.* *We worked to overcome this by trying to take it one day at a time and to try and be strong for others.*

XII	Surprises	*A surprise was how willing the MD/RN Collaborative leadership and teams and the MD leadership of the NI team were to help, even though they were overwhelmed with their patient care responsibilities at many times during the course of the Initiative.*
XIII.	Lessons Learned	*What would be the single most important piece of advice to provide another team embarking on a similar initiative and how to be successful?* *Try to keep going.*
XIV.	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 and how were your results the same or different from your expectations? About a "3," but we plan to keep going.* *1 2 3 4 5 6 7 8 9 10*
XV.	Sustainability and Next Steps	What does your CEO need to know to help keep your work sustainable? Our CEO realizes how fundamental interdisciplinary teams are to providing excellent patient care and there will be continued efforts to further integrate residents and fellows into the important MD/RN Collaborative teams.

Team Based Care in our Family Medicine Residency Practice at ChristianaCare

Jamie Rapacciuolo, DO, Sara Cabrera (Practice Supervisor), Jaime Ayala (MA), Alan Schwartz, PsyD (Behavioral Health), Lauren Carter, MD (PGY2), Ben Golden, MD (PGY4), Alyssa Hancock, FNP, Anna Filip, MD

NI VII Meeting #4

INTRODUCTION: Background

The complexities of an academic practice reach all persons who come into contact with our practice. Our goal is to develop and replicate the essence of "teaming" as purely defined as teamwork on the fly into our practice of care teams for our patients. We hope to develop consistency throughout every contact point that our staff and providers have with our patients.

Once achieved, the difficulty of caring for a population of patients will be surpassed by the increased satisfaction among the staff and providers which will enhance the care we provide to the center of this team, the patient.

Aim/Purpose/Objectives

- **AIM:** Improve team based care for our providers/staff and patients in our academic practices.

- **Defining team based care**: a population of patients is cared for by an interdisciplinary team including physicians, nurse practioners, medical assistants, nursing, office assistant, behavioral health

- Accepting the mindset of **"teaming on the fly"** is pivitol in a residency practice where residents come and go daily and the teams inherently change every year as part of the natural lifecycle of a residency.

METHODS: Interventions/Changes

- **Evaluation of Current State**
  - Fishbone analysis completed to identify barriers
  - Identification of highest priority areas of concentration for possible interventions
- **Interventions**
  - -- Finding opportunities to infuse team names in
  - conversations and printed materials in the office
  - -- Establish role clarity with lunch and learns
  - -- Determine space allowance for cohorting teams
  - -- Fishbone around resident schedules

METHODS: Measures/Metrics

- **Staff/Provider Evaluation**
  - A survey was distributed to staff and providers prior to the start of any interventions around satisfaction and team based care in our practice.
  - Repeat Survey in May/June of 2020
  - Evaluate results and change as needed
- **Patient Evaluation**
  - Monitor patient satisfaction data pre and post interventions

RESULTS

Our project was halted due to events listed below:

1. Global Pandemic
   - Shift to virtual/telemedicine
   - Focus shifted to develop different experiences for our trainees

2. Weather related office flooding and closure for over 8 weeks

3. Entire support staff turn over (MA OA, RN)
   - There was minimal staff that remained who were involved in the beginning of the project as compared to the end.
   - Difficult to compare
   - Office functioned in a completely new way

Discussion

As with so many others the events of Covid-19 transitioned this work and medical care throughout 2020 and 2021. The concept of teaming on the fly, however, came to forefront in other dramatic ways.

The make up of our teams changed as we added key roles as they were needed. As we had to learn how to train and practice medicine in a very different way. It also became apparent that our team members could very quickly pivot and change/expand their individual role as needs developed. This required a greater understanding of the members abilities that already existed on the teams. Because of resources that were strained all across the system, we had to look inward for help and support instead of looking externally for answers. It was very interesting which components of the team strengthened over the course of this work. The need for resiliency training was needed. The concept of resiliency within a team dynamic was born and there was then different work that had to be done to allow all members to have some resiliency foundation during this time.

Our work will continue. We learned over the course of these 18 months that this concept of teaming on the fly, was always present on some level but never more important than in times of great stress and need.

Nurse Mentoring Program for Internal Medicine Interns

K. Snyder RN, R. Powers DO, M. Drinan MFA, A. Ababneh MD,
D. Mayes RN, J. Gorecki RN, C. Goliath PhD, N. Haller PhD, A. Diwakar MD, T. Sheers MD

Cleveland Clinic Akron General

National Initiative

NI VII Meeting #4

INTRODUCTION: Background

- There is a need to improve resident physician – nurse teaming for the purpose of improving patient care.
- Currently, our institution does not have an onboarding program to address this need.
- A review of the literature yielded reports of institutions that incorporate inter-professional mentorship programs in the resident onboarding process (Tilden et al, 2016).

Aim/Purpose/Objectives

- To develop a nurse mentorship-based onboarding program for Internal Medicine Interns.
- To assess feasibility and desirability of the mentoring program concept and content.

METHODS: Interventions/Changes

- A mentoring program was piloted with Internal Medicine interns.
- 12 interns were paired with self-selected nurse mentors on a 1:1 basis.
- There will be six sessions followed by a debriefing celebration:
- Session 1 (1 hour): Dyad Pairing and Icebreaker.
- Session 2 (4 hours): Nurse mentor shadowed intern.
- Session 3 (4 hours): Intern shadowed nurse mentor.
- Session 4 (1 hour): Debrief of shadowing experience – Discussed relational challenges and role misperceptions.
- There were two pilot sessions of the program:

Measure #1 Program Feasibility and Desirability

- Program feasibility and desirability will be assessed during the debriefing session.

Measure #2 Program Success

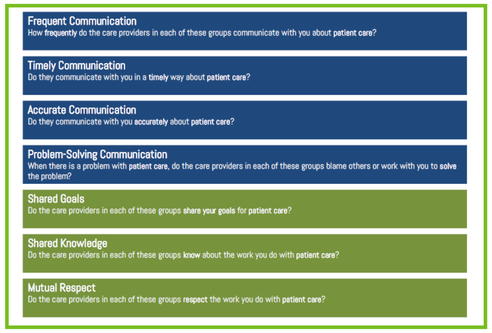
- Objective measure of the program's success will occur through pre/post-program administration of a relational coordination survey.

IRB Submission

- This project received a Quality Improvement designation from the CCAG IRRB.

RESULTS

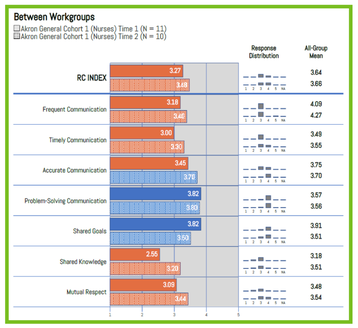
The RC Survey 2.0 is a validated measure of teamwork in healthcare.



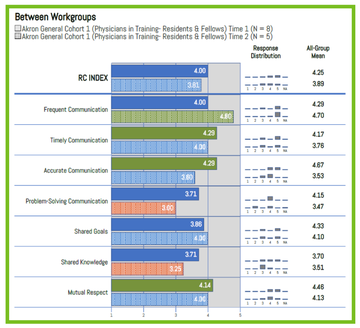
Relational coordination measures and interpretations.

Relational coordination strength key.

Pilot 1: Jan 2020-Jun 2020 (established interns)

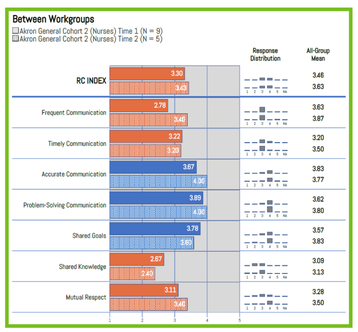


Cohort 1 Intern perception of nurses Pre/Post shadowing.

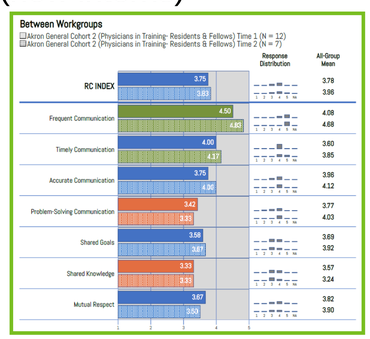


Cohort 1 Nurse perception of interns Pre/Post shadowing.

Pilot 2: Jul 2020-Dec 2020 (new interns)



Cohort 2 Intern perception of nurses Pre/Post shadowing.



Cohort 1 Nurse perception of interns Pre/Post shadowing.

RESULTS: Continued

Measure #1: Cohort 1 Intern perception of nurses

- There was slight improvement on most relational measures from Time 1 to Time 2, especially in Accurate Communication.
- Relational coordination was scored as moderate for Problem-solving Communication and Shared Goals at Time 1 and Time 2.

Measure #2: Cohort 2 Intern perception of nurses

- Slight improvement on most relational measures from Time 1 to Time 2 was observed.
- Relational coordination was scored as moderate for Accurate Communication, Problem-solving Communication and Shared Goals at Time 1 and Time 2.
- There was a slight decrease in shared knowledge from Time 1 to Time 2.

Measure #3: Cohort 1 Nurse perception of interns

- A slight decrease in strength for most relational measures from Time 1 to Time 2 was observed, especially in Timely Communication, Problem-solving Communication, and Shared Knowledge.
- There was a significant increase in Frequent Communication from Time 1 to Time 2.

Measure #4: Cohort 2 Nurse perception of interns

- Strength of relational coordination for Frequent Communication was strong at Time 1, and increased further at Time 2.
- Strength of Problem-solving Communication and Shared Knowledge relational coordination was weak at Time 1 and Time 2.

Measure #5: Cohort 1 Nurses versus Cohort 2 Nurses

- For most measures, Cohort 2 scores were lower than Cohort 1 scores.
- Problem-solving Communication and Shared Knowledge Cohort 2 Time 1 scores were lower than Cohort 1 Time 1 scores, while Cohort 2 Time 1 Frequent Communication scores were higher than Cohort 1 Time 1 scores.

Measure #6: Cohort 1 Interns versus Cohort 2 Interns

- Scores were similar overall between Cohort 1 and Cohort 2.

Discussion

Key Findings

- New interns bring their perceptions of Nurse-Resident relationships from their previous hospital experiences.
- Pandemic burnout is real and likely played a role in the patience and respect between nurses and residents, especially Cohort 1 Time 2 and Cohort 2.

Limitations

- COVID-19 (but really 2020!)
- Intern schedules
- Nurse mentor schedules
- Identifying meeting times that work for the entire group.

Next Steps and Sustainability

- Interns have suggested that the nurse mentorship program be integrated into new resident orientation.

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 2019. 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 Tile:** **Creating a Nurse Mentoring Program for Internal Medicine Interns**

<table>
<tr><td>I.</td><td>Vision Statement (markers of success by March 2021; Refer to Toolkit #6 after meeting one)</td><td colspan="3">Our vision is to create a culture of inter-professional collaboration that is supported by open communication, empathy and mindfulness for our caregivers in an environment that provides world class care for their patients.</td></tr>
<tr><td>II.</td><td>Team Objectives ('needs statement,' project requirements, project assumptions, stakeholders, etc.)</td><td colspan="3">Physician/Nurse communication remains a challenging milestone as responses to HCAPHPS scores in this area tend to lag behind other queries. By creating an opportunity for incoming residents to collaborate with their nursing colleagues at the onset of their medical careers, the hope is that this collaboration will improve awareness of each other's role, enhance respect and communication while creating an environment of inter-professional care for our patients. Creating a Nurse Mentoring program consisting of icebreaker sessions, shadowing and feedback opportunities will help determine the feasibility of developing an annual mentoring program as part of New Resident Orientation.</td></tr>
<tr><td>III.</td><td>Team Members & Accountability (list of team members from Toolkit #7 [after meeting one] and who is accountable</td><td colspan="3"><table>
<tr><td>* Cheryl Goliath, PhD</td><td>Executive Director, Medical Education & Research</td><td>goliatc@ccf.org</td></tr>
<tr><td>Nairmeen Haller, PhD</td><td>Director, Research</td><td>hallern@ccf.org</td></tr>
<tr><td>Julie Gorecki, RN</td><td>Director, Nursing Critical Care</td><td>goreckj@ccf.org</td></tr>
<tr><td>Deandreia Bell Mayes, RN</td><td>Manager, Nursing 4100</td><td>belld4@ccf.org</td></tr>
</table></td></tr>
</table>

	for what)			
		Katherine Snyder, RN	Critical Care Nurse	snyderk5@ccf.org
		Titus Sheers, MD	Chairman/DIO, Medical Education & Research	sheerst@ccf.org
		Amit Diwakar, MD	Program Director, Internal Medicine	diwakaa@ccf.org
		Ahmad Ababneh, MD	Chief Resident, Internal Medicine	ababnea@ccf.org
		Rachel Powers, MD	Chief Resident, Internal Medicine	powersr@ccf.org
		Marjorie Drinan, MFA	Residency Program Coordinator, Internal Medicine	drinanm@ccf.org
IV.	Necessary Resources (staff, finances, etc.)	*Nursing Leadership, Chief Residents and Residency Coordinators will be needed to coordinate numerous schedules for the icebreaker and shadowing sessions. Lunch will be provided for the icebreaker sessions for each Cohort. The Relational Coordination Survey was expensed to our colleagues at Cleveland Clinic Main Campus.*		
V.	Measurement/Data Collection Plan (Refer to Toolkit #2)	**OUTCOME** (*what is the measure of interest being evaluated as a result of the intervention)*	**DATA COLLECTION** (*how will the data be collected, i.e. timepoints, tool used*)	**METRIC(S)** *(measures used to evaluate the outcome)*
		Nursing and Residency Leadership have conveyed a high level of interest in developing a collaborative	*Once the nurse mentoring plan is developed, interns in our Categorical Internal Medicine program in the 2nd half of their*	*The Relational Coordination Survey was administered as a pre and post*

		ANALYSIS PLAN /APPROACH *(qualitative/quantitative methods used to assess the metric)*	**LIMITATIONS/BARRIERS** *(what barriers may exist)*		
		Qualitative summary of participant feedback as well as objective data from RC Survey.	*We will be assessing two different classes of interns at different stages of their training.*		

		interprofessional approach to patient care.	*intern year (Jan-June 2020) will participate as will interns in their 1st half of their year (July-Dec 2020) and then compared.*	*surveys for both Cohorts.* *The RC Survey measured the following: Frequency of Communication, Timely Communication, Accurate Communication, Problem-Solving Communication, Shared Goals, Shared Knowledge and Mutual Respect.*		*Use different groups of nurse mentors to remove possible bias of mentors from Group 1.* *Covid and impact on availability/scheduling*
VI.	Stakeholder Communication Plan (may be helpful to draft a flow chart of team members & senior management; Refer to Toolkits #3 and #5)	*Nurse Mentors volunteered to participate in this new program. Nursing Leadership and Chief Residents provided background on participants to pair residents with nurses in specialty areas of interest. Residency Coordinator worked with NI VII Team Leader as well as Nursing Leadership and Chief Residents to schedule multiple sessions.*				
VII.	Potential Challenges (engagement, budget, time,	*1. We aim to identify pre-conceived impressions of each group by the other. The curriculum will then be designed to strategically remove any misconceptions through dialogue and "walking in each other's shoes". The post-test will tell us if the program was successful. It is our hope that the nurse mentor/intern pairs will evolve into professional relationships extending beyond the program such that they will now advocate for each other and the respective roles. With each subsequent program, there will be a significant increase in nurse mentor/intern pairs, which will gradually*				

	skills gaps, etc.; Refer to Toolkit #4)	*move the caregiver culture in the direction of mutual respect, open dialogue, and sense of team.* *2. We have not previously had an inter-professional teaming initiative. We conducted multiple meetings with nursing to understand their current state and level of interest in the project. Concerned that the nurses may not feel as if the interns recognize the knowledge/experience they bring as a mentors. Concerned that interns may feel as though they are being treated by their age rather than professionals.* *3. Nurse mentors will apply to participate rather than being assigned to increase engagement. The team will meet monthly as a group with weekly follow up to ensure mentors are meeting with their interns. Sustainability will be dependent upon having dedicated individuals to coordinate the program. If these individuals do not have a good rapport with nursing administration or residency program leadership, the efforts will likely fail. New Team members will be encouraged to use their knowledge and experience to help create the mentorship curriculum – rather than be handed a curriculum to follow. The mentors will be hand-picked by nurse directors as individuals who would serve as excellent mentors. This will prevent from "groups" serving as mentors.* 4. At the onset of the project, *time seemed to be the largest barrier to making this program successful. Little did we know that a global pandemic would make participant availability a MAJOR factor in moving the project along. The nurses and interns operate on two different schedules. We worked with Nursing leadership and Residency program leadership to develop the best meeting schedule to reduce productivity pressures on the participants, as well as to eliminate peer retaliation arising from staffing issues. Because of reduced staffing, nurse mentors who volunteered to participate came in on their days off (unpaid) to shadow the interns. This commitment to the project is incredible.*

VIII.	Opportunities for Scholarly Activity (potential publications, conference presentations, etc.)	*Presentation at APDIM and/or ACP.* *Publish in Oschner Journal and Academic Medicine.*

Sections X thru XV to be completed first quarter 2021 for "Final Proceedings" booklet:

X.	Success Factors	*The most successful part of our work was….being able to complete the project during a pandemic.* *We were inspired by….nurse mentors who gave up their personal time to come in on their day off, unpaid, to shadow the interns. Additionally, multiple interns and nurses hoped that this program continues after the conclusion of NI VII.*
XI.	Barriers	*The largest barrier encountered was….availability of participants to schedule given periods of quarantine, reduced staffing, etc.* *We worked to overcome this by….moving to a different format for the Cohort 2 Icebreaker sessions to not meet as a group, rather in pairs or virtually and extending the shadowing session time period in Cohort 2.*
XII	Surprises	*What surprised you and why?* *Didn't know until half way through the project the nurses were coming in on their day off to shadow their intern.*
XIII.	Lessons Learned	*What would be the single most important piece of advice to provide another team embarking on a similar initiative and how to be successful?* *Create a structure to ensure the process is monitored closely to adhere to the timeline.*
XIV.	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 and how were your results the same or different from your expectations?* *1 2 3 4 5 6 7 8 9 10*
XV.	Sustainability and Next Steps	What does your CEO need to know to help keep your work sustainable? When our CEO was rounding in the hospital, one of our Nurse Mentors shared how much they enjoyed participating in our program and the CEO shared how positive this program is and wants us to continue with the new interns starting in 2021. We will work with the Department of Medicine to incorporate this program in their New Resident orientation with the potential to expand to other Residency Programs.

BOOST

Bridging Operative Obstacles through Shared Tenets

C. Foshee, PhD | L. Baszynski, MSN | L. Gardner, MSN | J. Lipman, MD
R. Romano, MBA | L. Simko, MSN | L. Smith, MBA | E.I. Traboulsi MD, MEd

Cleveland Clinic

National Initiative
NI VII Meeting #4

INTRODUCTION

BOOST was designed to overcome the assumptions and biases that lead to a lack of trust and mutual respect between first year [PGY-1] general surgery residents and surgical [OR] nurses. To this end, we set out to develop high performing surgical teams that model exemplary collaborative practices but also advocate for new comers and act as the force that fuels optimal interprofessional practices.

References

1. House, Sherita MSN, RN; Havens, Donna PhD, RN, FAAN Nurses' and Physicians' Perceptions of Nurse-Physician Collaboration, JONA: The Journal of Nursing Administration: March 2017 - Volume 47 - Issue 3 - p 165-171.
2. Schlitzkus LL, Agle SC, McNally MM, Schenarts KD, Schenarts PJ. What do surgical nurses know about surgical residents? J Surg Educ. 2009 Nov-Dec;66(6):383-91. doi: 10.1016/j.jsurg.2009.08.001. PMID: 20142140.
3. McComb SA, Lemaster M, Henneman EA, Hinchey KT. An Evaluation of Shared Mental Models and Mutual Trust on General Medical Units: Implications for Collaboration, Teamwork, and Patient Safety. J Patient Saf. 2017 Dec;13(4):237-242.

AIM

To improve interprofessional collaboration between PGY-1 surgical residents and OR nurses by: (a) minimizing assumptions/biases that impede effective and respectful communication, (b) increasing role understanding, and (c) employing proven strategies to enhance interpersonal relations between professions.

METHODS

- Implemented an 8-part program (delivered face-to-face, in bi-weekly, 50-minute live sessions)
- Applied a mixed-methods design and analysis
  - Administered the Relational Coordination Survey at two times: concurrent control group and cohort (intervention)
  - Gathered self-reported data at each live session

The BOOST Program: Curricular Model & Curricular Topics

R Recognize — Acknowledge the importance of self-awareness, valuing other's perspectives, and developing shared mental models

A Analyze — Evaluate the role and impact of emotions on behavior, trust on camaraderie, and civility on collaboration

P Practice — Explore strategies to maximize communication and foster psychological safety

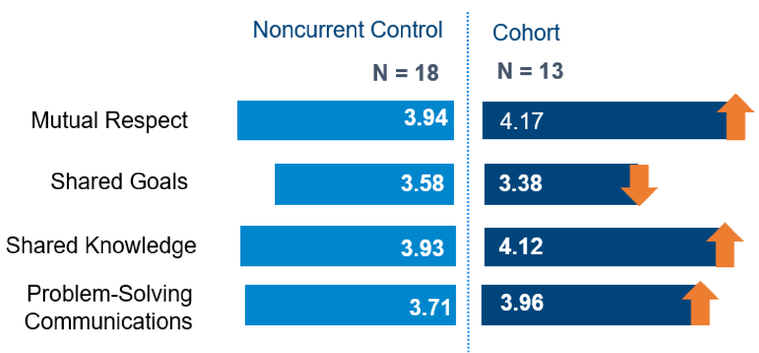
R Reflect — Examine how to hold self and others accountable for promoting trust, transparency, effective communication, and respect

Trust & Camaraderie
Shared Mental Models
Mutual Respect
Empathy
Psychological Safety
Trust & Teaming

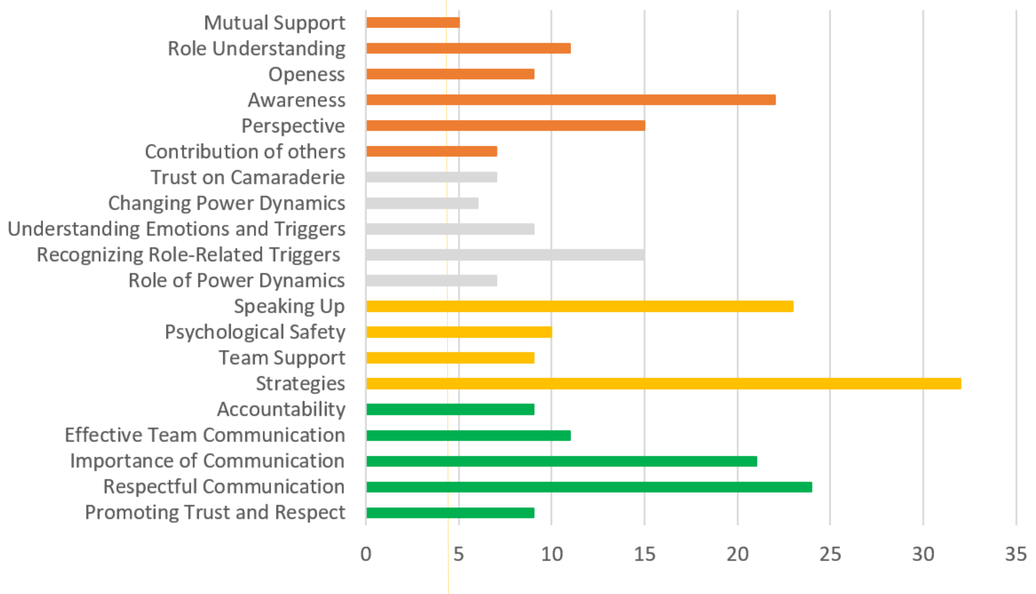
RESULTS

Observed a slight increase in three of the four Relational Coordination domains. The increase in the Mutual Respect domain was supported by and consistent with the statements gathered from the live sessions (N = 24; 233 Reflections).

Relational Coordination Domains



Themes From Reflections Gathered During Live Sessions



DISCUSSION

Key Findings

- Heightened Communication
- Increased awareness about …
  - Roles & Perspectives
  - Impact of behaviors/emotions
- Embraced strategies to improve speak up

Limitations

- Not entire team or target team
- Inconsistent nurse participation

Next Steps and Sustainability

- Ensure participants are members of target audience
- Integrate more clinical examples within program activities
- Modify curriculum to decrease the time commitment

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 2019. 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 (Main Campus)** **Project Tile:** **Nursing Physician Mentorship Collaborative - BOOST**

I.	Vision Statement (markers of success by March 2021; Refer to Toolkit #6 after meeting one)	To develop high performing surgical teams that model exemplary collaborative practices but also advocate for new comers and act as the force that fuels optimal interprofessional practices.
II.	Team Objectives ('needs statement,' project requirements, project assumptions, stakeholders, etc.)	The 2019 Cleveland Clinic Press Gainey results suggested the presence of communication barriers between nurses and residents. Data from focus groups (conducted in early 2020) as well as observations, interviews, and surveys (conducted in mid-2020) suggested the need for improved role understanding amongst first-year surgical residents and operating room nurses. The literature supports these preliminary findings in that mutual respect, effective communication, and clarity about respective roles is expected but not always attained. Thus our objectives were: • Demonstrate ability to apply strategies to minimize assumptions and biases inherent in daily professional interactions • Demonstrate the ability to maintain a climate of respect through effective communication • Demonstrate an understanding of the role of trust and mutual respect on teamwork and patient outcomes

III.	Team Members & Accountability (list of team members from Toolkit #7 [after meeting one] and who is accountable for what)	Cecile Foshee, PhD; project lead, curriculum and content designer, session developer and facilitator Lisa Baszynski MSN; Linda Gardner MSN; nursing experts, session content co-creators; session facilitators, project advocates Jeremy Lipman MD; medicine expert, content reviewer, project advocate Ronna Romano MBA; project manager Leslie Simko MSN; nursing expert, session content co-creator; session facilitator Lory Smith MBA; GME support Elias I. Traboulsi, MD; GME support
IV.	Necessary Resources (staff, finances, etc.)	• Designated educators to facilitate teaching sessions • Dedicated project manager to manage logistics • Budget for transcripts, snacks, surveys, and session materials • Time commitment from participants
V.	Measurement/Data Collection Plan (Refer to Toolkit #2)	**Administer Relational Coordination (RC) surveys** • The RC Survey 2.0 is commercial team instrument with validity evidence from healthcare settings. • June 2020 – Non concurrent control group (PGY1 2019-2020 and OR Nurses) • December 2020 – Follow up survey to OR Nurses and PGY1 2020-2021 • June 2021 – Follow up survey to OR Nurses and PGY1 2020-2021 • Compare the control group with the group receiving intervention to see there is any difference or improvement in relationships. **Gather self-reflections** • Bi-weekly after each session
VI.	Stakeholder Communication Plan (may be helpful to draft a flow chart of team members & senior management; Refer to Toolkits #3 and #5)	• Program director provided support to ensure the residents participated in the program • Nursing Directors provided support to recruit and encourage nurses to participate. They acted as liaisons between the participating nurses and their manager. They worked with the nurse managers and helped to address concerns and attendance barriers • Cohort participants received direct communications which included session invites and reminders

VII.	Potential Challenges (engagement, budget, time, skills gaps, etc.; Refer to Toolkit #4)	• Participation resistance from both residents and nurses. This resistance could stem from misconceptions about purpose of program or distrust in benefits/outcomes of program • Time commitment for full participation is the largest barrier to making this program successful
VIII.	Opportunities for Scholarly Activity (potential publications, conference presentations, etc.)	We plan to share our experience and lessons learned through conference presentations and peer-reviewed publications.
IX.	Markers (project phases, progress checks, schedule, etc.; Refer to *NI VII Roadmap to 2021* which will be presented at Meeting One)	*n/a*

Sections X thru XIII to be completed first quarter 2021 for "Final Proceedings" booklet:

X.	Success Factors	From our experience, factors that contribute to success include: • Using relevant data—from the literature and from the target group—to demonstrate the need for the program • Being clear about the intended outcomes of the program and showing how it will impact them • Highlighting the potential immediate benefits (e.g., improved interprofessional camaraderie and collaboration) as well as long-term benefits (enhanced individual/team well-being and increased patient care efficiencies) • Designing learning experiences that address the identified gaps and specific needs of the target group

XI.	Barriers	▪ Assumptions about intent of program
		▪ Inconsistent nurse participation
		▪ Unable to include entire surgical team
		▪ Unable to gain participation from the targeted nursing group
		▪ Power dynamics
		▪ Logistics:
		  ▪ Classroom availability
		  ▪ Classroom size - Social distancing
		  ▪ Nursing schedules - clocking-in requirements

XII.	Lessons Learned	The most important advice to those embarking on a similar initiative would be: • Ensure participants are members of (or at minimum representative of) your target audience • Integrate clinical examples within the program activities to enhance relevance and interest • Use multiple instruments to capture all aspects of program (e.g., communication, psychological safety, teamwork, trust, etc.) • Examine curriculum to confirm only critical components are included and determine the minimum time commitment needed
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?* *1 2 3 4 5 6 7* ***8*** *9 10* • The preliminary data pointed to communication barriers however deeper analysis suggested a lack of respect and trust. We were able to make modifications to the program to address these gaps and needs. • In spite of COVID, we will able to execute all the sessions meeting to address the identified gaps and needs • The data collected from the RC survey was insufficient for meaningful analysis. We had to rely on reflections to capture trust and respect.

		• The targeted nursing group with the identified service line refused to participate so, we had to depend on nurses from a different service lines.
XIV.	Sustainability and Next Steps	Building on what we learned, we plan to identify clinical teams, where tensions among caregivers have been identified, or where an explicit need to improve interprofessional collaboration has been articulated. We plan to modify the BOOST curriculum to teach and coach how to mitigate assumptions and behaviors that lead teams to underperform or manifest dysfunction. The program delivers two key components: (1) an evidence-based curriculum that is tailored to each team and (2) the application of proven tools and strategies within authentic contexts to facilitate improved team impact. Participants engage in an ongoing, mutual learning process of examining real-world problems through meaningful discussions. This process is supported by individual and team education and coaching; these learning activities serve as the foundation for transformative individual and team learning. By focusing on shifting individual and team mindsets (values and assumptions), we foster teamwork, enhance empathy, build trust, engender mutual respect, and ultimately create high-impact teams that are able to provide high quality care.

Providing a Framework to Address Health Care Disparities

A Kassam, MD, K Windnagel, PsyD, K Jones, LCSW, H Wheeler, DO,
P Karalis, MD, L Ruekert, PharmD

Community Health Network

National Initiative
NI VII Meeting #4

INTRODUCTION: Background

In 2020, the American Medical Association reported, despite improvements in health and healthcare in many parts of the country, racial, ethnic, and other under-represented people experience a lower quality of care and suffer higher morbidity and mortality. Recent national events have charged healthcare organizations to face the personal, professional, and systemic factors which discriminate against marginalized groups of patients.

This important call to action has galvanized organizations, however, there is a significant lack of collated resources and paths to help guide them. The mission of Community Health Network's AIAMC initiative is to provide a framework for interdisciplinary teams to better understand systemic factors which create disparities with patients, providers, systems, and in research. This framework will provide the structural support for residency programs to enact meaningful change within their team in addressing diversity, equity, and inclusivity.

References:

1. AAFP Presentation. (2019). *How Social Determinants Influence Health: A Conceptual Framework for Family Medicine.*
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3. Jordan, A. (2020). The Importance of Diversity in Healthcare & How to Promote it, *Health*
4. Romano MJ. White privilege in a white coat: how racism shaped my medical education. Ann Fam Med. 2018;16(3):261-263.
5. Sue, D. W., Capodilupo, C. M., Torino, G. C., Bucceri, J. M., Holder, A. M. B., Nadal, K. L., Esquilin, M. (2007). Racial Microaggressions in Everyday Life Implications for Clinical Practice, *American Psychologist, 62*(4), 271-286.

Aim/Purpose/Objectives

Create a diversity, equity, and inclusion framework as an educational tool to equip our team to address health care disparities during the 2020-2021 academic year.

METHODS: Interventions/Changes

Subjects: Selection, Recruitment

•The subjects for this intervention were the Graduate Medical Education community at Community Health Network. This consists of an interdisciplinary team of faculty, residents, and staff of two family medicine residency programs, psychiatry residency program, podiatry residency program, as well as a hospitalist fellowship program.

METHODS: Measures/Metrics

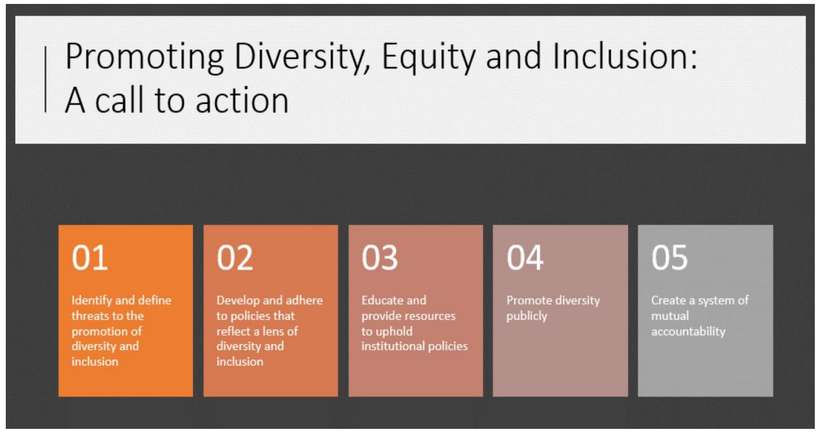
•The core planning team consisted of representatives from multiple programs and professional specialties in order to plan content for nearly one hundred participants.

Interventions/Changes

The team looked to create a curriculum which would begin to address concepts that are integral for a team and system to incorporate for meaningful change. The 75-90 minute virtual workshops consisted of the following:

1. Diversity, Equity, and Inclusion & Health Care Disparities
2. Implicit Bias & Influence on Healthcare Systems
3. Microaggressions & Communication
4. Using Cultural Humility to Provide Patient Centered-Care & Address Disparities

The team utilized various methods to administer our material including didactics, self-assessments, workbook materials, in-session surveys, as well as group facilitated activities.



Measure: Measure change on the annual Accreditation Council for Graduate Medical Education (ACGME) Diversity Sub-section.

- Every spring, ACGME conducts surveys to assess the educational and learning environment at institutions. The Diversity Sub-section will be an important marker to assess if the curriculum has enhanced the clinical learning environment.

RESULTS

Measure:

•The results for the initiative are still pending. The ACGME annual survey results will be distributed in late Spring.

In-Session Feedback: The team was able to assess attitudes and immediate feedback via in-session polls and surveys. The audience showed good engagement in our sessions with all the different mediums of education. The core team found the audience to be in different stages of learning and incorporating these concepts into their practice. The majority of feedback felt the workshop to be informative, creative, and helpful with creating dialogue surrounding these concepts. Some feedback against the workshops, while minimal, noted the workshops to not be the best use of time and would rather do clinical work.

Discussion

Key Findings

•This framework helped the core team realize baseline understanding and level of change for the institution. While there was feedback across the spectrum, this will allow for continued programming and initiatives to affect change. It was found that a mix of different learning tools provided good levels of engagement as well as fostered a psychologically safe environment.

Limitations

•Virtual workshops may limit the ability to take individuals outside of their comfort zone. While a possible limitation, it also allowed for easier access to the entire department along with a variety of different teaching tools within the session.

•There were some difficult situations the facilitators encountered with resistance towards these concepts. Further training and support are needed for institutional leaders in order to best advocate for application of this work.

Next Steps and Sustainability

•This foundational framework is a stepping stone to continue to foster engagement across our institution. A common language and expectations must be the first step in instituting change.

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 2019. 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 Health Network -Areef S. Kassam, MD, MPA, Kasey Windnagel, PhD, Kim Jones, LCSW Holly Wheeler, DO, Peter Karalis, MD, Laura Ruekert, PharmD **Project Tile: Providing a Framework to Address Disparities**

I.	Vision Statement (markers of success by March 2021; Refer to Toolkit #6 after meeting one)	*Create foundational curriculum to help out team to begin to address health care disparities as it relates to patients, providers, teams, and research.*
II.	Team Objectives ('needs statement,' project requirements, project assumptions, stakeholders, etc.)	*Describe a framework for implementing diversity, equity, and inclusion education to a GME community.* *· Describe the advantages and disadvantages to providing DEI education virtually and at the GME level* *· Identify areas of potential impact related to the implemented DEI education*
III.	Team Members & Accountability (list of team members from Toolkit #7 [after meeting one] and who is accountable for what)	*Areef S. Kassam, MD, MPA, Associate Program Director, Psychiatry Residency Program* *Kasey Windnagel, PhD, Behavioral Faculty, Family Medicine East Program* *Kim Jones, LCSW, Behavioral Faculty, Family Medicine South Program* *Holly Wheeler, DO, Associate Program Director, Family Medicine South Program* *Peter Karalis, MD, Psychiatry Chief Resident* *Laura Ruekert, PharmD, Psychiatry Pharmacy Faculty*

IV.	Necessary Resources (staff, finances, etc.)	*The significant necessary resources was time and staff. There was initial difficulty finding the team who could come together especially with our project changing focus and groups multiple times. The Graduate Medical Education community was very receptive to carving out time for this project as part of our roles/responsibilities. It required significant reading and learning in order to create novel curriculum which could focus on how our teams could work better together in order to address health care disparities. We utilized existing Cross Program Didactic Sessions for out team in order to facilitate the workshops for nearly 100 individuals.*
V.	Measurement/Data Collection Plan (Refer to Toolkit #2)	*We are utilizing the ACGME Survey, Diversity, Subsection in order to compare 2020 results with 2021 results. This data collection is still pending. We additionally did in session polls and surveys in order to get baseline attitudes and knowledge for driving content.*
VI.	Stakeholder Communication Plan (may be helpful to draft a flow chart of team members & senior management; Refer to Toolkits #3 and #5)	*See above.*
VII.	Potential Challenges (engagement, budget, time, skills gaps, etc.; Refer to Toolkit #4)	*One of the biggest challenges is time in order to make sure individuals have carved out space in order to work through these concepts. We utilized carved out time for the entire Graduate Medical Education community which was helpful for this part, utilizing buy-in from all program leaderships. Other significant challenges was finding ways to present the materials related to diversity, equity, and inclusion in a way which took people out of their comfort zone and was a psychologically safe space. We also had to work through many different gaps and baselines for skill level, and thus it was important that this was just a foundation to level-set our team and build upon this in the future.*
VIII.	Opportunities for Scholarly Activity (potential publications, conference presentations, etc.)	*We were accepted to University of Indianapolis and Community Health Network's Multi-disciplinary Scholarly Activity Symposium. We will additionally be looking for submission to the Association for Academic Psychiatry taking place in September 2021.*
IX.	Markers (project phases, progress checks, schedule, etc.;	*Our previous project hit many barriers which ultimately led to it being discontinued in Summer 2020. With only about 6 months left of the National Initiative, we sought to plan a four part*

	Refer to *NI VII Roadmap to 2021* which will be presented at Meeting One)	*workshop series designed to address health care disparities through the concepts of diversity, equity, and inclusion. Here are the dates and topics for our workshops. In between workshops, our team meets bi-weekly as we develop our content and structure for the workshops.* *Workshop 1: September 23, 2020; Health Care Disparities (The What)* *Workshop 2: November 11, 2020; Implicit Bias (The Why)* *Workshop 3: February 9, 2021; Microaggressions (The How)* *Workshop 4: May 12, 2021; Cultural Humility (What Next)*

Sections X thru XV to be completed first quarter 2021 for "Final Proceedings" booklet:

X.	Success Factors	*The most successful part of our work was…opening communication to have dialogue amongst our team in order to work together. Only when we have common language and terms can we begin to address this important issue.* *We were inspired by….D W Sue as well as Brene Brown. Their understanding of these topics were truly instrumental. It is important to approach these topics with vulnerability and seeking growth. As we immersed ourselves in this work, it was imperative that we grew as leaders. We have to learn how to "call-in" individuals to conversations and growth rather than "call-out" and create further othering.*
XI.	Barriers	*The largest barrier encountered was….the vastly different knowledge levels and buy-in by our audience. It shows how much more work we have ahead of us, however, it is also a good place to understand the needs of our audience.* *We worked to overcome this by…."calling" people into conversations. It was important for our team to have several de-briefings and have support for one another during this time.*

XII	Surprises	*What surprised you and why? It was a great feat of our team to do all of this within 6 months after pivoting form a previous project. To do this while being virtual was also a great feat/success of our team.*
XIII.	Lessons Learned	*What would be the single most important piece of advice to provide another team embarking on a similar initiative and how to be successful? We would say it is imperative to slow down and be intentional. You really must understand the needs of the team as well as where you want to take them. This work takes time, and we knew our end-goal could not be to end racism and disparities. With that though, we hoped to still push our team in that direction.*
XIV.	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 and how were your results the same or different from your expectations?* *1 2 3 4 5 6 7 8 9 10* *If looking at our second project, we would say we accomplished and exceeded what we hoped to do. We were proud of our materials we created, and we hope they can be used moving forward for further projects.*
XV.	Sustainability and Next Steps	What does your CEO need to know to help keep your work sustainable? This work needs to be done on an intimate level within one's self and within the teams we are comprised. Didactic sessions, videos, and training are all helpful, but in order to really push things forward, we must bring conversations to the forefront amongst all of us.

The Effect of Teaming on Opiate Prescribing and Usage in a GME Naïve Education Consortium

INDIANA UNIVERSITY
SCHOOL OF MEDICINE
SOUTHWEST INDIANA INTERNAL MEDICINE RESIDENCY

Good Samaritan
Ascension St. Vincent

Dr. Christopher Neely, MD
Dr. Margaret Beliveau, MD, FACP
Brian Chang, PharmD
Christi Trimabth, PharmD
Dr. Adrian Singson, MD
Dr. Kengo Soghoyan
Dr. Scott Fraser
Dr. Robert Ficalora, MD, FACP

National Initiative
NI VII Meeting #4

INTRODUCTION: Background

- 2017: 1,176 reported opioid-involved deaths in Indiana; rate of 18.8 deaths/100,000 persons (national rate is 14.6 deaths/100,000 persons).
- 2017: 649 reported synthetic opioid cases; 20-fold increase from 2013.
- 160 to 327 heroin-related deaths.
- 2017: Indiana providers prescribed 74.2 opioid prescriptions for every 100 persons (US national average rate is 58.7 prescriptions); only 9 states have a higher prescribing rate than Indiana.
- This project is a dual opportunity to impact the opioid epidemic and build both relationship and infrastructure in a new program.

Aim/Purpose/Objectives

We plan to investigate and construct teaming as we build our medical education infrastructure in our 4-hospital GME naive medical education consortium. This will also include medical consultation and hospital medicine at a surgical specialty hospital. The internal medicine and psychiatry residencies share many resources and facilities. We also plan to integrate nursing and pharmacy, and our established nurse and pharmacy residency programs, into the effort. This combination of disciplines will be well suited to focusing on opioid prescribing across the consortium, and thus we will have one project that spans several environments.

METHODS: Continued

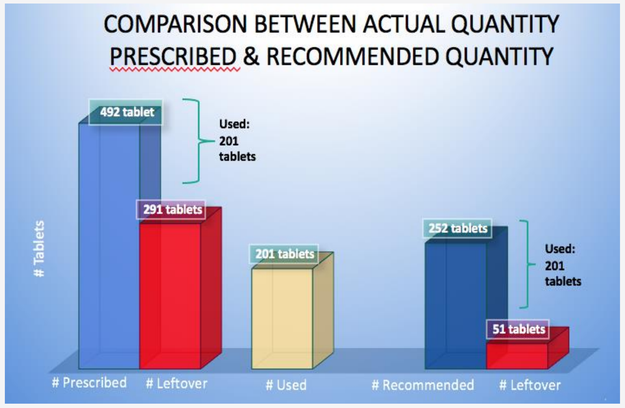
Subjects: Selection, Recruitment

- One-month pilot study from Feb 3 2020 to Feb 28 2020
- Adult patients scheduled for elective total joint replacement
- Eligible patients screened via the electronic medical record and weekly surgery schedules
- Inclusion criteria: Age >18, elective total joint replacement
- Exclusion criteria: Opioid tolerant patients

Interventions/Changes

- Patients underwent an individualized pain protocol
- Protocol included: INSPECT report; patient education on appropriate opioid use and disposal of excess medications using Deterra Drug Deactivating System; and pharmacy recommendations on inpatient opioid use, individualized opioid prescribing upon discharge, and drug-drug interaction screening
- Follow up phone call to gather information on opioid use 1 week after education

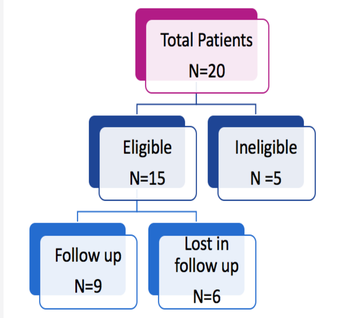
RESULTS: Continued



Comparison Between Pre- and Post-Implementation

- 42% more leftover tablets in the post-implementation group compared to pre-implementation group.
- Noted difference between pharmacy-recommended prescription and amount actually prescribed.
- Many patients found to have medications remaining at follow-up.

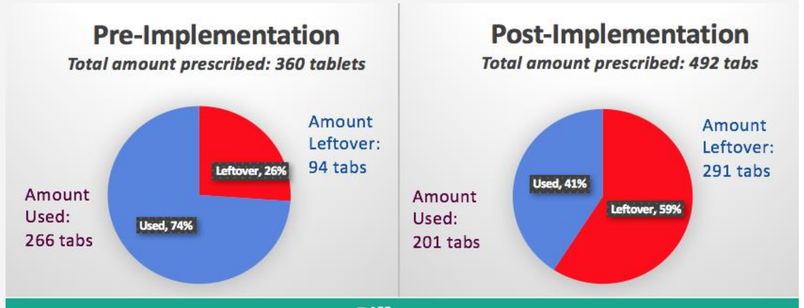
METHODS



Opioid Prescription Data

Opioid	Prescription	Quantity
Tramadol 50 mg	2 Prescriptions	90 tablets
Hydrocodone-Acetaminophen 5-325 mg	7 Prescriptions	402 tablets
Total	9 Prescriptions	492 tablets

RESULTS



Difference	
5 patients included in follow up	9 patients included in follow up
Per 10 surgeries - Total tablets: **720** tablets - Amount used: **532** tablets - Leftover: **188** tablets	Per 10 surgeries - Total tablets: **547** tablets - Amount used: **223** tablets - Leftover: **323** tablets

Discussion

Key Findings

- An individualized pain protocol may limit the amount of opioids prescribed post-operatively.
- Many patients still had unused pills post-operatively.

- **Limitations**
- Volumes were low.
- This was a single-center trial over 1 month.

- **Next Steps and Sustainability**
- With the recent incorporation of residents into NI7, our project has pivoted from the orthopedic arm to an outpatient perspective.

- We are taking lessons from the orthopedic arm's individualized protocols to attempt to create a multimodal pain algorithm for chronic low back pain in the clinic setting.

- We have completed our literature search and are creating a pilot for submission to the IRB.

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 2019. 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: Good Samaritan Hospital **Project Tile: The Effect of Teaming on Opiate Prescribing and Usage in a GME Naïve**

I.	Vision Statement (markers of success by March 2021; Refer to Toolkit #6 after meeting one)	We will create a healthcare community, inclusive of patients and providers, which truly understands the risks of prescribing opiates to prevent addiction and foster access to alternative modalities to address adequate pain control.
II.	Team Objectives ('needs statement,' project requirements, project assumptions, stakeholders, etc.)	We plan to investigate and construct teaming as we build our medical education infrastructure in our 4-hospital GME naive medical education consortium. This will also include medical consultation and hospital medicine at a surgical specialty hospital. The internal medicine residency shares many resources and facilities. We also plan to integrate nursing and pharmacy, and our established nurse and pharmacy residency programs, into the effort. This combination of disciplines will be well suited to focusing on opioid prescribing across the consortium, and thus we will have one project that spans several environments.
III.	Team Members & Accountability (list of team members from Toolkit #7 [after meeting one] and who is	Dr. Christopher Neely, MD

	accountable for what)	Dr. Margaret Beliveau, MD, FACP Dr. Adrian Singson, MD Brian Chang, PharmD Christi Trimabth, PharmD Dr. Kengo Soghoyan, MD Dr. Scott Fraser, MD Dr. Robert Ficalora, MD, FACP
IV.	Necessary Resources (staff, finances, etc.)	Willing patients Willing providers Coordinated pharmacists, nursing, and support staff Should be financially neutral to initiate Data must be easily mined at the institutional and state level
V.	Measurement/Data Collection Plan (Refer to Toolkit #2)	1) Systems monitoring data base for items such as usage, orders, amounts, and renewals 2) Number of opiate prescriptions and average morphine equivalents prescribed per patient 3) Real-time data collection during teaming sessions when discussing discharge planning of patients. Survey of providers before and after interventions 4) Provider and patient satisfaction surveys

		5) Survey residents for educational impact
VI.	Stakeholder Communication Plan (may be helpful to draft a flow chart of team members & senior management; Refer to Toolkits #3 and #5)	We had ready access to institutional leadership at both hospitals at all times during the project.
VII.	Potential Challenges (engagement, budget, time, skills gaps, etc.; Refer to Toolkit #4)	We are three new residency programs in two 2 complex organizations with many lines of reporting overlapping core functions within the residencies. This is particularly an issue at St. Vincent's, which is part of a larger health care system. This may be a necessary accommodation in its first year, but centralization of the residency-specific functions and clearer and more streamlined lines of authority will be necessary as the program grows. Success will require a nimble structure to accommodate more complexity as well as to react to both internal and external program demands. At both institutions, senior leadership must emphasize the institutional commitment to the programs and project. Leadership must ensure that all employees understand the responsibility that they have to the residencies and their scholarship requirements.

VIII.	Opportunities for Scholarly Activity (potential publications, conference presentations, etc.)	Resident-driven posters and presentations NI7 poster and presentation
IX.	Markers (project phases, progress checks, schedule, etc.; Refer to *NI VII Roadmap to 2021* which will be presented at Meeting One)	The orthopedic arm had a 1-month trial with regular follow-up meetings upon completion of the project. From there, the addition of inaugural internal medicine residents and the COVID-19 pandemic prompted a pivot and evolution of the project toward the outpatient setting. Progress was monitored with regular monthly meetings. Team leadership was impacted by a

		variety of external forces. Finally, the initial involvement of the psychiatry residency shifted and pursued a different project outside of NI7.

Sections X thru XV to be completed first quarter 2021 for "Final Proceedings" booklet:

X.	Success Factors	*The most successful part of our work was:* We observed a decrease in opiate pill use post-operatively and initial data suggests that an individualized pain protocol may reduce the number of opiate pills prescribed. *We were inspired by:* The project utilized an innovative solution to safely dispose of unused opiate pills post-operatively, the patient engagement and acceptance in an individualized opioid prescribing protocol, and the engagement of residents with the new outpatient arm of the project. The outpatient arm is submitting a pilot to the IRB for a multimodal treatment algorithm for chronic low back pain.
XI.	Barriers	*The largest barrier encountered was:* Losing momentum due to COVID-19 for the outpatient arm. Time, personnel, and engagement was temporarily lost due to surges in COVID-19 cases. *We worked to overcome this by:* Momentum and reengagement was achieved by engaging the inaugural internal medicine residents, transitioning to a completely virtual format, centralizing our literature search findings and project information on a shared Google drive, and acknowledging the pandemic's effects on moving the project forward.
XII	Surprises	*What surprised you and why?* We were pleasantly surprised by the impact of on-site teaming with orthopedic surgery, pharmacy, and internal medicine consultation on opioid prescribing in the orthopedic arm. We were encouraged by the effect of the inaugural internal medicine residents on teaming in the outpatient arm of this project. They brought enthusiasm, renewed momentum in the project,

		and challenges in guiding the team during the COVID-19 pandemic. We were surprised by the challenge in data mining from state and institutional data for the orthopedic arm. This was originally thought to be an easy task, but proved cumbersome.
XIII.	Lessons Learned	*What would be the single most important piece of advice to provide another team embarking on a similar initiative and how to be successful?* Appropriately sizing the project to the environment and available resources. Initial resources included state data, a new orthopedic hospital, and a multidisciplinary team of orthopedic surgeons, internal medicine consultants, pharmacists, and nurses. This enabled us to achieve completion of the orthopedic arm of the project and pivot toward the outpatient arm. In addition, we obtained additional resources in the form of the inaugural internal medicine residents and GME. Appropriate sizing of the project enabled us to effectively engage them in the outpatient arm. One element we did not account for was the difficulty in data mining from state and institutional data prior to starting.
XIV.	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 and how were your results the same or different from your expectations?* *1 2 3 4 5* ***6*** *7 8 9 10* We were able to complete the orthopedic arm of our project. However, we lost a great deal of traction with the outpatient arm initially. The involvement of the inaugural internal medicine residents made significant breakthroughs in getting the outpatient arm on track.
XV.	Sustainability and Next Steps	*What does your CEO need to know to help keep your work sustainable?* CEOs at involved sites need to maintain ready accessibility to the teams involved in the project.

Assessing & Improving Ambulatory Quality Metrics in a Resident and Faculty Internal Medicine clinic

Victor Kolade, Sheela Prabhu, John Pamula, Colleen Woodring, Misty Mase, Bobbé Edwards, Shobha Mandal, Sydney Silverman, Manisha Raikar

National Initiative
NI VII Meeting #4

INTRODUCTION: Background

- Assessment of primary care quality via standardized aggregate measures has been done by medical centers and monitored by insurers and patients in the US for years
- Several primary care office visits are provided primarily by residents each year; patients seen by residents have been shown to have similar (1) or worse than (2) performances on their quality metrics than patients seen by staff providers
- The effectiveness of interdisciplinary collaboration in improving this disparity is not known

References

1. Edwards ST, Kim H, Shull S, Hooker ER, Niederhausen M, Tuepker A. Quality of Outpatient Care with Internal Medicine Residents vs Attending Physicians in Veterans Affairs Primary Care Clinics. JAMA Intern Med. 2019 May 1;179(5):711-713
2. Essien UR, He W, Ray A, Chang Y, Abraham JR, Singer DE, Atlas SJ. Disparities in Quality of Primary Care by Resident and Staff Physicians: Is There a Conflict Between Training and Equity? J Gen Intern Med. 2019 Jul;34(7):1184-1191

Aim/Purpose/Objectives

- To improve the 'diabetes bundle' compliance to 62% across patients in Sayre Internal Medicine being cared for by non-resident providers (faculty, non-faculty doctors, and advanced practice providers) by June 2021
- To improve the 'diabetes bundle' compliance to 54.6% across all patients being cared for by resident providers by June 2021
- To see or maintain a colorectal cancer screening rate of 70% or more among patients in Sayre Internal Medicine being cared for by non-resident providers by June 2021
- To see a colorectal cancer screening rate of 65.2% or more among patients in Sayre IM being cared for by resident providers by June 2021
- To see or maintain a diabetic retinopathy screening/assessment rate of 72% or more among patients in Sayre Internal Medicine being cared for by non-resident as well as resident providers by June 2021
- To see or maintain a depression screening rate of 80% or more among patients in Sayre Internal Medicine being cared for by non-resident as well as resident providers by June 2021
- To see or maintain a fall screening rate of 85% or more among patients 65 and older in Sayre Internal Medicine being cared for by non-resident as well as resident providers by June 2021

METHODS: Interventions/Changes

Subjects: Selection, Recruitment – see table

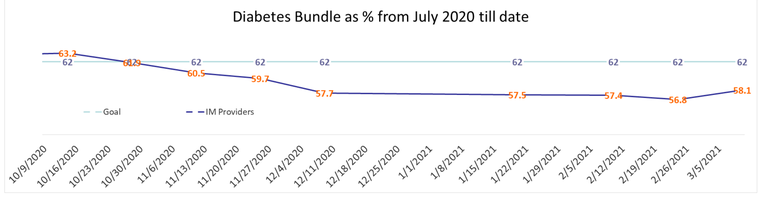
Interventions

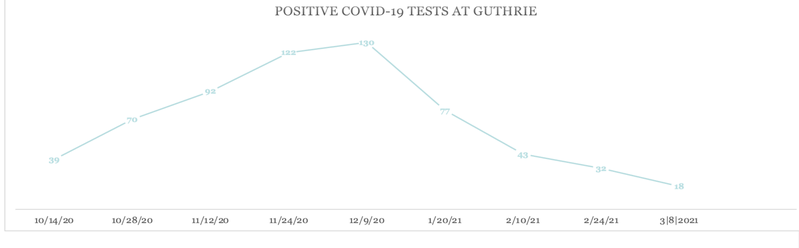
- We sought to leverage daily office huddles to achieve these aims (as a complement to pre-visit planning calls implemented earlier as part of processes required for Patient-Centered Medical Home certification)
- Redesigned in July 2020, huddles occur from 8:40-9 am and include the office director, care coordinator, providers, residents, nurses, patient service specialists and nurse practitioner/physician assistant/medical students
- Data provided by administration is reviewed by providers and in huddle every 1-2 weeks

METHODS: Measures/Metrics

Metric	System Numerator	System Denominator	Inclusions	Exclusions
Diabetes bundle	Diabetic Patients Seen in the Past 2 Years Who Have an Active Guthrie PCP, With an A1C <= 8 in the Past 6 Months, an LDL < 70 (or currently prescribed a moderate or high dose statin) in the Past Year and age 40-75, and medical attention for nephropathy (a microalbumin test in the Past Year, or a nephrology visit, or are on an ACE/ARB, or have ESRD/CKD Stage 4)	Diabetic Patients Seen in the Past 2 Years With an Active Guthrie PCP	Patients Who Have: Diabetes On Their Problem List, An encounter with a Diabetes Diagnosis in the past 2 Years, or a Health Maintenance modifier for Diabetes. Patients must have an active Guthrie PCP and have had an office visit in the past 2 years	Gestational Diabetes & Long-Term Care Patients
Colorectal Cancer Screening	Colonoscopy (10 years), Fit test (annual) , and Cologuard (3 years), Or Health Maintenance Modifier marked as completed(Past 10 Years)	Patients Aged 50-75 Seen In The Past Year		Long-Term Care Patients
Diabetic Retinopathy	Negative Eye Exam In the Past Two Years Or Positive Exam In the Past Year	Diabetics Aged 18-75	Patients Who Have: Diabetes On Their Problem List, An encounter with a Diabetes Diagnosis in the past 2 Years, or a HM modifier for Diabetes. Patients must have an active Guthrie PCP and have had an office visit in the past 2 years	Gestational Diabetes & Long-Term Care Patients
Depression Screening	Patients aged 12 years and older screened for depression using the PHQ-2, and if positive, the PHQ-9, during their encounter	Patients seen by practice in the last year	Patients seen in the past year by Primary Care with a Guthrie PCP	Patients with a history of an active diagnosis of depression or bipolar
Fall Risk Assessment	Patients >=65 with a fall risk screening completed in the past year	Patients >=65 and seen in the past 2 years by Primary Care	Patients seen in the past 2 years by Primary Care with a Guthrie PCP	

RESULTS





RESULTS: Continued

- The 'diabetes bundle' compliance **reached 62%** across patients in Sayre Internal Medicine being cared for by non-resident providers in **August 2020, but fell to 56.4% in February 2021; the residents have not met goal for this metric**
- The colorectal cancer screening rate **was 70% or more** among patients being cared for by non-resident providers by **July 2020**, and **stayed at goal through March 2021**
- The colorectal cancer screening rate **exceeded 65.2%** among patients being cared for by residents by October 2020, likely due to a resident-led QI initiative, and **stayed at goal through early March 2021**
- The diabetic retinopathy screening/assessment rate **was 72% or more** among patients being cared for by non-resident as well as resident providers by **July 2020, but the resident rate fell to 66.9% in December, then hit 73.5% in March 2021**
- The depression screening rate **was 80% or more** among patients in Sayre Internal Medicine being cared for by non-resident and resident providers by **July 2020**, and **stayed at goal through March 2021**
- The fall screening rate **was 85% or more** among patients in Sayre Internal Medicine being cared for by non-resident and resident providers by **July 2020**, and **stayed at goal through March 2021 for residents, but staff providers fell below goal in January - February 2021 only to rebound to 85% in March**

Discussion

Key Findings

- Diabetes bundle completion rates fell when COVID-19 infections rose among our patients and communities
- Colorectal cancer screening data was rather resistant to the changes in COVID-19 prevalence
- Disparities in metric completion rates were seen between resident and non-resident provider patient cohorts from July 2020 till date

Limitation

- It came to light in January 2021 that some residents were unaware of the nuances involved in the quality metric assessments

Next Steps and Sustainability

- Resident education is ongoing
- Quality star boards have been incorporated into our huddles – and our model has been shared with senior leadership

Interprofessional Collaboration Practice (IPCP) to Improve Colorectal Cancer Screening

Shobha Mandal MD, Shista Priyadarshini MD, Victor Kolade MD, Sheela Prabhu MD, John Pamula MD

NI VII Meeting 4 STORYBOARD

Background & Context

- Colorectal cancer (CRC) is the third most common type of cancer and the second leading cause of cancer death in the United States [1]
- The United States Preventive Services Task Force (USPSTF) recommends CRC screening for colorectal cancer using fecal occult blood testing, sigmoidoscopy, or colonoscopy in adults at average risk beginning at age 50 years and continuing until age 75 years [2]
- According to the National Health Interview Survey (NHIS), the CRC screening percentage in the United States was 66% in 2018 [3]
- Guthrie Robert Packer Hospital (RPH) primarily serves five counties in the Twin Tier regions of New York and Pennsylvania - rural communities with health disparities and gaps in both preventive and therapeutic care when compared to national data because of low literacy and lower average household income compared to national data
- Only 56% of patients in the Internal Medicine (IM) resident clinic were up-to-date with CRC screening in September of 2020

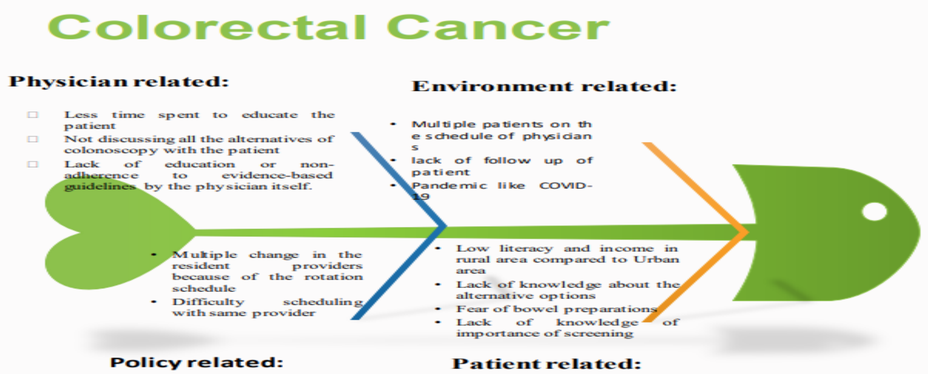
Mission/Vision Statement

- To create and implement a unique and sustainable team-based approach to improve the percentage of CRC screening in IM Resident clinic via Inter-Professional Collaborative Practice (IPCP)

Aim/Purpose/Objectives

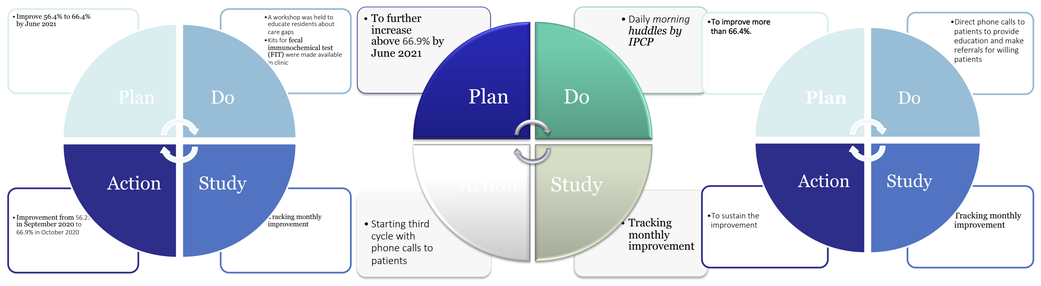
- The goal of this project is to increase the CRC screening rate from 56% to 66% or more among persons aged 50–75 years by March 15th, 2021

Fishbone Diagram



Methods: Interventions/Changes

- We ran three PDSA cycles: Workshop to educate Residents about care gaps, daily morning huddle (IPCP) and calls to individual patients due for CRC screening.



	July	August	September	October	November	December	January	February
Residents - SAYRE INTERNAL MEDICINE	61.3%	57.4%	56.4%	66.9%	66.8%	66.4%	67.1%	68.9%
Target	65.0%	65.0%	65.0%	65.0%	65.0%	65.0%	65.0%	65.0%

Barriers/Strategies

1. Barriers affecting CRC screening in the IM resident clinic:

Due to the COVID-19 pandemic,

- Scheduled colonoscopies were cancelled and needed to be reordered
- Patients were hesitant to come for office visits

2. Limitation affecting this project:

- Time constraints

Discussion and Conclusion:

- All three interventions of educational workshop, IPCP and individual phone calls to patients were successful to improve the CRC screening rate by more than 10%
- IPCP played a critical role in improving the CRC screening rate from 56% to 68.9% by the end of February 2021
- In rural areas like ours where health literacy is low and poverty is high, patient education on the importance of screening, with individual follow up and review of both invasive and non-invasive options can improve CRC screening rates

References:

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2.Screening for colorectal cancer: U.S. Preventive Services Task Force recommendation statement. *Ann Intern Med.* 2008; 149: 627-637

3. National Center for Health Statistics, Division of Health Interview Statistics. National Health Interview Survey Public Use Data File 2018. In Centers for Disease Control and Prevention, Hyattsville, MD.2019

A multi-disciplinary care team model to improve diabetic bundle compliance

NI VII Meeting #4

Manisha Raikar MD, Miji Kim MD, John Pamula MD, Victor Kolade, Sheela Prabhu MD

INTRODUCTION: Background

- Diabetes mellitus is one of the most common chronic diseases in the United States, with a prevalence of 9.4% (1).
- American Diabetes Association (ADA) sets forth annual guidelines on preventative measures that can help prevent or delay the onset of more severe complications of diabetes mellitus.
- Guthrie Robert Packer Hospital serves area listed in Health Professional Shortage Areas (HPSAs) which also has low health literacy and therefore poor compliance.
- Thus, residents play an important role in providing appropriate care.
- Upon review its was found that resident clinics provide suboptimal diabetic preventative care as evidenced by decreased compliance with ADA guidelines.

AIM: Objective

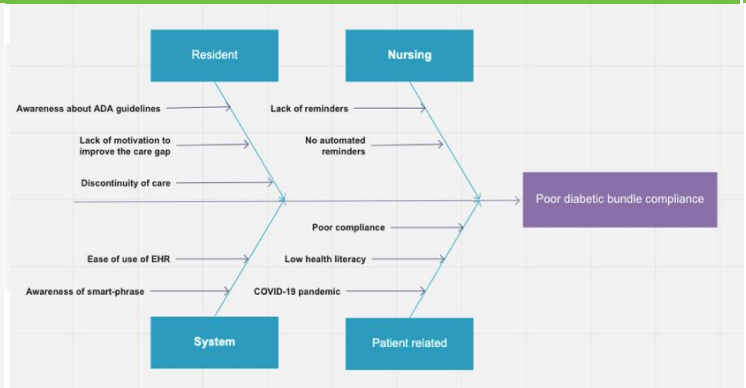
- The purpose of our study was to improve diabetic care bundle in resident clinics by >7.5% in 7 months (from 46.9% to 54.60% from August 10 2020 to March 8 2021) through QI project, with A1C value as primary outcome and other ADA guidelines as secondary outcomes.

METHODS: Metrics

Our composite scores includes:

- ✓ A1C check every 6months if A1c is below 8 and every 3 months if A1C is above 8 .
- ✓ Annual check of fasting lipid profile <70 or on high intensity statins in age 40-75
- ✓ Urine microalbumin/creatinine check or has seen Nephrologist in last 1 year.

ROOT CAUSE ANALYSIS



METHODS: INTERVENTION

I. Care team formation

-Consisted of clinic director, care co-ordinator, nurse, Resident, faculty overseeing resident

II. Pre-visit planning/ chart audit

-To identify deficiency and labs done before visit to be addressed

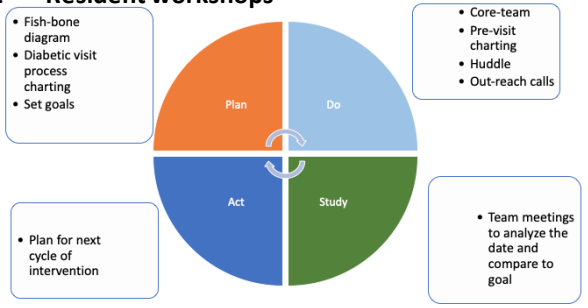
III. At. Visit planning/ Huddles

-Early morning Huddles and notify and address gaps at multiple levels.

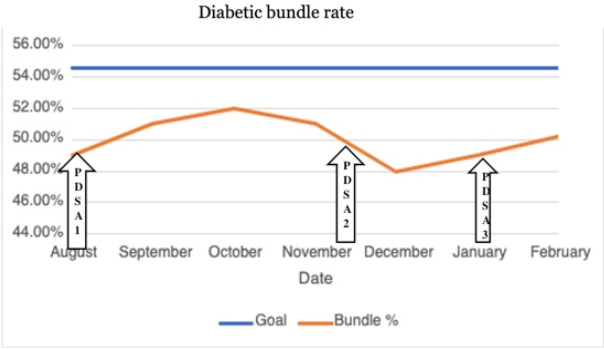
IV. Nurse outreach calls

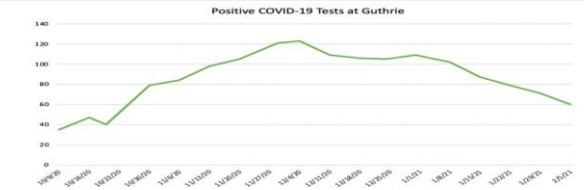
-For gaps not addressed during clinic visit

V. Resident workshops



RESULTS





DISCUSSION

We performed 3 PDSA cycles which helped identify barriers. PDSA-1 identified non-compliance / low health literacy. PDSA-2 identified patients' hesitancy to come to hospital during the COVID-19 pandemic; the above graphic shows some effect of high COVID-19 cases (bottom chart) on the bundle score (top chart). PDSA-3 found that residents had difficulty in accessing EHR dashboards and therefore intervention was addressed with many workshops which led to an uptrend in bundle score. Although our goal was not reached, we were able to identify root causes at multiple levels and after addressing those, we found a sustained rise in bundle %.

REFERENCES

- 1.Centers for Disease Control and Prevention. National Diabetes Statistics Report, 2017. Atlanta: Centers for Disease Control and Prevention, U.S. Dept of Health and Human Services; 2017.
- 2Fleming BB, Greenfield S, Engelgau MM, Pogach LM, Clauser SB, Parrott MA. The Diabetes Quality Improvement Project: moving science into health policy to gain an edge on the diabetes epidemic. *Diabetes Care* 2001;24:1815–1820

An Interdisciplinary approach to improve TCM visit completion rate in IM resident and faculty clinic

Dr. Tejaswini Maganti, Dr. Sudhir Pasham, Dr. John Pamula, Dr. Victor Kolade, Dr. Sheela Prabhu

National Initiative

NI VII Meeting #4

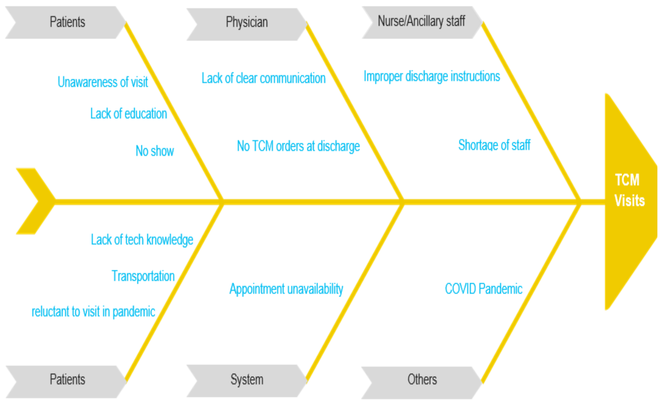
Introduction

- Transitional Care Management (TCM) services were established under the Affordable Care Act in 2010 to improve quality of care and to reduce healthcare costs.
- Naylor summarized twenty-one-randomized clinical trials of transitional care interventions and the positive effect on patient care (1).
- However, there are barriers for TCM services implementation.
- In Guthrie primary care clinics, we track multiple ambulatory quality metrics to improve healthcare for patients; we included a focus on TCM compliance rate to improve patients' health and prevent readmissions.

Aim

- To improve the TCM visit compliance rate by leveraging the process of interdisciplinary morning huddles among the care team via a multidisciplinary approach and multiple interventions at different times.
- Specifically, we aim to improve the TCM rate in the Internal medicine clinic by 10% from 7/1/2020 to 6/30/2021.

Root cause analysis



METHODS: Metrics

- Collected data from our clinical data analyst every week: Number of patients discharged, TCM order, 48-hour call after discharge, 1 week visit, 2-week visit, readmissions/ED visits.
- We collected data from January and interventions that mentioned above were started in June except virtual visits, which were started by end of December.

METHODS: Interventions

I. Team approach: Huddles occur in the morning in the IM clinic every day in a team-based approach. They include the office director, care coordinator, providers, residents, nurses, patient service specialists, and nurse practitioner/physician assistant/medical students.
   - ❖ We discussed the barriers and where necessary, use of vacant slots for TCM appointments was done.
   - ❖ We implemented a mandatory reminder to patients 24 hours before visits by a patient service specialist (PSS), in addition to utilizing a 48-hour outreach call by a care coordinator.

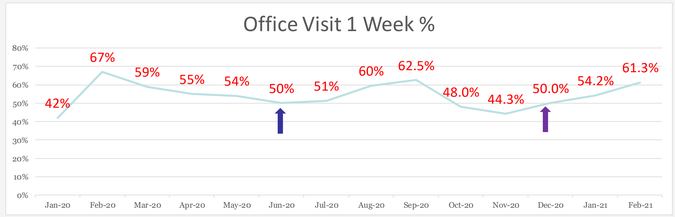
II. Utilized a specific EMR TCM visit order, which is a part of the inpatient discharge order set.

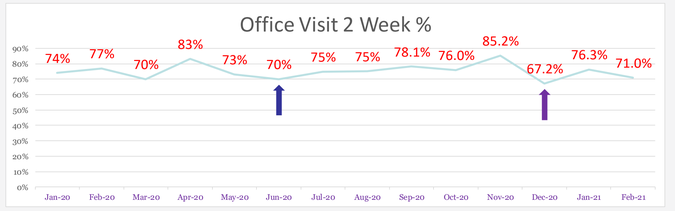
III. Resident workshops were conducted:
   - ❖ To educate regarding the process and importance of TCM, and to teach the patients to comply with TCM.
   - ❖ To facilitate (where needed) transition from generic follow up appointment to specific TCM appointments in the EMR.

IV. We audited the data every week to assess the barriers and brainstorm solutions.

V. We commenced virtual visits to improve access and promote patient compliance.

RESULTS





➡ Intervention one: Multidisciplinary approach

➡ Intervention two: Virtual visits

RESULTS

✓ We have achieved our goal for the 1-week TCM rate with increase from 50% in June 2020 to 61.3% by the end of February 2021.

Discussion

As per our analysis and based on reviewing our multiple PDSA cycles, we conclude that among the interventions used the most important ones for maximum and sustainable benefit are:

- ❖ mandatory calls made by a PSS 24 hours before visits, and
- ❖ virtual visits.

Reference

1. Naylor MD, Aiken LH, Kurtzman ET, Olds DM, Hirschman KB. The care span: The importance of transitional care in achieving health reform. Health Aff (Millwood). 2011 Apr;30(4):746-54.

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 2019. 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: Assessing & Improving Ambulatory Quality Metrics in a Resident and Faculty Internal Medicine clinic**

I.	Vision Statement (markers of success by March 2021; Refer to Toolkit #6 after meeting one)	To see Sayre Internal Medicine be the premier primary care practice in Guthrie in terms of quality
II.	Team Objectives ('needs statement,' project requirements, project assumptions, stakeholders, etc.)	*To leverage daily morning office huddles to achieve:* > *To improve the 'diabetes bundle' compliance to 62% across patients in Sayre Internal Medicine being cared for by non-resident providers (faculty, non-faculty doctors, and advanced practice providers) by June 2021* > *To improve the 'diabetes bundle' compliance to 54.6% across all patients in Sayre Internal Medicine being cared for by resident providers by June 2021*

		> *To see or maintain a colorectal cancer screening rate of 70% or more among patients in Sayre Internal Medicine being cared for by non-resident providers by June 2021* > *To see a colorectal cancer screening rate of 65.2% or more among patients in Sayre IM being cared for by resident providers by June 2021* > *To see or maintain a diabetic retinopathy screening/assessment rate of 72% or more among patients in Sayre Internal Medicine being cared for by non-resident as well as resident providers by June 2021* > *To see or maintain a depression screening rate of 80% or more among patients in Sayre Internal Medicine being cared for by non-resident as well as resident providers by June 2021* > *To see or maintain a fall screening rate of 85% or more among patients 65 and older in Sayre Internal Medicine being cared for by non-resident as well as resident providers by June 2021*

		Although metrics are computed for individual providers as well as for residents as a whole and non-resident providers as a whole, we assumed a centralized process would assure success in meeting our objectives as assigned by senior leadership
III.	Team Members & Accountability (list of team members from Toolkit #7 [after meeting one] and who is accountable for what)	*Victor Kolade – data management,* *Sheela Prabhu - oversight,* *John Pamula – resident project oversight,* *Colleen Woodring – care coordinator & data management,* *Misty Mase - coordination,* *Bobbé Edwards – nursing,* *Shobha Mandal – CRC screening project,* *Sydney Silverman – data presentation* *Manisha Raikar – diabetes bundle* *Tejaswini Maganti – transition of care management project*

IV.	Necessary Resources (staff, finances, etc.)	*Staff as above – including office director, care coordinator, providers, residents, nurses, patient service specialists* *nurse practitioner/physician assistant/medical students*
V.	Measurement/Data Collection Plan (Refer to Toolkit #2)	*Data utilized as provided by Epic analyst weekly (for diabetes bundle) or every 2 weeks (for all 5 metrics) by the CMO for Ambulatory Quality*
VI.	Stakeholder Communication Plan (may be helpful to draft a flow chart of team members & senior management; Refer to Toolkits #3 and #5)	*Verbal communication at huddles and one-on-one with office director, section chief and other team members as indicated* *Convened meetings as indicated*
VII.	Potential Challenges (engagement, budget, time, skills gaps, etc.; Refer to Toolkit #4)	*COVID-19 (unforeseen)* *Nursing shortfall (unforeseen)*
VIII.	Opportunities for Scholarly Activity (potential publications, conference presentations, etc.)	potential publication on the disparities between resident and non-resident data *conference presentations – Stanley Conklin Research Day at Guthrie*
IX.	Markers (project phases, progress checks, schedule, etc.; Refer to *NI VII Roadmap to 2021* which will be presented at Meeting One)	*Progress checks were done every 2 weeks or so based on data released by the CMO for Ambulatory Quality*

Sections X thru XV to be completed first quarter 2021 for "Final Proceedings" booklet:

X.	Success Factors	*The most successful part of our work was….* *Expansion of the objectives* *We were inspired by…. Residents meeting their goal for colorectal screening in October 2020 (sustained) – and providers meeting their goal for diabetes bundle in August 2020 (not sustained)*
XI.	Barriers	*The largest barrier encountered was….* ***COVID-19 related process disruption and nursing shortfall*** *We worked to overcome this by….* Persistence
XII	Surprises	*What surprised you and why?* ▪ *Residents trailed staff providers in 3 of 5 listed metrics as of July 2020 - and 4 of 5 in February 2021* > *Our clinic does not use the primary care exception, so an attending sees each patient with the resident – allowing for the possibility that resident metrics would be better than those of non-resident providers* ▪ *Our huddle processes did not close the data gaps between resident and non-resident providers*
XIII.	Lessons Learned	*What would be the single most important piece of advice to provide another team embarking on a similar initiative and how to be successful?* *Choose metrics that the C-suite is vested in monitoring and improving*
XIV.	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 and how were your results the same or different from your expectations?* *1 2 3 4 5 6 7 8 9 10*

		▪ *6.5 for early improvements in diabetes bundle #* ***progress to goal completion was lost in October 2020 - February 2021 possibly due to a nursing shortfall and COVID-19 related process disruption*** ▪ *10.5 for expansion of project reach beyond the diabetes bundle to other metrics* ***COVID-19 notwithstanding, the project expanded***
XV.	Sustainability and Next Steps	What does your CEO need to know to help keep your work sustainable? Teamwork can lead to target completion - when teams remain intact Providing protected time for physician engagement in team processes goes a long way towards target accomplishment Incentives for residents may prove valuable in creating and sustaining engagement

Utilizing Inter-Professional Teaming To Reduce Inpatient Length of Stay

K. Ussery-Kronhaus MD, C. Bader DO, M. Halari MD
J. Tang MD, J. Bland MSN RN, K. Rasinya LCSW CCM,
K. Kronhaus MD, P. Cheriyath MD, W. Mink, G. Filice MD

Hackensack Meridian Ocean Medical Center

National Initiative
NI VII Meeting #4

INTRODUCTION: Background

Address:

- The hospital and health system track on inpatient length of stay is an important measure of its payment and benchmark of patient care when compared to other hospitals nationally.
- Identifying diagnosis and areas outside the norm can provide opportunities for quality improvement in utilizing resources.
- The case mix index (CMI) is calculated by summing the Medicare severity-diagnosis related group weight for each discharge and dividing by the total number of discharges. It reflects the diversity, clinical complexity and resource needs of all the patients in the hospital.
- Team based care may positively affect patient satisfaction.

References

1. Healthdata.gov
2. Cms.gov
3. Will KK, Johnson ML, Lamb G. Team-Based Care and Patient Satisfaction in the Hospital Setting: A Systematic Review. *J Patient Cent Res Rev*. 2019;6(2):158-171. Published 2019 Apr 29. doi:10.17294/2330-0698.1695
4. Institute for Healthcare Improvement, How to Guide: Multidisciplinary Rounds, February 2015.

Aim/Purpose/Objectives

To decrease length-of-stay (LOS) by 1 day at Hackensack Meridian Health Ocean Medical Center through the utilization of enhanced interprofessional communication.

METHODS: Interventions/Changes

Subjects: Selection, Recruitment

- Meeting with administration, hospital president, and chief nursing officer identified LOS as a network initiative that would involve collaboration among hospital departments
- Meetings with case management and patient progression department to identify goals/needs/current methods

Interventions/Changes

- Network-wide Epic EHR implementation
- Identified Case Management rounding tool available in Epic visible to case management department and physicians
- Resident and faculty education about the tool
- Initial implementation in November 2019
- Quarterly re-education of the inpatient team about the tool
- Addition of resident education about discharge time with case management department

METHODS: Measures/Metrics

Measure #1: Monthly reported EPIC data 3 months prior to intervention (Nov 2019-Feb 2020) compared to post intervention (March 2020-May 2020)

- CMI risk adjusted LOS for the Family Medicine Teaching service (Intervention group)
- CMI LOS for the Internal Medicine Teaching service (control group)

Measure #2: Hospital Consumer Assessment of Healthcare Providers (HCAHP) discharge questions (patient responses), survey data assessed monthly

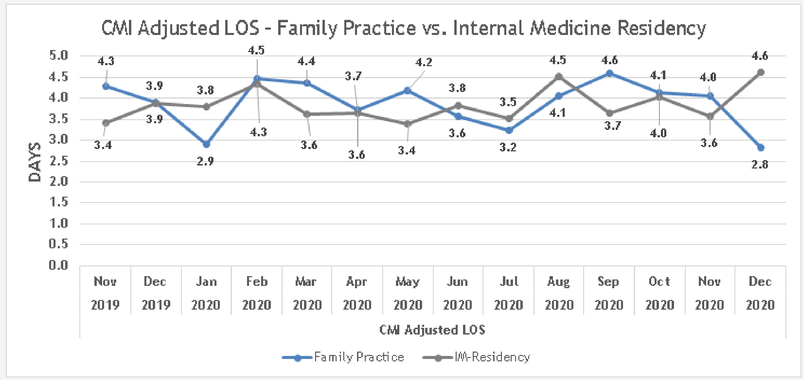
- During this hospital stay, did doctors, nurses or other hospital staff talk with you about whether you would have the help you needed when you left the hospital?
- During this hospital stay, did you get the information in writing about what symptoms or health problems to look out for after you left the hospital?

IRB Submission

- Exempt

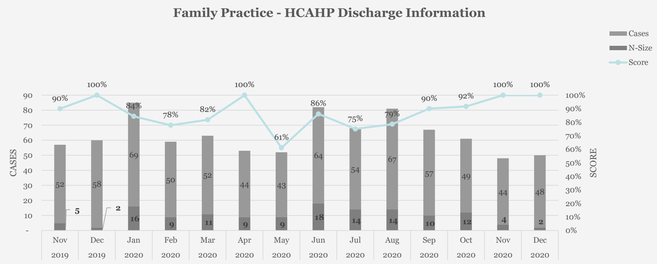
RESULTS

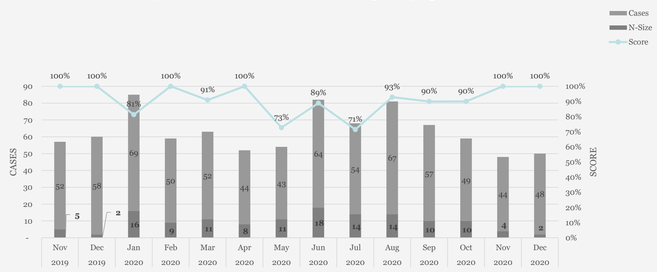
Measure #1:



RESULTS: Continued

Measure #2:





Discussion

Key Findings

- CMI adjusted LOS for the intervention group reduced 0.5 days compared to a 0.23 day reduction in the control group (p value 0.8)
- While this did not meet the 1.0 goal of the network, it is still a significant reduction

Limitations

- It is difficult to assess the sustainability of the change past the project time line
- The CMI for both groups is consistent and both are impacted by the COVID-19 pandemic

Next Steps and Sustainability

- The tool is available to all physicians and takes minimal time to input discharge plan/barriers for synchronous communication with case management
- More resident education about discharge planning
- More involvement of the office of patient experience to improve HCAHP

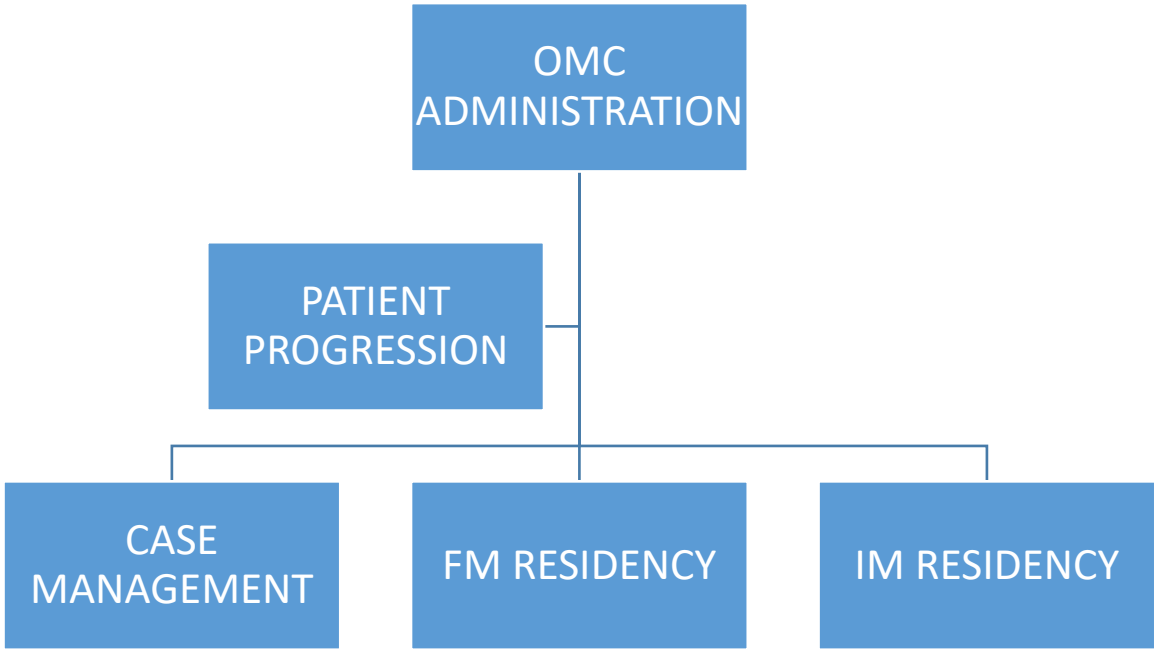
Project Management Plan

Begin completing this Project Management Plan at Meeting One and complete it with your team following Meeting One, i.e., by November 2019. 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:Hackensack Meridian Health Ocean Medical Center Project Tile: Utilizing Inter-Professional Teaming to Reduce Inpatient Length of Stay

I.	Vision Statement (markers of success by March 2021; Refer to Toolkit #6 after meeting one)	*Improve interprofessional teaming with all clinical and nonclinical personnel to achieve patient care excellence and align with our institutional goals of care.*
II.	Team Objectives ('needs statement,' project requirements, project assumptions, stakeholders, etc.)	▪ ***Introduction**:* *Reducing length of stay (LOS) is a network wide initiative, and Hackensack Meridian Ocean Medical Center is committed to achieving the goal of reduction of LOS by 1 day. CMI-Adjusted Length of Stay (LOS) Goal for 2020 is 2.5 days for Hackensack Meridian Ocean Medical Center. Our goal is to utilize inter-professional teaming to reduce length of stay through collaboration.* ▪ ***Aim**:* *To decrease length of stay (LOS) by 1 day at Hackensack Meridian Ocean Medical Center by utilizing enhanced interprofessional communication. The project will continue until this goal is achieved.*
III.	Team Members & Accountability (list of team members from Toolkit #7 [after meeting one] and who is accountable for what)	*Kelly Ussery-Kronhaus, MD (Program Director Family Medicine Residency, project lead)* *Meha Halari, MD (Family Medicine PGY3)* *Julie Tang, MD (Family Medicine PGY 2)* *Kristen Rasinya, LCSW CCM (case management, patient progression)* *Jayme Bland, MSN, RN (case management)* *William Mink, IT analyst (emergency department)* *Chris Bader, DO (Family Medicine Faculty)*

		Ken Kronhaus, MD (Family Medicine Faculty) *Pramil Cheriyath, MD (Program Director Internal Medicine Residency)* *Guiseppe Filice, MD (Internal Medicine PGY 2)*
IV.	Necessary Resources (staff, finances, etc.)	*Epic reports* *Meetings with case management/patient progression/residents/faculty*
V.	Measurement/Data Collection Plan (Refer to Toolkit #2)	***Methods**:* > *Utilizing a newly developed Multi-Disciplinary Rounding Tool in EPIC, virtual multi-disciplinary rounding* > *Monthly implementation team meetings to exchange best practices and areas for improvement* ***HCAHP discharge questions*** > *During this hospital stay, did doctors, nurses or other hospital staff talk with you about whether you would have the help you needed when you left the hospital?* > *During this hospital stay, did you get the information in writing about what symptoms or health problems to look out for after you left the hospital?*

VI.	Stakeholder Communication Plan (may be helpful to draft a flow chart of team members & senior management; Refer to Toolkits #3 and #5)	
VII.	Potential Challenges (engagement, budget, time, skills gaps, etc.; Refer to Toolkit #4)	*Potential Challenges- Comparison groups, patient engagement, transparency of data, engagement of residents/physicians/case management* *Actual Challenges- meeting time because of covid* *Epic implementation* *engagement*

VIII.	Opportunities for Scholarly Activity (potential publications, conference presentations, etc.)	*STFM Practice Improvement conference* *STFM Journal- Family Medicine* *Poster Presentation- network, New Jersey Academy of Family Physicians, AIAMC meeting* *Department Meeting presentation/QIO committee*
IX.	Markers (project phases, progress checks, schedule, etc.; Refer to *NI VII Roadmap to 2021* which will be presented at Meeting One)	*We were able to stay on track and meeting the project milestones through the project.*

Sections X thru XV to be completed first quarter 2021 for "Final Proceedings" booklet:

X.	Success Factors	*The most successful part of our work was the relationships and communication we built between the residents/faculty and case management and patient progression.* *We were inspired by our team work to enable each other to do the best work we could for our patients.*
XI.	Barriers	*The largest barrier encountered was consistency of using the case management tool for asynchronous rounding when the family medicine teaching team changed monthly.* *We worked to overcome this by re-education about the tool at research meetings, adding a teaching time in case management for the residents.*
XII	Surprises	*What surprised you and why? The ease of communication between departments when we identified the right tool/format. The sustainability of the project through covid.*

XIII.	Lessons Learned	*What would be the single most important piece of advice to provide another team embarking on a similar initiative and how to be successful? Identify a clear goal and early on take the time with all stakeholders to identify the best way to achieve the goal and measure it.*
XIV.	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 and how were your results the same or different from your expectations? 8, I think our consistency could have been better and things might have moved along better if we had been able to have more consistent team meetings, which were difficult because of covid restrictions and staffing. It is also less clear to interpret if we achieved our goal then I thought it would be.* *1 2 3 4 5 6 7* ***8*** *9 10*
XV.	Sustainability and Next Steps	What does your CEO need to know to help keep your work sustainable? These kind of interprofessional projects are very valuable and rewarding. Incorporating the residents/GME programs into hospital initiatives will help to achieve goals and make them sustainable. The GME programs can be a good pilot group for projects before rolling them out to the general medical staff. Next steps to continue the project and reinforce our education around using the communication tool.

Designing a Teaming Framework to Align Training to Patient Care Outcomes

Michelle Noltimier, Kelly Frisch, Hannah Van Lith, Ankit Mehta, Scott Faust, Felix Ankel, Rachel Dahms, Julie Maust, Cecily Spencer, Anabel De Juan Gomez, Rochelle Johnson, Meredith Wold, Emily Mishek Brennan, Kathryn Sandgren, Mackenzie Moore

NI VII Meeting #4

Introduction

HealthPartners Institute is uniquely positioned to align Health Professional Education and our organizational strategy by developing a shared understanding of Teaming for Interprofessional Collaborative Practice (ICP).

We have many successful models of teaming already established and have various initiatives that link teaming behaviors to desired patient care outcomes.

This shared vision will inform our approach to training to improve patient care quality and safety.

Objective

Develop a framework to train essential teaming skills that will enable learners to practice with competence and confidence.

Methods

The project team included educators, leaders, clinicians and learners at HealthPartners. The work was divided into five phases, each a few months long:

Phase One: Reviewed literature on teaming, built an inventory of HealthPartners teaming initiatives/efforts , and extracted a list of essential teaming skills from the initiatives.

Phase Two: Work was redesigned due to COVID 19 pandemic's real time effects on teaming in clinical and educational settings.

Phase Three: Identified teaming skills that emerged as essential from the COVID 19 pandemic, compared these to HealthPartners teaming initiative goals, and distilled a core list to incorporate into a curriculum framework.

Phase Four: Created recommendations for future approaches to training for HealthPartners

Phase Five: Assembled findings and prepared a report to disseminate to leadership at HealthPartners seeking support, involvement and calls to action.

Combined Definition of Teaming

"Teaming" is defined as the dynamic flow of a trusted group of diverse and courageous people coming together to collaborate in achieving a well-defined goal. There is mutual respect, adaptability and sharing of knowledge quickly as members are called to action at the right time in service to a common purpose.

Essential Teaming Skills As Evidenced in Practice: Tru-CLASSIC

Trust	• Work is centered around our relationships, putting faith in our co-workers to do their job • Team members are able to ask and answer questions • Transparency and honesty with each other
Communication	• Utilize various methods to share information • Awareness that things may be understood differently by different people • Cadence and focus of information is based on the situational needs, accuracy is important • Willingness to share insights and contributions, ability to call out inequities and bias
Leadership	• Importance of being inclusive from the beginning • Be visible, communicate regularly and transparently • Solve the problems that affect care first, acknowledge front line staff, and address people's personal needs • Connect with the community and others outside of the organization to gain insight
Adaptability	• Able to "wing it" together, change focus based on priorities • Identify those having trouble adapting and offer help • Willingness to lose professional identity in service of patient care
Shared Vision	• Coordination, across a system that shares the same focus and priorities, can be more efficient • Shared purpose unites people • Creation of a playbook for action both within small groups and among the community
Self Awareness	• Practice humility and patience • Check myself and be ok with not knowing the answer • Debrief with others, ask for feedback, keep an open mind
Insynch	• Multidisciplinary team members are essential • Acknowledge the humanness of others, need to address things that people may be dealing with or responding to in their life (racisms, family stressors) • Allow for grief for the old ways and plans • Respond with compassion
Communal	• Hierarchies are broken down; we are connected by the work not the role • Center of gravity is around caregivers and learner • Peer to peer conversations and consultations • Local iterations of new ways of doing work

Discussion

During a time of crisis we were able to get real time feedback on what teaming skills were most effective and important. This aligned with organizational initiatives and was supported in the literature. We were not able to implement training and test effectiveness as originally planned due to the COVID pandemic. However, these findings will be:

Shared with internal leaders and educators, as well as external health systems, schools and students.

Developed as curricula/toolkit for interdisciplinary team learning with learners, leaders in care delivery, HR and quality improvement, and clinicians.

Incorporated into existing curricula and practices. Focus areas include improvement work, human resources processes and documentation, clinical rounding and care model process, and team building days for various care delivery areas.

Tested and measured when incorporated into existing 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 2019. 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 Institute Project Tile: **Designing a Teaming Framework to Align Training to Patient Care Outcomes**

<table>
<tr><td>I.</td><td>Vision Statement (markers of success by March 2021; Refer to Toolkit #6 after meeting one)</td><td>HealthPartners Institute is uniquely positioned to align Health Professional Education and our organizational strategy by developing a shared understanding of Teaming for Interprofessional Collaborative Practice (ICP). This shared vision will inform our approach to training to improve patient care quality and safety. Through our participation in the AIAMC National Initiative VII (NI VII) our objective is to learn about existing teaming efforts across our system, identify essential elements of teaming and pilot new models of training.

Design a training curriculum for learners to practice with confidence and competence using communication and teaming skills to improve patient care outcomes.</td></tr>
<tr><td>II.</td><td>Team Objectives ('needs statement,' project requirements, project assumptions, stakeholders, etc.)</td><td>Design a teaming framework for learners to practice with confidence and competence using communication and teaming skills to improve patient care outcomes.</td></tr>
<tr><td>III.</td><td>Team Members & Accountability (list of team members from</td><td><table>
<tr><th>Name/Credentials</th><th>Position/Title</th></tr>
<tr><td>Michelle Noltimier*</td><td>Director, Program Development and Student Clinical Education</td></tr>
<tr><td>Kelly Frisch*</td><td>Executive Director Health Professional Education</td></tr>
<tr><td>Hannah Van Lith*</td><td>Project Manager</td></tr>
</table></td></tr>
</table>

	Toolkit #7 [after meeting one] and who is accountable for what)	*Ankit Mehta*	*Physician Hospital Medicine/Hospitalist*
		Scott Faust	*Nurse Practitioner Hospital Medicine*
		Felix Ankel	*Medical Director Health Professional Education, Physician Emergency Medicine*
		Rachel Dahms	*Director of Medical Student Education, Physician Emergency Medicine*
		Julie Maust	*GME Accreditation and CLER Consultant*
		Cecily Spencer	*Director of Operations Health Professional Education*
		Anabel DeJuanGomez	*Manager of Patient Experience- Regions Hospital*
		Rochelle Johnson	*Director of Nursing- Birth Center -Regions Hospital*
		Meredith Wold	*APC Fellowship Central Director*
		Emily MishekBrennan	*Director of Patient Safety and Accreditation- Methodist Hospital*
		Kathryn Sandgren	*Pharmacy Resident*
		Mackenzie Moore	*Surgery Resident*
IV.	Necessary Resources (staff, finances, etc.)	*To produce this work, we need the team members listed above (who span leadership, practicing physicians, learners and educators) to attend 4-6 meetings and contribute an additional 20-30 minutes to interviewing current initiatives that are focusing on teaming within HealthPartners.*	

V. Measurement/Data Collection Plan (Refer to Toolkit #2)

Our initial goal for measurement:

OUTCOME *(what is the measure of interest being evaluated as a result of the intervention)*	*DATA COLLECTION* *(how will the data be collected, i.e. timepoints, tool used)*	*METRIC(S)* *(measures used to evaluate the outcome)*	*ANALYSIS PLAN /APPROACH* *(qualitative/quantitative methods used to assess the metric)*	*LIMITATIONS/BARRIERS* *(what barriers may exist)*
Inventory of current practices of Interprofessional collaborative practice across the HealthPartners system in various practice settings	*Team will develop the tool to compile methods of IPCP and training*	*Determine the number and variation in current approach*	*Determine common themes* *Identify essential elements needed and any gaps in training compared to the literature.*	*May not be able to capture all of these activities in all settings within the system*
Identify the training methods used for new hires or trainees. *Determine if any evaluation methods are used to determine effectiveness on patient care*	*Team will develop the tool to compile methods of IPCP and training*	*Determine the number and variation in current approach*	*Determine common themes* *Identify essential elements needed and any gaps in training compared to the literature.*	

VI.	Stakeholder Communication Plan (may be helpful to draft a flow chart of team members & senior management; Refer to Toolkits #3 and #5)	*The project leader and project manager will communicate regularly with the team members via meetings. Sponsors and management will be consulted as needed to surmount barriers as the project progresses. Findings and information will be shared with project sponsors and leadership when the work is complete and can be disseminated for utilization within HealthPartners training programs.*
VII.	Potential Challenges (engagement, budget, time, skills gaps, etc.; Refer to Toolkit #4)	*Our barriers include: getting a clear understanding of current state in a large and complex care system that is representative of most practice areas. Outline a clear path to coordinate the engagement of learners who are already busy in the care of patients and other learning activities. Develop a meaningful analysis of self- reflection results when evaluating the effectiveness of training that has the most impact on patient care outcomes.*
VIII.	Opportunities for Scholarly Activity (potential publications, conference presentations, etc.)	*This work is being done primarily for internal use, but as the framework develops and is tested, it could be written for publication or shared at a conference.*
IX.	Markers (project phases, progress checks, schedule, etc.; Refer to *NI VII Roadmap to 2021* which will be presented at Meeting One)	*The work was divided into 5 phases:* ***Phase One:*** *Reviewed literature on teaming, built an inventory of HealthPartners teaming initiatives/efforts, and extracted a list of essential teaming skills from the initiatives.* ***Phase Two:*** *Work was redesigned due to the COVID-19 pandemic's real time effects on teaming in clinical and educational settings.* ***Phase Three:*** *Identified teaming skills that emerged as essential from the COVID 19 pandemic, compared these to HealthPartners teaming initiative goals, and distilled a core list to incorporate into a curriculum framework.* ***Phase Four:*** *Created recommendations for future approaches to training for HealthPartners* ***Phase Five:*** *Assembled findings and prepared a report to disseminate to key stakeholders within HealthPartners seeking support, involvement and calls to action.*

Sections X thru XV to be completed first quarter 2021 for "Final Proceedings" booklet:

X.	Success Factors	*The most successful part of our work was….* *The team stayed engaged and found the project meaningful and practical to inform our approach to training others.* *We have a strong foundation on which we can rely to move this work forward in a practical and meaningful way.* *We were inspired by….* *Resiliency and insight of team members on how important being a good team member is to patient care and the outcome of our educational initiatives.*
XI.	Barriers	*The largest barrier encountered was….* *The COVID-19 Pandemic hit just after our work plan had been formed, and required us to put our work aside, as team members were needed elsewhere.* *We worked to overcome this by….* *By the time that the group was able to gather again, it was quickly realized that the pandemic offered us a different opportunity to expand upon the beginning of our work. We had already compiled our inventory, and decided to expand upon that with real-time learnings due to the pandemic.*
XII	Surprises	*What surprised you and why?* *A 15 minute interview can give you rich information.* *People's raw honesty and feedback in discussion constructed a safe place to share and create.* *Team stayed engaged because the work was meaningful.* *Practical real life examples defined our approach.* *Virtual meetings worked well.*
XIII.	Lessons Learned	*What would be the single most important piece of advice to provide another team embarking on a similar initiative and how to be successful?* *To remain flexible and willing to adapt when things don't go as planned. The unexpected opens up incredible opportunity for learning and sharing.*

XIV.	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 and how were your results the same or different from your expectations?* *1 2 3 4 5 6 7 8 9 10* *We were not able to incorporate our essential elements of teaming into a pilot training and test it on learners. The COVID-19 pandemic gave us the opportunity to see the real-time effects on teaming and adjust our list of essential elements of teaming accordingly. With our experience responding to the* ***COVID 19 pandemic*** *we were able to incorporate learnings from both the clinical setting and our educational structure to design a teaming framework for future training.*
XV.	Sustainability and Next Steps	*What does your CEO need to know to help keep your work sustainable?* *An executive summary of our work was created to share with key stakeholders across the organization.* ***Share more broadly and get feedback*** • *Internal- Institute Leaders, Care Delivery Leaders, Clinician Educators, Nursing Educators, Human Resource and Quality Improvement Leaders* • *External -Health Systems, Schools, Students and other GME Program Leaders* ***Develop Curricula/Toolkit for Interdisciplinary Team Learning*** • *Learners- residents, fellows and students with longitudinal experiences* • *Leaders- care delivery, human resources, quality improvement* • *Clinicians- preceptors, practicing physicians, physician assistants, nurse practitioner* • *Consider using Medical Improv as a tool to engage all clinical staff as a team.* ***Incorporate into existing curricula and practices*** • *Improvement work- identifying and mitigating safety concerns at the moment* • *Human Resources- performance reviews, Interviews, onboarding* • *Clinical- bedside rounding, care model process changes* • *Team building days for various care delivery areas*

		Test/measure skills • *Determine elements to measure after curriculum and tool kit has been created.* • *Measure effectiveness of teaming when incorporated into existing practices.* *The intention is for this to be shared, along with a call to action for anyone who works in the organization and wants to help promote teaming. People can be a:* — ***Champion*** *Serves as a point of contact for others if there are questions around what teaming is and how it can be used in practice* — ***Liaison*** *Connects with others in Human Resource, Quality, Patient Experience to incorporate teaming principles, concepts and competencies into everyday practices.* — ***Consensus Builder*** *Assists with sharing the newly designed teaming framework with stakeholders both internal and external to get additional feedback and recommendations. Create and deliver key messages to stakeholders and compile feedback.* — ***Toolkit Designer*** *Assembles a user friendly resources for individuals, teams, leaders and faculty interesting in implementing teaming in everyday practice* — ***Curriculum Designer*** *Contributes to the build of specific teaming curriculum using techniques such as Medical Improv that can be applied in a variety of settings. Curriculum can be tailored to learners, clinicians and leaders based on interest and support.* — ***Researcher*** *Establishes a process to measure the essential teaming skills by using existing tools or conducting further studies.* — ***Teaming Faculty*** *Provide instruction using the designed curriculum and toolkit items to individuals and teams seeking to strengthen their teaming skills*

Teaming to Create a Culture of Inclusivity and Health Equity

Alethea Turner DO, FAAFP; Cynthia Kegowicz MD; Darlene Moyer MD, FAAFP; Ashley Dyer-Giaquinto MD, FM PGY3; Yiwen Richard Liang MD, FM PGY3

HONORHEALTH

National Initiative

NI VII Meeting #4

INTRODUCTION: Background

- Health inequity disproportionately affects racial and ethnic minorities in the United States[1]
- The COVID-19 pandemic accentuated this; Black, Latino and Indigenous populations are more than 2x as likely to die of COVID-19 than White people in the US[2]
- Structural racism plays a vital role in perpetuating "discriminatory beliefs, values, and distribution of resources," which directly affect population health[3]
- Our Family Medicine residents and faculty identified a need to provide a framework for education, conversation and reflection focused on discrimination and health inequity

References

1. https://www.cdc.gov/minorityhealth/
2. https://www.apmresearchlab.org/covid/deaths-by-race
3. Bailey ZD, Krieger N, Agénor M, Graves J, Linos N, Bassett MT. Structural racism and health inequities in the USA: evidence and interventions. Lancet. 2017 Apr 8;389(10077):1453-1463

AIM

- By June 2021, we will develop and implement a longitudinal curriculum that increases resident and faculty understanding of topics related to health equity, and strengthens our program's culture of diversity and inclusivity.

METHODS: Interventions/Changes

- A program committee was created, consisting of faculty and resident representatives from each class
- A formal role for resident leaders in the area of Equity, Diversity and Inclusivity (EDI) was developed = EDI Champions
- Protected time was secured for quarterly program-wide EDI sessions

Committee	• Develop longitudinal curriculum • Research and develop seminar session content
Champions	• Share updates, events and reminders at leadership meetings • Facilitate EDI sessions
Scholarship Team	• Develop metrics; create and distribute surveys • Analyze data

METHODS: Measures/Metrics

- EDI Sessions were both educational and interactive
- Likert questions were developed with a 5-point answer scale

Strongly Agree | Agree | Neutral | Disagree | Strongly Disagree

- Pre and post session surveys were distributed to all participates via email and QR code, utilizing Survey Monkey
- Anonymous answers were analyzed after each session

Before 1st Session & After Each Session

- Our residency culture supports diversity and inclusion

Before & After 1st Session – Implicit Bias

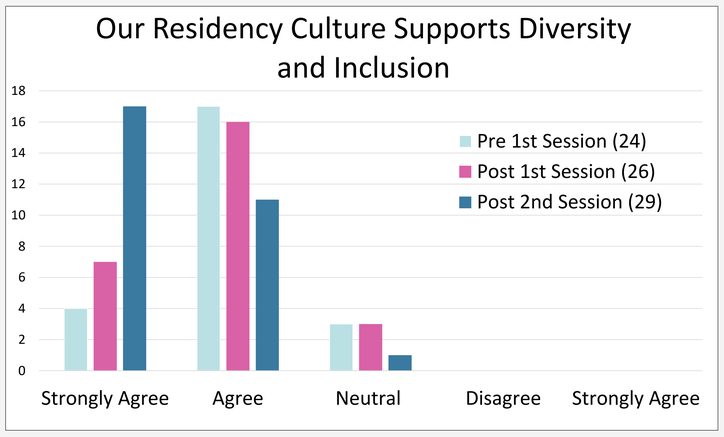
- I understand the concept of implicit bias and the role it plays in medicine

Before & After 2nd Session – Equity, Equality, and Privilege

- I understand the concepts of equity and privilege, and the role they play in medicine

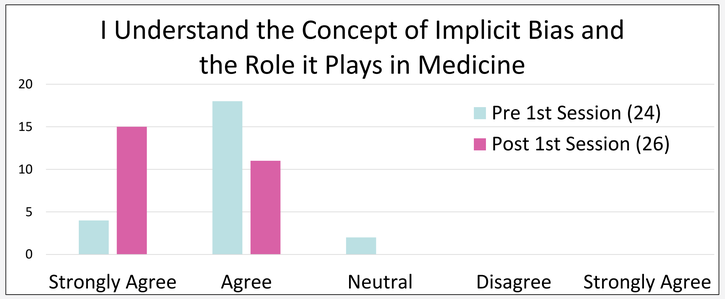
- Kruskal-Wallis and Mann-Whitney U Tests were utilized to assess statistical significance

RESULTS

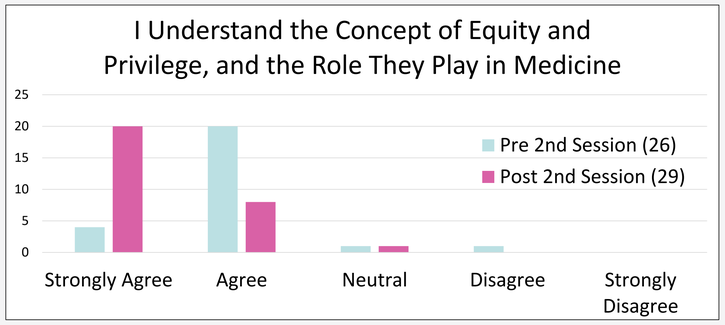


- After the 1st session, the median score improved significantly compared to baseline, p=0.042
- The median score improved even more after the 2nd session, p=0.006

RESULTS: Continued



- After the 1st session, the median score improved significantly, p=0.002



- The median score significantly improved after the 2nd session as well, p<0.001

DISCUSSION

Key Findings

- Positive impact on our program's culture and individual knowledge, after 2 sessions
- "Thought-provoking," "Powerful discussion," "Made me think of ways to approach equity and health disparities with patients," are just a few remarks participants have shared

Limitations

- Introduction of session topics that have not been previously discussed; content development
- Social distancing and limitations on group size

Next Steps and Sustainability

- Ongoing development of content
- Integration of sessions across all institutional GME programs
- Participation of EDI Champions in network wide EDI initiatives

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 2019. 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: HonorHealth **Project Tile:** Teaming to create a culture of inclusivity and improved health equity

I.	Vision Statement (markers of success by March 2021; Refer to Toolkit #6 after meeting one)	*** Revised due to COVID 19* "By June 2021, we will develop and implement a longitudinal curriculum that increases resident and faculty understanding of topics related to health equity, and strengthens our program's culture of diversity and inclusivity."
II.	Team Objectives ('needs statement,' project requirements, project assumptions, stakeholders, etc.)	• Health inequity and social determinates of health are major factors effecting health outcomes. These issues disproportionately affect ethnic and racial minorities. We identified a gap in our education for teaching residents and faculty about historical events, present day concepts, and other issues perpetuating these inequities. Not only did we want to better educate ourselves, but we wanted to create a safe place for reflection and dialogue. • Assumption – this would positively affect the culture of FM program, expand knowledge and understanding • Requirements - Create protected time for participants, Research and develop content, write curriculum, collect and analyze data • Stakeholders – Program director, faculty, residents, academic affairs/DIO, VP of Diversity
III.	Team Members & Accountability (list of team members from Toolkit #7 [after meeting one] and who is	Primary Team: Regular meetings, data collection and analysis, presentation/poster composition • Faculty Lead – Alethea Turner

	accountable for what)	• Other Faculty – Darlene Moyer, Cynthia Kegowicz • Residents – Richard Liang, Ashley Dyer Adjunct Team: Regular meetings, content research and development, creating written curriculum • EDI committee (Faculty members above w/ addition of Sam Tytler, Andrea Darby-Stewart, Dmitry Bisk, and EDI Resident Champions: Jennifer Perry, Jeff Wang, Monica Chaung, Karina Luera, Casey Peterson)
IV.	Necessary Resources (staff, finances, etc.)	• Librarian Team – literature research, protected time for participants
V.	Measurement/Data Collection Plan (Refer to Toolkit #2)	• Team decided on survey monkey before and after each session, measuring results on Likert scale • Statistician to identify if our change from the median, was statistically significant or not
VI.	Stakeholder Communication Plan (may be helpful to draft a flow chart of team members & senior management; Refer to Toolkits #3 and #5)	• Project and Results to be shared at Graduate Medical Education Committee Meeting w/ DIO and representatives from other residency programs and academic affairs

VIII.	Opportunities for Scholarly Activity (potential publications, conference presentations, etc.)	Plan to submit for poster presentation and possible conference seminar. Maybe publication as well. Plan to 1st complete last 2 session of this academic year.
IX.	Markers (project phases, progress checks, schedule, etc.; Refer to *NI VII Roadmap to 2021* which will be presented at Meeting One)	Brainstorming, content research and development, data collection, analysis, review of progress and future steps, curriculum creation. We have completed the curriculum and are in the process of developing our last 2 sessions for this academic year.

Sections X thru XV to be completed first quarter 2021 for "Final Proceedings" booklet:

X.	Success Factors	*The most successful part of our work was….* Channeling feelings of unrest and injustice due to current events, into something meaningful and positive. Lots of engagement from the get go from residents, faculty, and institution. *We were inspired by….* Social injustice and health inequity among minorities
XI.	Barriers	*The largest barrier encountered was….* Having to switch gears 1 year into our original project. *We worked to overcome this by….* Regrouping with team and listening to concerns among faculty and residents regarding racial injustice to point us in a new direction
XII	Surprises	*What surprised you and why?* How invigorating this project became. Was a joy to work on and not a burden.

XIII.	Lessons Learned	*What would be the single most important piece of advice to provide another team embarking on a similar initiative and how to be successful?* Don't be afraid to switch gears. Be in tune with the needs of the group. You don't have to be an expert in the field to open up a dialogue – just be vulnerable, honest and curious.
XIV.	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 and how were your results the same or different from your expectations?* *1 2 3 4 5 6 7 8 9 10 (0 from original project. 9 from revised project).* *The results were even better than expected.*
XV.	Sustainability and Next Steps	What does your CEO need to know to help keep your work sustainable? Collaborate w/ faculty, keep the dialogue alive by engaging physicians and staff outside of Academic Affairs

Vallejo Mobile Health: Teaming For an End to Homelessness

Emily Fisher, MD; Ted O'Connell, MD; Kat Dang, MS, MAS; Siddharth Selvakumar;
Jung Kim, PhD, MPH; Joelle Lee MPH; Vanessa Franco, MD;
Theresa Azevedo-Rousso, DIO; Angela Jenkins; Michelle Loaiza

KAISER PERMANENTE® Northern California Residency & Fellowship Programs

VMH Vallejo Mobile Health — Providing Free Health Care to Our Community

National Initiative — NI VII Meeting #4

INTRODUCTION: Background

- 1151 people are currently living without homes in Solano County (2019 Solano County Homeless Census and Survey).
- Top reasons to preventing an exit from homelessness: Lack of assistance with employment placement, rent/mortgage, alcohol/drug counselling, and mental health services.
- Vallejo Mobile Health is a street outreach team providing free medical care and resource facilitation
- Project Room Key(PRK) is a state-funded initiative to offer housing in hotels to people without homes at most risk for COVID

Aim/Purpose/Objectives

- We strive for wellness and the long-term goal of facilitating housing stability for people without homes through the culturally-informed provision of supportive services including, but not restricted to, mental health, housing assistance, and case management.
- By March 2021, we will formalize the partnerships we have developed at Project Room Key to continue integration of mobile medical care with social services and expand to additional transitional housing sites.

METHODS: Measures/Metrics

Measure #1: Basic Demographics

- Project Room Key offers a rare opportunity to measure and learn about patients experiencing homelessness in our community.

Measure #2: Utilization Behavior

- Patients experiencing homelessness that are also uninsured and lack a regular PCP are at risk of being high utilizers of the healthcare system.

Measure #3: Process Measures

- Tracking the number and types of visits over time can show how various factors affect the delivery of our medical care and highlight prevalent health concerns in our patient population.
- This data enables us to improve the quality and efficiency of the care we give to our patients.

METHODS: Interventions/Changes

Pre COVID-19 Plan:

- Integrate medical care with mobile outreach and improve referral workflow process.
- Track a) patient utilization with referrals, b) ED and primary care visit, c) the patient experience.

Step 1: Asset mapping >completed

10 team members contacted 17 city and county-based organizations to create a comprehensive referral resource/asset map answering the following questions:

- What services do you offer and how do we refer?
- Do you have any outreach members to partner with us?
- Do you have recommendations for other organizations?

Step 2: implementation at outreach sites>completed

Post COVID-19 Plan:

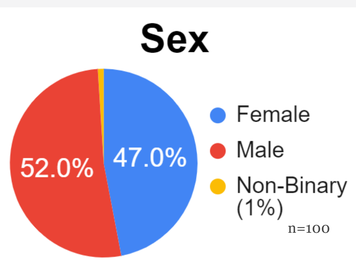
- Integrate medical care with Project RoomKey, formalize partnerships, integrate social services, expand to additional transitional housing sites.
- Track same variables as above and coordinate data collection with other service providers.

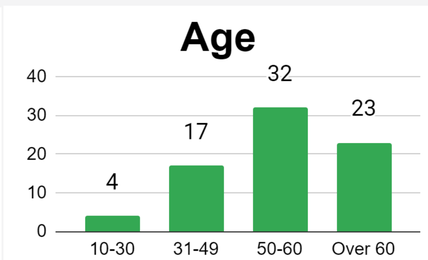
Our Team:

- Vallejo Mobile Health and 4th Second
- Kaiser Permanente Northern CA Graduate Medical Education
- Kaiser Napa-Solano Family Medicine Residency Program
- Kaiser Napa-Solano Public Health Internship
- One Love Center for Health and Touro University
- Fighting Back Partnership and Unity Care

RESULTS

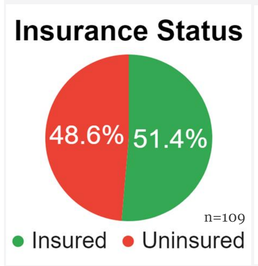
Measure #1: Basic Demographics

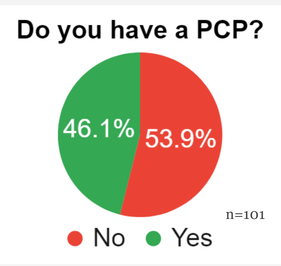


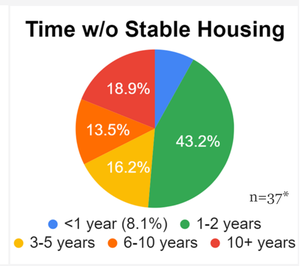


RESULTS: Continued

Measure #2: Utilization Behavior

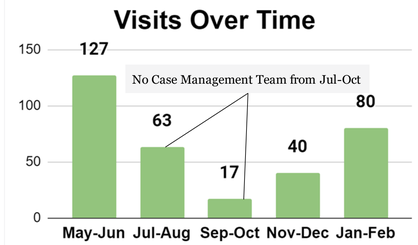


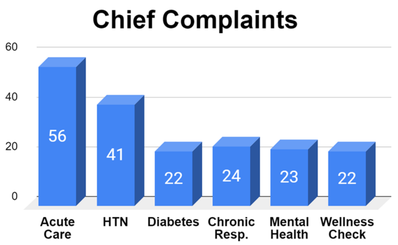




*many patients did not remember/declined to answer

Measure #3: Process Measures





Discussion

Key Findings

- We were able to care for over 100 distinct patients over the course of 18 months. Patients were seen at outreach sites and PRK. Most issues seen were acute care.
- We developed a comprehensive, easy to use resource guide for easier referrals.
- At PRK, encounter numbers dropped significantly when on-site case management was lost, highlighting importance of partnering in care.

Limitations

- COVID-related restrictions of in-person work for research and clinical support.
- Navigating the complexities of different healthcare systems.
- Mobile nature of the patient population.
- Sustainability of volunteer-based workforce.

Next Steps and Sustainability

- Continue to adapt to pandemic challenges.
- Develop health system 'point providers' to navigate each 'medical home.'
- Coordinate data collection across health systems and service providers.
- Develop student and resident rotations.

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 2019. 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: **Kaiser Permanente Northern California** **Project Tile:** **Vallejo Mobile Health : Teaming for an End to Homelessness**

I.	Vision Statement (markers of success by March 2021; Refer to Toolkit #6 after meeting one)	*We aim to use a multi-disciplinary, community-based team to improve the wellness and health of people without homes in Vallejo. We strive for wellness and the long term goal of facilitating housing stability for people without homes through the culturally-informed provision of supportive services including, but not restricted to, mental health, housing assistance, and case management.*
II.	Team Objectives ('needs statement,' project requirements, project assumptions, stakeholders, etc.)	*Kaiser Vallejo serves an incredibly diverse racial/ethnic and socioeconomic population. Access to affordable housing is an ongoing disparity across the Bay Area, and the country at large. The partnerships between Kaiser Permanente Northern California, Vallejo Mobile Health (VMH) and Project Room Key addresses community health, homelessness, and access to care to vulnerable populations in Vallejo. The project seeks to enhance the team structure by adding a leadership team and broaden our resource coordination abilities with the addition of mental health providers, case managers, and student pharmacists. Partnering with VMH, there is interest from nurses, medical assistants, behavioral medicine, community members, local FQHC physicians, residents, medical students, physician assistant students, pharmacy students, and MPH Students.*
III.	Team Members & Accountability (list of team members from Toolkit #7 [after meeting one] and who is accountable for what)	***Team Leader:*** *Emily Fisher, MD* ***Executive Liaisons:*** *Ted O'Connell**,** MD**,** Theresa Azevedo, Angela Jenkins* ***Steering Project Coordinator:*** *Michelle Loaiza* ***Program Outcomes Coordinator:*** *Kat Dang, MS, MAS* ***Program Outcomes Intern****: Siddarth Selvakumar*

		Community Outreach Team: *Joelle Lee, MPH, Vanessa Franco, MD* ***Teams Expert:*** *Jung Kim*
IV.	Necessary Resources (staff, finances, etc.)	• *Project Manager* • *Time* • *Travel* • *Supplies*
V.	Measurement/Data Collection Plan (Refer to Toolkit #2)	*Measurement outcomes include staffing of VMH, housing resources, primary care visits, and access to Medicaid or other health insurance. Survey tools are utilized for qualitative/quantitative measurements.* *End-of-clinic Summary: number of patients seen, rates of specific diseases, referrals given by type of service* *Referral Follow-up: volunteers call to follow up with patients receiving referrals to track the utilization behavior of referrals* *ED and Primary Care Utilization: measured in end-of-clinic summary as aggregate data of responses on encounter forms* *Qualitative Feedback: volunteers can comment on the interventions and make suggestions on end-of-clinic summary*
VI.	Stakeholder Communication Plan (may be helpful to draft a flow chart of team members & senior management; Refer to Toolkits #3 and #5)	*Pre Covid- Asset mapping in the local community to establish a referral resource. AiAMC leadership team communicates with VMH student leadership to coordinate outreach days and resource facilitation* *Post-COVID: Establish partnership with VMH and Project Room Key. Community experience which includes a diverse group of medical professionals, residents, physicians, staff, and volunteers. Kaiser AIAMC team coordinates with VMH and One Love Center for Health. The organizations work directly with Project Room Key, City of Vallejo, and Onsite Case Management and County Navigator Teams*
VII.	Potential Challenges (engagement, budget, time, skills gaps, etc.; Refer to Toolkit #4)	*Potential challenges include:* • *Time constraints (work hours/shifts, personal time)* • *Lack of follow up by the patient*

		• *Volunteer commitments* • *Robust and complex organizational context at KP* • *Challenge of coordinating across multiple service providers*
VIII. .	Opportunities for Scholarly Activity (potential publications, conference presentations, etc.)	*Opportunities:* • *Kaiser Napa-Solano Research Week Symposium* • *UCSF Community Medicine Colloquium* • *Collaboration with One Love Center for Health and Touro University in publications with the Journal for Underserved Medicine*

IX.	Markers (project phases, progress checks, schedule, etc.; Refer to *NI VII Roadmap to 2021* which will be presented at Meeting One)	*Assess:*
		• *Using pre-existing framework of Vallejo Mobile Health, conduct needs assessment and asset mapping to delineate project focus for AIAMC National initiative*
		  ○ *Marker: Completed resource guide and clear mission for NI VII*
		Design
		• *Design implementation strategy for new resource guide and workflow for referrals*
		• *Plan for measurement of referrals given and plan for follow up*
		  ○ *Marker: newly crafted progress notes and referral forms for us at VMH*
		Test
		• *Implement strategy put into place at VMH outreach day*
		• *Begin new data entry system*
		
		Re-Assess with COVID
		• *Design new implementation strategy and data collection method at Project Room Key*
		
		Current Phase: Project Room Key Collaborative Project
		• *Continued services for PRK patients until project conclusion*
		• *Create formal way for providers from each health system to sustainbly see their patients in the PRK context*
		• *Established relationship with organizations working with PRK*

		○ *Monthly check-ins to discuss next steps and share collected data* *Transitional Phase: PRK project end date finalized* ● *Work with partnered organizations to ensure smooth transition of PRK patients to permanent/temporary stable housing and set up with long-term PCP* ● *Prepare to resume independent functionality of VMH by reorganizing clinic logistics, personnel, and strengthening relationships with local encampments and community heads* *VMH resumes role as mobile clinic* ● *Utilize relationships built with community organizations and government to strengthen resource desk* ● *Integrate use of HMIS database and coordinated entry system for effective and collaborative support of patients needing resources, housing, etc.* **Note: Specific timeline dependent on factors outside of VMH control: City budget allocation, hotel cooperation, partnered organizations' support, etc. However, steps to prepare for a smooth transition out of Project Room Key are already being taken.*

Sections X thru XV to be completed first quarter 2021 for "Final Proceedings" booklet:

X.	Success Factors	*The most successful part of our work was the ability to pivot to take advantage of the opportunity presented by Project RoomKey. We were able to advance our project by stepping in to provide the needed medical component to the program. In so doing, we were able to provide an important piece of the inter-professional team that we had been trying to create.* *Prior to COVID, the collaborative nature of the team and successful delegation enabled the creation of a comprehensive, easy to use resource guide for Solano County.*

XI.	Barriers	*While COVID actually catalyzed the unique opportunity of Project RoomKey, it also significantly changed the on-site support team. Medical students could no longer participate (for several months), and the AiAMC team became almost entirely remote. We were operating as two separate entities: the AiAMC team and the small group at the Project Room Key hotel trying to maintain operations.* *The health system itself also acted as a barrier. The concept of the "medical home" actually worked against some of these patients since they are transient. For many, this prevented insurance coverage from being transferred or prevented service access because they were assigned to a different clinic in another county. In addition, communicating with patients' PCPs across 3 different clinic systems proved challenging in a timely and HIPAA-compliant manner.*
XII	Surprises	*Gathering data in an organized fashion across multiple service providers was surprisingly difficult. Each group either organized information differently, didn't collect the information we would have expected, or collected information in unusable ways.* *It was surprising that, for some, having a roof over their heads negatively impacted health due to poor conditions of the second hotel.* *It was also surprising and inspiring to incorporate Nurse Practitioner students who were always eager to take action and step in when needed.*
XIII.	Lessons Learned	*We would advise the next group to establish data plans across the service providers from the very beginning, and make as much of the collection as easy as possible so that it actually gets done.* *We would also advise developing a method to create accountability and consistency in the volunteer base as soon as possible. We eventually found this in creating a Nurse Practitioner student rotation.*

XIV.	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 and how were your results the same or different from your expectations?* *1 2 3 4 5 6 7 8 9 10*
XV.	Sustainability and Next Steps	What does your CEO need to know to help keep your work sustainable? *We need to move towards a formalized model of this program. Volunteer solutions, even with built in accountability, require a plan for sustainability. We have begun the framework for pilot programs to allow providers from each health system to have designated time to care for their patients at the hotel. This could be an incredible opportunity to provide timely, high quality care to a population for whom this is typically very difficult.* *We must see the example of service coordination and on-site intensive case-management and medical partnerships as a chance to bring the appropriate level of care to this group.*

Nurturing Collaborative Skills in the Clinical Learning Environment

Sandra Ross, LSW, Elena Umland, PharmD, FNAP, Katherine Pang, DO, Drew Kopicki, DO,
Joanna Dixon, MSN, RN, CEN, Eleanora Yeiser, DO,
Salma Mami, Barry D. Mann, MD

NI VII Meeting #4

INTRODUCTION: Background

Training for healthcare workers is often siloed with limited opportunity for interaction with other disciplines prior to graduation. Only when they graduate and start working do they interact with other disciplines through a team-based approach to medicine. Main Line Health and Jefferson are clinical rotation sites for multiple disciplines and have recognized an opportunity to incorporate interprofessional training during clinical rotations. Our goal is to increase awareness and appreciation for interprofessional collaboration among students from various disciplines through monthly discussion-based case conferences and patient encounters.

Aim/Purpose/Objectives

- Instill a sense of confidence working with an interprofessional team to improve patient care.
- Assess interventions to demonstrate impact.
- Determine replicability of the project with our academic affiliate, Jefferson.

METHODS: Interventions/Changes

- A series of 5 case conferences involving student participants from multiple disciplines were created and delivered by family medicine residents and advanced nursing candidates
- Disciplines involved: medical assistants, medicine, nursing, occupational therapy, pharmacy, physical therapy, respiratory therapy, social work
- Students worked in interprofessional teams to discuss a case with a focus on identifying the value of each member of the team in addressing various elements of the case
- Small groups responded to discussion questions throughout the case conference and then reported to the larger group
- IRB approval obtained at Main Line Health and Jefferson

METHODS: Measures/Metrics

- Interprofessional Collaborative Competency Attainment Scale (ICCAS): a 21-item self-assessment tool ranked on a scale of 1-5 (1 being “poor”, 5 being “excellent”) in two parts (“before participating in this activity” and “after participating in this activity”) that evaluates participants’ perception of ability to demonstrate behaviors related to collaborative care.
- ICCAS was distributed at the conclusion of case conferences via QR Code and link to online evaluation

RESULTS

102 student participants responded to the ICAS survey. 64.7% of the students responded that they had less than 5 hours of prior interprofessional education

Table 1: Frequency of Genders in the Sample

Response	Frequency
Female	76
Male	25
N/A	1

Table 2: Frequency of Disciplines in the Sample

Discipline	Frequency
Medical Assistant	1
Medicine	16
Nursing	21
Other - Please write “other” below	17
Pharmacy	7
Physical Therapy	2
Respiratory Therapy	35
Social Work	3

Table 3: Frequency of responses to the Hours of IPE Question

Response	Frequency
0-5 hours	66
6-10 hours	14
10-15 hours	8
16-20 hours	4
21 + hours	10

RESULTS: Continued

There was a significant difference in reported Interprofessional Competency Attainment with the post-intervention scores averaging almost a standard deviation higher than the pre-intervention scores $t(101) = 8.69$, $p < .001$, $d = 0.86$. Table 4 looks are the outcome of the pre-and-post responses, with students noting improvement in their comfort with interprofessional collaboration after attending one of our sessions.

Table 4: Descriptive Statistics for ICCAS Before and After responses for the entire sample

	n	mean	sd	median	se
Before	102	3.90	0.82	4.00	0.08
After	102	4.48	0.56	4.72	0.06

No significant difference was found when stratifying by mode of presentation (in-person vs virtual), gender, or discipline, suggesting the program was successful in increasing competency for all participants.

Discussion

- **Key Findings**

Student’s overall self reported competency for interprofessional collaboration improved after participating in an interprofessional case discussion.

- **Limitations**

Small sample size and disproportionate representation among participating specialties

The other category was large, making it hard to generalize results. Osteopathic medical students identified as ‘other’ when responding to the discipline question on the survey instead of medicine.

- **Next Steps and Sustainability**

1. Results of this study are promising and show additional research is needed.

2. The model can be replicated at other sites and virtually without compromising the intended outcomes.

3. Provide additional opportunities for interprofessional education in the clinical learning environment through interprofessional rounding.

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 2019. 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: Main Line Health **Project Tile: Nurturing Collaborative Skills in the Clinical Learning Environment**

I.	Vision Statement (markers of success by March 2021; Refer to Toolkit #6 after meeting one)	We strive to create a sustainable model of bringing students from various disciplines together to learn about, from, and with each other. The ultimate goal is to develop an appreciation for the value of professional teaming to improve patient outcomes.
II.	Team Objectives ('needs statement,' project requirements, project assumptions, stakeholders, etc.)	Training for healthcare workers is often siloed with limited opportunity for interaction with other disciplines prior to graduation. Only when students graduate and start working do they interact with other disciplines through a team-based approach to medicine. Main Line Health and Jefferson are clinical rotation sites for multiple disciplines and have recognized an opportunity to incorporate interprofessional training during clinical rotations. Our goal is to increase awareness and appreciation for interprofessional collaboration among students from various disciplines through monthly discussion-based case conferences and patient encounters. Students from multiple disciplines will be invited to attend monthly case conferences that are delivered by family medicine residents and advanced nursing candidates. Students from medicine, nursing, physical therapy, occupational therapy, respiratory therapy, social work, pharmacy, and medical assistants will be invited to participate. The students will be divided into interdisciplinary teams to discuss the case with an emphasis on identifying the value of each member of the team in addressing various elements of the case. The Interprofessional Collaborative Competency Attainment Scale (ICCAS) will be distributed to participants to determine if the program is successful at increasing student perception of their ability to work in interprofessional teams.

		Program will be run with students rotating at Main Line Health and Jefferson Center City.
III.	Team Members & Accountability (list of team members from Toolkit #7 [after meeting one] and who is accountable for what)	- Sandra Ross, LSW, MSW – Manager, Undergraduate Medical Education; team leader - Elena Umland, PhD (Pharmacy) – Associate Dean of Academic Affairs, Co-Director, Jefferson Center for Interprofessional Education; assist with implementing program at Jefferson Center City, data analysis - Barry Mann, MD – Chief Academic Officer, Main Line Health; ensure project aligns with system goals, update C-suite - Joanna Dixon, MSN, RN, CEN – Emergency Department Clinical Nurse Educator, Nurse Residency Coordinator; engage nursing in interprofessional sessions, arrange for nurse co-facilitators - Katherine Pang, DO – Family Medicine Resident, City Line Family Medicine; develop case presentations, facilitate case conferences, identify resident to assume responsibility for program in 2021-2022, data collection - Elenora Yeiser, DO – Family Medicine Resident, Bryn Mawr Family Practice; develop case presentations, co-facilitate interprofessional sessions, assist with developing protocol for integration into clinical learning environment (interdisciplinary rounding, case review, etc.) - Drew Kipicki, DO – Family Medicine Resident, City Line Family Medicine; facilitate interprofessional sessions, develop case presentations, assume responsibility for program in 2021-2022 - Salma Mami -Administrative Assistant – Coordinate team meetings and interdisciplinary conferences; assist with review and revision of posters/presentations; assist with data analysis

IV.	Necessary Resources (staff, finances, etc.)	- Nursing and resident facilitator for sessions - Coordinator to oversee events and manage invitations - Statistician for data analysis - Zoom account for virtual sessions
V.	Measurement/Data Collection Plan (Refer to Toolkit #2)	The Interprofessional Collaborative Competency Attainment Scale (ICCAS) is a 21-item self-assessment that uses a 5-point Likert scale (1=Poor; 5=Excellent) to evaluate the participants' perception of their ability to demonstrate behaviors related to interprofessional collaborative care competencies. The survey was provided to participants via QR Code and link to online evaluation at the end of each interprofessional session. Per the validation studies for this tool, aggregate scores were used for analysis.
VI.	Stakeholder Communication Plan (may be helpful to draft a flow chart of team members & senior management; Refer to Toolkits #3 and #5)	Sandra Ross and Salma Mami will schedule routine team meetings and case conferences. Dr. Mann will provide updates to the C-Suite regarding the project. Elena Umland will communicate updates to Jefferson Center of Interprofessional Practice and Education (JCIPE) and engage residents and faculty at Jefferson Center City.
VII.	Potential Challenges (engagement, budget, time, skills gaps, etc.; Refer to Toolkit #4)	• Scheduling conferences at a mutually convenient time for all participating disciplines. • Training facilitators to be effective and engaging students on virtual platform. • Data collection, particularly when moving to a virtual platform for sessions.
VIII.	Opportunities for Scholarly Activity (potential publications, conference presentations, etc.)	Jefferson Center for Interprofessional Practice and Education Newsletter - 'Collaborative Healthcare'
IX.	Markers (project phases, progress checks, schedule, etc.; Refer to *NI VII Roadmap to 2021* which will be presented at Meeting One)	Phase One of the project, the monthly interprofessional case conferences, were routinely occurring, but with no data collection. Data collection started upon receiving IRB approval for the project in January of 2020. Phase Two of the project, integration into the clinical learning environment, was scheduled to begin in January 2020, but COVID halted our progress. We will revisit this portion of the project in the 2021-2022 academic year.

Sections X thru XV to be completed first quarter 2021 for "Final Proceedings" booklet:

X.	Success Factors	*The most successful part of our work was…* data showing that discussion-based case conferences were successful at increasing self-reported ability to collaborate interprofessionally. The results were similar across disciplines, showing that our presentations weren't catering to a single specialty. *We were inspired by….* the results we received on the Interprofessional Collaborative Competency Attainment Scale (ICCAS). 80% of respondents noted feeling either much better or somewhat better about their ability to collaborate interprofessionally after participating in the conference session. It was incredible to observe the students learning from one another during the conferences.
XI.	Barriers	*The largest barrier encountered was….* finding a mutually convenient time for all disciplines to attend the case conferences. It was challenging to consistently have a well-balanced group of students from various disciplines. *We worked to overcome this by….* developing the schedule in advance to distribute to preceptors and attempting to schedule around clinical responsibilities. We rescheduled meetings that were not at a convenient time for a minimum of 3 disciplines to attend.
XII	Surprises	*What surprised you and why?* There was no difference in the results on the survey when we moved to a virtual model as a result of COVID.
XIII.	Lessons Learned	*What would be the single most important piece of advice to provide another team embarking on a similar initiative and how to be successful?* When having students work as interprofessional teams with the intent of them developing interprofessional competencies…let THEM do it. Early on faculty would join the discussion groups during case presentations – and really join as opposed to letting the group organically identify a leader and come to its uniquely own conclusion. We learned to back off as the project progressed.

XIV.	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 and how were your results the same or different from your expectations?* *1 2 3 4 5 6* ***7*** *8 9 10* We developed a very close relationship with our partners at the Jefferson Center for Interprofessional Practice and Education (JCIPE). They assisted us with finding a validated survey to demonstrate the efficacy of the interprofessional case conferences. Our initial results are very promising and showed that students feel increased confidence in their ability to collaborate interprofessionally after participating in a discussion-based interdisciplinary case conference. Our results also show that we had a successful transition of the program to the virtual space after COVID impacted our ability to hold the case conferences in-person. We hope to increase the number of student participants and obtain equal representation from all specialties. Our ability to replicate the program at Jefferson Center City was not as successful as we had hoped. We intend to reach out to the residency practice again this spring in hopes that we can replicate the conferences at their site with more consistency in the 2021-2022 academic year. Unfortunately, COVID impacted our ability to implement phase two of our project, which was implementation into the clinical learning environment in the form of interprofessional rounds. We will explore and develop this model as COVID-related restrictions in the hospital are lifted.
XV.	Sustainability and Next Steps	What does your CEO need to know to help keep your work sustainable? Our CEO is very supportive of this work and it requires minimal resources to sustain. Our hope is that the success of this program will provide an opportunity for additional interprofessional educational opportunities/trainings.

Monmouth Medical Center | RWJBarnabas HEALTH

Interprofessional Teaming to Address Hand Hygiene

National Initiative

NI VII Meeting #4

Dr. Joseph Jaeger, Pranoy Mohaptra, MHA, Christine Steinberger, Priya Fernicola, MPAH, David Hanos, Jason Montero, Raymond Duarte, Deb Peterson, RN, Julie Villa, RN, Laura Fleming, RN, Yasmin Ahmed, MPH, Laura Taddeo, Brian Baker, Carolyn Korotky, Traci Foccarino, MBA, Dr. Nikita Tripathi

INTRODUCTION: Background

Address:

- Hand Hygiene is crucial and necessary in creating a safe healthcare delivery environment.
- Many healthcare practitioners, despite the known benefits of hand hygiene (such as reducing nosocomial infection rate by 40%[1]), still fail to comply during as much as 60% of necessary handwashing opportunities[2]
- Our current Hand Hygiene efforts via manual observation through secret shoppers results in small sample sizes, a burden on time and resources, and potentially flawed data via the "Halo Effect"

References

1. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2770229/#:~:text=Improved%20compliance%20in%20hand%20hygiene,by%20as%20much%20as%2040%25.
2. https://www.cambridge.org/core/journals/infection-control-and-hospital-epidemiology/article/systematic-review-of-studies-on-compliance-with-hand-hygiene-guidelines-in-hospital-care/36AD78694A4A2BA831A598E9C935C92E

Aim/Purpose/Objectives

To first implement a system that accurately measures handwashing compliance rates during each opportunity and then achieve 95% compliance through intervention

METHODS: Interventions/Changes

We analyzed our current hand hygiene reports before identifying gaps and searching for solutions. Due to cost, we decided to pilot our program in the pediatric department as it is a smaller controlled environment that still relies on a wide variety of healthcare professionals.

Subjects: Selection, Recruitment

- 200 professionals in pediatric department
- Selection to include several of each profession type

- **Interventions/Changes**
- Handwashing wristband or Sensor Badge
- Interventions including interdisciplinary education, daily huddles & data sharing, incremental goal increase, peer to peer accountability, daily and weekly progress reports

METHODS: Measures/Metrics

Definition:

- A "handwashing opportunity" would be defined as any moment a patient room or patient care floor is entered or exited. These would be captured electronically in real-time, and then compared to actual number of handwashing events

Measure: Handwashing opportunities / compliance

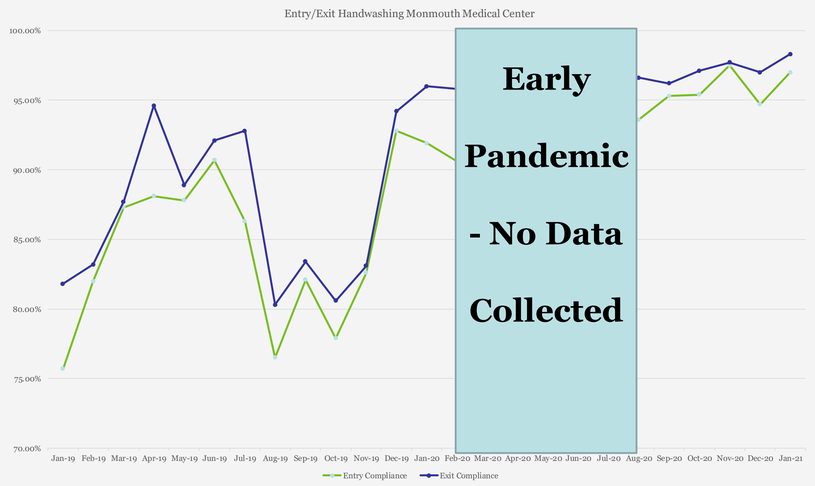
- Current hand hygiene program relies on manual observation of 354.2 (average) events per month across the hospital
- Expectation is to implement real-time feedback and post-event feedback to examine effects and sustainability of interventions

- **IRB Submission**
- Incomplete at this time until project resumes

RESULTS

- Due to the pandemic, we were unable to implement new tracking systems. However, we continued to monitor hand-hygiene compliance via "Secret Shoppers"
- Prior to the pandemic, hand washing compliance upon entry was **85.16%.** During pandemic, hand washing compliance upon entry is at **95.58% (+10.42%)**
- Prior to the pandemic, hand washing compliance upon exit was **88.18%.** During pandemic, hand washing compliance upon entry is at **97.15% (+8.97%)**

RESULTS: Continued



Discussion

Key Findings

- Hand hygiene compliance seems to be steadily higher during pandemic

- **Limitations**
- Data collection method of "Secret Shopper" observation may still have some flaws

- **Next Steps and Sustainability**
- Obtain IRB and funding approvals
- Implement automatic electronic tracking system for accurate and realtime feedback
- Introduce robust interdisciplinary education to ensure these compliance rates are consistent 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 2019. 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, Long Branch, NJ **Project Tile: Interprofessional Teaming to Address Hand Hygiene**

I.	Vision Statement (markers of success by March 2021; Refer to Toolkit #6 after meeting one)	*To establish a reliable and robust hand-hygiene monitoring system, implementing behavioral interventions, and monitoring for sustainable improvement*
II.	Team Objectives ('needs statement,' project requirements, project assumptions, stakeholders, etc.)	*This project will be a collaborative effort amongst the spectrum of healthcare professionals at Monmouth Medical Center, and will require leadership buy-in and an inclusive and collaborative spirit.*
III.	Team Members & Accountability (list of team members from Toolkit #7 [after meeting one] and who is accountable for what)	*Dr. Joseph Jaeger – Senior Leadership* *Pranoy Mohapatra, MHA – Project Lead* *Christine Steinberger – Project Lead* *Priya Fernicola, MPAH, MS – Project Lead* *David Hanos – Environmental Services* *Jason Montero – Materials Management* *Raymond Duarte - IT* *Deb Peterson, RN – Clinical Director, Pediatric Floor* *Julie Villa, RN – MAGNET Director* *Laura Fleming, RN – Nursing lead/IRB* *Yasmin Ahmed, MPH - Quality* *Laura Taddeo - Dietary* *Brian Baker - Quality* *Carolyn Korotky – Infection Control*

		Traci Foccarino, MBA - Security *Dr. Nikita Tripathi- Pediatric Resident*
IV.	Necessary Resources (staff, finances, etc.)	*Volunteers to pilot tracking system (Pediatric floor- including Nurses, physicians, residents, dietary, students, volunteers, case management, management, housekeeping)* *Finances (variable depending on scope/scale). Project has potential for grant funding*
V.	Measurement/Data Collection Plan (Refer to Toolkit #2)	*Currently collecting data via manual observation by Secret Shopper tracked on spreadsheets* *Plan to implement new measurement/data tracking system (GoJo, Stanley, or Vitalacy)*
VI.	Stakeholder Communication Plan (may be helpful to draft a flow chart of team members & senior management; Refer to Toolkits #3 and #5)	*Monthly steering committees, information and reports distributed at ground level during daily huddles*
VII.	Potential Challenges (engagement, budget, time, skills gaps, etc.; Refer to Toolkit #4)	*Budget- a similar effort had been rejected in the past due to cost at the time* *Communication and inclusion across "siloed" groups that co-exist in the unit*
III.	Opportunities for Scholarly Activity (potential publications, conference presentations, etc.)	*Potential for publication*
IX.	Markers (project phases, progress checks, schedule, etc.; Refer to *NI VII Roadmap to 2021* which will be presented at Meeting One)	*Expect 4 phases* 1. *Pre-implementation communication and team planning* 2. *Data tracking implementation* 3. *Behavioral interventions (review of numbers, positive feedback, automated reminders)* 4. *Sustain*

Sections X thru XV to be completed first quarter 2021 for "Final Proceedings" booklet:

X.	Success Factors	*The most successful part of our work was….* *Recognizing the gaps in our current hand hygiene efforts and organizing a core group of professionals to execute our plans* *We were inspired by….* *The success and collaboration of others who have engaged in similar work, especially during times of pandemic*
XI.	Barriers	*The largest barrier encountered was….* *The coronavirus pandemic and resulting shift of all available resources* *We worked to overcome this by….* *Keeping our plan in place and establishing the framework needed to resume this work, especially in order to meet new Leapfrog guidelines*
XII	Surprises	*What surprised you and why?* *The pandemic was unexpected and surprising*
XIII.	Lessons Learned	*What would be the single most important piece of advice to provide another team embarking on a similar initiative and how to be successful?* *Ensure constant communication and prioritization of these efforts. Having the right team that truly believes in the necessity of the work is essential.*
XIV.	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 and how were your results the same or different from your expectations?* *1 **2** 3 4 5 6 7 8 9 10*
XV.	Sustainability and Next Steps	What does your CEO need to know to help keep your work sustainable? Hand Hygiene initiatives show a demonstrable decrease in communicable disease and must become a serious part of hospital culture- especially after this past year and updated Leapfrog requirements.

Teaming on Labor and Delivery – Ochsner Baptist

Rajiv B Gala, MD; Lauren Bergeron, MD; Joseph Biggio, MD; Tabitha Duvernay, RN; Jessica Grote, MD; Roneisha McLendon, MD; Barry Starr, MD; Anna White, MD

NI VII Meeting #4

INTRODUCTION: Background

Care on Labor and Delivery is historically challenging because of the rapid changes in acuity. AHRQ's TeamSTEPPS® program is an established teamwork system with extensive research supporting their ability to create highly effective medical teams that provide higher quality, safety patient care[1].

Over the last 3 years, the volume on our unit has increased by 40% with no changes in staffing. We were struggling with constant backlogs on the unit leading to delayed inductions, increased length of stay, and decreased provider job satisfaction.

References

1. TeamSTEPPS®: Research/Evidence Base. Content last reviewed July 2015. Agency for Healthcare Research and Quality, Rockville, MD. https://www.ahrq.gov/teamstepps/evidence-base/labor-delivery.html

Aim/Purpose/Objectives

The primary purpose of our project was to provide the highest level of maternity care, efficiently, in the Gulf South through an integrated, team-based approach.

METHODS: Interventions/Changes

We started with the formation of a new "L&D Safety Committee" that included the key stakeholders – OB, MFM, OB Hospitalists, Ob/Gyn Residents, OB Anesthesia, Nursing leadership (L&D, MBU); and Pediatrics. Monthly meetings were held to start analyzing system issues and major gaps in communication.

The group was tasked with implementing the following changes:

1) Re-structure staffing coverage to provide greater continuity on the unit
2) Develop new operation standards with a focus on how defining how the team should perform
3) Implement educational sessions on communication and situational awareness, adapted from TeamSTEPPS®

METHODS: Measures/Metrics

We identified 2 major categories of metrics to best measure our primary purpose:

1) Teamwork assessment
    1) Team performance observation tool
    2) Teamwork Perceptions Questionnaire (T-TPQ)
    3) Teamwork Attitudes Questionnaire (T-TAQ)
    4) L&D Protocol adherence
2) Operational measures of efficiency and quality
    1) Admission to start of induction time
    2) Length of Stay (LOS)

IRB Submission

- The project was submitted to the IRB for review and granted Exemption status (Ochsner IRB ID: 2020.396)

RESULTS

4 major initiatives were completed by the L&D Safety Committee:

- Safe Surgery Checklist with a team debrief
- Hypertension in Pregnancy toolkit
- Postpartum hemorrhage protocol ("Code H")
- Amniotic Fluid Embolism protocol

Independent observations of the team performance found significantly higher performance during ***acute events*** (107/115) as compared to during "***routine care***" (46/115)

Adherence to the team debrief after surgical cases went from 50% to 95% over 4 months with sustainment. Members now view the debrief as high value (as opposed to a burden).

RESULTS: PDSA Cycles

Operational efficiency and quality went through 3 major PDSA cycles (thus far)

PDSA Cycle #1 – Induction time changes to a rolling schedule

- Issue: We had 2 major work boluses as it relates to inductions – 8-10pm; 4-5 am. Patients in labor would receive less active management during these times because everyone was trying to get inductions started
- Results: Nurses were happier with the broader distribution of new patients. OB Anesthesia has been critical to allowing scheduled cases on the weekend to reduce the weekly burden as well.
- Admission to start of induction time fell slightly (110 min to 90 minutes) with no significant change to average length of stay.

PDSA Cycle #2 – Added Mother Baby Unit (MBU) nursing and Peds to daily multi-disciplinary rounds (MDR's)

- Issues: Discharges were not happening in a timely manner leading to a bottleneck moving patients out of L&D.
- Results: MBU now had better situational awareness of how many patients would be needing beds and the physician teams could address social barriers to discharge earlier. This significantly decreased LOS (no longer waiting on peds to clear babies for circumcision). Still no significant changes to admission to start of induction times

PDSA Cycle #3 – Asked faculty to do H&P's, Orders, and consents at 36 weeks

- Issues: Nursing would not start inductions until orders were placed and consents signed. Unit acuity would dramatically impact the resident's ability to complete these in a timely manner. (and could cause major delays)
- Results: After faculty added this to their clinic workflow and the system of scanning consents was streamlined, Induction times significantly dropped (down to approx. 30 minutes, from 110). The residents still assess the patients and no changes in fetal position have happened to date.

Discussion

Key Findings

- Our teams consistently function better in acute situations – we simulate these and practice perfection. We need to do a better job with "routine care", which accounts for most of the work.
- There is high value now seen in the team debrief. We identify and solve system issues real time.

Limitations

- We have had leadership changes (L&D nursing, OB Hospitalist) that delayed progress
- COVID resulted in limitations in data analysis due to reduced statistics support
- Technology to communicate is outdated and not reliable.

Next Steps and Sustainability

- Working to secure new communication equipment (Vocera)
- Continuing regular L&D Safety Committee meetings (with resident input)

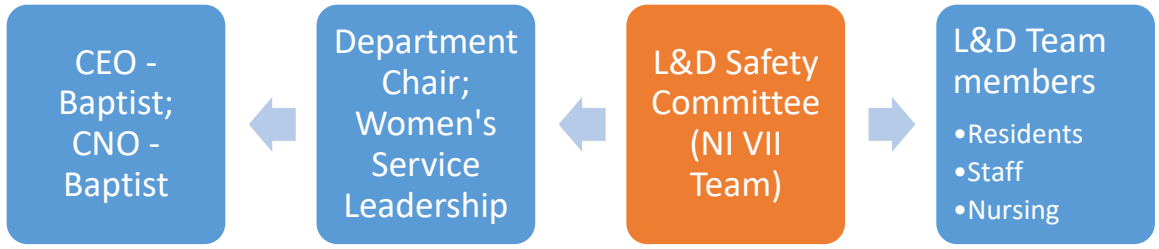
Project Management Plan

Begin completing this Project Management Plan at Meeting One and complete it with your team following Meeting One, i.e., by November 2019. 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** **Project Tile:** **Teaming On Labor and Delivery – Ochsner Baptist**

I.	Vision Statement (markers of success by March 2021; Refer to Toolkit #6 after meeting one)	*Our vision is to deliver a world-class experience on Labor and Delivery that our patients recommend to their loved ones, our employees are proud to be a part of, and our learners carry with them to any future employer.*
II.	Team Objectives ('needs statement,' project requirements, project assumptions, stakeholders, etc.)	*As the volume and acuity on our labor and delivery unit has increased by 40% in the last 3 years with no change in staffing, we needed to find a way to better manage the unit. Our objective was to provide the highest level of maternity care, efficiently, in the Gulf South through an integrated, team-based approach.*
III.	Team Members & Accountability (list of team members from Toolkit #7 [after meeting one] and who is accountable for what)	*Lauren Bergeron, MD – OB Hospitalist who helps cover our OB ED and staff Labor and Delivery during the day. Helped oversee OBED protocol adherence and communication between OBED and L&D* *Joseph Biggio, MD – MFM, System Chair. Oversees quality of care delivered on L&D and develops protocols that our entire system uses.* *Tabitha Duvernay, RN – RN lead (nights). Helped teach communication and bridged the gap between nursing and physicians* *Rajiv Gala, MD – OBGYN, DIO – Assisted with IRB application, lecture development, and observations on L&D.* *Jessica Grote, MD – PGY3 (Admin Chief elect) – Helped bring resident workflow perspectives and assisted with EPIC optimization* *Roneisha McLendon, MD – OB Anesthesiologist – Assisted with induction workflow and OR efficiency*

		Barry Starr, MD – Pediatrics Hospitalist Lead – assisted with d/c planning issues, circumcision clearance *Anna White, MD – OBGYN Residency Program Director – Covers L&D during the day and assisted with communication enhancements during multi-disciplinary rounds, identifying system issues that involved gaps in coverage*
IV.	Necessary Resources (staff, finances, etc.)	*1) Staff resources – we started to redesign the work each team member is responsible for to optimize flow. Still need additional nursing (but limited due to COVID) and an additional resident on L&D (applying for increase in complement next year)* *2) Finances – need new communication technology (on hold due to COVID)* *3) Time – need to find protected time for everyone to attend educational sessions (easier using ZOOM and pre-recorded options for self-study)*
V.	Measurement/Data Collection Plan (Refer to Toolkit #2)	*1) Teamwork performance questionnaire – regularly collect random assessments of team performance by an anonymous observer* *2) Teamwork perceptions questionnaire (T-TPQ) – distribute to members quarterly* *3) Teamwork attitudes questionnaire (T-TAQ) – distribute to members quarterly* *4) Length of Stay – collected after SVD and Cesarean delivery* *5) Admission to start of induction time – spot checks to monitor efficiency*
VI.	Stakeholder Communication Plan (may be helpful to draft a flow chart of team members & senior management; Refer to Toolkits #3 and #5)	

		
VII.	Potential Challenges (engagement, budget, time, skills gaps, etc.; Refer to Toolkit #4)	1) *Medical hierarchy – Ensuring psychologically safe teams for any member to question or raise a concern without fear of retaliation.* 2) *Impact of sudden changes in acuity/plan – outdated communication systems* 3) *Overcoming physician inertia – will be difficult for Ob's to turn L&D management over to the physician on call. Current system sets up silos of communication where nobody has complete situational awareness with everyone's plan*

VIII.	Opportunities for Scholarly Activity (potential publications, conference presentations, etc.)	*1) Present at regional ACOG meeting* *2) Publish in The Ochsner Journal* *3) Resident to present QI project at Resident Research Day*
IX.	Markers (project phases, progress checks, schedule, etc.; Refer to *NI VII Roadmap to 2021* which will be presented at Meeting One)	*Pre-work/background – 100%* *Measurement – 100%* *Methods (including IRB submission) – 100%* *Implement – Measure – Adjust – Sustain – 75% (Need more robust data interpretation, limited due to statistic resources being limited during covid)*

Sections X thru XV to be completed first quarter 2021 for "Final Proceedings" booklet:

X.	Success Factors	*The most successful part of our work was….* *Challenging the status quo of how we run L&D with the focus of improving quality and safety.* *We were inspired by….* *How efficiently the unit ran during COVID*
XI.	Barriers	*The largest barrier encountered was….* *Getting buy in from the faculty to change the way they manage patients on L&D* *We worked to overcome this by….* *Creating a stable "day call" group who work well with the residents and practice consistently. This helps create a uniform experience for patients and minimizes the number of unfamiliar faces they see.*
XII	Surprises	*What surprised you and why?* *Patient satisfaction with their experience on L&D did not drop when the primary OB turned care over to the laborist group. (Provider satisfaction has fallen though…)*
XIII.	Lessons Learned	*What would be the single most important piece of advice to provide another team embarking on a similar initiative and how to be successful?* *Consider technology needs early because those are not cheap investments*

XIV.	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 and how were your results the same or different from your expectations? 5. We set out to have more education about communication best practices, but as in-person talks were limited by COVID, this education did not lend itself to the virtual platform (reading body language was important to teach). Results are moving in the right direction and we hope to continue the work to enhance our team's efficiency* *1 2 3 4 5 6 7 8 9 10*
XV.	Sustainability and Next Steps	What does your CEO need to know to help keep your work sustainable? The unit needs to invest in communication technology that allows the team to share situational awareness in times of emergency more seamless. Right now, we have lots of work arounds, but there are holes that could easily get exposed in our system.

OhioHealth Riverside Methodist Hospital

Improving Breastfeeding Rates in Women Using MAT for Opioid Use Disorder

Susan Davy, MD; Karen D'Angelo, MD; Melissa Nines, WHNP

National Initiative

NI VII Meeting 2 STORYBOARD

Introduction: Background & Context

Several medical organizations including ACOG and AAP have endorsed and supported breastfeeding exclusively through the first 6 months of life. For our patients who are recovering from opioid use disorder with medication assisted therapy (MAT) this is of particular benefit for decreasing neonatal abstinence syndrome (NAS), increasing bonding of the dyad, and decreasing rates of depression in the mother.

Aim/Purpose/Objectives

We are aiming to have a least 75% of our Recovery patients leave the hospital breastfeeding and 50% continue to breastfeed at least through 6 weeks postpartum.

Methods: Interventions/Changes

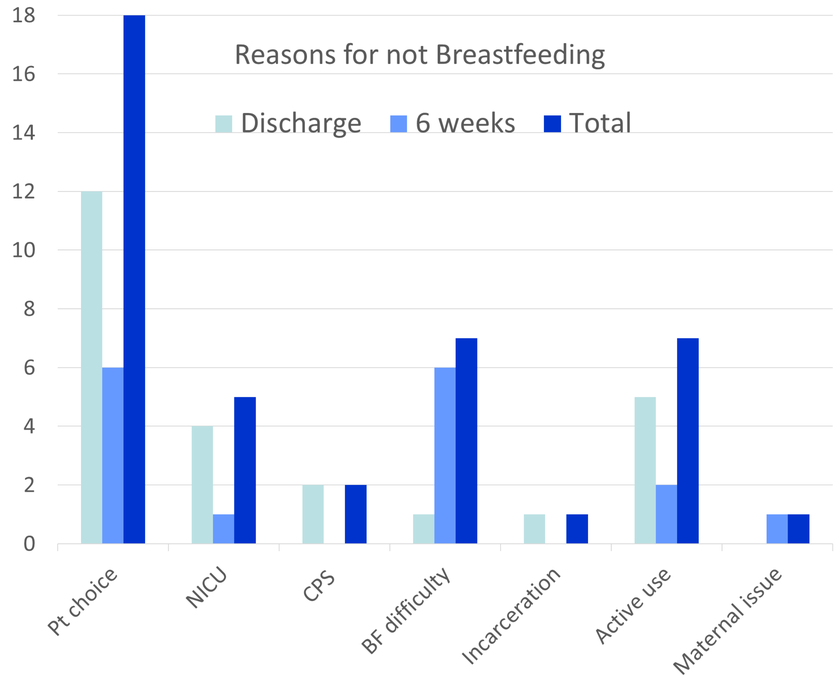
- We will provide additional education to physicians, nurses and other staff regarding MAT and any co-morbid medical conditions that may impact breastfeeding.
- We will have a consistent script and message that we will provide to the patients during the continuum of care.
- We will routinely write prescriptions for breast pumps so that at the very least, this resource will be available as these are covered by most health insurance programs. If they are uninsured, social work is able to help navigate obtaining a breast pump using resources available through our institution.

Methods: Measures/Metrics

We calculated breastfeeding rates at the time of discharge and then at the six-week visit. We also looked at the reasons why patients did not initiate breastfeeding or stopped prior to the six-week visit. We also looked at the number of in-patient and out-patient lactation consults.

RESULTS

Our overall rate of breastfeeding upon discharge was 52%. At six weeks the rate dropped to 24%. Reasons for not initiating or ending breastfeeding early included a desire to not breastfeed, NICU admission, difficulties with nursing, active substance abuse, incarceration, and child protective services involvement. In-patient lactation consults were obtained 80% of the time, but no out-patient consults were obtained.



Discussion

- **Key Findings**

While we were not as successful as we wished to be, we were able to identify reasons areas for improvement. Many women choose to not breastfeed or stop shortly after delivery. Having more in-depth conversations and using motivational techniques may be more successful in the initiation and prolongation of breastfeeding. Also, no out-patient lactation consults were made. This is was also made difficult due to the COVID pandemic. We were unable to have patients go directly up to lactation for one-on-one consults. There was also an increase in substance abuse in our population stemming from issues related to the pandemic. This resulted in more patients actively using, being incarcerated, NICU admission for neonatal withdrawal, and protective services cases.

- **Limitations**

We are a small clinic with an average of eight active patients at any given time. Due to space limitations in our current office, we are unable to increase this number currently.

For several months, we were unable to have a consistent resident physician in the clinic secondary to the work schedule changes due to COVID. Usually there is one resident who takes a four-week block and can establish a better rapport with patients.

- **Next steps/sustainability**

While we saw some modest success with this subset of patients, the lessons that were learned and techniques that were used can be extended to our general obstetric population in an effort to increase breastfeeding in that group.

Improving Access to Medication-Assisted Therapy in the Perinatal Setting

Allison Gase DO, Emily Gorman DO, Ann Aring MD, Susan Davy MD, Karen D'Angelo MD, Melissa Nines CNP, Samantha Meadows RN, Susan Catlett RN

National Initiative
NI VII Meeting #4

INTRODUCTION: Background

According to the American College of Obstetricians and Gynecologists (ACOG), "the postpartum period represents a time of increased vulnerabilities, and women with opioid use disorder relapse far more often in the postpartum period compared with during pregnancy."[1] Riverside's Family Medicine and OB-GYN residency programs have developed a partnership that aims to minimize this risk of relapse in the postpartum period. These two programs function independently, and a smooth transition of care is imperative. At Riverside Methodist Hospital, patients have the opportunity to receive prenatal care and medication-assisted therapy (MAT) through the OB-GYN Recovery Clinic. Six to eight weeks after delivery, management of MAT is transferred to Riverside Family Practice, where the physicians also provide newborn care. When transitioning care after delivery, ACOG recommends long-term multidisciplinary follow-up for patients during pregnancy and postpartum for both mother and baby.[1] Newborns are often seen by their primary care physician multiple times in the first month of life, more frequently if issues arise. Similarly, postpartum mothers receiving MAT are evaluated regularly, often weekly. The primary care physician has the unique ability to provide all-encompassing, comprehensive care for both mother and baby. By establishing with a primary care physician earlier in pregnancy, we are better able to address the many co-morbidities that are often associated with opioid dependence, such as tobacco use, poor nutrition, psychiatric disorders, and other co-occurring disorders.[2]

References

1 Opioid Use and Opioid Use Disorder in Pregnancy. Committee Opinion No. 711. *Obstetrics & Gynecology.* 2017;130(2):1-14.

2 Ecker J, Abuhamad A, Hill W, et al. Substance use disorders in pregnancy: clinical, ethical, and research imperatives of the opioid epidemic: a report of a joint workup of the Society for Maternal-Fetal Medicine. *American Journal of Obstetrics & Gynecology.* 2019;221(1).

Aim/Purpose/Objectives

By December 31, 2020, 50% of Recovery Clinic patients who plan to establish with Riverside Family Practice will have at least one visit in the Riverside Family Practice Center office before the transition of MAT care.

METHODS: Interventions/Changes

Subjects: Selection, Recruitment

- Recovery Clinic patients seen at RMH OB-GYN Residency Program (n=18). Of these patients, 14 did not have a primary care physician.
- Patients were seen in the Recovery Clinic, where they received prenatal care and MAT throughout pregnancy.

Interventions/Changes

- A shared patient list was created so that FM providers (Drs Gase, Gorman, Aring) could see which patients may be coming to Riverside Family Practice Center (RFPC) for postpartum care. This was discussed at monthly meetings.
- Added primary care provider to the OB care plan to assist in starting the conversation about care after pregnancy. OB provider initiated primary care linkage by 2nd to 3rd OB visit.
- Dr Gase provided names to RNs to reach out to patient to schedule an appointment to establish care prior to delivery.
- At initial PCP appointment, MAT transfer of care was discussed in addition to MAT expectations/policies at RFPC.
- Patient continued to obtain suboxone from OB provider at Recovery Clinic until first postpartum visit. MAT transfer of care occurred at 6-8 weeks postpartum.

METHODS: Measures/Metrics

- Maternal medical history was recorded.
- After patients established with RFPC for primary care and later MAT, missed appointments were also recorded.
- As this process was new, any referrals resulting in a primary care visit prior to the transition of MAT postpartum was an improvement.

Measure #1: Maternal history

- When patients on the Recovery Clinic list were reviewed, maternal history including mood disorders, hepatitis C status, asthma, and other chronic conditions were recorded.

Measure #2: Missed appointments

- Because making it to appointments can be stressful for mothers postpartum, missed appointments were recorded. To assist with this, both maternal and baby appointments were scheduled for the same day (if baby also needed to be seen).

METHODS: Measures/Metrics, cont

- **IRB Submission**
- Project submitted to the QI determination committee and determined to be IRB-exempt.

RESULTS

- 18 total patients were a part of the data collection, 4 patients had a primary care physician, so they were excluded from the sample.
- Of the 14 patients without a primary care provider, 8 (57%) established with RFPC.

Table 1. Patient characteristics, n=14

Characteristic	Established with RFPC (n=8)	Not established with RFPC (n=6)
Medical history		
Mood disorders, n (%)	5 (62.5)	5 (83.3)
Hepatitis C	3 (37.5)	2 (33.3)
Asthma	3 (37.5)	0 (0)
Number of children, mean ± sd	2 .0 ± 1.8	3.17 (2.3)
Number of pts with newborn visits	5 (71.4)*	2 (33.3)
Number of patients with missed appointments	6 (85.7)*	1 (16.7)**

*denominator is 7 as one patient's EDD is still impending
**newborn visit missed

Discussion

Key Findings

- Maternal history notable for mood disorders, consistent with recommendation for comprehensive care due to co-morbidities.
- Of those patients who did not have a primary care provider and established with RFPC, 7/8 are still actively receiving MAT.

Limitations

- The sample size of only 14 patients.
- As data collection occurred during COVID, patients may have been hesitant to seek medical care or come to appointments.

Next Steps and Sustainability

- We hope to refine the "look ahead" process in monthly MAT meetings and have multiple team members assist with identifying and scheduling patients.
- Include patient feedback to improve ease of scheduling and comfort with process the transition process.

Recovery Clinic Patient and Provider Satisfaction

Susan Davy MD, Valerie Busick MD, Michelle Hoffman DO

OhioHealth Riverside Methodist Hospital

National Initiative

NI VII Meeting #4

INTRODUCTION: Background

According to ACOG (American College of Obstetricians and Gynecologists), opioid use in pregnancy has increased significantly in recent years and so has the rate of admissions to treatment programs. Substance use in pregnancy has also been identified as a risk factor for increased maternal morbidity and mortality as well as Neonatal Abstinence Syndrome (NAS). According to a systematic review of 28 studies regarding the attitudes of healthcare professions towards patients with substance use disorders, it was found that many professionals had negative attitudes and lacked adequate education, training, and support. It also reports that as a result of the negativity professionals had less engagement and empathy possibly resulting in worse treatment outcomes for patients.

References

1. Opioid use and opioid use disorder in pregnancy. Committee Opinion No. 711. American College of Obstetricians and Gynecologists. Obstet Gynecol 2017;130:e81–94.
2. Leonieke C. van Boekel et al., "Stigma Among Health Professionals Towards Patients With Substance Use Disorders and Its Consequences for Healthcare Delivery: Systematic Review," Drug and Alcohol Dependence 131, no. 1–2 (2013): 23–35

Aim/Purpose/Objectives

Improve both patient and provider satisfaction through provider education and increased team communication at handoff

METHODS: Interventions

Interventions

1. Monthly transition of care meeting to review the current patient group

2. Monthly MAT educations sessions

These interventions were completed together every fourth Friday. The transition meeting was led by the resident physician that worked in the Recovery clinic that block. The education component was sometimes led by the same resident or other times by a senior resident.

METHODS: Measures/Metrics

Measure #1: Provider satisfaction survey

- Provider satisfaction survey quarterly (Physician/NP, nurses, medical assistants, and social workers)

Measure #2: Patient satisfaction survey

- Patient satisfaction survey at 2nd visit, late pregnancy, and post partum
- Paper survey to be completed by patient while waiting for physician

QI Project approval

- Committee approval received September 2020 (submitted June 2020)

RESULTS

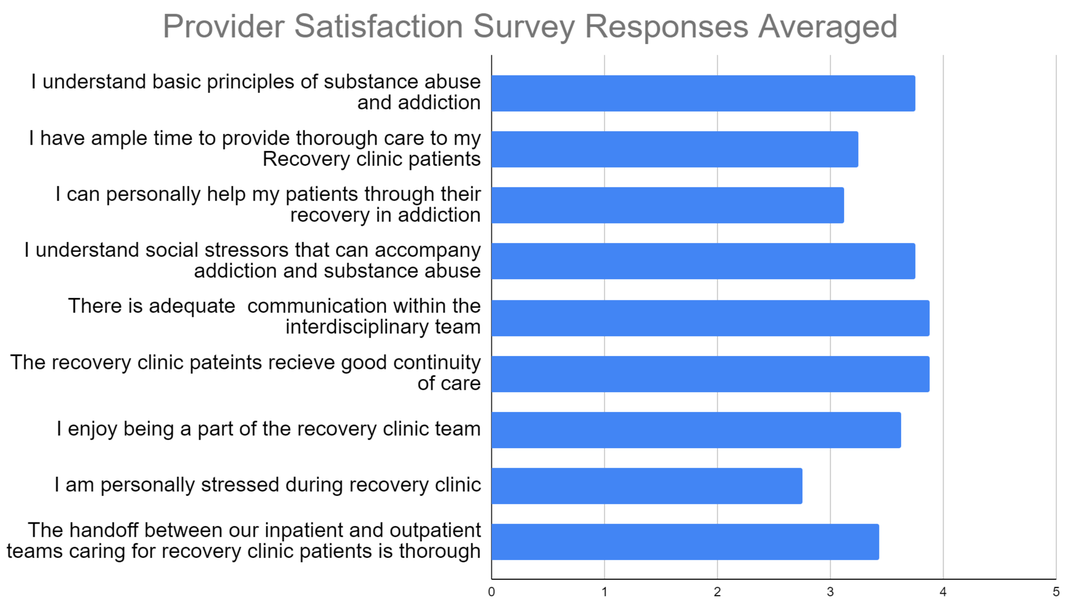
Measure #1: Provider satisfaction survey

- 8 provider surveys distributed and collected between September 2020 and February 2021
- Collected at conclusion of time in recovery clinic, not quarterly, all different providers

Measure #2: Patient satisfaction survey

- No surveys successfully distributed/collected due to unexpected staffing changes and low patient volume

RESULTS CONTINUED



Discussion

Key Findings

- Providers overall satisfied with education and communication
- Room for improvement:
  1. Adequate time for providers with patients
  2. Providers perception of being able to help patients
  3. Provider feelings of stress
  4. Handoff between inpatient and outpatient teams

Limitations

- Delayed QI approval
- COVID – decreased meeting attendance/low patient volume
- Survey distribution and collection

Next Steps and Sustainability

1. Adjust schedule to give providers more time with each
2. Identify sources of stress for providers during recovery clinic
3. Use Webex for transition of care meetings to connect with additional inpatient and outpatient team members
4. Identify a consistent team member to distribute and collect patient surveys

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 2019. 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: OhioHealth Riverside Methodist Hospital **Project Tile: Improving the Care of Women with Opioid Use Disorder**

<table>
<tr><td>I.</td><td>Vision Statement (markers of success by March 2021; Refer to Toolkit #6 after meeting one)</td><td>To improve the health and wellness of our patients with substance use disorder in pregnancy in an interdisciplinary, collaborative fashion as well as supporting these caregivers in order for them to provide ongoing compassionate care.</td></tr>
<tr><td>II.</td><td>Team Objectives ('needs statement,' project requirements, project assumptions, stakeholders, etc.)</td><td>1. To increase the rate of initiation and continuation of breastfeeding.
2. To increase patient experience satisfaction across the continuum of their care.
3. To increase rate of linkage with PCPs for long-term management of other co-morbid medical problems.
4. To increase provider comfort and satisfaction when dealing with this complex population.</td></tr>
<tr><td>III.</td><td>Team Members & Accountability (list of team members from Toolkit #7 [after meeting one] and who is accountable for what)</td><td>
<table>
<tr><th>Name/Credentials</th><th>Position/Title</th><th>Role</th></tr>
<tr><td>Michelle Hoffman, DO</td><td>PGY-2 Resident, OBGYN</td><td>Patient and provider satisfaction</td></tr>
<tr><td>Valerie Busick, MD</td><td>PGY-4 Resident, OBGYN</td><td>Patient and provider satisfaction</td></tr>
<tr><td>Emily Gorman, DO</td><td>Faculty, Family Medicine</td><td>Linkage with primary care physician</td></tr>
<tr><td>Allison Gase, DO</td><td>PGY-2 Resident, FM</td><td>Linkage with primary care physician</td></tr>
<tr><td>Susan Catlett, RN</td><td>Clinical Nurse, OBGYN clinic</td><td>Assistance with all aspects of project</td></tr>
<tr><td>Brittany Williams, RN</td><td>Clinical Nurse, OBGYN clinic</td><td>Assistance with all aspects of project</td></tr>
<tr><td>Susan Davy, MD</td><td>Assoc. Program Director</td><td>Improving breastfeeding rates</td></tr>
<tr><td>Karen D'Angelo, MD</td><td>Assoc. Program Director</td><td>Improving breastfeeding rates</td></tr>
</table>
</td></tr>
</table>

Melissa Nines, CNP	Nurse practitioner	Improving breastfeeding rates
Kathy Sharkis, MSW	Social work	Assistance with all aspects of project

IV. Necessary Resources (staff, finances, etc.)

- Staff
- Minimal financial resources required as all of this is being done as part of an already established clinic.
- Time

V. Measurement/Data Collection Plan (Refer to Toolkit #2)

OUTCOME *(what is the measure of interest being evaluated as a result of the intervention)*	DATA COLLECTION *(how will the data be collected, i.e. timepoints, tool used)*	METRIC(S) *(measures used to evaluate the outcome)*	ANALYSIS PLAN /APPROACH *(qualitative/quantitative methods used to assess the metric)*	LIMITATIONS/BARRIERS *(what barriers may exist)*
Ability to link patient with primary care physician	Periodic chart review	Number of patients who make and attend appointments	Percentages of appointments made and then attended; reasons for lack of attendance	Communication between offices; lack of transportation for patients
Rate of breast-feeding	Asking patient at each postpartum visit if they are continuing to breastfeed; chart review of breastfeeding upon discharge from hospital	Duration of breastfeeding	Analysis of number of patients breastfeeding at discharge and six weeks postpartum; reasons for discontinuation	Patients have misconceptions about breastfeeding and MAT that need to be addressed so that they feel comfortable even starting it.

		Provider satisfaction	Resident and staff surveys	Likert scaled survey about knowledge, communication, motivational interviewing, etc.	Statistical analysis of answers	Having the people complete yet another survey (survey fatigue)
		Patient satisfaction with transitions of care	Surveys at various points of care to determine how they feel valued as a patient	Likert based questions on respect, dignity, provider knowledge, etc.	Descriptive statistics	May be patients lost to follow up along the way and then will have incomplete data.
VI.	Stakeholder Communication Plan (may be helpful to draft a flow chart of team members & senior management; Refer to Toolkits #3 and #5)	Senior Management Leadership Team • Tom Harmon, MD: Vice President of Medical Affairs, Riverside Methodist Hospital • Sara Sukalich, MD: Senior Director, Medical Education; Designated Institutional Official for OhioHealth • Marie Cooper, MBA, BSN, RNC-LRN: Director of Nursing, Women's Health, Riverside Methodist Hospital • Carl Krantz, MD: Program Director, OB-GYN Residency Program				
VII.	Potential Challenges (engagement, budget, time, skills gaps, etc.; Refer to Toolkit #4)	In examining the barriers to this project, the following were noted to be issues. First, having the support and aid of the OhioHealth psychiatry program would be an ideal partnership to care for these patients and their numerous psychiatric co-morbidities. As the program only came into existence in July of 2019, they do not have the personnel available. Second, there must be buy-in from the involved parties. All need to accept that meetings are necessary to make this run more smoothly and shouldn't be seen as "extra work". Third, education is needed at all levels to help understand what special needs, emotionally and medically, these patients have. There is a lack of knowledge, misperceptions, and biases that must be overcome. Lastly, the physical space for the out-patient clinic limits the number of patients that can be served by this project.				

VIII.	Opportunities for Scholarly Activity (potential publications, conference presentations, etc.)	This would make an excellent opportunity for grand rounds at our institution to discuss the biases that exist in the care of pregnant women with opioid use disorder. These projects can be the basis for this event.
IX.	Markers (project phases, progress checks, schedule, etc. Refer to *NI VII Roadmap to 2021* which will be presented at Meeting One)	The following are the steps to be completed for this project: 1. Write-up and submission of quality improvement projects to the IRB for approval. 2. Create Redcap databases for data collection 3. Distribute surveys. Use patient scripts for breastfeeding and document in the chart. 4. Start educational series for providers. 5. Have monthly transition of care meetings to discuss care plans of patients. 6. Collect and analyze data. 7. Write-up and prepare for publication. Check-ins will occur at least quarterly, more frequently if necessary, to keep all participants on track with their portion of the project.

Sections X thru XV to be completed first quarter 2021 for "Final Proceedings" booklet:

X.	Success Factors	*The most successful part of our work was….* 1. Having any patient be able to successfully breastfeed past the six-week mark. While we were hoping to make a bigger impact, we were thrilled with any win. 2. Our ability to link our patients with primary care physicians was extraordinary, clearing showing how we are able to work together as a collaborative team. 3. Establishing transition of care conferences at the end of each resident block. *We were inspired by….* …the women we serve and all that they have endured and struggle with on a daily basis. Having them trust in us to care for them gives us the motivation to come to work and provide outstanding care. We were also inspired by the dedication the patients have to their health and the health of their children.

XI.	Barriers	*The largest barrier encountered was….* …a pandemic. COVID-19 not only made it difficult to recruit patients, but there was also an added barrier of fear that we encountered with patients (of contracting COVID, of traveling to the office, of the unknown, of how COVID would affect them and their baby, etc.). *We worked to overcome this by….* …continuing our mission of improving the health and wellness of those we serve. We kept the clinic open and staffed so that we could continue to see these patients on a regular basis. Family medicine implemented telehealth visits to continuing caring for our patients. We continued to encourage patients to work on their recovery and take care of their health despite the external stressors this year brought. Introducing intermittent telehealth visits also established greater trust between the patient and provider.
XII	Surprises	*What surprised you and why?* Clearly, the pandemic caught us off guard. It is also surprising that we haven't had more patients enroll in our clinic as the pandemic also brought an increase in opioid use in our community. The city of Columbus and state of Ohio saw a significant increase in the number of overdoses that occurred in 2020. Opioid use continues to remain a significant health problem for our area. As a primary care physicians, it was also surprising how many patients (14/18 or 78%) did not have a primary care physician despite having chronic medical conditions (mood disorders, hepatitis C, asthma, etc.).
XIII.	Lessons Learned	*What would be the single most important piece of advice to provide another team embarking on a similar initiative and how to be successful?* Make the project manageable and attainable. Break it into smaller chunks if need be. Keep on a timeline and hold team members accountable for their portion of the work. Delegate work to different members of the team so that not everything falls on a few different people.

XIV.	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 and how were your results the same or different from your expectations?* 6: Breastfeeding As a result of the COVID-19 pandemic, we saw an increase in opioid use among our patients, which is a contraindication to breastfeeding. We also did not have as many new patients added to our panel because for some there was a fear of leaving home and the risk of contracting COVID. 7: Linkage with primary care physicians We had a better turnout than anticipated despite the overall patient numbers in the Recovery Clinic being lower than expected. Greater than half (57%) of the patients without a primary care physician established with RFPC for their care. The process and communication between the two teams (OB and FM) allowed this to happen! 3: Patient and provider satisfaction The original expectation was to have multiple data points for both patient and providers. We were only able to issue one round of provider surveys and no patient surveys due to inconsistent clinic coverage secondary to COVID issues. With so few data points, it is hard to interpret whether or not there was improvement. We were, however, able to establish monthly transition of care meetings which has been helpful.
XV.	Sustainability and Next Steps	What does your CEO need to know to help keep your work sustainable? While we had some success, we would benefit from a larger clinic space in order to serve more patients and allow more time for their care. Maintaining strong lines of communication between our clinic and family medicine is also important. Continuing our educational series should continue to increase provider comfort in serving this patient population.

Incorporating Lessons Learned to Increase Participation and Engagement in Interdisciplinary Huddles within Surgical Units

Meridith Bergeron, EdD; Sophia Solomon, MSN, RN; Rebekah Warner, BSN, CMSRN; Michelle Nelson, DNP-FNP; Emily Stevens, MBA, MSW, LCSW-BACS; Rich Vath, MAEd; Phillip Allen, MD, MBA; Brent Allain Jr., MD, FASMBS

OUR LADY OF THE LAKE

National Initiative

NI VII Meeting #4

INTRODUCTION: Background

- National focus on Interprofessional (IP) rounds.
  - >Institute of Medicine advocates rounding involving IP teams to support patient care and improve patient safety.[1]
- Research demonstrates improved efficiencies and diminished cost and length of stay when collaborative IP practice occurs.[2,3,4]
- Healthcare providers participating on IP teams report greater job satisfaction[5] and there is increased workforce retention.[6]

References

1. Kohn LT, Corrigan JM, Donaldson MS (eds). *To Err is Human: Building a Safer Health System*. Washington, DC: National Academic Press. 2000.
2. Reeves S, Goldman J, Burton A, Sawatzky-Girling B. Synthesis of systematic review evidence of interprofessional education. *J Allied Health*. 2010;39:198-203.
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4. Smyrnios NA, Connolly A, Wilson MM, Curley FJ, French CT, Heard SO, Irwin RS. Effects of a multifaceted, multidisciplinary, hospital-wide quality improvement program on weaning from mechanical ventilation. Critical Care Medicine. 2002;30:1224–1230. doi: 10.1097/00003246.
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Aim/Purpose/Objectives

Implement a Quality Improvement (QI) Project to advance the use of interprofessional rounds and patient safety discussions including events that need to be reported on Our Lady of the Lake's SUR 2 unit, which involves the LSU Surgery Residency Program and the LPG Surgeon's Group.

METHODS: Interventions/Changes

- IP rounds on SUR 2 that include patient care team held Monday through Friday at 2:00 p.m.
- The rounds are thirty minutes and involve a scripted rhythm, with a role for all professionals.
- Primarily focused on discharge planning.
- Additional focus added on safety, quality, value, and equity.
- Review of unit-level data.
- Promote discussion of additional focus areas with educational components tailored to the setting and patient population.
  - >Five-minute discussion occurring at least once per week.

METHODS: Measures/Metrics

- Measures:
  - >IP attendance
  - >Average Length of Stay
  - >Harm scores
  - >HCAHPS and Press Ganey
  - >IDT Governance Council Findings and Observations

RESULTS

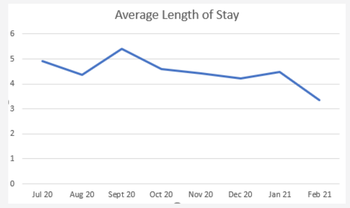
Measure #1: IP Attendance

- Baseline data indicated 7 to 8 attendees for each IP round, mainly comprised of nurses and case management.
- This increased to 15 to 18 attendees for each IP round.
- Representatives from the following areas present for each IP round:
  - Nurses
  - Case Management/Social Work
  - LPG Nurse Practitioner
  - Resident Representative
  - PT/OT

RESULTS: Continued

Measure #2: Average Length of Stay

- Overall decrease in ALOS for FY 21.
- ALOS for FY 21 is 4.60.
- ALOS for FY 20 was 4.33.
- Increase year-over-year may be due an influx of non-cohorted medicine patients on the unit.



Measure #3: Harm Scores

- No significant difference noted year-over-year.

Measure #4: HCAHPS and Press Ganey

- Greatest Increases:
  - Degree all staff showed compassion (19.32% increase)
  - Extent felt ready for discharge (5.26% increase)
  - Staff addressed emotional needs (3.14% increase)

Measure #5: IDT Governance Council Findings and Observations

- Improved yearly baseline performance on IDT Scorecard by 17%.

Discussion

Key Findings

- Increased participation, communication, and engagement amongst the patient care team.
- Decreased Average Length of Stay during FY 21.

Limitations

- Project delayed due to COVID-19 Pandemic.
- Staff turnover and transitions.

Next Steps and Sustainability

- Revise implementation based on current and future PDSA cycles.
- Reengage additional teams.
- Support additional collaborations that will leverage the interprofessional teaming infrastructure.

Acknowledgements

- Special thanks to the IDT Governance Council for supporting this work. The council is chaired by Lesley Tilley, MSN, RN, NE-BC and co-chaired by Jason Rogers, MSN, RN.

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 2019. 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: **Our Lady of the Lake Regional Medical Center** **Project Tile:** **Incorporating Lessons Learned to Increase Participation and Engagement in Interdisciplinary Huddles within Surgical Units**

I.	Vision Statement (markers of success by March 2021; Refer to Toolkit #6 after meeting one)	*All members of the patient care team will participate in IDT huddles and engage in the interdisciplinary care of the patient.*		
II.	Team Objectives ('needs statement,' project requirements, project assumptions, stakeholders, etc.)	*Overarching Aim: Implement a Quality Improvement (QI) Project to advance the use of interprofessional rounds and patient safety discussions including events that need to be reported on OLOL's SUR 2 unit, which involves the LSU Surgery Residency Program and the LPG Surgeon's Group.* *Priorities and Goals:* 1. *Improve patient experience* 2. *Decrease patient harm* 3. *Decrease length of stay* 4. *Increase IP participation and engagement*		
III.	Team Members & Accountability (list of team members from Toolkit #7 [after meeting one] and who is accountable for what)	***Name***	***Title***	***Accountability Area***
		Meridith Bergeron, EdD	*Director, Academic Affairs*	*Team Leader*

		Sophia Solomon, MSN, RN	*Sr. Director, Nursing*	*Team Leader*
		Rebekah Warner, BSN	*Director, Nursing, Surgical 2*	*Project Lead, Nursing*
		Michelle Nelson, DNP-FNP	*Nurse Practitioner, Surgery*	*Project Lead, LSU/LPG*
		Emily Stevens, MBA, MSW, LCSW-BACS	*Manager, Social Services*	*Project Lead, Soc. Serv.*
		Rich Vath, MAEd	*Sr. Director, Dean of Education*	*Project Lead, Academics*
		Phillip Allen, MD, MBA	*Medical Director of GME*	*Project Lead, LSU/LPG*
		Brent Allain Jr., MD, FASMBS	*Surgeon, General Surgery*	*Project Lead, LSU/LPG*
IV.	Necessary Resources (staff, finances, etc.)	*Staff and personnel associated with Surgical 2 unit, members of the patient care team, reallocated space for IDT, funds for professional development, training, and resources.*		

V.	Measurement/Data Collection Plan (Refer to Toolkit #2)	***Outcome***	***Data Collection***	***Metrics***	***Analysis Plan***	***Limitations/Barriers***
		Increase Team Member Participation and Engagement	*IP Attendance and Team Member Engagement Survey*	*Survey includes Likert-based items on perceptions of team engagement, Safety, and Quality; open-ended items for self-reflection*	*Descriptive statistics; qualitative coding*	*Survey completion rates may be low and not representative of participation*

		Improve patient care	*HCAHPS data*	*Survey includes Likert-based items on nine key topics; open-ended items*	*Descriptive statistics; qualitative coding*	*Survey completion rates may be low and not representative of population*
		Improve patient experience	*HCAHPS data*	*Survey includes Likert-based items on nine key topics; open-ended items*	*Descriptive statistics; qualitative coding*	*Survey completion rates may be low and not representative of population*

VI.	Stakeholder Communication Plan (may be helpful to draft a flow chart of team members & senior management; Refer to Toolkits #3 and #5)	***Stakeholder***	***Communication Methods***	***Frequency of Communication***
		Participants	*Status updates and actions items discussed at IDT.*	*M-F through IDT*
		Workgroup	*Bi-weekly status updates, action items, and follow-up.*	*Every two weeks*
		Senior Leadership/C-Suite	*Monthly status updates, high-level needs, barriers, and follow-up.*	*Once per month*
VII.	Potential Challenges (engagement, budget, time, skills gaps, etc.; Refer to Toolkit #4)	*The barriers we found that exist for us are:* 1. *Concerns expected to be raised by those who may be impacted by the project;* 2. *Strategies needed to sustain the effort; and* 3. *Preparing individuals and teams to engage in the initiative and be prepared for change.* *These issues may be addressed by ensuring we use proper change and diffusion models to address concerns related to the initiative, how we'll sustain the effort, and preparing individuals and teams to engage in the initiative.*		

VIII.	Opportunities for Scholarly Activity (potential publications, conference presentations, etc.)	*Academic Medical Journals, Nursing and Nursing Administration Journals, Interprofessional Practice and Education Journals, AIAMC Annual meeting, AHA Team Training National Conference.*
IX.	Markers (project phases, progress checks, schedule, etc.; Refer to *NI VII Roadmap to 2021* which will be presented at Meeting One)	*Project Phase: Learn (August 2019 – September 2019)* 1. *Pre-work/Background- Read and reviewed required readings, completed the seven toolkits, and attended Meeting One: Understanding Teaming Micro Environment Approach.* 2. *Measurement- Identified data, sources, and collection plan; analyzed baseline data; defined improvement goal and measures of success.* *Project Phase: Gap Analysis, Design, and Implement (October 2019 – October 2020)* 1. *Identified potential solutions, prioritizes solutions, developed action plan.* 2. *Chose implementation methodology (PDSA).* 3. *Submitted and obtained IRB Approval.* 4. *Assessed and planned for potential resources needed.* **Paused projected due to COVID-19 (March 2020 – August 2020)** 5. *Modified project to focus on one Surgical unit (August 2020).* 6. *Resumed workgroup meetings (September 2020).* 7. *Developed action plan and revised implementation timeline.* *Project Phase: Implement, Measure, Adjust (October 2020 – March 2021)* 1. *Piloted and implemented initiative (October 2020).* **Paused in-person meetings due to rise in COVID-19 cases** *educational component continued on unit (November 2020 – March 2021)** 2. *Interpreted results and data presentation plan.*

BeSections X thru XV to be completed first quarter 2021 for "Final Proceedings" booklet:

X.	Success Factors	*The most successful part of our work was increasing interprofessional participation in SUR2's IDT huddle and streamlining the IDT huddle with a focused agenda.* *We were inspired by previous work with other innovation units and the increased participation amongst staff.*
XI.	Barriers	*The largest barrier encountered was the COVID-19 pandemic, the pause on in-person meetings across our Health System, and staff transitions.* *We worked to overcome this by moving to a larger huddle space to increase social distancing and limiting the number of attendees to core group of patient care teams.*
XII	Surprises	*We were surprised by the willingness of our team members to embrace change during the COVID-19.*
XIII.	Lessons Learned	*The single most important piece of advice we'd provide another team embarking on a similar initiative would be to plan for uncertainty and be willing to change course when needed.*
XIV.	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 and how were your results the same or different from your expectations?* *1 2 3 4 5 6 7 8 9 10*
XV.	Sustainability and Next Steps	What does your CEO need to know to help keep your work sustainable? *Our CEO needs to know that this work leads to improved team member engagement, improved patient outcomes and patient experience. As we emerge from the COVID-19 pandemic, it is important to reengage additional teams in this work because this remains a core goal for our hospital and leadership team. We have embarked on additional collaborations that will allow us to leverage the interprofessional teaming infrastructure, including the AMP Program from Johns Hopkins.*

Teaming for Excellence: Improving the patient experience during hospital discharge through phased interventions at St. Luke's Anderson Campus

Eluwana Amaratunga, Kristal Khan, Rebecca Markson, Catherine Craven, Carmen Dobrovolschi, James Dalkiewicz. Jenna Diasio, , Darla Frack, Richard Garwood, Parampreet Kaur, Daniel Martins, James Orlando, Richard Snyder, Quynh Hicks, Sandra Yaich

National Initiative
NI VII Meeting #4

INTRODUCTION: Background

The Hospital Consumer Assessment of Healthcare Providers and Systems(HCAHPS) is a scoring system used to measure and compare the standard of care in healthcare facilities. At the St. Luke's Anderson campus our HCAHP scores are usually in the positive percentiles. This is the case for all but one domain, 'discharge'. This could have been due to unclear communication and instructions at discharge. Prior studies have demonstrated how implementation of specific initiatives can improve both the discharge process and patient experience.

Our vision was to ensure that the patients have accurate and detailed information communicated to them in writing and verbally. We also wanted to ensure that the team of caregivers are aware of the discharge plan and are communicating this plan accurately and in a timely fashion.

References

1. Waniga HM, Gerke T, Shoemaker A, Bourgoine D, Eamranond P. The Impact of Revised Discharge Instructions on Patient Satisfaction. J Patient Exp. 2016 Sep;3(3):64-68. doi: 10.1177/2374373516666972. Epub 2016 Nov 7. PMID: 28725840; PMCID: PMC5513645.
2. Burke, Kristen, "Improving Patient Discharge Satisfaction Scores by Implementing Teach-Back Instructions in a Community Hospital Emergency Department (ED): A Quality Improvement Project" (2018). Doctor of NursingPractice (DNP) Projects. 160. Retrieved from https://scholarworks.umass.edu/nursing_dnp_capstone/160

Aim/Purpose/Objectives

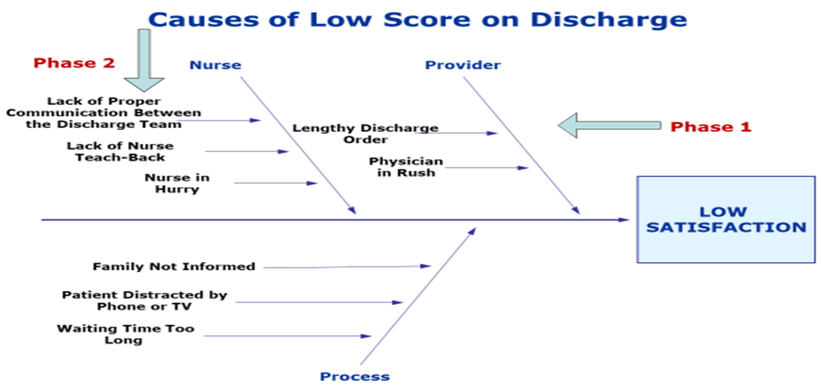
To improve patient satisfaction by increasing HCAHPS scores in the overall discharge domain to twice the baseline percentage within six months for phase 1 and then 10% incremental increase at every next phase

METHODS: Interventions/Changes

Audience: Acute Care Patient Population (includes 4 separate units; SMS-2, SMS-3, SMS4 and WMS-4) These units have a total of 126 beds. The data excludes the OB unit.

Interventions: Phase 1–Implement a Standardized Discharge Letter

Phase 2 – Improve Nursing Communication with the Patient



METHODS: Measures/Metrics

Project is separated into different phases:

Phase 1(implemented) Personalized Discharge Letter Template:

A personalized discharge letter from the attending physician was tailored to each patient informing them about their stay and included in their After Visit Summary. – Utilization rates of the template was recorded.

Phase 2 (Implemented) Nursing Communication:

Observed discussion between the nurse and patient at discharge to track patient engagement. The after-visit phone call comments were connected to the patients that were observed to assess which feedback was relevant to our endpoints.

Next, we tailored the nurse interactions using a checklist to improve the discharge process including the teach back step based on the trends we found.

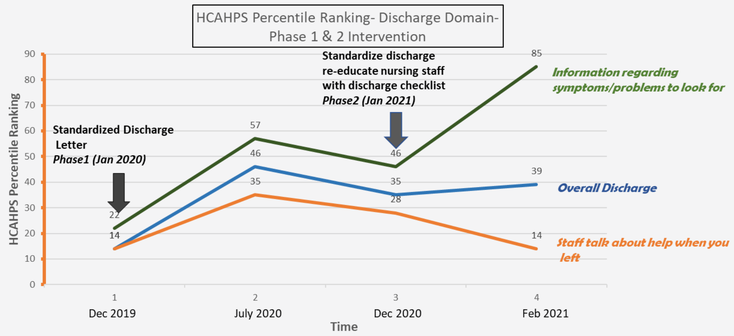
Measure #1: HCAHPS Scores

Measure #2: Utilization rates of Discharge Template

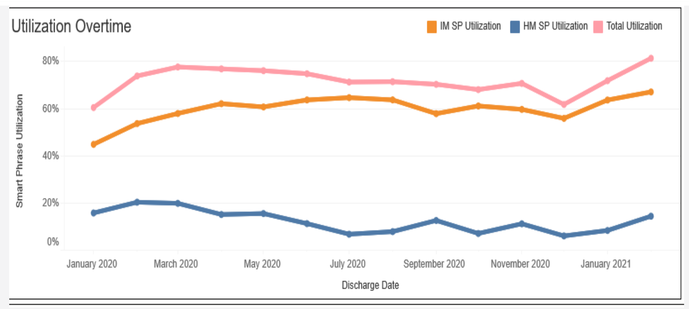
Measure #3: Number of Nurses attending Re-education

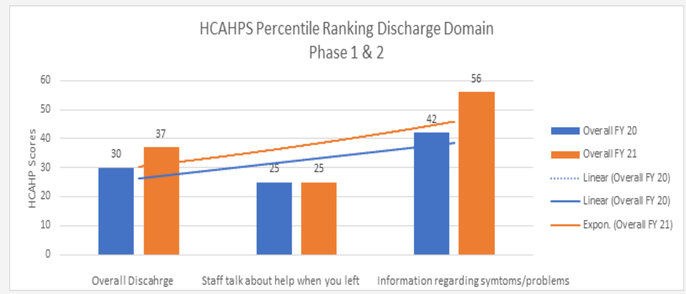
IRB Submission: The QI study was started after the approval from IRB.

RESULTS



RESULTS: Continued





- Number of nurses who attended the huddle on discharge re-education in first round- 20
- Second round scheduled during end of March

Discussion

Key Findings

A personalized letter from the provider to the patient and going through the discharge checklist by a nurse can be a simple, cost-effective method of improving the discharge process and patient satisfaction. It not only improves provider to patient, and nurse to patient communication but improves efficacy of discharge and patient satisfaction.

Limitations

COVID surges and COVID vaccination clinics posed some hurdles and delays in our projects but assigning a second person in-charge for various tasks could have made it easier to follow the tasks and the scheduled timeline.

Next Steps and Sustainability

•Continue to follow utilization rates of discharge template and consistently adapting any new finding encountered along the way.

•**Phase 3** – Hardwired Inpatient to Outpatient Communication – Physician to Physician

•**Phase 4** – Managing Patient Expectations During Discharge

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 2019. 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: St. Luke's University Health Network (Cohort 1) **Project Tile: Teaming for Excellence: Improving the patient experience during hospital discharge through phased interventions at St. Luke's Anderson Campus**

<table>
<tr><td>I.</td><td>Vision Statement
(markers of success by March 2021;
Refer to Toolkit #6 after meeting one)</td><td>This project is working on the discharge process at SLUHN-Anderson. Our mission is to improve the discharge process at St. Luke's by ensuring the patient has accurate and detailed information communicated to them in writing and verbally. We also want to ensure that the team of caregivers is aware of the discharge plan and are communicating this plan accurately and in a timely fashion. The goal is to improve patients' perception of the discharge process as measured by HCAHPS surveys and discharge phone call comments.</td></tr>
<tr><td>II.</td><td>Team Objectives
('needs statement,'
project requirements, project assumptions, stakeholders, etc.)</td><td>To improve patient satisfaction by increasing HCAHPS scores in the overall discharge domain to twice the baseline percentage within six months for phase 1 and then 10% incremental increase at every next phase</td></tr>
<tr><td>III.</td><td>Team Members & Accountability
(list of team members from Toolkit #7 [after meeting one] and who is accountable for what)</td><td>
<table>
<tr><th>Name/Credentials</th><th>Position/Title</th><th>Role</th></tr>
<tr><td>Eluwana Amaratunga MD</td><td>Resident, Internal Medicine</td><td>Designing the study, data collection, writing</td></tr>
<tr><td>Catherine Craven MD</td><td>Resident, Neurology</td><td>Designing the study, data collection</td></tr>
<tr><td>Carmen Dobrovolschi MD</td><td>Resident, Internal Medicine</td><td>Phase 2 implementation, Re-teaching discharge checklist, writing</td></tr>
<tr><td>James Dalkiewicz MBA, MHA</td><td>GME Project Manager</td><td>Designing the study, monthly meetings, updates</td></tr>
</table>
</td></tr>
</table>

		Jenna Diasio MSPAS, PA-C	Lead Physician Assistant, Hospitalist Team	Designing the study, monthly meetings, data updates on template utilization
		Darla Frack RN, MSN, NE-BC	VP, Patient Care Services	Designing the study, monthly meetings, data updates on HCAHPS
		Richard Garwood DO	Hospitalist	Designing the study, monthly meetings, Discharge template
		Matt Geary BS	Nurse	Data collection, observing Nurses
		Parampreet Kaur MD	GME Research and QI PM	Designing the study, IRB, data analysis, writing
		Kristal Khan MD	Resident, Psychiatry	Designing the study, data collection, writing
		Rebecca Markson DO	Resident, Family Medicine	Designing the study, data collection, writing
		Daniel Martins RN, BSN, CMSRN	Patient Care Manager	Designing the study, monthly meeting, implementing phase 2 intervention
		James Orlando Ed.D	DIO	Designing the study, monthly meeting
		Richard Snyder DO	Program Director, IM	Designing the study, implementing phase 1, monthly meeting
		Quynh Hicks MS	Regional Inpatient Director Care Management	Designing the study, monthly meeting
		Sandi Yaich MEd	GME Manager	Designing the study, Former project lead, monthly meeting
IV.	Necessary Resources (staff, finances, etc.)	Multidisciplinary team was needed to implement all the phases of improvement and get results. We had Residents, Physicians, Physician Assistants, Nurses, Care Management, GME, Research, Leadership.		

V.	Measurement/Data Collection Plan (Refer to Toolkit #2)	1. HCAHPS scores pre and post phased intervention 2. Utilization rates of Phase 1 discharge template 3. Survey was administered via REDCap among the nursing staff of the hospital before phase 2 intervention to get their feedback for interventions. 4. Post-discharge follow-up calls were connected to the patients that were observed to assess which feedback was relevant to our endpoints. *5.* Number of nurses attending re-education on using discharge checklist and teach-back.
VI.	Stakeholder Communication Plan (may be helpful to draft a flow chart of team members & senior management; Refer to Toolkits #3 and #5)	We have a C-Suite member as part of our team, so she is actively involved in our project. We have a working /core group meeting every month and a stakeholder meeting each month. She attends all stakeholder meeting and receives an update after every working group meeting.
VII.	Potential Challenges (engagement, budget, time, skills gaps, etc.; Refer to Toolkit #4)	There were a few other projects at other campuses that might have impacted our ability to make changes in EPIC regarding as the EPIC team may not make this a priority. There was a discharge checklist piloted last year at this campus. The checklist was on paper and never moved to an electronic format. The pilot did not progress any further as there was very few checklists returned. During Covid surges, the utilization rate of discharge template decreased and it became difficult to remind providers coming from other campuses to Anderson. During Covid vaccination clinic, our core team member was pulled to lead the vaccination clinic and our phase second was delayed.

VIII.	Opportunities for Scholarly Activity (potential publications, conference presentations, etc.)	It has been presented at our GME QI symposium and we plan to take this with our second phase completed in SLUHN Quality Awards in September.
IX.	Markers (project phases, progress checks, schedule, etc. Refer to *NI VII Roadmap to 2021* which will be presented at Meeting One)	▪ Phase 1 – Implement a Standardized Discharge Letter (Implemented in Jan 2020) ▪ Phase 2 – Re-educate Nurses on Discharge checklist and teach back to patients. ✓ Observe Nurses during Discharge ✓ Discharge for consistency ✓ Survey Nurses for their perspectives ▪ Phase 3 – Hardwired Inpatient to Outpatient Communication – Physician to Physician ▪ Phase 4 – Managing Patient Expectations During Discharge

Sections X thru XV to be completed first quarter 2021 for "Final Proceedings" booklet:

X.	Success Factors	*The most successful part of our work was…* ▪ Multidisciplinary team ▪ Monthly meetings and sharing takeaways for each meeting with the whole team ▪ Following utilization rates of standardized discharge letter each week ▪ Appointing the lead resident for the project ▪ Support from leadership *We were inspired by….* Consistently adapting to any new findings that we encounter along the way in order to tailor our inventions and informing stakeholders along the way of our progress.
XI.	Barriers	*The largest barrier encountered was….* During Covid surges, the utilization rate of discharge template decreased and it became difficult to remind providers coming from other campuses to Anderson to use the discharge template.

		During Covid vaccination clinic, our core team member was pulled to lead the vaccination clinic and our second phase was delayed. *We worked to overcome this by….* Residents worked very hard to go to each nurse manager at each floor, started re-educating regarding discharge checklist and teach back with the help of nurse managers and Physician Assistant.
XII	Surprises	*What surprised you and why?* Covid 19 pandemic We saw improvement after phase 2. At the same time, we saw an increase in utilization rates of discharge template. Not sure which phase made more difference in HCAHPS scores.
XIII.	Lessons Learned	*What would be the single most important piece of advice to provide another team embarking on a similar initiative and how to be successful?* Have a multidisciplinary team with monthly meetings and share takeaways from each meeting with the whole team.
XIV.	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 and how were your results the same or different from your expectations?* *1 2 3 4 5 6* ***7*** ***8*** *9 10*
XV.	Sustainability and Next Steps	What does your CEO need to know to help keep your work sustainable? We have support from C – suite who is involved in the project at every step and attend meetings.

Improving Resident Communication Skills

Elizabeth Beiter MD, Becky Fleig MEd, Richard Gryspeerdt DO, Angela N Fellner PhD CCRP

NI VII Meeting #4

INTRODUCTION: Background

- According to the Joint Commission, an estimated 80% of serious medical errors involve miscommunication between caregivers[1]
- Skillful communication between doctors and patients is also tied to better medication adherence, better chronic disease management, and improved patient satisfaction
- The ACGME recognizes communication as a core competency for residency education
- Despite its importance to health outcomes, objective assessment of communication skills presents a challenge to many residency programs

References

1. Joint Commission Center for Transforming Healthcare releases targeted solutions tool for hand-off communications. Jt Comm Perspect. 2012 Aug;32(8): 1,3.

Aim/Purpose/Objectives

- To teach and validate all residents in the evidence-based communication strategy AIDET (i.e., Acknowledge, Introduce, Duration, Explanation, Thank You)
- To train faculty and resident validators for AIDET communication
- To provide objective feedback on AIDET communication skills to all residents

METHODS: Interventions/Changes

- Longitudinal survey study measuring communication skills through AIDET training

Subjects: Selection, Recruitment

- 120 male and female residents and fellows in TriHealth GME programs including dermatology, family medicine, internal medicine, ob-gyn, podiatry, sports medicine, surgery, urogynecology, and vascular surgery

Interventions/Changes

- Educational sessions for all residents were part of GME Grand Rounds, including a pre and post knowledge assessment
- Validator training and tracking all TriHealth residents' AIDET performance scores over time

METHODS: Measures/Metrics

- The Studer Group Provider Communication Validation Tool, MPAIDET4, was used to evaluate AIDET communication skills
- Effective application of these skills ultimately leads to better patient outcomes and increased patient satisfaction
- Reported here are statistics pertaining to two summary variables
- Medical providers were scored up to 4 times and received an evaluation after each scoring
- Family Medicine and Ob/Gyn residents are included in the current results

Measure #1: Overall First Impression

- Summarizes performance on the AIDET communication skills

Measure #2: Overall Performance

- Summarizes performance on 15 additional communication behaviors (e.g., eye contact, body language, and others)

IRB Submission

- The TriHealth IRB determined this study to be Exempt under Category 1, education research

RESULTS

- For both measures the number of participants at each measurement period is noted in the accompanying graph
- In general, more Ob/Gyn residents were evaluated, and their scores were higher at all periods
- Due to unequal Ns at each period, data were analyzed using independent samples t-tests
- Bonferroni-corrected p-values ($p = 0.012$) were used to designate statistical significance.

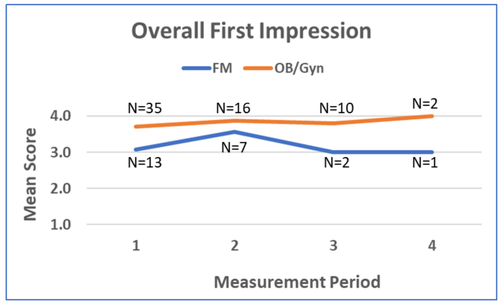
Measure #1: Overall First Impression

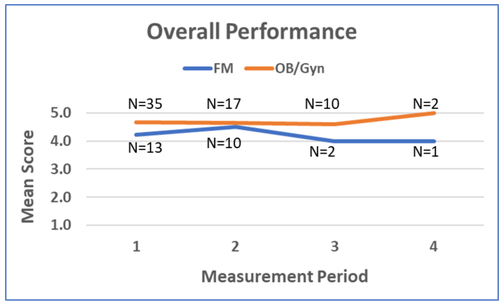
- A statistically significant difference between FM and Ob/Gyn groups was noted only at period 1 ($p < 0.001$)
- A statistically significant difference between FM and Ob/Gyn groups was noted only at period 1 ($p < 0.001$)

Measure #2: Overall Performance

- A statistically significant difference between FM and Ob/Gyn groups was noted only at period 1 ($p < 0.001$)
- A statistically significant difference between FM and Ob/Gyn groups was noted only at period 3 ($p = 0.005$)

RESULTS: Continued





DISCUSSION

Key Findings

- The Overall First Impression and the Overall Performance are consistent between programs
- The decreasing number of participants through each measurement period makes it difficult to draw conclusions about the overall trend
- An increased number of measurements would further elucidate our improvement
- It is possible that a difference in validators (multiple in Ob/Gyn, limited in FM) and the way validations were conducted (Ob/Gyn in person, FM via video) may have created measurement discrepancies between the programs
- We lack robust data across all programs

Limitations

- COVID-19 pandemic
- Not enough validators / turnover of validators
- Difficult to work into existing schedules

Next Steps and Sustainability

- Train new validators - roll into chief resident expectations across all programs
- Explore development of online/app-based evaluation
- Program champions to schedule validation days for validators

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 2019. 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 Tile:** Improving Resident Communication Skills

I.	Vision Statement (markers of success by March 2021; Refer to Toolkit #6 after meeting one)	We believe that teaching, and reinforcing evidence based communication strategies will improve patient safety, the patient experience, and also the relationship between resident physicians and nurses.
II.	Team Objectives ('needs statement,' project requirements, project assumptions, stakeholders, etc.)	*To teach and validate all residents in the evidence based communication strategy AIDET.* *To train faculty and resident validators for AIDET communication* *To provide objective, quantitative feedback on communication skills to all residents.*
III.	Team Members & Accountability (list of team members from Toolkit #7 [after meeting one] and who is accountable for what)	

Atwa, Kareen	Kareen_Atwa@trihealth.com	Family Medicine Resident Champion for Program Specific Project
Beiter, Libby	Elizabeth_Beiter@trihealth.com	Overall Project Co-Chair
Eagleston, Justin	Justin_Eagleston@trihealth.com	Surgery Resident Champion for Program Specific Project
Fellner, Angie	Angie_Fellner@trihealth.com	Research Support and Analytics
Fleig, Becky	Becky_Fleig@trihealth.com	Overall Project Co-Chair

		Gryspeerdt, Richie	Richard_Gryspeerdt@trihealth.com	Resident Champion for AIDET/Communication Skills Project
		Johnson, Steve	Steven_Johnson@trihealth.com	Executive Sponsor
		O'Connor, Eileen	Eileen_Oconnor@trihealth.com	OB/GYN Resident Champion for Program Specific Project
		Patel, Nima	Nima_Patel@trihealth.com	OB/GYN Faculty Champion for Program Specific Project
		Rangan, Yashaswini	Yashaswini_Rangan@trihealth.com	Internal Medicine Faculty Champion for Program Specific Project
		Reichard, Adam	Adam_Reichard@trihealth.com	Surgery Resident Champion for Program Specific Project
		Zitelli, Steve	Steven_Zitelli@trihealth.com	Family Medicine Faculty Champion for Program Specific Project
		Brehm, Sharon	Sharon_Brehm@trihealth.com	Nursing Team Representative
		Namdarizandi, Vahid	Vahid_Namdarizandi@trihealth.com	Internal Medicine Resident Champion for Program Specific Project
IV.	Necessary Resources (staff, finances, etc.)	*Skills validators from each residency program* *Research data analysis support*		
V.	Measurement/Data Collection Plan (Refer to Toolkit #2)	*Completed communication skills validation assessment*		
VI.	Stakeholder Communication Plan (may be helpful to draft a flow chart of team members & senior management; Refer to Toolkits #3 and #5)	*The GME Office is establishing a GME quarterly operations report with Senior (C-suite) Leadership and Program Leadership. Included in the reported metrics will be CGCAHPS score and Communication Skills Validation.*		

VII.	Potential Challenges (engagement, budget, time, skills gaps, etc.; Refer to Toolkit #4)	*The COVID-19 pandemic restrictions limited our ability to complete communication skills assessment for the residents. We were not able to provide training to additional skills validators across all programs and some trained validators were residents who graduated last academic year. Also, current validators found it difficult to work skills validation into existing schedules without further expectations set. Finally, we believe there are assessment variances between program validators even with the same training.*
VIII.	Opportunities for Scholarly Activity (potential publications, conference presentations, etc.)	*There are no current plans for publication, but there are opportunities for quality improvement with future PDSA cycles. Following those PDSA cycles and future training sessions, we look forward to presenting at ACGME or Society for Teachers of Family Medicine (STFM).*
IX.	Markers (project phases, progress checks, schedule, etc.; Refer to *NI VII Roadmap to 2021* which will be presented at Meeting One)	*Due to disruptions from the COVID-19 pandemic, this is the first PDSA cycle.*

Sections X thru XV to be completed first quarter 2021 for "Final Proceedings" booklet:

X.	Success Factors	*We were inspired by the initial program engagement in the communication skills project. It was the best engagement from all programs in any of the National Initiative Projects that TriHealth has participated in. It is encouraging to see what the future of this project will bring as we are entering a post-pandemic phase.*
XI.	Barriers	*The largest barrier we encountered was the restriction caused by COVID-19, which resulted in halted program specific projects and inability to train program validators.* *We worked to overcome this by developing a project plan beyond NI 7 to implement training, execution and accountability to this important work.*

XII	Surprises	*The impact on resident training as a of result of the COVID pandemic. Also, the small volume of assessment completed with limited accountability from program leaders.*
XIII.	Lessons Learned	*We need a more structured approach to training and communicating the expectations of validators and consistent accountability for program leaders to execute resident assessments.*
XIV.	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 and how were your results the same or different from your expectations?* *1 2 3 4 5 6 7 8 9 10 – We were not able to accomplish very much of what we initially planned to as result of COVID. However, with our post pandemic plan, our expectations are a "7" to execute the initial results.*
XV.	Sustainability and Next Steps	*The GME Office will hold validators training for all programs in May 2021. At this training, validators will receive the skills needed to assess residents and learn the expectations of these assessments. Beginning in academic year 2021-2022, there will be a GME quarterly operations report with Senior (C-suite) Leadership and Program Leadership. Included in the reported metrics will be CGCAHPS score and Communication Skills Validation. Program leaders will need to continuously monitor validations for alignment with resident milestones and CGCAHPS scores.*

UnityPoint Health
Des Moines

Antimicrobial Stewardship: Decreasing Vancomycin Usage in the Intensive Care Unit

National Initiative
NI VII Meeting #4

Hayden Smith, Steven Craig, Chanteau Ayers, William Yost, Amanda Bushman, Frank Caligiuri,
Julie Gibbons, Rossana Rosa, Samuel DuMontier, Brooke Delpierre, Vali Potter, Austin Boeckman, Laura Elliott, Jonathan Hurdelbrink

INTRODUCTION

A local quality improvement initiative revealed the rate of vancomycin use in our ICU patients was above national standards.

A previous change was instituted in our ICUs from using cultures to PCR testing for MRSA screening to decrease vancomycin usage. After implementing this change, the impact on vancomycin usage was unclear even though screening results were now available sooner.

Two other issues were identified: 1.) patients were not being consistently screened for MRSA on ICU entry; and 2.) the hospital's vancomycin days metric may have been poorly defined.

AIM

To better understand and address vancomycin usage in the ICU for MRSA screened patients.

METHODS

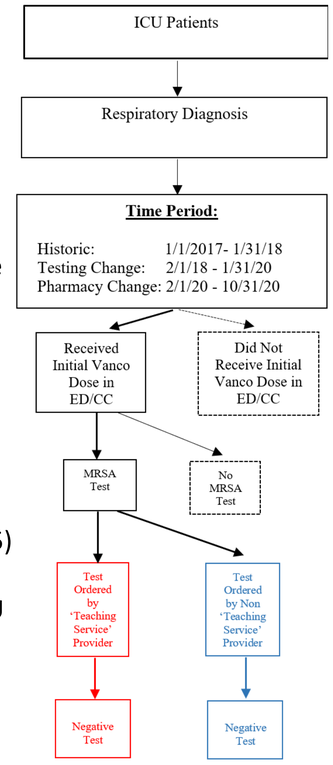
- An interdisciplinary cross-campus team (i.e., education, nursing, medicine, residents, pharmacy, infectious diseases, and IT) was formed.
- An existing IRB study was extended to include new objectives.
- Processes for MRSA screening and vancomycin usage mapped.
- Pharmacy Collaborative Practice Agreement (CPA) updated to include ordering MRSA nasal PCR for respiratory/ pneumonia indications.
- Data collected for historic period, after screening change, and after pharmacy change for two ICUs (i.e., larger tertiary and smaller community) in our health system.
- Data analyzed for respiratory ICU patients stratified by teaching service status and with a negative MRSA screen where vancomycin was initiated in the Emergency Department or Critical Care Unit. Vancomycin doses were compared across these groups and by facility.

RESULTS

There were 16,000 ICU patients seen across study periods at the 2 hospitals:
-> 78% larger vs 22% smaller facility

Inclusion criteria and time periods are presented in figure to the right.

Counts for eligible patients are available in below tables with doses presented in histograms.



Multiple Quantile Regression

Median dose differences for larger ICU
Period 2 v 1: -1 (95% CI: -1.4, -0.6)
Period 3 v1: -1 (95% CI: -1.6, -0.4)
Teaching service: -1 (95% CI: -1.5, -0.5)

Median dose differences for smaller ICU
Period 2: -1 (95% CI: -1.5, -0.5)
Period 3: -1 (95% CI: -1.7, -0.3)
Teaching service: 1 (95% CI: 0.6, 1.4)

Respiratory patients receiving vancomycin without MRSA screen:
Larger ICU by period: 20%, 10%, 13%
Smaller ICU by period: 12%, 6%, 5%

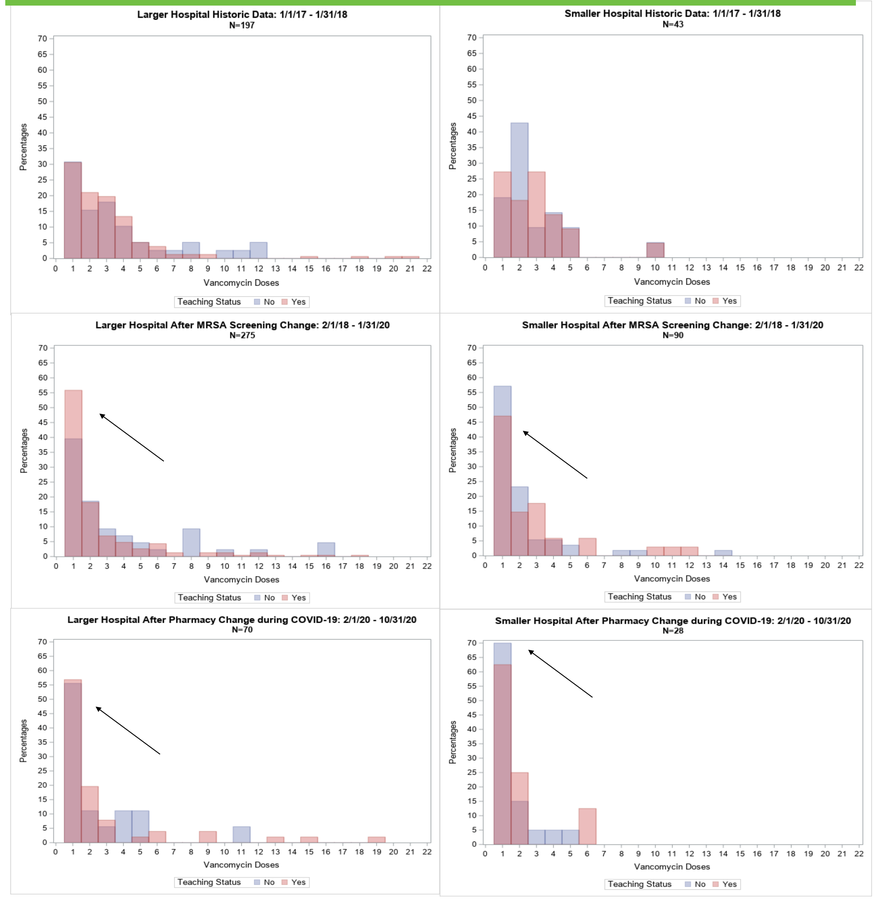
Vanco Doses among Larger Hospital Respiratory Patients

Time Period	Teaching Service	N	Median	IQR
Historic	Y	157	2	1-4
(1/1/17 - 1/31/18)	N	40	3	1-5
After MRSA Screen Change	Y	232	1	1-3
(2/1/18 - 1/31/20)	N	43	2	1-5
After Pharmacy Change	Y	52	1	1-2.5
(2/1/20 - 10/31/20)	N	18	1	1-4

Vanco Doses among Smaller Hospital Respiratory Patients

Time Period	Teaching Service	N	Median	IQR
Historic	Y	22	3	1-4
(1/1/17 - 1/31/18)	N	21	2	2-4
After MRSA Screen Change	Y	34	2	1-3
(2/1/18 - 1/31/20)	N	56	1	1-2
After Pharmacy Change	Y	8	1	1-2
(2/1/20 - 10/31/20)	N	20	1	1-2

RESULTS: Continued



Histograms: Vancomycin doses across periods and ICU by teaching service status for patients with respiratory diagnosis and negative MRSA screening result.

DISCUSSION

Key Findings
- Vancomycin doses in ICU respiratory patients with a negative MRSA screening decreased and stayed lower across time periods.
- Results were similar across the two ICUs.

Limitations
- Difficult to define patients, doses, and ordering of events using EMR data.

Next Steps and Sustainability
- Understand why not all ICU patients receive a screening and ensure negative results are promptly communicated to providers.

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 2019. 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 Tile:** **Antimicrobial Stewardship: Decreasing Vancomycin Usage in the Intensive Care Unit**

I.	Vision Statement (markers of success by March 2021; Refer to Toolkit #6 after meeting one)	*Increase Antimicrobial Stewardship within the ICU by Improving Vancomycin usage via teaming.*
II.	Team Objectives ('needs statement,' project requirements, project assumptions, stakeholders, etc.)	*Our goal is to decrease vancomycin usage in the ICU at two UnityPoint facilities and to increase pharmacist engagement in appropriate vancomycin usage. This requires communication between pharmacists, nurses, residents and attending physicians. This assumes that pharmacists can be engaged to increase their role in reviewing/moderating vancomycin usage. Success benefits patients and healthcare providers.*
III.	Team Members & Accountability (list of team members from Toolkit #7 [after meeting one] and who is accountable for what)	

Chanteau Ayers, JD	Director, Medical Education Admin	Team leader
William J. Yost, MD	VP, Medical Ed and Research	DIO and research advice
Hayden Smith, PhD	Senior Research Scientist	Research coordination, data collection, and analysis
Rossana Rosa, MD	Infectious Diseases Physician	Data analysis and protocol development
Amanda Bushman, Pharm	Infectious Diseases Pharmacist	Data analysis and protocol development

		Julie Gibbons, BSN	Infection Control	Data analysis and protocol development
		Steven Craig, MD	Transitional Year PD	Data analysis and protocol development
		Frank Caliguiri, PharmD	ICU Pharmacist	Data analysis and protocol development
		Brooke Delpierre, RN	ICU Nurse	Data analysis and protocol development
		Austin Boeckman, DO	Family Medicine Resident	Data analysis and protocol development
		Sam DuMontier, MD	Internal Medicine Resident	Data analysis and protocol development
		Vali Potter	Pharmacist – Lutheran Hosp	Data analysis and protocol development
		Laura Elliott	Manager Clinical Pharmacy	Data analysis and protocol development
		Jonathan Hurdelbrink	Research Consultant	Data collection and analysis
IV.	Necessary Resources (staff, finances, etc.)	*Access to patient test results, access to patient medical records, access to team members, representatives in pharmacy at both locations, representatives for nurse and physician providers at both locations, data analysts, and research staff.*		

<table>
<tr><td>V.</td><td>Measurement/Data Collection Plan (Refer to Toolkit #2)</td><td colspan="5"><table>
<tr><th>OUTCOME

(what is the measure of interest being evaluated as a result of the intervention)</th><th>DATA COLLECTION

(how will the data be collected, i.e. timepoints, tool used)</th><th>METRIC(S)

(measures used to evaluate the outcome)</th><th>ANALYSIS PLAN /APPROACH

(qualitative/quantitative methods used to assess the metric)</th><th>LIMITATIONS/BARRIERS

(what barriers may exist)</th></tr>
<tr><td>1. Antimicrobial stewardship via: decrease unnecessary use of vancomycin in ICUs at two hospitals.</td><td>1. Work with data analyst to properly measure vancomycin use in ICU of both hospitals.</td><td>1. Decrease in vancomycin doses for respiratory patients seen in the ICU with a negative MRSA screening.</td><td>1. Comparisons between study periods will occur using a quasi-experimental design. We will compare time periods and effects across hospitals using non-parametric multiple regression</td><td>1. Clear definitions for eligible patients and vancomycin usage without having to chart review every single patient record. Continued team involvement and communication across the project period.</td></tr>
</table></td></tr>
<tr><td>VI.</td><td>Stakeholder Communication Plan (may be helpful to draft a flow chart of team members & senior management; Refer to Toolkits #3 and #5)</td><td colspan="5">An existing IRB study was extended to include our new objectives. Meetings with C-Suite individuals about our proposed project were positive. The Chief Safety and Quality officer was very supportive. We received pledges of support from ICU Nursing and Physician leaders, Pharmacy leaders, Residency Program leaders (IM +FM + Hospital PharmD residents), Infectious Disease leaders (Physician and Pharmacy), and Information Technology leaders.</td></tr>
</table>

VII.	Potential Challenges (engagement, budget, time, skills gaps, etc.; Refer to Toolkit #4)	*Data collection. In addition to major personnel changes in our Data Analyst and Quality team, the pandemic caused major challenges with availability of key team members for focus on the project. We tabled the project throughout the initial surge in 2020. We resumed meetings in late summer/early fall. However, the second surge again shifted focus away from our project.*
VIII.	Opportunities for Scholarly Activity (potential publications, conference presentations, etc.)	*A manuscript can be drafted in an infection prevention journal on decreasing vancomycin doses in MRSA negative screening patients in the ICU.*
IX.	Markers (project phases, progress checks, schedule, etc.; Refer to *NI VII Roadmap to 2021* which will be presented at Meeting One)	*Data was collected for historic period, after screening change, and after pharmacy change for two ICUs (i.e., larger tertiary and smaller community) in our health system.*

Sections X thru XV to be completed first quarter 2021 for "Final Proceedings" booklet:

X.	Success Factors	*We were able to have successful project meetings after the initial urgency of COVID-19 calmed down. We were able to expand the Pharmacy Collaborative Practice Agreement to include ordering MRSA nasal PCR for respiratory/pneumonia indications. We were able to see an initial decrease and sustained decrease in vancomycin in the targeted patient sample.*
XI.	Barriers	*The largest barrier encountered was data collection. We had difficulty in defining patients, doses, and the ordering of events using EMR data.* *We worked to address this by pulling larger data sets, creating some defining rules, and performing some spot checks on the applicability of data.*

XII	Surprises	*What surprised you and why?* ▪ *That not all ICU patients received the required MRSA screening. MRSA screenings are supposed to be SOP.* ▪ *How difficult it was to define days of vancomycin therapy. Many factors went into determining each patient need for the therapy that we were not aware of initially and doses are not exchangeable between patients.* ▪ *How difficult it was to find a time that everyone could meet. The pandemic was not expected and had an adverse effect on this project particularly since the ICU was a key unit used to treat COVID-19 patients. Added to that, many of our team members were infectious disease nurses, pharmacists, and physicians who were frontline in pandemic issues. Finally, our project spanned two hospital campuses.*
XIII.	Lessons Learned	*What would be the single most important piece of advice to provide another team embarking on a similar initiative and how to be successful?* *Talk directly with providers in the units covered to determine if assumptions are on point. Work out a process tree of current processes to determine best approach to addressing the concern. Ensure that initial data collections reflect the current understanding of the process in place to better interpret effects of changes from data.*
XIV.	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 and how were your results the same or different from your expectations?* *We discovered that some of the processes we hoped to address were achievable while hardwiring all components such as the communication of results wase more difficult than thought.* *1 2 3 4 5 6 7 8 9 10*
XV.	Sustainability and Next Steps	What does your CEO need to know to help keep your work sustainable? He would need to know that not all ICU patients receive a screening and that it is essential to ensure negative screening results are promptly communicated to providers in order to be better stewards of vancomycin usage.