A Promising Future:
School-Based Health Centers and Accountable Care

Perspectives from Providers in Connecticut

School-Based Health Alliance

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Abstract

This report describes findings from a qualitative research study that assesses factors influencing care coordination for adolescents who access healthcare in multiple settings, including school-based health centers (SBHC) in communities in Connecticut, New Mexico, and New York. Though the challenges and issues related to care coordination described in these reports are common across the healthcare system, the lens of the SBHC is unique because they serve as the usual source of care for many adolescents, yet many SBHCs have not been fully integrated into the traditional healthcare system. Through interviews with SBHC and community providers and focus groups with adolescent SBHC users, this research examines why care coordination is important and the challenges providers face in providing coordinated, continuous care. The report integrates the perspectives of providers and adolescents to offer recommendations to improve care coordination for adolescents who access care in SBHCs and other settings.

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Glossary of Provider Types

School-based health center (SBHC) provider: Both primary care and behavioral health providers practicing in a SBHC.

SBHC primary care provider: The SBHC provider delivering primary care services.

SBHC behavioral health provider: The SBHC provider delivering behavioral health services.

Primary care provider (PCP) of record: The provider who is assigned by a state agency to care for the primary care needs of Medicaid enrolled adolescents.

Community provider: A provider who is delivering primary care services at any location in the community other than the SBHC.

Community specialist: A provider who is delivering specialty services at any location in the community other than the SBHC, including behavioral, pulmonology and other specialty areas.

Background

The Affordable Care Act, along with other recent state and local initiatives, have spurred a great deal of activity across the nation aimed at increasing the effectiveness of the health care delivery system while also reducing costs. Through these efforts, the importance of care coordination has emerged as an essential component of improving health care delivery and health outcomes, and key to creating a medical home.[1] While the definition of care coordination varies to some degree, for the purposes of this project, care coordination refers to the routine exchange of communication between health care providers who care for patients who receive care from multiple providers in multiple locations. An investment in care coordination can enhance access to services and resources, improve continuity of care, promote better health outcomes, reduce duplication of services, lower health care costs, and increase patient satisfaction.[2-6]

Many adolescents, especially those who are low-income, ethnic minorities, or immigrants, receive health care in multiple places, sometimes from a community primary care provider or a local medical clinic or health center, and frequently in the emergency room.[7] Communication and coordination among these providers is often poor and care can be fragmented, incomplete, and sometimes duplicated.[8] School-based health care is a health care model that is designed for adolescents and is responsive to these challenges. School-based health centers (SBHCs) provide children and adolescents with access to high-quality, comprehensive clinical and preventive health care that is culturally and developmentally-appropriate and delivered in a setting that is trusted, familiar, and immediately available: their school. SBHCs collocate a multi-disciplinary team of providers to deliver integrated care that can meet the complex medical, behavioral, and social health needs of children and adolescents. They are administered and operated by organizations, such as hospitals, federally qualified health centers, universities and non-profit organizations, that view schools as a common-sense and effective place to improve the health of the community.

Many SBHCs, however, have not been fully-integrated into the traditional healthcare system. This project sought to identify the factors that influence care coordination and the provision of continuous, comprehensive, and complete care to adolescents who seek health care in multiple settings including an SBHC. We examine this through the lens of adolescent SBHC users and from providers who work in or share patients with SBHCs. We hypothesized that adolescents would be accessing health care in multiple places, and that they would feel that the providers they see in different settings were not routinely communicating with one another. We also hypothesized that care coordination would be more consistent and comprehensive among SBHCs and community providers that are part of a larger health/hospital system, since larger health/hospital systems might be more likely to have an established referral process and be operating using the same electronic health record (EHR) systems across sites.

This report identifies the successes and challenges influencing care coordination for adolescents who access care in multiple settings, and proposes a set of recommendations to improve care coordination for adolescents who access care in multiple settings including SBHCs.

Methods

Six communities were selected to participate in this research including New Haven and New London, Connecticut (CT); the Bronx and Cooperstown, New York (NY); and Albuquerque and Española, New Mexico (NM). These communities were selected based on their geographic and ethnic diversity as well as their diverse SBHC sponsor organizations and diverse staffing models (Table 1). The SBHC sponsor organizations represented among the participating sites included a hospital/health system, three community health centers, a nonprofit organization, and a medical university. All the SBHCs had at least one primary care and behavioral health provider on staff, though some of the providers worked part-time in the SBHC. We focused on one SBHC in each community except in the Bronx, where staff from multiple SBHCs that were all part of the Morris Heights Health Center, were interviewed.

Table 1: SBHC Characteristics

	New London, CT	**New Haven, CT**	**Espanola, NM**	**Albuquerque, NM**	**Bronx, NY****	**Cooperstown, NY**
Geographic Location	Urban	Urban	Rural	Urban	Urban	Rural
SBHC Sponsor Organization Type	Private/non-profit	Community health center	Community health center	University	Community health center	Hospital/health system
SBHC Sponsor Organization Name	Child and Family Agency of Southeastern Connecticut	Fair Haven Community Health Center	El Centro Family Health	University of New Mexico Health System	Morris Heights Health Center	Bassett Healthcare Network
Staffing Model	Primary Care and Behavioral Health***	Primary Care and Behavioral Health	Primary Care and Behavioral Health Plus****	Primary Care and Behavioral Health Plus	Primary Care and Behavioral Health Plus	Primary Care and Behavioral Health Plus
SBHC uses an Electronic Health Record (EHR)	✓	✓	✓		✓	✓
Student population size	703	1300	996	1664	2400	790
% of student population enrolled	69.4%	50%	65.2%	62.7%	83.3%	87.2%
% students eligible for free/reduced school meals	83%	100%	99%	59%	88%	45%
SBHC can see patients other than students in the school	✓		✓	✓		

*Data from 2010-2011 School-Based Health Alliance Census.[9]
**Providers from several SBHCs in the Bronx participated in this study; however, the data provided in Table 1 for the Bronx is from the SBHC where the focus groups were completed.
*** The Primary Care and Behavioral Health staffing model is staffed by a primary care provider (nurse practitioner, physician's assistant, or physician) in partnership with a behavioral health professional such as a licensed clinical social worker, psychologist, or substance abuse counselor.
**** The Primary Care and Behavioral Health Plus staffing model is the most comprehensive staffing model: the primary care provider and behavioral health provider are joined by other provider types to complement the health care team such as a health educator, oral health provider, social service case manager, and/or nutritionist.

This is an exploratory study in which qualitative research methods were used to collect data from a convenience sample of adolescents and health care providers. Two focus groups were

completed with adolescent SBHC users in each of the six communities, and each focus group included an average of four participants between the ages of 14-19 years[a]. A total of 46 adolescents participated in the focus groups. Focus group participants were selected by the SBHC staff based on broad selection criteria. These included that adolescents have an asthma diagnosis and that they had accessed care in the SBHC and from a community provider and/or community specialist. We selected these criteria because it was likely that an adolescent with asthma would have accessed healthcare in a variety of settings for the management of the disease, and that they would have insight into how well their care was coordinated across providers. In some communities, it was not possible to only select participants with asthma, so they were selected based on being frequent users of the SBHC and because they reported having also accessed care in another location from a community provider, specialist, or in the emergency department (ED). The participants were asked to discuss:

- why they access care in multiple settings;
- how referrals were made;
- whether or not they thought that the different providers they see communicate about the care they are receiving;
- whether or not they experienced duplicative services; and
- recommendations for improving the delivery of their health care.

In-depth, semi-structured interviews were conducted with a variety of providers in each of the six communities. Interviews were completed with 5-11 providers in each community including SBHC providers (physicians, physician's assistants, nurse practitioners, and behavioral health providers/social workers), community providers (primary care providers and behavioral health providers), and with community specialists (endocrinologists and a pulmonologist). A total of 43 interviews were completed (Table 2). SBHC providers and community providers were asked to describe the communication and referral process, and the successes and challenges therein. SBHC staff members were asked to describe the communication and referral process: within the SBHC between the primary care and behavioral provider; with the school nurse in the school, in instances where there was one; and with other school staff. SBHC staff, community providers, and community specialists were asked to describe their communication and referrals process, and how they exchanged information with one another about the patients who seek care in multiple settings. Providers also described communication with the emergency department. All the providers were asked to discuss:

- factors that influenced their ability to routinely exchange clinical information about patients;
- supports that encouraged effective care coordination;
- challenges the prevented coordination; and
- recommendations on how to improve coordination and the provision of comprehensive care for students who access care in multiple settings, including an SBHC.

[a] While focus groups were the intent, an individual interview with a male and female adolescent SBHC user was conducted in Albuquerque, NM due to difficulty recruiting adolescents for the focus groups.

Table 2: Number of interviews and focus groups conducted in each community

	New London, CT	New Haven, CT	Espanola, NM	Albuquerque, NM*	Bronx, NY	Cooperstown, NY
# of Interviews						
SBHC Providers/School Nurses	4	6	3	2	7	6
Community Primary Care Providers	3	1	1	2	0	1
Community Specialists	3**	1**	1	2	1	0
Total Interviews	10	8	5	6	8	7
Total Focus Groups	2	2	2	2***	2	2

*Most of the SBHC providers in Albuquerque worked at the SBHC and at another location
**One of the same community specialists in CT served both New London and New Haven and was interviewed for both communities.
*** While focus groups were the intent, an individual interview with a male and female adolescent SBHC user was conducted in Albuquerque, NM due to difficulty recruiting adolescents for the focus groups.

In Connecticut, interviews were conducted with a total of 17 different health care professionals, one of whom, a community specialist, offered both a New London and New Haven perspective since this specialist served both communities. The table below displays the number and type of providers interviewed in Connecticut (Table 3).

Table 3: Types of providers interviewed in New London and New Haven

Position	New London	New Haven
SBHC Staff/School Nurses		
Nurse Practitioner	2	1
Behavioral Health Provider	1	3
School Nurse	1	2
Community Providers and Specialists		
Community Provider	3	1
Community specialist	3*	1*

*One of the same community specialists in CT served both New London and New Haven and was interviewed for both communities.

All focus groups and interviews were transcribed and independently coded by at least two researchers using qualitative data analysis software, NVivo 10. Kappa scores were calculated and showed moderate agreement with an average score of > 0.6. The findings from the focus groups and interviews were analyzed to identify themes that influence care coordination. The analysis of the interviews was used to develop reports for each of the three participating states. In each report, similarities and differences between the two participating sites were highlighted. Comparisons across all six sites were also included to allow the sites to reflect on the findings and identify their strengths and areas for improvement. The analysis of the focus groups was used to develop one report. The focus group report summarizes the findings for each of the six sites and draws out similarities and differences in each. Based on the analysis and specific suggestions from the providers who were interviewed and the adolescents who participated in the focus groups, a set of recommendations were developed to improve care coordination for adolescents who access care in SBHCs and other settings. This study received Institutional Review Board (IRB) approval from Western IRB.

Overview of the Local Health Systems

While Connecticut has one of the highest median household incomes of any state, there are substantial income disparities within the state in both urban and rural communities.[10] The two communities in Connecticut profiled for this report, New Haven and New London, are two urban communities in south central Connecticut, located on the coast about one hour apart. The schools included in this study in New Haven and New London are both in poorer areas and contain high-risk populations, with the large majority of the student population eligible for free and reduced lunch. There are over 75 SBHCs in Connecticut, with over 13 in New Haven and 8 in New London.

In the participating SBHCs in both New Haven and New London, about 20-30% of the SBHC users were uninsured, 10-20% of users were privately insured, and about 50-60% were insured by Medicaid. Both the New London and New Haven SBHCs provided a large portion of their services to uninsured adolescents, especially immigrant youth that had not yet received health insurance coverage in the United States. About 60-70% of the SBHC users did not have a primary care provider in the community. SBHC providers reported that in many instances, an immigrant youth's first contact with the health care system was through the SBHC, which then helped that adolescent enroll in a public health plan and be assigned to a PCP if they were a U.S. citizen.

New London

The SBHC in New London is sponsored by Child and Family Agency of Southeastern Connecticut (CFA), a private nonprofit organization that provides a variety of child health services, including mental health therapy and psychiatric evaluation/medication management in their Child Guidance Clinics. CFA is a sponsor of seven New London SBHCs and an additional 12 SBHCs in nearby cities which are staffed by both medical and behavioral health providers. CFA also employs psychiatrists that conduct psychiatric evaluations and prescribe behavioral health medications to adolescents that seek services in SBHCs.

CFA is designated as an "enhanced care clinic" (ECC). While only the outpatient child guidance clinics are designated as ECCs, not SBHCs, psychiatrists provide services to adolescents in the SBHCs and the child guidance clinics. As an ECC, CFA must meet special requirements, including increased access, coordination of care, member services and support, quality of care and cultural competence, in order to qualify for higher reimbursement rates from Connecticut's Medicaid program.[11] The coordination of care domain of the ECC requires CFA to negotiate coordination agreements with primary care providers and the access domain requires CFA to offer a face-to-face clinical evaluation appointment within 14 calendar days of a referral or telephonic/walk-in screening. These requirements increase care and access to CFA services for adolescents on Medicaid, while adolescents with private insurance, and not subject to the 14 day rule, experience long delays in accessing screening and treatment services at CFA. At the same time, some providers in the New London area will only take private insurance.

New Haven

The SBHC profiled in this report is sponsored by the Fair Haven Community Health Center (FHCHC), a federally-qualified health center, which sponsors a total of five SBHCs in New Haven. The FHCHC places providers in the SBHCs, allowing the providers to deliver care in the SBHC and at the FHCHC.

Clifford Beers, an organization based in New Haven that specializes in delivering mental health services to children and families, operates five clinics in the greater New Haven area. Clifford

Beers also places mental health providers in four schools, allowing mental health providers in Clifford Beers clinics to seamlessly refer adolescents to their counterparts in the SBHCs, and vice versa. Clifford Beers also plays a significant role in managing a behavioral health care coordination collaborative, called the New Haven Collaborative for Youth. The Collaborative offers behavioral health coordination, care planning, advocacy and referral services, and meets each month to discuss collaborative opportunities.

Connecticut Results

Communication, Coordination, and Referrals between SBHC Providers, with School Nurse, and School Staff

All of the SBHC primary care providers reported that they communicated on a regular basis with the SBHC behavioral health providers to refer or follow-up on cases. SBHC primary care providers mentioned that during a visit with an adolescent to conduct a checkup, for example, they might identify a behavioral health need that the SBHC behavioral health provider could address. One SBHC provider in New London commented: *"I think [the] behavioral health thing is sort of an in-house kind of deal right off the bat just because we have the mental health part of the program, so it's really easy for us. It's just like a one stop shopping kind of deal. So I haven't had to specifically refer out for behavioral health. It's as simple as walking down the hall and talking to my mental health clinician, "Can you meet this kid? Can you meet this family?""*

An SBHC primary care provider in New Haven also stated that it was easy to refer patients that appeared to have behavioral health needs to the SBHC behavioral health provider: "*[Our SBHC mental health provider] is employed by Clifford Beers this year which is great. There are certain things that I'll talk to students about …but if there is somebody who [has a behavioral health need] …then [I] refer to her because I don't feel comfortable counseling people."*

SBHC providers stated that they also regularly coordinated with the school nurse, especially about immunization records, which the school nurses maintained, and about adolescents that had certain allergies or other special conditions. SBHC providers, including the behavioral health providers, also coordinated care with other health care professionals in the school, administrators and teachers. One SBHC provider noted that the services the SBHC was able to provide were well known to school staff and that having this established understanding was important for receiving referrals from teachers and administrators that had identified a need: *"This [SBHC] has been here for [many] years, and so people understand how they work with us, even teachers bring down a student saying, "I know I can't know the information but I want you to know that so-and-so needs this and that," and we have a referral form where they write down what the problem is and give it to us."* Another provider stated that teachers often made referrals to the SBHC: "*Teachers fill out referral forms probably a lot more often [than other school staff]…but teachers can refer, administrators, anyone - guidance counselors, anyone who thinks that a student would benefit for mental health services can make a referral towards the mental health clinic[ian]."*

The SBHC providers also reported that communication between the other SBHC providers in the area was strong. An SBHC provider in New Haven commented that when SBHC users moved from middle-school to high-school for instance, the SBHC providers at these two schools would communicate about any critical conditions that the high-school SBHC provider should be aware of when delivering care. In addition, all of the SBHC behavioral health providers were on the Planning and Placement Team (PPT), a group of teachers, administrators and health care professionals in the school such as the counselor and psychologist, that met every week or every month to discuss and coordinate care to support students with disabilities and/or students that needed extra help.

Communication, Coordination, and Referrals among SBHC Providers and Community Providers for Primary Care

New London

Communication from SBHC Primary Care Providers to Community Providers

While one community provider reported that he always received health checkup documents from the SBHC, another community provider stated that he did not always receive checkup, immunization and asthma action plan documents from the SBHC. He added that this gap in communication limited his ability to understand the full extent of an adolescent's condition: *"There have been cases where kids come to see me and they say, oh yeah they went to the school-based health clinic…and [the SBHC] didn't bother sending [documents to me], but I mean that's one more thing it's important because obviously we want to know how many times the kids going out to the nurse's office…for exacerbations and that type of stuff."*

Communication from Community Providers to SBHC Primary Care Providers

The SBHC providers and community providers reported that information and documents were rarely sent to the SBHC. The SBHC provider added that they did not receive communication back from the community provider unless they tried to contact the provider, which could be difficult because the providers are busy seeing patients during the day. An SBHC provider in New London reported: "*We kind of have to ask the kid what happened or the parent or, "Can you bring me [documents]? Do you have a form? Do you have papers that say anything?" If the family doesn't get that information to us, we don't know."*

The community providers also reported that they did not send information back to the SBHC, unless it was requested. One community provider added that since his role as a PCP was managing a patient's health, it was not necessary to send documents to the SBHC, unless requested: *"Generally we don't [send information to the SBHC] because we feel that we're the primary care provider…It's not like I withhold information…but in general we don't [send information] because once again we feel like we're their primary care and we should be managing it…they are people that should be sending stuff to us."*

Communication from Community Providers to SBHC Behavioral Health Providers

The behavioral health provider in the SBHC reported that the community providers did not initiate contact and it was often difficult to find a time that they were both free; however, the community providers would respond to requests for behavioral health information. Different work schedules, where the community provider was free in the early evening to return phone calls after the SBHC provider had already left, appeared to be one of the sources of the difficulty in coordinating care. *"I think that sometimes you're playing phone tag and you'll call and they'll obviously be with patients. Then they'll call you back and my day ends at 3:30 so I'm not here when they're calling at six. Then I call them back the next day and they're with the patients. So calling phone tag can be pretty annoying but I would say for the most part they're pretty good at getting back to you."*

New Haven

Communication from SBHC Primary Care Providers to Community Providers

In New Haven, the FHCHC is the sponsor and places providers in SBHCs. A community provider noted that as a result of this organizational and professional relationship, communication between SBHC providers and community providers employed by FHCHC was strong. A community

provider employed by FHCHC and who also worked in an SBHC one day a week, noted: *"… if a physical is done at one of our [FHCHC] school-based health centers…we will get records from that [SBHC] because they bring it right to [FHCHC] as opposed to if it's done at one of the other school-based health centers that's not connected with the clinic. I'll often have no idea if they've gotten their physical there or what was done or what vaccines they were given or even if they were seen at the [other] school-based health center."*

Communication from Community Providers to SBHC Primary Care Providers

Although communication was better between providers affiliated with FHCHC, the SBHC provider and the school nurse in Fair Haven reported information was sent to community providers, but information was not often received back from them. The SBHC provider added that community providers often have a "wall of people" around them, or "gatekeepers" as one school nurse stated that prevent communication, including faxes, from being delivered to the PCP: *"A primary care clinician is usually with patients and they have this wall around them of people who know that if it's not acute, don't take the call. So you leave a message, you might get a message back, you might not. The thing is when I see, like I saw a pediatrician at a conference recently, I said, "Did you get that fax about so-and-so?" "No." "Okay, let me send it again." He's very friendly but you know you have this wall of people who are trying to keep their providers just seeing patients and not being interrupted because you're trying to get through your day… we can never really count that a fax has gotten information to somebody."*

A primary care provider in the community, who also worked in another SBHC one day a week, reported that he communicated with the other SBHC providers that also worked at FHCHC in New Haven on a regular basis. This provider commented: "*The nice thing about the school-based health centers that [FHCHC] run[s] is that all of our school-based providers also work at the clinic. We all know each other and so…if…they're concerned about something, it's very easy for me to pick up the phone and coordinate with them or I'll just talk to them when I see them."*

Communication from Community Providers to SBHC Behavioral Health Providers

Much like in New London, the community provider in New Haven reported that communication around behavioral health was more consistent: "*A lot of the calls that I do or a lot of the contact that I do have with those school-based health centers is about mental health issues."*

Two behavioral health providers, one working in the SBHC in New Haven and the other at a nearby SBHC, also reported that they communicated well with community providers. One even received the cell phone number from a provider at FHCHC in case she really needed to contact this provider:*"I think with Fair Haven it's a little easier because they know we're part of this [SBHC] here - like they know…that I'm affiliated…like they gave me their cell phone number a lot - and I'm like "Wow"…I guess you really want to be bothered."*

Communication, Coordination, and Referrals among SBHC Providers and Community Specialists

Perspectives from the SBHC

New London

When a student had a PCP in the community, all of the providers interviewed in New London reported that community specialists preferred that referrals were sent from the community provider, and SBHC providers added that they also preferred if referrals to community specialists

were routed through the community provider so that the community provider was kept in the information loop. When the SBHC provider believed that a patient's condition required visiting a specialist, the SBHC provider would either inform the patient of the information they needed to communicate to the community provider, or the SBHC provider would send a letter to the PCP explaining the circumstances for the referral. The SBHC providers also noted that they were more likely to receive information back from some specialty clinics, such as cardiology and an infectious disease clinic, than they were from other community providers.

Mental health professionals employed by CFA reported that it is often difficult to coordinate care between the CFA psychiatrist seeing SBHC users and the SBHC users' PCP: *"The easiest way to talk to [community providers] is not even picking up the phone. There was one time, a case that we really needed to dialogue [about], I went and I sat in the waiting room…because you call and you might not get a call back for a couple of days. You might not get a call back at all…They may call back but are they both free at the same time? Usually not, so that's an issue."*

One of the community providers reported that his clinic used a referral document to track referrals to community specialists and that his staff would often make the appointment with the community specialist for the patient.

New Haven

An SBHC provider in New Haven indicated that most conditions could be handled at the SBHC or at the FHCHC because the providers worked in both locations. Nonetheless, referrals were made to community specialists such as for conditions related to dermatology or neurology. The SBHC provider reported that to make the referral for a student whose PCP was not at FHCHC, she would fax the referral form over to the PCP and the PCP would schedule an appointment with the community specialist. She reported that sometimes it was difficult to get information back from the community specialist or from the PCP after the patient has seen the community specialist. *"Anyhow, we got [the referral] to the primary…but we never heard from that primary [after the referral]. Then she, [the adolescent], told me she saw [a community specialist] and they said they didn't find [the abnormality]. I'm like, they didn't find it? We'll see if it's still here. It was still there…So then you have to do that extra step of calling and saying so-and-so had an abnormal neurological finding, and the kids don't know who they saw…. But anyhow, then you follow up and say, "I just want to make sure that you saw this [abnormality].""*

Perspective from a Community Specialist

A community specialist that served both communities reported that she consistently sent information back to the PCP after she saw one of the PCP's patients; however, she rarely received communication about care plan changes and other pertinent information from the primary care provider or the SBHC, especially from SBHC providers in some communities. *"There's no one that I see whose primary care provider does not get a note whenever I see them… but I rarely get communication from most primary care providers be it family practitioners, pediatricians, or school-based health clinics… I think that's an area that needs improvement."*

Apart from the communication from the community specialist to the SBHC provider and primary care provider, the community specialist reported that she communicated regularly with otolaryngology (ENT) providers, even setting a time aside to coordinate care between their patients face-to-face. *"I have the cell phone numbers of all of the ENTs in the area. I talk to [one ENT provider] regularly. I talk to [another ENT provider] and [a third ENT provider], their new partner, regularly… [another ENT provider] is in the OR every Friday. So when we know we're*

both going to be there, we bring a list of all of the patients we have in common and go over [them]."

Communication and Coordination between SBHC Providers and the Emergency Department

In both communities, the community providers reported that they regularly receive communication from the ED, with one community provider in New London reporting that: "*We get a fax very promptly. Actually, all the children's hospitals will fax immediately saying, "Your patient so and so was admitted to the hospital," and give a reason."*

On the other hand, at the time of the interview, the SBHC providers in New London and New Haven, reported that they did not receive communication directly from the EDs. A provider in New London noted: *"If somebody goes to the hospital, the PCP gets the note, not us. We never know if somebody comes from the ER and what goes on…. That stuff gets to the PCP if they have one, but it never gets back to us so we can't support the family in a way that's most beneficial to them and to make sure the kids [are] getting [the care they need], so that's part of the loop that we're not in, which we need to be."*

The SBHC provider in New Haven reported that the ED would send information to the FHCHC if a patient was seen, and that sometimes she might find out about a SBHC user's ED visit via this channel. The community specialist in both communities also reported that communication from the ED was not sent to her after a patient makes a visit, even though her patients tell her that they tell the ED doctor to send communication to her. *"[The ED doctors]…automatically fax the note on the ED visit to the primary care provider and it's frustrating for the parents of some of my patients because they'll say, "I told them that we see you and that you manage their asthma. How come they told us that our doctor would get a copy of the note but it always goes to the pediatrician or family practitioner?" I call and ask to talk to the doctor in charge of the ED. I give them all of the information on the patient…. Even when I have done that, the note goes to the pediatrician and I don't get a copy of it."*

EHR Systems

New London

The SBHC providers and the CFA in New London received meaningful use incentive funding and started using the same EHR system, e-Clinical Works, in 2012-2013. At the time of the interviews, the shared EHR allowed the SBHC primary care provider, SBHC behavioral health provider, and providers at the CFA to see each other's notes, leading to stronger coordination of care. The SBHC primary care provider in New London stated that: *"That's one good thing though about the electronic medical record now…like just today I thought I was entering a new school-based health entry form, so I go to put the information and she was already in our system [and] it does show…that she was seen [by CFA] so you know who's [delivering] the services. Otherwise, I wouldn't have ever known."*

The SBHC behavioral health provider reiterated this sentiment, reporting that: "*If she has a kid that she thinks is not doing well or just having episodes, she can look in the system and see, "Oh, she saw "Vanessa" four times in a week."….That gives her a clue about what's going on too. So that's helpful."*

While SBHC providers and the CFA were using the same EHR and were able to share records, the community provider and community specialist in the area were all using different EHRs, making communication and coordination between providers more difficult.

New Haven

The SBHC primary care providers and community providers associated with FHCHC were all using or starting to use the Epic EHR system, the same system that Yale-New Haven Health uses, and as a result they are able to share information and records. The community providers at another CHC in New Haven were not using Epic, and other providers in the community were using a variety of different EHR systems. At the time of the interview, the SBHC provider was not yet using Epic, but she was using Yale-New Haven Hospital's web portal, MDlink, which allowed her to see limited ER visit data and to access lab results. As an advanced practice registered nurse she was not able to see the full clinical notes that medical doctors could access.

Although the SBHC primary care providers and the community providers at FHCHC were using the same EHR, the SBHC behavioral health providers in Fair Haven staffed by Clifford Beers were using a different EHR, called Sigmund. As a result, the SBHC primary care and behavioral health providers in New Haven were not able to access each other's clinical notes. However this EHR did allow behavioral health providers of adolescents who sought care in multiple locations or adolescents who moved from middle-school to high-school, to see each other's notes.*"If I refer a kid over to Clifford Beers for a psychiatric evaluation - the psychiatrist can go in and read all my notes and I can go in and read all their notes…. And like my 8th graders here, if they go to [the high-school, the mental health provider there] can pick them up next year and she can read all my old notes."*

The community specialist in New London and New Haven reported that she had been using the EHR system Pulse, but that she would soon be switching to Epic, since Yale was using this EHR system. *"…Epic is probably the largest and it's the largest nationally. So I'm switching over to Epic because – even for the patients that I see in New London - if they need surgery, if they need any other subspecialty care - they're more likely to come to Yale and that will make that exchange of information more seamless."*

Linking Across EHR Systems

A provider in New Haven reported that there were some preliminary conversations around allowing Clifford Beers providers and providers affiliated with the FHCHC, the capability of accessing one another's EHR records. This would allow the SBHC primary care provider the ability to access information from records entered by the SBHC behavioral health provider. This capability was just starting to be discussed and would require data use agreements and significant software compatibility enhancements, but would greatly improve the ability of providers that see the same patients to coordinate their care.

Transitions

Both SBHC and community providers recognized the importance of transitioning graduating students to adult care providers, with a community provider noting that transitioning adolescents to adult care *"is the one of our biggest problems…[due to adolescents]… not getting follow-up [care]…."* One of the SBHC providers in New London reported that she played an active role in transitioning adolescents to adult care: *"The goal for me is if I have students who are going to graduate and I know that they're going to remain in the area, I try and get them a family physician or a practitioner before they leave school so that they have someone that they have a relationship with before they are cut completely off and can't see me anymore."*

A SBHC primary care provider in New Haven commented that since she also works at the community health center, *"…the kids who have only seen me here will come see me till they're 21, 22 or 23, something…."* This SBHC provider added that she would send medical charts to the FHCHC if graduating students would continue to be seen there, and added that sometimes graduating students would still contact her if they need assistance: *"I'll get calls sometimes on this phone from kids who have graduated because they know they can get a hold of me here…."*

Factors that Influence Care Coordination

All 43 providers who were interviewed across the three states shared similar concerns and views about the factors that influence care coordination. When care coordination worked, it was likely because strong relationships built on mutual respect existed among the providers, and processes and technical infrastructures were in place to support the routine exchange of information. More often than not, however, there were barriers to effectively coordinating care. In some cases, the factors that influence care coordination varied between specific states and communities due to particular state or local conditions. In these cases, the differences are noted and where applicable, similarities across states and communities are highlighted in order to draw attention to the primary factors that influence care coordination.

Six prominent themes emerged across the six sites as influencing care coordination and the provision of continuous and comprehensive care.

1. The collocation of providers and services in the SBHC encouraged frequent communication and better care coordination.

Communication among providers within the SBHC was strong across the majority of the sites. School-based primary and behavioral health providers reported that being collocated in the same office facilitated effective care coordination, frequent communication, and ease of cross-referrals to one another. Across most sites, the primary care and behavioral health providers described how they were able to refer patients to one another and track their care over time, simply by working in close proximity. One SBHC provider in New London commented: *"I think behavioral health…is sort of an in-house kind of deal right off the bat just because we have the mental health part of the program, so it's really easy for us. It's just like a one stop shopping kind of deal. So I haven't had to specifically refer out for behavioral health. It's as simple as walking down the hall and talking to my mental health clinician, "Can you meet this kid? Can you meet this family?""*

Nonetheless, communication and care coordination within the SBHC was not without its challenges. For example, the Albuquerque SBHC was staffed with multiple, part-time behavioral health providers whose schedules did not overlap. As a result, it was challenging for them to share information about patients. To improve coordination, the SBHC behavioral health providers conducted end-of-shift "wrap-up meetings" or "huddles" with the SBHC primary care provider and school nurse to discuss any ongoing concerns. They explained that these wrap-up sessions were important for ongoing monitoring of adolescents with more serious behavioral health needs and for delivering primary care services to these adolescents. Given that the school nurse was the only health care professional at the school in Albuquerque five days a week, it was especially important for the SBHC behavioral health provider and school nurse to coordinate, leading to improved continuity of care at the SBHC.

2. ***Collaborative efforts between SBHC staff and school staff facilitated better provision of care by the SBHC*.**

SBHC providers described communicating regularly with other staff in the school, including the school nurse. The presence of a school nurse strengthened the efficiency of care delivery because it allowed the SBHC providers to systematically delegate care based on the severity of the patient in need. However, the communication between the SBHC staff and school nurse was sometimes limited because the school nurse was not a member of the SBHC staff and therefore was not allowed to see patient medical records because of federal regulations governing data sharing.

SBHC providers also reported coordinating care with other health care professionals in the school, administrators, and teachers. One SBHC provider in CT noted that the services the SBHC provided were well known to school staff and that having this established understanding was important for receiving referrals from teachers and administrators who identified a need: *"This [SBHC] has been here for [many] years, and so people understand how they work with us, even teachers bring down a student saying, 'I know I can't know the information but I want you to know that so-and-so needs this and that,' and we have a referral form where they write down what the problem is and give it to us."*

3. ***Being Part of the Same Health System and the Presence of a Shared EHR Improved Care Coordination***.

In the communities where the SBHC was part of a health system that used a common EHR there was better communication and a smoother referral process than in communities that did not have a shared EHR. An SBHC provider from the Bronx reported, "*We don't have to request a chart. We don't need to call any person. I can send a flag and I can get my message across."* Another SBHC provider in Cooperstown commented, "*It's become a lot easier* [to share information] *within our network with the broad use of electronic records.*" A community provider in Cooperstown said, "*Now that the SBHC is using the same electronic medical record that we have, it's relatively seamless*." Echoing the insight from the providers in New York, a provider in Española who worked both in the SBHC and at another point of care offered the following example: *"I had reviewed her record [electronically] and there was a message from the ENT that she didn't show up for an appointment…I let the medical assistant at the SBHC know...and she was able to make the appointment. [The adolescent] has had subsequent surgeries because of the appointment. So, if she had missed it, it would have been horrible. And it's only because I checked the [electronic] record [that we caught the problem]."*

In communities where the SBHC primary care providers split their time between the SBHC and the sponsoring community health center, providers and adolescents explained that they felt the continuity of care was especially strong. For example, providers in Española and New Haven explained that by working in both locations, they could easily share information with, and refer adolescents who needed extra attention to, providers in the community health center.

4. ***Poor communication and collaboration between SBHC providers and community providers or emergency departments led to confusion in the roles of the different providers and fragmented care***.

SBHC providers reported that communication between themselves and community providers could be challenging, especially when the community providers were part of a different health system. SBHC staff frequently reported sending information to community providers about well-child visits and other care delivered; however, community providers did not routinely exchange

clinical information in return. Both SBHC providers and community providers felt that better communication would help providers coordinate care better, improve relationships, and help prevent duplication of services.

In New London, where the SBHCs were not part of a larger hospital or health system in the community, some of the relationships between the SBHCs and the community providers were contentious. Community providers reported that they felt the SBHCs disrupted the continuity of care for their patients. The ability to regularly see patients as part of an annual physical was especially critical to these community providers. One community provider in New London remarked: *"…as a primary care provider, I prefer for my patients to get their physicals with me and to do vaccines or other things at the – in the school-based health centers…for the continuity of care."*

Another provider in New London reported, *"We really can't be your primary care provider if we're not doing your annual physical exam [here] so we'll basically tell them you need to kind of choose here…or there but we don't want you getting your continuity of care there."*

SBHC staff across most of the sites, similar to healthcare providers across the healthcare system,[12] reported that communication between the SBHC and the emergency department (ED) was poor and they explained that they rarely received information about a student's visit to the hospital. If the SBHC provider were to receive notice that a patient was seen in the ED, this information usually came from the student or the parent after the visit, rather than from the ED. SBHC providers felt that if they were alerted they could play a more proactive role in follow-up care. In communities where the SBHC was part of a larger system and on the same EHR, SBHCs were able to receive alerts and view ED and inpatient hospital visits that occurred in hospitals through the patient's electronic chart.

5. *Establishing Good Relationships Built on Mutual Respect Improves the Delivery of Coordinated, Complete Care*.

Communication between SBHC primary care providers and community specialists was better than with community providers, EDs, or urgent care facilities. An SBHC provider in Cooperstown reported that the specialists outside of the local health system generally sent findings back to them after a consultation with an SBHC patient: *"If we refer to the specialist, we'll get [a] report back about that."* They explained that this was because they had built strong relationships with community specialists.

While interviewees were not asked directly about the quality of their relationships with other health care providers, providers in all three states, especially SBHC providers, reported that coordination went well when relationships had been built over time with other providers. An SBHC provider said, *"My goal is to establish relationships. So I know that relationship-based care is kind of a hot name that's used. So for me it's getting to know people, establishing relationships."*

Another SBHC provider described the importance of having long-term relationships with community providers and specialists and explained, "*It makes a lot of the stuff that we're talking about here easier because you have so much experience with each other and outside as well*." An SBHC provider in the Bronx discussed the importance of good relationships with other providers when making referrals outside of their system. She said, "*So I have a good relationship with the provider there and she's given me her cell phone number…There's really not much of a barrier*." In New Haven, CT, a behavioral health provider also commented on the importance of relationships to care coordination: *"Well, it's all about relationships…you're going to be a good provider if you're a good practitioner but you're also – if you're viewed as a good person who cares, people are going to refer to you."*

6. *Not Having Sufficient Staff and Time for Coordinating Care Hindered Care Coordination*.

SBHC staff, similar to health care providers across the health care system[13], indicated that it was difficult for them to coordinate care well, make referrals, and communicate with other providers, especially with community providers, if there was not staff time dedicated to do this because it was time-intensive. Moreover, providers were not incentivized to coordinate care since time spent communicating with other providers was not reimbursable. One SBHC provider explained, *"I just don't have the time to reach out to all the primary care doctors because our kids are from everywhere…We don't even have enough staff for the amount of work that we have at this point."*

Another SBHC provider discussed this same issue: "I know the problem is time...You refer somebody out and you just kind of hope it is happening...What would be ideal is to have somebody who could just track referrals and follow up..." SBHC staff also explained that the SBHC was closed during the time when community providers reached out to them to discuss patients: "*Again, that whole thing phone tag thing like we…don't have a secretary…the…[community providers'] hours are generally later into the day than ours so by the time they get on to making their phone calls I'm not here*."

Factors that Influence Care Coordination Specific to Connecticut

SBHCs are perceived as competition by community providers.

While not mentioned in the other states, some of the providers in New London reported that there was a view in this community of the SBHC as competitive service providers. The community provider in New Haven, who had previously worked in New London, noted that there was a considerable difference in the general perspective of SBHCs in the two communities. He reported that there were many more private practices in New London that viewed the SBHC as competition, whereas in New Haven, SBHCs were viewed as part of a network of providers delivering team-based care. *"…In New London…there is a lot of politics between the primary care providers, which were a lot [of] private practices, and the school-based health [staff]…. I think at Fair Haven, we have such a good relationship with our school-based health providers and the schools and the team…. In New London, school-based health…[has] no direct connection to any large community provider. There's a bunch of private practices. I think that that team element is missing, and so that's not as good for coordination. And the private practices were suspicious of…school-based health centers as basically trying to steal patients and divert both care but also probably income from them."*

Other providers reported that up until recently, there was considerable animosity among the primary care providers in a community near New London and the SBHCs in the area. Several providers indicated that the community providers in this town would discourage their patients from seeking services in the SBHC. One provider stated: *"…[some] of them in particular, actually put signs up in their offices and threatened the patients, "If you go to the school-based health center, you'll be discharged from my practice."*

While the community providers no longer hang signs like this in their practices, interviewees noted that there is some remaining friction between the community providers in this town, and the SBHC. Another community provider in New London reported that, at times, community providers viewed the SBHC as taking patients from their practice: *"I think kind of recognizing that seeing a kid for repeated physicals [at the SBHC] might be kind of stepping on the toes of the primary care person. So before [the SBHC provider] maybe schedules a second physical in a row that [SBHC*

provider] may want to say, "Hey listen…your [community] doctor is so and so and they should do it," and if the parent refuses maybe even sending a letter [to the community provider] then saying listen…we counsel them to go back to you but their parents say they can't, so it kind of gives us a heads up so we're not [thinking that] they're taking our patients."

Another community provider in New London reported that sometimes other community providers are "…*not as receptive to working with the school-base clinic…I think it may be a turf situation. Some of the offices may feel that they're being – the patients are being given advice that may be different from theirs."*

Recommendations for SBHC and Community Providers to Improve Care Coordination

The recommendations below represent the provider and adolescent perspectives on how SBHCs and community providers could improve care coordination.

1. ***Collocate primary care and behavioral health staff in 100% of SBHCs.***

   School-based primary and behavioral health providers reported that working side-by-side in the same office improved their ability to communicate frequently, refer patients to one another, and provide coordinated, continuous care. One hundred percent of SBHCs should aim to have a primary care and behavioral health providers on staff and collocated in the same office. In situations when providers work part-time shifts, SBHC staff should dedicate time for "huddles" to ensure continuous care when they are not available to see a patient. School staff, including the school nurse, and SBHC staff should also work collaboratively to identify and work with students who need care or support.

2. ***Formalize roles and a process of communication for providers working in different settings.***

   Both SBHC providers and community providers, when not attached to a larger health system or community health center, highlighted the importance of understanding each other's roles. They felt that a more defined role for both the community providers and the SBHC providers would help providers coordinate care better and help prevent duplication of services. Many providers, especially SBHC providers, noted that building strong professional relationships improved communication and coordination between providers. SBHC providers, and community providers and specialists, should proactively build professional relationships with other providers in the community and discuss strategies for improving communication and collaboration where applicable.

3. ***SBHC administrators should advocate for shared EHR systems within the community.***

   Care coordination was stronger and more consistent in communities where providers at multiple points of care were using the same EHR. While most providers do not have control over the EHR that is used in their office, they should advocate and encourage their administrators and leaders to recognize the benefits of using a shared EHR system.

4. ***SBHC administrators should allocate sufficient resources for care coordination.***

   SBHC providers pointed out that if the SBHC was staffed with a medical assistant, receptionist, or personnel dedicated to follow-up, care coordination was stronger and more consistent. Adolescents echoed this perspective and explained that although they could

usually find a time to see the SBHC provider, they stated that it would be easier if there was an administrative assistant that could make appointments. Further, SBHC providers felt that more time explicitly allocated for "huddles" or other team conferences within the SBHC and for follow-up with community providers would facilitate improved care coordination. Additional resources for care coordination would benefit from a funding stream for communication or a payment system based on outcomes, rather than services, as is discussed in the next recommendation.

5. ***Advocate for reimbursement by insurers for care coordination.***

   While payment delivery reforms are taking root with accountable care organizations, patient-centered medical homes, and other initiatives incentivizing care coordination, providers should advocate for, and payers should still establish, a billing structure that would allow providers in traditional fee-for-service to bill for time spent coordinating care.[14]

6. ***Increase the use of technology to communicate with patients.***

   Adolescents discussed how increasing the use of technology would improve their attendance and their patient experience. They suggested that using text messages or phone applications for appointment reminders would encourage them not to miss their appointments. Adolescents also discussed how the ability to email the SBHC provider questions, concerns, or a request for an appointment would be helpful, especially for confidential matters that could be embarrassing or uncomfortable to discuss in person.

7. ***SBHCs should explore the role that telemedicine could play in connecting students to specialty providers.***

   There were individual and family level barriers that often prevented adolescents from completing referrals to community specialists, especially when it required their parents to take time off work, to have access to a vehicle, and to travel long distances to reach a provider. SBHCs should explore opportunities to use telemedicine to connect their patients with specialists, such as behavioral health specialists or pulmonologists. This will reduce the burden of adolescents having to leave the school to access services and will allow care to be coordinated more effectively.

Conclusions

Adolescents are traditionally a hard to reach population and they have demonstrated low-levels of satisfaction with many aspects of the healthcare system. SBHCs are one of few settings within the healthcare system that are designed for adolescents, and findings from the adolescent SBHC user focus groups show that the majority of the adolescents preferred accessing care in this setting compared to others because the providers and the care were responsive to their cultural and developmental needs. SBHC were conveniently located and they were able to get an appointment within a short time frame. SBHC providers were approachable, they allowed adolescents to take responsibility for their health, and they provided confidential care.

Adolescent SBHC users highlighted the importance of providers they saw in different settings to routinely exchange clinical information with one another, especially as it related to medication management and follow-up care, though they did not think that this routine exchange was happening frequently. Providers in the SBHCs and the community stressed the complex challenges of providing coordinated, continuous care to adolescents who access care in multiple settings. However, they described factors to improve care coordination including having specific

time dedicated to care coordination; having strong relationships; using a common EHR; and developing a standardized process to coordinate care.

Improving coordination between SBHC providers and community providers will likely require creating incentives for routinely exchanging information and completion of referrals, as well as consequences for incomplete care. In the current healthcare environment, which is building patient-centered, accountable healthcare focused on improving quality and reducing costs, these incentives may become available. Future work in this area might test a model that creates incentives for providers when care is effectively coordinated that are tied to the completion of referrals and health outcomes of patients. Coming reforms associated with being a patient-centered medical home may support these recommendations.

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