Fostering Local Health Department and Health System Collaboration Through Case Conferences for At-Risk and Vulnerable Populations

In case conferences, health care providers work together to identify and address patients' complex social and medical needs. Public health nurses from the local health department joined case conference teams at federally qualified health center primary care sites to foster cross-sector collaboration, integration, and mutual learning. Public health nurse participation resulted in frequent referrals to local health department services, greater awareness of public health capabilities, and potential policy interventions to address social determinants of health. (*Am J Public Health*. 2018; 108:649–651. doi:10.2105/AJPH.2018.304345)

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To foster cross-sector collaboration, public health nurses joined existing primary care case conference teams. Case conferences are collaborative team meetings during which providers trained in medicine, behavioral health, and social services identify and address patients' social, financial, legal, and medical needs.[1] Case conferences develop shared understanding, create consensus on management plans, address social determinants of health, and facilitate referrals and care coordination.[1,2] Case conferences have been widely applied internationally, with promising effectiveness.[3]

INTERVENTION

Eskenazi Health initiated case conferencing in its primary care practices to better address the needs of patients with challenging issues. Part of the Marion County Health & Hospital Corporation, Eskenazi Health is the public hospital system serving the unrepresented and indigent populations of Indianapolis and has a 315-bed hospital. Also, Eskenazi Health is a federally qualified health center with 10 sites and nearly 1 million outpatient visits annually. Composition varies by site, but, in addition to a physician and nurses, teams may include physician assistants, medical assistants, clinical social workers, dietitians, and geriatric care representatives. Activities include a review of the patient, identification of relevant patient goals, information sharing, discussion, and action items. If appropriate, the team may attempt to speak with the patient or a caregiver by phone during the conference. Any member of the health care team can nominate a patient for discussion at a case conference, which typically occurs at a designated weekly time.

With such diverse representation of professionals engaged in focused problem-solving activities, case conferences present a unique opportunity to foster cross-sector collaboration, integration, and learning. We introduced public health nurses from the Marion County Public Health Department into case conference teams at three clinic sites. Also part of the Marion County Health & Hospital Corporation, the Marion County Public Health Department is the largest local health department in the state. The public health nurses were fully participating members of the case conferences; they reviewed patient history, shared knowledge, and formulated action items.

PLACE AND TIME

Three clinic sites initiated case conferencing in 2016. Public health nurse participation began February 2017.

PERSON

Patients (adult and pediatric) included in case conferences were high risk and had unmet psychosocial needs and were drawn from predominately urban and lower-income communities.

PURPOSE

We introduced local public health nurses into the case conference team to explore the activity as a point of integration and cross-sector collaboration between health care providers and public health professionals. Specifically, we sought to identify

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TABLE 1—Characteristics of Case Conferences Attended by Public Health Nurses: Indianapolis, IN, 2017

Characteristic	No. (%)
Patient gender	
Male	12 (75.0)
Female	4 (25.0)
Patient age	
Adult (aged ≥ 18 y)	12 (75.0)
Pediatric (aged < 18 y)	4 (25.0)
Reasons for case conferencing	
Inappropriate utilization or missed appointments	3 (18.8)
Recent hospitalization or emergency visit	3 (18.8)
Substance abuse, including alcohol and tobacco	6 (37.5)
Chronic conditions	13 (81.3)
Mental health	4 (25.0)
Social determinants of health present	
Financial or no insurance	5 (31.3)
Lack of social support	5 (31.3)
Language barrier	3 (18.8)
Transportation barrier	4 (25.0)
Legal barrier	1 (6.3)
Outcomes of case conferences	
Referral to another service or provider	9 (56.3)
Referral to public health	4 (25.0)

how local public health nurses contributed to addressing the needs of medically and socially complex patients and what organizational learning occurred from participation.

IMPLEMENTATION

To foster connectivity with members of the health team and to ensure continuity across case conferences, one public health nurse was assigned to each case conference team. Before joining case conferences, the public health nurses were trained in Eskenazi Health's case conference approach and provided templates for documenting conference discussions and their subsequent activities. Public health nurses had laptop computers to remotely access the health department's electronic health records. Quarterly, each public health nurse shared summative experiences from the conferences with health department leadership.

EVALUATION

We evaluated the intervention qualitatively using a multilevel and multimodal approach. Observational data collection focused on the reasons for case conferencing, information needs, social determinants, action items, and the contribution of public health. We observed seven case conferences (three before and four after the intervention began). To protect confidentiality, we did not record observations and omitted identifiers from field notes. In addition, we interviewed 12 providers participating in case conference using a semistructured interview guide (three public health nurses, two physicians, two nurses, two social workers, one dietitian, one behavioral health professional, and one medical assistant). We analyzed transcripts and field notes using an open-coding approach to identify relevant themes about the impact of case conferencing and the effect of public health nurse participation. We also observed sessions during which the public health nurses provided reports to health department leadership.

During the four observed intervention period case conferences, 16 patients were discussed (Table 1). Chronic conditions (81.3%), substance abuse (37.5%), and mental health issues (25.0%) were common reasons for case conferencing. Frequent mention of financial issues, a lack of adequate social support, or transportation barriers demonstrated the importance of social determinants. Referrals to a dietitian, home health agency, or mental health provider occurred in more than half of the observed conferences. One fourth of the observed conferences resulted in a referral to the health department for services that included checking blood pressures, education, home assessments, or social worker visits.

The intervention created a perceived benefit. First, participants provided evidence of cross-sector learning: greater awareness of each one's capabilities and expertise (Table 2). For example, one nurse noted, "It's helpful to know other things that are available." Similarly, a public health nurse commented, "It's good to be there. It reinforces what we do." Second, public health nurses were routinely identified as an invaluable source of information that is typically unavailable to clinicians. They were eyes and ears able to determine "what's happening at home," and they shared information about previous patient interactions. Referrals resulted in home visits to check on patients no longer engaged in care and additional opportunities for education, which was important for patients with low health literacy. Last, we observed evidence of the health department contemplating policy changes because of this intervention. Patients experienced access issues to same-day appointments, because Medicaid covers taxi services but only for one select company and only if booked 72 hours in advance. In response to this information, a health department administrator stated, "We need to work with [the state Medicaid office] to change this policy."

ADVERSE EFFECTS

No adverse events or unintended consequences were noted.

SUSTAINABILITY

Eskenazi Health allows physicians to assign a relative value unit to case conferences to credit participation, even though the activity is not reimbursable. Because the organizations are part of the same parent agency, barriers to sharing patient information were minimal. Organizations interested in case conferences with public health will likely first have to update or formalize data-sharing policies. Leaders of both organizations value addressing social determinants of health and are committed to supporting the collaboration.

TABLE 2—Perceptions of Primary Care Case Conferences and Impact of Participation by Public Health Nurses: Indianapolis, IN, 2017

Domain	Theme	Example Quotations
Cross-sector learning	Increasing awareness of public health system	[For] some things that we never thought were possible, the public health nurse was like, "Well, we got somebody for that." —Eskenazi nurse
		It's giving the health department a face, because a lot of people don't understand what we do. —public health nurse
	Increasing awareness of health care system	I have learned a lot. —public health nurse
Referrals	Education	I feel like the patients that we send to public health need duplication. So it's not overkill, but maybe you didn't hear it—you didn't receive the message from the core team, but then public health nurse comes to reinforce what core just told you. And so you might have a success there. —Eskenazi nurse
		We've had people that were not compliant with diabetes medication. They would go out and provide diabetes support education. —public health nurse
	Patient contact and finding	The client wasn't engaged . . . there could be some benefit to a public health nurse going out into the home. —public health nurse
Information	Sharing information	[A] family that had just moved here from Uganda, they were refugees. And the public health nurse already had information where the patients had been seen through—I guess it's some kind of clinic for immigrants. And so she was able to provide that information and kind of help put pieces to the puzzle that we didn't have. —Eskenazi nurse
		The public health nurse has the ability to see whether the patient has been engaged with public health before, so that's been helpful being able to have access to her reading those notes during a case conference. —Eskenazi nurse
	Finding information	They offer a unique opinion . . . eyes and ears into people's homes, that typically we can't do that on a regular basis. —Eskenazi physician
		It's a whole lot of things that we can learn just by having the public health nurse go into the home. —Eskenazi social worker

PUBLIC HEALTH SIGNIFICANCE

Historically, medical and public health systems have failed to work collaboratively; however, recent payment models encourage more collaboration. Population health strategies and renewed demands for nonprofit hospitals' community accountability have increased providers' interest in the expertise of public health agencies pertaining to prevention and addressing social determinants. Additionally, Internal Revenue Service community benefits requirements increases the need for hospitals and local health department collaboration. To our knowledge, local health departments are not frequent participants in case conferences even though the activity is a logical, low-cost, and easy collaboration point.

Furthermore, our evaluation suggests that involving public health nurses was a mutually beneficial activity. For providers, the public health nurses enabled access to needed health department services as well as critical information about living environments and communities. Additionally, the health department identified needs and opportunities for policy interventions. Overall, case conferences are effective catalysts for collaboration[4] that now include cross-sector learning with public health. Importantly, public health nurses were able to have additional venues to address the multifaceted needs of complex and vulnerable members of the community. AJPH

CONTRIBUTORS

J. R. Vest, V. Caine, L. E. Harris, N. Menachemi, and P. Halverson conceptualized the project. J. R. Vest and D. P. Watson designed the study and collected and analyzed the data. All authors wrote and approved the article.

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HUMAN PARTICIPANT PROTECTION

The project was approved by the Indiana University institutional review board.

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