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Using Experiential Education in Health Professions Training to Improve Health Equity: Lessons Learned from Interviews With Key Informants

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Abstract

Health professions students can increase their understanding of how social determinants impact health equity through experiential learning opportunities. Using key informant interviews with faculty and staff familiar with experiential education programs in medicine, dentistry, nursing, pharmacy, public health, and social work, we sought to identify key features and best practices to inform the broader implementation of these programs. Interviews were recorded and compiled notes were reviewed to identify common themes across programs. Experiential learning helped teach students competencies related to health equity. However, many programs were challenged by limited infrastructure and the need for faculty training on health equity topics. Key informants noted that programs should be linked to accreditation and curricular requirements. Strong community partnerships also facilitated successful program implementation. Our findings can help guide other schools considering experiential learning programs, as well as future research in this area.

Keywords: health professions, experiential education, service-learning, health equity

There have been increasing calls for health professionals to better understand the role of social determinants of health in shaping the health of the patients and populations they serve (NASEM, 2016; Robert Wood Johnson Foundation, 2017). Social determinants of health are the conditions in which people live, work, and play that shape patterns of health. Health researchers point to social determinants of health as the underlying causes at the root of many persistent health inequities in the United States (NASEM, 2017). Therefore, solutions to address health inequities at the population level must go beyond the traditional health care delivery system. Increasingly, health professions' accrediting bodies are requiring this content in their curricula; however, there is wide variation in satisfying such requirements (Chen et al., 2021; Davis et al., 2021; Dunleavy et al., 2022; NASEM, 2016). Understanding the role of social determinants is especially important for those in clinical professions in order to understand the limitations of the health care system in addressing health equity (Metzl & Hansen, 2014; Siegel et al., 2018).

Immersing health professions students through experiential learning opportunities can improve their understanding of how the social and physical environment influences health. Experiential learning is a pedagogical approach that provides an opportunity to participate in a real-word practice experience, reflect on that experience, develop new knowledge as a result of the experience, and apply that knowledge in new settings (Kolb, 1984). Examples include courses that incorporate community service, or opportunities to practice skills in clinical or community environments (such as field assignments or practica; Gimpel et al.,

2018). Most programs that have been evaluated have been in medicine, nursing, and pharmacy (Chen et al., 2021; DeHaven et al., 2020; Gimpel et al., 2018). Commonly used models include service-learning (group or individual community service paired with didactic sessions), practicums (individual fieldwork with a culminating report or reflections), and clinical service opportunities (not paired with a course or didactic sessions). Benefits of experiential learning include student preparation to transition from the classroom to the workplace, longer term knowledge retention, and improved skills acquisition (DeHaven et al., 2020). An important component of experiential education is the role of community–academic partnerships where students gain firsthand experience working with populations experiencing health inequities. Through the partnership, students are not only exposed to the larger social issues present in communities, but are also addressing community needs and potentially increasing community capacity, which is an important goal of service-learning (Seifer, 1998).

In 2016, the National Academies of Science, Engineering, and Medicine published a report highlighting the importance of experiential education in training health professionals on health equity (NASEM, 2016). The report noted the need for further research on how these programs are implemented and whether they are responsive to the evolving needs of local communities. Although many health professions schools have been offering experiential education opportunities for years, little guidance exists on how best to implement these programs. Even 6 years following the NASEM report, only a handful of studies have focused on what types are most effective in training students, which components have the biggest impact on the community, and how to make these programs sustainable long-term (Chen et al., 2021; Davis et al., 2021; Dunleavy et al., 2022). Because these programs often require an institutional investment, more evidence regarding their feasibility and efficacy could support decision making among leaders in higher education.

We drew on the Consolidated Framework for Implementation Research (CFIR) to examine how experiential education has been used specifically to teach social determinants of health content to health professions students (Damschroder et al., 2009). This framework suggests that the implementation of experiential education programs can be influenced by both characteristics of the program and external factors, such as institutional or community support. Using key informant interviews with faculty and staff familiar with experiential education programs, this exploratory study sought to highlight the key features of programs being implemented in health professions training, as well as identify best practices and gaps in current models that could be addressed in future research and broader implementation of these programs.

Methods

We conducted in-depth interviews with key informants to better understand how experiential education was being used to teach social determinants of health. We compared experiential education programs across six major health professions: nursing, medicine, dentistry, pharmacy, social work, and public health. The study protocol was reviewed and approved by the institutional review board (IRB) at the University of Washington.

Study Participants

We aimed to interview at least two key informants in each health profession and continue interviews until we reached thematic saturation (Guest et al., 2006). Key informants were identified in several ways. First, we reviewed program websites of highly ranked health professions schools to identify faculty and staff leading experiential education programs (U.S. News & World Report, 2021). Second, we identified authors of peer-reviewed articles that described experiential education programs for health professions students (DeHaven et al., 2011; Gimpel et al., 2018; Thompson et al., 2013; Tiwari & Palatta, 2019). Third, the research team identified faculty and program staff with content expertise related to experiential education programs through our own professional networks and academic affiliations. We also asked our interviewees to identify other key informants with expertise in experiential education in the health professions.

Data Collection

Using keywords such as "experiential education" and "service learning" with specific health professions to search PubMed, we identified peer-reviewed papers on experi-

ential evaluation programs. Building from the literature, the CFIR was used to identify hypothesized factors that might influence the implementation of experiential education programs, such as cost, external policies, processes for incorporating feedback and evaluation, and key stakeholders. We developed two versions of the interview guide (see Appendix A), one for those who had experience implementing a specific program and another for those who had relevant expertise on the topic but were not currently implementing an experiential education program. Both interview guides included questions about the program model, faculty and staff involvement, program development, student assessment, implementation challenges, lessons learned, the role of community partners, program funding, and sustainability. We used follow-up questions and prompts to elicit more detailed responses by participants.

Recruitment began in January 2020 and continued through April 2020. Each week, we reviewed the recruitment goals in order to determine targeted recruitment for the next week. We approached 33 potential participants via email, with up to three follow-up emails, as well as a phone call where numbers were available. Interviews were conducted by two trained members of the research team via Zoom and lasted 30–60 minutes. Interviewers took notes during the interviews and used recordings to construct more detailed notes. All but one participant gave consent to have their interview videorecorded.

Data Analysis

The research team used the CFIR and the interview guide to organize interview notes, which were then reviewed to identify themes across experiential education programs. Themes and example quotes were shared with others on the research team for assistance with interpretation. Reviewing our notes throughout the process, our team achieved thematic saturation after completing 14 interviews (42% of those contacted). Saturation was defined as having representation from all six health professions, as well as receiving consistent and similar answers from respondents (Guest et al., 2006). Program features were summarized to describe different program types, how programs were integrated with other parts of the curricula, the process for assessing competencies, and personnel and fiscal supports. In order to identify challenges and successes experienced during experiential education program implementation, study team members compiled participant responses to each study question in order to conduct content analysis and identify common themes within responses to each question. We used descriptors such as "many" or "most" when more than half the respondents shared a similar perspective and "some" or "few" if less than half shared the perspective.

Results

In this section we summarize the characteristics of the programs described by participants, including the competencies and how they were assessed. After this we describe lessons learned from implementing programs and recommendations for other institutions interested in developing similar programs.

Program Design and Competencies

We interviewed 14 faculty and staff at 10 different universities within each of the health professions: medicine (2), dentistry (2), nursing (3), pharmacy (1), public health (4), and social work (2). They included participants at both public and private institutions located across the United States, including the states of Colorado, Georgia, Hawaii, Illinois, Maine, Maryland, Massachusetts, Texas, and Washington. Most were large research-intensive universities. We did not observe any differences in programs by region or institution type. Most programs used a service-learning (group or individual community service paired with didactic sessions) model of experiential education. Other common models were practicums (individual fieldwork with a culminating report or reflections) and clinical service opportunities (not paired with a course or didactic sessions). See Table 1 for examples of programs in each health profession. Most programs were delivered during the academic school year, with one being conducted during the summer. About half of the programs had set minimum time commitments for providing service (these ranged from 6 to 240 hours); the rest did not mention specific commitments. These requirements also depended on whether the program was a required component of the curriculum. Half the experiential education programs (which included all five public health and social work programs) were

required as part of accreditation, and the other half were not.

Implementation infrastructure varied across programs. Most programs were supported by no more than two faculty and/or staff members and occasionally a student teaching assistant. One program was run entirely by faculty and staff who volunteered their time. Although most faculty and staff developed and managed their programs independently, one program had an entire office, including dedicated staff, to administer experiential education programs and train faculty to implement these programs across health professions schools. In most cases, salaries for the employees implementing the programs were covered by the university. However, costs such as supplies, incentives, and student stipends came from grants and private donors.

Key informants noted that experiential education programs were being used to teach a number of different competencies. Appendix B summarizes competencies that are related to social determinants of health and health equity in each of the health professions. Most common competencies were related to skills for working with individual patients, such as bias awareness, building trust, reflective listening, cultural humility, power dynamics, and shared decision-making. Other knowledge and skills competencies were related to furthering health equity, such as advocacy, social and political factors contributing to social determinants of health, equity, social justice, barriers to health care, health promotion, interprofessionalism, and privilege.

Programs assessed performance and increased competency through classwork and assignments. The most common class assignments were reflective writing about their experiences, followed by group discussion, poster presentations, and written papers. Two programs conducted pre-post surveys to assess student progress over the course of the semester or year. Two programs had no class assignments or requirements. Only two programs tracked their students after graduation to see if participation in experiential education and knowledge about social determinants of health had an impact on their later careers, even though experiential education was not an accreditation requirement. Programs relied largely on anecdotal feedback from students for program evaluation. Those that did follow their students said that the program had positively influenced their career decisions, often resulting in choosing to work with low-income or vulnerable populations.

Lessons Learned From Implementing These Programs

Key informants shared many challenges and lessons learned. We grouped these challenges into three categories: issues related to working with faculty, students, and community partners.

Table 1. Example Models of Experiential Education Being Used to Teach Health Equity

Profession	Program Description
Dentistry	Elective course called "Health and Homelessness" where students perform clinical outreach with homeless patients
Pharmacy	Work with local health department to provide immunizations at homeless camps, recovery centers, and community centers
Medicine	Elective, interprofessional community health project that provides foot care clinics at homeless shelters
Public health	Applied practice experience that takes public health students to different parts of the city using public transportation to learn about historically low-income neighborhoods
Nursing/ interprofessional	Service-learning program where students and faculty go to farms and provide care for migrant farmworkers
Social work	Interprofessional, collaborative practicum where students develop and deliver health-related workshops for inmates in a local jail

Faculty

Respondents cited two key challenges related to faculty involvement in experiential learning opportunities. The first was the need for orienting and training faculty on this type of teaching, particularly among schools of public health. This included the need for training on social determinants of health and how to manage classroom dynamics when health equity issues were discussed. One respondent noticed that some faculty had limited capacity to facilitate student conversations about health equity and lead critical reflections among students. As one respondent noted,

> Best practices are finding very intentional ways to center these conversations around power and privilege, and the context. Some of our faculty have different levels of comfort. Some come in from training spaces where they feel prepared, but they need more tools in their toolbox, but that population is minute compared to the larger population of our faculty. (Staff, public health)

The lack of faculty training negatively impacted students' experience. For example, one respondent noted faculty committing microaggressions, such as calling upon students of color to offer perspectives on health issues faced by people of their same race or ethnicity. In another case, respondents noted faculty choosing movies and other course materials without considering the impact on students who came from those communities. For example, one respondent described,

> We also piloted watching *13th Amendment*, and then leading a reflection, which failed greatly during the first semester…We got mixed reviews from students. Students [of color] felt like this was really important, but that their clinical instructors were not prepared to facilitate the type of conversation that needed to happen or it was traumatizing and triggering for these students, to be in a room of predominantly folks who did not look like them and didn't understand their connection to this film. (Staff, public health)

Respondents also noted the need for more specific training on experiential education pedagogy. Only three respondents were aware of the NASEM report laying out specific recommendations for these types of programs, though many were interested in reading it.

Another challenge was identifying enough faculty to fully support experiential education programs. Most programs had no more than two faculty actively involved in implementing or managing the program. Almost all of the programs depended to some extent on faculty volunteering their time to teach, mentor, or supervise educational experiences. This challenge included identifying faculty or other clinicians to serve as preceptors, who are needed to supervise students providing clinical services. Fewer programs noted that it was difficult to recruit preceptors due to their competing demands and the inability to offer support or funding for their time. Programs instead relied on former students and committed community partners to staff these positions.

Students

Respondents noted several challenges related to student engagement in experiential education, both in and out of the classroom. Some faculty and staff felt that students were using experiential learning opportunities to indicate that they had experience working with diverse communities, rather than having a genuine interest in gaining new knowledge or improving their skills. As one respondent (a faculty member in public health) said, "We aren't just there so students can check a box and say, 'Oh, I volunteered and I did this thing.'"

For those programs that were optional, respondents mentioned that the students who chose to engage were often those already familiar with concepts of social determinants of health and health equity, rather than the students who might have less familiarity and could benefit more from this type of experience. Respondents also commented that some students had the privilege of being able to spend time outside class on experiential education programs, although other students had work obligations that left them little to no time to participate.

Students enrolled in experiential education programs had varying degrees of previous experience working with diverse communities or providing clinical services. Some respondents noted the need for classroom

experiences that prepared students to work in diverse community or clinical settings for the first time. As one respondent described,

> It's the way you build trust. All of our [pharmacy] programs require extensive training before going out into the community…We already have classroom, and laboratory, and then refresher courses before we go out. Not only on how to do clinical things; there's reflective listening, and shared decision making, and culture humbleness conversations before we would embark. I think, to me, those are the best spent hours in advance…One of the reasons we want students to have this experience in their first year is because sometimes we've found that students who went out and started doing internships picked up cultural biases that students thought were normal. So, we try to normalize grassroots engagement in the community before students establish a cultural norm that we don't think really promotes equity. (Faculty, pharmacy)

These classroom experiences could include an emphasis on the student role being to serve the community, not the other way around. Another respondent noted the importance of concepts such as humility and accountability, which are not typically taught elsewhere in school curricula but are critical for preparing students for field experiences. Some programs, particularly clinical practice for medical, dental, and pharmacy students, also required extensive training on equipment and coordination of care with usual providers. Providing orientation or training for students before they went "into the field" also helped ensure more positive and respectful relationships between students and community partners. As noted above, student learning was rarely formally assessed as part of the program, making it difficult to evaluate changes in student knowledge, skills, and attitudes.

Community Partners

Several respondents noted that having a strong relationship with community partners was essential to implementing a successful program. Specifically, they noted that it was important to take the time to engage community partners at various stages of developing and implementing the program. As one respondent noted,

> We established solid connections with community partnerships over time. So then the projects became long-term projects. I felt that I had a responsibility to respond to the community partners…We don't go to community organizations to do whatever we want to do for research…It's done together. Sustainability is through having a continuous learning partnership. (Faculty, medicine)

Most programs did not have formal processes for soliciting feedback from community partners, but all felt it was important to do so. Many respondents also noted the importance of providing financial incentives to community partners for hosting or facilitating opportunities for students. They acknowledged that some burdens on community partners—identifying site supervisors, providing community space for students, attending planning meetings—often went uncompensated. A few programs were able to offer incentives to community partners, but most did not. Other challenges that were noted were related to the disruptions caused by students' physical presence and their inappropriate or disrespectful behavior toward community members. Relationships with community partners appeared to be most successful when built on personal relationships with individual faculty, because of the community partners' personal level of trust in the individual. As one respondent described how they identify and maintain relationships with community partners,

> Our faculty are relatively well-connected in the area, so relying on them for introductions…Also trying to find ways to give back and support that relationship, I think. (Staff, public health)

Respondents noted the importance of ensuring that community partners benefit from the partnership with an academic institution rather than be subject to a one-directional relationship as has been historically the case.

Recommendations for Those Looking to Implement Similar Programs

Participants were also asked what they

would like to change about their program or if they had recommendations for others implementing similar programs. Their responses fell into two categories: (1) additional content to include in the program and (2) structural changes to the program. In terms of content changes, some programs mentioned that students needed opportunities to learn advocacy skills, not just clinical or interpersonal skills, to truly address social determinants of health. For example, one program noted that after providing foot care to residents in a homeless shelter week after week, they saw a need to do more to try to address the root causes leading to homelessness. Another program noted the need for dental students to become more involved in the health policy process in order to increase access to dental care. In addition to advocacy, some noted that they would like to support experiential education opportunities for students in international settings outside the United States. Another program saw the benefit of having students from different health professions participate in experiential education together, and wanted to explore using this approach to achieve interprofessional education competencies required by accrediting bodies.

In terms of structural changes, many noted the need to improve the sustainability of their programs. Respondents noted the need for longer term opportunities for students, to enhance the reciprocity of community partnerships and deepen student learning. Others noted the need for more infrastructure to support their program, such as dedicated core funding, and employing staff to maintain community relationships and better serve student needs. One program was looking to further engage its alumni to serve as preceptors and donate funds. These needs did not differ across profession or type of institution. Given that these programs are often offered as an optional part of the curriculum, many respondents commented that experiential education should be required for all students. Lastly, one program was looking for ways to bring community members into the classroom to increase student exposure to community perspectives, especially for students who do not opt in to experiential learning opportunities.

Discussion

Our study identified examples of experiential learning programs focused on social determinants of health and health equity across six major health professions. Most were using service-learning models or involved students providing clinical services in community settings. Experiential learning was seen as an appropriate way to teach students content and competencies related to health equity. However, many programs struggled with limited infrastructure and saw the need for further faculty training on health equity topics. Programs and student participation were also shaped by requirements tied to accreditation. Below, we discuss differences across professions and directions for future practice and research.

Our findings highlighted the need for health professions schools to invest more infrastructure into experiential learning programs, including increased funding and faculty and staff support. A recent review of service-learning programs offered in dental schools noted similar challenges in implementation and sustainability (Hood, 2009). Our findings are also consistent with recommendations noted in the NASEM (2016) report, which cited the need for training and support for faculty who lead experiential education programs. Respondents in our study highlighted the need for faculty training on issues of equity, diversity, and inclusion. Demand for such support has also become more visible in health professions schools as faculty and students have begun to speak out against institutional cultures that allow microaggressions, implicit bias, and discrimination (Doll & Thomas, 2020; Issaka, 2020; Iwai, 2020; Yousif et al., 2020). In addition to faculty training, schools can support and incentivize faculty to develop and implement experiential education programs with salary coverage or other financial resources. These programs could be funded through internal course development funds, or grants offered through federal agencies, such as NIH and HRSA, that support health workforce development. Health professions school leadership should also clearly articulate the value of these programs to both students and local communities. They can explicitly signal this value to faculty by adding experiential education programs to promotion and tenure criteria and/or curricular requirements. Faculty could also be encouraged to publish curricula, case studies, or evaluations of their programs as evidence of their scholarship.

Many health professions schools have begun grappling with larger issues of

how to address health equity and racism in their school culture and/or curriculum (Njoku & Wakeel, 2019). Our findings highlighted how these issues are also present in experiential learning programs, and present an opportunity for health professions schools to address power imbalances among faculty, students, and community members. Previous research has critiqued service-learning models that reinforce power and privilege by sending White middle- or upper-class students to engage with low-income clients and communities of color without the background and skills needed to understand social determinants of health in these communities (Taboada, 2011). Experiential education programs should intentionally develop a pedagogical approach and curriculum that directly address institutional racism and its role in perpetuating health inequities. Several other techniques are being used to teach health equity in health professions schools, such as digital story projects, community outreach, community health promotion events, and simulations that focus on understanding the lived experience of low-income populations (Bill & Casola, 2016; Hackett & Humayun, 2018; Palombi et al., 2017; Thompson et al., 2020). Some of these approaches were also mentioned by respondents in our study as being successful parts of experiential learning programs (Bill & Casola, 2016; Palombi et al., 2017; Thompson et al., 2020). These approaches speak to the important role of community engagement in helping students understand and address social determinants of health.

We noted key differences across health professions that were tied to accreditation requirements. All health professions had at least one competency specified by their accrediting body related to working with diverse populations; however, only three professions (medicine, dentistry, nursing) had competencies that specifically reflected the need to understand health inequities and social determinants of health. In addition, all professions except dentistry encouraged some form of practical learning experience as part of their competencies. In our study, those schools with specific accreditation requirements related to experiential learning also required their students to participate in their programs. Some respondents also felt that in order for students to learn how to truly address social determinants of health, programs may need a stronger focus on advocacy skills. For example, programs might highlight ways students can make changes to the health care institutions they will eventually work in or encourage participation in the political process. Accrediting bodies have an important role to play in shaping the curricula of health professions. Health professions schools may want to advocate for changes to their accreditation requirements to incorporate competencies related to health equity and experiential learning to encourage this type of training.

Our study had some limitations. Because our recruitment strategies focused on larger, more well-recognized health professions schools, our findings may not reflect programs at smaller schools. Furthermore, we focused on six major health professions, with some overrepresentation of public health and underrepresentation of pharmacy. Our findings may not reflect the experiences of all health professions, given that some fields, including physical therapists and emergency medical technicians, were not included. Future studies should further examine differences across professions and institution types. Our recruitment and data collection occurred in early spring 2020, as the country was beginning to shut down in response to the coronavirus pandemic. The competing demands of faculty and staff may have led to fewer responses from potential participants. This time was also marked by a heightened focus on racism within the United States and within academic institutions, which may have led participants to focus more on equity implications of their work during the interviews.

Our findings can help guide other schools considering experiential learning programs, as well as future research in this area. Faculty should be encouraged to establish long-term reciprocal relationships with community partners that can serve as sites for experiential learning programs. In addition, faculty could mentor students on how to develop collaborative partnerships so that they could develop and/or participate in similar programs later in their careers. Health professions schools with innovative and successful experiential education programs should be encouraged to publish their curricula and evaluation outcomes. Both our study and previous studies indicate that few programs have evaluated the impact of experiential learning programs on either students or the communities they serve (DeHaven et al., 2011; Rohra et al., 2014). Still, there is evidence that

community-based educational experiences are highly valued by students and result in more positive attitudes about working in underserved communities (Pau & Mutalik, 2017; Rohra et al., 2014). Future studies can provide guidance on how these programs influence student competencies long term, as well as their impact on community health. Programs focused on social determinants of health and health equity should also consider using the framework laid out in the NASEM (2016) report to guide both development and evaluation.

Conclusion

Our interviews with faculty and staff suggest that experiential education programs are a promising strategy for increasing health professions students' competency in social determinants of health and health equity. These programs are notable examples of community–academic partnerships that strengthen both the communities they serve and the training offered by academic programs. Many of the skills students learn via experiential programs are precisely those that are needed for leadership roles throughout their careers. As academic programs strive to increase representation by students from historically marginalized communities, experiential learning programs need to evolve from the experiences of these students, so that they become empowered leaders in their own communities. For these programs to be successful, they need to be supported by the appropriate infrastructure, faculty with the appropriate expertise to teach and mentor students, and sustained community partnerships. Ongoing and systematic evaluation of these programs is necessary to ensure that experiential education programs support students in meeting established competencies, and more importantly, improving the health of the communities in which they work.

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Appendix A. Interview Guide

Key Informant/Institution Background

First, I want to ask you some questions about yourself and your institution/program.

1. Where do you work and what is your role?
2. How do you define "experiential learning"? What words/phrases do you use to describe these types of programs?
3. What experiential education models is your program/profession/institution using?

Program Information

Next, I want to ask you some questions about the specific [term they use to describe their program] program at your institution/department. [For experts: Next, I want to ask you some questions about the program models you support.]

4. Tell me about the specific program you lead.

   Probe for:
   - *Years implemented*
   - *Number of students served*
   - *Faculty and staff involvement*
   - *Resources required*

Development

5. Can you tell me more about how the program was developed? [*For experts*: Do you have a sense of how the program was developed?]

   Probes:
   - *Who was involved? What kind of initial support did they have?*
   - *Why did they decide to begin the program?*
   - *Who provided input on the program development (students, community partners, faculty)?*

6. What competencies are taught and assessed through your program? [*For experts*: Do you know if any of these models address competencies related to social determinants of health or health equity? If so, how?]

   Probe:
   - *Are any of the competencies related to social determinants of health or health equity?*

Now, we're going to talk about implementing the program.

7. What have you learned from implementing the programs? [*For experts*: What do you think the lessons learned are from implementing these types of programs?]

   Probes:
   - *What are the best practices for running this type of program?*
   - *Are there things you make sure to do every time?*

8. What have been the major challenges in implementing your program? [*For experts*: What do you think the major challenges are, implementing these types of programs?]
9. How do you assess student outcomes or community impact in your program? How do those assessments relate to the competencies on social determinants of health? [*For experts*: How do you think students' outcomes or community impact are assessed in these programs?]
10. What is the role of the preceptor/supervisor/community partner and what kind of commitment is required of them?

Probes:
- *Do you get feedback from community partners on the program?*
- *Has the program been modified based on that feedback?*
- *How many community sites do you engage with? How were they recruited? Has there been any turnover in community sites?*

11. How does the program fit into the larger curriculum (related coursework/prerequisites)?
12. What kind of students participate in the program? Do you get feedback from students on their experiences? Has the program been modified based on that feedback? [*For experts*: How involved are students in the model development or implementation?]
13. How is the program funded? What are the major costs for the program? [*For experts*: Do you know how these models are funded?]
14. How has it been sustained over time? What changes have been made since the program was first implemented? [*For experts*: Do you know how these models are sustained over time?]
15. Do you think the program has been effective in ensuring students have learned to recognize and appropriately address issues of cultural competency/social determinants of health/disparities in health status/implicit bias? [*For experts*: Do you think these models have been effective in ensuring students have learned to recognize and appropriately address issues of cultural competency/social determinants of health/disparities in health status/implicit bias?]

What Does the Field Need?

Lastly, I'd like to ask you about what you think about these programs more broadly, outside your institution.

16. What would students in your profession benefit from that isn't currently being done?
17. Are you aware of any model programs? Have you seen things done elsewhere that you would want to try?
18. Which skills/competencies do you think are best taught through experiential learning?
19. Are you aware of the National Academies report and recommendations regarding teaching health professional students social determinants of health through experiential education?

Appendix B.

Table 2. Experiential and Health Equity Accreditation Requirements by Profession

Profession	Accrediting body	Experiential education requirement	Health equity requirement
Medical	Liaison Committee on Medical Education (LCME, 2021)	**Standard 6: Competencies, Curricular Objectives, and Curricular Design** *6.6. Service-Learning* The faculty of a medical school ensure that the medical education program provides sufficient opportunities for, encourages, and supports medical student participation in service-learning and/or community service activities.	**Standard 7: Curricular Content** *7.6. Cultural Competence and Health Care Disparities* The faculty of a medical school ensure that the medical curriculum provides opportunities for medical students to learn to recognize and appropriately address biases in themselves, in others, and in the health care delivery process. The medical curriculum includes content regarding the following: • The diverse manner in which people perceive health and illness and respond to various symptoms, diseases, and treatments • The basic principles of culturally competent health care • Recognition of the impact of disparities in health care on all populations and potential methods to eliminate health care disparities • The knowledge, skills, and core professional attributes needed to provide effective care in a multidimensional and diverse society
	Accreditation Council for Graduate Medical Education (ACGME, 2018)	**IV.B. ACGME Competencies** *IV.B.1.d) Practice-based Learning and Improvement* Residents/Fellows must demonstrate the ability to investigate and evaluate their care of patients, to appraise and assimilate scientific evidence, and to continuously improve patient care based on constant self-evaluation and lifelong learning.	**IV.B. ACGME Competencies** *IV.B.1.f) Systems-based Practice* Residents/Fellows must demonstrate an awareness of and responsiveness to the larger context and system of health care, including the social determinants of health, as well as the ability to call effectively on other resources to provide optimal health care.

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Table 2. Continued

Profession	Accrediting body	Experiential education requirement	Health equity requirement
Dental	Commission on Dental Accreditation (CODA, 2021)	**Clinical Sciences** *2-26. Dental education programs must make available opportunities and encourage students to engage in service learning experiences and/or community-based learning experiences.* Intent: Service learning experiences and/or community-based learning experiences are essential to the development of a culturally competent oral health care workforce. The interaction and treatment of diverse populations in a community-based clinical environment adds a special dimension to clinical learning experience and engenders a life-long appreciation for the value of community service.	**Behavioral Sciences** *2-17. Graduates must be competent in managing a diverse patient population and have the interpersonal and communications skills to function successfully in a multicultural work environment.* Intent: Students should learn about factors and practices associated with disparities in health status among subpopulations, including but not limited to, racial, ethnic, geographic, or socioeconomic groups. In this manner, students will be best prepared for dental practice in a diverse society when they learn in an environment characterized by, and supportive of, diversity and inclusion. Such an environment should facilitate dental education in: • basic principles of culturally competent health care; • recognition of health care disparities and the development of solutions; • the importance of meeting the health care needs of dentally underserved populations, and; • the development of core professional attributes, such as altruism, empathy, and social accountability, needed to provide effective care in a multi-dimensionally diverse society
	American Dental Education Association (ADEA, 2008)	Not mentioned.	**Communication and Interpersonal Skills** *3.3. Communicate effectively with individuals from diverse populations.* **Health Promotion** *4.3. Recognize and appreciate the need to contribute to the improvement of oral health beyond those served in traditional practice settings.*

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Table 2. Continued

Profession	Accrediting body	Experiential education requirement	Health equity requirement
Nursing	Commission on Collegiate Nursing Education (CCNE, 2018)	**Standard III: Program Quality—Curriculum and Teaching-Learning Practices** *III-G. Teaching-learning practices:* • *support the achievement of expected student outcomes;* • *consider the needs and expectations of the identified community of interest; and* • *expose students to individuals with diverse life experiences, perspectives, and backgrounds.* Elaboration: Teaching-learning practices (e.g., simulation, lecture, flipped classroom, case studies) in all environments (e.g., virtual, classroom, clinical experiences, distance education, laboratory) support achievement of expected student outcomes identified in course, unit, and/or level objectives. Teaching-learning practices are appropriate to the student population (e.g., adult learners, second language students, students in a post-graduate APRN certificate program), consider the needs of the program-identified community of interest, and broaden student perspectives.	Not mentioned.

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Table 2. Continued

Profession	Accrediting body	Experiential education requirement	Health equity requirement
Nursing	Council on Accreditation of Nurse Anesthesia Educational Programs (COA, 2019)	Not mentioned.	**Standard III: Program of Study** *C21. The program demonstrates that graduates have acquired knowledge, skills and competencies in patient safety, perianesthetic management, critical thinking, communication, and the competencies needed to fulfill their professional responsibility.* b.9. Individualized perianesthetic management is demonstrated by the ability of the graduate to deliver culturally competent perianesthetic care throughout the anesthesia experience.
	Accreditation Commission for Midwifery Education (ACME, 2019)	Not mentioned.	**Criterion IV: Curriculum** *M. The midwifery program provides content throughout the curriculum about implicit bias and health disparities related to race, gender, age, sexual orientation, disability, nationality, and religion.* The American College of Nurse-Midwives (ACNM) is committed to eliminating racism and racial bias in the midwifery profession and race-based disparities in reproductive health care. The American College of Nurse-Midwives (ACNM) supports efforts to provide transgender, transsexual, and gender variant individuals with access to safe, comprehensive, culturally competent health care.
	Accreditation Commission for Education in Nursing (ACEN, 2021)	**STANDARD 4. Curriculum** *4.9. Student clinical experiences and practice learning environments are evidence-based; reflect contemporary practice and nationally established patient health and safety goals; and support the achievement of the end-of-program student learning outcomes.*	**STANDARD 4. Curriculum** *4.5. The curriculum includes cultural, ethnic, and socially diverse concepts and may also include experiences from regional, national, or global perspectives.*

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Profession	Accrediting body	Experiential education requirement	Health equity requirement
Social work	Council on Social Work Education (CSWE, 2015)	**Educational Policy 2.2—Signature Pedagogy: Field Education** The intent of field education is to integrate the theoretical and conceptual contribution of the classroom with the practical world of the practice setting. It is a basic precept of social work education that the two interrelated components of curriculum—classroom and field—are of equal importance within the curriculum, and each contributes to the development of the requisite competencies of professional practice. Field education is systematically designed, supervised, coordinated, and evaluated based on criteria by which students demonstrate the Social Work Competencies. Field education may integrate forms of technology as a component of the program. 2.2.1. The program explains how its field education program connects the theoretical and conceptual contributions of the classroom and field settings. 2.2.2. The program explains how its field education program provides generalist practice opportunities for students to demonstrate social work competencies with individuals, families, groups, organizations, and communities and illustrates how this is accomplished in field settings.	**Competency 2: Engage Diversity and Difference in Practice** Social workers understand how diversity and difference characterize and shape the human experience and are critical to the formation of identity. The dimensions of diversity are understood as the intersectionality of multiple factors including but not limited to age, class, color, culture, disability and ability, ethnicity, gender, gender identity and expression, immigration status, marital status, political ideology, race, religion/spirituality, sex, sexual orientation, and tribal sovereign status. Social workers understand that, as a consequence of difference, a person's life experiences may include oppression, poverty, marginalization, and alienation as well as privilege, power, and acclaim. Social workers also understand the forms and mechanisms of oppression and discrimination and recognize the extent to which a culture's structures and values, including social, economic, political, and cultural exclusions, may oppress, marginalize, alienate, or create privilege and power. Social workers: • apply and communicate understanding of the importance of diversity and difference in shaping life experiences in practice at the micro, mezzo, and macro levels; • present themselves as learners and engage clients and constituencies as experts of their own experiences; and • apply self-awareness and self-regulation to manage the influence of personal biases and values in working with diverse clients and constituencies **Competency 3: Advance Human Rights and Social, Economic, and Environmental Justice** Social workers understand that every person regardless of position in society has fundamental human rights such as freedom, safety, privacy, an adequate standard of living, health care, and education. Social workers understand the global interconnections of oppression and

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Table 2. Continued

Profession	Accrediting body	Experiential education requirement	Health equity requirement
		2.2.4. The program explains how students across all program options in its field education program demonstrate social work competencies through in-person contact with clients and constituencies. 2.2.5. The program describes how its field education program provides a minimum of 400 hours of field education for baccalaureate programs and a minimum of 900 hours for master's programs. 2.2.6. The program provides its criteria for admission into field education and explains how its field education program admits only those students who have met the program's specified criteria. 2.2.7. The program describes how its field education program specifies policies, criteria, and procedures for selecting field settings; placing and monitoring students; supporting student safety; and evaluating student learning and field setting effectiveness congruent with the social work competencies. 2.2.8. The program describes how its field education program maintains contact with field settings across all program options. The program explains how on-site contact or other methods are used to monitor student learning and field setting effectiveness.	human rights violations, and are knowledgeable about theories of human need and social justice and strategies to promote social and economic justice and human rights. Social workers understand strategies designed to eliminate oppressive structural barriers to ensure that social goods, rights, and responsibilities are distributed equitably and that civil, political, environmental, economic, social, and cultural human rights are protected. Social workers: • apply their understanding of social, economic, and environmental justice to advocate for human rights at the individual and system levels; and • engage in practices that advance social, economic, and environmental justice.

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Table 2. Continued

Profession	Accrediting body	Experiential education requirement	Health equity requirement
		2.2.9. The program describes how its field education program specifies the credentials and practice experience of its field instructors necessary to design field learning opportunities for students to demonstrate program social work competencies. Field instructors for master's students hold a master's degree in social work from a CSWE-accredited program and have 2 years post-master's social work practice experience. For cases in which a field instructor does not hold a CSWE-accredited social work degree or does not have the required experience, the program assumes responsibility for reinforcing a social work perspective and describes how this is accomplished. 2.2.10. The program describes how its field education program provides orientation, field instruction training, and continuing dialog with field education settings and field instructors. 2.2.11. The program describes how its field education program develops policies regarding field placements in an organization in which the student is also employed. To ensure the role of student as learner, student assignments and field education supervision are not the same as those of the student's employment.	

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Profession	Accrediting body	Experiential education requirement	Health equity requirement
Public health	Council on Education for Public Health (CEPH, 2021)	**D5. MPH Applied Practice Experiences** MPH students demonstrate competency attainment through applied practice experiences. Applied practice experiences may be concentrated in time or may be spread throughout a student's enrollment. Opportunities may include the following: • a practicum or internship completed during a summer or academic term • course-based activities (e.g., performing a needed task for a public health or health care organization under the supervision of a faculty member as an individual or group of students) • activities linked to service learning, as defined by the program, school or university • co-curricular activities (e.g., service and volunteer opportunities, such as those organized by a student association) • a blend of for-credit and/or not-for-credit activities Applied practice experiences may involve governmental, non-governmental,	**D2. MPH Foundational Competencies** *Public Health & Health Care Systems* 6. Discuss the means by which structural bias, social inequities and racism undermine health and create challenges to achieving health equity at organizational, community and systemic levels *Planning & Management to Promote Health* 7. Assess population needs, assets and capacities that affect communities' health 8. Apply awareness of cultural values and practices to the design, implementation or critique of public health policies or programs *Policy in Public Health* 14. Advocate for political, social or economic policies and programs that will improve health in diverse populations 15. Evaluate policies for their impact on public health and health equity *Communication* 20. Describe the importance of cultural competence in communicating public health content **G1. Diversity and Cultural Competence** The school or program defines systematic, coherent and long-term efforts to incorporate elements of diversity. Diversity considerations relate to faculty, staff, students, curriculum, scholarship and community engagement efforts. The school or program also provides a learning environment that prepares students with broad competencies regarding diversity and cultural competence, recognizing that graduates may be employed anywhere in the world and will work with diverse populations.

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Table 2. Continued

Profession	Accrediting body	Experiential education requirement	Health equity requirement
		non-profit, industrial and for-profit settings or appropriate university-affiliated settings. To be appropriate for applied practice experience activities, university-affiliated settings must be primarily focused on community engagement, typically with external partners. University health promotion or wellness centers may also be appropriate. The school or program identifies sites in a manner that is sensitive to the needs of the agencies or organizations involved. Activities meeting the applied practice experience should be mutually beneficial to both the site and the student. The applied practice experiences allow each student to demonstrate attainment of at least five competencies, of which at least three must be foundational competencies (as defined in Criterion D2). The competencies need not be identical from student to student, but the applied experiences must be structured to ensure that all students complete experiences addressing at least five competencies, as specified above. The applied experiences may also address additional foundational or concentration-specific competencies, if appropriate.	Schools and programs advance diversity and cultural competency through a variety of practices, which may include the following: • incorporation of diversity and cultural competency considerations in the curriculum • recruitment and retention of diverse faculty, staff and students • development and/or implementation of policies that support a climate of equity and inclusion, free of harassment and discrimination • reflection of diversity and cultural competence in the types of scholarship and/or community engagement conducted Aspects of diversity may include age, country of birth, disability, ethnicity, gender, gender identity, language, national origin, race, historical under-representation, refugee status, religion, culture, sexual orientation, health status, community affiliation and socioeconomic status. This list is not intended to be exhaustive. Cultural competence, in this criterion's context, refers to competencies for working with diverse individuals and communities in ways that are appropriate and responsive to relevant cultural factors. Requisite competencies include self-awareness, open-minded inquiry and assessment and the ability to recognize and adapt to cultural differences, especially as these differences may vary from the school or program's dominant culture. Reflecting on the public health context, recognizing that cultural differences affect all aspects of health and health systems, cultural competence refers to the competencies for recognizing and adapting to cultural differences and being conscious of these differences in the school or program's scholarship and/or community engagement.

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Table 2. Continued

Profession	Accrediting body	Experiential education requirement	Health equity requirement
		The school or program assesses each student's competency attainment in practical and applied settings through a portfolio approach, which demonstrates and allows assessment of competency attainment. It must include at least two products. Examples include written assignments, projects, videos, multi-media presentations, spreadsheets, websites, posters, photos or other digital artifacts of learning. Materials may be produced and maintained (either by the school or program or by individual students) in any physical or electronic form chosen by the school or program. The materials may originate from multiple experiences (e.g., applied community-based courses and service learning courses throughout the curriculum) or a single, intensive experience (e.g., an internship requiring a significant time commitment with one site). While students may complete experiences as individuals or as groups in a structured experience, each student must present documentation demonstrating individual competency attainment.	
Pharmacy	Accreditation Council for Pharmacy Education (ACPE, 2015)	**Standard 12: Pre-Advanced Pharmacy Practice Experience (Pre-APPE) Curriculum** *12.5. Introductory Pharmacy Practice Experience (IPPE) expectations*	**Standard 3: Approach to Practice and Care** *3.5. Cultural sensitivity* The graduate is able to recognize social determinants of health to diminish disparities and inequities in access to quality care.

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Table 2. Continued

Profession	Accrediting body	Experiential education requirement	Health equity requirement
		IPPEs expose students to common contemporary U.S. practice models, including interprofessional practice involving shared patient care decision-making, professional ethics and expected behaviors, and direct patient care activities. IPPEs are structured and sequenced to intentionally develop in students a clear understanding of what constitutes exemplary pharmacy practice in the U.S. prior to beginning APPE. *12.6. IPPE duration* IPPE totals no less than 300 clock hours of experience and is purposely integrated into the didactic curriculum. A minimum of 150 hours of IPPE are balanced between community and institutional health-system settings. *12.7. Simulation for IPPE* Simulated practice experiences (a maximum of 60 clock hours of the total 300 hours) may be used to mimic actual or realistic pharmacist delivered patient care situations. However, simulation hours do not substitute for the 150 clock hours of required IPPE time in community and institutional health-system settings. Didactic instruction associated with the implementation of simulated practice experiences is not counted toward any portion of the 300 clock hour IPPE requirement.	