

2023 AΩA Fellows in Leadership ready to lead

Leadership in medicine, medical education, and health care is more complex in the 21st century than ever before. Escalating costs, accessibility, less than ideal outcomes, and commercialization challenges have contributed to an unprecedented level of uncertainty in medicine.

The medical profession and the country are in need of leadership that is inspiring, insightful, engaging, and humble—leadership that understands and represents the needs of patients, physicians, medical educators, and trainees.

Encouraging the development of leaders in the community and academia has been, and continues to be, a core Alpha Omega Alpha Honor Medical Society (AΩA) value, and an essential part of the organization's mission.

The Richard L. Bynny Fellow in Leadership program recognizes and supports the development of outstanding physicians through the tenets of the Inward Journey; upholding AΩA's values and mission; and a commitment to servant leadership.

The five essential components of the AΩA Fellow in Leadership program are:

1. Self-examination through the Inward Journey (learning to lead oneself before leading others);
2. A structured curriculum focused on leadership, and the relationship between leadership and management;
3. Mentors and mentoring;
4. Experiential learning to broaden the perspective and understanding of leadership as it relates to medicine and health care; and,
5. Developing communities of practice.

Nominations for the Fellowship are made by the senior executive of a medical school, hospital, or health care organization, who agrees to serve as a mentor for the Fellow. The nominating organization and Fellow designate at least one additional mentor who supports the completion of an experiential leadership project, serves as a role model, offers advice, and connects the Fellow with key individuals in leadership positions.

These relationships, leadership opportunities and experiences are ongoing throughout, and after, the Fellowship year.

Fellows receive a \$30,000 award for further leadership development and project funding.

The most recent graduates of AΩA Fellows in Leadership program—Christine Jensen, MD, MPH (AΩA, University of Washington School of Medicine, 2010, Resident) and Kristina Petersen, PhD, (AΩA, New York Medical College, 2019, Faculty)—were selected for their diverse backgrounds, career performance and success, leadership experience, mentor support, and each one's leadership project.

The Fellows successfully completed their year of leadership development and have joined the growing AΩA Fellows in Leadership Community of Practice.

The simplest solution to a thorny problem: Improving communication between providers and administrators



Christine Jensen, MD, MPH is Medical Director of Surgical Services and past Chief of Staff at Mercy Hospital, part of Allina Health. She is also an Adjunct Professor in the Division of Colon and Rectal Surgery at the University of Minnesota, Minneapolis, MN.

My AΩA Fellow in Leadership project aimed to improve bidirectional communication between medical providers and administrators in order to improve patient care, and to ensure providers felt heard and valued.

To understand the impetus for the project, one must first understand the challenges being faced by the Allina Health system, a large nonprofit health system in the upper Midwest. The medical staff and the primary care providers in the system recently voted to unionize, and there have been multiple articles in the *New York Times* about this and other issues within the system, with many physicians voicing concerns.

Unionization among practicing physicians is highly unusual, as is granting interviews to the national media. Clearly something has been amiss, and serving as Chief of Staff during the unionization vote gave me insight into what the issues might be. The drive to unionize arose from a deep disconnect between physicians and administrators largely due to challenges in communication. Challenges related to communication likely exist regardless of where one practices, and so I made the focus of my

project improving bidirectional communication between providers and administrators, with the Chief Medical Officer of the health system as my mentor.

Originally there were four arms to the project:

- Creation of E-mail distribution lists to ensure effective communication with providers;
- Development of influence maps to show who key, helpful and influential people were so they could be informed of decisions and could help with implementation of initiatives;
- Assessment of the current state of communication through structured interviews, and pre- and post-intervention surveys about perceptions of communication in the health system; and,
- Improving communication by setting aside time during scheduled meetings to address the concerns of the attendees and address them in a systematic fashion.

E-mail

Development of the E-mail distribution list was an initial priority because the health system did not have an effective way to communicate with all providers, because of logistical challenges. Thirty-two percent of providers in the health system are employed by the health system, and 68 percent are independent. There was no way to construct an E-mail distribution list that includes independent providers, and no way to construct a distribution schema so that targeted E-mails can be sent to a subset of providers, for example, all orthopedic providers within the system regardless of where they practice or whether they are independent or employed.

An inquiry was made into maintaining a database of E-mail addresses in partnership with the communications office. Ultimately, it did not prove feasible as the system was introducing a new E-mail program, and updates to the existing program were not allowed. However, the communications office manually maintains a list of all provider E-mail addresses, so by using this manual list, it was possible to get a weekly provider update to all providers, both employed and independent.

Influence maps

The idea behind the influence maps was that the individuals who are most respected and effective are not always necessarily the ones who hold titled positions. It is helpful to have identified for each location within the health system those whose opinion should be solicited for decision-making, and who should be informed of decisions and could help with implementation.

Ultimately, to create these maps, or a map for an entire health system requires extensive resources and time. A map was created for one hospital, which was quite helpful in onboarding a new hospital president, as he used it to identify who to meet with in order to get to know the staff and hospital influencers.

State of communications

For the third arm of the project, I assessed the current state of communication through structured interviews with key players, and conducted pre- and post-intervention surveys about perceptions of communication within the health system. The interviews were conducted with providers who bridge the gap between administrators and providers—those in roles such as Chief of Staff, Vice President of Medical Affairs, physician lead for Emergency Medical Services, Information Technology lead, and other recommended leaders and influencers.

The interviews identified a number of common themes surrounding the difficulties with communication, and associated frustrations. I also solicited ideas from the interviewees as to how communication could be improved. The interviews confirmed the importance of my project and the need for consolidated support across the system to improve communication.

Improving communication

The fourth arm of the project, and the one that ultimately proved most beneficial, was to set up a structure for regular meetings to systematically solicit feedback from providers. During meetings, 15 minutes was set aside at the end of a set of regularly scheduled meetings (i.e., Medical Executive Council, department meetings, Quality Council, etc.). During this 15 minutes, the providers at the meeting were asked for any challenges or concerns they were facing. The group was asked to narrow this down to the most pressing issue they were facing, and to develop a proposed solution to the problem as well as any related asks from administrators. The commitment was that by the next meeting, administrators would have feedback as to what was done, or not done, in response to each concern.

There were several opportunities that arose from this process. The process sparked many thoughtful discussions about the challenges providers were facing. Sometimes these were very specific and resulted in multiple initiatives that improved patient safety and quality of care. Sometimes, these were more general discussions regarding broader challenges facing the health system, such as recruitment.

Results of preintervention and postintervention survey regarding communication

	Preintervention mean (n=30)	Postintervention mean (n=21)	p
Please provide a rating for how effectively factual information (such as Epic changes or safety alerts) is communicated to you	3.50	4.05	0.01
Please provide a global rating for communication (incorporating quality, frequency, modes of communication) from site-level leaders (those within your daily practice setting) to you	2.97	3.95	0.001
Please provide a global rating for communication from Allina Health system-level leaders to you	2.77	3.24	0.14
Your ability to communicate to site-level leaders	3.27	4.33	0.001
Your ability to communicate to system-level leaders	2.37	3.33	0.006
The degree to which you received feedback and/or felt you were heard if you gave input to site-level administrators	3.07	4.10	0.003
The degree to which you received feedback and/or felt you were heard if you gave input to Allina Health system-level administrators	2.28	2.89	0.11

Likert scale, 1 = poor, 5 = excellent for all questions.

There were times when these discussions generated additional work for the responsible administrators and leaders in order to address the identified concern. At other times, the identified issue was not easily solvable (e.g., the emergency department was overflowing, and had been for several years). The education and information obtained through this process was beneficial for all involved regardless of the final outcome; providers appreciated having their concerns heard. Closing the loop was the most important part of the process, not necessarily whether anything was done.

As part of assessing the state of communication, a survey was sent to medical staff leaders to assess perceptions of communication. This was done prior to initiation of the fourth arm of the project and then repeated six months later.

There were significant improvements in communication in five out of the seven measures, ranging from half a point to a point on a five-point scale, despite only a six-month time frame and the limited number of respondents. The improvement in the first question, “Please provide a rating for how effectively factual information (such as Epic changes or safety alerts) is communicated to you,” likely relates to the expansion of the weekly

provider updates to all providers by the communications office. This vehicle for disseminated factual updates had previously had limited distribution.

The significant improvement in all of the measures related to communication to and from site-level leaders suggests that the new structured communication process was effective, since this was primarily geared at improving communication between providers and site-level leaders. The perception of the ability to communicate to system-level leaders also may have improved because providers felt their concerns were being relayed from site-level leaders to system-level leaders. The fact that the other measures of communication, to, and from, system-level leaders did not improve likely reflects on the fact that this intervention did not address communication to, or from, system-level leaders.

Overall, these results suggest that the structured communication process that was instituted was highly effective, particularly considering that these results were demonstrated after only six months of piloting this project.

Enhanced communication

A surprising and important result of this project was that it was the simplest intervention that was most

effective. Setting aside time to regularly solicit the concerns of providers, systematically addressing those concerns, and providing a feedback loop was extremely effective. This is particularly remarkable since it was occurring in a highly charged environment, where the medical staff is unionizing, and there exists a great degree of mistrust between providers and administrators. This demonstrates that improved communication does not require a great commitment of resources, but simply a commitment to listen and respond.

A year of growth

The Fellows were told early in the program that the actual project is ourselves. I am enormously indebted to the program and Alpha Omega Alpha as the program has been transformational. It has fundamentally changed me and made me a vastly better leader, and person.

The E-mail component of my project, although not completely successful, gave me an ally in the communications office who has been helpful in other areas, and made me realize that the communications office shares the same goals and frustrations as I do.

Constructing the influence map for the new hospital president was one of the early steps in gaining his trust and having him see me as a leader in the hospital. Interviewing others around the system built relationships across the system that will serve me well into the future. It also helped me practice my listening skills. Developing the structured process within meetings also built my listening skills, and built my skills in being able to develop communication plans.

The program also provided me excellent mentors in Diane Magrane, MD (AQA, Drexel University College of Medicine, 2017), and Ron Robinson, MD, MBA, MPH (AQA, University of Texas McGovern Medical School, 1993), both of whom challenged and guided me, and were there with help, advice, and a steadying hand when the road got really rough for a while.

The Fellowship also came with financial support that is allowing me to pursue a Master's degree in Business Administration, which will further the next stage in my career.

The Fellowship changed me. A situation happened last year in my role as Chief of Staff, which was challenging beyond anything I could have imagined. I have always said we don't have a choice in what happens to us, but we have a choice in how we react. Because of the guidance, growth, and self-reflection that occurred during this Fellowship, I chose to react to situations differently than

I would have previously, and was able to safely lead those I was responsible for, and my patients. I am grateful to Alpha Omega Alpha not only on my behalf, but on the behalf of the other physicians, and patients, involved.

This is an exceptional program that develops leaders in the medical field in a unique and unparalleled way, and I owe a debt of gratitude to the difference it has made in my life.

Investing in one another: Striving to achieve a symbiotic community



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Over the past 18 months, I have had the privilege of participating in the AQA Fellow in Leadership program

during which I had incredible mentors who helped push me beyond my comfort zone to grow as a professional and leader. Throughout the experience, I led a medical education project, worked collaboratively within a team, and received feedback to help me improve and maximize my project's potential impact. During this time, I was fortunate to partner with experts to pioneer the application of machine learning techniques to medical education, exploring whether holistic medical student success could be predicted by advanced machine learning algorithms.

My academic interests, teaching, service, and scholarly work are concentrated around strengthening medical education from many perspectives: developing innovative curriculum; enhancing the learning environment by fostering inclusion of all underrepresented groups; developing early intervention programs to support students with academic barriers; and promoting a fully accessible approach to teaching, learning, and patient care.

A few of my goals upon entering the Fellow in Leadership program included:

- To develop and test a new method of assessment within medical education that considers multiple intersectional factors simultaneously, and has the

- potential to provide a more holistic approach to predicting and assessing medical student performance.
- To apply the new method to a multi-institutional dataset to examine whether it is generalizable across institutions, and begin the process of creating a user-friendly risk score or other model that could be widely used by medical educators. This has the potential to transform the way medical educators interact with learners, as they could create proactive support programs for learners at the highest risk of facing academic, professionalism, or physicianship barriers.
 - To develop my leadership skills through self-examination and reflection, engaging in a structured curriculum, interacting with colleagues within the program, working regularly with mentors, leading the proposed project, and actively searching for ways to enhance my personal growth.

The critical role of mentors and partners

I entered the AQA Fellow in Leadership program at a time when I had incredible support from many mentors, but recently had one difficult experience that opened my eyes to an environment where mentors could see mentees as competitors and exploit the power differential to their benefit. This experience as a mentee shook me to the core—professionally and personally. I watched, heartbroken, as other mentees of this individual experienced similar challenges. It was challenging for me to continue pursuing work in the same field as this mentor due to the firestorm that seemed to surround me. I was in the midst of this turmoil when I entered the AQA Fellow in Leadership training session, unsure how to proceed.

The mentors I encountered on the AQA Fellow in Leadership faculty were the polar opposite. Over four days, I got to know leaders whom I wanted to emulate, leaders who were dedicating their time to furthering good work and innovation, leaders who saw themselves as servants and stewards.

After the many months I had spent feeling engulfed by flames of difficulty due, in large part, to one previous mentor's actions, this was a breath of fresh air that helped me rediscover my strengths and innate desire to continue pursuing work in the areas where I am passionate. Drs. Wiley (Chip) Souba, DSc, MBA (AQA, University of Texas Medical School at Houston, 1978), Richard L. Byyny (AQA, Keck School of Medicine of the University of Southern California, 1964), Diane Magrane (AQA, Drexel University College of Medicine,

2017, Faculty), Brad Barth (AQA, University of Kansas School of Medicine, 1994), Alan Robinson (AQA, University of Pittsburgh School of Medicine, 1988, Faculty), Steven Wartman (AQA, The Johns Hopkins University School of Medicine, 1970), Eve Higginbotham (AQA, Morehouse School of Medicine, 2008, Faculty), as well as Kathi Becker and Dee Martinez spent many hours interacting with the three fellows in our cohort. My project mentor, Dr. Kelly Dore, provided invaluable support—from assisting with my misdelivered luggage to helping me prepare my presentation and providing constructive feedback throughout the process.

The AQA team, including Dee Martinez, Lori Kerr, Halie Martinez, Libby Appel, and Wendy Ciancio, went above and beyond to make our cohort feel comfortable, welcomed, and appreciated. The entire faculty and AQA team made it clear that they were invested in getting to know us individually and supporting our development into stronger servant leaders.

The multi-day training provided a unique opportunity to focus on my skill set, identify where I needed improvement, and build on my areas of strength. I could not remember the last time I had been afforded the chance to focus on myself for several days in a row without interference from many other distractions, duties, and responsibilities.

After several days of individualized interactions with patient AQA faculty and staff, as well as enriching experiences with my cohort and senior fellows, I left the training newly inspired to emulate the exceptional leadership I had observed throughout those transformative sessions. I also gained a new perspective on the situation that had troubled me for months and felt fully ready to advance my goals of enhancing equity and access in academic medicine, irrespective of what challenges I may need to try to manage along the way.

In addition to the support I felt from so many strong mentors, I was reminded of the critical importance of my own role as a mentor. I recommitted myself to ensuring that my own interactions with mentees would emulate those of the leaders with whom I had spent several July days in Denver at the AQA headquarters. I re-affirmed a lesson that I learned many years ago: when we invest in one another, we all benefit.

After returning home from the training experience, I was excited to meet with my AQA faculty liaison, Dr. Holly Humphrey (AQA, University of Chicago Pritzker School of Medicine, 1983), monthly over the course of the fellowship. Her guidance and support were invaluable in

directing the scope and potential impact of my project, as well as helping me navigate career challenges and achieve goals. I also was fortunate to meet monthly with Dr. Rachel Salas (ΑΩΑ, The Johns Hopkins University School of Medicine, 2020, Faculty), a fellow Robert J. Glaser Distinguished Teacher award recipient and expert coach, who helped keep me on track and provided sage advice.

Within my institution at the time, New York Medical College (NYMC), I was grateful for the wonderful mentorship and collaborative support from Drs. Mill Etienne (ΑΩΑ, New York Medical College, 2017, Alumni), William H. Frishman (ΑΩΑ, Albert Einstein College of Medicine/Montefiore Medical Center, 1978, Faculty), Marina Holz, and Edward C. Halperin (ΑΩΑ, Yale University School of Medicine, 1979). I also enjoyed exploring machine learning techniques alongside an expert in the field, who happens to be my husband, Dr. Kellen K. Petersen.

The ΑΩΑ Fellow in Leadership Scholarly Project: A novel approach to examining predictors of success in medical school: A multi-institutional study

The shift in medical education toward a broadening access agenda aims to create equal opportunities for learners with diverse backgrounds, recognizing that a diverse and inclusive medical workforce is essential for addressing the complex health and social needs of the population.¹ As a result, there are more learners with varying levels of preparation, and an increase in potential need for academic remediation.² Learners from underrepresented backgrounds may be disenfranchised, navigating barriers, and often have fewer educational opportunities.³ This changing learner population presents an important opportunity to develop precise and holistic methods that allow institutions to proactively intervene to enhance learners' academic success.

Those who need academic support are often reluctant to seek it, suggesting a need for institutional stakeholders to reach out to students who may not otherwise seek help.⁴ With current best practices favoring a holistic admissions approach, it is critical to shift the definition of student success away from purely academic success to a more holistic view of performance that also includes critical elements to becoming an excellent physician, including physicianship and professionalism.⁵⁻⁸

We introduced machine learning (ML) as a novel and holistic strategy that we hypothesized will identify

learners who would benefit from early intervention while concomitantly acknowledging the role of noncognitive factors on academic performance.

Utilizing traditional statistical techniques, many studies have shown that prior academic factors, including GPA, MCAT scores, and high school grades, are strong indicators of medical school performance.^{1,9-13} Numerous studies have investigated the effects of demographic factors like socioeconomic status, disability status, gender, and age on academic performance.¹⁴⁻²¹

The underrepresented in medicine status, including disability, has been linked to lower exam scores, higher attrition rates, and/or fewer honors grades in undergraduate medical education.¹⁷⁻²¹ Researchers have also investigated the role of these characteristics, in addition to scholarly activities, in matching into United States residency programs.²²⁻²⁶ However, recent studies have found that learners who demonstrated inadequate performance attributed their shortcomings to personal reasons unrelated to school or demographics. Those who did not graduate were unlikely to seek support from faculty or academic services and felt obligated to cope on their own.^{1,24}

Although studies that examine a single demographic can be instructive, it is important to assess how intersectional identities and multiple factors, including engagement in support services, may impact learner performance and outcomes. One study reported positive effects of engagement in academic support on learner mental health, but did not evaluate its impact on academic success.²¹ Another study found that academic engagement and adaptive coping strategies were associated with decreased burnout, while stress and maladaptive coping strategies were linked to increased burnout.²⁹

Studies predicting holistic learner success are limited for various reasons: most are restricted to an isolated period; are not longitudinal; do not explore learner usage of academic support services and/or elements of professionalism and physicianship; and/or only explore academic outcomes. While each learner faces a unique combination of obstacles, there seem to be some common barriers among learners which may help to predict learner success. This often results in categorizing students by groups, which can be misinterpreted as potentially detrimental "othering."¹³⁻¹⁷ We must be careful to acknowledge group variability and work toward understanding the underlying causes of academic challenges rather than applying a deficit mentality.

When used in conjunction with a robust data set with multiple variables, ML techniques may allow for

the creation of more effective, holistic, student-centered programs that could impact larger institutional changes and move toward equity and justice.

A major limitation of previous methods has been the inability to leverage large data sets with myriad variables. ML algorithms can be used to create prediction models using large datasets, allowing many factors with complex relationships to be considered simultaneously. This allows varying intersectional identities, as well as metrics, to be factored in, such as engagement in support services, and elements of professionalism and physicianship.

Current literature suggests ML can predict outcomes with accuracy and specificity superior to that of traditional data analysis methods.³⁰⁻³¹ While growing evidence supports the application of ML in clinical research and diagnostic medicine,³²⁻³⁴ a much smaller body of literature exists on using ML to predict admissions into graduate education and physician competence.^{30,35}

One study reported that ML techniques predicted the outcomes of high school students in Portugal with greater accuracy than traditional methods.³¹ These findings suggest that ML can serve as a potential tool that offers specific insight into learner performance that is otherwise unavailable.

One study in veterinary medical education demonstrated the promise of applying ML methodology to predicting veterinary student outcomes.³⁶

To date, only our team's previous studies have utilized ML techniques to assess learner outcomes in undergraduate medical student education.³⁷⁻³⁸

My project sought to implement previous work and improve approaches through the following aims:

Aim 1: To examine a cross-section of multi-faceted student data from three Liaison Committee on Medical Education-accredited institutions for indicators of student performance outcomes, including: Multiple Mini Interviews and Casper scores; demographic factors; pre-matriculation metrics including GPA and MCAT; medical school in-house and NBME exam grades; AQA/Gold Humanism Honor Society status; engagement in academic support services, lapses in professionalism, Leaves of Absence; clinical grades; clinical skills grades; promotions committee actions; awards received upon graduation, and remediation. This uses both traditional statistical techniques and state-of-the-art ML algorithms to identify clusters of student subtypes and compare group characteristics.

Aim 2: To lay the foundation to create prediction models using ML algorithms, such as random forest

algorithm as well as ML-based integer risk scores. Models will be developed and tested using various performance metrics. This process will require analysis of multiple institutional datasets and will continue beyond the end of the Fellowship year.

Preliminary Results & Outcomes

Model performance was assessed using traditional performance metrics, including areas under the receiver operating curve (AUC) analysis. Using a cross-section of multi-faceted medical student data from three LCME-accredited institutions, both traditional statistical techniques and state-of-the-art ML algorithms to predict outcomes (e.g., remediation, receiving a service award upon graduation were used). Specifically, ML prediction models and ML-based risk scores and assessed model performance using metrics such as AUC, accuracy, sensitivity, specificity, and positive predictive value, which are standard in the literature were used.

Models were trained on a random subset of medical students' data ("training set") and model performance was determined using data from the remaining medical students ("test set") for validation of our results.

Analyses are ongoing, but initial results include a model that predicts remediation with an AUC of 0.904 and sensitivity of 0.848, strong indicators of the model's performance. Initial analyses also generated a model that predicts service award recipients upon graduation with an AUC of 0.713.

Additional outcomes are in the process of being tested using both traditional statistical methods and machine learning algorithms. Initial results support the successful use of ML techniques to predict medical student outcomes.^{39,40}

Preliminary results support the successful use of ML techniques to predict medical student outcomes. Ongoing analyses will optimize preliminary models, examine multiple additional outcomes, and compare the utility of ML models to traditional statistical techniques. Previously published work also suggests that ML models can predict outcomes with stronger levels of accuracy than traditional statistical techniques.^{31,36}

Prediction models have the potential to provide a more holistic approach to identifying individual students who may need additional support; inform medical educators about areas to invest resources for early intervention; and serve as a tool for leaders in supporting students to meet graduation competencies and move toward a model of precision medical education.

I am grateful for all the contributions by the many collaborators on this work: Dr. Kelly L. Dore, Dr. Mill Etienne, Dr. Holly J. Humphrey, Jessica McQuaid Moore, MS; Constance N. Lacap, DO; Theresa W. Gillis, MBA, MJ; Ursula Goldman; Lisa Journell, PhD; Adrienne Stolfi, PhD; Chasity O'Malley, PhD; Cha-Chi Fung; Ranna Nash; Ashley Selva-Rodriguez; Kyle Bauckman, PhD; Penelope Farris; and Kellen K. Petersen, MD.

Additional progress during the year

In addition to my AQA Fellow in Leadership scholarly project, I continued the work I had been engaged in for several years: advocating for the enhancement of disabilities education curriculum throughout the medical education continuum. In addition to promoting awareness nationally, I continued enhancing the disabilities curriculum delivered at NYMC. Preliminary results of this work have been presented at American Medical Association and Association of American Medical Colleges-affiliated meetings^{41,42} and a full manuscript is in preparation with my mentee and former student, now-resident Dr. Aitan Magence, as first-author.⁴³

Disabilities curriculum implementation and measurement of efficacy

Despite considerable efforts by many to implement disabilities curriculum in medical education, there are significant concerns about the unavailability, insufficiency, and inconsistency of disability training for future and current clinicians. The absence of a mandated, comprehensive curriculum across the continuum likely contributes to the significant health disparities experienced by people with disabilities (PWD).⁴⁴⁻⁴⁹ A four-year, longitudinal disabilities curriculum on five cohorts of NYMC medical students' (MS) knowledge and attitudes related to communicating with, and providing quality health care to PWD, was examined.

Seven disabilities-focused curricular sessions were offered from academic years (AY) 2020-2021 through 2023-2024. A mixed-methods analysis was performed utilizing student response data from pre- and post-session surveys. Qualitative content analysis was used to analyze open-ended essay questions and optional written feedback.

The Disabilities Core Curriculum (DCC) consisted of seven sessions that addressed apparent and non-apparent disabilities; inclusive language; ableism, bias, and stigma; functional limitations, barriers, and accommodations; the impact of bias on the physical and sexual

health of PWD; and best practices for supporting the transition of PWD from pediatric to adult care. Students were assessed objectively and subjectively at four timepoints over the four-year curriculum. In addition, a reflective essay asked students to discuss their commitment to preventing unconscious bias from creating barriers to quality health services for PWD.

Five student cohorts (n= 899) demonstrated several statistically significant increases in disabilities knowledge and confidence in various areas over the four-year curriculum. Student essays (n=423) expressed commitment to addressing health care disparities and unconscious bias, promoting effective communication, and providing empathetic care to PWD. Objectively and subjectively, medical students who engaged in the DCC reported having increased disabilities knowledge and comfort caring for PWD.

I appreciate all the contributions of many collaborators to this work: Ddrs. Aitan E. Magence, Karen Edwards, Susan Solman, Jeanne Wilson, and Kellen K. Petersen. I am also grateful to the many NYMC students who advocated for the inclusion of these sessions and the community members with disabilities who shared their lived experiences and made the curriculum impactful.

Impact of experiential learning on leadership skills

I am thankful for the opportunities that the AQA Fellow in Leadership scholarly project afforded me to utilize a collaborative team-based approach with mentors and experts. While short-term goals were achieved and preliminary results reported, this team continues to work toward long-term goals: building a stronger model and ultimately exploring the possibility of creating a risk-score model to support medical educators in determining appropriate resource allocation to support students from all backgrounds. I am grateful to this team, which has developed into a strong community of practice dedicated to developing more holistic methods to evaluate student success.

I have benefited greatly from taking time to reflect and develop strategies that facilitate introspection. The process of self-examination has helped me recognize opportunities for growth, improvement, and development of new skills. I have found many opportunities to engage in self-examination throughout the Fellowship, particularly as I pushed beyond my comfort zone to complete new and difficult tasks. I recognize that

much of my self-reflection was catalyzed and bolstered by feedback and conversations with mentors and colleagues who see the challenge through a different lens.

When I applied for the Fellowship, I saw it as an opportunity to meet like-minded leaders with the goal of identifying ways that our strengths complement one another so that we may support each other and work together to effect long-standing change. I realize now that is only part of the story. We invest in one another's success through collaboration, mentorship, and partnership. As we work together to achieve our collective goals, the experience changes and molds us as professionals and human beings, and consequently strengthens each one of us as individuals, thereby enhancing our community of practice. I am grateful to be part of the strong AQA Fellow in Leadership community of practice and look forward to finding ways to give back over the coming years.

I have found my membership in AQA to be invaluable. I recently learned that my great-grandfather was inducted into AQA in 1909, shortly after he became faculty at the University of California and set up his medical practice in San Francisco, where he treated patients in the face of the 1906 earthquake and ensuing fires. I am grateful to be a part of an organization that supported the medical community in his time, and continues to support a much more diverse medical community more than a century later. It is truly special to have a connection with him through AQA and to consider how much the organization has evolved and grown.

It is especially meaningful to me that I, as a woman with a non-apparent disability, am afforded so many more opportunities in the 21st century than I would have experienced during the time of my great-grandfather's induction. I am grateful to AQA for taking a chance on me by funding my exploration of this topic, particularly as the first AQA member with a PhD to be awarded this Fellowship.

My involvement with AQA to date has certainly been career-changing, but I also feel it has been life-changing. As an AQA Fellow in Leadership I was fortunate to receive incredible mentorship support and funding to work toward creating a new method to holistically evaluate student success in undergraduate medical education. Through this work and many colleagues' projects that are funded by AQA, collectively we hope to contribute to creating innovative solutions to some of medicine's current challenges. As we work together and

support one another, we can all continue to improve our community and impact necessary changes within our health care and medical education systems.

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