

Emily A. Arnold, Shannon M. Fuller, Valerie B. Kirby, Wayne T. Steward

Executive Summary

This rapid response study was undertaken to document how counties in California have previously used the HIV Set-Aside portion of the Substance Abuse Prevention and Treatment (SAPT) Block Grant, which contributed \$12,454,346 to HIV early intervention services and hepatitis C screening in FY2015, and was discontinued in FY2016.¹ Our aim was to develop recommendations for future state and federal funding opportunities to help preserve early intervention services for people living with and at risk for HIV in California. SAPT funding is administered by the Substance Abuse and Mental Health Services Administration (SAMHSA), and the HIV Set-Aside portion of the funding can be used by states that are shouldering a higher burden of AIDS cases. In California, there has been a drop in incident HIV and AIDS cases.² Because the SAPT HIV Set-Aside funds are tied to a threshold rate of 10 or more AIDS cases per 100,000 individuals annually, California was no longer permitted to use SAPT funds towards HIV Set-Aside activities in FY2016 because the case rate in the state decreased below the threshold.^{3,4}

In light of the discontinuation of SAPT HIV Set-Aside funding in California, we look to other state and federal-level funding sources to continue providing these services. For example, the 21st Century Cures Act is a broad bill containing approximately \$4.8 Billion to be spent over 10 years on medical research, medical technologies including genetic mapping, and approximately \$1 Billion in funding to be directed to the states for substance use disorders.⁵ As such, it represents a potential replacement for the funding that was lost through the SAPT HIV Set-Aside. Other potential funding mechanisms include California State General Fund monies and/or funding generated by propositions that mandate taxation on particular substances such as marijuana or tobacco. This report presents findings from in-depth interviews to illustrate how the HIV Set-Aside funding was utilized in select counties across California, and recommendations for how future allocations dedicated to substance use and co-occurring conditions such as HIV and hepatitis C virus (HCV), might be directed.

From April 2015 to June 2016, we conducted 17 key informant interviews and 36 provider interviews with individuals involved in HIV care, substance use treatment and behavioral health in five counties in California (Alameda, Fresno, Los Angeles, San Diego and San Francisco). Interviews were conducted in person or via telephone, and audio recorded. Audio recordings were professionally transcribed and data related to county-level budgeting, clinical programming regarding HIV and HCV testing, linkage to

care, substance use and/or behavioral health services using SAPT HIV set-aside funding were identified.

SAPT HIV Set-Aside funding was used in two primary ways: (1) integrating substance use counseling and education efforts into HIV and primary care settings, and (2) providing HIV and HCV education, testing and linkage to care through substance use services and programs. When SAPT HIV Set-Aside funds were used to integrate substance use counseling and services into HIV and primary care settings, they were utilized in a variety of ways to reach unique at-risk populations. First, the monies supported integrated substance use and behavioral health services for those who were at high risk for HIV, particularly in more rural areas where coordinated services could be provided by mobile counselors traveling throughout a county. Second, the funds supported programs that were tailored to address HIV prevention and substance use needs for unique populations vulnerable to HIV, such as LGBTQ communities or homeless individuals. Participants also described the use of HIV Set-Aside funds to support integration of HIV and HCV testing and linkage to care programs into settings that primarily offer substance use treatment and/or harm reduction services. For services provided in substance use settings, distributing the funding in this manner was seen as useful for two reasons: (1) Substance use care settings had access to a historically difficult-to-reach population which could benefit from linkage to care services for HIV and HCV; and (2) The funds could be combined with other funding streams to support more holistic, comprehensive, and flexible services, including behavioral health counseling and care navigation in drug treatment settings.

Particularly in an era of possible declines in federal level support for public health efforts and substance use treatment, the vulnerability of comprehensive and effective programs to budget cuts cannot be overstated.⁶ The loss of the HIV Set-Aside in California was based on an outdated formula that uses only AIDS cases to determine how well the epidemic is controlled. In an era of treatment as prevention, there are fewer AIDS cases as more people living with HIV are able to access treatment and control their viral load. It would be more prudent to revise the SAPT HIV Set-Aside formula and tie these funds to HIV case rates, which continue to be prevalent in high-risk communities in California and in other states. Specifically, we would recommend that any funding that became available to California via the 21st Century Cares Act or other state or federal funding sources be used with the following considerations:

- Future funding should be directed towards collaborative models of care, since California has demonstrated an ability to integrate behavioral health and substance use counseling into HIV-specific and primary care settings, as well as to integrate HIV and hepatitis C testing and linkage to care outreach into substance use services. Testing for HIV/HCV would be more accessible to low income substance using populations if these services were billable to Drug Medi-Cal.

- Appropriate administrative support and expertise must be available to oversee and support these cross-disciplinary efforts, particularly those efforts involving HIV and HCV testing and linkage to care.
- Comprehensive early intervention services, including behavioral health and substance use counseling, to effectively reach HIV-negative individuals who are engaged in high-risk behaviors should be prioritized.
- Funding should be directed to reach the populations most vulnerable to HIV and/or HCV, and future programming must be designed to address mental health and substance use issues in a culturally appropriate manner.

A reliable source of funding dedicated to providing integrated HIV, HCV, and substance use treatment should be identified in order to protect the advances that California has made in identifying and treating these diseases. Our findings make clear the importance of keeping such services available in order to keep the HIV epidemic, and its co-occurring conditions, such as substance use, at bay. Thus, California must look to other opportunities to support comprehensive programs, such as the 21st Century Cures Act. Rather than punishing California by prohibiting the use of federal funds for HIV prevention and early intervention, resources should be allocated so that public health departments and local county clinics can continue doing this important work.

Background

This rapid response study was undertaken to document how counties in California have previously used the HIV Set-Aside portion of the Substance Abuse Prevention and Treatment (SAPT) Block Grant, which contributed \$12,454,346 to HIV early intervention services and hepatitis C screening in FY2015, and was discontinued in FY2016.¹ Our aim was to develop recommendations for future state and federal funding opportunities to help preserve early intervention services for people living with and at risk for HIV in California.

SAPT funding is administered by the Substance Abuse and Mental Health Services Administration (SAMHSA), and the HIV Set-Aside portion of the funding can be used by states that are shouldering a higher burden of AIDS cases. In California, there has been a drop in incident HIV and AIDS cases.² This may be due to increasing numbers of people living with HIV getting onto ART, the advent and uptake of PrEP, or a variety of public health strategies to test and treat members of the most vulnerable communities. Nevertheless, because the SAPT HIV Set-Aside funds are tied to a threshold rate of 10 or more AIDS cases per 100,000 individuals annually, California was no longer permitted to use SAPT funds towards HIV Set-Aside activities in 2016 because the case rate in the state decreased below the threshold.^{3, 4} The remaining (non-HIV Set-Aside) SAPT monies are reserved for other services. This includes SAPT funds deemed “discretionary,” which have somewhat greater flexibility but must be used specifically for substance use treatment and prevention services, not for the HIV early intervention services that had been supported by the HIV Set-Aside. Please see Appendix A for a more detailed description of the funding categories and services funded through the SAPT Block Grant that California received for FY2017.

SAPT funding comes with direct guidance from the state about how the monies are to be allocated at the county level. Previously, this included directions pertaining to the HIV Set-Aside that was reserved for early intervention services. Such services included information and educational outreach regarding substance use, as well as HIV and/or hepatitis C (HCV) testing and counseling to people living with or at risk for HIV. For those testing positive for HIV or HCV, there were also services to link them to care. In some cases, SAPT funds could be used as “a payer of last resort” to provide additional confirmatory testing and for any treatments arising from “the deterioration of the immune system.” Likewise, the monies could be used to pay for treatment of infectious diseases, such as HCV, so long as the individual clients were HIV-positive, in a substance use treatment program funded by SAPT Set-Aside dollars, and SAPT funding was the payer of last resort.⁷ In recent years, SAPT HIV Set-Aside funding had been used to cover outreach to injection drug users not currently in drug treatment programs.¹

The SAPT HIV Set-Aside funding allocation formula to determine county-level funding in California¹ was based on multiple variables (see Table 1):

Table 1: Allocation Formula for HIV Set-Aside

Weighting	Needs-based Data Factors
75%	People living with HIV/AIDS, ¹ excluding prison cases, diagnosed through December 31, 2010
15%	African American population based on Census 2010
5%	Hispanic population based on Census 2010
5%	People living below the Federal poverty line based on Census 2010
100%	Total

Counties received no less than \$7,500 in HIV Set-Aside funds, which was deemed to be enough to create a minimally viable early intervention program. Six counties declined funds: Alpine, Calaveras, Colusa, Mariposa, Sierra, and Trinity.¹ Of the 51 counties in California that accepted HIV Set-Aside funding in 2015, the average award was \$245,415 and median was \$30,861.⁸ Awards ranged from larger amounts directed to high prevalence counties (\$4,458,877 to Los Angeles, \$1,370,776 to San Francisco, and \$1,288,709 to San Diego) to more modest amounts at the \$7,500 threshold.⁸

Preserving early intervention services for HIV and the treatment of other co-morbidities is critical for improving health outcomes among people living with HIV (PLWH) and those at risk of HIV. The U.S. Preventive Services Task Force recommends routine testing and early intervention services for HIV due to evidence that early initiation of antiretroviral therapy is beneficial.⁹ Treating other co-morbidities can also improve health outcomes for people living with HIV. For example, the approximately 25% of PLWH in the U.S. who are co-infected with HCV are at increased risk for serious, life-threatening complications.¹⁰ In addition to more than tripling the risk for liver disease, liver failure, and liver-related death, HCV progresses faster among those who are co-infected.^{11,12} Furthermore, HIV/HCV co-infection disproportionately affects people who inject drugs.¹⁰ Behavioral health, encompassing mental health and substance use disorder care, is another key co-morbidity to consider for people living with and at risk for HIV, as behavioral health treatment can support better adherence to antiretroviral treatment^{13,14} and prevent transmission of the virus to others.¹⁵ Among people who inject drugs, treatment of mental health disorders supports primary and secondary prevention of HIV infection (i.e., preventing acquisition and transmission of infection).¹⁶

In light of the discontinuation of SAPT HIV Set-Aside funding in California, we look to other state and federal-level funding sources to continue providing these services. For example, the 21st Century Cures Act is a broad bill containing approximately \$4.8 Billion to be spent over 10 years on medical research, medical technologies including genetic mapping, and approximately \$1 Billion in funding to be directed to the states for substance use disorders.⁵ As such, it represents a potential replacement for the funding that was lost through the SAPT HIV Set-Aside. Other potential funding mechanisms include California State General Fund monies and/or propositions, which generate revenue through taxation on particular substances such as marijuana or tobacco. This

¹ California used HIV/AIDS cases to distribute SAPT HIV Set-Aside monies to its counties, even though the federal government used AIDS case rates to determine the state's eligibility for the Set-Aside funds.

report presents findings from in-depth interviews to illustrate how the HIV Set-Aside funding was utilized in select counties across the state of California, and recommendations for how future allocations dedicated to substance use and co-occurring conditions such as HIV, might be directed.

Methods

From April 2015 to June 2016, we conducted 17 key informant interviews and 36 provider interviews with individuals involved in HIV care, substance use treatment and behavioral health in five counties in California (Alameda, Fresno, Los Angeles, San Diego and San Francisco). We sought to include a range of counties most impacted by HIV, and to also include a more rural setting, Fresno, which received a smaller allocation of the HIV Set-Aside (\$222,675) to cover a more geographically dispersed population. Interview topics relevant to this analysis included questions about: the funding streams available to support behavioral health services and substance use services for people living with and impacted by HIV; description of the behavioral health services available at the agency and/or county that the participant represented; and how these services were integrated into other HIV and primary care-related treatment and care. Interviews were conducted by a team of investigators and policy analysts at the University of California, San Francisco and lasted between 60-90 minutes. Interviews were conducted in person or via telephone, and audio recorded. Audio recordings were professionally transcribed and data related to county-level budgeting, and clinical programming regarding HIV and HCV testing, linkage to care, substance use and/or behavioral health services using SAPT HIV Set-Aside funding were identified. The Institutional Review Board at the University of California, San Francisco reviewed and approved the study protocol, and all participants provided verbal consent.

Findings

SAPT HIV Set-Aside funding was used in two primary ways: (1) integrating substance use counseling and education efforts into HIV and primary care settings, and (2) providing HIV and HCV education, testing and linkage to care through substance use services and programs.

Use of the HIV Set-Aside funds to integrate substance use counseling and services into HIV and primary care settings

In keeping with the state's guidelines outlined above, we found that SAPT HIV Set-Aside funds were used to integrate substance use counseling and services into HIV and primary care settings. County officials and clinical providers cited multiple reasons for greatly appreciating the SAPT HIV Set-Aside funds. First, the monies supported integrated substance use and behavioral health services for those who were at high risk for HIV, particularly in more rural areas where coordinated services could be provided by mobile counselors who traveled around the county. Second, the funds supported programs that were tailored to address HIV prevention and substance use needs for unique populations vulnerable to HIV, such as LGBTQ communities or homeless individuals.

Integrated services with HIV and primary care:

In counties that included more rural settings, such as San Diego and Fresno, SAPT HIV Set-Aside funds were used to hire substance use counselors that traveled around to provide substance use counseling at clinics throughout the county. The counselors were thus able to make their services available on a weekly basis to more rural, and difficult to reach, individuals in different parts of the county. Most importantly, because the funding was not directly earmarked for people living with HIV, clinical staff knew they would be able to regularly refer patients, whatever their HIV status, for substance use counseling. Of particular point of pride for many service providers and key informants was an acknowledgement of the unique role that SAPT HIV Set-Aside funding was able to play in preventing HIV infection among high risk negatives with mental health and substance use service needs, as reflected in comments of one informant who discussed the need to identify funding sources to support integrated models.

If our goal is to end the HIV epidemic, we won't be successful until we really get a handle on mental health and substance abuse. It's absolutely impossible for us to succeed without addressing those [issues]. There's one huge piece that I didn't talk about. We don't have effective mental health resources for people who are HIV negative but at high risk for infection. There's no resources to address sexual compulsivity or sex addiction. There's zero. Unless you can afford to pay \$170 a week to see a private therapist. (Alameda County)

Unfortunately, funds were limited. One informant based in Fresno noted that while funds were appreciated, they were spent rapidly on salaries to substance abuse and LCSW credentialed counselors to work in those settings.

[SAPT HIV Set-Aside] funds our substance abuse and one LCSW. The substance abuse guy and one LCSW, and pretty much nothing else. It also funds that same position in Kern [County]. The grant covers both Kern and Fresno. So there's two substance abuse positions and two LCSW's for the organization that are funded by that \$500,000. We realize that 500 grand doesn't go very far. With mental health professionals' [salaries], it gets chewed up pretty quick. (Fresno County)

In many cases, SAPT represented one funding stream alongside other funding streams that were woven together by clinics and counties to make behavioral health, along with substance use counseling, available in primary care settings for people who were at high risk for HIV. However, having substance use counseling offered alongside behavioral health counseling sometimes created barriers to accessing the substance use services, primarily because of stigma related to drug use. In one San Diego clinic, for example, SAPT HIV Set-Aside funds allowed the facility to provide services to people living with HIV (PLWH) and to their partners. Medi-Cal and Ryan White were separately providing funds for behavioral health support, in the form of a therapist. This individual was more heavily utilized than the substance use counselor. Our informant noted that although the substance use counselor would come to the clinic on a weekly basis, patients were reluctant to make appointments due to the fear of being stigmatized for substance use

disorders. As a consequence, the behavioral health therapist provided counseling most frequently for issues related to substance use.

And then as I mentioned briefly, we do have this Early Intervention Services so we have mental health clinicians here weekly, at our site, who's able to see anyone with HIV, or I think anyone affected by HIV can also qualify. So moms, partners, and folks like that. And so she's pretty busy, as you can imagine. But she gives us – I think – seven visits in the time she's here. On a weekly basis. So we do have some work-around, too, if there is someone who's maybe Medi-Cal and maybe just can't quite make it. So instead of going the Ryan White reimbursement route, we would just sort of link them to our center. And then we also have a substance abuse counselor who comes once a week and he also gives us three hours, four hours, where he's just out-patient up here. But he is not nearly as popular....I think the stigma around mental health is really shed, and there's a lot of people who are ready and willing to accept that, but I don't think the same is true for the words substance abuse. (San Diego County)

Thus, there is a need for sufficient resources to design health care delivery systems that can be responsive to stigma and feature programs that lower barriers to accessing care.

Reaching particularly vulnerable populations in targeted ways:

In some cases, SAPT HIV Set-Aside funding allowed agencies to provide targeted substance use counseling to individuals at risk for HIV in a tailored, culturally competent fashion. Here is an informant discussing their substance use outreach, which was funded by the Set-Aside, and was designed to reach homeless individuals, and address their behavioral health needs, substance use and also provide alcohol-related counseling in a convenient fashion.

I should mention, our behavioral health includes substance abuse. Out-patient substance abuse. We don't do in-patient....we use [our substance use] folks to see everybody, by the way...Our substance abuse guys are awesome. Very proactive. And we have an AA [Alcoholic Anonymous] meeting every Tuesday night at that same health center. After hours. Which is interesting to me that there are very few – as it turned out – we found out that the shelters require that their residents, when they're going to AA meetings, they won't hold one at the shelter. They insist they find another one in the community to go to. That was a surprise to me. So that's why we have one at our health center [which is close by]. (Los Angeles County)

With the loss of SAPT HIV Set-Aside funding, there is the risk of losing culturally competent providers, particularly in rural parts of California.

So we're the only ones providing LGBTQ- [competent services], we're the only ones with this amount of funding in the day treatment program's funds, so I'm gonna have to really start working then to make up this money. (San Diego County)

Still, the ability to provide substance use counseling that was integrated with HIV-specific services was viewed as a tremendous opportunity to take care of co-occurring conditions that impact the ability of people living with HIV to remain in care and on treatment. For example, in Los Angeles, there was a program to integrate general mental health and substance use services into support groups for HIV positive individuals.

Well, what we're doing is, we're sending the people that we think – where there might be some substance use, they have to go to the mental health worker, who would assess that and try to work with that a little bit, as part of the services that they give, understanding that there are special kinds of issues and needs for the HIV positive group, that we want to incorporate a little bit of prevention for positives and an understanding of some of the other issues that they're facing, around trauma and identity and self-esteem, and all of those things, in addition to the substance use. So then, depending on if more would be needed, then that would generate a connection to something else. (Los Angeles County)

SAPT HIV Set-Aside funding was used in a targeted way to identify opportunities for substance use and mental health support within the context of services designed for PLWH. In robust health care settings, this resulted in referrals to other services to address these unmet needs within the population.

Use of the HIV Set-Aside funds to provide HIV and HCV education, testing and linkage to care through substance use services and programs

Unlike Drug Medi-Cal, which cannot reimburse drug treatment programs for HIV or HCV testing,¹⁷ the HIV Set-Aside provided resources for such tests to be conducted in drug treatment settings, where positivity rates for HIV and HCV were likely to be high. One informant from San Francisco estimated HCV positivity rates in drug treatment settings to range from 10-15% to 20-25% and HIV positivity rates to be around 1-2%. Participants described the use of HIV Set-Aside funds to support integration of HIV and HCV testing and linkage to care programs in settings that primarily offer substance use treatment and/or harm reduction services. For substance use settings, distributing the funding in this manner was seen as useful for a couple reasons: (1) Substance use care settings had access to a historically difficult-to-reach population who could benefit from linkage to care services for HIV and HCV; and (2) The funds could be combined with other funding streams to support more holistic, comprehensive, and flexible services, including counseling and navigation.

Access to a difficult-to-reach population in need of services:

Participants generally saw substance abuse treatment settings as good opportunities to offer testing and linkage to care services to clients who may not present to care elsewhere because of distrust of the medical system and/or socioeconomic barriers to care engagement. One provider based at a syringe exchange organization in Los Angeles summed up the sentiment well. She remarked that the population her organization serves, which consists of people who inject drugs and many (around 65-70%) who are experiencing homelessness, has a low rate of completion of referrals to other care sites,

but that the clients regularly come to the syringe exchange. After conducting a successful pilot project for HCV testing and linkage to care, the organization planned to use HIV Set-Aside funding to expand its linkage to care program.

There's been a number of studies that show that if folks who are using a syringe exchange regularly are not receiving care, like medical care, mental health care, or substance abuse management stuff, at the exchange site, they're generally not receiving it anywhere else. So that linkage to care piece – our hope is that this opportunity can shift that, because there are so many – well, at least the clinics are supposed to be expanding in a way – they're now more responsible for our folks, we're supposed to be plugging a gap in a system that wasn't functioning for our folks, and so now is our opportunity to make that system function a little better, and we're hoping that if we create this program that establishes itself, and people start to respond to it and want it, maybe then we can improve that linkage to referral care, or just move them to a place that can manage and support them with more resources than us, frankly. (Los Angeles County)

For this agency, the HIV Set-Aside funding would allow them to offer testing and linkage to care services to more clients than possible through the pilot program. Notably, the participant also described good buy-in for the project among their clientele.

[Through the pilot project] we're not able to assess everybody and offer the service to everybody who needs it, and so what we're doing is, we're picking people who we think are likely to work with us because we have more of an established relationship with them than somebody who comes in and out all the time and is not engaging on that level. So these expansions, Hep C linkage to care programs, are really focused on trying to cast a more wide net... We haven't gotten a lot of resistance [to the linkage to care model]. People want it. They're more interested in the incentive at first, and later on – that's sort of the way it works. (Los Angeles County)

Flexible funding support for counseling programs and intensive navigation services:

Counties were able to use HIV Set-Aside funds to support comprehensive services in substance use settings. Informants from San Francisco described a program in their county, which provides comprehensive counseling services, linkage to HIV care, and early intervention services specifically for men who use drugs and/or alcohol and are at high risk of acquiring HIV through sex (e.g., gay men, transmen who have sex with men, and other men who have sex with men.) Another clinic, a residential drug treatment center for LGBTQ-identified people in San Diego used HIV Set-Aside funding to provide early intervention services and mental health counseling to clients at risk for HIV. Roughly half of the beds are reserved for PLWH, and while the organization can dedicate a small portion of Ryan White funds towards day treatment and residential care services for substance use, since it was prioritized through their local Ryan White planning council, it primarily received funds from SAPT to run its treatment program for high risk negatives. HIV Set-Aside funds represented approximately one tenth of the funding for their residential treatment program, and one third of the budget for their linkage to care and counseling services. A provider explained that the HIV Set-Aside funding was

especially relevant because it recognized the need for prevention and early intervention services that integrated mental health services into substance use treatment settings and reached those at risk for HIV before they became infected. The informant noted that this had been a longstanding need for their clinic, and appreciated the flexibility of the funding to provide these integrated services including both substance use and HIV-related prevention and early intervention services at their site:

Provider: The biggest part of the money that we get to operate this facility is the federal block grant from SAMHSA. That is what will cover our general population [HIV-negative] beds, plus all the operation expenses.

Interviewer: And is that the [SAPT] funding that we're talking about, or is that another piece of the block grant?

Provider: The one you're talking about, the [SAPT funding], which is substance abuse prevention treatment, that's part of what we get money out of. And then this is combined [with] the HIV-specific early intervention service. So we do get PEI, which is Prevention and Early Intervention funding [part of California's Mental Health Services Act, MHSA], which is what has paid for our mental health services, once they got paid for. (San Diego County)

The clinic featured in the example above received most of its support from SAPT and the HIV Set-Aside specifically. For its prevention and early intervention services, it was heavily dependent on the HIV Set-Aside as well as funding from the Prevention and Early Intervention (PEI) Statewide Project, which provided funds for mental health services and resources in California. Together, these funding sources supported mental health services for newly diagnosed and high-risk negatives in their facility. At the time of the interview, our informants had just learned they were going to lose the SAPT HIV Set-Aside as a funding source and were quite concerned about replacing it because it covered a large portion of their staff time.

This clinic also used the HIV Set-Aside to provide comprehensive linkage to care services for people who were newly diagnosed with HIV. Here, the informant described the clinic's effort to provide robust linkage to care services.

So if somebody is newly diagnosed, I or one of the staff who's trained in HIV care will accompany the client to the medical care, to the medical appointment. If somebody thinks they're positive, then we have – there are several staff that will go to the appointment with them, because we know that's such a critical time. [And it's important] for someone to be there, and supportive. We have volunteers that will accompany residents to appointments, and then the residents will also ride the bus to the appointments. We do have an SUV. We're hoping to get a van again soon, that we can take people to the appointments. We [also] do free bus passes. (San Diego County)

Participants often remarked on the vulnerability of funding available for substance use disorder services. As one provider from San Francisco described in the quote below,

SAPT money could provide more robust funding options for substance use care in conjunction with Medi-Cal.

Most of substance use funding is on soft money, and when I say 'soft money,' I mean on unrestricted funds for the city and county – which puts substance use in a very vulnerable position, and whenever there's reductions in the city and county of San Francisco budget, substance use programs tend to be the first that are targeted for elimination or reduction. So I think with more Medi-Cal dollars, this puts substance use funding on firmer ground. But the other thing that it does is, there's federal pass-through dollars, which is SAPT funding, and that SAPT funding, if Medi-Cal covers certain services or expenses, then the city can move around to where they're using the SAPT money. So that effectively might actually help to improve some of the funding situation as it comes to substance use in the city and county. (San Francisco County)

It is worth noting that the participant quoted above is discussing SAPT funding in general, not specifically the HIV Set-Aside portion of the grant. However, this participant raises an important point about the broader vulnerability of dedicated funds related to substance use.

Discussion

The SAPT HIV Set-Aside funding provided support for integrated care models, creating opportunities for those living with and impacted by HIV to access substance use counseling in primary care settings, as well as providing needed educational outreach and HIV and HCV testing and linkage to care in clinics devoted to substance use disorders. Furthermore, this funding stream also promoted collaboration between HIV specialists and substance use professionals, allowing for more interaction between these silos in the healthcare system. In an era where comprehensive, more holistic approaches to health result in better health outcomes and cost effectiveness,¹⁸ future funding should also be directed towards collaborative models of care.

Interestingly, services that were offered in these diverse contexts were sometimes viewed with suspicion or were even stigmatized, such as the case of offering substance use counseling in primary care settings in rural Fresno. This calls for the need to ensure that appropriate administrative support and expertise are available to oversee and support these cross-disciplinary efforts. Indeed, county public health informants identified barriers to directing appropriate funding to organizations with relevant experience and infrastructure. Thus, the appropriate agencies and professionals should be funded to oversee the allocation of funding at the county level, and to implement these services on the ground.

Unlike Ryan White funding, the HIV Set-Aside funding was able to provide comprehensive early intervention services, as well as behavioral health and substance use counseling to effectively reach high-risk negatives. Many of our informants believed that SAPT-supported programs prevented HIV infections, and did so in a culturally competent fashion. From providing substance use counseling within a support group setting for

people living with HIV, to paying for HIV and HCV test kits and counseling to individuals who were present at needle exchange sites, Set-Aside funds were used in tailored, thoughtful efforts developed for the most vulnerable populations. Furthermore, because Drug Medi-Cal does not cover HIV and HCV testing, the loss of the HIV Set-Aside funds effectively removed these services from contexts where vulnerable substance using populations were more likely to make use of them. Particularly in counties, such as San Francisco, where relatively high positivity rates were detected through HIV and HCV testing supported by the HIV Set-Aside, there is a need to consider whether Drug Medi-Cal funds should be dedicated to supporting these services, making them more accessible and sustainable to the public.

Particularly in an era of possible declines in federal level support for public health efforts and substance use treatment, the vulnerability of comprehensive and effective programs to budget cuts cannot be overstated.⁶ The loss of the HIV Set-Aside in California was based on an outdated formula to determine how well the epidemic is controlled, using AIDS case rates. In an era of treatment as prevention, there are fewer AIDS cases as more people living with HIV are able to access treatment before their CD4 count dips below a certain threshold, and therefore control their viral load sooner. Fewer individuals living with HIV progress to AIDS. In light of current treatment guidelines, it would be more prudent to tie HIV Set-Aside funds to HIV case rates, which continue to be prevalent in high-risk communities in California and in other states. Unlike Ryan White, a federal funding source dedicated to providing HIV-related care and treatment and support services for those living with HIV, there is no dedicated funding source to support substance use treatment or prevention services to substance users. Indeed, substance use funding is in greater danger of being eliminated during budgetary contractions. Funding provided through sources such as the 21st Century Cures Act or California's General Fund may be able to fill gaps left by the loss of the SAPT HIV Set-Aside funding in California. Although some counties were able to apply for other grant funding or raise funds through private donations to support HIV and HCV testing, linkage to care, and treatment, for example, these revenue streams are not sustainable in the long term. Specifically, we would recommend that any funding that became available to California via the 21st Century Cares Act or other state or federal funding sources be used with the following considerations:

- Future funding should be directed towards collaborative models of care, since California has demonstrated an ability to integrate behavioral health and substance use counseling into HIV-specific and primary care settings, as well as to integrate HIV and HCV testing and linkage to care outreach into substance use services. Testing for HIV/HCV would be more accessible to low-income substance using populations if these services were billable to Drug Medi-Cal.
- Appropriate administrative support and expertise must be available to oversee and support these cross-disciplinary efforts, particularly those efforts involving HIV and HCV testing and linkage to care.

- Comprehensive early intervention services, including behavioral health and substance use counseling, to effectively reach HIV-negative individuals who are engaged in high-risk behaviors should be prioritized.
- Funding should be directed to reach the most vulnerable populations to HIV and/or HCV, and future programming must be designed to address mental health and substance use issues in a culturally appropriate manner.

Limitations

Although we were able to interview informants in four of the counties (Alameda, Los Angeles, San Diego, and San Francisco) that received some of the highest levels of SAPT HIV Set-Aside funding, as well as a county that received less of the HIV Set-Aside funds (Fresno), we were not able to exhaustively document how SAPT HIV Set-Aside funds were used across the State of California. Still, with the inclusion of a diverse array of data collection sites, we were able to provide evidence for the impact that these funds had on service provision to vulnerable populations.

Conclusion

A reliable source of funding dedicated to providing integrated HIV, HCV, and substance use treatment should be identified in order to protect the advances that California has made in identifying and treating these diseases. The formula that determined receipt of HIV Set-Aside funding resulted in somewhat perverse consequences. Specifically, states lose funding if they implement programs that successfully prevent HIV/AIDS cases. Our findings make clear the importance of keeping such services available in order to keep the HIV epidemic, and its co-occurring conditions, such as substance use, at bay. Thus, California must look to other opportunities to support comprehensive programs, such as the 21st Century Cures Act. Rather than punishing California by prohibiting the use of federal funds for HIV prevention and early intervention, resources should be allocated so that public health departments and local county clinics can continue doing this important work.

Acknowledgements

This research was supported by funds from the California HIV/AIDS Research Program, Office of the President, University of California, Grant Number RP15-SF-096 and Grant Number RP11-SF-021.

We wish to thank our participants for sharing their time and insights with us.

References

1. California Department of Health Care Services. Fiscal Year 2014-15 Budget Act Allocation. Exhibit A. Overview of Programs, Funding, and Allocation Methodologies. Available from: http://www.dhcs.ca.gov/services/MH/MHSUD/Documents/Information_Notices/14-037_Exhibit_A.pdf
2. California Department of Public Health, Office of AIDS. California HIV Surveillance Report – 2014. October 2016.
3. California Department of Health Care Services. Fiscal Year 2016-17 Governor’s Budget Allocation Exhibit A. Overview of Programs, Funding, and Allocation Methodologies. Available from: http://www.dhcs.ca.gov/formsandpubs/Documents/Info%20Notice%202015/MH_SUDS_IN_16-019_Exhibit%20A.pdf
4. U.S. Code Title 42 § 300x-24. Requirements regarding tuberculosis and human immunodeficiency virus.
5. 21st Century Cures Act. Rules Committee Print 114-67. 2016. Available from: <http://docs.house.gov/billsthisweek/20161128/CPRT-114-HPRT-RU00-SAHR34.pdf>
6. Jost, TS. Beyond Repeal: A Republican Proposal for Health Care Reform. *N Engl J Med.* 2014; 370(10): 894-896.
7. State of California Health and Human Services Agency. Department of Alcohol and Drug Programs. ADP Bulletin. “Substance Abuse Prevention and Treatment (SAPT) Block Grant Human Immunodeficiency Virus (HIV) Set-Aside Expenditure Requirements. Issue Date: 7-23-04.
8. Calculations based on numbers reported in FY 2014-15 Budget Act Allocation. Exhibit A.
9. Moyer V. Screening for HIV: U.S. Preventive Services Task Force Statement. *Ann Intern Med.* 2013; 159:51-60.
10. Centers for Disease Control and Prevention. HIV and Viral Hepatitis. March 2014. Available from: http://www.cdc.gov/hiv/pdf/library_factsheets_hiv_and_viral_hepatitis.pdf
11. Klein MB, Althoff KN, Jing Y, et al. Risk of end-stage liver disease in HIV-Viral Hepatitis C coinfecting persons in North America from the early to modern antiretroviral therapy eras. *Clin Infect Dis.* 2016; 63(9):1160-1167.
12. Weber R, Sabin CA, Friis-Møller N, et al. Liver-related deaths in persons infected with the human immunodeficiency virus: the D:A:D study. *Arch of Intern Med.* 2006; 166 (15): 1632-1641.
13. Tucker JS, Burnam MA, Sherbourne CD, Kung FY, Gifford AL. Substance use and mental health correlates of nonadherence to antiretroviral medications in a sample of patients with human immunodeficiency virus infection. *Am J Med.* 2003;114(7):573-80.
14. Ammassari A, Antinori A, Aloisi MS, et al. Depressive symptoms, neurocognitive impairment, and adherence to highly active antiretroviral therapy among HIV-infected persons. *Psychosomatics.* 2004;45(5): 394-402.
15. Cohen MS, Chen YQ, McCauley M, et al. Antiretroviral therapy for the

- prevention of HIV-1 transmission. *N Engl J Med.* 2016;375(9):830-9.
16. Buckingham E, Schrage E, Cournos F. Why the treatment of mental disorders is an important component of HIV prevention among people who inject drugs. *Adv Prev Med.* 2013.
 17. California Code of Regulations. Title 22 § 51516.1. Reimbursement Rates for Drug Medi-Cal Substance Abuse Program Services.
 18. Weaver, MR, Conover CJ, Proescholdbell RJ, et al. Cost-effectiveness analysis of integrated care for people with HIV, chronic mental illness and substance abuse disorders. *J Ment Health Policy Econ.* 2009; 12(1):33-46.

Appendix A: Funding Categories of the SAPT Block Grant

Fund Category	Services Funded	FY2017 Award for California
Discretionary	Substance use disorder treatment, prevention, and recovery services	\$154,365,356
Prevention Set-Aside	State is required to spend 20% of the total SAPT block grant on primary prevention services, e.g., strategies, programs and services that aim to prevent substance use disorders	\$47,162,776
Friday Night Live/Club Live	Youth program to prevent alcohol and other drug use	\$1,104,000
Perinatal Set-Aside	Women-specific services for treatment and recovery from alcohol and other substance use disorders; supportive services for women and children	\$17,054,000
Adolescent and Youth Treatment Program	Comprehensive, age-appropriate substance use disorder services for youth	\$7,326,561
HIV Set-Aside	HIV early intervention services; also supports testing for other infectious diseases, such as HCV, if the following requirements are met: (1) the individual is HIV-positive, (2) the treatment program must be receiving funds from the SAPT HIV Set-Aside, (3) the individual must be undergoing substance abuse treatment, and (4) SAPT block grant funds must be the payer of last resort Funds can also pay for an HIV counselor to attend alcohol and other drug treatment sessions for the purpose of conducting pretest counseling.	Eliminated (\$12,454,346 moved to discretionary award block)