

## ORIGINAL RESEARCH

# Primary Care and Public Health Perspectives on Integration at the Local Level: A Multi-State Study

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**Objective:** The Institute of Medicine argues that the integration of primary care (PC) and public health (PH) is of paramount importance. We undertook this qualitative study to better understand how these collaborations function.

**Data Sources:** Investigators from PC and PH practice-based research networks in Colorado, Minnesota, Washington, and Wisconsin identified 40 key informants from the PH and PC fields within their respective states.

**Study Design:** The key informants participated in standardized, semistructured interviews.

**Data Collection:** Coinvestigators from each state conducted telephone interviews. The interviews were recorded, transcribed, and analyzed using NVivo 10.

**Principal Findings:** Participants described 2 main types of themes. One, which we have termed “foundational” aspects of partnership, includes leadership, communication, mutual awareness, formal processes, history and values. The other, which we have characterized as “energizing” aspects of partnerships, includes having a shared strategic vision, opportunity, and the shifting culture in PC and PH. While the vast majority of participants described the value of foundational aspects of partnership, those who reported having more active collaborations were more likely to also describe the energizing aspects of partnerships.

**Conclusions:** Our findings indicate that interactions between foundational aspects and energizing aspects of partnerships are dynamic. Further exploration of these aspects may help us to understand how best to support the integration of PC and PH. (J Am Board Fam Med 2017;30:601–607.)

**Keywords:** Collaboration, Integration, Multi-Sector, Primary Care, Public Health, Qualitative

Primary care (PC) and public health (PH) have shared goals in addressing issues of disease prevention and health promotion in the community. PC

providers have been principally focused on the health of individuals, but are increasingly oriented to responding to the health of the communities they serve.<sup>1,2</sup> PH agencies are focused on the health of communities and are under increasing demand to find ways to collaborate and build relationships with PC. In some areas, such as immunizations and emergency preparedness, these relationships have a long history, but there is a growing interest and need by both PH and PC to broaden and deepen their relationship to better promote population health.<sup>3–6</sup> The Institute of Medicine (IOM) makes a compelling case that PC and PH integration, and research on such integration, is of paramount importance.<sup>7</sup> Integration has been elevated to the national agenda by the US Centers for Disease Control and Prevention and the Health Resources and Services Administration, organizations with influence, funding authority and the motivation to leverage their resources more collaboratively.<sup>7</sup>

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Recent federal legislation and state-based initiatives requiring shared accountability for health outcomes have intensified the need to prioritize models of interaction. Several factors have been identified as contributing to integration between PC and PH, including less-competitive health care markets,<sup>8</sup> and PH activities that involve the delivery or management of individual health services and health information data exchange.<sup>2</sup> Investments in information technology, establishment of PC homes, and increased coordination of care are all important for reforming health care from a traditional safety net system to coordinated care involving both PC and PH.<sup>9</sup> Although local partnerships of this intensity will require active and sustained commitment,<sup>10</sup> integration of PC and PH could enhance the capacity of both sectors to carry out their missions and link with other stakeholders to catalyze a collaborative, intersectoral movement toward improved population health.<sup>7</sup>

There are a range of ways to define integration across health sectors.<sup>5,6</sup> However integration is defined, the literature seems fairly consistent in calling for coordinated infrastructure and funding; shared vision, mission and values; alignment of goals and objectives; alignment of leadership; partnership; sustainability, evaluation; community engagement; shared data and analysis; contextual variables; and innovation.<sup>8,11–19</sup> Although this literature comprehensively describes models of interaction between PC and PH, more could be done to learn how both partners experience or prioritize such aspects of at the local level, and in a way that considers the processes or actions that can support successful implementation.<sup>20–22</sup>

In this study, PC and PH practice-based research networks (PBRNs) from 4 states came together to explore the continuum of integration proposed by the IOM (eg, mutual awareness, cooperation, collaboration, partnership),<sup>7</sup> examine the dimensions of integration on this continuum, and identify factors that facilitate or impede integration. By using a practice-based, local-level perspective, we seek to advance much-needed interdisciplinary agreement on underlying principles and concepts. In this article, we present qualitative findings that describe the factors that PC and PH participants describe as being important when they come together at a local level to collaborate.

## Methods

### *Study Population*

Investigators from PC and PH PBRNs in Colorado, Minnesota, Washington, and Wisconsin identified key informants from the PH and PC fields within their respective states. Each state identified 5 local jurisdictions in which to conduct paired key informant interviews, for a total of 20 local jurisdictions. The local PH Director and a PC Medical Director from within the same jurisdictions were invited to participate in separate, semistructured, key informant interviews, giving a total of 40 key informants. This study was reviewed by the institutional review boards of the Universities of Colorado, Minnesota, Washington, and Wisconsin and was deemed exempt under federal regulations 45 CFR 46.101/21 CFR 56.104. Although deemed exempt, all participants underwent an informed consent process with investigators before participation.

### *Study Instrument*

Model frameworks of collaboration from a variety of disciplines were reviewed to identify key factors thought to be important for measuring and assessing integration.<sup>13–19,23</sup> A standard interview protocol was developed by the multi-state study team and framed within the research questions. The protocol was followed closely by each interviewer, to reduce potential interviewer bias.

### *Data Collection*

Coinvestigators from each state (1 PC and 1 PH PBRN representative) jointly conducted telephone interviews with each key informant. All interviews were recorded (with verbal consent from respondents) and voice recordings were securely uploaded to the University of Minnesota, which transcribed all interviews verbatim. The coprincipal investigators from Minnesota read all the transcripts. State-specific transcripts were also provided back to study investigators in each state.

### *Data Analysis*

The qualitative data were analyzed using NVivo 10. Investigators used the social constructivist approach to Grounded Theory to identify themes and subthemes in the data.<sup>24</sup> Discussions with members of the research team on the emerging analysis further validated the rigor of the qualitative analysis. In addition, the PBRNs within the states were en-

gaged to review the findings and assist with interpretation. The themes identified by the investigators were used, along with the literature, to identify factors potentially related to degree of integration and to identify factors that facilitate or inhibit integration.

## Results

Two main thematic areas describe the emerging themes in this data, being the “foundational aspects of partnerships” and “energizing aspects of partnerships.” The foundational aspects subthemes described institutional features and processes that help to establish and maintain relationships, and energizing aspects subthemes described activity or action in the local-level partnerships. We will describe each of these and their associated subthemes, in turn.

### *Foundational Aspects of Partnerships*

Foundational aspects of partnerships emerged as the themes that described core components of relationship building between partners. These themes described institutional structures or attributes, such as leadership, communication, awareness, formal processes, history and values.

#### *Leadership*

Well-aligned and multi-level leadership were described as an important aspect of success in partnerships. In what may be a shift in findings from the literature on this topic, there was less emphasis on the presence of champions than there was on the role of collaborative, multi-level engagement of leadership. There were many descriptions of the need to have the “right people at the table” as the dominant metaphor for these data. In larger, urban areas, the involvement of leadership could mean multi-agency, multi-system engagement. In that setting, PH emerges as a neutral convener across local PH, health providers, and health plans.

And at that table then we have people from the hospitals and the health plans as well as public health. And so, if we agree on something at that level, there may be an opportunity to, through the system itself, to go back down and influence the clinical site. (Minnesota, Public Health)

PH and PC informants agreed that collaborations were mainly initiated by PH leadership. PC

participants described decisions to collaborate often happening at the system rather than the provider level.

#### *Communication*

Communication was described by participants as an important but challenging aspect of partnership. PH described a one-to-many kind of relationship with PC, both in relation to the potential need to connect with a number of different health systems, clinics and plans, but also in relation to hierarchical layers within the health care system itself. Constant changes in health systems was seen as complicating the ability to communicate in timely and effective ways. PH was often seen as initiating communication, but keeping the communication going required constant ongoing attention from both groups. Communication was described as an activity that could dial up in times of crisis, and dial back after a crisis period.

If you had asked me at H1N1, we were kind of connected at the hip (laughs). So again, I think that kind of has, it kind of ebbs and flows. (Minnesota, Public Health)

#### *Mutual Awareness*

Developing mutual awareness was described by participants as having meaningful knowledge about each other, which might include specific knowledge about services or activities or an understanding of each other’s perspective. Awareness was impacted by communication, and there was a strong indication that knowledge about each other, while sometimes limited, was an essential component of building partnerships. Mutual awareness was also related to understanding areas of common priorities, mission, and vision, such as striving to impact population health. Some described the value of shared training experiences and opportunities as a way to build in an opportunity to build relationships and knowledge about each other.

I think one of the things would be education on both sides of what the other has to offer. You know, because if you do not know what they have available or what their knowledge base is or how we could access them, it probably would not be at the top of our radar screen to say oh, gosh. We should talk about this. (Wisconsin, Primary Care)

### **Formal Processes**

Participants identified formal processes as an important part of building collaborative relationships. Of particular importance were shared structures and mandated connections. Where PH and PC identified they were required to work together, processes that supported the relationship formed around that requirement. Some identified coming together around activities required for both entities, such as health needs assessments, that they decided to conduct collaboratively. While there appeared to be a shift in all PH sites toward less direct service provision, where PH was providing clinical services there was a need to come together around contracts, payment structures, and shared clients. For some, colocation was very beneficial for the relationship, because it brought both partners into more frequent contact.

I think sometimes something that is off campus, you know, is kind of out of sight, out of mind and you know, we'd remember when there was an epidemic of something in the community that we needed to work together, but now that they are on our campus, it feels like we think of them more often, and loop them into things more often. (Wisconsin, Primary Care)

### *History of Relationship*

Participants indicated that relationship building is fostered over an ongoing period and requires time and patience. A key component of building the relationship over time was to find ways to work together on joint projects and to take time to celebrate the successes and achievements. The value of building a foundation of knowing each other and working together was seen as important prework for being project or issue ready.

### *Shared Values*

Having a strong shared commitment to the value of the work of PH and PC was seen as important, and included some element of mutuality where the knowledge and assets each partner brings was acknowledged and valued. Other values that were described as important in building collaborative relationships included having passion for this work and trust. The data reflect that PC and PH participants did describe a values overlap, particularly with regard to population health and underserved populations. As the PC respondent below reports,

there is a sense of being “kindred spirits” in the work that is undertaken together.

To tell you the truth, I think that we really are—the public health guys I know and that I've worked with, they are such kindred spirits I sort of feel like we're starting at a point where philosophically we're so much in agreement that it makes it easier to work. (Colorado, Primary Care)

### **Perceptions of Foundational Aspects of Partnerships**

The foundational aspects of partnerships were described most of the by participants as very valuable to the development of their relationships. Participants were also asked offer examples of times they came together to collaborate, and while foundational aspects were important, they were not necessarily predictive of having an active collaboration within a partnership. Indeed some partnerships interviewed described that while their relationship had good foundations, collaboration was mostly defined by responding to urgent needs in the community, rather than being a sustained and active collaboration.

I think that when we have a specific need, something that might come up urgently or be time bound, we have a good working relationship. (Washington, Public Health)

### **Energizing Aspects of Partnerships**

In contrast with the foundational aspects of partnerships, which describe key institutional structures and attributes, there was also an emerging main theme of energizing aspects of partnerships. This collection of subthemes describe the areas of active engagement or shared activity at the local level. In general, participants who could describe energizing aspects of their partnership were far more able to offer active examples of current work together. These subthemes describe what appeared to support movement toward joint focused activity, which elevated the partnership beyond having a strong foundation and onward to achieving active collaboration.

### *Developing a Shared Strategic Vision*

Actively pursuing a shared strategic vision emerged as being of central importance for successful collaboration between PC and PH. Having common goals and objectives that bring partners together to



focus on areas of work was described as important. The processes for developing these goals and outcomes have been greatly impacted by the availability of data about patients and populations and how the data can be shared between partners. The ability to share data on a patient level was described as useful, but the benefits at the population level were substantial. Once data could be reviewed at the population level, the use of data emerged as a key component in being able to meaningfully come together to identify needs and priorities using data-driven processes. The data analysis capabilities that PH often brought to the partnership were useful for bringing data into the process of reviewing the health of the community. Combining the data with the local PC practitioner experience enabled the partners to think jointly and strategically about the health of the community.

What I have found is when you can show the doctors that the health of our population is lower than the state average, you know, they really see that. Physicians are scientists. They look at the data. And then they have some good ideas on what might work to change it from the point of view of having seen these patients every day. (Washington, Public Health)

In addition, engaging dialog around sustainability of both joint work and the relationship was also an important part of success in partnerships. This involved reviewing the capacity and resources each party brings to collaboration and thinking about the role of sharing those to maximize sustainability.

#### *Opportunity*

The role of opportunity was described by participants as a key energizing concept. Opportunity was sometimes described as coming about when serendipity brought the right people together at the right time. In this sense, some collaborations were seen to have been made successful by factors outside of each partner's control, such as the benefits of living in small communities with high degrees of personal relationships. Opportunity was also seen to be borne of health-related crises, such as disease outbreaks. During these times, PC and PH came together through necessity, such as with the H1N1 outbreak. However, these moments of crisis provided some partnerships with the opportunity to start to work together and for some it elevated their work to being much more collaborative and ongoing.

ing. Opportunity was also described as being due to changes in the context of providing PH and PC.

A lot of the population health focus is going to be laid out there. So we see that as the next step for us, to come together as a county and organize in a way that we can look at being able to manage our population's health within a managed care environment. (Washington, Primary Care)

Innovation also promoted opportunity and included coming together to work on applications for new funding and coming together on novel funded projects. Such projects offered challenges for sustainability as the funding period for such projects is by definition limited, but the process of seeking funding for innovative joint work was helpful.

#### *A Shifting Culture in PC and PH*

One emerging theme from the interviews was that there is much change currently happening in both the PC and PH contexts. For PC, there was a strong sense of anticipation of change in the health care system, particularly with payment reform encouraging population-based provision. PH participants described how there were changes in the field of PH, too. For some there was a shift away from being involved in direct service provision, with some care still being provided where there were local gaps in services and a need to provide a safety net. In this new climate, there was debate about the role for PH in working strategically with PC to ensure gaps in direct provision were being met, rather than meeting those gaps through direct service. This strategic role for PH was leading to increased opportunities for PH to emerge as a neutral facilitator, where they can help to coordinate and navigate relationships.

So the PH Department is often the convener of that, if not the convener they supply critical data, and also often help facilitate those meetings. So here we play all 3 of those roles; we're the convener, we provide data, and we help facilitate it, and we bring others to the table. (Washington, Public Health)

#### **Discussion**

The IOM provided a vision of collaboration for PC and PH that set an aspiration of moving through mutual awareness, cooperation, and collaboration

to a fully integrated partnership.<sup>7</sup> The literature describes the many key aspects that support such a transition, such as importance of infrastructure and funding; shared vision, mission and values; alignment of goals and objectives; alignment of leadership; partnership; sustainability; evaluation; and community engagement.<sup>8,11–19</sup> In this multistate study, our findings reflect, to some extent, the literature in this area, with participants describing the presence of many of these important factors in building partnerships. Yet for this group of participants, collaboration did not seem linear, and the foundational aspects of partnerships did not necessarily relate to being able to describe examples of actively working together. The participants who could describe active examples of collaboration were more likely to describe not only the key foundational aspects of collaboration, but also additional energizing aspects of partnerships, which appeared help to elevate local partnerships beyond building the foundations of good relationships, and further toward active collaboration.

These research findings lay the foundation for revisiting our understanding of integration and for finding ways to refine and build on current models. Some partnerships may have strong foundations, yet little action or activity, and others may have occasional bursts of activity, yet very limited foundations. The relationship between these 2 different and equally important aspects of partnership are clearly dynamic and challenge the idea that a linear continuum is sufficient to describe these complex interactions.

The importance of the energizing aspects of partnerships emerged strongly in this data set, with an emphasis on the role of opportunity, crisis, using data-driven strategic planning processes and health reform as important aspects for some partnerships. It may be that participants are carefully attuned to this being a time of opportunity because PC and PH are both going through a period of growth and culture shift within their disciplines. It may also reflect that the work of building partnerships between PC and PH has matured somewhat, and local-level practitioners have important experiences to share about how to elevate their partnerships beyond forming key relationships and into active collaboration to improve the health of the community. Our data indicates that partnerships at the local level need support in building good foundations, but they may also benefit from support in

how to build on those foundations and elevate the relationship into shared action for improving the health of the community.

This study has a number of limitations. PH may have many different organizational configurations, which can impact their effectiveness,<sup>24</sup> and although our sample is diverse, it may not represent all potential local structures. Likewise, PC respondents may also not be fully representative. Participants may have been somewhat self selected and have a particular interest in this topic. It may be useful to further test and explore these findings through the use of more broadly disseminated survey methods.

## Conclusion

The time is ripe to revisit the ways in which PC and PH collaborate. Our findings indicate that there are dynamic processes of interaction between foundational aspects and energizing aspects of partnerships, and that energizing aspects seem more likely present in more collaborations that describe being more active. Further exploration of these aspects may help further our understanding of how collaboration between PC and PH can best be supported so that together they can rise to meet the emerging opportunities and challenges in improving population health.

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On behalf of the Local Primary Care-Public Health Study Group the following are members of the Local Primary Care-Public Health Study Group: Beth Gyllstrom, Principal Investigator (Minnesota); Rebekah Pratt, Co-Principal Investigator (Minnesota); Laura-Mae Baldwin (Washington); Betty Beke-meier (Washington); Kim Gearin (Minnesota); Carol Lange (Minnesota); David Hahn (Wisconsin); Tracy Mrachek (Wisconsin); Kevin Peterson (Minnesota); Don Nease (Colorado); Lisa Van Raemdonck (Colorado); and Susan Zahner (Wisconsin).

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