Background
Burnout or moral injury is of major concern in residents with burnout rates ranging from 27-75% in varying medical and surgical specialties. Approximately 10% of medical school graduates entering Anesthesiology residency programs are already exhibiting symptoms of depression and 30% experiencing burnout. Burnout causes are multifactorial including: exhaustion, emotional detachment, feelings of incompetence, uselessness, and feelings of alienation. Resident burnout has been linked to poorer resident well-being (stress, de-personalization, and fatigue) and can also result in poor patient safety outcomes (reduced empathy to patients, increased medical errors). Preliminary institutional survey results observed that 69% of the surveyed DMC residents did not believe that there was sufficient institutional support for personal wellness and that there were a significant number of factors that adversely affect resident wellness, resulting in a significant number of residents having high stress levels and a lack of work satisfaction.

Aim
To improve anesthesiology resident wellness and reduce burnout this project sought to identify potential burnout by initially obtaining a baseline of anesthesiology residents well-being index (WBI) using a WBI scale. To address resident burnout there is a need to identify and provide effective resources/strategies to improve well-being. In this project such interventions will include additional resident advising/mentoring, identifying and utilizing available institutional resources and the researching of and implementation of additional wellness tools/programs. Measurable objective aims use the physician well-being index scores and ACGME resident annual survey at the one-year implementation of this project we aim to achieve to observe at a minimum a 10% reduction in burnout, fatigue, depression rates and a 10% improvement of work-life integration measures.

Wellness Implementations
To improve resident conditions will include Birthday Luncheons hosted by the dept. on a monthly basis, “Honorable Mention” Gift cards awarded to two residents monthly, Monthly Wellness Meetings at an off-site informal setting with the meal and/or event paid for by the dept., to discuss every day stressors and come up with resolutions/solutions to resident concerns. Physician Wellness Committees to meet bi-monthly comprised of faculty and to implement changes that directly improve resident morale. Resident Mentorship Program with senior residents serving as mentors to incoming junior residents with matches will be made based on sub-specialty interests. Seniors will educate and guide juniors on education, research, and applying for fellowships/post residency positions, Wellness Expert Grand Rounds (both institutional and non-institutional) have conducted grand rounds presentations to residents with a special focus on well-being with quarterly sessions consisting of meditation, breathing exercises, and yoga.

Results
Wellness Implementations to improve resident conditions will include Birthday Luncheons hosted by the dept. on a monthly basis, “Honorable Mention” Gift cards awarded to two residents monthly, Monthly Wellness Meetings at an off-site informal setting with the meal and/or event paid for by the dept., to discuss every day stressors and come up with resolutions/solutions to resident concerns. Physician Wellness Committees to meet bi-monthly comprised of faculty and to implement changes that directly improve resident morale. Resident Mentorship Program with senior residents serving as mentors to incoming junior residents with matches will be made based on sub-specialty interests. Seniors will educate and guide juniors on education, research, and applying for fellowships/post residency positions, Wellness Expert Grand Rounds (both institutional and non-institutional) have conducted grand rounds presentations to residents with a special focus on well-being with quarterly sessions consisting of meditation, breathing exercises, and yoga.

Summary of Results
ACGME Resident survey responses revealed that DMC residents were very satisfied with work environment conditions and were coping well with work demands and not showing burnout symptoms. All Residents at DMC including anesthesiology residents have received 12% stipend increase over 12-month period (from 07/01/2019-07/30/2020) and another 2% increase is set for starting July 2020. Communication with Detroit Medical Center wellness committee regarding resident concerns over call rooms and cleanliness in call room areas have resulted in separate call rooms for male and female anesthesiology residents with the area routinely cleaned and linen changed on a daily basis.

Shared resources available to residents for well-being from Wayne State University and DMC have been utilized by residents particularly for stress reduction and wellness program guidance.

Ongoing Interventions/Discussion
Further Planned interventions include:
- After implementation of the wellness program and improvement in various areas, a survey will be used to look at the direct impact these changes have made for resident wellness.
- Through discussions with residents regarding burnout and fatigue, we found that failure to debrief after critical events could potentially lead to resident burnout.
- Plan to understand the barriers to debriefing and learn potential solutions that close the gap between principle and implementation.

We are confident that this moment will continue as there was project support at all institutional levels with stakeholders and participants in this study including the Anesthesiology residency Program Director and coordinators, faculty and residents and Graduate Medical education and Institutional Designated Officer. Resources provided to this project included funding from residency wellness program funds provided by NorthStar Anesthesia, protected time to have committee meetings at regular intervals, additional required wellness meetings, interventions and wellness research projects.