

Final Narrative Report: Curriculum Assessment and Reform Initiative for Medical Students

1. *What measurable goals did you set for this project and what indicators did you use to measure your performance? To what extent has your project achieved these goals and levels of performance?*

Based on the belief that medical education ought to include formal instruction about health care delivery and policy and the environment in which future physicians will practice, and in order to help direct medical education reform, the American Medical Student Association (AMSA) believes it is important to document the current level of understanding of physicians-in-training concerning health care access and delivery. AMSA conducted an assessment of medical students' attitudes and knowledge about health care delivery with the following goals in mind:

- Assess the knowledge and attitudes of medical students about health care delivery and problems with the American public's access to health care, including racial and ethnic disparities in health care access;
- Examine differences in knowledge and attitudes between levels of training; and
- Examine the relationship of students' demographics, faculty, institutions, and curricula on medical students' knowledge and attitudes regarding access to care.

The indicator AMSA identified to measure its success was the response rate on the assessment by the medical students. AMSA was striving for a response rate of 60% or more and achieved a response rate of 57%.

Jeffrey Huebner, MD, AMSA's Jack Rutledge Fellow, and Jaya Agrawal, MS-4 at Brown University and AMSA's President, served as the principal investigators and ably led the survey effort on behalf of AMSA. AMSA sought the expert advice from three researchers who could provide AMSA with a perspective on health policy education and survey design and administration. They were Paul Jung, MD, Robert Wood Johnson Foundation Clinical Scholar at Johns Hopkins University, Steven Simon, MD, MPH from Harvard Pilgrim Health Care and Harvard Medical School and Ashwini Sehgal, MD from MetroHealth and Case Western Reserve Medical School. In addition, AMSA used the survey and research services of the Center for Survey Research at the University of Virginia.

a) *Describe the subject matter of the research, time period, the universe, and the response rate (if applicable). Include the research instrument if you developed it under this grant or a previous RWJF grant.*

The American Medical Student Association Foundation is committed to preparing and encouraging medical students to serve the health care needs of all Americans, particularly underserved populations. The AMSA Foundation follows the Association's lead in studying and educating the American public and, more specifically, future physicians on its strategic priorities. As one of AMSA's current strategic priorities, the organization has launched a universal health care campaign to educate its constituency on health care access issues. AMSA has noted that

medical students often demonstrate high levels of both interest and confusion about the health care system in which they will practice, while often being unaware of the advantages and disadvantages of potential policy reforms. Consequently, their ability to become broader advocates for their patients and the public might be compromised. In order to help direct medical education reforms that would enable medical schools to better address issues of health policy and disparities in health access, AMSA developed a nationwide study of medical students that was designed to:

- Measure students' attitudes and knowledge of issues about the American health care system, specifically regarding access to care, options for health care reform, and racial/ethnic disparities in health access;
- Make comparisons and contrasts between this cross-section sample of first and fourth year students;
- Examine the relationship of variables such as students' demographics, faculty, and curricula on students' knowledge and attitudes.

To our knowledge, this was the first nationwide, randomized study of medical students' knowledge and attitudes about health policy, health care delivery, options for health care reform, and racial/ethnic disparities in health care access. First and fourth year students were surveyed.

The survey instrument was pilot-tested with a group of medical students at the University of Virginia and subsequently refined. The survey was distributed in a written format to a random sample of 640 first year and 960 fourth year medical students drawn from the AMA MasterFile. Due to the expectation that fourth year students would be more difficult to reach and less likely to complete the questionnaire (because of out-of-town rotations), fourth year students were over-sampled. To encourage a higher response rate, the survey offered a nominal incentive as well as self-addressed, stamped envelopes. With follow-ups via both written and phone reminders, the overall response rate was 57%. The questionnaire included 49 questions, many with sub-parts. The survey contained both original and previously published questions. Surveys were distributed in early March 2002, and the closing date was mid-May 2002.

The respondents' demographic characteristics included the following:

- More often male than female for both first and fourth year students (55% v. 45%);
- Approximately 2/3 students grew up in urban/suburban areas (v. small town/rural);
- Approximately 3/4 students had undergraduate majors in sciences;
- Approximately 6/10 first year students and 7/10 fourth year students planned to enter a specialty field (v. primary care);
- 3/4 students estimated their debt at the end of medical school would be greater than \$50,000, nearly 1/2 students believed it would be greater than \$100,000;
- Approximately 4/10 students experienced a period of time in the past when they were uninsured, and a majority of students reported a period of time when a family member had been uninsured;
- Students' racial backgrounds were roughly similar to the nationwide student population;
- Respondents amongst first years were equally divided between public and private schools, while fourth year respondents more often came from public schools.

b) Describe the major findings of your research. Use a bulleted format, with one bullet for each key finding.

- In general, overwhelming majorities of both first and fourth year students believed that the topics of health policy, health care delivery, options for health care reform, and racial/ethnic disparities in health access were very important to their future practice of medicine, and they believed that more time in the curriculum should be devoted to these topics.
- In general, first and fourth year students often demonstrated similar levels of knowledge regarding these topics. This knowledge reflected in general, a good awareness of concepts, but poor knowledge of “the details.” Most students correctly answered true/false questions about the consequences of lacking health insurance, but many medical students (one in three) could not correctly answer questions about the health of our system based on various indicators, and the approximate number of uninsured people in this nation. In addition, large percentages of students answered “don’t know” (lower percentages of fourth years than first years) in response to questions about what they believed would be the best solution for health care reform and how the American health care system compares to those abroad. This also was exemplified by one non-respondent, who took the time to send back the survey and include a letter outlining her disgust with her lack of ability to answer many of the questions in the survey.
- A large majority of first year students believed that the health care system treated people unfairly based on whether they have health insurance, their income level, how well they speak English, and their racial background. In addition, a large majority of first year students believed that racial/ethnic background affected the ability of minorities to obtain medical care. Near majorities, but for most questions, less than 50% of fourth year students believed the same.
- Meanwhile, large majorities of both classes believed that it is important for the racial composition of our medical workforce to mirror the diversity of society and desired increased exposure to teaching about racial/ethnic disparities in health care and more effective communication with patients that do not speak English.
- In general, fourth year students were less idealistic than first year students, as has been noted in previous studies. This was evidenced by their higher rating of the importance of income, declining interest (though still substantial and a majority) in curricula that would address these topics, and a decreased preference compared to first years for some sort of universal health care system.
- Even though it is difficult to quantify and describe how the U.S. system compares to those of other nations’, students seem to understand that trade-offs would exist, manifested in their commonly held beliefs that the U.S. system provides better quality, choice of physician, and innovations in medical technology. Becoming a “player” in that system, and perhaps immersed more in the “culture” or subject to the “hidden curriculum” (Ludmerer, 2001), higher percentages of fourth years consistently believed that the U.S. system outperformed the systems of other nations’ on these characteristics. In addition, perhaps because medical students often provide care at academic health centers with missions to take care of underserved populations, a lower percentage of fourth year versus first year students believed that the U.S. system was worse than other nations in providing access to care. This was also evident by the fact that a lower

- percentage of fourth year students believed that people without health insurance could not access the health care they need.
- Perhaps the discrepancy itself was unsurprising, but the magnitude of discrepancy between students' preferences for some sort of universal health care system (majority preferred "multi-payer") and their perceptions of the preferences of physicians (in essence their mentors) and the public (their future patients) was quite marked. Medical students apparently believe that the system that would serve their patients best is not the same as the one that would serve them best as future physicians. The exact reasons for this should be explored in future studies, but likely are manifested in their beliefs about how the U.S. system works better than those of other industrialized nations and the declining idealism of medical students between first and fourth year that was apparent in this study.
 - As a result of a lack of support from both their training curriculum and culture, medical students undergo medical training in an environment that is not conducive to empowering them to become "patient population" advocates and influential leaders as physicians in local and national debates about health policy. However, students demonstrated a large awareness of the importance of these issues and the importance of their political activity as physicians, demonstrating the need for greater attention to these issues in the curriculum. Students clearly desire objective teaching and innovative experiential learning in these subject areas that does not place undue burden on them in an increasingly crowded medical school curriculum. Idealism is what draws most medical students to the profession, and it commits students and physicians to advocating first and foremost for their patients' best interests. Evidenced by this research, students seem to understand that their awareness of health policy and ability to be politically active also will allow them to better shape the American health care system for their patients and the profession of medicine.

2. Did the project encounter internal or external challenges? How were they addressed? Was there something RWJF could have done to assist you?

The project encountered and overcame several challenges. Since this was one of AMSA first attempts at a national survey (other than surveys of its membership and project participants), AMSA had a slow start-up in identifying the necessary steps to developing, administering and analyzing a national survey. AMSA decided not to survey residents due to the difficulty in accessing them and the varying answers they would provide. With the expert guidance of three dedicated advisors to the project, AMSA proceeded with survey design and conduct with due diligence. The initial survey research partner that AMSA identified ceased its survey assistance function shortly after AMSA began to partner with them, causing AMSA to seek another partner, the Center for Survey Research at the University of Virginia, which offered AMSA superb service, consultation, timeliness and performance. AMSA was also challenged by the fact that the survey needed to be administered prior to students graduating or leaving school for the summer so that the mailing addresses obtained would still be good. AMSA did not need to seek assistance from RWJF for the challenges identified above.

3. *Have there been other sources of support?*

AMSA supported the salary of the two student co-directors, Jeff Huebner, MD, who served as AMSA's Jack Rutledge Fellow, and Jaya Agrawal, AMSA's president. Both of them were medical students who took the year off to work in the AMSA office. The RWJF grant supported the costs of the actual survey administration.

4. *What lessons did you learn from undertaking this project?*

AMSA learned from the expert co-collaborators on the project about appropriate survey design and administration, skills that will be useful in future surveys and studies that the organization may undertake.

There was high recognition by medical students that participated in this study of the importance of learning about racial disparities and acknowledging their presence in the American health care system. Apparently, many students are aware of these disparities as they enter medical school. However, as they progress through medical school, based on fourth year students' responses, they may become "numb" to these disparities and become less likely to acknowledge them. Given the overwhelming documentation in the literature of their presence in our system and the students' own preferences to learn more, medical schools should educate students more explicitly about disparities, their causes, and attempts by the medical profession, public health sector, and policy-makers to reduce them.

5. *What impact do you think the project has had to date? Who can be contacted a few years from now to follow up on the project?*

The project provided AMSA with data to justify the need to launch its educational campaign on health care policy, access, disparities and universal health care coverage. Joan Hedgecock, the principal investigator, may be contacted at the AMSA Foundation for any future questions about the project.

6. *What are the post-grant plans for the project if it does not conclude with the grant?*

Post-grant plans include the following activities:

Publication of papers:

- 1: Subject: Medical Students' Attitudes about the American Health Care System and Universal Health Care
- 2: Medical Students' Knowledge about the American Health Care System and their Desire to Learn More about Health Policy
- 3: Medical Student's Attitudes about Racial and Ethnic Disparities in Health Access and their Curriculum about Them
- 4: Collaboration with University of California at San Francisco on paper comparing public's responses to questions on health care disparities to those of physicians and medical students

Dissemination of study findings in the following forums:

- AMSA Annual Convention;
- Professional conferences, such as those sponsored by the Association of Academic Medical Colleges, Society of Teachers of Family Medicine, AAMC Meeting;
- AMSA Website;
- AMSA Press Releases about various papers and findings.

Development of future studies and projects:

- Further exploration of the type of curricula students desire for these topics (perhaps best explored via qualitative methods)
- Further exploration of students' fears about health care reforms that would create a universal health care system.
- Future AMSA Curriculum Project/Grant educating medical students on health care access issues

7. *With a perspective on the entire project, what have been its key publications and national/regional communications activities? Did the project meet its communications goals? Please complete the Bibliography.*

Since the survey analysis was completed in June 2002, AMSA has not finalized its papers for submission to peer-reviewed journals. Several papers are currently being written by the student co-directors and will be submitted for publication during the current academic year. AMSA will also seek opportunities to use the study findings in its public education campaigns. In October 2001, AMSA's Public Relations office released a Press Release on the funded study to be conducted by AMSA. AMSA succeeded in having a press release summarizing the assessment undertaken with RWJF support publicized in the "Grant Watch" section of *Health Affairs*, March/April 2002. (See attached Bibliography.)

AMSA will update RWJF with bibliographic information as papers are accepted for publication and conference presentations are made in the future, as required.