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Providers' Perspectives on Program Collaboration and Service Integration for Persons Who Use Drugs

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Introduction

The structure and process of health care financing, delivery, and organization result in challenges for providers seeking to offer comprehensive and integrated care for persons who use drugs. The Affordable Care Act (ACA) is increasing coverage for mental health and substance abuse treatment as part of the Essential Health Benefits for Medicaid expansion and many private health plans.^{2,3} Community groups and scholars predict that increasing access to care under the ACA will likely require program collaboration among providers and integration of services in community health centers.^{2,3} Integration of services is also a part of clinical decision making systems.⁴ Without deliberate assessment and effective intervention, however, expanded coverage and service integration for persons who use drugs may fall short of expectations. ^{5,6} The authors conducted a rapid assessment to obtain provider perspectives of program collaboration and service integration (PCSI) for substance abuse and mental health, prevention of HIV infection, viral hepatitis, sexually transmitted diseases (STDs), and tuberculosis (TB) for persons who use drugs in Atlanta, GA. Rapid assessments are an approach to qualitative data collection used to quickly gain the "insider's" perspective of local phenomena and a preliminary understanding of emerging issues. Findings from rapid assessments are often used to inform and make necessary program adjustments.^{7,8}

Program collaboration has been defined as two or more organizations developing procedures for pooling resources and sharing responsibilities to meet the common goal of providing more comprehensive health services. *Service integration* refers to delivery of different services provided by multiple programs to patients or clients through a single entry point. Delivery of evidence-based public health intervention strategies through a collaborative and integrated model can increase access to services, accelerate service delivery, and enhance prevention of infectious diseases among persons who use drugs. Building on the PCSI literature, 1,9 this report describes the perspectives of health care providers implementing PCSI in Atlanta, GA. The authors describe program collaboration structures, the extent to which integrated services were being delivered by providers, and providers' assessment of factors influencing PCSI implementation for persons who use drugs. The paper concludes with broader implications of this assessment for PCSI implementation.

Epidemiology of target diseases

Persons who use drugs experience higher rates of HIV, viral hepatitis, STDs, and TB than those who do not use drugs; they are also at greater risk for acquiring and transmitting these diseases through risk behaviors such as unprotected sex with partners of unknown HIV status or sharing contaminated injection equipment. The Atlanta area experiences high rates of both infectious diseases and drug use and trafficking. For example, almost two thirds (32,391/50,436) of persons living with HIV in Georgia resided in the Atlanta area in 2012, and most HIV treatment providers were clustered in Atlanta's urban core. In 2012, Atlanta's Fulton County ranked fifth in the nation in its ratio of primary and secondary syphilis cases to overall population (41.5/100,000) and 16th in the nation in its ratio of gonorrhea cases to overall population (329.8/100,000). In 2012, Atlanta was designated a high-intensity drug trafficking area by the Office of National Drug Control Policy

(ONDCP). ¹⁴ In 2011, 4586 individuals in the Atlanta metropolitan area entered substance abuse treatment for drug or alcohol use. ¹⁴ Among cities monitored by National Institute on Drug Abuse's (NIDA) Community Epidemiology Work Groups, Atlanta ranked eighth in the percentage of individuals admitted to treatment (13%) for opiate use in 2011. ¹⁵

Methods

Data collection occurred during June—August of 2012. The project team used purposive sampling to identify organizations with a substantial role in providing services to this population. The team created an inventory of organizations using the Substance Abuse and Mental Health Services Administration (SAMSHA) database of substance abuse treatment programs, ¹⁶ searched the Internet for providers, and used chain-referral methods to identify potential organizations as participants. The team also identified key organizations that provide HIV, STD, TB, and hepatitis services to persons who use drugs. Organizations were contacted in advance and appointments made with staff members identified as knowledgeable about the population and the organizations' services. During each interview, a trained team member took hand-written notes that were later transcribed. The protocol received scientific and ethical review in compliance with institutional and federal requirements. Participants gave written informed consent to be interviewed.

Semi-structured qualitative interviews were designed to provide insight into providers' impressions of PCSI and the current treatment landscape. ¹⁷ Interviewers asked participants to describe their position and professional background, the array of health services provided directly by the organization, other ways in which services were delivered, collaborative relationships with external organizations, barriers to collaboration, and interest in future collaboration.

Interviewers used a checklist to assess whether services of interest were potentially available to persons who use drugs whether on-site, through referral, or not at all. The checklist covered screening and treatment for STDs, HIV, hepatitis, and TB; vaccination for hepatitis A and B; referrals to behavioral interventions; access to condoms and to sterile drug preparation equipment; and overdose prevention education. Interview findings were triangulated with checklist data, primary source material provided by interviewees (e.g., brochures), and information displayed on organizations' websites. Transcripts were imported into QSR NVivo 10¹⁹ and coded thematically. ^{17,20}

The team held 25 semi-structured interviews with a total of 40 persons (representing their organizations), including 16 one-on-one interviews and nine group interviews. Interviews were stopped at 25 because of data saturation (i.e., interviews no longer yielded new information). ^{19,20} Most participants defined their organization's primary mission as addressing substance abuse or mental health, HIV, or a combination of these (Table 1). Participants included executive directors and CEOs (13), midlevel program managers or coordinators (19), counselors (2), and public relations representatives (1). All organizations were located within the Interstate 285-defined perimeter of metropolitan Atlanta and in close proximity to public transportation (i.e., bus or train) facilitating access of patients to care.

Findings

Program collaboration structures

Participants offered 13 examples of program collaborations. Two dynamics determined the collaborations' structure: the formality of the partnership and staff engagement in the referral process. Formal partnerships were documented through contracts, through memoranda of understanding (MOU), or through other legal instruments; the authorities of these documents were recognized by program staff and partners, including grantors. Informal partnerships relied on staff connections and knowledge. Active referrals, in which clients are involved in the process (e.g., being present when appointments are made), could accompany formal or informal partnerships. From these descriptions, four program collaboration structures emerged:

- Strong (formal partnership, active referral): long-standing partnerships between organizations with a shared history and mission (n = 6, 46%)
- Casual (informal partnership, active referral): informal partnerships that relied on personal connections of staff members (n = 4, 31%)
- Weak (informal partnership, passive referral): partnerships based primarily on passive referrals (n = 3, 15%)
- One-way (formal partnership, passive referral): partnerships based on necessity rather than two-way collaboration (n = 1, 8%).

Most of the strong collaborations included a primary health service provider, such as a hospital or health department, as either the referring organization or the organization receiving a referral. Most of the casual collaborations were between providers with a similar organization mission (e.g., two HIV prevention providers or two substance abuse treatment providers). Weak collaborations were between substance abuse treatment providers who gave a list of referrals to clients who did not meet their screening criteria at intake. One-way collaborations were between organizations with different missions (e.g., a substance abuse organization referring clients to a primary health service provider).

Participants expressed positive views of program collaboration and gave examples of efforts to increase the diversity of their organizations' collaborations. Two providers noted the importance of forging collaborations across sectors: for example, one provider was working to bring together theology, public health students, and pastors to deliver HIV, STI, and substance abuse prevention services through churches. Another described a desire to build a charitable pharmacy partnership between an academic health center, a substance abuse treatment center, a church, and volunteer pharmacists.

Extent of service integration

Table 2 aligns participants' reported integrated services with public health strategies for persons who use drugs. HIV testing was the most frequently provided health service in substance abuse settings (n = 15, 75%), and overdose prevention education was the most commonly integrated behavioral health service provided by substance abuse treatment and mental health service providers (n = 13, 65%). The most frequently integrated services

provided on-site in HIV treatment settings were screening for STDs (i.e., syphilis, chlamydia, and gonorrhea) (n = 3, 100%) and sexual and drug use risk assessments (n = 3, 100%). The least frequently integrated service in all settings was access to sterile drug preparation equipment. Few organizations provided integrated screening and treatment services for all four disease categories (HIV, STD, hepatitis, and TB) and two disorders (substance abuse and mental disorders).

Factors influencing program collaboration and service integration

Federal and state policy—Participants frequently mentioned the significant role that policy—laws, regulations, administrative actions, or incentives—played in facilitating or impeding PCSI.²¹ Participants discussed federal²² and state regulations²³ that required clients to be tested for TB and syphilis prior to admission to a residential or in-patient drug treatment program; licensure and accreditation depended upon compliance with these regulations. Participants suggested that this policy could function as a barrier for clients needing immediate treatment because admission would be delayed until they have obtained these two tests. This could result in missed opportunities or in delays in entering a treatment program. Two participants said that they knew other providers who did not offer these tests onsite for their clients. These other providers reported feeling conflicted about the need to comply with the law, even though it encouraged PCSI, and the desire to get clients into treatment immediately, as deferred admission placed potential clients at risk for relapse to substance abuse. Rather than referring clients for testing, one participant said that some "organizations will give someone a mental health diagnosis first so that they can get them into treatment faster, instead of waiting for them to come back with their TB/RPR results," emphasizing that "when people show up asking for help, they need help then."

Participants invoked the state policy on mandatory TB and syphilis testing when asked about why and with whom they collaborate. Participants reported that the pressure to enroll clients into treatment efficiently led some substance abuse treatment providers to adopt an active referral process, including providing clients with transportation for required testing.

Resources of potential collaborators—Limited resources acted as a barrier to service integration but served as a catalyst for program collaboration. For example, participants mentioned that their staff were trained to conduct testing and counseling for HIV and hepatitis but were unable to regularly do so because they did not have the necessary testing kits. Therefore, they built strong collaborations with organizations to provide testing. "We are trained to do hep C testing, but right now the hep C kit is too costly. It is more expensive than an HIV kit, which makes it hard for us to offer hep C testing on-site, so we refer them to other places," said one substance abuse treatment provider.

Participants reported that their organizations sought to build partnerships with other service providers who provided complementary services. For example, staff of residential substance abuse settings collaborated with organizations that provided intensive outpatient day treatment services for clients. Substance abuse treatment providers collaborated with organizations that provided HIV case management to better serve the needs of their clients living with HIV. Participants reported that having a focused organizational mission and

limited capability to provide comprehensive services resulted in increased networking and collaboration.

Treatment philosophy—Substance abuse treatment specialists described their field as a "small world" in which organizations quickly achieve reputations for their treatment philosophies and quality of services. These reputations influenced the shape of program collaborations; organizations were less likely to refer clients to other agencies if they heard negative reports from previous clients or disagreed with their treatment philosophy. "There are organizations that we do not work with anymore. They have either closed down, or we got a bad report about them," said one participant. Participants implied that "bad reports" could be related to inadequate care or to differences in treatment methods and goals. For example, methadone, faith-based, or harm reduction services could be appealing or polarizing to providers or patients depending upon perceived compatibility with providers' organizations' treatment philosophy, thus influencing referral decisions. A participant said, "There have been organizations that we won't work with because of bad feedback from our clients. They don't want to meet our [faith-based] requirements."

Discussion

This paper describes perceptions of PCSI among health service providers and organizations serving persons who use drugs in Atlanta, GA. Participants were motivated to adopt PCSI because of a desire to provide infectious disease screening services that meet the needs of clients and because limited resources (e.g., few test kits) made complete integration of services challenging. While all participants engaged in some form of program collaboration, the formality of partnerships and level of engagement of referrals varied. Many organizations described strong collaboration structures as successes, which indicates that formal partnerships and active referrals can enhance program collaboration.

Service integration was variable for the strategies of interest in this assessment. Policies, fiscal constraints, and treatment philosophies shaped providers' decisions regarding delivery of integrated services. Services that were deemed necessary by structural factors (e.g., law or organizational mission) were more likely to be integrated. HIV testing was the service most often integrated, perhaps because the test is less expensive and complex to administer than tests for some other diseases, such as syphilis. Other services that might be integrated—such as screening for syphilis, hepatitis, gonorrhea, and chlamydia—were offered through referral to other organizations. Overall, providers viewed effective collaboration as essential to meeting the needs of persons who use drugs despite several barriers to PCSI.

The rapid assessment focused on perceptions of providers in Atlanta; it was designed to obtain a preliminary understanding of issues related to collaboration and integration of specific health services among organizations that serve persons who use drugs in Atlanta. The findings are based on the experience and perceptions of interviewed providers; the assessment was not intended to objectively evaluate the quality of services or to assess specific organizational variables (e.g., staffing, licensure, etc.). While insights from this assessment may be useful to other areas, they are based on a small, purposive sample and are not meant to be generalized.

Implications for Behavioral Health

Delivery of health care is changing in response to new developments including ACA's provisions for resource sharing and integrated care.³ Our assessment indicates that PCSI is well accepted by providers yet continues to be influenced by structural and philosophical facilitators and barriers. Our findings suggest that integration is more likely to occur if there is structural support for it. While agencies are encouraging integration through various national initiatives, ²⁴ support for integration could materialize at many levels. For example, integration of screening or other services may be encouraged through federal and practitioner guidelines, through state legislation, or through local organizations' shared protocols. Further consideration could be given to finding methods for building structural support for integration at the local level. Large-scale initiatives that emphasize disease prevention through health care services^{1,6, 25-27} depend, in part, on how providers perceive and carry out their mission, leverage facilitators of PCSI, and overcome barriers to meet the needs of the populations that they serve. ^{28,29} Future research might explore how additional dimensions of program collaborations, such as trust or reciprocity among providers, treatment philosophy, or other values, affect the strength of partnerships and contribute to more comprehensive services for persons who use drugs.³⁰

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References

- 1. Centers for Disease Control and Prevention (US). Integrated prevention services for HIV infection, viral hepatitis, sexually transmitted diseases, and tuberculosis for persons who use drugs illicitly: summary guidance from CDC and the U.S. Department of Health and Human Services. Morbidity and Mortality Weekly Report. 2012; 61(5):21–26.
- Community Anti-Drug Coalitions of America. Coalitions and community health: integration of behavioral health and primary care. Washington, DC: Substance Abuse and Mental Health Services Administration-Health Resources and Service Administration Center for Integrated Health Solutions; Apr. 2013
- 3. Mechanic D. More people than ever before are receiving behavioral health care in the United States, but gaps and challenges remain. Health Affairs. Aug; 2014 33(8):1416–1424. [PubMed: 25092844]
- 4. Hunink, MG., Weinstein, M., Wittenberg, E., et al. Decision making in health and medicine: integrating evidence and values. Cambridge (UK): Cambridge University Press; 2014.
- Rinaldo, SD., Rinaldo, DW. Availability without accessibility? State Medicaid coverage and authorization requirements for opioid dependence medications. San Francisco (CA): the Avisa Group; Jun. 2013
- 6. Urada D, Teruya C, Gelberg L, et al. Integration of substance use disorder services with primary care: health center surveys and qualitative interviews. Substance Abuse Treatment, Prevention, and Policy. 2014; 9(15):1–9.
- 7. Beebe J. Basic concepts and techniques of rapid appraisal. Human Organization. 1995; 54(1):42-51.

8. Needle RH, Trotter RT II, Singer M, et al. Rapid assessment of the HIV/AIDS crisis in racial and ethnic minority communities: an approach for timely community interventions. American Journal of Public Health. 2003; 93(6):970–979. [PubMed: 12773364]

- Centers for Disease Control and Prevention (US). Program collaboration and service integration: enhancing the prevention and control of HIV/AIDS, viral hepatitis, sexually transmitted diseases, and tuberculosis in the United States. Atlanta, GA: Centers for Disease Control and Prevention; 2009.
- 10. Georgia Department of Public Health. Fact sheet: HIV surveillance, Georgia, 2012. Atlanta, GA: Georgia Department of Public Health; 2013.
- 11. Hixson BA, Omer SB, del Rio C, et al. Spatial clustering of HIV prevalence in Atlanta, Georgia and population characteristics associated with case concentrations. Journal of Urban Health. 2011; 88(1):129–141. [PubMed: 21249526]
- 12. Centers for Disease Control and Prevention. Primary and secondary syphilis—reported cases and rates in counties and independent cities ranked by number of reported cases, United States, 2012. Atlanta, GA: Centers for Disease Control and Prevention; Available online at http://www.cdc.gov/std/stats12/tables/33.htm [January 6, 2016]
- 13. Centers for Disease Control and Prevention. Gonorrhea—reported cases and rates in counties and independent cities ranked by number of reported cases, United States, 2012. Atlanta, GA: Centers for Disease Control and Prevention; Available online at http://www.cdc.gov/std/stats12/tables/20.htm [January 6, 2016]
- 14. Office of National Drug Control Policy. Georgia Drug Control Update, 2012. Washington, DC: Office of National Drug Control Policy; Available online at http://www.whitehouse.gov/sites/default/files/docs/state_profile_-_georgia.pdf [October 23, 2014]
- 15. National Institute on Drug Abuse. Epidemiologic trends in drug abuse: Proceedings of the community epidemiology work group, highlights and executive summary. Bethesda, MD: National Institute on Drug Abuse; 2012.
- 16. Substance Abuse and Mental Health Services Administration Treatment Database. Rockville, MD: Substance Abuse and Mental Health Services Administration; Available online at: http:// findtreatment.samhsa.gov/ [October 23, 2014]
- Charmaz, K. Constructing grounded theory: a practical guide through qualitative analysis.
 Thousand Oaks, CA: Sage; 2006.
- 18. Begley CM. Using triangulation in nursing research. Journal of Advanced Nursing. 1996; 24(1): 122–128. [PubMed: 8807387]
- 19. NVivo qualitative data analysis software; QSR International Pty Ltd. Version 10, 2012.
- 20. Guest G, Bruce A, Johnson L. How many interviews are enough? An experiment with data saturation and variability. Field Methods. 2006; 18(1):59–82.
- 21. Centers for Disease Control and Prevention. Definition of policy. Atlanta, GA: Centers for Disease Control and Prevention; Available online at http://www.cdc.gov/policy/analysis/process/definition.html [January 6, 2016]
- 22. [October 23, 2014] ADAMHA Reorganization Act of 1992, Pub L 102–321 (July 10, 1992). Available online at: http://history.nih.gov/research/downloads/PL102-321.pdf
- 23. [October 23, 2014] Client Referral, Intake, Assessment and Admission, Official Code of Georgia Annotated 26-5-2, 26-5-5, 26-5-6 (September 18, 1997). Available online at: http://rules.sos.state.ga.us/docs/290/4/2/13.pdf
- 24. Centers for Disease Control and Prevention. Program Collaboration and Service Integration (PCSI) at NCHHSTP: about PCSI. Atlanta (GA): Centers for Disease Control and Prevention; Available online at http://www.cdc.gov/nchhstp/programintegration/About.htm [October 23, 2014]
- 25. Babor TF, McRee BG, Kassebaum PA, et al. Screening, brief intervention, and referral to treatment (SBIRT): toward a public health approach to the management of substance abuse. Substance Abuse. 2007; 28(3):7–30. [PubMed: 18077300]
- 26. Kresina TF, Hoffman K, Lubran R, et al. Integrating hepatitis services into substance abuse treatment programs: new initiatives from SAMHSA. Public Health Reports. 2007; 122(Suppl 2): 96–98. [PubMed: 17542463]

27. Padwa H, Urada D, Antonini VP, et al. Integrating substance use disorder services with primary care: the experience in California. Journal of Psychoactive Drugs. 2012; 44(4):299–306. [PubMed: 23210378]

- 28. Carey TS, Crotty KA, Morrissey JP, et al. Future research needs for evaluating the integration of mental health and substance abuse treatment with primary care. Journal of Psychiatric Practice. 2013; 19(5):345–359. [PubMed: 24042241]
- 29. Guerrero E, Aarons G, Palinkas L. Organizational capacity for service integration in community-based addiction health services. American Journal of Public Health. 2014; 104(4):e40–e47. [PubMed: 24524525]
- 30. Varda DM, Chandra A, Stern S, et al. Core dimensions of connectivity in public health collaboratives. Journal of Public Health Management and Practice. 2008; 14(5):E1–E7.

Table 1

Attributes of participating health service provider organizations and their patient populations, August 2012 (n = 25)

Characteristic	n	%
Organization mission ^a		
Substance abuse	17	68
HIV/AIDS	3	12
Substance abuse and HIV	2	8
Mental health	1	4
Substance abuse and mental health	1	4
Other (health department)	1	4
Organization type b		
Community-based organizations	15	60
Other clinical setting	4	16
Public or private hospitals or clinics	2	8
Health departments	1	4
Advocacy group	2	8
Correctional setting	1	4
Target populations served $^{\mathcal{C}}$ (within the larger po	pulation of per	rsons who use drugs)
Uninsured or underinsured	7	28
Men	6	24
Homeless	6	24
African-American	4	16
Injection drug users or opiate addicts	3	2
Persons living with HIV/AIDS	2	8
Incarcerated/re-entering	1	4
Men who have sex with men	1	4
Veterans	1	4
Women	1	4

HIV/AIDS human immunodeficiency virus/acquired immune deficiency syndrome, MSM men who have sex with men

^aReported by respondents as the organization's primary purpose

 $b_{\mbox{\footnotesize Determined}}$ based on funding source, self-identification, or SAMSHA classification

^CRespondents reported multiple target populations served. Percentages reflect the proportion of respondents who volunteered information about serving each target population and therefore do not equal 100

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Table 2 Reported Service Integration, August 2012 (n = 23)

Health service setting	Number of or	ganizations offer	offering services	
	Only on-site	Only referral	Total (on-site + referral) ^a	
Substance abuse and mental health settings ($n = 20$)				
Screening, diagnosis, and counseling for infectious diseases				
Routine HIV testing	15 (75%)	5 (25%)	20 (100%)	
Routine TB screening	8 (40%)	10 (50%)	18 (90%)	
Syphilis screening at intake	8 (40%)	7 (35%)	15 (75%)	
HCV testing	4 (20%)	9 (45%)	13 (65%)	
GC/CT screening at intake	4 (20%)	8 (40%)	12 (60%)	
Vaccination				
Vaccination for HAV and HBV	3 (15%)	12 (60%)	15 (75%)	
Interventions for reduction of risk behaviors				
Overdose prevention education	13 (65%)	1 (5%)	14 (70%)	
Access to condoms	8 (40%)	3 (15%)	11 (55%)	
Access to drug preparation equipment	1 (5%)	3 (15%)	4 (20%)	
Referrals and linkage to care				
HIV patients referred to care and progress tracked	8 (40%)	11 (55%)	19 (95%)	
Referral to behavioral interventions	8 (40%)	10 (50%)	18 (90%)	
HIV clinical settings $(n=3)$				
Screening, diagnosis, and counseling for infectious diseases				
Persons newly diagnosed HIV+ persons screened for syphilis, GC/CT	3 (100%)	0 (0%)	3 (100%)	
Persons newly diagnosed with HIV screened for TB	2 (67%)	1 (33%)	3 (100%)	
HCV testing for all patients	2 (67%)	1 (33%)	3 (100%)	
Vaccination				
HBV vaccination for all patients	2 (67%)	1 (33%)	3 (100%)	
Interventions for reduction of risk behaviors				
Overdose prevention education	2 (67%)	0 (0%)	2 (67%)	
Access to condoms	1 (33%)	0 (0%)	1 (33%)	
Access to drug prep equipment	0 (0%)	1 (33%)	1 (33%)	
Referrals and linkage to care				
Referral to behavioral interventions	2 (67%)	1 (33%)	3 (100%)	
Partner Services and contact follow-up				
Partner services	1 (33%)	0 (0%)	1 (33%)	
Risk assessment for infectious diseases				
Ongoing, routine risk assessment and annual screening for syphilis, GC/CT	3 (100%)	0 (0%)	3 (100%)	
Risk assessment for illicit use of drugs				
Risk assessment for reproductive health, substance abuse and mental disorders	3 (100%)	0 (0%)	3 (100%)	

Two advocacy groups were excluded because they provided education but no direct services. The health department, which provided a wide array of services, chose to be assessed as a substance abuse treatment setting, although they are not a substance abuse organization per their primary

mission. Organizations that provided services for both substance abuse and HIV equally were asked to choose to answer either the substance abuse or HIV services checklist questions, indicated in the rows above, and were classified according to their choice

HIV Human Immunodeficiency Virus, TB tuberculosis, HAV hepatitis A, HBV hepatitis B, HCV hepatitis C, GC/CT Gonorrhea/Chlamydia, SC syphilis

^aOn-site service provision received priority in coding. Providers were first asked whether their organization provided services on-site; if they responded no, they were asked whether they offered the services through referral