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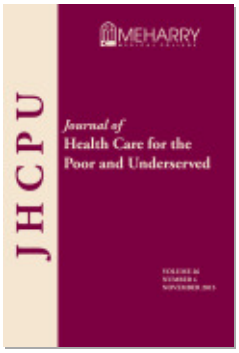

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Urban Health Project: A Sustainable and Successful Community Internship Program for Medical Students

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Abstract: **Background**. Urban Health Project (UHP) is a mission and vision-driven summer internship at the University of Cincinnati College of Medicine that places first-year medical students at local community agencies that work with underserved populations. At the completion of their internship, students write Final Intern Reflections (FIRs). **Methods**. Final Intern Reflections written from 1987 to 2012 were read and coded to both predetermined categories derived from the UHP mission and vision statements and new categories created from the data themselves. **Results**. Comments relating to UHP's mission and vision were found in 47% and 36% of FIRs, respectively. Positive experiences outweighed negative by a factor of eight. Interns reported the following benefits: educational (53%), valuable (25%), rewarding (25%), new (10%), unique (6%), and life-changing (5%). **Conclusions**. Urban Health Project is successful in providing medical students with enriching experiences with underserved populations that have the potential to change their understanding of vulnerable populations.

Key words: Community, medical education, social responsibility, underserved populations, urban health, vulnerable.

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Historically, medical school curricula have prepared future physicians to manage health care settings by providing training in patient care, interpersonal skills, systems-based practice, and professionalism.[1[p.455]] However, with an increasingly diverse population, medicine also needs physicians who will translate cultural and community competencies to practice and research.[2,3] Many practicing physicians today are not trained to recognize, understand, and respond to the complex health care needs of underserved populations.[4,5] This has led to a health care infrastructure that is ill-equipped to provide effective health care to underserved populations in the U.S.[6,7]

In order to serve vulnerable populations better, medical students need a solid knowledge base on the culturally-specific needs of underserved populations. Training in socially responsible medicine and the care of underserved and vulnerable populations would enhance medical education.[8,9] One way to instruct medical students about socially responsible medicine is to provide volunteer and internship experiences.[10]

Wanting to address the need for community-based training with underserved populations, students at the University of Cincinnati College of Medicine (UCCOM) established Urban Health Project (UHP) in 1986. The mission of UHP is to educate, inspire, and challenge medical students to become socially responsible physicians who have an understanding of the factors that impact health through their service to vulnerable populations in the Greater Cincinnati area. The vision of UHP is to improve health care by molding future physicians who will have a personal understanding of the factors that impact health and use this knowledge to provide better care to all populations, especially the underserved. Urban Health Project aims to meet its mission and vision by providing students with an eight-week summer internship at a local community agency to facilitate immersion of medical students in communities with vulnerable populations. This is in line with the current view that fieldwork is an important component of training future doctors to become socially responsible physicians.[11] In order to assess the effectiveness of UHP in meeting its mission and vision, we qualitatively analyzed 26 years of final intern reflections (FIRs) from student interns.

While programs exist in medical schools across the country that provide models for medical students to engage with underserved populations,[12–27] few have evaluated their goals over a time period that spans decades.[28–33] Of those that do have such extensive evaluations, none are solely student-run organizations whose executive functions are considered completely independent from their medical institution. Urban Health Project is therefore unique in that it is an extra-curricular and student-led organization that has formally evaluated its goals since its establishment in 1986. Box 1 describes the current program, including UHP's governance structure, funding, and expenses.

Methods

Overview. Throughout the 29 years that UHP has been in operation, UHP has used FIRs to assess each intern's experience. Each intern (or intern pair, if two interns worked at the same site during the same summer) writes one FIR during or after the last week of the UHP internship. The interns are not provided with prompts, but they are told that their FIRs may be shared with the public through the UHP Annual Report and/or

Box 1.

URBAN HEALTH PROJECT: CURRENT PROGRAM, GOVERNANCE STRUCTURE, FUNDING, AND EXPENSES

Current Program	Mission Statement	To educate, inspire, and challenge medical students to become socially responsible physicians who have an understanding of the factors that impact health through their service to vulnerable populations in the Greater Cincinnati area.
	Vision Statement	Urban Health Project strives to improve health care by molding future physicians who will have a personal understanding of the factors that impact health and use this knowledge to provide better care to all populations, especially the underserved.
	Summer curriculum components	• Immersion in 8 weeks of full-time work at a community site • Writing weekly reflections of their site experiences and one final intern reflection (FIR) at the end of their UHP experience • Completing a project at their community site that is meaningful to both the intern and the community • Attending a community enrichment day with didactics and tours of selected community partners • Participating in a service day during which interns work together on a community-based project • Presenting at the Committed to Community poster event where interns present to each other, community partners and the general and academic public
	Student interns	Student interns are medical students between their first and second year of school. They are selected by the Co-directors from a competitive applicant pool. Approximately 450 students have participated between 1987–2012.
	Community sites	Since 1987, approximately 53 sites have hosted UHP interns. These sites have included social service agencies, health centers, health departments, homeless shelters, transitional housing programs and drug and alcohol treatment programs. All of these sites have been agencies that provide services to vulnerable populations.

(Continued on p. 1410)

Box 1. (continued)

Governance structure	Co-directors	Student Co-directors lead the summer program, apply for funding from local and national sponsors, lead the board of advisors meetings and select the upcoming class of student interns. Co-director terms overlap, with senior Co-directors providing guidance and support to new Co-directors.
	Board of Advisors	Physicians and community leaders provide direction, oversight and continuity to the Co-directors.
Funding		Funding is primarily from community foundation grants. UHP funding is held by the University of Cincinnati Foundation.
Expenses		Approximately 86% of yearly expenses are student intern summer stipends. The remaining portion is used for general operations (e.g. project funds, mailings, media, events).

the UHP website. These FIRs have served as an informal benchmark for Co-directors to determine if the program is providing students with meaningful exposure to underserved populations; however, no official evaluation of the FIRs has been attempted. So, a formal analysis of these qualitative data was performed to determine whether the program was achieving its mission and vision and to identify common themes in the UHP intern experience. This project was reviewed by the University of Cincinnati Institutional Review Board and determined to be exempt for review as non-research.

Data source. Final Intern Reflections from 1987 to 2012 were collected for analysis. Most of the FIRs from 2003 and scattered FIRs from other years had been lost so they were not included in the analysis. The FIRs from 1987 to 2001 and 2006 were available only within printed annual reports, while those from 2002 to 2012 (except 2006) were also available in electronic form.

Analysis. Each FIR was read by the primary analyst (KR) and 25% of the FIRs were also read by a second analyst (TP). Both analysts were Co-directors during the summer of 2012, and they were supported by two experienced qualitative researchers—a family physician and a sociologist. The initial reading of all the FIRs searched for two pre-determined themes: "Understands Underserved Populations" (from the mission statement) and "Provides Future Benefit" (from the vision statement). The data were analyzed and organized using the editing technique, where data are initially coded into categories derived from both the interview guide and from the data themselves, and then themes are developed from the data, leading to a rich analysis.[34] One year of FIRs was randomly chosen (2002) for review to generate the identification of additional categories. Coding categories were developed and were then used to code all remaining FIRs. While the analysts searched for additional categories in each FIR, few further categories were found after the initial year of FIR review.

Those FIRs coded by both analysts were compared and determined to be a match if there was sentence concordance, which was defined as having at least one identical sentence coded by both analysts to the same category. Within a single FIR, both analysts often identified multiple sentences per category, but only one matching sentence per category was required for a match between analysts. When there was discordance in category coding between the analysts, then both analysts re-read and re-coded the FIR in question. Ultimately, the two analysts came to an agreement for 92% of the codings. For those FIRs with remaining discordance, a third reader, an experienced qualitative researcher, read and resolved the categorization of the disputed phrase.

Results

There were 420 reflections from 1987 to 2012. The number of student interns each year, and thus the number of reflections, grew through the years. From 1987 to 1996, there was a mean of 12.8 reflections per year, while in 2004 to 2012, there was a mean of 19.1 reflections per year. There were 53 different sites over the study period, including community health centers, social service agencies, shelters, drug and alcohol treatment centers, youth programs, mental health agencies, other clinical sites (obstetrics, human immunodeficiency virus clinics, pediatric clinics), and older adult programs. Since some sites closed and other sites opened during the 26 years, no site was used by UHP every year. The number of times that FIRs were based on any particular site ranged from one (six sites) to 24 times (one site); 18 sites were used 10 or more times. In addition to the two main categories from the mission and vision statements ("Understands Underserved Populations" and "Provides Future Benefit") we found two additional themes. The first was an overall assessment of either positive or negative experiences. The second encompassed the specific beneficial experiences and attributes of the program, including educational, valuable, rewarding, novel or new, unique or life-changing. Table 1 reports the number of reflections in each category.

Urban Health Project's mission and vision results. Overall, 47% of students wrote that their experience led them to understand underserved populations better, and 36% wrote that their participation in UHP would benefit them in their interactions with underserved populations in the future. In speaking to improved understanding of underserved populations, one student commented, "To see firsthand the environment in which low income people live adds to a greater understanding of their plight, in that they do not have access to many of the goods and services that middle and upper class America take for granted." Other students noted that they came to understand "the lack of health literacy," "why women delay getting health care due to costs," "that people even lived at racetracks," and "the role of food insecurity," as well as many others. Interns also described how their experience with UHP would benefit them in their interactions with underserved populations in the future. For instance, one intern stated, "I know that my internship with UHP has enriched the way I will practice medicine, and I am more seriously considering serving this portion of society professionally."

Overall experiences. Positive experiences were mentioned eight times more often than negative ones. Overall, positive experiences were reflected by comments such as "highly recommend," "excellent opportunity," "wonderful experience," and "this position

Table 1.

NUMBER OF FIRS CONTAINING COMMENTS FROM EACH CATEGORY

	1987–1991		1992–1995		1997–2001		2002–2007		2007–2012		Total	
	N(55)	%	N(73)	%	N(98)	%	N(95)	%	N(99)	%	N(420)	%
Categories from mission and vision statements												
Understands underserved populations	26	47.27	26	35.62	45	45.92	43	45.26	58	58.59	198	47.14
Provides Future Benefit	20	36.36	21	28.77	26	26.53	28	29.47	56	56.57	151	35.95
Overall experience												
Positive	14	25.45	31	42.47	43	43.88	54	56.84	66	66.67	208	49.52
Negative	6	10.91	1	1.37	3	3.06	10	10.53	6	6.06	26	6.19
Specific benefits												
Educational	27	49.09	38	52.05	57	58.16	48	50.53	54	54.55	224	53.33
Valuable	14	25.45	16	21.92	23	23.47	26	27.37	24	24.24	103	24.52
Rewarding	9	16.36	21	28.77	26	26.53	24	25.26	27	27.27	107	25.48
Novel or new	3	5.45	7	9.59	5	5.10	7	7.37	19	19.19	41	9.76
Unique	4	7.27	3	4.11	1	1.02	5	5.26	10	10.10	23	5.48
Life changing	2	3.64	1	1.37	4	4.08	5	5.26	9	9.09	21	5.00

was great." In total, 23 negative experiences were noted among the 426 FIRs read. The negative experiences included poor role modeling ("It was a negative experience seeing how the medical professional treated the patients"), lack of a good experience ("A portion of everyday was spent on mundane clerical tasks"), and frustrations and emotional burnout ("The summer caused me to become callused to hearing about awful circumstances").

Specific benefits. As Table 1 demonstrates, most reflections noted the specific benefits the students received from their experiences. Most common were educational, rewarding, and valuable experiences. One student noted, "My knowledge increased concerning those who struggle with homelessness, drug addiction, and psychiatric conditions" while another noted, "I have learned the most effective ways to interact with children." Fewer students wrote that the experience was novel, unique, or life-changing. However, the reflections of the 5% who did were profound; for example, a student from 2009 wrote, "I am walking away with the knowledge that even though I devoted my summer trying to help these women and children, in the end, they are the ones that forever changed me."

Discussion

The need for socially responsible physicians who are able to deliver culturally sensitive health care to vulnerable populations continues to increase.[8,9] Therefore, training is needed to ensure that physicians are culturally competent and socially aware. While physicians typically gain medical knowledge through coursework and faculty-led curricula, the literature suggests that social responsibility is best shaped through experiential learning and training.[35] In line with this view, this paper offers evidence that UHP is achieving its socially-driven mission and vision statements, as demonstrated through a qualitative evaluation of FIRs written by UHP interns.

Findings from these reflections provide evidence that many UHP interns who completed an eight-week internship in a community agency found the experience meaningful, valuable, and in some cases life-changing. Indeed, 47% of interns expressed that they were able to gain a meaningful understanding of an underserved population and 36% of interns expressed that they would be able to use the experiences gained from UHP to help them work with underserved populations in the future. Additionally, we noted that many UHP intern experiences could be categorized as positive (50%), valuable (24%), and educational (59%) for participants. Urban Health Project provides a model for integrating medical education with service to underserved populations, which may lead to the production of socially responsible physicians who are better able to meet the needs of underserved populations in the United States.

There are limitations to the evaluation. For instance, the FIRs only express what the interns state that they *will* do in the future. For this reason, a longitudinal evaluation that will track UHP alumni perceptions of comfort with working with the underserved, as well as career choices, including caring for underserved populations, is currently being implemented. Additionally, interns were aware that their FIRs might be read by a community audience and were not anonymous. Therefore, it is possible that interns portrayed their experiences more favorably than they might have if they were anony-

mous or confidential. However, a number of negative experiences were reflected on over the years, as mentioned in the results. Although few, these negative experiences demonstrate that at least some of the interns felt free to speak candidly about their experience with UHP within their FIRs. Additionally, we believe that the positive benefits of UHP are likely to be underreported, as may be some of the challenges, since interns were not directly asked questions about their satisfaction with the program or the outcomes. A final limitation is that UHP participants are self-selected, choosing to apply for the program. It is likely that they already have an interest in the mission and vision espoused by UHP. However, the consistency of reflections from over 400 interns over 26 years speaks to the value of this evaluation.

The positive impact of UHP on its participants was noted by the UCCOM during its recent curriculum revision process. First implemented in August of 2011, experiential and service learning is now incorporated into all four years of medical school through the Physician and Society (P&S) course. In order to teach medical students about determinants of health, foster professionalism with colleagues and the community, and develop teamwork skills, the P&S links learning communities of students with a different neighborhood and community agency in Greater Cincinnati. From there, these learning communities research and complete projects with and for their assigned communities. While not formally connected, UHP and P&S are related in that they share community sites and a common mission of service learning. Additionally, the creator and director of P&S has been one of the site supervisors for UHP for 11 years, as well as a member of the board of UHP for three years. There is even ongoing discussion of incorporating UHP into the UCCOM curriculum; however, for now they exist as separate experiences. The similarities in their missions and the overlaps in their sites continue to enhance the learning of UHP interns beyond a single summer.

In summary, the UHP model is consistent with emerging trends related to ensuring that the next generation of physicians will be trained in social responsibility. This study supports the efficacy of UHP's immersive eight-week summer internship program in meeting its mission to provide medical student interns with valuable learning experiences with underserved populations and communities and its vision to increase participants' awareness of issues that face underserved populations. For 29 years, UHP has been sustainable with our eight-week summer internship, the strong community and health partnerships that create internship positions, and involvement of second, third, and fourth-year medical students who provide leadership. We believe this model has potential to spread to other medical schools as we advance our future evaluation to understand the long-term impact of participation.

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