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THE INTEGRATION OF HARM REDUCTION AND HEALTHCARE

IMPLICATIONS AND LESSONS FOR HEALTHCARE REFORM

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Statement of Responsibility

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Preface

In the fall of 2013, The New York Academy of Medicine (the Academy) was approached by the MAC AIDS Fund to undertake an examination of the issues surrounding the integration of harm reduction into emerging healthcare reform initiatives (please see Appendix A. for an overview of the major healthcare reform initiatives discussed in this report). We enthusiastically welcomed the opportunity to explore this subject and contribute to greater understanding of the opportunities and challenges involved, in order that effective policies and practices that promote the health of harm reduction participants and other marginalized populations could emerge.

Evidence-based policy development is central to the Academy's mission to advance the health of urban populations. The Academy was among the early advocates of harm reduction, beginning in 1992. In 2001, the Academy developed the report *Towards a Comprehensive Plan for Syringe Exchange in New York City*. We went on to lead the evaluation of New York's Expanded Syringe Access Program. In 2009 the Academy co-hosted a landmark conference, *New Directions for New York: a Public Health & Safety Approach to Drug Policy*, to launch a transformation in drug policy away from a criminal justice focus toward a public health approach. In partnership with the Drug Policy Alliance, the Academy published a *Blueprint for a Public Health Approach to Drug Policy* in 2013, which was informed by consultations with members of various sectors and communities, including harm reduction providers.

The Academy's past work in policy support and technical assistance to further the integration of harm reduction in healthcare settings include a multi-year assignment advising the Health Resources Services Administration on how to better integrate the needs of drug users with HIV/AIDS into the services funded under the Ryan White CARE Act. Among the products of this effort was a *Manual for Primary Care Providers: Effectively Caring for Active Substance Users* and a consumer guide for substance users, *Health Matters*, both published by the Academy with funding from the City of New York, and a training curriculum for Ryan White Title I planning councils on meeting the health needs of substance users.

This project continues the Academy's efforts to examine the many issues surrounding integration of harm reduction providers and participants into the broader healthcare system. The findings and recommendations are intended as a resource for others engaged in efforts to advance the role of harm reduction in healthcare, and for those working to advance responsive integrated healthcare for all marginalized populations.

Executive Summary

Harm reduction services, i.e., syringe exchange programs and the array of services for injection drug users that have developed around syringe exchange, have a long history in addressing the health and basic needs of people at elevated risk for poor health outcomes. While not generally thought of as a point of reference for healthcare reform, harm reduction program participants share many characteristics with the broader Medicaid population, such as significant socioeconomic disadvantage, multiple chronic health conditions, and a history of crisis-oriented episodic care.

Current healthcare system reforms carry with them an implicit critique of the manner in which healthcare delivery has evolved, based on the logic and demands of the healthcare system itself rather than the circumstances and needs of patients. This can be seen in Medicaid reform initiatives such as the Delivery System Reform Incentive Payment (DSRIP) Program, which includes healthcare system incentives to integrate behavioral and primary healthcare services, as well as incentives to meet the needs of those who utilize hospital Emergency Departments for primary care with less costly community-based services.

This study reveals the many opportunities and challenges facing harm reduction providers and their healthcare provider partners as they work to improve and expand the integration of harm reduction and healthcare services. Key informant interviews, focus groups, a comprehensive literature review, and an in-depth case study of a successful co-location model of service integration uncovered effective strategies and instructive experiences to guide integration efforts.

The overarching theme that emerged is the need for healthcare reform strategies to move beyond the array of clinical care needs of patients to embrace and promote models of holistic person-centered care. Clinical care should be coordinated and co-located with services that address basic needs including food, housing, counseling and advocacy, access to safe injection equipment and harm reduction education, as well as social support. For marginalized populations living in precarious circumstances, such services are essential to establishing the stability that allows them to take care of their health.

Major Findings

- Healthcare and harm reduction providers are forming partnerships to coordinate complementary services and improve access for people with the greatest need for comprehensive care. Arrangements include part-time clinic hours established at harm reduction centers by nearby teaching hospitals, coordination and co-location of clinical and harm reduction services within a single larger organization, and partnerships between healthcare and harm reduction providers to co-locate clinical and pharmacy services at a harm reduction center.
- Fundamental philosophical differences between healthcare and harm reduction providers in promoting patient health should be recognized and addressed, as these differences pose potential barriers to integration. Medical providers are often poorly trained to distinguish health issues related to drug use from other behavioral and physical conditions afflicting drug users and are susceptible to negative societal attitudes toward injection drug users that undermine their ability to provide effective care; while harm reduction providers often need to gain a better appreciation of the parameters within which medical providers operate, especially in regard to opioid pain relievers.

- The changing demographics of opioid use are contributing to reducing the longstanding hostility toward harm reduction strategies, such as syringe exchange, from segments of the broader community. The benefits of expanded access to naloxone to reverse overdoses have gained widespread recognition and support recently. Similarly, the traditional antagonism between harm reduction and abstinence-based drug treatment programs appears to be decreasing, partly because harm reduction providers are a resource in training drug treatment providers to administer naloxone for individuals in treatment who relapse.
- The transition to per-member-per-month based Health Home care management reimbursement has been very challenging for harm reduction/AIDS services providers who previously provided comprehensive case management under the fee-for-service Targeted Case Management program. Increased caseloads have resulted from a net reduction in reimbursement while the needs of beneficiaries continue to be intensive (including personal escorts to healthcare services, and assistance in meeting basic needs). The New York State Department of Health has responded with a revised care management payment structure scheduled to go into effect January 1, 2016. The revised payment structure should be assessed for its impact on alleviating pressures that some fear may be undermining the effectiveness of care management services under the Health Home program.

Key informant and focus group participants also identified a range of quality of care issues as barriers to appropriate healthcare utilization – long waiting times, the need to juggle appointments across multiple locations, having adequate time in an encounter with a practitioner to feel valued and to convey and receive information in a language the patient understands, lack of empathy among practitioners, and lack of integration with social support and basic needs assistance. These issues are not unique to harm reduction participants. However, their situations are often so insecure that they cannot compensate for the shortcomings of the healthcare system in the way that others may be able to, so they become estranged from the system except in the most dire and costly circumstances. In this sense, the experiences of harm reduction participants and the type of service delivery structures and interpersonal skills they demand are indicative of the service integration and care management needs of high-need, high-cost Medicaid beneficiaries in general. Moving forward, their experiences will provide a test case of the effectiveness of the redesigned service delivery structures and practices put in place through healthcare reform.

A major focus of healthcare reform is the development of value-based payment systems that incentivize improved health outcomes over medical procedures, such as New York State's DSRIP program. The lack of models that successfully integrate clinical health care with social, public health, and community-based interventions necessary to achieve improved health outcomes for many low-income individuals has been cited as a significant barrier to these efforts. Largely unseen by policymakers, harm reduction providers in New York are developing such models with their healthcare provider partners. Their efforts offer examples of community-based interventions that address the social determinants of health integrated with healthcare delivery. The complementary value each party brings to the partnerships is evident not only in the enhanced array of easily accessible services for patients, but also in the strengthening of the market position of the participating healthcare providers. This report is an attempt to raise awareness of these models so that they may be replicated and refined by other community-based service providers working together with healthcare provider partners to reduce healthcare costs and improve the health of the high-need populations they serve.

Policy Recommendations

Specific policy recommendations are organized into three broad areas:

- Partnerships between harm reduction providers and healthcare providers hold exciting promise to achieve meaningful integration and should be encouraged through education and technical assistance; and should be evaluated for effectiveness in improving healthcare quality, reducing healthcare costs, and improving health outcomes.
- Proposed solutions to the substantial challenges for Health Home care management agencies to facilitate integrated healthcare for Medicaid’s most fragile and marginalized populations should be implemented, evaluated, and further developed.
- Medication-Assisted Treatment (buprenorphine/suboxone and methadone) for opioid drug users should be more widely and uniformly available in order to improve drug user health, functioning, and well-being.

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Introduction

Harm reduction services, i.e., syringe exchange programs and the array of services for injection drug users (IDUs) that have developed around syringe exchange, have a long history in addressing the health and basic needs of people at elevated risk for poor health outcomes.

While not generally thought of as a point of reference for healthcare reform, harm reduction program participants share many characteristics with the broader Medicaid population, such as significant socioeconomic disadvantage, multiple chronic health conditions, and a history of crisis-oriented episodic care. Harm reduction programs in which syringe exchange is central share for their participants the “triple aim” goals of Medicaid healthcare system redesign efforts to improve the quality of healthcare, reduce healthcare costs, and improve the health of the population served. Yet harm reduction programs stand apart from the broader healthcare system in a very significant manner: they offer care, support, and assistance with a uniquely low threshold for people to receive services. Syringe exchange, because of the illegal nature of injection drug use, evolved without requiring identifying or other personal information from the participant. Low threshold service delivery is integral to the theory and practice of harm reduction, as it allows harm reduction providers to “meet people where they are,” fundamentally in their status as active drug users and drug users in recovery.

Other services offered by harm reduction providers beyond anonymous syringe exchange include: testing for human immunodeficiency virus (HIV), hepatitis C, and sexually transmitted infections; Medicaid enrollment; case management and healthcare coordination; support and education groups on various topics; food and nutrition services; showers, laundry, and personal grooming services; referrals to

cash and food assistance and housing programs; and referrals to or, more rarely, direct provision of primary healthcare, mental healthcare, and Medication-Assisted Treatment (MAT) and other drug treatment services. Many of these other services have higher thresholds in regard to documentation of identity, income, or residence; however low threshold services remain key as they allow engagement to occur and trust to develop between participants and harm reduction providers. This earned trust facilitates eventual engagement in higher threshold services that require more personal information and greater documentation.

The experience of harm reduction programs suggests that achieving an integrated and responsive healthcare system for harm reduction participants isn’t only a matter of harm reduction providers adapting to Medicaid redesign initiatives; it also involves medical providers and healthcare systems adapting to and incorporating into their own practices service delivery approaches that harm reduction providers have pioneered in serving marginalized individuals over the past 25 years. The experience, knowledge, and practices of harm reduction providers can be applied broadly toward accomplishing systems and clinical practice integration that is being promoted by the Centers for Medicare & Medicaid Services (CMS) and structured and incentivized by the New York State Department of Health and other State Medicaid agencies (Gates, Rudowitz, and Guyer 2014).

The promotion of the concept of “patient-centered care” by CMS and State Medicaid agencies has become a central tenet of reforms designed to achieve the goals of improving the quality of healthcare, reducing healthcare costs, and improving population health. It implicitly carries with it a critique of the manner in which

healthcare delivery has evolved, based on the logic and demands of the healthcare system itself rather than the circumstances and demands presented by the lives of patients. This can be seen in numerous Medicaid reform efforts, from those that seek to integrate behavioral and primary healthcare services, to those that replicate characteristics of hospital emergency departments (ED) in other less costly settings based on an understanding of how the use of hospital emergency departments for primary care can be a rational choice for many patients. The premise that inappropriate healthcare utilization is solely the result of problematic patient behavior, and to improve upon the status quo the focus must rest squarely on modifying that behavior, is an increasingly outdated concept (Pines et al. 2011; Blank et al. 2005; LaCalle and Rabin 2010).

Care coordination practice aimed toward increasing appropriate healthcare utilization faces barriers not only in patient knowledge or attitudes, but in healthcare systems that are difficult to navigate and unfriendly to use. Characteristics of healthcare systems that discourage use include the placing of difficult demands on patients (e.g., scheduling appointments with multiple providers on multiple days across multiple locations) and treating

The Emergence of Harm Reduction

The origins of the modern harm reduction movement provide important historical context and facilitate an understanding of the relevance of harm reduction practice to current healthcare reform efforts. They also provide background to the perspectives of harm reduction providers as they face questions regarding their future, and the future of the people they serve, raised by various healthcare reform initiatives.

patients disrespectfully and thereby discouraging continued utilization (a common experience of active drug users in the healthcare system). In other words, the direction of Medicaid reforms that seek to achieve the triple aim are coming around to the fundamental principle of harm reduction: meeting people where they are.

The objective of this report is threefold. First, it aims to share the experience and knowledge of harm reduction programs and participants with government health officials so that policies can be informed by this long-neglected laboratory of patient-centered care. Second, it is designed to familiarize healthcare system executives and clinical providers tasked with re-structuring and reforming the way in which clinical care is delivered, particularly to unengaged marginalized populations, based on the experiences of harm reduction providers in delivering coordinated patient-centered care. And third, the report is intended to contribute to the discussion of how harm reduction providers can remain viable contributors to meeting the health needs of the population they traditionally have served, while expanding the benefits of their approach to additional populations who have been poorly served by the healthcare system in the past.

Efforts to reduce the harm associated with injection drug use – largely grassroots and often illegal efforts by current and former drug users in the 1980s and early 1990s – emerged specifically in response to the recognition that injection drug use practices were key mechanisms of transmission of HIV. Injecting drugs is associated with the transmission of HIV as a result of sharing the equipment used to prepare and inject the drugs. Injecting heroin, in contrast to other means of administration, such as snorting or

smoking, is generally viewed by users as the most cost-effective route, and the route providing the strongest most desirable effect. When the needle punctures the vein, a small quantity of blood is drawn into the syringe to ensure that the needle has been properly located in the vein, followed by the injection of the blood and drug mixture. A small residue of blood always remains in the needle and syringe. This blood residue, along with blood in the “cooker” used to melt the drug into an injectable liquid and blood in the “cotton” used to filter the drug as it is drawn into the syringe, are the means of transmission of the virus when injecting equipment is shared (Hagan and Des Jarlais 2000).

As the relationship between HIV and the AIDS epidemic became understood in the early 1980s, and methods of estimating HIV prevalence developed, the role of injection drug use in transmitting HIV became a focus of surveillance efforts (Karon et al. 1996). Although the back-calculation method of estimating HIV prevalence from the number of confirmed AIDS cases is subject to great uncertainty in regard to the accuracy of numerical estimates, the relative proportions of AIDS diagnoses among different risk groups and how those proportions changed over time is instructive. The estimated prevalence of adult and adolescent HIV infection in the United States increased from 400,000-450,000 in 1984, to 650,000-900,000 in 1992. The proportion of these estimated cases attributed to injection drug users (including men who have sex with men who are also IDUs) stayed fairly constant in the range of 29%-33% from 1984 to 1992. However, adding in cases where the infection was attributed to heterosexual contact, presumably in most cases from infected heterosexual IDUs, the proportion directly or indirectly associated with injection drug use rose from 32% in 1984 to 46% in 1992 (Karon et al. 1996).

During the 1980s and 1990s, rates of HIV prevalence among injection drug users varied greatly around the world. In some cases, prevalence rates stabilized at relatively low levels and in some locations they stabilized at much higher levels (Hagan and Des Jarlais 2000). Similarly within the United States, prevalence of HIV infection among IDUs varied across cities from 0% to nearly 70% in the mid-1980s (Curran et al. 1988). In New York City, the HIV seroprevalence rate among injection drug users increased from around 10% in 1978 to around 55% in 1984, at which point it stabilized (Des Jarlais 1989)(Des Jarlais et al. 1994). Stabilization of the prevalence rate occurred as a result of three factors: 1) the loss of seropositive injection drug users from the pool of active drug users (i.e., through death or cessation of injecting drugs); 2) the entry of new uninfected injection drug users to the pool; and 3) the adoption of risk reduction behavioral change among injection drug users. Intended to reduce their risk of contracting AIDS, behavioral change by injection drug users was found increasingly in New York City over the mid- to late-1980s (Des Jarlais 1989).

Although anecdotal examples of providing syringes to IDUs to prevent jaundice and soft tissue infections can be found as far back as the 1970s (Lane 2006), the impetus to contemporary organized harm reduction programs have their origin in the 1980s. In early 1980s Amsterdam, pharmacies were allowed under Dutch law to sell syringes without a prescription and the use of new clean syringes acquired through pharmacies became a means, promoted by the Junkiebond, or Junkies’ Union, a drug-users advocacy group, to combat the transmission of Hepatitis B among drug users. Along with low threshold methadone availability aimed toward reducing drug injection, syringe exchange was advocated by the Junkiebond in discussions with local authorities as a means to reduce the

harms associated with drug use. In 1984, when a pharmacist in central Amsterdam decided to stop selling syringes to drug users, the Junkiebond began directly distributing new clean syringes to drug users themselves, with the support of the Municipal Health Service (Buning 1991). By this time, the focus of syringe exchange had shifted to prevention of HIV transmission (Ameijden, Haastrecht, and Coutinho 1992).

In the United States, two pioneers of grassroots sterile syringe distribution in the late 1980s were David Purchase in Tacoma, Washington and Jon C. Parker, who distributed clean syringes to drug users throughout many northeast cities. Both were individual activists responding to the AIDS epidemic and the knowledge that sharing injecting equipment transmitted HIV. While Parker, a former injection drug user and a master's student of public health at Yale, actively defied the laws of states where he operated and was arrested for his efforts, Purchase operated with the vocal support of local authorities including the police department (Gross 1989; Lambert 1989). In a quote that would be striking for its candor today, let alone in 1989, Tacoma Police Department spokesman Mark K. Mann explained, "Conventional law enforcement hasn't helped the AIDS problem. Before you put the clamps on somebody trying to help, you better have an alternative. We didn't." (Gross 1989). While Tacoma authorities supported syringe exchange in 1989 through police non-interference and county health department support, in areas hardest hit by the AIDS epidemic, such as New York City, where by the end of 1988 the number of AIDS cases involving injection drug use was roughly comparable to the total number of AIDS cases in San Francisco (Des Jarlais 1989), widespread opposition to syringe exchange hampered and delayed for years the establishment of viable and effective syringe exchange programs (Gross 1989).

Opposed by law enforcement, politicians, and neighborhood groups, a small-scale pilot syringe exchange program initiated by the New York City Department of Health in 1988 (Gross 1989) was discontinued under new Mayor David Dinkins in February 1990 (Lambert 1989)(New York State Department of Health AIDS Institute 2014). Community activists from the AIDS Coalition to Unleash Power (ACT UP) then began distributing syringes in Manhattan's Lower East Side, and were soon joined by activists in Harlem and the Bronx in operating a number of underground exchanges (New York State Department of Health AIDS Institute 2014) (Des Jarlais et al. 1996). In 1991, responding to the continued growing prevalence of HIV infection in New York and newly published evidence that a syringe exchange program in New Haven, Connecticut resulted in a 33 percent decrease in HIV infections among exchange participants compared to IDUs not using the exchange (Curtis 2002)(New York State Department of Health AIDS Institute 2014), a task force was convened under the direction of Mayor Dinkins to re-examine syringe exchange. After months of study the task force recommended support of community-based harm reduction programs, including syringe exchange. At the same time, the New York State Department of Health convened a workgroup to develop regulations to permit syringe exchange in the state. In May 1992, the New York State Department of Health filed emergency regulations authorizing the State Health Commissioner to exempt personnel and participants of approved syringe exchange programs from the State's needle possession law. The regulations required syringe exchange services be provided as part of a comprehensive harm reduction model to prevent new HIV infections – including, in addition to provision of clean injection equipment, information on risk reduction practices related to sexual and drug-using behaviors; distribution and demonstration of the use of condoms;

distribution and demonstration of the use of bleach kits and safer injection techniques; and direct provision of or referrals to HIV counseling and testing, drug treatment, healthcare, and legal, housing, and social services (New York State Department of Health AIDS Institute 2008). That same year, the state's first five authorized syringe exchange programs (SEPs) were approved, which expanded rapidly to serve approximately 36,000 IDUs by 1995 (Des Jarlais et al. 1996).

The underground syringe exchanges operating in New York City from 1990-1992 had a profound effect on the ability of injection drug users to act upon their desire to reduce their risk of contracting AIDS. In a study of Beth Israel detoxification patients with recent injection drug use, the proportion who reported injecting with equipment previously used by others fell from 51% in 1984 to 7% in 1990-92, with many in the later time period reporting acquiring clean syringes from the underground exchanges (Des Jarlais et al. 1994).

A number of factors related to the social organization of drug use helped to inform the design of syringe exchange programs so that they would be maximally effective. These factors include the social context and circumstances surrounding how injection drug use is initiated (most often with the assistance of an experienced injector), how ongoing use is characterized by most IDUs having trusted "running partners" or "shooting buddies," and the preponderance of shooting galleries that provided a place where IDUs could inject without fear of interruption and that were often adjacent to where they could procure their drugs, minimizing the waiting time to inject (a major consideration if suffering from effects of withdrawal) (Des Jarlais, Friedman, and Strug 1986). These social factors surrounding initiation and ongoing use strongly contributed to the practice of sharing syringes and other injection

equipment (Grund et al. 1996). These factors were reinforced by the scarcity of money among most users to procure injecting equipment.

In a study of New York City injection drug users during 1992-94, an increased adjusted hazard ratio for HIV infection of 3.5 was found for IDUs who did not use syringe exchange programs compared to IDUs who were regular syringe exchange program participants (Des Jarlais et al. 1996). This strong beneficial effect of syringe exchange program participation was attributed by the authors to the way in which the New York City syringe exchanges facilitated practices that addressed the risks associated with prevailing syringe and equipment sharing practices. Syringe program participants could obtain large amounts of sterile injecting equipment at no cost, important for group injecting where having at least one sterile syringe and needle for each injector is necessary to avoid sharing. In contrast, for non-syringe exchange participants (and for everyone prior to the establishment of syringe exchange programs) the alternative was sharing equipment or procuring a "new" (often used and repackaged) syringe for \$2 on the illicit market. Also, as noted above, the New York State regulations permitting the establishment of syringe exchange programs specifically allowed syringe exchange participants to legally possess and carry syringes, which meant that that they were more likely to have their own equipment with them when they obtained drugs to inject.

As syringe exchange programs and harm reduction education expanded around the world, they were shown to be highly effective in reducing the transmission and prevalence of HIV (Des Jarlais et al. 2005)(Neaigus et al. 2008)(New York State Department of Health AIDS Institute. 2014)(GMHC 2009)(Strathdee and Stockman 2010) (Rendina et al. 2014)(Hall et al. 2008)(Balter et al. 2014)(Des Jarlais et al. 2009). However, the health concerns and needs of Harm Reduction program

participants extend far beyond HIV (and hepatitis C, another blood-borne viral infection whose transmission is reduced by syringe exchange). Other chronic conditions, including cardiovascular, respiratory, and behavioral health conditions, burden high numbers of harm reduction program participants (IDUHA 2014b)(IDUHA 2014a). The desire of harm reduction programs to ensure treatment of the chronic conditions afflicting participants have led many programs to take concrete steps to address the lack of coordination and integration of healthcare services with the harm reduction services they offer.

What follows is an examination of the challenges and opportunities for harm reduction providers to contribute to the improved integration of

harm reduction and healthcare services for the benefit of their program participants, in the context of significant structural reforms occurring in healthcare, specifically in regard to Medicaid in the state of New York. Strategies and experiences of harm reduction providers seeking to achieve improved integration in this rapidly changing environment are presented, followed by policy recommendations aimed toward facilitating the accomplishment of integration objectives, the sustained viability of harm reduction services providers, and leveraging the philosophy and practice of harm reduction to contribute to the broader objectives of healthcare reform – to improve healthcare quality, lower healthcare costs, and improve population health – for all low-income individuals.

2014 through February 2015. In addition, three focus groups were conducted in November-December 2014 in relation to the co-location case study; one each with a group of harm reduction program participants, harm reduction program peer outreach workers, and Health Home care managers who work at the harm reduction center that was the focus of the case study. The study protocol was approved by the New York Academy of Medicine Institutional Review Board.

Scope and limitations

This study was conducted in the state of New York and reflects the experiences of New York harm reduction providers, healthcare providers, and healthcare systems; and the healthcare system policies and reforms of the State of New York.

Methods

Data Sources

Identified through an extensive search and review of the literature, secondary data sources included peer-reviewed journal articles; books; reports and other public documents from government agencies and private organizations; and newspaper and magazine articles.

Primary data collection consisted of key informant interviews and focus groups. Key informants, whose statements and opinions are indicated in the report by (KI), were identified from an array of stakeholders, including harm reduction providers, AIDS services providers, healthcare providers, pharmacies, behavioral health providers, lead Health Homes, Health Home care management agencies, harm reduction advocacy organizations, the New York City Department of Health and Mental Hygiene (NYC DOHMH), and the New York State Department of Health (NYS DOH). In total, 41 key informants were interviewed from June

Findings and Analysis

1. Overview of Harm Reduction Program Participants' Health and Healthcare Utilization

Twenty-two Syringe Exchange Programs currently operate in New York State, with fourteen of those programs operating in New York City. From 1992, when the New York State Department of Health approved the first four syringe exchange programs, through 2013, over 170,000 individuals have enrolled as SEP participants in New York. Over 55 million clean syringes have been furnished and over 43 million used syringes have been collected by the program (New York State Department of Health AIDS Institute. 2014). For 2013, these numbers are 22,300 individuals served, over 4.2 million syringes furnished, and over 2.8 million syringes collected (New York State Department of Health AIDS Institute. 2015). Data collected by the New York State Department of Health AIDS Institute indicate that the proportion of new HIV cases attributable to injection drug use in New York State has decreased from 54% in 1990 to 3% in 2012. (New York State Department of Health AIDS Institute. 2014). By all accounts, syringe exchange programs have been tremendously successful in reducing the transmission and prevalence of HIV among injection drug users in New York (Des Jarlais et al. 1996)(Des Jarlais et al. 2010)(Des Jarlais et al. 2000), as well as being associated with reducing the rates of drug use by participants (Kidorf et al. 2013)(Ti and Kerr 2014)(Holly Hagan et al. 2000).

Although syringe exchange is central to the history of harm reduction programs, and continues to be a primary reason people seek out harm reduction program services, many harm reduction program participants are not current injection drug users. These include people who are former IDUs now at some stage of recovery, as well as others without a history

of injection drug use but drug use through other means. A 2014 convenience sample survey of 1,340 harm reduction program participants from all 14 harm reduction programs in New York City, conducted by the Injection Drug Users Health Alliance (IDUHA), found that less than half (44.9%) of the surveyed program participants had exchanged syringes within the 30 days prior to the survey (IDUHA 2014a). Heroin use in the past 30 days was reported by 37.1%, while slightly over half (52.9%) of the survey respondents reported use of methadone in the past 30 days. Additional injection drug users served by syringe exchange who are not fully represented in these numbers include those who receive syringes through secondary distribution, by harm reduction program peer outreach workers or individual participants who walk the streets and visit Single Room Occupancy (SRO) housing to distribute clean syringes to known networks of users. A key informant in the harm reduction field (KI) attributes much of the growth in numbers of people reached and syringes distributed over the past several years to peer-delivered or secondary syringe exchange.

Although many harm reduction programs offer services with dedicated funding that restricts eligibility to people living with HIV (discussed more fully in the following sections), harm reduction program participants have many health issues beyond HIV, as shown in the data below from the IDUHA survey:

Have you ever been told by a doctor that you have...?	% Yes
Asthma	36.8%
Diabetes	14.8%
Hypertension	35.7%
Heart Disease	11.1%
Liver Disease	30.4%
Kidney Disease	5.2%
Cancer	4.0%
HIV/AIDS	12.5%

Overall, 75.4% of survey respondents had at least one of the above chronic health conditions, and 41.9% had two or more. The prevalence of liver disease is likely related to high rates of hepatitis C infection, which remains a serious problem among injection drug users (Alter et al. 1999)(Koh and Valdiserri 2013).

In addition to chronic physical health conditions, 54.7% of harm reduction participants surveyed self-report “serious depression over the past 3 months,” with 49.7% of those respondents having been prescribed medications for depression, and 40.4% reporting the use of alcohol or drugs to help cope with the depression. Over one quarter, 27.2% of survey respondents, report both a medically diagnosed physical chronic health condition and a mental health condition being treated with prescribed medications (IDUHA 2014a).

Self-reported overall health status was fair or poor for 42.0% of harm reduction program participants (IDUHA 2014a), compared to 23.1% of all New York City adults (New York City Department of Health and Mental Hygiene 2015). Although, as described below, harm reduction participants skew older than the general population, even

when limiting the comparison general population group to the most comparable “male age 45-64” group, harm reduction program participants’ self-reported rate of fair or poor health exceeds the general population rate, 42.0% to 30.7%.

Health care utilization from the same IDUHA survey of harm reduction program participants indicate ample need and opportunity for improved integration of harm reduction and health care. Despite a relatively high rate of Medicaid enrollment – 89.5% (a characteristic among HR participants that predates implementation of the Affordable Care Act (Millery 2013), reflecting New York State’s pre-existing Medicaid coverage for low-income adults without dependent children), harm reduction participants exhibit high rates of hospital emergency department use. Over half (54.3%) of IDUHA respondents had used the emergency department in the 12 months prior to the survey, compared to 22.9% of NYC Medicaid beneficiaries ages 18-64 in calendar year 2013 (New York State Department of Health 2015). Over 70% of IDUHA respondents who used an ED did so multiple times during the prior 12 months, an average of 3.3 ED visits each for respondent who reported any ED use. Inpatient hospitalization was reported by 33.1% of survey respondents in the 12 months prior to the survey (IDUHA 2014a), compared to 11.2% of NYC Medicaid beneficiaries ages 18-64 in calendar year 2013 (New York State Department of Health 2015). Over 50% of IDUHA survey respondents reported multiple hospitalizations in the prior 12 months with an average number of 2.5 inpatient hospitalizations for those with any inpatient stays (IDUHA 2014a).

To provide some context to these rates, key demographic data from the IDUHA survey include: a participant age range of 18 to 77, with a median age of 45. The gender breakdown is 69.1% male, 29.7% female, and 1.2 % transgender. The predominantly over age 40 population

(71.2% over age 40) served by harm reduction programs make the prevalence of chronic health conditions noted above not surprising (IDUHA 2014a). As such, they are a population whose health conditions, health care utilization patterns,

and barriers to appropriate healthcare are relevant to the larger New York State Medicaid reform initiatives underway, and whose experiences can inform the implementation of those initiatives by healthcare systems in New York.

2. Harm Reduction Providers’ and Participants’ Current Relationship to the Healthcare System

An examination of the integration of harm reduction into healthcare has an underlying premise that prior to current healthcare reform initiatives, harm reduction services have not been well integrated within a larger system of care involving the traditional medical system. Current healthcare reform initiatives provide the context from which opportunities for integration are emerging and being acted upon by both harm reduction providers and healthcare providers. This new pragmatism reflects an understanding of how certain aspects of the current healthcare system may be undermining the achievement of optimal health outcomes in a financially sustainable manner. However, fundamental philosophical differences between medicine and harm reduction need to be noted and addressed as integration efforts move forward, as these differences pose potential barriers to integration.

I really resist the mentality of harm reduction being a kind of parallel healthcare system for drug users. Like, that’s a terrible thing. We’ve done it for years and years out of necessity but it is absolutely the opposite of the goal of what we should be doing. It’s just that, by and large, the regular healthcare system has been appallingly bad for drug injectors and people with mental health issues...

- Harm reduction advocate

Along with the stigma associated with drug use, discussed below, these philosophical differences between medicine and harm reduction influence the approach to delivering care to injection drug users in profound ways. Heller,

et al, has outlined eight domains of differing philosophical approaches between the harm reduction and medical models of care (Heller, McCoy, and Cunningham). She notes that “harm reduction is grounded in a structural philosophy that embraces individuals as experts” whose perspectives and life experiences inform the delivery of services, in contrast to the medical model that “relies on the authority of expertise and formal, specialized knowledge.” Relatedly, the “discrete information set” employed by medical providers “is presumed to be the best available to serve as the basis for the delivery of care” while non-medical issues affecting health are generally not acknowledged and are viewed as outside the realm of care. This contrasts with the harm reduction approach to care that “seeks to adapt and change to fit the immediate and ongoing needs of users” over an expansive range of issues. Harm reduction services providers “view their roles as information resources, educators, advocates, and guides for services and care,” and in these roles are supportive of medical providers by facilitating “goal-setting, decision-making, and action-planning” among patient users and by reinforcing medical instructions regarding medications, specialty referrals, and other aspects of care; however, the medical provider needs to be open and flexible in regard to inputs that don’t conform to the traditional practice of requiring the user to “adopt prescribed behaviors and actions to fit the [medical] model.”

“There’s a very realistic fear on the part of the folks we serve that they’re going to go to the provider and the provider is going to say, you know “Well, you need to get clean, because we’re not going to discuss anything else but that” when they might have other health concerns. So for us I think it’s two-fold. It’s number one, it’s trying to counsel the folks we serve into prioritizing their health, but it’s also for us to try to work with providers to say, “Look, yeah the person is an active drug user, but that’s not why they’re seeking care, so let’s not... you know, we’re working on that on our end.” That sometimes is how we couch it, like, “Look, we’re working on it so let’s just deal with the person’s physical health right now,” you know?”

- Harm reduction and AIDS services provider

The most fundamental area in which collaboration and integration between harm reduction and medical care demands flexibility on the part of the healthcare system is in regard to the high proportion of harm reduction participants who are active injection drug users. The notion that a patient has to adopt the prescribed behavior of no illicit drug use in order to have their medical or mental health needs addressed is a non-starter for harm reduction providers as such a requirement would be in essential conflict with the principles of harm reduction and would effectively exclude injection drug users from all but emergency care. Whether from this basic philosophical difference, or from more practical concerns (such as mistrust and fear that prescribed medications will be sold on the street), or from attributing an inflated level of danger and blame to drug users as part of a broader societal process of stigmatization, the reluctance of some medical providers to treat active injection drug users has impeded the development of collaborative relationships and limited the number of medical providers available to treat drug users.

“The community center where I work and the hospital where I work, it’s really not set up to accommodate people who don’t fit the norm of somebody who has a formal education and 9 to 5 job and can advocate for themselves. Some of my patients with substance use disorders are fine coming to the clinic. But some people don’t feel comfortable in that setting and that situation. We make people wait for a long time and some people don’t want to wait for three hours to see the doctor for 15 minutes, regardless if they have a substance use disorder or not. But some people are anxious in places, in a waiting room like that. And people really trust harm reduction agencies and trust the staff there and don’t have to deal with the stigma, and the comments or the looks or just not understanding what their lives are like and where they’re coming from.

- Physician

A review of studies regarding the prevalence and role of stigma in the treatment of drug users, including within the healthcare setting, found that in many of the encounters between healthcare providers and drug user patients mistrust on both sides arose around the subject of pain relief (Lloyd 2013). In addition to concerns over prescription opioid pain relievers being sold, many healthcare providers view requests for opioid pain relievers as examples of manipulative behavior deriving from the patient’s addiction, which is typically viewed as outside their scope of care, rather than manifestations of a medical disorder (Merrill et al. 2002). This mistrust is exacerbated by the difficulties in measuring levels of pain relief in chronic opiate users who have high levels of tolerance to opioids, and by the occurrence in some users (including people on methadone maintenance) of opioid-induced hyperalgesia, which increases sensitivity to pain (Morgan and White 2009). While doctors are concerned about being deceived by patients, opiate-addicted patients feel that doctors are insensitive to their pain. Patients often view these interactions, marked by physicians’ inconsistency in assessment

and avoidance of addressing patients’ pain and withdrawal, as intentional mistreatment or being punished for their addiction (Merrill et al. 2002).

In a study drawing upon open-ended interviews with 71 current drug users in New York City, predominantly cocaine and heroin users, negative experiences with the healthcare system fell into three broad categories. In addition to inadequate treatment for pain, respondents related experiences of poor healthcare that they perceived to be related to their being low-income, and poor healthcare stemming from prejudicial attitudes toward drug users among healthcare providers (Weiss et al. 2004). Particularly surprising and frustrating to respondents was the lack of understanding among healthcare providers of the nature of addiction, leading to simplistic demands by providers that patients “just stop” their drug use, treatment infused with the perceived judgment that users “did this to themselves,” and providers’ erroneous attribution of a range of symptoms to drug use or drug withdrawal (Weiss et al. 2004). For these reasons, drug users might attempt to hide their drug use in healthcare settings (Kurtz et al. 2005). In situations where drug users report good treatment from healthcare providers and their drug use has not been disclosed, fear of poorer treatment from medical providers if they were discovered to be drug users weighs heavily upon them (Weiss et al. 2004). This is only one way in which stigma attached to drug use may contribute to poor health outcomes.

A cross-sectional study of over one-thousand drug users in New York City (over 60% crack and cocaine users, over 60% heroin users, and nearly half injection drug users) looked at the effects of drug use stigma on physical and mental health. In addition to perceived discrimination across all aspects of daily living, the study examined participants’ perceived devaluation and alienation. Perceived devaluation occurs when drug users believe that most people hold common negative

stereotypes of drug users (i.e., a drug user is dangerous, a drug user is not a good person, and a drug user is unreliable); and alienation refers to the internalization of these negative views, resulting in shame and avoidance of others (Ahern, Stuber, and Galea 2007). All three domains of stigma examined in the study – discrimination, perceived devaluation, and alienation – were experienced at high levels by the cohort (65%-85%). Experience of discrimination was found to be associated with poorer physical health; and alienation and discrimination were each found to be associated with poorer mental health (Ahern, Stuber, and Galea 2007). The results suggest that the perceived negative opinions of others is less important in regard to health than the acting upon those opinions in the form of poor treatment (discrimination) or the internalization of those opinions (alienation).

Implementing structural reforms to promote and facilitate integration between harm reduction and the healthcare system are fundamentally important, but knowledge and attitudinal barriers among individual practitioners or the problematic “culture” of particular practices may yet remain. Discriminatory practices against drug users may even be codified into treatment pre-authorization protocols used by insurance companies, for instance in the case of hepatitis C treatment for an active drug user being denied because of the patient’s cocaine use, as described by both a physician key informant and in a harm reduction program peer outreach worker focus group. In a review of research that examined access to medical treatment for hepatitis C among people who inject drugs, discriminatory treatment by healthcare practitioners was commonly cited (Harris and Rhodes 2013). Although examples of poor quality care for active drug users abound in the literature, the problems cited can also be viewed as part of a larger problem of practitioners lacking empathy

for their patients. The issue of clinical empathy has received heightened attention recently in relation to the importance of patient satisfaction and improved outcomes in revised Medicare and Medicaid reimbursement methods stemming from the Affordable Care Act, and has also been identified as an issue in malpractice claims by a major malpractice insurer (Boodman 2015).

Beliefs and attitudes held by individual practitioners that are in conflict with harm reduction principles and practice lead to those providers simply being avoided as a referred source of care (harm reduction provider care manager, focus group, December 5, 2014), or as has occurred in the co-location partnership between a healthcare clinic and a harm reduction provider in the case study that follows, the re-assignment of healthcare practitioners from the harm reduction site (KI). At least one Health Home in New York City is planning to undertake a basic level of training of clinical providers in their network regarding harm reduction through network in-service trainings conducted by harm reduction providers, as part of a larger program of orientations and in-service trainings among network providers who serve drug users. Despite questions regarding how effective such trainings might be in enhancing provider knowledge and skills to improve relationships between clinical providers and active injection drug users, these trainings will hopefully be a first step in fostering new relationships between harm reduction and clinical providers for the benefit of participants (KI). One physician we interviewed who provides care to active drug users believes that the reluctance on the part of many established healthcare providers to treat injection drug users is unlikely to be overcome by training. However, he believes that through training young physicians in medical school in issues related to substance use and addiction, the number of physicians willing to

treat injection drug users can be expanded (KI). This view is supported by evidence of improved attitudes and less anticipated discomfort toward alcohol- and heroin-dependent patients among medical students after structured blocks of drug and alcohol education that included contact and interaction with drug users in small-group settings (Silins et al. 2007). Without such training, as well as enhanced clinical training regarding addictions and pain management for opiate-drug users, physicians, nurses, and other healthcare practitioners are as susceptible to the influence of negative societal attitudes toward injection drug users as anyone.

Harm reduction providers understand the alienation experienced by drug users. Alienation commonly experienced by drug users may in itself negatively affect health through being a source of stress (Ahern, Stuber, and Galea 2007). Harm reduction providers purposefully act as a counterweight to the forces of devaluation and discrimination prevalent in society that manifest themselves within drug users as alienation and chronic stress. Harm reduction's foundational orientation to offer services free of stigma results in a welcoming environment for drug users that engages them, thus making the potential benefits of structural reforms toward integration realizable. This orientation has applicability to other populations, particularly persons suffering with mental illness, who are a focus of Medicaid reform efforts, such as Health Homes and DSRIP in New York State. Both "public stigma" or perceived devaluation by others and internalized "self-stigma" or alienation are widely recognized to inhibit care-seeking among people with mental illness (Corrigan 2004). Commonly held stereotypes about mental illness that motivate people to avoid the label of "mentally ill," and so contribute to the avoidance of care, are very similar to the stereotypes that burden drug users. People with mental illness are often

considered violent and dangerous, incompetent (incapable of independent living or real work), and are to blame for their disorders (because of weaknesses in their character) (Corrigan 2004).

“What you're really looking at for behavioral health to be effective is where are the friendly points of entry... and again, it doesn't matter whether you're talking about somebody who's bipolar and psychotic or you're talking about somebody who's bingeing on crack, people need soft, warm points of entry into a system that is low threshold, doesn't make a lot of demands, and begins to move them down a path that starts improving their health and reducing their cost. At the end of the day, that's what it's all about.”

- Harm reduction and AIDS services provider

With the goal of addressing the healthcare needs of the marginalized populations they serve, many harm reduction providers have taken steps to

3. Challenges in Meeting Harm Reduction Program Participants' Needs through Health Home Care Management

Because many harm reduction participants suffer from multiple chronic health conditions, including behavioral health issues, as well as experience challenges in accessing healthcare services from providers who are not always understanding and accommodating of their needs, they can often benefit from case management or care management services to facilitate access to needed healthcare.

Many harm reduction providers, in addition to operating syringe exchange programs and providing harm reduction counseling, have provided Targeted Case Management services (TCM) in their capacity as AIDS services providers. TCM, also sometimes referred to as COBRA case management (after the Consolidated Omnibus Budget Reconciliation Act of 1986 that established the reimbursed services category),

integrate clinical primary care and behavioral health services with the harm reduction services they provide at their service sites. Despite the philosophical, knowledge, and attitudinal barriers described above, harm reduction providers have found clinical care partners to extend harm reduction's low threshold service approach into a broader more comprehensive system of care. These initiatives range from on-site care coordination and case management to facilitate referrals for both off-site and on-site healthcare services, to residents in training from a nearby teaching hospital volunteering hours to see harm reduction participants at the harm reduction center, to a full-service Federally Qualified Health Center (FQHC) co-located at a harm reduction center. These activities are described in the following three sections.

offers case management services for particular targeted special populations, including people living with HIV/AIDS. With the implementation of the Health Home program, which seeks to provide care management for a broader array of Medicaid beneficiaries who have multiple chronic conditions, TCM is being phased out in New York, superseded by Health Home care management.

The Ryan White CARE Act is another significant source of support for many harm reduction providers to provide case management services designed to facilitate healthcare utilization for HIV-positive participants, particularly HIV healthcare and antiretroviral adherence. HIV-positive drug users are less likely to access needed medical care than HIV-positive members of other risk groups, and when they do access care they are less likely to have optimal utilization

of HIV healthcare services and are less likely to receive antiretroviral therapy (Cunningham et al. 2011). Observational studies consistently demonstrate benefits of case management services for HIV-positive drug users in terms of HIV healthcare utilization and antiretroviral adherence; however, randomized trials of case management services have shown mixed results (Cunningham et al. 2011).

One of the problems in evaluating the effectiveness of case management is defining what it entails. Case management may encompass a number of services in various combinations, each delivered in different ways with different kinds of staff depending on agency, sources and levels of funding, and participant need. Care management, using the term of the Health Home program, suggests a focus on facilitating utilization of healthcare services, which is generally viewed as a primary component of more comprehensive case management. However, in order to facilitate the receipt of healthcare services, a care manager often addresses a broad spectrum of issues that act as barriers to appropriate healthcare utilization, such as inadequate housing and other basic needs that are unmet. In other words, care management often requires much more than the limited scope that its name suggests. Although the New York State Health Home Provider Manual lists “crisis intervention” planning and linking the client with “community supports to ensure that needed services are provided,” including “peer supports, support groups, social services, [and] entitlement programs as needed,” the emphasis in the examples of core care management activities listed in the manual is not surprisingly on medical care coordination (New York State Department of Health 2014b). Relatively little recognition and no specific mention are given to other factors that often impede a client from utilizing needed healthcare services.

The broader view of case management that addresses a wide range of participant needs, including needs that the participant often prioritizes above healthcare, characterizes the approach taken by harm reduction/AIDS services providers in how they delivered TCM services prior to the introduction of the Health Home program. There is no inherent conflict between the practice of this form of case management and care management under the Health Home program. However, the increased number of clients assigned; the broadened range of health conditions afflicting the clients reflective of Health Home eligibility criteria (severe mental illness or at least two chronic health conditions, including both physical and behavioral health); and the change from fee-for-service to a fixed per member per month (PMPM) payment methodology that results in a reduction in per client reimbursement have combined to present significant challenges to meeting client needs, according to lead Health Home agency executives, care management agency executives, and care managers.

Harm reduction participant needs

In interviews we conducted with executive and care management staff of harm reduction providers that have been transitioning from HIV/AIDS Targeted Case Management to Health Homes care management, two client priority needs were consistently identified that, left unmet, undermine prospects for success at increasing more appropriate lower cost healthcare utilization, and thereby reduce costly inpatient utilization: housing and mental health services.

“There’s just not enough housing to support all the need. Low-income housing is just not low-income housing anymore. It’s been a struggle. Housing has always been... from the time I have been in this agency, housing was always the goal of every client that came in ... and then it was like, well what about medical? And they were like, “Oh yeah, well put some medical in there, too, but I really need the housing.”

- Harm reduction provider care manager focus group

Over 25% of the New York City harm reduction participants surveyed by IDUHA sleep in public places or homeless shelters (IDUHA 2014a). The challenges associated with locating affordable housing in New York City are widespread, affecting low-income individuals and families regardless of health status. In some respects, through the creation of targeted housing programs for individuals with certain medical diagnoses, such as HIV/AIDS and mental illness, people with these conditions have housing options unavailable to the general population. The problem remains that demand far outstrips the supply. Further, for example with 2010e supportive housing for people with mental illness, certain requirements such as an established medical history, which many harm reduction participants lack, present barriers to establishing eligibility (harm reduction provider care manager focus group). Care managers who served HIV-positive individuals exclusively under TCM note that for people who have no income other than cash assistance under the New York State Safety Net Program there are more housing units available for people with HIV or AIDS than for those who are HIV-negative (KI). As the number and proportion of HIV-positive people served by harm reduction programs has decreased, in no small measure due to the success of harm reduction programs in reducing transmission of HIV among injection drug users, the housing options for their clientele overall have contracted.

To its credit, the New York State Department of Health has worked very hard to expand supportive housing options under its Medicaid Redesign efforts. These expansions are intended to benefit a broad array of high-cost Medicaid utilizers who are homeless or unstably housed (many of the same people eligible for Health Home care management) but has been set back by federal government refusal to support such initiatives through federal funding under Medicaid, severely limiting the number of units available. Although a strong case can be made for the link between unstable housing or homelessness to high-cost Medicaid utilization, especially for individuals with chronic health conditions, one harm reduction provider lamented the “pathologization” of the lack of basic needs such as housing instead of focusing on fundamental political and economic changes to address the lack of affordable housing (KI). Evidence from western nations other than the US strongly suggest that higher relative levels of spending on social determinants of health, such as adequate and stable housing and other social supports outside of the healthcare system, would contribute significantly to improved health outcomes and reduced healthcare costs (Bradley and Taylor 2013).

In regard to mental health services for harm reduction participants, again the situation they face is part of a larger problem; in this case, the lack of availability of mental health services providers who participate in the Medicaid program, compounded by challenges of a system of care that separates behavioral health services from other healthcare services. Harm reduction providers we interviewed expressed hope that DSRIP system integration and clinical improvement initiatives will help address both issues.

However, there are other barriers to mental health services specific to an active drug using population. A referral for mental health services may not be accepted by the mental health services provider if the patient is not abstinent or in recovery (KI); and the lapse of time from the intake process to initiation of therapy is typically a number of days, which increases the likelihood of non-adherence to care (KI). For these reasons, co-locating behavioral health services at the harm reduction center is a strategy being implemented by some harm reduction providers (for more information on this topic, see the Case Study on co-location, below).

Who the New York State Department of Health is targeting for Health Home enrollment

The identification of individuals eligible for Health Homes, leading to their enrollment into Health Home care management, is initiated by one of two processes: a New York State Department of Health (DOH) predictive algorithm utilizing Medicaid services data, which prioritizes individuals based on risk of future hospitalization; and community or “bottom up” referrals from healthcare providers, community-based care management providers, including harm reduction providers, and other agencies such as those who serve individuals re-entering the community from jail or prison. DOH has expressed concerns that some Health Homes have very large proportions of community-referred enrollments versus beneficiaries identified by DOH as highest risk for poor and costly outcomes. This is a concern because DOH believes that community referrals, who by definition are engaged in a system of care, may not be the highest risk individuals (KI).

However, those who are not in a system of care but are on the lists of beneficiaries targeted by DOH can be very difficult to find. Health Home executives and care managers we interviewed

uniformly cited problems with the lists provided by DOH, including individuals with out-of-date or invalid contact information, individuals no longer certified eligible for Medicaid, or deceased. DOH is well aware of these problems and has been working to improve the lists in order to improve program efficiency, achieve their objective of enrolling the priority highest risk beneficiaries, and reduce frustration among the Health Home and care management staff responsible for enrolling the beneficiaries prioritized by DOH.

Caseloads, acuity, and intensity of care management services under Health Homes

Despite the low enrollment rates of those beneficiaries identified by DOH, estimated by Health Home executives we interviewed at around 20% (2 KI sources), the transition from Targeted Case Management to Health Home care management has led to a tremendous increase in agency and individual care manager caseloads. Large numbers of community or “bottom up” referrals combined with the high prevalence of Health Home qualifying chronic conditions, resulting in approximately 450,000 Health Home eligible Medicaid beneficiaries across New York state (KI), have led to an explosion in the number of beneficiaries receiving care management services. A typical caseload under TCM was 15-35 per case manager, in many cases supplemented by one or two outreach workers who were either dedicated to a single case manager or assisted with the caseloads of two case managers (typically by conducting ongoing outreach as needed and providing escorts to healthcare and social services appointments). Under the Health Home program, caseloads have increased to an average of 50-80 per care manager staff person, with agencies utilizing a range of staffing structures in an attempt to maintain service quality and program accountability. There is an even greater increase in the overall caseload of

care management agencies, with one agency growing from 125 cases under TCM to over 1,700 under the Health Home program. Along with such growth, beyond personnel costs, overhead costs related to office space and communications technology have mushroomed (5 KI sources).

The particular challenge associated with this growth, voiced by Health Home executives and harm reduction providers that perform Health Home care management, is maintaining service quality in the face of an overall lower level of reimbursement per case. This relatively lower per case reimbursement, compared to TCM, is what drives up the staff caseloads. Whereas under TCM, case management was reimbursed on a fee-for-service basis related to specific case management activities, thus leading to higher levels of reimbursement for beneficiaries requiring more intensive services, under Health Home care management reimbursement is based upon a fixed per member per month rate. The base rate is adjusted for acuity associated with a beneficiary derived from the beneficiary’s Medicaid claims data history, along with adjustments for other factors like severity of illness and mental illness (New York State Department of Health 2014b). However, acuity scores based solely on clinical measures have proven grossly inadequate, as they do not account for variations in significant non-clinical factors that act as barriers to care.

In response to feedback from lead Health Homes and care management agencies, DOH has proposed a three-tier (low, medium, high) rate structure that adds further clinical adjustments (including HIV viral load and T-cell counts) and new “functional adjustments,” most significantly addressing the concerns of providers. These functional adjustments include imminent risk of, or current, homelessness; recent incarceration; recent inpatient stay for mental illness; recent inpatient stay for substance use disorder; and active substance use (New York State Department

of Health 2014c). State health department officials and Health Home executives noted during interviews with us that other factors could potentially be introduced into the reimbursement rate formula in the future using data from the Care Management Annual Reporting Tool (CMART). CMART incorporates information from the FACT-GP, an instrument that includes self-reported assessments of physical, social/family, emotional, and functional well-being, plus a supplemental Health Home functional questionnaire.

The receptivity of DOH to input from providers in the drafting of this first set of proposed changes is encouraging. Further adjustments will likely be indicated in the future to better reflect service intensity needs as the program matures and the impact of care management on healthcare utilization and health outcomes is evaluated. A possible future mitigating factor in the resource intensity demanded on care management is enhanced integration of healthcare services, including behavioral healthcare, through DSRIP and other means. Service integration in the form of co-location of services potentially makes care management more cost-efficient as well as more effective. A thorough discussion of this potential is included in the Case Study on co-location, below.

The changes in the care management rate structure described above are scheduled to go into effect January 1, 2016 (KI). There is a need to assess the impact these changes have on care management staffing and caseloads, and on resolving the problem of unmet need for patient navigation or escort services for Health Home participants. These are key outcomes to be examined with implementation of the revised rate structure. A number of Health Home care managers told us that they are currently unable to provide navigation and escort services to every beneficiary who needs it because of inadequate reimbursement, an issue particularly acute for providers serving a largely non-English speaking

population (KI; harm reduction provider care manager focus group) and harm reduction care manager providers serving active drug users.

The relation of the Health Home program to other healthcare reform initiatives

In the view of New York DOH, Health Homes provide a care management model that complements the service integration initiatives under DSRIP for all chronic conditions, and those under HARP for people with severe mental illness or substance use.

“Most of our readmissions in Medicaid are for people with behavioral health issues but 80% of those readmissions are for physical health problems. The numbers are compelling, and so our idea was that we would put a Health Home together that would have capabilities to treat someone with diabetes and congestive heart failure but they would also have to have a capability to treat people with schizophrenia and COPD. And that they would have to, over time, create a flexible resource to meet a comprehensive set of demands from people with multiple chronic illnesses... That’s what we think is critical on DSRIP. That’s what we think is going to be critical on the HARP project. And that’s what we think eventually Health Homes need to get to, the place where they are this platform for high-cost, high-needs patients to have no wrong door to care... In the publicly insured population, as I’ve been looking at the data for a while now, it’s the problem, the lack of integration of services, and the lack of access to comprehensive care for these populations.

- NYS DOH official

The role of syringe exchange programs, and other community-based providers who engage high-need, high-cost groups who are poorly served by the healthcare system, is viewed by DOH as important to all of these healthcare reform initiatives, with their role in outreach often highlighted (2 KI sources). Outreach could mean either conducting new outreach or referring existing cases, as is done with Health Home “bottom up” referrals. This potential extends beyond those providers discussed in this section, those with case management experience and an established history as a Medicaid provider under Targeted Case Management, who are now transitioning to Health Home care management. There are a number of syringe exchange programs without this history who also have a large participant base of beneficiaries with multiple chronic illnesses who could benefit from being better integrated into the broader healthcare system (KI). A key question is, through what mechanisms can harm reduction providers, for the benefit of their program participants, be integrated into healthcare reform beyond the role of providing Health Home care management?

4. Asserting Harm Reduction Providers’ Central Place in the Healthcare System for their Participants

Healthcare reform initiatives in New York, such as the Health Home program and DSRIP and HARP, have helped to introduce an increasing number of healthcare system executives and administrators to the potential role of harm reduction providers in helping to achieve the quality and cost objectives of healthcare reform, both as care managers and sources of community-based services that can positively influence health outcomes. However, harm reduction providers have needed to assert these roles. Many healthcare system executives, administrators, and practitioners are still unfamiliar with the full scope and impact of harm reduction services on beneficiary health, and they have myriad other issues related to healthcare reform to contend with in a short timeframe. As DSRIP and HARP move from the planning stages to implementation, harm reduction providers need to continue to take the initiative in identifying and developing opportunities for integration with the rapidly evolving healthcare system.

Before looking at those opportunities for integration, we will first focus on recent changes among participants served by harm reduction providers and changes in the public perception of harm reduction. Additionally, we will explore in more depth how harm reduction providers help participants prioritize healthcare.

Harm reduction providers’ changing clientele and the widening acceptance of harm reduction strategies to improve drug user health

As noted above, less than half of recently surveyed harm reduction program participants in New York City are active injection drug users (IDUHA 2014a). This survey finding predominantly reflects utilizers of harm reduction providers’ fixed-

site locations and, reportedly, this proportion is significantly reduced from 10-15 years ago. According to a key informant in a position that offers a broad overview of changes in the field, most of the continued growth in syringe exchange occurring since that time has resulted from peer delivered syringe exchange (KI). Peer delivered syringe exchange is the process by which syringe exchange program participants and peers working under program supervision distribute syringes outside harm reduction providers’ fixed-site locations or formal mobile-van distribution efforts. This practice, which had always occurred informally, received a boost in 2007 when New York State regulations were amended to formally allow it (New York State Department of Health AIDS Institute. 2014). Of course, this provides particular challenges to engaging IDUs who receive syringes in this fashion into other aspects of services offered by harm reduction providers (3 KI sources), including healthcare, care management and onsite physical and behavioral healthcare services.

With recent attention in the media and New York legislature directed toward a new group of opiate users – younger, predominantly white, and more suburban and rural than the profile of an injection drug user typically conjured in people’s minds – we sought to assess the situation from the perspective of harm reduction providers. In light of the overall increase in heroin use found nationally (a 50% increase in self-reported heroin use from 2008 to 2013) (SAMHSA 2014) and anecdotal and news media reports of increased heroin use among young people who had started their opioid use with prescription pain relievers, we asked harm reduction providers if they were noticing a shift in demographics among participants. Insofar this shift is reflected among participants, it appears to be specific

to geography and the communities served by particular harm reduction programs. Programs outside New York City and those within New York City that serve a predominantly white non-Hispanic population are noticing the shift toward more participants under age 30; while other programs serving primarily black and Hispanic communities are not seeing such a shift. The youth oriented sexual health programs operated by the parent organizations of two such harm reduction programs, serving a similar black and Hispanic racial/ethnic demographic, report no increase in opiate or injection drug use among the youth they serve, with preferred drugs remaining marijuana, ecstasy, and snorted methamphetamine (2 KI sources). Two other New York City harm reduction programs and two upstate programs that serve a significant number of white participants have noticed an increase over the past couple of years in the number of syringe exchange participants that are under age 30 and white (3 KI sources). This conforms with data from a recent study of opioid users seeking drug treatment, strongly indicating that the recent increase in heroin use is predominantly found among whites (Cicero et al. 2014).

Expanding access to naloxone, the opioid antagonist that functions as a highly effective overdose antidote, has gained broad support in the past year in New York State, as it has in much of the country. Training and funding for police officers and other first responders to administer naloxone has expanded. In addition, a bill that increases access to naloxone by allowing the prescribing and dispensing of naloxone to non-patient laypersons in a position to assist those experiencing opioid overdoses, such as friends, family members, and non-medical community-based program staff, passed both houses of the New York State legislature unanimously in 2014. As a result, the naloxone trainings that harm reduction providers conduct have

expanded beyond syringe exchange program participants. For example, harm reduction providers have conducted naloxone trainings, organized and sponsored by local hospitals, that are aimed at reaching the broader community (KI). These trainings are expected to grow in number and in the breadth of people trained.

Another way in which hospitals and harm reduction programs can collaborate to save lives of overdose victims is through consistent implementation of steps contained in NYS DOH and OASAS guidance to hospital emergency departments to refer non-fatal opioid overdose victims to medication-assisted treatment and harm reduction programs (New York State Department of Health, n.d.). It is not clear to what extent referrals from hospitals to harm reduction programs are occurring as prescribed in the guidance, “for patients not willing or able to abstain from substance use.” Harm reduction provider management and SEP harm reduction counselors we talked to were unaware of such referrals occurring (4 KI sources); however, care managers working at one harm reduction provider did report that they had received such referrals (harm reduction services provider care manager focus group), indicating that the referrals are made by a hospital social worker to a harm reduction care manager rather than directly to SEP staff. This issue needs further investigation and appropriate follow-up training of all parties where indicated.

While the term “harm reduction” is rarely used in statements by elected officials in connection to programs designed to expand access to naloxone, the focus is clearly on avoiding preventable deaths among active opioid drug users, including injection heroin users. Legislators and other government officials responsible for putting these programs in place are responding to their constituents and the collective desire to save lives.

“If you have to say there’s something positive that’s come out of this prescription drug epidemic, it’s that it really has shifted the conversation about addiction in communities that never wanted to have that conversation before. Back in the 1980s, when we had lots of people with AIDS coming to us for help, there were white middle-class people, people’s kids, but in those days if that happened in your family, you’d just disown that person. You kicked them out, you disowned them, and they ended up going down to the poor neighborhoods and hanging out with the people there. But because it’s so widespread now... it really has shifted the conversation. I mean people actually talk about addiction as being a disease now. When I said that 20 years ago, I was shouted down... I think it’s shifted the attitudes in a way where it’s unlikely that it’s ever going to shift back.”

Harm reduction services provider

Harm Reduction providers’ relationships with drug treatment providers

In the past, the relationship between harm reduction providers and many drug treatment providers has been fraught with contention and conflict, stemming from fundamental differences in philosophy that inform their respective approaches to improving the health and well-being of drug users. The conflict is most prominent in regard to abstinence-based treatment programs, which generally have a similarly based objection to medication-assisted drug treatment, such as methadone maintenance and treatment that utilizes buprenorphine or suboxone, as they do toward harm reduction. However, key informants we interviewed report that relationships have improved, in part based on some common ground found between abstinence-based treatment programs and harm reduction programs in saving lives with naloxone. As harm reduction programs have initiated more community-based education efforts, including naloxone training, drug

treatment programs have requested naloxone training for their staff from harm reduction providers and the Harm Reduction Coalition (KI). People discharged from residential treatment are at elevated risk for opioid overdose due to diminished tolerance (Davoli et al. 2007), and treatment providers recognize that having staff trained in naloxone administration could be extremely valuable for their clients as they re-enter the community. From a similar orientation, some harm reduction providers are presenting themselves as a resource for abstinence-based treatment programs in situations that a client is discharged from the treatment program for non-compliance (e.g., having a dirty urine). As an alternative to being turned out to the street, they can be referred to and engaged in harm reduction services that may constitute treatment readiness (KI). Beyond the specific example of naloxone, the longstanding position of harm reduction providers that harm reduction occupies a place on the spectrum of drug treatment, rather than being outside of or in opposition to treatment, has gained credibility in the New York City treatment community in recent years (2 KI sources). However, in upstate New York the old lines of demarcation persist more strongly (KI).

A key harm reduction strategy is to support the reduction of drug use among program participants in accordance with participant goals, and medication-assisted treatment is an important tool in those efforts. Methadone maintenance slots are severely limited in most upstate communities, so for local harm reduction providers the option of referring injection drug users to methadone maintenance programs is severely constrained. Methadone maintenance programs are generally quite available for New York City residents – 49.3% of NYC harm reduction program participants surveyed by IDUHA report current methadone

maintenance participation, indicative of success in supporting participants to substitute methadone for injected heroin (IDUHA 2014a).

The availability of buprenorphine or suboxone treatment, which allows people to take the opioid-substitution medication on their own rather than visiting a methadone clinic each day, is limited both upstate and in New York City. The proportion of NYC harm reduction participants taking buprenorphine or suboxone is only 3.0% (IDUHA 2014a). Buprenorphine and suboxone availability problems are viewed as a product of federal regulations that limit the number of patients a single physician is authorized to treat (National Alliance of Advocates for Buprenorphine Treatment 2015), perceived administrative burdens in being an authorized prescriber, and the overall scarcity of physicians interested in treating drug users.

A strategy to expand availability of buprenorphine and suboxone would logically include integrating prescribing physicians with harm reduction providers, whether through referral agreements or co-location. Buprenorphine and suboxone are natural candidates for such a service since they can be prescribed by physicians in traditional office and clinic settings. This is discussed more in the Case Study on co-location, below.

Even though national associations of drug courts such as the National Drug Court Institute and the affiliated National Association of Drug Court Professionals have supported the use of medication-assisted treatment since the early 2000s, (National Drug Court Institute 2002) (National Association of Drug Court Professionals, n.d.), drug courts largely reject medication-assisted treatment as an option (Matusow et al. 2014) with many drug court judges still holding biased and unfounded beliefs about medication-assisted treatment (Legal Action Center 2011). The result is large numbers of drug users are steered onto an abstinence-only path of treatment for which they are unsuited or not

ready, and which too often results in relapse, heightened risk of overdose, and incarceration. As explained by one key informant, clinical guidelines require that a person be ready for abstinence before undertaking an abstinence-based course of treatment. However, in receiving court-mandated individuals, abstinence-based treatment programs have not been in a position to turn away individuals or suggest alternative treatment modalities if they deem the individual not ready for abstinence (KI). In February 2015, in a high-level break from past policy, the Office of National Drug Control Policy announced that federal grants will no longer be available to drug courts that prohibit the use of suboxone, buprenorphine, or methadone (Grim and Cherkis 2015). Although many drug courts do not receive federal grant funds and would not be directly affected, this federal level policy change may signal the beginning of far-reaching policy changes affecting the treatment options available to people sentenced in drug courts, with a beneficial impact on treatment outcomes.

Incentives for drug treatment and healthcare providers to work with harm reduction providers

As Medicaid Redesign initiatives, such as DSRIP and HARP, are implemented and discussions involving harm reduction, substance use treatment, and healthcare providers have intensified, many harm reduction providers are more clearly seeing the benefits of what they have to offer to providers of other health services: engagement with a high-cost and hard-to-reach population and flexibility that puts a greater focus on health outcomes than on the means to achieve them. This reach and approach creates referral opportunities and other opportunities for collaboration with a wide variety of service providers, and is consistent with the focus of Medicaid Redesign.

“The way I’ve presented this to [drug treatment providers] who I have a better relationship with... I’ve been frank with them and I say, “Nobody cares about your philosophy, nobody cares.” The people paying for this, they could care less that you believe that abstinence is the only way for people to achieve recovery. They care about how you’re going to save them money... and so if that requires you to be okay with people smoking weed and taking Xanax as long as they’re staying off opiates and they have good health outcomes, well then that’s your problem, not the payers’ problem, you know? It’s all about cost and outcomes, and so you might need to be okay with people showing up dirty for marijuana and cocaine if they’re on suboxone, right? Because as long as it’s keeping them stable, that’s what the payers care about.

- Harm reduction services provider

One harm reduction program we spoke with described the efforts of a large medical institution in New York City to consolidate and expand their hepatitis C, HIV, and sexually transmitted infection services in a single clinic, with the support of dedicated grant funds. That clinic needs patients and the nearby harm reduction program is viewed as a potential source of patients (KI). This provides some leverage for the harm reduction provider to act as an advocate for its participants, to try to ensure that they are treated respectfully, not stigmatized, and that other barriers to care at the clinic are addressed.

DSRIP provides the most far-reaching incentives for healthcare systems to work with harm reduction providers. The vast majority of harm reduction participants are Medicaid beneficiaries and many have multiple chronic conditions and are high utilizers of emergency department and inpatient services, as noted above in Section 1. Through the New York State DSRIP attribution methodology (New York State Department of Health 2014d), Medicaid beneficiaries who utilize particular hospital emergency departments and inpatient services will be attributed to the Performing Provider System to which that

hospital is affiliated, making the PPS responsible for reducing preventable emergency department and inpatient usage among those attributed beneficiaries. If successful in reducing preventable emergency department and inpatient usage among its attributed beneficiaries, a PPS will receive incentive payments from Medicaid. Clinical and systems reforms aimed at reducing preventable emergency department and inpatient usage will include strategies to improve utilization of primary care, behavioral health, and to increase medication compliance. The intended result is improved health and the prevention of health crisis events that lead to emergency department and inpatient use. The role of harm reduction providers in achieving these objectives in regard to their participants is key.

The logistics of integrating harm reduction with healthcare services

In the section on care management above, care managers noted the need for escort or navigation services for many harm reduction participants and others they serve in order to ensure they follow through on referrals and follow-up care. Harm reduction providers expressed some hope that DSRIP reforms will result in more user-friendly easy to navigate healthcare systems, but at least for the short-term escort services are very important. However, as noted, the current Health Home care management reimbursement levels are inadequate to meet the demand for escort services and it is not yet clear whether the proposed revisions to the reimbursement methodology will fully address the gap between need and resources in regard to more intensive care management services such as escorts. When even an initial escort to familiarize a participant with a clinic location is not feasible because of competing demands on personnel, harm reduction staff may prepare a participant for a clinical care referral by visually walking them through what they will encounter, with cues and

landmarks of what to expect at a clinic location, so they are able to get to where they need to be and have some confidence that they will be able to navigate themselves (KI). Harm reduction staff, whether designated Health Home care managers or other staff performing a similar function, must be personally familiar with the clinic locations to which they refer participants. In the course of familiarizing themselves with clinic locations, they may identify potential barriers to care, such as security procedures.

“The other day I went to a meeting at a [hospital] because we’re participating in their DSRIP work. You know, they’re talking about how challenging [it is to have patients keep appointments]... but I walked in and there’s like a metal detector and people checking ID. And before you even get to where you even think... I didn’t even know if it was the right building because it’s so complicated... and I was like, well there you go. I’ll tell you right now there’s a barrier. That’s why people aren’t showing up... There is a lot of cultural awareness that needs to happen... Somebody’s not going to go to your clinic if they have to go through a metal detector and bring their ID. Or if they do, they really need to be prepped for it. Or have somebody go with them the first time.

- Harm reduction services provider

A major logistical barrier is one discussed earlier: finding healthcare providers that provide care in a manner that does not alienate harm reduction program participants. A syringe exchange program manager and harm reduction counselor discussed the need for a directory of providers who understand and embrace harm reduction principles (KI). She explained that within a certain clinic or hospital, differences often exist, with some practitioners willing to work with active drug users from a harm reduction perspective and others not. A detailed directory would facilitate successful referrals and integration of services for harm reduction participants across a spectrum of services and practitioners

– primary care, medical specialties, behavioral health, and substance use treatment. In effect, such directories are kept informally by SEP staff and care managers; however, the information is not systematically maintained or shared.

The problem is even more acute in upstate New York (KI), in large part because of the relatively small number of providers to choose from. Bad experiences with healthcare providers tend to be shared among participants, reinforcing reluctance to utilize services, especially in small communities.

“I had this discussion the other day with one of the [hospital’s] DSRIP folks, she was writing the section on cultural competence and asked for input. I had to say to her very, very frankly... If medical providers were able to competently work with the GLBT community, with injection drug users, with active substance users, there’d be no reason for me to exist. You could do everything that my organization does within your own organizations already... We’ve recently had folks bringing their friends to our offices... a friend that was overdosing, and they drove him to the office so that our staff could inject him with naloxone rather than going to the ER. So, it speaks to two things: it speaks to not wanting to be treated in the manner that they feel they’d be treated at the ER, and also a level of trust for us.

- Harm reduction services provider

Partnerships between harm reduction and healthcare providers

Formal partnerships with healthcare providers, beyond Health Home care management, is a strategy that a number of harm reduction providers are pursuing in order to ensure respect and accommodation in the healthcare system for their participants. Contracts or negotiated memorandums of understanding form a legal basis to advocate for respectful responsive treatment of harm reduction participants in the healthcare setting and provide a framework in

which issues can be discussed and resolved to both parties’ satisfaction. It is also a strategy designed to create funding mechanisms to help support the comprehensive services provided by harm reduction providers that contribute to achieving the goals of healthcare reform.

Discussions between harm reduction providers and hospitals in the course of developing plans for DSRIP Performing Provider Systems include hospitals (typically the lead agency in a PPS) subcontracting with harm reduction providers to provide services that can help reduce emergency department admissions. What those services might include is still the subject of discussions, but a contractual arrangement is the framework (KI). These discussions tend to occur from the basis of an existing relationship, e.g., teaching hospital faculty arranging for and overseeing medical students who volunteer clinical service time at a harm reduction provider site possibly evolving to a more formal relationship between the hospital and harm reduction provider. Another approach is for hospitals to extend their Article 28 clinic certification to a harm reduction provider site through part-time clinics authorized in Title 10 of the NYCRR (New York State Department of Health 2007) in which the hospital would provide clinical services to harm reduction participants and pay a space usage fee or rent to the harm reduction provider (KI). Revenue directed to space and other overhead expenses could be very helpful to harm reduction providers as they try to balance operational expenses against limited funding streams, many of which are grants that have relatively low caps on indirect costs.

Similar efforts to create co-located harm reduction and clinical care services include Federally Qualified Health Centers (FQHCs) as partners. Some harm reduction providers believe that FQHCs have advantages over hospital Article 28 clinics because FQHCs’ enhanced Medicaid reimbursement rates allow them greater flexibility

in pursuing partnerships, e.g., in terms of more easily attaining sufficient patient volume for economic viability of the co-located clinical services (KI). As FQHCs are integrated into DSRIP Performing Provider Systems, in part because of their own more comprehensive array of services delivered from community-based settings, they have reason to be receptive to partnerships with harm reduction providers in order to extend their reach and expand their patient base. In addition to new partnerships between FQHCs and harm reduction providers, some harm reduction programs and FQHCs are operated by the same parent agency, with existing co-location of syringe exchange and clinical services at FQHC sites or close coordination between harm reduction services and clinical services located in the same communities (2 KI sources). One harm reduction provider that has an addiction treatment license in addition to being a certified syringe exchange program is in the process of becoming a wholly owned subsidiary of an FQHC. The goal is to create a fully integrated harm reduction oriented health clinic in their community (KI).

Many harm reduction providers that are not affiliated with FQHCs have explored, in the past, the possibility of delivering clinical services themselves at their sites, going as far as considering regulatory requirements for the size of examination rooms and ventilation in remodeling facilities (KI). However, the costs and expertise required to establish and directly operate clinical health services have been found to be prohibitive (4 KI sources). In the FQHC-harm reduction provider partnership discussed in the co-location case study below, regulations that govern FQHCs require that the clinical services be open to the whole community. In addition, from a financial feasibility perspective, the patient base needs to include community residents who are not harm reduction program participants (2 KI sources). However, the sharing of space with

people who are not harm reduction program participants raises concerns among some participants that they may lose important qualities of their program space, which many consider a haven or home for themselves (KI). As the case study below discusses, there are architectural layout solutions to address these concerns; however, the solutions might not be available and applicable to all harm reduction program facilities.

Another partnership arrangement that achieves integration would entail harm reduction services, including syringe exchange and harm reduction counseling, to be delivered from an existing community health clinic site (KI). This approach might be a feasible strategy to achieve the benefits of co-location in suburban and rural areas that have a lower density of injection drug users than urban areas.

Partnering with behavioral health providers is a subject being discussed by many harm reduction providers, both in regard to DSRIP clinical improvement projects and HARP Home and Community Based Services (HCBS). While most New York City Performing Provider Systems selected a population health project that seeks to improve access to and retention in HIV care (7 of 10; however, 0 of 15 in the rest of the state), only 1 of 25 Performing Provider Systems statewide chose to undertake the HIV/AIDS clinical improvement project (Cohen and Shearer 2015), the project for which NYS DOH guidance cites harm reduction providers as potential partners (New York State Department of Health 2014e). Clinical improvement projects and system integration projects are more highly valued within DSRIP compared to population health projects, according to the DSRIP project index scores (New York State Department of Health 2014e), with the result being that explicit HIV-focused projects were a relatively low priority among Performing Provider Systems. The conclusion a harm reduction provider who was involved in shaping

New York Medicaid Redesign initiatives draws from these facts is that harm reduction providers' best potential point of entry into high-priority healthcare reform initiatives is through behavioral health (KI). The DSRIP clinical improvement project seeking to integrate primary and behavioral healthcare services was selected by all 25 of the approved Performing Provider Systems in the state; and the integrated delivery systems project that involves integrating behavioral health and physical healthcare services was selected by 22 of 25 PPS's (Cohen and Shearer 2015).

The February 2015 decision by CMS to designate harm reduction providers as safety net providers removes them from the pool of community-based services providers that are capped at 5% of total incentive payments under DSRIP (KI). Although this decision frees harm reduction providers from fighting over a small limited pool of DSRIP incentive payments, the alternative strategy to secure funds from healthcare systems up front, through subcontracts or rent for clinical space, still holds advantages for harm reduction providers. With subcontracts and space rental agreements, harm reduction providers are able to count on a defined payment amount and the cash flow advantages under this arrangement in contrast to incentive payments are significant for small community-based organizations. Nevertheless, as relationships between healthcare systems and harm reduction providers evolve under DSRIP, with harm reduction providers become part of Performing Provider Systems, the potential support of harm reduction through DSRIP incentive payments should be thoroughly explored.

In addition to offering value to Performing Provider Systems in relation to the more abundant and highly valued opportunities for behavioral health under DSRIP (in contrast to HIV/AIDS), harm reduction providers are looking toward the launch of HARP Home and Community Based

Services. Many harm reduction participants are expected to be eligible for HARP HCBS, so the role of harm reduction providers in delivering and facilitating the receipt of these services for their participants would make sense. However, beyond peer support services that most harm reduction providers are experienced in providing, the opportunities for harm reduction providers to participate in HCBS are not clear. The fact that

harm reduction providers, through providing low threshold comprehensive supportive services, have relationships with some of the people with severe mental illness who are eligible for HCBS suggests that there may be further opportunities for sub-contractual and co-location partnerships between harm reduction and behavioral healthcare providers that provide HARP Home and Community Based Services.

5. Addressing Harm Reduction Providers' Capacity and Operational Support Needs

When the Medicaid Redesign Team process to reform the Medicaid program in New York began in 2011, harm reduction providers were wary of changes that could emerge from the process, specifically changes that would require them to rely on Medicaid reimbursements rather than New York State DOH AIDS Institute grant funding to support core harm reductions services (harm reduction advocate, June 27, 2014). However, throughout the MRT process, the NYS DOH AIDS Institute assured harm reduction providers that the grant program would continue. Further, somewhat ironically, the federal prohibition on funding syringe exchange provided some comfort and assurance that grant funding would continue as the federal prohibition foreclosed Medicaid is not an alternative source of funding for syringe exchange. There remains other harm reduction services, such as harm reduction education and counseling, that are candidates for a change of funding source from grants to Medicaid reimbursement, and New York State has a pending State Plan Amendment to CMS that would allow Medicaid reimbursement for harm reduction counseling.

The uncertainty in net funding such changes would cause was exacerbated by concerns among many harm reduction providers about their ability to bill Medicaid (IDUHA 2013)(Partners

for Organizational Excellence 2013) (KI). The concerns centered around two issues: 1) many harm reduction providers, particularly smaller providers and those who had not previously billed Medicaid under the Targeted Case Management program, were concerned about their organizational capacity to bill Medicaid and the administrative and infrastructure costs associated with incorporating Medicaid billing into their operations; and 2) the fact that syringe exchange programs, aiming to be low threshold services and associated with injection drug use that remains illegal, have traditionally operated without knowing a participant's identity; this practice of anonymous services and using assigned participant numbers rather than names or other identifying information to track service provision is incompatible with the requirements of Medicaid billing.

The AIDS Institute, New York City DOHMH, the Injection Drug User Health Alliance, and the Harm Reduction Coalition have all been active in assessing the capacity of harm reduction providers for Medicaid billing and conveying feedback on the issue to the New York DOH Office of Health Insurance Programs, which oversees the Medicaid program (3 KI sources). Further, IDUHA and the Harm Reduction Coalition report that OHIP has been receptive

to resolving the issue in a way that meets Medicaid requirements and still preserves anonymous services in some fashion, although the contours of what such a solution might look like are not yet clear. This issue presents itself not only in regard to future Medicaid billing for harm reduction services but currently within some harm reduction programs in relation to coordination between their syringe exchange services, Health Home care management, and on-site clinical services they may offer through partnerships with healthcare providers (KI). Based on syringe exchange participant focus groups and informal conversations that have occurred between program staff and participants, some providers believe that participants would not object to their Medicaid numbers being linked to harm reduction services if the use of such identifying information was limited and clearly explained to participants (2 KI sources). As with all aspects of harm reduction services, gaining and preserving participant trust is key and providers expressed confidence that this issue can be resolved in a way that satisfies that need as well as Medicaid requirements.

Harm reduction provider organizational capacity to bill Medicaid has been examined by IDUHA in a broader context to not only address organizational capacity to bill Medicaid but also organizational capacity to enter into and operate within contractual partnerships with healthcare providers (2 KI sources). This more comprehensive view of the organizational challenges posed by healthcare reform is needed in the short term and might be ultimately more significant than the Medicaid billing issue as DSRIP and HCBS are implemented. As is noted in the previous section and in the co-location case study, partnerships with healthcare providers that are already authorized and reimbursed Medicaid providers is an approach that has been and will continue to be pursued by harm

reduction providers, resulting in their integration with Medicaid reimbursed healthcare services but under financial arrangements that do not require them to bill Medicaid directly themselves.

In an effort aimed at providing assistance to harm reduction providers in negotiating contracts with DSRIP Performing Provider Systems, Managed Care Organizations, Home and Community Based Services providers, and other healthcare entities, IDUHA is taking steps toward forming an Independent Practice Association (IPA) for harm reduction providers (KI). IPAs have been touted as a way for small independent physician practices to organize in a manner that both promotes and protects their interests in dealings with MCOs (Merritt 2012) and furthers the goals of accountable care models, such as DSRIP, through facilitating the formation of integrated healthcare systems that include small independent practices that would otherwise remain outside the influence of accountable care structures (Shields et al. 2011). In addition to the short-term need for enhanced organizational capacity in negotiating contracts and possibly facilitating mergers, an IPA could also address the Medicaid billing issue by performing that function on behalf of member harm reduction providers. It could also facilitate the sharing of Electronic Health Record information between harm reduction providers and other healthcare entities, an important aspect of integration, by being a vehicle for pooling resources and building capacity toward standardization (KI).

Case Study: How and Why Co-Location Works as an Effective Model of Services Integration

Introduction

As we conducted the literature review and key informant interviews for this study, certain themes and strategies related to harm reduction and healthcare system integration arose repeatedly: cultural competence, care coordination, and co-location of services. BOOM!Health, Inc. operates a harm reduction center in the Bronx that provides an ideal setting for a case study of how these issues intersect in regard to offering well-utilized integrated services for harm reduction participants. In addition to operating a syringe exchange program and the array of harm reduction, HIV and HCV testing, care management, and support services fairly typical of harm reduction programs, BOOM!Health also offers on-site primary healthcare, mental health services, suboxone treatment, and pharmacy services.

The case study question is: “How and why do co-located harm reduction and healthcare services lead to higher or more appropriate healthcare utilization for current and former injection drug users?” The case study does not test the hypothesis that co-location does, in fact, lead to higher or more appropriate healthcare utilization. Testing that hypothesis is beyond the scope of this study and a case study is not an appropriate method to approach that question (Yin 2014). Based on the literature and anecdotal reports from key informant interviews we conducted, we presume that co-located harm reduction and healthcare services offer advantages for healthcare utilization and, in accordance with the kind of questions case studies are best suited to address – “how” and “why” questions – we organized the case study to try to understand the mechanisms that lead to better utilization given the co-location of healthcare resources.

Findings

Review of the literature

The association between co-located service models and improved outcomes for active and former drug users has been explored in many studies. Most of these studies have measured either the utilization of health care services, such as linkage to HIV or primary care treatment and utilization of emergency department versus outpatient services (Gourevitch et al. 2007); or patient outcomes such as medication compliance,

rate of drug use, length of retention in treatment, relapse, and social stability (Samet, Friedmann, and Saitz 2001). The co-location of primary care and drug treatment has been especially well-studied through the provision of buprenorphine in medical care clinics (O’Connor et al. 1998; Sullivan et al. 2006; Trigg, Murphy, and Tsang 2011), as well as medical care offered in drug treatment clinics, especially methadone maintenance treatment programs (MMTP) (Gourevitch et al. 2007; Rothman et al. 2007). For example, one

study of a 1997 nationally representative sample of outpatient drug treatment centers found a significant correlation between the provision of on-site medical and psychosocial services and higher client utilization of ancillary services, but found no association between referral agreements to off-site healthcare providers and service utilization (Friedmann et al. 2000). Similarly, higher utilization of medical care and other ancillary services were associated with on-site case management, but not off-site case management (Friedmann et al. 2000). Additionally, several randomized studies found that the co-location of medical care and MMTP was associated with higher treatment adherence outcomes than a non-integrated setting (O'Connor et al. 1998; Umbricht-Schneider et al. 1994). Few rigorous studies, however, have been undertaken to evaluate co-located services specifically targeting injection drug users in harm reduction settings. In 2012, Islam and his colleagues conducted a narrative synthesis of the literature on IDU-targeted primary health care, most commonly offered through SEP on-site services or referrals. Consistent with the range of SEP models in New York, their review found that service models and services available varied among settings, but that by 2008 most SEPs in the United State had some on-site clinical and social services and frequently made referrals to drug treatment; yet, most of the primary healthcare services offered at SEPs were limited and related to drug use (Islam et al. 2012). While a few studies have suggested that co-located models may be more effective in improving health outcomes for IDUs (Stein, Samet, and O'Connor 1993), rigorous evaluations of their cost-effectiveness, financial sustainability, and impact on service utilization and IDU health, as well as studies on implementation obstacles, are lacking (Islam et al. 2012).

Background to healthcare services co-location at the BOOM!Health harm reduction center

The President and Chief Program Officer of BOOM!Health, Robert Cordero, explains the motivation to co-locate healthcare services at a harm reduction services site.

“One of the things that was striking to me is that, as a syringe exchange, we had been almost exclusively concerning ourselves with the transaction of the syringe exchange and providing that low-threshold access to the syringe, which is great, and providing some basic necessities, but that we were not paying enough attention to the holistic needs of the people that we were working with. So, it might be dealing with a diabetes diagnosis, but we were doing nothing to ensure any kind of coordination of care around their diabetes because we were laser-focused — because of categorical funding restrictions in contracts and lack of vision on our part to provide the comprehensive services... So, we were giving out a needle but their toes were falling off from diabetes-related blood circulation issues. And so the entire motivation to get co-located healthcare and pharmacy wrapped around all the basic needs services really came from that.

BOOM!Health management explained further why co-location offers distinct advantages for their participants in contrast to relying on referrals to off-site healthcare providers. Active drug users are in particular need of escort and advocacy services to access care at an off-site location, but providing that navigation is not always possible in terms of care management funding and available staffing.

“[Participants] walk out the [healthcare] facility and they get distracted in many ways. So, having the services right on site and having the patient navigator to escort them and monitor that they're accessing the services, as well as the level of convenience for the client, too... It helps ensure that the services were received by the patient. And the same thing with the pharmacy... Occasionally, the patient will leave the provider's office with a prescription, they'll lose the prescription while they get distracted on the walk home... And there's also the issue of [whether] a specific prescription has been filled or not. It's an additional level of monitoring in that, as well, with the pharmacy on-site and the care manager going with them to get their medication.

- Senior VP for Programs and Partnerships, BOOM!Health

In earlier sections of this report we discussed many of the factors that inhibit utilization of healthcare services by active drug users, from stigmatization and disrespect on the part of many healthcare providers, to the prioritization of meeting basic needs and acquiring drugs over health and healthcare among many drug users. We will discuss these issues further in the BOOM!Health harm reduction center context, and attempt to tease out the thematic threads of cultural competence, care management, and co-located services and examine how they interact to influence the outcomes of improved healthcare utilization and improved health. However, before proceeding, it is important to understand the culture of the service delivery site. This is the context in which all the distinct services are organized and delivered.

The Health Home care managers who work at the BOOM!Health harm reduction center spoke to their observations and experiences in regard to participants:

“Not only is it to access services, which obviously they need, but a lot of it from what I've seen in my experience, a lot of it is for social support. You walk in and they're huddled and they're talking, it's like “Oh, you should get...” So, yes, they get it from the case managers and the groups that they attend but a lot of it is that camaraderie, to be able to have a place where they can kind of just talk and just be together.

And treated with respect too... a warm meal... so you get them to eat, and meet their basic needs first. They need to be fed first if they're going to a medical appointment...

The ability to use a shower and do laundry. There's no cost to the person. [They] get those two items that are just part of basic daily living for free.

Just being able to receive their mail there. A lot of them just got out of rehab [and might have an] HRA re-certification letter that's sitting there waiting... The ability to say, “We need to get on the phone and get working to re-certify...”

The program participants explain what the harm reduction center offers them:

“I have my doctors downstairs, I have my visit with psych. I realize that once you stop drugs, things start to happen with your body. This starts to hurt, that happens. It's the effect of the drugs. While you're doing it you're fine, or you think you're fine. Nothing hurts, you don't feel anything is out of place, but once you stop, things like... your back starts hurting... I didn't know I had 2 herniated discs. I have 2 herniated discs, I have bulging discs, I suffer from COPD, I have psychological problems, I suffer from chronic depression. I have numerous health issues. And like I said, I come here and I see the doctor and they take great care of me. Medicinally and also psychologically.

Once you are an addict, you forget about your health. But I came here, and they all listened and every day the same thing, except one day I stopped, and I said yo, even though I don't like it, they're telling the truth, I'm being irresponsible with my life, with my health. I'm not taking care of what I need to take care. These people helped me go into treatment for my liver.

I receive mail here, you know? This is like my house. Right now I'm in the streets. I just go . . . my little place, I go there just to sleep, change clothes. This is my place. I come here from over there. I bring everything, take a shower, take care of myself, eat breakfast, lunch, and dinner, take a shower and go back home. This is like my house, this is like my family. I see them every day.

Every week they give you food in a bag... Christmas they give you something, Thanksgiving Day. They show a lot of love. You see somebody smile. The people living in the street. They pass the time like this. People who don't got nobody. These people here will help you no matter who you are. No matter if you're using drugs every day... they treat you with respect. They treat you like a human.

Social support, in both formal programmatic terms and informal peer support, is often neglected in healthcare settings and in establishing standards of care, yet arises as a barrier to care in many ways: in regard to understanding and acting upon medical instructions (especially for those with low English proficiency), medication adherence, keeping appointments, motivation regarding improving and maintaining health and how that is affected by depression. Addressing basic needs through providing pantry bags of food and meals, a warm place to spend the day; and maintaining a connection and communication to the world, including the healthcare system, through access to computers and a place to receive mail, are critical to facilitating appropriate healthcare utilization for many people. It's not necessarily the role of the healthcare system to create these places, but it becomes incumbent upon the healthcare system to partner with such places and work to ensure that they can operate.

Co-location partnerships – financial and other pragmatic considerations

As the following parts of the case study will demonstrate, partnerships between harm reduction providers and healthcare services providers need to be firmly based on common service missions and compatible service philosophies. Beyond these commonalities, distinct and complementary resources and market access strengthens the value proposition for each potential partner, which speaks to the bottom line issue of financial viability. The partnership between BOOM!Health and HELP/PSI, a primary healthcare provider with a long history of serving people living with HIV/AIDS and the homeless, as well as BOOM!Health's partnership with Evers Pharmacy, an independent pharmacy serving New York City, illustrate these qualities.

BOOM!Health is the product of a 2013 merger between Citiwide Harm Reduction and Bronx AIDS Services. Prior to the merger, then Citiwide Executive Director and current BOOM!Health President and Chief Program Officer Robert Cordero examined different ways to offer co-located primary healthcare services at the harm reduction center. His examination accounted for the strengths and capacity of his own organization and those of potential partners, and he developed a value proposition for a partnership that reflected these respective assets.

Cordero concluded that it would be best to find a Federally Qualified Health Center (FQHC) partner. The reasons for this speak to both shared service mission and financial considerations, which in turn strongly influence the manner in which services can be delivered. As noted in the Findings, analysis done by Cordero and by other harm reduction providers investigating the possibility of offering co-located services effectively precluded the possibility of a full-service primary healthcare provider solely dedicated to serving a harm

reduction center's participants (2 KI sources). If calculating from the Medicaid reimbursement rates of, for example, a hospital-affiliated clinic, projections of patient volume necessary to break even financially could not be realistically achieved from a patient base of harm reduction participants only. Even if open to the broader community, the high volume needed to be financially viable would alter the character of a harm reduction center, likely leading to the loss of the environment so highly valued by participants. However, the enhanced Medicaid reimbursement rates of FQHCs in combination with their lower overhead costs (compared to hospitals, for example) could allow a co-located clinic to serve both harm reduction participants and the broader community at a reasonable patient volume. With FQHCs, the question of serving the broader community is not only a financial necessity but a requirement of their status as a Federally Qualified Health Center; however, they do not need to serve the broader community in a high-volume fashion in order to cover operational costs. Another important and related consideration was that a practitioner could take more time in a clinical encounter in an FQHC because of their enhanced reimbursement rates. Cordero believes this is key to providing holistic and effective healthcare services to harm reduction participants.

Cordero formerly worked at HELP/PSI and so was familiar with the organization, its values and mission, and had confidence that they could carry out what he envisioned. He acknowledges that he could have cast a wider net for potential FQHC partners but, as he said of the time this was undertaken, there was no track record for this kind of partnership. It's not surprising that the partnership grew out of established relationships and the knowledge and confidence those relationships had produced.

HELP/PSI saw the partnership as an opportunity to serve a population not receiving adequate medical care, i.e., Citiwide/BOOM!Health harm reduction participants, and to extend their services to a bigger population in the South Bronx (KI). Cordero, speaking both from the perspective of BOOM!Health and from his knowledge of HELP/PSI believes that the partnership not only resulted in a dramatic increase in access to primary and behavioral healthcare for harm reduction participants, but that it also increased the skill set and capacity of HELP/PSI to deliver services to active drug users across all of their service locations.

Evers Pharmacy had a working relationship with HELP/PSI and, as a result, HELP/PSI introduced them to the opportunity to co-locate a pharmacy at the harm reduction center when Citiwide Harm Reduction issued an RFP for pharmacy services. Similar to HELP/PSI, Evers estimates that about half of their patient base is from the harm reduction center and the other half from the broader community. Evers believes such a broad-based patient base is necessary for the long-term financial viability of their operations at the harm reduction center (KI).

HELP/PSI and Evers Pharmacy are located next to each other on the second floor of the harm reduction center facility, along with BOOM!Health's behavioral services therapist. The physical layout fosters coordination of care (discussed more fully below) and also allows the sharing of healthcare services between harm reduction participants and members of the broader community without requiring the harm reduction participants to give up space that they feel is theirs. The fact that the healthcare space is on a separate floor from the syringe exchange, group and meal rooms, and shower and laundry facilities (on the third and fourth floors) that are

used exclusively by harm reduction participants certainly makes this “best of both worlds” aspect of co-location at BOOM!Health easier to achieve than, for example, in a facility where all services would have to be on a single floor.

The financial relationship between BOOM!Health and both HELP/PSI and Evers Pharmacy is a simple one. HELP/PSI and Evers Pharmacy pay BOOM!Health rent for the space they occupy. There are no shared financial interests or other financial arrangements to the partnerships. Through the rent payments, the partnerships generate earned income for BOOM!Health to help cover overhead costs and to re-invest in programmatic initiatives.

Co-location partnerships and cultural competence

As discussed above in Section 2. of the Findings, many challenges and potential barriers exist to achieving coordinated patient-centered services for active drug users given the different philosophical orientations of medical practice and harm reduction. Upon initiating the partnership, there was no formal training of HELP/PSI staff in cultural competence regarding serving active drug users, nor in the harm reduction approach to offering services. Although HELP/PSI had experience working with similar populations, in retrospect they believe such training might have helped avoid some of the difficulties encountered early on (KI). HELP/PSI noted in interviews with us that finding the appropriate staff to work in a harm reduction center, practitioners as well as front desk staff, required some trial and error. In some cases, individuals who HELP/PSI management thought would do well in a harm reduction environment did not, and others in whom they had some doubts ended up flourishing (KI). Similar situations were noted by care management supervisors in regard to the

Health Home care managers located at the harm reduction center, many of whom worked as TCM case managers with Bronx AIDS Services prior to the merger with Citiwide Harm Reduction, and so did not necessarily have a strong grounding in harm reduction approaches to service and care (KI). Co-location offers advantages in these situations by facilitating early identification of problems that are quickly brought to the attention of management of both BOOM!Health and its partners, who then work together rapidly to resolve issues in order to prevent damage to relationships with participants.

The imperative of maintaining engagement with participants/patients is a driving force in BOOM!Health’s approach to services and, despite challenges this at times presents for medical providers, it has become fully accepted and adopted by HELP/PSI and Evers Pharmacy. A syringe exchange program staff person related an incident where a participant had ingested some fentanyl, an extremely strong opioid and, unable to find the SEP staff person, went to the HELP/PSI clinic and asked to be watched because he was concerned he might overdose. The SEP staff person arrived at the clinic and made an agreement with the participant that she would monitor him in the clinic waiting area. However, the doctor at the clinic told the SEP staff person that he was calling 911 because fentanyl was involved. The SEP staff person explained to the doctor that the participant needed to agree to that, that he needed to be involved in the decision. Otherwise, she feared that the next time he ingested fentanyl he might not come to the harm reduction center. So the doctor and the SEP person explained to the participant the seriousness of the situation and the participant agreed that 911 be called (KI). It’s important to note that HELP/PSI and Evers Pharmacy share much of this orientation regarding maintaining patient engagement from their own past

work and organizational missions, but some specific circumstances arising at the harm reduction center have been new for them.

This is not to suggest that resolution of conflicts has been one-sided. BOOM!Health has had to adapt in cases as well, and. As described by HELP/PSI’s medical director:

We have boundaries that we don’t cross and that led to some miscommunication in the beginning, where it seemed like we were at cross-purposes. So, patients would feel unhappy with something that happened in the clinic and they would go to their counselor at BOOM!, because of the different sort of philosophies. I think sometimes the people at BOOM!Health would give them a different message than what we were giving... I’m not saying one was right or one was wrong but it was different. It took some time for us to all get on the same page.

These issues centered around pain management, the prescribing of opioid pain relievers and benzodiazepines, and led to a meeting between HELP/PSI’s clinical director and BOOM!Health staff in order to share HELP/PSI’s perspective and concerns. The meeting resulted in a greater understanding by BOOM!Health staff of the issues and parameters medical providers work under, as well as enhanced understanding of potentially serious negative consequences for participants related to more liberal prescribing practices drawn from HELP/PSI’s experience serving active drug users at their other clinic locations (KI). The use of pain management contracts that the clinical provider, care manager, and participant all agree to is an approach that has been utilized successfully to establish a common understanding of expectations for all parties involved. In this manner, the co-located care manager, fully knowledgeable of a participant’s health issues and participation across all aspects of the harm reduction center, is a critical source

of information and mediator in resolving issues that pose threats to the participant’s health and well-being. Plans to make such sharing of knowledge and experience routine through regular case conferences between clinic staff and program staff and care managers are underway.

Another form of cultural competence for BOOM!Health’s participant base is being able to speak Spanish. HELP/PSI reports that patient satisfaction with services, measured by anecdotal reports as well as the rate at which follow-up appointments are kept, has increased significantly since they switched from English-only speaking practitioners to practitioners who speak Spanish. Being competent in the primary language of patients increases patient comfort and allows their active involvement in developing and following treatment plans (KI). Discussing off-site service referrals for Spanish-speaking participants, BOOM!Health care managers agree about the importance of language competence among practitioners.

On-site care managers, patient navigators, and coordinated care

Our initial understanding of how improved access and utilization of services resulted from co-location under-estimated the role of care management services. The concept of co-location is sometimes posited as an alternative to active care management as a means to achieve service integration. It’s as if physical proximity of various types of services naturally leads to their being integrated and coordinated, whereas in practice active care management and coordination is crucial to take advantage of the potential for integration that co-location offers.

“In my opinion, [the care managers] are the most critical part of the entire puzzle because our patients go to them the most. Because they’re the ones that help them with their Medicaid issues, they’re the ones that help them with their housing issues, they’re the ones that help them with anything that comes up. Their most frequent visit is to their care managers, so they’re the ones that really are able to make this all work.

- On-site pharmacist, Evers Pharmacy

In addition to the Health Home care managers based at the harm reduction center, a team of on-site patient navigators is critical to achieving service integration. Care managers and patient navigators are continuously walking participants up from meetings with their care managers or down from the syringe exchange or education and support groups and meals to the clinic and behavioral health therapist on the second floor, where they assist the participant in making an appointment or being seen as a walk-in. The navigators, because of their constant escorting throughout the building, know which participants are in the building each day. As a result, if a participant doesn’t appear for a clinic appointment on time, clinic staff will ask a navigator to search for the participant and bring them to the clinic (3 KI sources). As indicated by the quotes from participants above, many participants spend most of their days at the harm reduction center, allowing this process to work.

Through the HELP/PSI clinic, the harm reduction center is able to offer suboxone opioid replacement therapy. Referrals to the HELP/PSI doctor authorized to provide suboxone treatment come from other practitioners in the clinic, BOOM!Health care managers and syringe exchange staff, and also self-referrals of participants who have heard about it from peers or may have bought it on the street and thought it could help them (KI). Care management is very important for suboxone

treatment to be successful and to be carried out in accordance with the strict federal rules that govern its dispensing and use.

“You need to come to all your appointments. You can’t miss appointments and expect to get your medications. This is all in the treatment agreement that is reviewed and signed. And a lot of times it doesn’t work out. When it works, it’s fantastic. I have patients who are doing great, functioning at a very high level in the community without any legal issues, without any substance abuse issues. So, it’s a great tool to help with opioid addiction, but in this population, there’s a lot of... there’s often a struggle. And certainly it has a street value. So there are those people who come in with no intention of using it for sobriety, they want to sell it. And it’s a process to identify those individuals and weed them out; and send them to a more appropriate modality.

- Vice-President and Regional Medical Director, HELP/PSI

Clinic nurses or nurse practitioners often case conference with the BOOM! behavioral therapist and care managers in regard to participants whose behavior causes concern for the participant’s and others’ well-being and safety (KI). Discussions often concern medication adherence, so the pharmacy adjacent to the clinic is brought into the conversation to determine if the participant has filled or re-filled prescriptions. In many cases, especially for homeless participants, closer than normal medication adherence monitoring is possible because the pharmacy will dispense weekly rather than 30-day or longer supplies. This is done because homeless participants are more vulnerable to losing, selling, or having their medication stolen (KI). The pharmacy strives to have new prescriptions filled prior to patients leaving their clinic appointment to minimize the risk of a condition going untreated. Further, it’s common for the pharmacy to dispense medications, especially for those patients

with multiple chronic conditions and multiple prescriptions, in custom blister packs that group medications to be taken together at particular times of the day, with symbols indicating morning or night. This kind of repackaging helps ensure patients take their medications in another way – by rendering the medications, particularly very expensive medications such as HIV anti-retroviral drugs, valueless on a black market in which other pharmacies, through intermediaries, are the ultimate buyers. This particular black market requires medication be in original packaging with lot numbers (KI).

The quality of healthcare available to low-income drug using patients varies, as has been discussed in earlier sections. Not only is there often a problem in regard to pain being inadequately treated, according to BOOM!Health care managers there is the converse problem of some providers all too willing to accede to patient demands for certain drugs, primarily pain and psychotropic medications. For this reason, some participants

Conclusion

The physical proximity inherent to co-location fosters the development of standards and practices that promote more appropriate utilization of primary and behavioral healthcare and medication adherence in a number of ways. These standards and practices relate to: a common service orientation grounded in the principles of harm reduction; rapid resolution of differences in policies, practices, and approach among partner agencies; informal and formal mechanisms for expeditiously sharing important information about cases among healthcare practitioners, pharmacists, SEP harm reduction counselors, and care managers; avoiding barriers to utilization posed by multiple service locations; and rendering care management functions, such as communication across providers and

prefer off-site providers who give cursory examinations and give in to patient requests for certain medications (care manager focus group). However, most participants appreciate the quality of care they receive at the harm reduction center and opt to receive their care there.

“When you go to, let’s say to [an outside doctor] to get, let’s say help, psychology help. They don’t treat you the same. It’s like, well, I say they’re getting paid and they just want the money. They don’t care about trying to find which is the problem, trying to find where it comes from... [With an outside doctor], you go, they ask you two questions, Are you good? You taking the pill? Okay, bye.

- BOOM!Health harm reduction program participant

Commonalities across both forms of poor quality treatment are lack of time, information, and inclination to see the patient in holistic terms. These deficits in care are addressed by the co-located services at BOOM!Health through the combined and coordinated efforts of all partners.

patient escort, more efficient and therefore more widely available in an extremely challenging funding environment. Co-location of healthcare, care management, and a comprehensive range of harm reduction and support services effectively translates the rhetoric of “patient-centered care” to meaningful practice.

The persistence of significant difficulties when arranging outside healthcare services for BOOM!Health participants underlines the benefits of co-located services – more precisely, the benefits of culturally competent co-located services supported by care management resources. Referrals from within BOOM!Health to outside healthcare providers may originate from the syringe exchange program, the HELP/PSI clinic, or from care managers. When trying

to arrange and ensure the receipt of off-site healthcare services, many of the same difficulties in achieving integrated care that confront other harm reduction providers and Health Home care managers apply to BOOM!Health: multiple information technology systems that don't communicate across agencies, impeding timely transfer of information that can be used proactively to facilitate the receipt of care (KI);

fragmented care, requiring multiple appointments often at multiple locations; lack of adequate resources to escort participants to appointments when needed (care manager focus group); and inadequate numbers of non-stigmatizing sources of care for active drug users, along with the lack of a comprehensive database of providers willing and able to care for active drug users (KI).

Drawing Lessons from Harm Reduction for Broader Healthcare Reform

Given New York's rich history and wide array of community level harm reduction services, and one of the most aggressive, expansive, and innovative Medicaid programs in the country, the work being done by harm reduction programs and healthcare providers to integrate harm reduction into healthcare is not surprising. Opportunities for integration continue to be identified and tested. Though in many ways still in their early stages, the efforts described in this report present instructive examples of how healthcare systems and community-based organizations can come together to deliver more appropriate, responsive, holistic, and effective health and social services.

Harm reduction services developed from a singular focus on achieving a health outcome: the prevention of HIV transmission. As healthcare reform efforts shift the focus of the system ever more strongly to outcomes, through value-based payments that reward results rather than

procedures, there are lessons to be drawn from harm reduction's "by any means necessary" ethos. Harm reduction providers' service delivery model for syringe exchange, low-threshold services absent the typical requirements for receiving health and social services, has allowed a unique level of engagement and trust to develop between them and their injection drug using participants, one of the populations that the traditional healthcare system has been unsuccessful at effectively serving. Engaging a previously unengaged population has driven harm reduction providers to deliver truly patient-centered care as they have learned from and evolved to meet the self-identified needs of their participants. Operating without the kinds of restrictions that come with a more defined reimbursable scope of services typical in the healthcare sector has facilitated this process.

Harm reduction providers' concept of patient-centered care is far more expansive than how patient-centered care is typically advanced by healthcare practitioners and policymakers, where the term typically refers to an array of coordinated clinical care services responsive to the range of a patient's clinical care needs. Harm reduction providers go far beyond a participant's clinical care needs to assess and address basic needs, like food, shelter, and social support. The service model recognizes that doing so is a prerequisite to addressing most clinical needs for substantial segments of the Medicaid population. In that the objective of meeting non-clinical basic needs is integral to providing effective clinical care to many populations, these needs become a concern and a necessary point of intervention for the healthcare system. Devising effective strategies for accomplishing this objective is an area in which harm reduction providers have much to share.

Moving from patient-centered care to person-centered care

Harm reduction provides a model of low threshold person-centered care as a foundation for comprehensive integrated healthcare services. This approach is applicable to other high-need high-cost populations who are not adequately engaged in ambulatory care.

I think again if we can package some kind of continuum that helps patients with where they're at, in terms of their own personal motivation for change and access to care, where you can get harm reduction services, you can get primary care, you can get behavioral health care, you can get access to housing, you can get access to other kinds of social determinant support. That's, I think, the sort of medical/behavioral health village that we're trying to drive toward in the delivery system transformation in DSRIP... I think we've underprovided that sort of one stop community stabilization and over-provided secondary, tertiary, and nursing level care for the failure to provide enough of that kind of safety net. I think it's critical for the patients that we're talking about to weave together that kind of ambulatory street level community support.

- NYS DOH official

Critical to this effort is an emphasis on responsive services that help to maintain engagement with a hard to engage population. By addressing participants' immediate needs and individual desires, harm reduction providers have created service environments in which highly stigmatized participants feel respected and even loved. The service site becomes a health and social support home in the truest sense. Service sites then become trusted as places that hold patient interests as primary, opening the door to successful service delivery because participants want to keep coming back and they are able to share their needs honestly. One key component to maintaining trust is choice. While some harm reduction providers have smaller menus of services than others, the unifying principle among them all is that participants decide what types of services are best for them to pursue their goals, and access and advocacy for those services is offered.

Aspects of this type of service delivery environment are often considered examples of cultural competence. And while developing cultural competence is an important process

oriented objective to pursue in order to create such a service delivery environment, it is perhaps more important to be guided by the ultimate outcome goal for creating such an environment. When the focus is firmly set on improving the health outcomes of the population served, the motivation for cultural competence becomes not only clearer but is made essential to the mode of service delivery: improved health outcomes, by any means necessary.

Harm reduction participants as illustrative of the care management and service integration needs of high-need and high-cost Medicaid beneficiaries

Numerous quality of care issues were raised in the key informant interviews and focus groups we conducted as barriers to appropriate healthcare utilization, issues that are not specific to active drug users – long waiting times, the need to juggle appointments across multiple locations, having adequate time in an encounter with a practitioner to feel valued and to receive and convey information in a language the patient understands, lack of empathy among practitioners, and lack of integration with social support and basic needs assistance. These are concerns for nearly all patients and certainly for most Medicaid beneficiaries. However, harm reduction participants’ situations are often so precarious, they cannot compensate for the shortcomings of the healthcare system in the way that others can. In this sense, the experience of harm reduction participants and the type of service delivery structures, processes, and interpersonal skills demanded by them become a test case for the adequacy of healthcare system reform efforts to improve the quality of care, improve health, and lower healthcare costs.

- Community-based support service providers as resources and partners

The move to value-based payment systems, such as the incentive payments under DSRIP and the expanding number of providers and payers forming ACOs, underline the value of community-based partners that are in a position to provide support and assistance to marginalized populations that improve their health outcomes. New York State DOH recognizes the role of these agencies in “stabilizing and improving the health of fragile populations” in regard to DSRIP (New York State Department of Health 2014f) (KI). Many community-based services improve health outcomes directly through disease prevention efforts and social supports that aid individual and family stabilization. Additionally, many community-based providers offer education, advocacy, and assistance that facilitate the appropriate utilization of healthcare services.

The utilization of community-based care management providers by lead Health Home agencies is one example of the healthcare system recognizing the value of community-based service providers. However, the possibilities for productive partnerships extend far beyond redirecting established services to current healthcare reforms efforts, such as with the transition of Targeted Case Management to Health Home care management, and the oft-cited potential contribution of community-based providers to perform outreach to unengaged populations. Now is the time for creative partnerships between healthcare systems and community-based service providers to improve the health of high-need high-cost populations.

A major challenge to the development of value-based payment systems that incentivize improved health outcomes over medical procedures is that “few models exist that successfully integrate clinical health care with social, public health, and/or community-based interventions” (Crawford et al. 2015). Largely unseen by policymakers, harm reduction providers in New York are

developing such models with their healthcare provider partners, through varied arrangements that include part-time clinic hours established at harm reduction centers by nearby teaching hospitals, coordination and co-location of clinical and harm reduction services within a single larger organization, and partnerships between healthcare and harm reduction providers to co-locate clinical and pharmacy services at a harm reduction center. Their efforts offer examples of community-based interventions that address the social determinants of health integrated with healthcare delivery.

These models can be instructive to healthcare reform initiatives that seek to develop and promote Advanced Primary Care models, as well as processes that are designed to share

best practices and develop local strategies to reduce health disparities, such as New York’s Population Health Improvement Program. The complementary value healthcare providers and community-based service providers bring to their partnerships are seen not only in the enhanced array of services for patients, but also in the strengthening of both the market position of the healthcare providers, and the future viability of the community-based organization amidst funding changes. This report is an attempt to raise awareness of these models so that they may be replicated and refined by other community-based service providers working together with healthcare provider partners to reduce healthcare costs and improve the health of the high-need populations they serve.

Policy Recommendations

Improve healthcare systems' capacity and competence to treat active and former drug users

1. Promote and facilitate integration of harm reduction and healthcare services beyond care management

- a. Provide technical assistance to harm reduction providers and healthcare providers to develop partnerships that implement integrated services models.
 - i. Partnership co-location models:
 - Co-locating a health clinic or other clinical services at a harm reduction provider site through simple space rental agreements. FQHC's are likely partners given their enhanced reimbursement rates.
 - Providing harm reduction services at a health clinic. This model may be especially attractive in rural and suburban regions where storefront syringe exchanges are less feasible for lack of sufficient demand.
 - ii. Integrated services within one organization has been demonstrated as a feasible approach in situations where a harm reduction provider is part of a larger organization that also operates a FQHC. Mergers of two organizations is one way to achieve the organizational structure to implement this model.
 - iii. Referrals supported by intensive care management as a means to integrate services across multiple locations, e.g., a harm reduction site and separate healthcare sites, is the least preferable model for achieving services integration for harm reduction participants; however, current arrangements can be improved upon with formal agreements.

Target audience: Harm Reduction providers, Harm Reduction Coalition, IDUHA, Community Health Care Association of New York State, FQHCs and other healthcare providers, Performing Provider Systems

- b. If implementing a co-location partnership model, harm reduction providers should at the outset:
 - 1) support integration with formal training in harm reduction principles and practice for partners not well-grounded in harm reduction; 2) arrange for reciprocal training of harm reduction staff regarding the practice and parameters of healthcare services delivery by their partners; and 3) institutionalize communication by establishing mechanisms for frequent contact between all levels of partnering organizations. Given different and often conflicting philosophies between harm reduction and healthcare providers, it can be helpful to anticipate conflicts at the outset and establish the infrastructure needed to discuss and solve problems as they arise.

Target audience: Harm reduction providers, Community Health Care Association of New York State, FQHCs and other healthcare providers, Harm Reduction Coalition, IDUHA

- c. Broaden provider eligibility for the Integrated Licensing Project to incentivize new co-located services in harm reduction settings by considering the following options:
 - i. Including providers with one license planning to add another license (e.g. a provider with an Article 28 part-time clinic planning to add an Article 31), and/or
 - ii. including co-located partner organizations operating under multiple behavioral and physical health licenses.

Target audience: NYS OMH, NYS OASAS, NYS DOH Integrated Licensing Project

- d. Facilitate healthcare integration through secondary syringe exchange by exploring different ways in which secondary syringe exchange can include healthcare integration efforts, e.g., through including healthcare integration outreach workers in secondary exchange; and training peers conducting secondary exchange to perform basic healthcare integration engagement.

Target audience: Harm reduction providers, care management agencies, Harm Reduction Coalition, IDUHA

2. Enable better communication and collaboration between healthcare systems and harm reduction providers

- a. Create and maintain an up-to-date searchable online directory of harm reduction oriented healthcare providers across various medical specialties, behavioral health and drug treatment providers, pharmacists, ancillary health service providers, and social support services agencies.
- b. Provide technical assistance to DSRIP Performing Provider Systems on why and how to partner with harm reduction providers and other community-based organizations that can contribute to achieving DSRIP goals to reduce emergency department use and inpatient hospitalizations.

Target audience: IDUHA, Harm Reduction Coalition, Performing Provider Systems

- c. Assess the extent to which NYS DOH and OASAS guidance to hospitals to refer non-fatal opioid overdose cases to medication-assisted treatment and harm reduction programs is occurring; conduct trainings to facilitate referral relationships as needed.

Target audience: NYS DOH OHIP, NYS OASAS, NYS AIDS Institute, Harm Reduction Coalition, IDUHA, harm reduction providers, care management agencies, The Academy's emergency medicine fellows, hospitals, Performing Provider Systems

3. Enhance medical education so physicians can better serve active drug users, considering among the following options:

- a. Introduce structured blocks of drug and alcohol education for medical students that include contact and interaction with drug users in small-group settings.
- b. Convene meetings between physicians with expertise in treating active drug users with medical students.

- c. Enhance training for medical students regarding Medication-Assisted Treatment for people with opiate dependence.
- d. Enhance training for medical students regarding pain management for people with opiate dependence.
- e. Facilitate Continuing Medical Education related to drug use, harm reduction, and Medication-Assisted Treatment.

Target audience: The New York Society of Addiction Medicine, Medical Schools and Teaching Hospitals, NYAM Fellows with expertise in addiction medicine and pain management, Harm Reduction Coalition, IDUHA, NYS DOH AIDS Institute

Assure necessary and appropriate care management for harm reduction participants and other marginalized populations

4. Recognize the importance of addressing the social determinants of health in Health Home care management

- a. Update the NYS Health Home Provider Manual to more explicitly address the non-clinical care coordination functions of Health Home care management.

Target audience: NYS DOH OHIP

- b. Educate healthcare providers about the Health Home program and value of care managers in addressing the social determinants of health and mitigating the barriers to appropriate healthcare utilization and adherence to medical advice.

Target audience: NYS DOH OHIP, lead Health Home agencies, Health Home care management agencies

5. Assess the impact of the Health Home care management PMPM rate revision, scheduled to go into effect January 1, 2016, to better reflect the care management resources required to meet beneficiary needs

- a. Evaluate changes in acuity scoring and reimbursement rate methodology that accounts for significant non-clinical “functional” beneficiary characteristics to accurately assess and rank beneficiary needs in relation to care management resource demands.
- b. Evaluate the implementation of changes in the rate structure to determine if payment is adequate to support the care management activities required for beneficiaries at different levels of need, and to assess their impact on care manager caseloads and beneficiary ambulatory care utilization patterns.

Target audience: NYS DOH OHIP

Expand substance use treatment options for harm reduction participants

6. Expand access to Medication-Assisted Treatment

- a. Train physicians on the benefits and related federal regulations of opioid addiction treatment with buprenorphine and suboxone to expand the pool of providers who are authorized by SAMHSA to prescribe these medications.

Target audience: NYS OASAS, The New York Society of Addiction Medicine, NYAM Fellows with expertise in addiction medicine, Harm Reduction Coalition, NYS DOH AIDS Institute

- b. Align New York State Drug Court policy and practice with new federal policy by: 1) mandating that drug courts allow defendants to continue use of Medication-Assisted Treatment (methadone, buprenorphine, and suboxone) under terms of drug court participation; and 2) offering Medication-Assisted Treatment as a treatment option to new cases coming before drug courts.

Target audience: New York State Association of Drug Treatment Court Professionals, New York Statewide Drug Court Coordinator, Drug Court Judges, District Attorneys, Center for Court Innovation, NYS OASAS

7. Support collaborative relationships between harm reduction providers and traditional substance use treatment programs

Facilitate communication and collaborative relationships between harm reduction providers and traditional substance use treatment providers in geographic proximity in order to 1) facilitate inter-agency referrals regarding treatment readiness and treatment; and 2) enhance participant stabilization in regard to drug use and basic needs, thereby contributing to healthcare reform efforts through supporting improved healthcare utilization, reduced emergency department and inpatient utilization, and improved health outcomes.

Target audience: NYS OASAS, NYS DOH AIDS Institute, NYC DOHMH

References Cited

- Ahern, Jennifer, Jennifer Stuber, and Sandro Galea. 2007. "Stigma, Discrimination and the Health of Illicit Drug Users." *Drug and Alcohol Dependence* 88 (2-3): 188–96. doi:10.1016/j.drugalcdep.2006.10.014.
- Alter, Myriam J., M.S. Kruszon-Moran, O.V. Nainan, G.M. McQuillan, F. Gao, L.A. Moyer, R.A. Kaslow, and H.S. Margolis. 1999. "The Prevalence of Hepatitis C Virus Infection in the United States, 1988 Through 1994." *The New England Journal of Medicine* 341 (8): 556–62.
- Ameijden, E J C Van, H J A Van Haastrecht, and R A Coutinho. 1992. "The Harm Reduction Approach and Risk Factors for Human Immunodeficiency Virus (HIV) Seroconversion in Injecting Drug Users, Amsterdam." *American Journal of Epidemiology* 136 (2): 236–43.
- Balter, S, J H Stark, J Kennedy, K Bornschlegel, and K Konty. 2014. "Estimating the Prevalence of Hepatitis C Infection in New York City Using Surveillance Data." *Epidemiology and Infection* 142 (2): 262–69. doi:10.1017/S0950268813000952.
- Blank, Fidela S J, Haiping Li, Philip L Henneman, Howard A Smithline, John S Santoro, Deborah Provost, and Ann M Maynard. 2005. "A Descriptive Study of Heavy Emergency Department Users at an Academic Emergency Department Reveals Heavy ED Users Have Better Access to Care than Average Users." *Journal of Emergency Nursing: JEN: Official Publication of the Emergency Department Nurses Association* 31 (2): 139–44. <http://www.sciencedirect.com/science/article/pii/S0099176705000607>.
- Boodman, Sandra G. 2015. "How to Teach Doctors Empathy." *The Atlantic*. <http://www.theatlantic.com/health/archive/2015/03/how-to-teach-doctors-empathy/387784/>.
- Bradley, Elizabeth, and Lauren Taylor. 2013. *The American Health Care Paradox*. First. New York: PublicAffairs / Perseus Books.
- Buning, Ernst C. 1991. "Effects of Amsterdam Needle and Syringe Exchange." *The International Journal of the Addictions* 26 (12): 1303–11.
- Center for Health Care Strategies. 2012. *Lessons for Health Homes Identified Through the Chronic Illness Demonstration Project Learning Collaborative*. https://www.health.ny.gov/health_care/medicaid/program/medicaid_health_homes/docs/02-24-2012_cidp_lessons_learned_CIDP.pdf.
- Centers for Medicare & Medicaid Services. 2015. "Managed Care." Accessed March 17. <http://medicaid.gov/medicaid-chip-program-information/by-topics/delivery-systems/managed-care/managed-care-site.html>.
- Cicero, Theodore J, Matthew S Ellis, Hilary L Surratt, and Steven P Kurtz. 2014. "The Changing Face of Heroin Use in the United States: A Retrospective Analysis of the Past 50 Years." *JAMA Psychiatry* 71 (7): 821–26. doi:10.1001/jamapsychiatry.2014.366.
- Cohen, Andrea G, and Chad Shearer. 2015. *Medicaid Performing Provider System Projects: Tackling the Health Needs of Communities*. New York, NY.
- "Comprehensive Medicaid Case Management Policy Guidelines." 2015. Accessed February 2. https://www.emedny.org/ProviderManuals/Cmcm/PDFS/CMCM_Policy.pdf.
- Corrigan, Patrick. 2004a. "How Stigma Interferes with Mental Health Care." *The American Psychologist* 59 (7): 614–25. doi:10.1037/0003-066X.59.7.614.
- . 2004b. "How Stigma Interferes with Mental Health Care." *The American Psychologist* 59 (7): 614–25. doi:10.1037/0003-066X.59.7.614.
- Crawford, Maia, Tricia McGinnis, John Auerbach, and Kristin Golden. 2015. *Population Health in Medicaid Delivery System Reforms*. http://www.milbank.org/uploads/documents/papers/CHCS_PopulationHealth_IssueBrief.pdf.
- Cunningham, Chinazo O, Nancy L Sohler, Nina A Cooperman, Karina M Berg, Alain H Litwin, and Julia H Arnsten. 2011. "Strategies to Improve Access to and Utilization of Health Care Services and Adherence to Antiretroviral Therapy among HIV-Infected Drug Users." *Substance Use & Misuse* 46 (2-3). Informa Healthcare New York: 218–32. <http://informahealthcare.com/doi/abs/10.3109/10826084.2011.522840>.
- Curran, J W, H W Jaffe, M Hardy, W M Morgan, R M Selik, and T J Dondero. 1988. "Epidemiology of HIV Infection and AIDS in the United States." *Science* (New York, N.Y.) 239 (4840): 610–16. <http://www.ncbi.nlm.nih.gov/pubmed/3340847>.
- Curtis, John. 2002. "IN FOCUS: Needle Exchange Program. Once Controversial Program Proves Its Impact in Fighting AIDS." *Yale Bulletin*. <http://www.yale.edu/opa/arc-ycb/v30.n16/story14.html>.
- Davoli, Marina, Anna M Bargagli, Carlo a Perucci, Patrizia Schifano, Valeria Belleudi, Matthew Hickman, Giuseppe Salamina, Roberto Diecidue, Federica Vigna-Taglianti, and Fabrizio Faggiano. 2007. "Risk of Fatal Overdose during and after Specialist Drug Treatment: The VEdeTTE Study, a National Multi-Site Prospective Cohort Study." *Addiction* (Abingdon, England) 102 (12): 1954–59. doi:10.1111/j.1360-0443.2007.02025.x.
- Des Jarlais, D C, M Marmor, D Paone, S Titus, Q Shi, T Perlis, B Jose, and S R Friedman. 1996. "HIV Incidence among Injecting Drug Users in New York City Syringe-Exchange Programmes." *Lancet* 348 (9033): 987–91. <http://www.ncbi.nlm.nih.gov/pubmed/8855855>.
- Des Jarlais, DC, SR Friedman, and D Strug. 1986. "AIDS and Needle Sharing within the IV-Drug Use Subculture." *In The Social Dimensions of AIDS*, edited by DA Feldman and TM Johnson, 111–25. New York: Praeger Publishers.
- Des Jarlais, Don C, Kamyar Arasteh, Courtney McKnight, Holly Hagan, David C Perlman, Lucia V Torian, Sara Beatrice, Salaam Semaan, and Samuel R Friedman. 2010. "HIV Infection during Limited versus Combined HIV Prevention Programs for IDUs in New York City: The Importance of Transmission Behaviors." *Drug and Alcohol Dependence* 109 (1-3): 154–60. doi:10.1016/j.drugalcdep.2009.12.028.
- Des Jarlais, Don C, Samuel R Friedman, Jo L Sothoran, John Wenston, Michael Marmor, Stanley R Yancovitz, Blanche Frank, Sara Beatrice, and Donna Mildvan. 1994. "Continuity and Change Within an HIV Epidemic." *JAMA: The Journal of the American Medical Association* 271 (2): 121–27.
- Des Jarlais, Don C, Courtney McKnight, Cullen Goldblatt, and David Purchase. 2009. "Doing Harm Reduction Better: Syringe Exchange in the United States." *Addiction* (Abingdon, England) 104 (9): 1441–46. doi:10.1111/j.1360-0443.2008.02465.x.

- Des Jarlais, Don C, Theresa Perlis, Kamyar Arasteh, Lucia V Torian, Sara Beatrice, Judith Milliken, Donna Mildvan, Stanley Yancovitz, and Samuel R Friedman. 2005. "HIV Incidence among Injection Drug Users in New York City, 1990 to 2002: Use of Serologic Test Algorithm to Assess Expansion of HIV Prevention Services." *American Journal of Public Health* 95 (8): 1439–44. doi:10.2105/AJPH.2003.036517.
- Des Jarlais, Don C. 1989. "HIV-1 Infection Among Intravenous Drug Users in Manhattan, New York City, From 1977 Through 1987." *JAMA: The Journal of the American Medical Association* 261 (7). American Medical Association: 1008. <http://ezproxy.tcnj.edu:2377/article.aspx?articleid=376365>.
- Des Jarlais, Don C., T Perlis, S R Friedman, T Chapman, J Kwok, R Rockwell, D Paone, J Milliken, and E Monterroso. 2000. "Behavioral Risk Reduction in a Declining HIV Epidemic: Injection Drug Users in New York City, 1990-1997." *American Journal of Public Health* 90 (7): 1112–16. <http://www.pubmedcentral.nih.gov/articlerender.fcgi?artid=1446283&tool=pmcentrez&rendertype=abstract>.
- Dohan, Daniel, and Deborah Schrag. 2005. "Using Navigators to Improve Care of Underserved Patients: Current Practices and Approaches." *Cancer* 104 (4): 848–55. doi:10.1002/cncr.21214.
- Fazio, Marcia L., and Michael Holley. 2013. "Integrated Licensing Project." New York State Office of Mental Health. https://www.omh.ny.gov/omhweb/mh_services_council/2013/0607/integrated_licensing_project_overview.pdf.
- Freeman, Harold P. 2012. "The Origin, Evolution, and Principles of Patient Navigation." *Cancer Epidemiology, Biomarkers & Prevention: A Publication of the American Association for Cancer Research, Cosponsored by the American Society of Preventive Oncology* 21 (10): 1614–17. doi:10.1158/1055-9965.EPI-12-0982.
- Friedmann, P D, T A D'Aunno, L Jin, and J A Alexander. 2000. "Medical and Psychosocial Services in Drug Abuse Treatment: Do Stronger Linkages Promote Client Utilization?" *Health Services Research* 35 (2): 443–65. <http://www.pubmedcentral.nih.gov/articlerender.fcgi?artid=1089128&tool=pmcentrez&rendertype=abstract>.
- Gates, Alexandra, Robin Rudowitz, and Jocelyn Guyer. 2014. An Overview of Delivery System Reform Incentive Payment (DSRIP) Waivers. <http://kff.org/medicaid/issue-brief/an-overview-of-delivery-system-reform-incentive-payment-waivers/>.
- GMHC. 2009. *Syringe Exchange Programs Around the World: The Global Context*.
- Gourevitch, Marc N, Pinka Chatterji, Nandini Deb, Ellie E Schoenbaum, and Barbara J Turner. 2007. "On-Site Medical Care in Methadone Maintenance: Associations with Health Care Use and Expenditures." *Journal of Substance Abuse Treatment* 32 (2): 143–51. doi:10.1016/j.jsat.2006.07.008.
- Grim, Ryan, and Jason Cherkis. 2015. "Federal Government Set To Crack Down On Drug Courts That Fail Addicts." *Huffington Post*. http://www.huffingtonpost.com/2015/02/05/drug-courts-suboxone_n_6625864.html.
- Gross, Jane. 1989. "Needle Exchange for Addicts Wins Foothold Against AIDS in Tacoma." *The New York Times*, January 29. <http://www.nytimes.com/1989/01/23/us/needle-exchange-for-addicts-wins-foothold-against-aids-in-tacoma.html>.
- Grund, Jean-Paul C., Samuel R. Friedman, L.Synn Stern, Benny Jose, Alan Neaigus, Richard Curtis, and Don C. Des Jarlais. 1996. "Syringe-Mediated Drug Sharing among Injecting Drug Users: Patterns, Social Context and Implications for Transmission of Blood-Borne Pathogens." *Social Science & Medicine* 42 (5): 691–703. doi:10.1016/0277-9536(95)00193-X.
- Hagan, H, and D C Des Jarlais. 2000. "HIV and HCV Infection among Injecting Drug Users." *The Mount Sinai Journal of Medicine*, New York 67 (5-6): 423–28. <http://www.ncbi.nlm.nih.gov/pubmed/11064493>.
- Hagan, Holly, James P. McGough, Hanne Thiede, Sharon Hopkins, Jeffrey Duchin, and E. Russell Alexander. 2000. "Reduced Injection Frequency and Increased Entry and Retention in Drug Treatment Associated with Needle-Exchange Participation in Seattle Drug Injectors." *Journal of Substance Abuse Treatment* 19: 247–52.
- Hall, H Irene, Ruiguang Song, Philip Rhodes, Joseph Prejean, Qian An, Lisa M Lee, John Karon, et al. 2008. "Estimation of HIV Incidence in the United States." *JAMA: The Journal of the American Medical Association* 300 (5): 520–29. doi:10.1001/jama.300.5.520.
- Harris, Magdalena, and Tim Rhodes. 2013. "Hepatitis C Treatment Access and Uptake for People Who Inject Drugs: A Review Mapping the Role of Social Factors." *Harm Reduction Journal* 10 (1). Harm Reduction Journal: 7. doi:10.1186/1477-7517-10-7.
- Heller, Daliah, Kate McCoy, and Chinazo Cunningham. 2004. "An Invisible Barrier to Integrating HIV Primary Care with Harm Reduction Services: Philosophical Clashes between the Harm Reduction and Medical Models." *Public Health Reports* 119 (1): 32–39. doi:10.1016/j.phr.2004.03.009.
- IDUHA. 2013. *New York State Medicaid Coverage for Harm Reduction Services, A White Paper: Positions and Policy Statements of the Injection Drug Users Health Alliance*.
- . 2014a. "IDUHA NYSDOH Presentation -Phase I." New York: IDUHA - Injection Drug Users Alliance.
- . 2014b. "IDUHA HR Participant Phase 2 Survey Results." IDUHA.
- Islam, M Mofizul, Libby Topp, Carolyn A Day, Angela Dawson, and Katherine M Conigrave. 2012. "The Accessibility, Acceptability, Health Impact and Cost Implications of Primary Healthcare Outlets That Target Injecting Drug Users: A Narrative Synthesis of Literature." *The International Journal on Drug Policy* 23 (2): 94–102. doi:10.1016/j.drugpo.2011.08.005.
- Joslyn Levy & Associates. 2014. *Care Management in New York State Health Homes*. <http://nyshealthfoundation.org/uploads/resources/care-management-new-york-state-health-homes-aug-2014.pdf>.
- Karon, J M, P S Rosenberg, G McQuillan, M Khare, M Gwinn, and L R Petersen. 1996. "Prevalence of HIV Infection in the United States, 1984 to 1992." *JAMA: The Journal of the American Medical Association* 276 (2): 126–31. <http://www.ncbi.nlm.nih.gov/pubmed/8656504>.
- Key Informants (KI). For list of Key Informants interviewed, see Appendix D.

- Kidorf, Michael, Van L King, Jessica Peirce, Ken Kolodner, and Robert K Brooner. 2013. "An Observation of Lower Rates of Drug Use over Time in Community Syringe Exchangers." *The American Journal on Addictions / American Academy of Psychiatrists in Alcoholism and Addictions* 22 (3): 271–76. <http://onlinelibrary.wiley.com/doi/10.1111/j.1521-0391.2012.12002.x/full>.
- Koh, Howard K., and Ronald O. Valdiserri. 2013. *Hepatitis C Virus Infection in Young Persons Who Inject Drugs*. <https://www.aids.gov/pdf/hcv-and-young-pwid-consultation-report.pdf>.
- Kurtz, Steven P, Hilary L Surratt, Marion C Kiley, and James a Inciardi. 2005. "Barriers to Health and Social Services for Street-Based Sex Workers." *Journal of Health Care for the Poor and Underserved* 16 (2): 345–61. doi:10.1353/hpu.2005.0038.
- LaCalle, Eduardo, and Elaine Rabin. 2010. "Frequent Users of Emergency Departments: The Myths, the Data, and the Policy Implications." *Annals of Emergency Medicine* 56 (1): 42–48. <http://www.sciencedirect.com/science/article/pii/S0196064410001058>.
- Lambert, Bruce. 1989. "AIDS Battler Gives Needles Illicitly to Addicts." *New York Times*, November 20. <http://www.nytimes.com/1989/11/20/nyregion/aids-battler-gives-needles-illicitly-to-addicts.html>.
- Lane, Sandra D. 2006. Needle Exchange : A Brief History. [https://hpcpsdi.rutgers.edu/facilitator/SAP/downloads/articles and data/History+of+Needle+Exchange.pdf](https://hpcpsdi.rutgers.edu/facilitator/SAP/downloads/articles%20and%20data/History+of+Needle+Exchange.pdf).
- Legal Action Center. 2011. *Legality of Denying Access to Medication Assisted Treatment In the Criminal Justice System*. http://lac.org/wp-content/uploads/2014/12/MAT_Report_FINAL_12-1-2011.pdf.
- Lloyd, Charlie. 2013. "The Stigmatization of Problem Drug Users: A Narrative Literature Review." *Drugs: Education, Prevention, and Policy* 20 (2): 85–95. doi:10.3109/09687637.2012.743506.
- Matusow, Harlan, Samuel L Dickman, Josiah D Rich, Chunki Fong, Dora M Dumont, Carolyn Hardin, Douglas Marlowe, and Andrew Rosenblum. 2014. "Medication Assisted Treatment in US Drug Courts: Results from a Nationwide Survey of Availability, Barriers and Attitudes." *J Subst Abuse Treat*. 44 (5): 473–80. doi:10.1016/j.jsat.2012.10.004.Medication.
- Merrill, Joseph O., Lorna A. Rhodes, Richard A. Deyo, G. Alan Marlatt, and Katharine A. Bradley. 2002. "Mutual Mistrust in the Medical Care of Drug Users. The Keys to the 'Narc' Cabinet." *Journal of General Internal Medicine* 17 (5): 327–33. <http://doi.wiley.com/10.1046/j.1525-1497.2002.10625.x>.
- Merritt, Martin. 2012. "The Basics of Independent Practice Associations." <http://www.physicianspractice.com/login?referrer=http://www.physicianspractice.com/basics-independent-practice-associations>.
- Millery, Mari. 2013. *CitiWide Harm Reduction January 2013 Participant Survey Summary Report*.
- Morgan, Betty D., and Donna M. White. 2009. "Managing Pain in Patients with Co-Occurring Addictive Disorders." *Journal of Addictions Nursing* 20 (1): 41–48. doi:10.1080/10884600802694809.
- National Alliance of Advocates for Buprenorphine Treatment. 2015. "19 Reasons to End the Patient Limits on Buprenorphine." <https://www.naabt.org/reasons.cfm>.
- National Association of Drug Court Professionals. *Resolution of the Board of Directors on the Availability of Medically Assisted Treatment (M.A.T.) for Addiction in Drug Courts*. http://www.nadcp.org/sites/default/files/nadcp/NADCP_Board_Statement_on_MAT.pdf.
- National Drug Court Institute. 2002. *Methadone Maintenance and Other Pharmacotherapeutic Interventions in the Treatment of Opioid Dependence*. <http://www.ndci.org/sites/default/files/ndci/MethadoneFactSheet.pdf>.
- Neaigus, Alan, Mingfang Zhao, V Anna Gyarmathy, Linda Cisek, Samuel R Friedman, and Robert C Baxter. 2008. "Greater Drug Injecting Risk for HIV, HBV, and HCV Infection in a City Where Syringe Exchange and Pharmacy Syringe Distribution Are Illegal." *Journal of Urban Health: Bulletin of The New York Academy of Medicine* 85 (3): 309–22. doi:10.1007/s11524-008-9271-1.
- New York City Department of Health and Mental Hygiene. 2015. "NYC DOHMH 2013 Community Health Survey: Self-Reported Health Status." <https://a816-healthpsi.nyc.gov/SASStoredProcess/quest?PROGRAM=/EpiQuery/CHS/chsindex&year=2013>.
- New York State Department of Health. 2015a. "Important Health Advisory: Emergency Department Interventions to Prevent Opioid Overdose." *Opioid Overdose Prevention*. Accessed March 23. https://www.health.ny.gov/diseases/aids/providers/prevention/harm_reduction/opioidprevention/health_advisory_ed_interventions_preventing_overdose.htm.
- . 2015b. "NYS Health Home Provider Qualification Standards For Chronic Medical and Behavioral Health Patient Populations." Accessed February 2. http://www.health.ny.gov/health_care/medicaid/program/medicaid_health_homes/provider_qualification_standards.htm.
- . 2015c. *Care Management for All*. Accessed March 16. https://www.health.ny.gov/health_care/medicaid/redesign/docs/care_manage_for_all.pdf.
- . 2007. *New York State Medicaid Program - Policy Guidelines Manual for Article 28 Certified Clinics*. https://www.emedny.org/ProviderManuals/Clinic/PDFS/Clinic_Policy_Guidelines.pdf.
- . 2013. *New York State Health Innovation Plan*. https://www.health.ny.gov/technology/innovation_plan_initiative/docs/executive_summary.pdf.
- . 2014a. "Health Homes Provider Manual: Billing Policy and Guidance." New York State Department of Health. https://www.emedny.org/ProviderManuals/HealthHomes/PDFS/Health_Homes_Provider_Manual.pdf.
- . 2014b. "Health Home Care Management Draft Rate Structure: 7-3-14." New York State Department of Health.
- . 2014c. *Frequently Asked Questions (FAQs) New York 'S MRT Waiver Amendment Delivery System Reform Incentive Payment (DSRIP) Plan*. http://www.health.ny.gov/health_care/medicaid/redesign/docs/dsrif_faq.pdf.
- . 2014d. "New York State Delivery System Reform Incentive Payment Program Project Toolkit."
- . 2014e. "Guidance for Conducting Community Needs Assessment Required for DSRIP Planning Grants and Final Project Plan Applications." New York State Department of Health. http://www.health.ny.gov/health_care/medicaid/redesign/docs/community_needs_assessment_guidance.pdf.

- . 2014f. *Medicaid Redesign Team (MRT) Supportive Housing Allocation Plan: 2014-15 & 2015-16*. https://www.health.ny.gov/health_care/medicaid/redesign/docs/support_house_alloc_plan_2014-15_2015-16.pdf.
- . 2014g. *Health Homes Provider Manual, Billing Policy and Guidance*. https://www.emedny.org/ProviderManuals/HealthHomes/PDFS/Health_Homes_Provider_Manual.pdf.
- . 2014h. *NYS DSRIP Glossary*. http://www.health.ny.gov/health_care/medicaid/redesign/docs/dsrip_glossary.pdf.
- . 2015. "NYS Medicaid DSRIP Dashboards." *NYS DOH Salient DSRIP Dashboards*. <http://dsripdashboards.health.ny.gov/#section-one>.
- New York State Department of Health AIDS Institute. 2008. *The New York State Department of Health AIDS Institute: 25 Years of Leadership, Service and Compassion*.
- . 2014. *Comprehensive Harm Reduction Reverses the Trend in New HIV Infections*.
- New York State Department of Health AIDS Institute. 2014. *Comprehensive Harm Reduction Reverses the Trend in New HIV Infections*.
- . 2015. *2012-2013 New York State Syringe Exchange Program Data*. Vol. 2012.
- New York State Office of Mental Health, New York State Department of Health, and New York State Office of Alcoholism and Substance Abuse Services. 2014. *New York State: Health and Recovery Plan (HARP) Home and Community Based Services (HCBS) Provider Manual*. <http://www.omh.ny.gov/omhweb/News/2014/hcbs-manual.pdf>.
- NYS Health Foundation. 2011. *Grant Outcomes Report: Improving Chronic Illness Care In New York State*. New York, NY. <http://nyshealthfoundation.org/uploads/gor/improving-chronic-illness-care-new-york-state-april-2011.pdf>.
- O'Connor, Patrick G, Alison H Oliveto, Julia M Shi, Elisa G Triffleman, Kathleen M Carroll, Thomas R Kosten, Bruce J Rounsaville, Juliana A Pakes, and Richard S Schottenfeld. 1998. "A Randomized Trial of Buprenorphine Maintenance for Heroin Dependence in a Primary Care Clinic for Substance Users versus a Methadone Clinic." *The American Journal of Medicine* 105 (2): 100–105. <http://www.sciencedirect.com/science/article/pii/S0002934398001946>.
- Office of the Assistant Secretary for Public Affairs (ASPA). 2013. *How the Health Care Law Is Making a Difference for the People of New York*. Washington D.C.: Department of Health and Human Services. <http://www.hhs.gov/healthcare/facts/bystate/ny.html>.
- Partners for Organizational Excellence. 2013. *Medicaid Readiness Needs Assessment Report Phase I*.
- Patchias, Elizabeth, Andrew Detty, and Michael Birnbaum. *Implementing Medicaid Health Homes in New York: Early Experience*.
- Pines, Jesse M, Brent R Asplin, Amy H Kaji, Robert A Lowe, David J Magid, Maria Raven, Ellen J Weber, and Donald M Yealy. 2011. "Frequent Users of Emergency Department Services: Gaps in Knowledge and a Proposed Research Agenda." *Academic Emergency Medicine: Official Journal of the Society for Academic Emergency Medicine* 18 (6): e64–69. <http://www.ncbi.nlm.nih.gov/pubmed/21676051>.
- Pollitz, Karen, Jennifer Tolbert, and Rosa Ma. 2015. "Survey of Health Insurance Marketplace Assister Programs." *The Henry J. Kaiser Family Foundation*. <http://kff.org/report-section/survey-of-health-insurance-marketplace-assister-programs-section-1/>.
- Rendina, H Jonathon, Ruben H Jimenez, Christian Grov, Ana Ventuneac, and Jeffrey T Parsons. 2014. "Patterns of Lifetime and Recent HIV Testing among Men Who Have Sex with Men in New York City Who Use Grindr." *AIDS and Behavior* 18 (1): 41–49. doi:10.1007/s10461-013-0573-2.
- Rosenbaum, Sara, Nancy Lopez, Taylor Burke, and Mark Dorley. 2012. *State Health Insurance Exchange Laws: The First Generation*. New York City. http://hsrc.himmelfarb.gwu.edu/cgi/viewcontent.cgi?article=1055&context=sphhs_policy_facpubs&sei-redir=1&referer=https://scholar.google.com/scholar?as_ylo=2011&q=navigator+program+new+york+exchange&hl=en&as_sdt=0,33#search.
- Samet, Jeffrey H., Peter Friedmann, and Richard Saitz. 2001. "Benefits of Linking Primary Medical Care and Substance Abuse Services." *Archives of Internal Medicine* 161 (1): 85. doi:10.1001/archinte.161.1.85.
- SAMHSA. 2014. *Results from the 2013 National Survey on Drug Use and Health: Summary of National Findings*. <http://www.samhsa.gov/data/sites/default/files/NSDUHresultsPDFWHTML2013/Web/NSDUHresults2013.pdf>.
- Shields, Mark C, Pankaj H Patel, Martin Manning, and Lee Sacks. 2011. "A Model for Integrating Independent Physicians into Accountable Care Organizations." *Health Affairs (Project Hope)* 30 (1): 161–72. doi:10.1377/hlthaff.2010.0824.
- Silins, Edmund, Katherine M Conigrave, Christine Rakvin, Timothy Dobbins, and Kenneth Curry. 2007. "The Influence of Structured Education and Clinical Experience on the Attitudes of Medical Students towards Substance Misusers." *Drug and Alcohol Review* 26 (2): 191–200. doi:10.1080/09595230601184661.
- Stein, Michael D., Jeffrey H. Samet, and Patrick G. O'Connor. 1993. "The Linkage of Primary Care Services with Substance Abuse Treatment." *Journal of General Internal Medicine* 8 (2): 106–7. <http://link.springer.com/10.1007/BF02599995>.
- Strathdee, Steffanie A, and Jamila K Stockman. 2010. "Epidemiology of HIV among Injecting and Non-Injecting Drug Users: Current Trends and Implications for Interventions." *Current HIV/AIDS Reports* 7 (2): 99–106. <http://rd.springer.com/article/10.1007/s11904-010-0043-7/fulltext.html#CR42>.
- Sullivan, Lynn E, Declan Barry, Brent A Moore, Marek C Chawarski, Jeanette M Tetrault, Michael V Pantalon, Patrick G O'Connor, Richard S Schottenfeld, and David A Fiellin. 2006. "A Trial of Integrated Buprenorphine/naloxone and HIV Clinical Care." *Clinical Infectious Diseases: An Official Publication of the Infectious Diseases Society of America* 43 Suppl 4 (Supplement_4): S184–90. http://cid.oxfordjournals.org/content/43/Supplement_4/S184.short.
- Ti, Lianping, and Thomas Kerr. 2014. "The Impact of Harm Reduction on HIV and Illicit Drug Use," 8–10.
- Trigg, B., M. Murphy, and A. Tsang. 2011. "P5-S6.39 Integrating Medication Assisted Therapy with Buprenorphine and Other Harm Reduction Interventions into an Urban Public Health Department STD Clinic in the Southwestern USA." *Sexually Transmitted Infections* 87 (Suppl 1): A342–A342. http://sti.bmj.com/content/87/Suppl_1/A342.1.short.

U.S. Health Resources and Services Administration. 2015. "What Are Federally Qualified Health Centers (FQHCs)?" *U.S. Department of Health and Human Services*. Accessed March 16. <http://www.hrsa.gov/healthit/toolbox/RuralHealthITtoolbox/Introduction/qualified.html>.

Umbricht-Schneider, Annie, David H Gin, Katherine M Pabst, and George E Bigelow. 1994. "Providing Medical Care to Methadone Clinic Patients : Referral vs On-Site Care." *American Journal of Public Health* 84 (2): 207–10.

Weiss, Linda, Kate McCoy, Michael Kluger, and Ruth Finkelstein. 2004. "Access to and Use of Health Care: Perceptions and Experiences among People Who Use Heroin and Cocaine." *Addiction Research & Theory* 12 (2): 155–65. doi:10.1080/1606635031000155099.

Yin, Robert K. 2014. *Case Study Research: Design and Methods*. 5th ed. Los Angeles: SAGE Publications.

Appendices

Appendix A: Overview of Major Healthcare Reform Initiatives In New York State

Various components of the sweeping federal healthcare reform law, The Patient Protection and Affordable Care Act (ACA) of 2010, provide opportunities for harm reduction services providers in New York to help improve the health of their participants. These opportunities can be categorized under three broad umbrellas: expanded health insurance coverage and enrollment activities for poor and low-income individuals; new opportunities for Medicaid-funded care coordination activities for individuals with multiple chronic conditions; and health system re-design initiatives promoting the "triple aim." In addition, NYS has applied to the Centers for Medicaid and Medicare through a Medicaid Managed Care 1115 Waiver to transition all Medicaid behavioral health benefits to managed care plans, and has included a set of home and community based services (HCBS) through a new managed care product called Health and Recovery Plans (HARPs), allowable under Section 1915i of the Social Security Act. These HARP benefits are expected to expand harm reduction providers' options in providing "ancillary" services to their participants (3 KI sources), though to what extent remains unclear.

In January of 2011, shortly after taking office, Governor Andrew Cuomo created the Medicaid Redesign Team (MRT) through executive order to provide guidance on the pressing healthcare issues facing New York State. The MRT was principally tasked with restructuring New York State's Medicaid program to achieve reductions in spending. The MRT included NYS legislators and several state agency

commissioners, health care system executives, nursing and medical association representatives, and other public health and behavioral health stakeholders. In addition to developing the FY12 Medicaid budget, the MRT helped shape the major healthcare reform initiatives in NYS. On April 14, 2014 NYSDOH finalized its waiver amendment with CMS to re-invest \$8 billion of \$17.1 billion worth of savings identified by the MRT. This money will be allocated to many of the reforms detailed below, including but not limited to: \$6.42 billion for the Delivery System Reform Incentive Payment (DSRIP) program and \$1.08 billion for initiatives such as the HARPs and Health Home program development.

Public health insurance reform

Since 2014, New York has been participating fully in the ACA Medicaid expansion. Unlike many states, it already had coverage for single childless adults through Family Health Plus, a managed care plan with similar coverage to Medicaid MCO's, for persons with household incomes up to 100% of the federal poverty level (FPL). Still, ACA significantly expanded New York's Medicaid program - currently, most adults with household incomes up to 138% of the FPL are eligible for Medicaid. As of July 2014, nearly 430,000 children and adults in New York gained new coverage through Medicaid or CHIP (ASPA 2013) as a result of ACA coverage expansions.

Patient navigators, defined broadly as "someone who helps assist patients overcome barriers to care" (Dohan and Schrag 2005), are now

commonly associated with the Navigator Program created and mandated by the ACA. However, several states including New York have decades of experience in providing various forms of patient navigation to patients. Historically, federal funding for navigator programs had been provided by several agencies including CMS and CDC, and in 2005, the Patient Navigator and Chronic Disease Prevention Act enabled HRSA to pay for patient navigation demonstration programs (Freeman 2012). Patient navigation was also an integral component of various case management and care coordination programs funded by Medicaid. Several components of the ACA have greatly expanded the scope of navigator programs through new federal grant opportunities, state mandates to establish navigator programs, and extension of the HRSA demonstration research mentioned above.

Every state must establish a navigator program that allows organizations to receive grants to assist individuals with enrollment in Qualified Health Plans and to conduct outreach and awareness activities (Rosenbaum et al. 2012). Most of these positions are sponsored by hospitals, nonprofit community service organizations or Federally Qualified Health Centers (Pollitz, Tolbert, and Ma 2015).

Care Management – Health Home Program

Prior to the ACA, NYS had over two decades of experience providing case management to Medicaid beneficiaries. These programs began in 1986 with the Consolidated Omnibus Budget Reconciliation Act (COBRA) that allowed states to submit amendments to their state Medicaid plans to establish Medicaid reimbursed case management programs for specific populations. The first Medicaid-funded CM program in New York was created under the state Office of Mental Health (OMH) in 1989, called Intensive Case

Management (ICM), and was designed to serve high utilizers of mental health services. This was a logical start for New York since OMH had established a case management program in 1978 through a block grant from the National Institutes of Health (NIH). Comprehensive Medicaid Case Management (CMCM) (also known as COBRA case management or TCM) began in 1990 to serve HIV+ and other designated Medicaid eligible populations with special needs.

By 2008, NYS had a number of Medicaid-funded case management programs, together serving about 35,000 Medicaid beneficiaries. All of these, with the exception of the OMH ICM program, were funded through a fee-for-service (FFS) methodology. Separate State Plan Amendments were required of DOH for each targeted program, and case management agencies served only the population of their respective programs (“Comprehensive Medicaid Case Management Policy Guidelines” 2015). Additionally, the NYS Office of Alcoholism and Substance Abuse Services (OASAS) oversaw the Managed Addiction Treatment Services program that was not originally funded by Medicaid, but was ultimately folded into the Medicaid-funded Health Homes program (Patchias, Detty, and Birnbaum, n.d.). With funding for technical assistance and design, implementation and evaluation assistance from the New York State Health Foundation’s Center for Health Care Strategies, NYS DOH in conjunction with OMH and OASAS created the Chronic Illness Demonstration Project (CIDP) in 2008 (NYS Health Foundation 2011). This demonstration project was aimed at identifying high-cost Medicaid beneficiaries who had chronic conditions but were not enrolled in managed care, and enrolling them in care coordination via interdisciplinary teams who provided care coordination in a FFS setting (Center for Health Care Strategies 2012). Evaluations of the CIDP helped inform many elements of the NYS DOH Health Homes program.

In 2010, the ACA created a new state Medicaid plan option to create a Health Home program for beneficiaries with multiple chronic conditions, with an enhanced 90% federal financial participation rate for the first two years. States were given latitude in how to design their Health Home programs (Patchias, Detty, and Birnbaum, n.d.). Health Home services eligible for reimbursement include: “comprehensive care management; care coordination and health promotion; comprehensive transitional care from inpatient to other settings, including appropriate follow-up; individual and family support, which includes authorized representatives; referral to community and social support services, if relevant; and the use of HIT (health information technology) to link services, as feasible and appropriate.” (New York State Department of Health, n.d.)

New York was among the first states in the country to design a Health Home program and received approval from CMS on January 1, 2012. Rolled out in three phases targeting different sub-sets of Medicaid beneficiaries with multiple chronic conditions, NYS DOH began by identifying one million beneficiaries through a clinical risk group attribution model based on Medicaid claims data. Eligible members may also be identified and enrolled in the community via “bottom-up” referrals. NYS designed the Health Home structure around lead health home agencies across New York State, who were responsible for building networks of care management agencies who receive capitated per-member-per-month (PMPM) rates based on a clinical risk methodology derived from Medicaid services data. Lead Health Homes vary significantly in their staffing, supervisory, and organizational structure, with some serving as administrative hubs and providing no direct care management to their members, and others providing direct services. At their most basic level,

in addition to retaining a network of providers to serve the holistic needs of members, health home leads must retain data and ensure payment and quality of care management (Joslyn Levy & Associates 2014). According to NYS DOH’s Health Home provider functional requirements, health homes must be able to coordinate and provide the following person and family-centered services: preventive services, including those for mental illness and substance use disorders; mental health and substance use treatment; comprehensive care management, coordination and transitional care; chronic disease management; long-term care support and services; and referral to social supports and recovery services.

Many harm reduction providers, because of their history of serving people living with HIV/AIDS, were also HIV TCM providers, now known as Health Home affiliated HIV Care Management Providers. Along with all “legacy” CM programs in NYS, including OMH TCM, OASAS MATS, and CIDP, HIV TCM providers were expected to transition over a two-year period into the Health Home model by sub-contracting under one or more lead Health Homes. This transition was a significant change, as TCM providers were expected to broaden their scope of services to be able to serve all Health Home eligible members. Their payment methodologies also changed from a fee-for-service model to the health home PMPM model and they were expected to take on new outreach responsibilities to enroll new Health Home eligible members identified by NYS DOH. See Section 3 for a detailed discussion of these challenges.

System Re-Design Efforts - DSRIP

Delivery System Reform Incentive Payment programs (DSRIP) are one of many new options states have to reform their Medicaid delivery systems. Through an amendment to their Medicaid Waiver, states may receive significant

funds to implement these Medicaid incentive programs, but they must be budget neutral to the federal government. DSRIP programs focus on infrastructure and delivery system re-design, clinical improvement projects, and population health improvement projects. New York is one of several states, including New Jersey, Kansas, California and Texas, to finalize a DSRIP waiver with CMS. New York's program is arguably the most ambitious among all the state programs in its scope of projects, the types of providers included, and the substantial amount of funding dedicated to it. On April 14, 2014, New York received approval from CMS to create a \$6.42 billion allocated DSRIP fund. Disbursement of funds are based on achievements in system re-design, clinical care, and population health. The main goal of DSRIP is to achieve a 25% reduction in avoidable emergency department and inpatient hospital use over 5 years. NYS DOH has indicated their desire to continue the program beyond 2019.

The main mechanism through which NYS DSRIP providers will be paid is through participation in Performing Provider Systems (PPS), coalitions led by state-designated "safety net providers"¹ who work together through some form of shared governance structure to design and implement projects around delivery system, clinical, and population health improvement. Each project must be chosen from the state's CMS-approved list of projects and payment is based on achievement of process and outcome metrics and milestones. In order to be approved by the state, each PPS must partner with all providers in their service area needed to serve the comprehensive needs of all Medicaid members. These providers include public and private hospitals, behavioral

¹ While the definition varies slightly depending on type of provider, generally speaking, safety-net providers in DSRIP must serve 35% or more of their patient volume in primary lines of service to Medicaid, uninsured or dual-eligible individuals. For a more detailed definition, see Glossary.

health providers, FQHC's and other health clinics, home health agencies, primary care and specialty medical providers, nursing homes and health homes. PPS's are also encouraged but not required by NYSDOH to partner with community-based "non-safety-net" providers (i.e., non-Medicaid providers such as physician practices, supportive housing, CBO's such as food banks, housing assistance programs, harm reduction providers, and so on), to implement projects and serve the needs of their attributed members; but, incentive payments to these types of providers (in aggregate) cannot exceed 5% of the total project valuation. Harm reduction providers in New York have been granted exemption by DOH and CMS to be considered safety-net providers.

Each PPS was required to conduct a Community Needs Assessment to inform their selection of projects and partners in their project plan during the summer of 2014. NYSDOH awarded DSRIP Planning Grants to 43 emerging PPS's throughout the state to assist them in developing their DSRIP Project Plans, which were due on December 22, 2014. On February 2, 2015, an Independent Assessor appointed by the state made recommendations to each PPS regarding their Plans. These recommendations were reviewed by the DSRIP Project Approval and Oversight Team who made final recommendations to the state. The first payments for Year 1 to each PPS are based on each PPS's Project Plan application, as opposed to the metrics and milestones that determine payments in later years.²

Behavioral Health Transition to Managed Care

NYS also has decades of experience in using managed care in their Medicaid program, beginning in the 1980s (though experimenting with managed care dates back to the late

² For a more detailed timeline, see the NYS DOH DSRIP timeline available at: https://www.health.ny.gov/health_care/medicaid/redesign/dsrrip/docs/dsrrip_timeline.pdf.

1960s). By April 2012, NYS had 4 million of its 5 million Medicaid enrollees enrolled in Medicaid managed care plans (New York State Department of Health, n.d.). However, some benefits, including behavioral health services, had been excluded from these plans and had continued to be reimbursed on a FFS basis. Under the Care Management for All Initiative that began in state fiscal year 2011-2012 as a result of the MRT proposal, the NYSDOH initiated a plan to transition nearly all Medicaid enrollees and benefits to managed care by April 2018. In addition, the MRT Behavioral Health Subcommittee made recommendations for the state to create new integrated Special Needs Plans (SNPs) that include mental health, physical health and substance abuse benefits, and assist in recovery and functional improvements for members, using the existing 1115 Waiver. As a result, the state amended its 1115 Waiver to create new managed care products called Health and Recovery Plans (HARPs) for beneficiaries with serious mental illness and/or substance use disorders. Mainstream managed care plans may also directly operate behavioral health services, but they must meet rigorous standards.

HARPs will include all current Medicaid managed care benefits including: physical health, long term care, Health Home care coordination, pharmacy and all behavioral health services. In addition, the HARPs will manage new 1915(i) home and community based services, currently under review by CMS and subject to the final terms and conditions approved. DOH expects approval for HARPs on April 1, 2015 (KI). According to the new HCBS provider manual, "these services are designed to help overcome the cognitive and functional effects of behavioral health disorders and help individuals with behavioral health conditions to live their lives fully integrated into all aspects of their community" (New York State Office of Mental Health, New York State Department of

Health, and New York State Office of Alcoholism and Substance Abuse Services 2014). The HCBS emphasize movement towards a recovery and person-centered model of care, and some examples of these services include: community psychiatric treatment, family support and training, mobile crisis intervention, crisis respite services, education and employment support services, peer support services, and non-medical transportation. Beneficiaries are eligible for HARPs based on utilization history or functional impairment, either through state designation or referral. All other beneficiaries with behavioral health needs will be served under qualified managed care plans. Both HARPs and qualified managed care plans will be held to performance metrics tied to behavioral health, and in the case of HARPs, metrics specific to their high-need population.

Additionally, New York State OASAS, OMH, and DOH began the Integrated Licensing Project, through funds in the 2012-13 budget, to facilitate integrated licensure to coordinate primary care and behavioral health care through "an expedited application, new codes and rates to support billing, and reduced regulatory burden through the designation of one lead ("host") State oversight agency – the agency from which the site already possesses a license" (Fazio and Holley 2013). Currently, the project has approved 7 pilots with 13 clinic locations throughout the state. DOH, OMH and OASAS are finalizing guidance so the project can move beyond a pilot phase and eligible agencies (those with licenses in the behavioral health and physical health) may participate through an application process (KI).

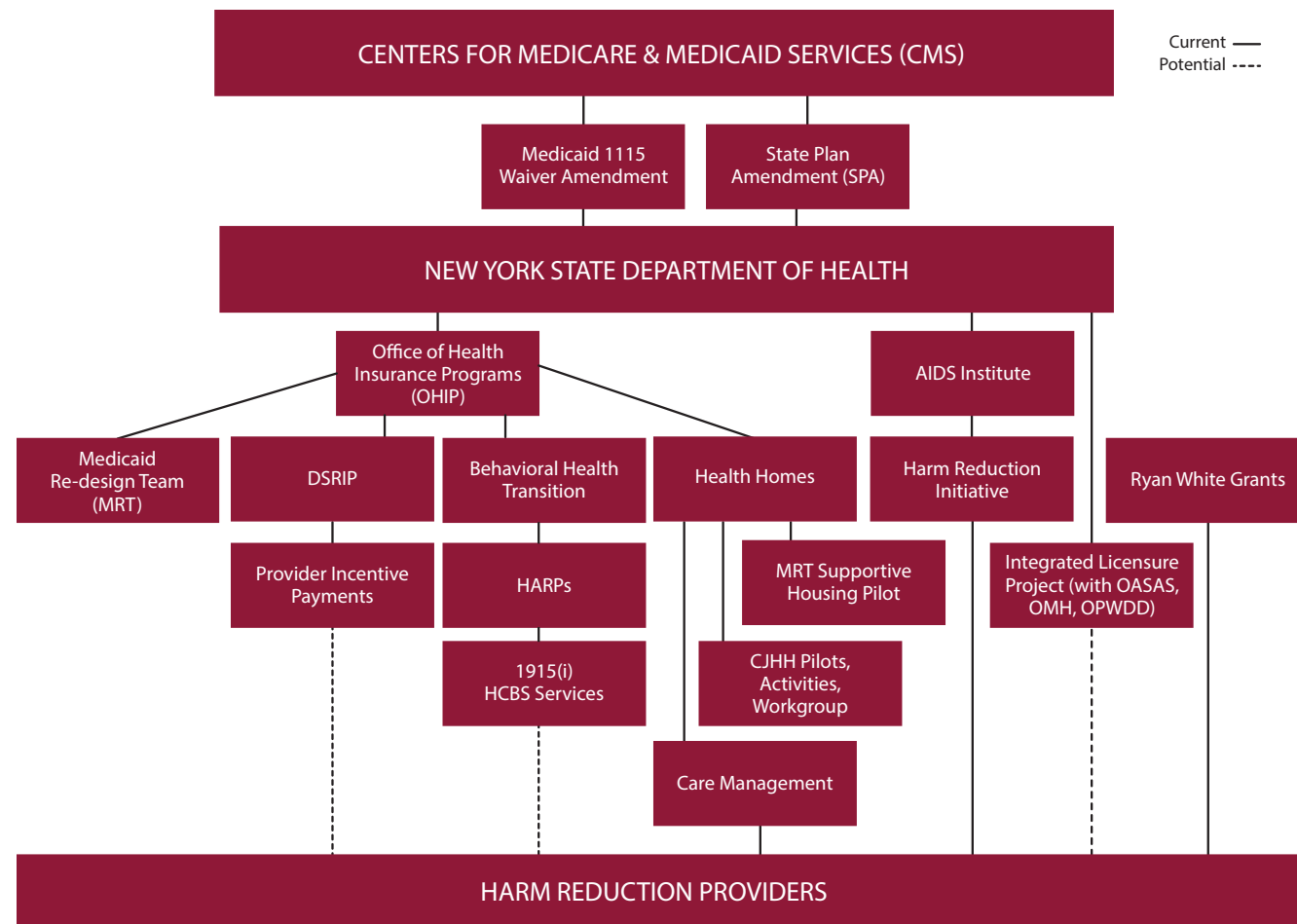
MRT Housing

The MRT Affordable Housing Workgroup initially developed recommendations for housing funds for high-utilizing Medicaid members in NYS and largely involved adding an ambitious housing

component to the state's 1115 waiver. Ultimately, CMS did not approve federal Medicaid dollars for housing, but NYSDOH has still allocated state-only capital and services funding to the budget via the MRT Supportive Housing Initiative, including \$75 million for FY12-13, \$86 million for FY13-14 and a 2-year allocation of \$260 million for FY14-15 and 15-16. Some examples of funded programs

include (but are not limited to): capital funding for NY/NY III housing; OASAS, OMH, OPWDD and AIDS Institute rental subsidies; operational funding for supportive housing for homeless persons with mental illness, substance use disorders or HIV/AIDS; and rental and service subsidies for supportive housing for Health Home members (New York State Department of Health 2014f).

Appendix B: Diagram of Current and Potential Relationships between Harm Reduction Providers and the Healthcare System



Appendix C: Glossary of Terms and Acronyms

1915(i) Services	In 2005, Section 1915(i) of the Social Security Act allowed state Medicaid programs to offer home and community based services (HCBS) to targeted populations in need of acute medical and long-term care services through a State Plan Amendment. Prior to 2005, HCBS were only available to beneficiaries meeting an institutional level of care. In New York, services offered in the new HARP benefit package will be a type of 1915(i) services.
2010e Supportive Housing	An electronic application for New York City Human Resources Administration (HRA) supportive housing.
ACA	Affordable Care Act: Two pieces of federal healthcare reform legislation comprise the ACA: the 2010 Patient Protection and Affordable Care Act and the Health Care and Education Reconciliation Act of 2010. Also commonly referred to as "Obamacare," it was signed into law in March of 2010 by President Barack Obama.
Acuity score	New York State Health Home per-member-per-month payments (PMPM) are based on a regional base PMPM rate set by NYS DOH and a fixed acuity score for each Health Home member. According to NYS DOH, it is "a weighted average based on total Medicaid fee-for-service and managed care encounter costs associated with the Clinical Risk Groups™ (CRG) for a Health Home eligible population for a given time period. DOH adjusted acuity includes additional upward adjustments for mental illness, predictive risk for adverse events and severity of illness. The acuity scores are typically recalculated based on quarterly changes in a member's CRG." (New York State Department of Health 2014g)
Adjusted hazard ratio	Hazard ratios are a type of relative risk that measure and compare how often an event such as death happens in one group to another. A hazard ratio of greater than one indicates increased hazard, one indicates no difference, and less than one indicates less hazard. An adjusted hazard ratio is a hazard ratio adjusted through regression for other variables such as age.
APC	Advanced Primary Care: According to the New York State Department of Health, the APC model is "an augmented patient-centered medical home (PCMH) that provides patients with timely, well-organized and integrated care, and enhanced access to teams of providers — is the foundation for a high performing health system. (New York State Department of Health 2013)
Article 28	As defined in Article 28 of the New York State Public Health law, Article 28 refers to licensed diagnostic or treatment centers such as hospitals, ambulatory surgical centers, hospital-based outpatient centers or community health centers.
Article 31	As defined in Article 31 of the NYS Mental Hygiene Law, Article 31 refers to facilities and programs that provide services for the treatment and recovery of persons who suffer from mental illness.
Article 32	As defined in Article 32 of the NYS Mental Hygiene Law, Article 32 refers to facilities and programs that provide services for the treatment and recovery of persons who suffer from chemical dependence.

Buprenorphine	Buprenorphine is a form of Medication-Assisted Treatment for opioid dependence. It acts as an opioid agonist-antagonist which means it can produce typical opioid responses, but it also counteracts the effects of opioids and has a lower risk of dependence and side effects than full agonist opioids. Sublingual formulations were approved by the FDA in October 2002. Buprenorphine has a number of special federal requirements including a limit on the number of patients that may be treated with buprenorphine by any one practitioner (30) and DEA reporting requirements beyond those of other Schedule III substances. Unlike methadone, it can be prescribed in a doctor's office and taken at home.
CJHH	Criminal Justice Health Home Initiative: Six pilot health homes were selected to enhance connectivity between the criminal justice system and health homes and focus on enrolling health home members involved in the criminal justice system.
Clinical Risk Group	Clinical Risk Group Software or CRG, developed by 3M, is based on an algorithm that predicts patient healthcare costs and utilization based on claims data. This software is the main mechanism through which the New York State Department of Health identifies health home eligible Medicaid members and assigns the level of "acuity" to each member to determine the level of health home care management per-member-per-month payment rate (for more on payment, see PMPM).
CMART	The Care Management Annual Reporting Tool is a database of process measures that lead health homes must complete on Medicaid members that are either in outreach and engagement or enrolled with the health home for care management. Files must be uploaded quarterly via the New York Department of Health's Health Commerce System website.
CMS	Centers for Medicare & Medicaid Services is the federal agency responsible for administering Medicaid, Medicare, and the Children's Health Insurance Program (CHIP) and is located within the U.S. Department of Health and Human Services (HHS).
COBRA	The Consolidated Omnibus Budget Reconciliation Act of 1986 established Medicaid reimbursed case management services for particular targeted populations.
Community / "Bottom up" referrals	In addition to being identified by DOH through Clinical Risk Group software, health home eligible members may also be referred to health homes through community or bottom-up referrals by hospitals, the criminal justice system, health centers, family members, or community based organizations, and so on.
NYS DOH	New York State Department of Health
Drug courts	A type of specialty or problem-solving court, drug courts began in 1989 in Dade County, Florida to offer drug offenders an alternative to incarceration through substance use treatment and other services. Drug courts operate through mandatory intensive substance use treatment and other services, close supervision via frequent court appearances and random, mandatory drug screens, and incentives and sanctions for defendant behavior for at least one year. The precise definition of "abstinence" varies from court to court. For example, many courts do not offer or allow defendants to participate in opioid replacement therapy. For more on this topic, see pg. 21. Eligibility for drug courts also varies by state.

DSRIP	Delivery System Reform Incentive Payment: As defined by the New York State Department of Health, "DSRIP is the main mechanism by which New York State will implement the Medicaid Redesign Team (MRT) Waiver Amendment. DSRIP's purpose is to fundamentally restructure the health care delivery system by reinvesting in the Medicaid program, with the primary goal of reducing avoidable hospital use by 25% over 5 years. Up to \$6.42 billion dollars are allocated to this program with payouts based upon achieving predefined results in system transformation, clinical management and population health" (New York State Department of Health 2014c).
DSRIP Attribution methodology	In the DSRIP program, all Medicaid members in the state of New York will be attributed to one Performing Provider System. Attribution is determined by a formula accounting for geographic and service use "loyalty." Each PPS will be responsible for population health outcomes of the members attributed to their care. Medicaid members however are not mandated to receive services from any one PPS and are still free to choose any provider in their network. Uninsured populations will also be attributed by a separate process involving selection of the 11th population health project. For more on uninsured attribution, see pg. 24 of the NYSDOH DSRIP FAQ document, available at: http://www.health.ny.gov/health_care/medicaid/redesign/docs/dsrrip_faq.pdf .
DSRIP Incentive Payments	Incentive payments are calculated by the state for each project that a Performing Provider System undertakes. The amount of the incentive payment is based on the value of the project and the achievement of metrics and milestones associated with each project.
DSRIP Planning Grants	New York State Department of Health awarded design grants to emerging Performing Provider Systems (PPS's) to develop DSRIP project plans, after emerging PPS's submitted non-binding letters of intent to the state. Out of 88 letters of intent, the state awarded 43 grants ranging from about \$300,000 to \$1 million in August 2014.
DSRIP Project Index Score	According to NYS DOH, Project Index Scores are an "evaluation or score assigned to DSRIP projects, based on five elements (1. Potential for achieving system transformation, 2. Potential for reducing preventable event, 3. Percent of Medicaid beneficiaries affected by project, 4. Potential Cost Savings and 5. Robustness of Evidence Based suggestions). Project index scores are set by the state and are released prior to the application period." (New York State Department of Health 2014h).
Expanded Syringe Access Program (ESAP)	ESAP began as a demonstration program in New York in 2000 and became a permanent program in 2009. It enables pharmacies and other healthcare professionals who can prescribe hypodermic needles to sell them without a prescription to adults 18 and over, after registering with DOH.
FACT-GP	An assessment instrument developed and validated by FACIT Measurement System, it is used in the Health Home program to measure a member's physical, social/family, emotional and functional well-being. Health Homes are required to administer the FACT-GP to health home members at enrollment, discharge and annually, and to report results to DOH through the CMART. According to NYS DOH, the FACT-GP will be used to monitor and measure changes in the health home population. FACT-GP stands for "Functional Assessment of Cancer Therapy - General Population."
FFS	Fee-for-service: The payment methodology historically used by most public and private health insurance plans, FFS is when healthcare providers receive separate payments for each service rendered (e.g., an office visit or test).

FPL	Federal Poverty Limit: Used to determine many government entitlement and assistance programs, the federal poverty limit for 2015 for most states including New York is \$24,500 for a family of four. For other household FPLs, see http://aspe.hhs.gov/poverty/15poverty.cfm . All states participating in the Medicaid expansion component of the ACA must provide Medicaid to most adults with household incomes up to 138% of the FPL.
FQHC	Federally Qualified Health Center: According to the U.S. Health Resources and Services Administration (HRSA), FQHCs “include all organizations receiving grants under Section 330 of the Public Health Service Act (PHS). FQHCs qualify for enhanced reimbursement from Medicare and Medicaid, as well as other benefits. FQHCs must serve an underserved area or population, offer a sliding fee scale, provide comprehensive services, have an ongoing quality assurance program, and have a governing board of directors.” (U.S. Health Resources and Services Administration, n.d.).
Harm reduction provider	In the context of this report, harm reduction provider refers to organizations providing sterile syringes and affiliated services for active drug users (otherwise known as syringe access programs or syringe exchange programs or SEPs). Harm Reduction refers to a movement, philosophy or practices that are centered on reducing the harm associated with drug use.
HARPs	Health and Recovery Plans: A new managed care product under New York’s Medicaid program, currently under review by CMS, for beneficiaries with serious mental illness and/or substance use disorders. These plans will include a set of home and community based services including community-based behavioral health treatment, employment and educational supports, peer supports, respite services, and non-medical transportation. For a complete list of the proposed HCBS, see the NYS HARP HCBS Provider Manual, available at: http://www.omh.ny.gov/omhweb/News/2014/hcbs-manual.pdf .
HASA	New York City HIV/AIDS Services Administration: an agency within NYC’s Human Resources Administration’s Office of Special Services, HASA offers a variety of social services and benefits to people living with HIV/AIDS including but not limited to: housing, nutritional assistance, case management, vocational services, and Medicaid and SSI assistance.
HCBS	Home and Community Based Services: State Medicaid programs may provide a variety of home and community based services for targeted populations (e.g., people with mental illness or physical disabilities) to be served in their home or community through a 1915 (c) Waiver or a State Plan Amendment, depending on the type of HCBS. Services often include personal care services, home health services, or community-based services.

Health Home	Section 2703 of the ACA created a new State Plan option for states to create Health Home programs to coordinate primary, acute, long-term and behavioral health care, and to provide linkages to other social services and supports to serve the holistic needs of Medicaid beneficiaries with chronic conditions. Health Home services include: “comprehensive care management; care coordination and health promotion; comprehensive transitional care from inpatient to other settings, including appropriate follow-up; individual and family support, which includes authorized representatives; referral to community and social support services, if relevant; and the use of HIT (health information technology) to link services” (New York State Department of Health, n.d.). In New York, the Health Home program was organized around lead health homes responsible for creating networks, or multidisciplinary teams of providers, and payment occurs through a capitated risk-based payment methodology (see PMPM or Clinical Risk Group definitions for more).
Health Home Care Management Agency	An agency sub-contracted by a lead Health Home to provide care management to health home members.
HCV	Hepatitis C Virus
HRA	New York City Human Resources Administration: NYC’s social services agency; services include (but are not limited to): food stamps, cash assistance, home care, child care, and public health insurance.
IDU	Injection drug user
IDUHA	Injection Drug Users Health Alliance: A coalition of harm reduction providers and allies operating in the five boroughs of New York City.
Integrated Licensure Project	New York State OASAS, OMH, and DOH began the Integrated Licensure Project, through funds in the 2012-13 budget, to facilitate integrated licensure to coordinate primary care and behavioral health care through “an expedited application, new codes and rates to support billing, and reduced regulatory burden through the designation of one lead (“host”) State oversight agency – the agency from which the site already possesses a license” (Fazio and Holley 2013). Currently, the project has approve 17 pilots with 13 clinic locations throughout the state.
Lead Health Home	The NYS Health Home Programs was organized around Lead Health Homes, which vary significantly in their staffing, supervisory, and organizational structure, with some serving as administrative hubs and providing no direct care management to their members, and others providing direct services. At their most basic level, in addition to retaining a network of providers to serve the holistic needs of health home members, lead Health Homes must retain data and ensure payment and quality of care management.
LTC	Long Term Care
MCO	Managed Care Organization: see “Medicaid Managed Care.”

Medicaid Managed Care	According to CMS, “Managed Care is a health care delivery system organized to manage cost, utilization, and quality. Medicaid managed care provides for the delivery of Medicaid health benefits and additional services through contracted arrangements between state Medicaid agencies and managed care organizations (MCOs) that accept a set per member per month (capitation) payment for these services.” (Centers for Medicare & Medicaid Services, n.d.).
Medication-Assisted Treatment	Medicaid-assisted treatment is a group of FDA-approved pharmacological treatments for substance use. In this report, medication-assisted treatment, also known as Opioid Replacement Therapy (ORT) or Opioid Substitution Therapy (OST), refers to a form of treatment for opioid dependence that replaces one opioid such as heroin with a longer-acting opioid, such as methadone or buprenorphine or Suboxone, that has fewer side effects and does not induce a “high.” The replacement opioid is taken under medical supervision.
Methadone	Methadone hydrochloride (methadone) is a long-acting synthetic opioid approved for the treatment of opioid dependence. Methadone treats opioid dependence by blocking the effect of opioids, easing cravings for opioids, and alleviating withdrawal symptoms.
MRT	Medicaid Redesign Team: Created in January of 2011 by Governor Andrew Cuomo through executive order to provide guidance on the pressing healthcare issues facing New York State. The MRT was principally tasked with restructuring New York State’s Medicaid program to achieve reductions in spending. The MRT included NYS legislators and several state agency commissioners, health care system executives, nursing and medical association representatives, and other public health and behavioral health stakeholders. In addition to developing the FY12 Medicaid budget, the MRT helped shape the major healthcare reform initiatives in NYS.
MRT Waiver	According to the NYS Department of Health, the Medicaid Redesign Team Waiver is “an amendment allowing New York to reinvest \$8 billion in Medicaid Redesign Team generated savings back into NY’s health care delivery system over five years. The Waiver amendment contains three parts: Managed Care, State Plan Amendment and DSRIP. The amendment is essential to implement the MRT action plan as well as prepare for ACA implementation.” (New York State Department of Health 2014h).
MMTP	Methadone Maintenance Treatment Program is a type of medication-assisted treatment that dispense daily doses of methadone to people with opioid dependence. Otherwise known as methadone clinics, they often have other services on-site such as HIV testing and treatment, other forms of drug treatment and primary health care.
NA	Narcotics Anonymous is a non-profit, international, community-based organization founded in 1953 that uses a twelve step model adapted from Alcoholics Anonymous. The organization focuses on recovery from addiction through abstinence from mind and mood-altering substances, though abstinence is not required for membership. NA is organized and supported by members, primarily through regular group meetings.
Naloxone	Naloxone is a prescription, non-controlled opioid antagonist that reverses the effects of opiate overdose. In New York, laypersons can legally administer Naloxone and prescription by a standing order was authorized in 2014, making third party distribution easier.

New York State Safety Net Program	Also known as cash assistance, The Safety Net Program is one of two assistance programs offered to New Yorkers. A person is eligible for the program if they have very little or no income and have less than \$2,000 in resources. The program is primarily for childless adults, but there are some exceptions, mostly for non-cash benefits. Cash assistance is generally available for 2 years and people may be disqualified if they or a family member have drug or alcohol sanctions or are using drugs or alcohol and not in treatment.
OASAS	Office of Alcoholism and Substance Abuse Services: New York State’s substance use services regulatory and oversight agency.
OMH	Office of Mental Health: New York State’s mental health services regulatory and oversight agency.
PHIP	Population Health Improvement Program: created by Governor Cuomo in 2014 as a result of recommendations from the Public Health and Health Planning Council, the goal of the PHIP is to promote the triple aim through the work of regional, neutral contractors, selected in December of 2014. Through convening of stakeholders; identifying, sharing and disseminating information and best practices; and serving as a resource to DSRIP PPSs, the PHIP is charged with supporting and advancing the State Health Improvement Project.
PLWHA	Per-member-per-month payment is a type of capitated payment arrangement, and is used in the New York State Health Home program. Instead of being paid on a fee-for-service basis whereby an entity is reimbursed for each service it provides, it is reimbursed a flat monthly payment for an agreed upon service or range of services.
PPS	Performing Provider System: According to NYS DOH, PPS’s are “entities that are responsible for performing a DSRIP project. DSRIP eligible providers, which include both major public general hospitals and safety net providers, collaborating together, with a designated lead provider for the group.”(New York State Department of Health 2014h).
Ryan White	The Ryan White Care ACT was passed in 1990 to support the Ryan White HIV/AIDS Program that works with community based organizations around the country to provide medical and social support services to people living with HIV/AIDS who do not have sufficient financial or health insurance resources to adequately address their needs. The Program has 5 parts (A, B, C, D, E, and F) and major services funded include: AIDS Education and Training Centers; dental programs; the Minority AIDS Initiative; emergency assistance to metropolitan areas with high rates of HIV/AIDS; and comprehensive primary and family-centered health care for special populations.

Safety Net Provider	<p>In the NYS DSRIP program, in order to receive more than 5% of a Performing Provider System’s total project valuation, an entity must be designated by the NYS Department of Health as a safety net provider. According to NYS DOH, safety net provider definitions vary based on the type of provider:</p> <ol style="list-style-type: none"> a. “A hospital must meet one of the three following criteria to participate in a performing provider system: <ol style="list-style-type: none"> i. Must be either a public hospital, Critical Access Hospital or Sole Community Hospital, or ii. Must pass two conditions: <ul style="list-style-type: none"> • At least 35 percent of all patient volume in their outpatient lines of business must be associated with Medicaid, uninsured and Dual Eligible individuals. • At least 30 percent of inpatient treatment must be associated with Medicaid, uninsured and Dual Eligible individuals; or b. Must serve at least 30 percent of all Medicaid, uninsured and Dual Eligible members in the proposed county or multi-county community. The state will use Medicaid claims and encounter data as well as other sources to verify this claim. The state reserves the right to increase this percentage on a case by case basis so as to ensure that the needs of each community’s Medicaid members are met.” c. Non-hospital based providers, not participating as part of a state-designated health home, must have at least 35 percent of all patient volume in their primary lines of business associated with Medicaid, uninsured and Dual Eligible individuals. <ol style="list-style-type: none"> i. Vital Access Provider Exception: The state will consider exceptions to the safety net definition on a case-by-case basis if it is deemed in the best interest of Medicaid members. Any exceptions that are considered must be approved by CMS and must be posted for public comment 30 days prior to application approval. Three allowed reasons for granting an exception are: <ol style="list-style-type: none"> ii. A community will not be served without granting the exception because no other eligible provider is willing or capable of serving the community. iii. Any hospital is uniquely qualified to serve based on services provided, financial viability, relationships within the community, and/or clear track record of success in reducing avoidable hospital use. iv. Any state-designated health home or group of health homes.” <p>(New York State Department of Health 2014h).</p>
SAMHSA	<p>Substance Abuse and Mental Health Services Administration: Part of the U.S. Department of Health and Human Services (HHS), SAMHSA is the federal regulatory and oversight agency for substance abuse and mental health services.</p>
Seroprevalence	<p>A type of prevalence, seroprevalence is the number of people in a defined population who test positive for a particular disease based on blood serum specimens.</p>

Suboxone	<p>A sublingual formulation of Buprenorphine and Naloxone approved for the treatment of opioid dependence. Unlike methadone, it can be prescribed in a doctor’s office and taken at home.</p>
SRO	<p>Single room occupancy: a housing arrangement in which tenants are leased one room with a shared kitchen and/or bathrooms; though some SROs have two rooms with a half-bathroom or kitchenette. SROs are used in New York City and other places as a type of affordable housing for very low-income or formerly homeless and are often converted hotels.</p>
SEP	<p>Syringe exchange program</p>
TCM	<p>Targeted Case Management: Targeted case management is a type of case management directed towards specific populations, such as people living with HIV/AIDS. In New York, TCM was also known as COBRA Case Management, or Comprehensive Medicaid Case Management. Today, most Medicaid-funded TCM programs (such as HIV TCM and OMH TCM) are being subsumed under the Health Home program.</p>

Appendix D: List of Key Informants

Victoria Abad BOOM!Health	Javiza Castro The Momentum Project	Tamika Howell Harlem United	Joyce Rivera St. Ann’s Corner of Harm Reduction
Greg Allen NYS DOH OHIP	Alane Celeste The Momentum Project	Charles King Housing Works	Leslie Rogers BOOM!Health
Diane Arneith Community Health Action of Staten Island	Dr. David Cohen Brooklyn Health Home (Maimonides)	Frank Laufer NYS DOH AIDS Institute	Nunzio Signorella BOOM!Health
John Barry Southern Tier AIDS Program	Robert Cordero BOOM!Health	Bianca Lopez-Bakke BOOM!Health	Linney Smith Housing Works
Luke Bergmann NYC DOHMH	Matt Curtis VOCAL-NY; IDUHA	Alyssa Lord Community Care Management Partners Health Home (CCMP)	James Tesoriero NYS DOH AIDS Institute
Dr. Jeffrey M. Birnbaum HEAT Program, SUNY Downstate Medical Center	Ira Feldman NYS DOH AIDS Institute	Ed Manchess BOOM!Health	Karen Thompson Housing Works
Keith Brown Catholic Charities Harm Reduction Care Coordination Services	Marcella Flood-Brown HELP/PSI	Fairy Martin BOOM!Health	John Volpe NYC DOHMH
Maria Caban BOOM!Health	Dr. Aaron Fox Albert Einstein College of Medicine	Kevin Muir CAMBA	Dave Watts Evers Pharmacy
Rosemary Cabrera Community Health Care Network Health Home	Taeko Frost Washington Heights Corner Project	Adriana Pericchi BOOM!Health	Valerie White NYS DOH AIDS Institute
	Virgilina Gonzalez Bronx Lebanon Health Home	Maxine Phillips NYS DOH AIDS Institute	Maria Young The Momentum Project
		Daniel Raymond Harm Reduction Coalition	Dr. Jonathon Zellan HELP/PSI



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