Health Workforce Research Brief
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# Social Mission Metrics Priorities II Survey

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## BACKGROUND

This project is a suppemental survey to the recently fielded Social Mission Metrics Initiative Self-Study (SMMI), which was aimed at measuring the current state of social mission at dental, medical and nursing schools across the country, through the process of self-assessment. The Social Mission Metrics (SMM) Priorities Survey is designed to address an additional challenge in the larger project: How should specific indicators be weighted to accurately reflect their relative importance in contributing to Social Mission? For example, is requiring students to serve in community health clinics more or less important than requiring them to take implicit bias training? In order to address this challenge, we conducted the first stage SMM Priorities Survey in 2018 with key stakeholders in health professions education, including members of the project's Advisory Committee, faculty and administrators at about 60 schools involved in pre-testing the instrument, and persons registered for the 2018 Beyond Flexner conference in Atlanta, Georgia. We computed item weights based on 293 respondents, and applied these weights in scoring results from schools who participated in the SMMI self-assessment. However, the first stage Social Mission Metrics Priority Survey did not include enough students and did not have enough respondent groups to support multivariate analysis and comparisons of their priorities on social mission. Therefore, we undertook a second stage Priority Survey (Priorities II) in 2019, with support from the present award.

This project addresses three objectives: (1) Surveying national samples of medical, dental and nursing students to see how their perception of social mission priorities is similar or different from faculty and other professionals. (2) Exploring differences in priorities among key respondent groups by applying multivariate models to the data that will link respondent characteristics to the relative ratings they provide. (3) Validating our definition of key domains by deploying a novel variant of the Paired Comparison method, known as Wiki Pairs. Using an online tool (developed at MIT and available at allourideas.com) respondents can propose new items for consideration, which (upon approval by the investigators) are incorporated into the ongoing data collection and tested for importance against the items already listed. This introduces a key 'crowdsourcing' element into the research that potentially broadens the set of relevant indicators.

## KEY FINDINGS

1. People in different health professions (dentistry, medicine and nursing) differ in some respects in the priorities they assign to different aspects of a school's programs that address the social mission of health professions education.
2. Students differ from full-time employees in health professions education in the priorities they assign to different aspects of social mission programs in health professions schools.
3. As our data collection efforts continue, we expect to be able to broaden and deepen our analysis of these differences.

The total number of participants we expected to enroll was 500, but we have yet to attain that goal. We began with Priorities II pilot study with a probability sample of about 600 cases from the email mailing list of Beyond Flexner Alliance

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(BFA). The pilot study only yielded a 10% open rate and 3% completion rate with three email pushes, so we switched our focus to social media promotion and outreach to various student associations. The data collection is in preliminary stage and we expect to have an increase of respondents in December 2019 and January 2020, the time that many student associations agreed to send the survey to their members.

## METHODS

The survey instrument used in this project is innovative and complicated, so we went through several rounds of internal test and revisions. The survey consists of two treatments. In the first treatment, selected participants first review informed consent information and provide demographics in a Qualtrics survey, then they are switched over seamlessly to the Sawtooth Software survey platform, on which we built a maxdiff (best/worst) rating questionnaire with the help of an outside consultant (Dr. Megan Peitz from Numerious Inc). This is a more balanced and adaptive Maxdiff design compared to the Qualtrics-based maxdiff questions we used in the first stage Priorities Survey. It allows respondents to see 4 randomly chosen SMM indicators at one time and select one as most important and one as least important. After the 20 maxdiff questions, respondents are asked a final anchoring question asking them to select all 'really important' items from a list of items they have already chosen as relatively important.

The second treatment, presented to a different group of participants randomly chosen, starts with the same demographic questions in Qualtrics and continues with an embedded electronic 'widget' we programed within Qualtrics. This widget links to the Wiki Pairs platform maintained by AllOurIdeas.com, a project by researchers at MIT that is supported by Google. The respondent sees a series of simple paired comparisons based on the 80 different SMM indicators, and chooses which of the two items is most important as an indicator of social mission performance. That platform will accept an unlimited number of answers, and keeps showing pairs until the respondent chooses to quit. It is clearly stated in the instructions that respondents are asked to rate 10-15 pairs. The Wiki Pairs platform allows respondents to suggest new items to add to the survey. Upon approval by the research team, these new items are incorporated into the ongoing data collection and tested for importance against the items already listed.

For both instances, we undertook several rounds of internal tests to successfully pass the respondent ID from Qualtrics to the Sawtooth or Wiki Pairs platform in order to merge the data later. The two treatments were originally built in two Qualtrics surveys with different survey links, which make them difficult for social media posting and sharing. In order to reduce the complexity of splitting respondents for the two treatments, we finally combined the two treatments into one Qualtrics survey and randomly assign 75% of respondents to the Sawtooth platform and 25% of respondents to the Wiki Pairs platform.

## FINDINGS

In planning this project, we expected to get 300 respondents from a probability sample of 2000 email addresses drawn from the email mailing list of Beyond Flexner Alliance (BFA) and 200 respondents from non-probability sample recruited from various student associations in health professions. We began our Priorities II data collection efforts with a pilot study with a probability sample of about 600 email addresses from the email mailing list of BFA. No mailing addresses or phone numbers were available for the listed people, many of whom turn out to have only weak affiliation with BFA. The pilot only yielded less than a 10% open rate and a 3% completion rate with three email pushes. Lacking phone numbers, we were unable to conduct telephone reminder calling. Therefore, we decided to switch our focus from the mailing list to social media posting of the survey on BFA's Facebook and Twitter account. This is an on-going process and we expect to get more respondents by advertising and promoting the survey to health professionals on Facebook and Twitter. At the same time, we also reached out to student associations, including the American Medical Student Association (AMSA), the American Student Dental Association (ASDA), the National Student Nurses Association (NSNA), and the Graduate Nursing Student Academy of the American Association of Colleges of Nursing (AACN). NSNA has sent our survey invitation to a list of program directors in undergraduate nursing schools, with promising results. AMSA agreed to help us send out the survey to their members for free and they have shared the survey on their social media account. NSNA and AACN also

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agreed to send the survey to their faculty members and students in early December with little or no charge. ASDA sought a high price for sending out the survey by email to its members, which is beyond our budget, so we started to reach out instead to the Student National Dental Association (SNDA) and the American Association of Women Dentists (AAWD) for a possible collaboration on sending out the survey to their student members. The data collection is in an early stage and we expect to get more respondent completions with our outreach efforts in December 2019 and January 2020.

## CONCLUSION

Our first stage Priorities Survey showed significant differences in the social mission priorities of professionals in dentistry, medicine and nursing. For example, dental professionals gave significantly higher ratings to the area that requires student participation in service-learning and extracurricular activities aimed at social determinants of health, compared to nursing and medical professionals. House staff, residents and fellows gave significantly higher ratings to the area that emphasizes K-12 and undergraduate pipeline programs having large minority enrollment and including first-generation college students, compared to faculty members, academic leaders (Deans and Associate Deans, etc.), administrative staff and students. Students gave significantly higher ratings to the area that requires students to attend training in unconscious bias, cultural competency, health advocacy and social determinants of health, compared to academic leaders. Currently we do not have enough data from our second stage Priorities Survey to make any new conclusions about the stakeholders' preferences on social mission. We are expecting to see differences in priorities between students and full-time employees in health professions education.

## POLICY IMPLICATIONS

Our work will have significant policy implications. The movement to improve the performance of health professions schools in educating for social mission has moved to a critical stage, as efforts like the SMMI national self-assessment have awakened the interest and concern of hundreds of schools across dentistry, medicine and nursing. The support of HRSA and of foundations such as RWJ are important for encouraging positive change, but a primary driver of continuing progress will be student demand. Health professions schools are in competition for the best students, and if students are seeking to enroll in programs that directly address health disparities, diversity and inclusion, and the social determinants of health, then health professions schools will respond. To direct this process of change, we need to understand better what the priorities for social mission are for students and how priorities differ across the three professions. With this knowledge, health professions schools in dentistry, medicine and nursing can more effectively target their efforts at changing their programs and curricula to address not only social mission in general, but the particular social mission areas that are of most importance to their current and prospective students—the next generation of health professionals. That process of positive change will bring our nation closer to realizing a culture of health for all residents.

**References:**

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