



ALLIANCE OF INDEPENDENT
ACADEMIC MEDICAL CENTERS
Innovation Award Application Form

Institution Name: Ascension Providence Rochester Hospital (APRH) and Wayne State University School of Medicine (WSUSOM), Office of Graduate Medical Education (WSUGME)

City, State: Rochester, MI

Web Site: <https://gme.med.wayne.edu/>

Institution Contact: Tsveti Markova, MD, FAAFP

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1. Describe how the nominee has developed and/or implemented *innovative approaches to medical education and/or research* by completing the following Innovation Abstract. Please limit to 500 words):

a. Title: **Building a Culture of Well-Being in Primary Care Resident Training Programs**

b. Contributors/Authors: **Tsveti Markova**, MD, FAAFP, DIO and Senior Associate Dean for Graduate Medical Education, WSUSOM; **R. Brent Stansfield**, PhD, Director of Education, WSUGME

c. Introduction/Background: Promoting wellness requires cultural change best achieved through a collaboration between “top-down” institutional efforts and “ground up” resident- and faculty-led efforts. Starting in 2017, WSUGME has led an initiative to build a culture of wellness at 3 primary care residency programs based in APRH, an AIAMC member institution.

d. Significance: Workplace stressors and the burdens of clinical care place trainees at high risk of burnout, depression, and suicide. In addition, resident burnout is associated with higher rates of medical errors, which impact patient safety. Residency programs are thus required by the ACGME to monitor and improve resident well-being. This effort occurs on multiple levels: from self-care, to peer and institutional support, to nurturing the sense of meaning in own and institutional work.

e. Methodology/Innovation Development and Evaluation: WSUGME created an **Institution-Wide Wellness Initiative** and innovated a **Resident Wellness Scale (RWS)** to assess and address resident well-being (see As part of the AIAMC's National Initiative VI, WSUGME targeted 3 programs at APRH, Internal Medicine (36 residents), Family Medicine (12 residents) and Transitional Year (4 residents), for wellness interventions. WSUGME convened APRH program directors, core faculty and residents to participate in the NI VI in 2017. To prepare for NI VI, they attended monthly Clinical Learning Environment Review meetings chaired by the DIO and attended by the Chief Medical Officer, the Quality Improvement director, and the WSUGME Research Coordinator and Director of Education. The initiative's vision statement -- To create a sustainable culture of wellness driven by engaged, empowered residents and faculty -- was written jointly by this group.

In order to measure outcomes of interventions, WSUGME partnered with Loma Linda University to develop the **RWS**, a 10-item instrument that was psychometrically sound, targeted towards aspects of wellness relevant to residents, and sensitive to changes in wellness over time. The RWS measures wellness as a positive construct: connectedness to meaningful work, ability, life satisfaction, institutional support, social support, and personal growth. It uses a frequency scale to elicit residents' memories of thoughts and behaviors over the previous 3 weeks in producing an estimate of recent wellness level. The RWS is administered by GME biannually as part of an anonymous survey of residents' perception of their learning environment, medical curriculum, and professional development.

The **Institution-Wide Wellness Initiative** comprised promotion of employee wellness resources, prioritization of wellness at administrative meetings, and conducting program evaluation and assessment. Residents and faculty formed Wellness Committees to organize events and address

wellness concerns. The initiative employed top-down (institutional resources) and bottom-up (residents leaders) approach to affect wellbeing on multiple levels: self-care, peer support and alignment with the institutional mission (see the ***Project Timeline*** found on p. 9 of this document).

f. Outcomes/Impact: Institutional efforts were successfully applied through multiple channels.

Programs formed Wellness Committees gradually at first, led by faculty champions who strengthened them. Baseline RWS ratings for items were between 3.1 and 4.1, with means comparable to published administrations of the RWS. Five items (1, 2, 7, 9 and 10) showed statistically significant time effects (see ***Table 1*** on p. 10 of this document). Most recently, in multi-site RWS research on demographic subgroups WSUGME found a strong gender effect on the self-care factor, with female residents having lower scores, which suggests that males and females may have different wellness challenges. Resident factor scores also rose across the training years. Qualitative resident comments were very positive about the impact of the wellbeing initiatives.

g. Discussion/Conclusions: Resident well-being is a complex phenomenon and thus efforts to improve it must also be multidimensional. WSUGME underscores the centrality of resident wellness to professional development as an institutional initiative. Programs in other specialties have formed Wellness Committees, which the WSUGME will track at bimonthly Graduate Medical Education Committee and Resident Council meetings. WSUGME underscores the centrality of resident wellness to professional development as an institutional initiative, and we will continue to use the RWS at the program level to track changes longitudinally.

2. Has the nominee received national recognition for this specific project/submission?

Yes No

If yes, please describe:

For more than 20 years, Tsveti Markova, MD, has contributed significantly to advancing graduate medical education and research. She led an institution-wide project to align WSUGME with hospital Quality Improvement and Safety Strategies, for which she was honored with the 2013 Alliance Innovation Award by the AIAMC. In 2018, she won the prestigious Parker J. Palmer “Courage to Lead” Award for her stewardship of innovative and effective residency programs.

Dr. Markova has been actively engaged in residency education innovation at the national, state and regional levels through leadership positions in the AAMC Group on Resident Affairs, AIAMC, the Michigan Academy of Family Physicians, and Southeast Michigan Center for Medical Education, among others. She participated in the Harvard Macy Institute Program for Leading Innovations in Healthcare and Education. Dr. Markova is the author or co-author of more than 75 peer-reviewed publications.

R. Brent Stansfield, PhD, has been the WSUGME Director of Education since 2016. A cognitive psychologist by training, he has worked in medical education for over 18 years. Dr. Stansfield is dedicated to effective program evaluation and improvement. In his current role, he created the WSUGME’s Developing Active Resident Teachers (DART) and Developing Effective Faculty Teachers (DEFT) programs and designed an innovative Dashboard-based program evaluation system. Dr. Stansfield spearheaded the Resident Wellness initiative and was the principal author of the RWS.

Dr. Markova and Dr. Stansfield’s research on resident wellness has reached a national audience, a testament of the importance and value of the project.

- They conducted presentations at the AIAMC Annual Meeting in Tucson in March 2019 and the AAMC GRA ORR Spring Conference in Portland in April 2019.

- Their article on the “Development of the Resident Wellness Scale for Measuring Resident Wellness,” was published in the *Journal for Patient-Centered Research and Reviews* in 2019 (Stansfield, Giang, & Markova, doi: [10.17294/2330-0698.1653](https://doi.org/10.17294/2330-0698.1653)).
- The *Ochsner Journal* will publish WSUGME’s article “Building a Culture of Well-Being in Primary Care Resident Training Programs” in the spring of 2021. This mixed-methods study combined responses to the RWS, the Graduate School Learning Environment Survey (GSLES), and a Semi-Structured Resident Wellness Interview. Correlations between each RWS and GSLES item revealed three important findings: (1) GSLES items measuring disagreement that there is distance between residents and faculty (“I often hesitate to express my opinions and ideas to faculty or my Program Director” and “Faculty are reserved and distant with residents”) correlated positively with RWS items 2, 6, 7, and 10; (2) GSLES items measuring disagreement about openness and trust in the program (“Upper-level residents provide support and guidance to junior residents” and “My program fosters an environment of mutual trust and respect among residents, faculty, patients, nurses, and staff”) correlated negatively with most RWS items; and (3) GSLES items measuring disagreement that the program is responsive to needs (“Resident complaints are responded to with meaningful action” and “Faculty, administrators, and staff give personal help to residents having academic difficulty”) showed weaker correlations with RWS items (see **Table 2** on p. 11 of this document).
- To serve the needs of other institutions and the ACGME as well as offer opportunities for multi-site research collaboration, WSUGME has made the RWS available for use at no cost via an online portal (<http://gme.wayne.edu/wellness/RWSFAQ.html>).

- The ACGME now incorporates a portion of the RWS in its own Wellness Survey, distributed to thousands of residents nationwide.
- Dr. Markova and Dr. Stansfield have completed a third manuscript, “Validity of Resident Wellness Scale (RWS): A Multi-site Analysis of Gender, Medical Specialty, and Year-of-Training Effects,” which analyzes RWS responses from 7 institutions (and 23 specialties) to provide additional validity evidence for the scale and to identify scale characteristics across demographic subgroups.

3. Please describe how this work might be scale-able and disseminated to other AIAMC members and the GME learning community.

As mentioned above, WSUGME has made the RWS freely available to any residency program via its online portal. The RWS is a short (10-item), validated instrument that is easily accessible to anyone with a computer or mobile device. The RWS is currently being used by at least 6 AIAMC institutions as part of the NI VI. GME leaders from these institutions have frequently contacted Dr. Markova and Dr. Stansfield for guidance and feedback on RWS use as well as various aspects of our institutional well-being initiative. We welcome all opportunities for research and dissemination collaboration in support of learning more about resident wellness and using outcomes data to improve the sensitivity of the scale to different aspects of resident well-being.

4. If chosen for this award, will the nominee be present at the AIAMC 2021 Annual Meeting, to be held March 25th thru 27th at the Loews Vanderbilt Hotel in Nashville, Tennessee? The award will be presented at the March 26th Awards Dinner. *(Please note the institution should ideally be represented by its CEO & CAO)*

Yes (most likely)

No

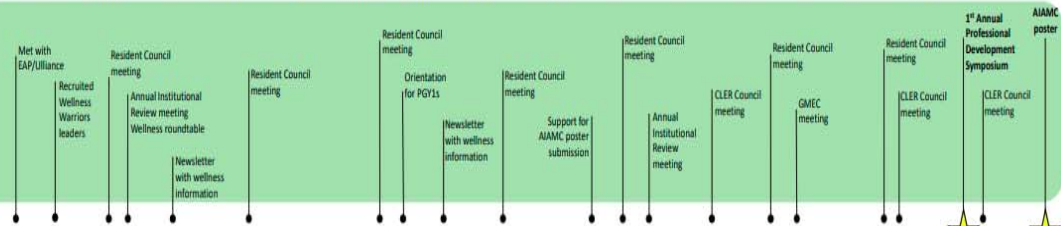
Not Sure Due to Travel Restrictions

Project Timeline

2017 Nov. Dec. 2018 Jan. Feb. Mar. Apr. May. Jun. Jul. Aug. Sep. Oct. Nov. Dec. 2019 Jan. Feb. Mar.

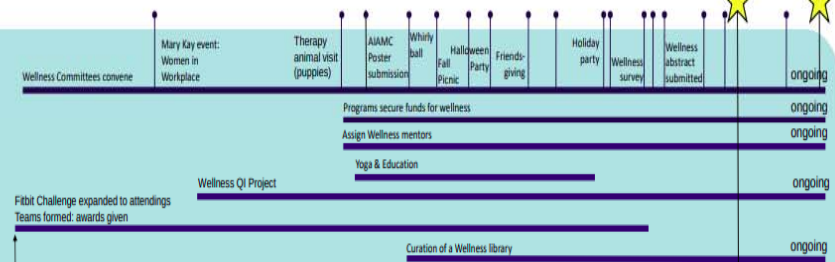
Institutional Initiatives

- Deployed the Resident Wellness Scale
- Disseminated institutional resources
GMEC, Resident Council, AIR, Newsletter, Web site, CLER Council
- Emphasized wellness at orientation
- Funded resident-led initiatives through GME Seed Grant
- Dedicated wellness funds for programs



Program Initiatives

- Program Wellness Committees formed
- Implemented formal events
 - Monthly meetings
 - Resident and faculty champions
 - Advocating to C-Suite resident sustenance (breakroom food, nap room amenities, etc.)



Resident Initiatives

- Individual residents' ideas are heard
- Program Committees adopt initiatives
- Success of resident-led projects over time

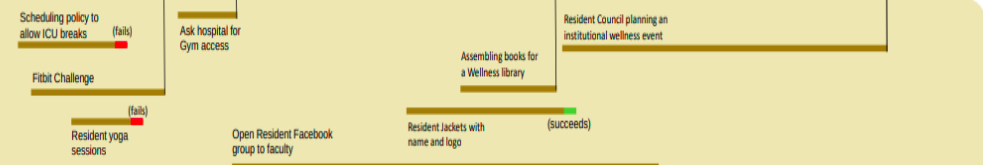


Table 1.

	Baseline	Spring	Fall		
Resident Wellness	Fall 2017	2018	2018		
Scale (RWS) Item	(GME)	(ACGME)	(GME)	<i>F</i> -test	<i>p</i>
1. Reflected on how your work helps make the world a better place	3.1	+0.62	+0.04	<i>F</i>_(2,142) = 6.63	0.0018*
2. Felt the vitality to do your work	3.6	+0.43	+0.08	<i>F</i>_(2,143) = 3.37	0.0371*
3. Felt supported by your co-workers	3.8	+0.19	+0.20	<i>F</i> _(2,143) = 0.60	0.5529
4. Had an enjoyable interaction with a patient	4.1	+0.34	+0.12	<i>F</i> _(2,143) = 2.98	0.0537
5. Was proud of the work you did	4.0	+0.11	-0.07	<i>F</i> _(2,142) = 0.61	0.5446
6. Was eager to come back to work the next day	3.5	+0.21	-0.20	<i>F</i> _(2,143) = 2.25	0.1086
7. You felt your basic needs are met	3.7	+0.42	+0.11	<i>F</i>_(2,142) = 3.61	0.0296*
8. You ate well	3.7	+0.34	-0.01	<i>F</i> _(2,142) = 2.71	0.0699
9. Knew who to call when something tragic happened at work	3.8	+0.64	-0.05	<i>F</i>_(2,140) = 11.90	0.0000*
10. You felt connected to your work in a deep sense	3.9	-0.01	-0.64	<i>F</i>_(2,143) = 7.66	0.0007*

Table 2.

	Graduate Student Learning Environment Scale (GSLES) Item					
Resident Wellness Scale (RWS) Item	I often hesitate to express my opinions and ideas to faculty or my Program Director.	Resident complaints are responded to with meaningful action.	Faculty are reserved and distant with residents.	Faculty, administrators, and staff give personal help to residents having academic difficulty.	Upper-level residents provide support and guidance to junior residents.	My program fosters an environment of mutual trust and respect among residents, faculty, patients, nurses and staff.
1. Reflected on how your work helps make the world a better place	0.22	-0.14	0.14	0.09	-0.39	-0.24
2. Felt the vitality to do your work	0.43	-0.22	0.36	-0.08	-0.29	-0.40
3. Felt supported by your co-workers	0.28	-0.20	0.18	-0.16	-0.37	-0.32
4. Had an enjoyable interaction with a patient	0.19	-0.10	0.35	-0.02	0.15	-0.37
5. Was proud of the work you did	0.23	-0.18	0.18	0.00	-0.28	-0.37
6. Was eager to come back to work the next day	0.31	-0.19	0.42	-0.14	-0.33	-0.47
7. You felt your basic needs are met	0.39	-0.06	0.38	-0.21	-0.18	-0.34
8. You ate well	0.45	-0.16	0.26	-0.33	-0.42	-0.27
9. Knew who to call when something tragic happened at work	0.27	-0.06	0.29	-0.13	-0.47	-0.41
10. You felt connected to your work in a deep sense	0.31	-0.19	0.28	-0.02	-0.29	-0.44