Community Engagement in Co-designing an Innovative Health Equity Program: A Case Report

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Abstract

INTRODUCTION Community-based interprofessional education is a promising strategy for socializing students into team-based care and centering the voices of community members in health equity-focused work. Particularly in resource limited areas, it is vital to collaborate across institutions, professions, and constituents to plan and implement interprofessional education offerings. However, little is known about the factors that support the process of co-designing an interprofessional health equity program centering the community.

METHODS Using a convergent, case study framework, this mixed methods project used quantitative data (Wilder Collaboration Factors Inventory) and qualitative data from working group feedback forms, to evaluate our collaborative process.

RESULTS Quantitative analysis reveals collaborative strengths that include skilled leadership, unique group purpose, and mutual respect. Collaborative challenges include appropriate cross-section of members and sufficient funds. Qualitative themes (analyzed to further illuminate quantitative results) include sense of purpose, importance of thoughtful leadership, and community engagement.

DISCUSSION Building sustainable academic-hospital-community relationships and centering the community in health equity work are keys to success in co-designing an interprofessional health equity curriculum. Committed funding also supports sustainability and sends an important message about the value of community members and community-based work. While these recommendations may be common sense, they are not yet common practice.

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Implications for Interprofessional Practice

- While many IPE programs rightly focus on student and service-recipient outcomes, it is crucial to address the process of interprofessional program co-design between academic and community members, in order to move beyond the "ivory tower" and shift to convergence of expertise between stakeholders.
- Skilled facilitation and thoughtful leadership are keys to creating a collaborative, productive working group.
- Consider funding and continuous evaluation from the outset of the project, including funding for community members' time and funding for project coordination.

Introduction

Health equity, or the idea that everyone deserves the right to be as healthy as possible, is a social and health "movement" for change that continues to gain momentum (Braveman et al., 2017). Promoting health equity is the responsibility of all health professionals, who must work collaboratively across disciplines to make the greatest impact. We know that interprofessional education (IPE), or students from different disciplines learning from and with one another (WHO, 2010), can support better functioning clinical teams that address holistic health. There is a growing body of evidence that IPE opportunities are well-received by students (Addy et al., 2015), lead to increased confidence and plans for future practice change (Fusco & Fultz-Ramos, 2018), and can help dismantle racism through collaborative skills that better promote equity in health (Cahn, 2020).

However, inclusion of health equity in IPE programs is variable, and most often focuses on classroom knowledge versus experiential learning (Stubbs et al., 2017). In order to address specific community needs in culturally sensitive ways, we must move beyond the "ivory tower" and include community expertise at all stages of planning and implementation of training health professions students about health equity (e.g. Casey et al., 2020, Greenhalgh et al, 2016; Nandan & Scott, 2014). Research suggests that community partners are important in sustaining programs and contributing to positive student learning outcomes (Bridges et al., 2011; Stubbs et al., 2017). However, there is a gap in literature about truly collaborative, community-based education models, in which community members are curricular "co-designers" and knowledge is "co-created" (Greenhalgh et al, 2016). This is vital for health equity work, given the unequal distribution of power traditionally seen in medical models and academia, with community members and organizations often devalued (Baker, et al., 2011; Miller & Hafner, 2008). Given the paucity of information about "collaborative knowledge generation" and effective inter-organizational collaboration, which is inherently challenging (Karam et al, 2018), this study aims to document and evaluate the process of co-designing an interprofessional health equity program centering the community.

Background

As interprofessional health educators, practitioners, and community members living in a geographic area with significant unmet health, behavioral health, and social needs (Baystate, 2019), we embraced the goal of co-creating an interprofessional health equity educational program. We have a history of working together across universities and medical systems through a network developed and now housed in our regional workforce development board. Spearheaded by pharmacy and nursing educators in 2013, the network has hosted IPE opportunities for students as well as training for the current health workforce on team-based care. However, relationships with community members and organizations were less well-developed. When a medical educator brought forward the idea of a health equity educational program, we were able to leverage already developed networks while also working hard to ensure community members were equal partners from the beginning of the process.

The purpose of this case report is to describe the process of development of a flexible program for students enrolled in health professions programs across different institutions. There are both synchronous (community of practice calls) and asynchronous (learning modules) components to the program. Longitudinal student learning at a community partner site is at the core of the program, with community preceptors guiding student learning. Didactic topics reflect the priorities, assets, and needs of community organizations and educational programs. See Figure 1.

Methods

Working Group Process & Resulting Curriculum

See Figure 2 for details of the working group development and process. Of note, working group meetings were led by an educator who had worked in the community and was trained in group leadership. Meetings were structured to value group process, relationship building, and reaching consensus. Each group meeting started with a gathering activity for community building and the agenda prioritized generation of ideas from many different perspectives. Guidelines for decision-making were determined collaboratively. Working group participants decided on action items for the subsequent meeting at the end of each meeting.

Participants & Procedures

Approval for human subjects was waived by IRB. Mixed-methods data for the evaluation of working group process were obtained from all members who participated in the working group (N = 9). Academics and administrators from medicine, pharmacy, nursing, social work, and community health work were represented. Local community organizations included those with missions of public health, early childhood education, food security, substance use disorder treatment, and transportation. Authors of this paper were also working group members.

Measures

Working group collaboration was assessed using the *Wilder Collaboration Factors Inventory*, 3rd ed (Amherst H. Wilder Foundation, 2021). This measure includes forty-four items, categorized into 22 factors. Each item is on a 5-point Likert scale, with response options ranging from 1 (strongly disagree) to 5 (strongly agree). The measure is not designed to produce a summative score. Rather, mean scores are calculated for each factor. In accordance with guidance from Inventory developers, a score of 4.0 or above indicates a strength for the working group, a score between 3.0 and 3.9 is of borderline concern, and a score of 2.9 or below indicates an area of concern for the group (Mattessich & Johnson, 2016). Wilder Collaboration Factors Inventory was sent to participants via Qualtrics. No identifying information was collected in the survey.

Exit tickets

To promote continuous feedback and inclusion, stakeholders were asked to complete "exit tickets" at the end of three meetings between July 2019 and December 2019. These feedback forms were anonymous and requested feedback on participants' experiences of knowledge, engagement, empowerment, and meeting structure. Narrative feedback was also requested. The open-ended, narrative comments were analyzed for this project.

Analysis

A convergent, "case study" framework (Fetters, Curry & Creswell, 2013) informed our study design and data analysis. A quantitative survey was the primary method used to explore working group process. Qualitative data from working group debriefs ("exit tickets") were used to further illuminate and add richness to quantitative findings.

Quantitative

The score for each factor listed in the table below was calculated by taking the mean of all responses for the item(s) representing that factor. Number of items per factor ranged from 1 to 3. Highest and lowest scores are highlighted (similar to a recent study by Wells et al., 2021).

Qualitative

Content analysis was guided by quantitative factors in which the group had particularly high or low scores. One author completed initial coding. All authors then

Program vision statement: **Students build foundational skills in the theory and practice of health equity solutions within the context of interprofessional practice and community partnerships.**
Contextual information: Current professional programs participating: medicine, pharmacy, nursing, social work, & community health. Flexibility is built into program with online components & self-pacing. Total # of hours for certificate: 500.

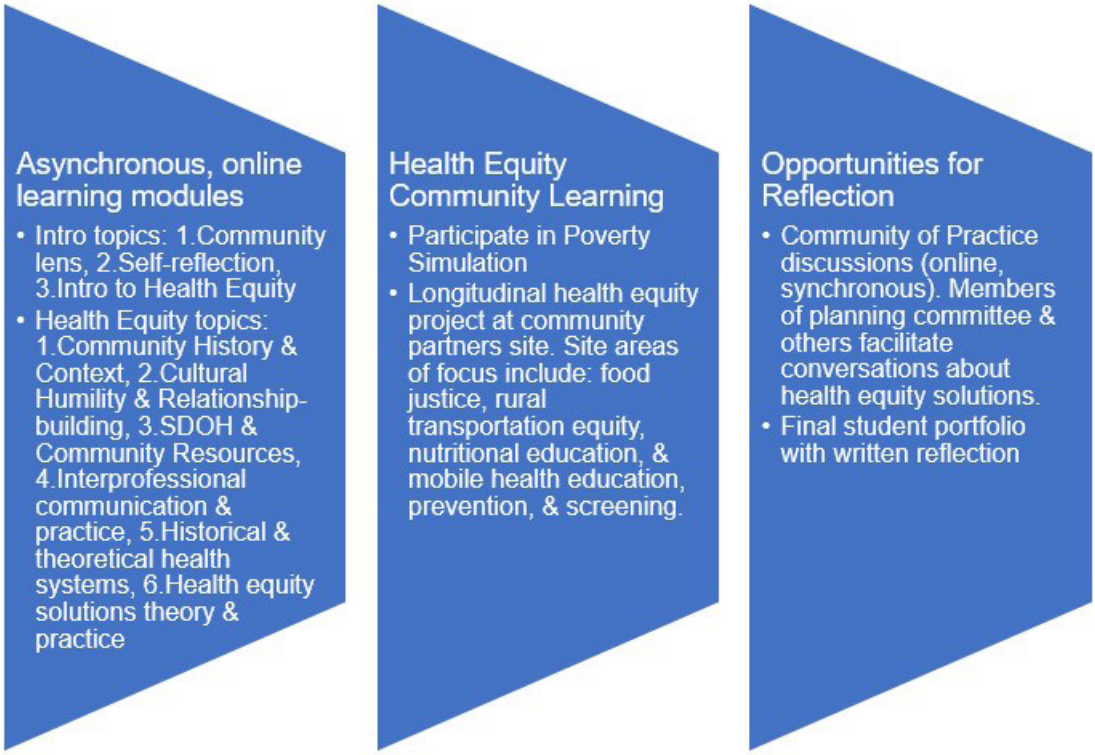
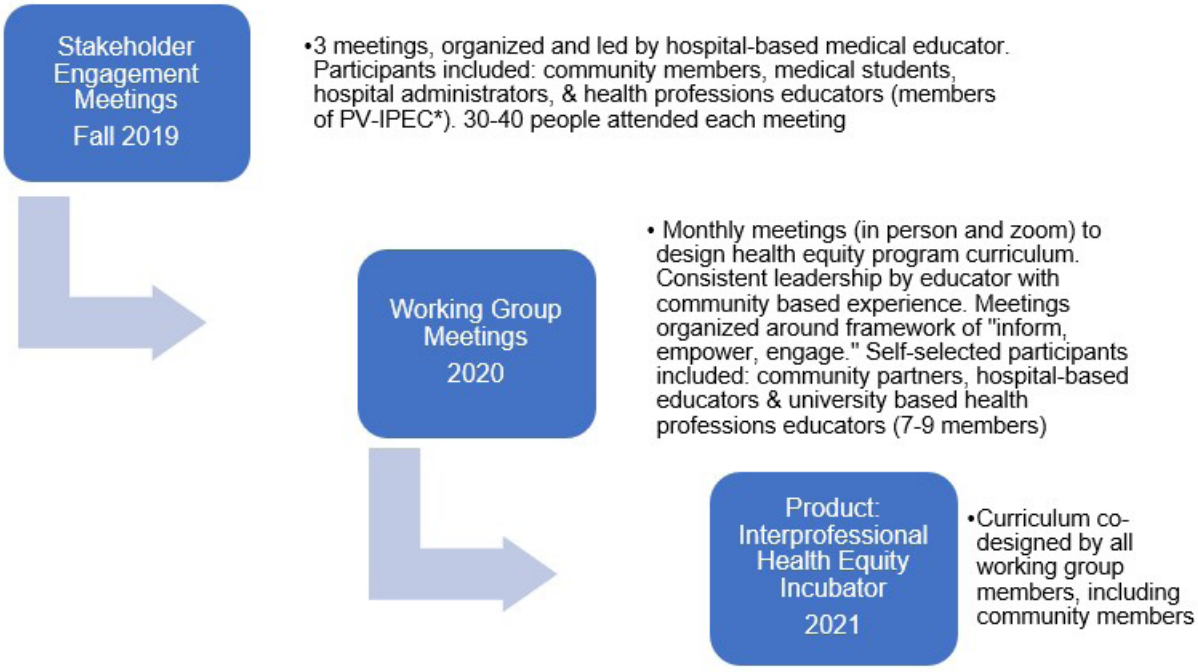


Figure 1. *Co-Designed Curriculum: Interprofessional Health Equity Incubator*



*Pioneer Valley Interprofessional Practice & Education Collaborative (PV-IPEC) was founded in 2013 by local health professions programs/ Universities and later housed in the Hampden County Workforce Board. The goal is to promote interprofessional education & collaborative practice, as informed by the Joint Commission standards and Interprofessional Education Collaborative (IPEC).

Figure 2. *Interprofessional, Inter-Institutional Program Design Process*

Factor	Average Score
History of collaboration or cooperation in community	3.84
Collaborative group seen as legitimate leader in community	3.89
Favorable political & social climate	**4.44**
Mutual respect, understanding, & trust	**4.67**
Appropriate cross section of members	*3.56*
Members see collaboration as being in their self interest	**4.44**
Ability to compromise	4.22
Members share a stake in both process & outcome	4.3
Multiple layers of participation	4.06
Flexibility	**4.44**
Development of clear roles & policy guidelines	3.89
Adaptability to changing conditions	4.06
Appropriate pace of development	3.89
Evaluation and continuous learning	*3.67*
Open and frequent communication	4.37
Established informal relationships & communication links	3.89
Concrete, attainable goals and objectives	4
Shared vision	4.33
Unique purpose	**4.79**
Sufficient funds, staff, materials, & time	*3.11*
Skilled leadership	**4.44**
Engaged stakeholders	3.78

Bold: Highest scores (4.44 and above)
Italics: Lowest scores (3.67 and below)

Table 1. *Average Scores on Factors: Wilder Collaboration Factor Inventory*

met to review codes. Member checking and direct quotations were used to enhance trustworthiness of results.

Results

Quantitative

As indicated in Table 1, average scores on factors ranged from 3.11 (sufficient funds, staff, material, time) to 4.79 (unique purpose). The average scores of thirteen factors were 4.0 or above, indicating areas of strength for the working group. The average scores of nine factors were between 3 and 3.9, indicating borderline concerns in those areas. No average scores were below 3.0. Given that we used the Wilder Collaboration Factor Inventory as an evaluative tool, highest and lowest scores are highlighted, for reflection on areas for growth and greatest strengths.

Qualitative

The following themes emerged from analysis: Sense of purpose, Importance of thoughtful leadership, and Community engagement.

Sense of purpose

Participants described feeling energized about taking action to promote health equity in the local community. Many individuals expressed enthusiasm about the project and excitement about making connections with different stakeholders.

"I was impressed with the gathering of so many involved community partners and the passion of the instructors and students."

Importance of thoughtful leadership

The critical importance of skilled leadership was noted throughout the qualitative feedback. Comments included: "Amazing facilitation"; "Loved the group work and exercises"; "Meetings are always very well thought out and run"; "Engaging and informative."

Community engagement

Narrative comments noted that community engagement was vital to the project and provided suggestions about how to include additional stakeholders:
"The possibility of incorporating actual (patients) into the planning of the 'learning experience.'"

"Need to involve religious policy makers."

Participants also provided some critique about health professionals' approaches and suggestions for better centering the community:

"Let's be careful about using the word 'patient' so much in this context. Many of the people concerned are not 'patients' in terms of their roles, access to care, and chronic needs."

"(Providers) need to learn about historic context of racism and inequity."

Discussion

This process evaluation highlights some key strengths and areas for improvement.

Strengths. The interprofessional health equity education working group was viewed as unique and important by members. One reason for this may be that we live in a region beset by historic and current health inequities and without the financial resources of other metropolitan areas in our region. Not only is health equity a pressing issue, but local organizations and individuals understood the working group curricular project could not be accomplished by any one profession or institution. Therefore, there was commitment across constituencies to this project. There has also been a history of academics and practitioners working together (described above). Therefore, the current project was grounded in established relationships and expanded outward to include key community partners. There was a foundation of trust, mutual respect and successful collaborations that had been built over several years, as well as openness to different perspectives. The leaders of the working group intentionally modeled continuous communication, consensus building, and centering the community, to further foster group cohesion and productivity. Qualitative comments further illuminated the importance of intentional leadership in maintaining working group motivation and helping all members to feel valued. In centering the community, leaders aimed to address power differentials inherent in the "medical model," which privileges physician-leader voices, as documented elsewhere in the literature (Baker, et al., 2011). Instead, the aim was to develop a shared vision of meaningful learning experiences for interprofessional students that was informed by those most impacted by the medical system (e.g., community members from vulnerable and traditionally excluded groups). In practice, this meant power-sharing in our working group interactions by committing to consensus decision-making and valuing diverse perspectives. In a parallel way, this process led to contextual information about community history and strengths in the project curriculum. Key findings about the value of leadership, mutuality, and sound process, support recommendations on building collaborations across universities and the community in the literature (Karam et al., 2018; Miller et al., 2008).

*Challenges***.** Despite efforts to invite community partners to co-design the planning group and curriculum, findings suggest that there were other stakeholders such as patients/clients and local religious leaders, who could have been "at the table." Community participants also challenged academics and administrators to think in a more nuanced way about "patients" and more broadly about "the community." The importance of including patients as collaborative partners in practice, planning and research has been recognized in the U.S. over the past decade (e.g. PCORI, 2022). Other health disciplines could also have been included in interprofessional efforts (e.g., physician assistant, physical therapy, etc.). It is possible that some working group members did not have full "buy-in" from leaders in their organizations to commit institutional time and resources to the project. The lowest score in our analysis was "sufficient funds, staff, materials, and time." Recognizing this an issue for many groups who have limited funds and competing demands, it

is worth considering strategies to increase access to resources. Grant funding, including funding for an administrative project coordinator, is one option. Funding could also "buy out" time for clinicians, academics, and community members alike, giving individuals more flexibility for project development. This idea of valuing clinical providers' time and expertise as much as traditional faculty through funding and appointments has been recommended elsewhere in the literature (Reed et al., 2022). Finally, evaluation and continuous learning was an area in which scores were lower. While leaders requested feedback at the end of every working group meeting, using language of continuous learning and quality improvement might have been helpful to make efforts more transparent. It also would have been helpful to use the Wilder Collaboration Factors Inventory several times throughout the working group process to better evaluate and adjust in "real time."

Conclusion

Amid the pandemics of COVID 19 and racial injustice in the United States, efforts to address health inequities are more important now than ever. Community-based IPE has the benefits of socializing students into team-based care and centering the voices of community members in health equity. Particularly in resource limited areas, it is vital to work across institutions, professions, and constituents to achieve goals. By understanding the strengths and challenges of effective inter-organizational collaborations, groups can implement strategies and practices for optimal functioning.

Although there are limitations to the project described in this report, such as inability to generalize widely, there might also be lessons for other groups interested in engaging in similar work. These include: 1. Leverage existing relationships but think "outside the medical model" to include a cross-section of community members. 2. Center the community in health equity work by including their expertise in the design process and content of the health equity curriculum. 3. Consider funding and continuous evaluation from the outset of the project. This includes funding for community members' time and evaluation for ongoing group learning and improvement. If the goal is long-term, successful collaboration, process evaluation is key to growth and sustainability. 4. Skilled facilitation and leadership are key to creating a collaborative, productive working group. While these recommendations may be common sense, they are not common practice. We invite those committed to health equity to consider the importance of process in program development.

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Disclosures

Authors have no conflicts of interest to declare.

Author contributions

Julie Berrett-Abebe: conceptualization, methodology, formal analysis, writing – original draft; Melissa Mattison: conceptualization, writing – original draft; Sarah Perez McAdoo: conceptualization, methodology, writing – original draft

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