THE HIV, HOUSING, & EMPLOYMENT PROJECT

City of Paterson Intervention Manual

THE HIV, HOUSING, & EMPLOYMENT PROJECT

CITY OF PATERSON NEW JERSEY

City of Paterson SPNS Intervention

Authors

Special thanks to everyone who contributed to the success of the intervention and this manual. The following is a list of authors of this manual; however, this does not reflect everyone who provided invaluable insight and wisdom into intervention activities that ultimately made their way into this document.

Milagros Izquierdo
Jesse Thomas
Thomas Rodriguez-Schucker
Robert Folgar
Alyse Rokita
Susan Shane
Louis Deis
Denise Coba

Center for Innovation in Social Work & Health at the Boston University School of Social Work
and their Technical Assistance Consultants, Alison O Jordan & Jacqueline Cruzado
Impact Marketing + Communications

The Special Projects of National Significance (SPNS) Initiative, Improving Health Outcomes Through the Coordination of Supportive Employment & Housing Services intervention was implemented by the City of Paterson, New Jersey, a RWHAP Part A recipient based in Paterson, New Jersey under grant number H97HA31429.

This project was supported by the Health Resources and Services Administration (HRSA) and the Minority HIV/AIDS Fund (MHAF) of the U.S. Department of Health and Human Services (HHS) as part of an award totaling $900,000 with 0 percentage financed with non-governmental sources. The contents are those of the authors and do not necessarily represent the official views of, nor endorsements, by HRSA, HHS or the U.S. Government.

Table of Contents

```
<img src="downtownpatersonnj.jpg" alt="aerial view of downtown Paterson NJ">
```

Introduction

Purpose

The purpose of this manual is to document, demonstrate, and support replication of the City of Paterson, New Jersey, HIV, Housing, & Employment Special Project of National Significance (SPNS) intervention.

The Health Resources and Services Administration's (HRSA) Ryan White HIV/AIDS Program (RWHAP) provides a comprehensive system of HIV primary medical care, essential support services, and medications for low-income people with HIV who are uninsured and underserved. The Program funds grants to states, cities/counties, and local community-based organizations to provide care and treatment services to people with HIV to improve health outcomes and reduce HIV transmission among hard-to-reach populations.

An important strength of the Special Projects of National Significance (SPNS) program is the collaborative thinking, innovative ideas, and outside-of-the-box thinking that contributes to the success of funded interventions. The intervention outlined in this manual was part of the "Improving HIV Health Outcomes through the Coordination of Supportive Employment and Housing Services" Initiative (otherwise known as the "HIV, Housing & Employment Project"). This HRSA SPNS Initiative was funded by the U.S. Department of Health and Human Services (HHS) Minority HIV/AIDS Fund (MHAF), and the intervention was conducted and evaluated within a RWHAP-funded site.

As stated in Funding Opportunity Number: HRSA-17-114, each demonstration site is required to document their intervention methodology, implementation, outcomes and lessons learned for the purposes of replication. Boston University, the Evaluation and Technical Assistance Provider (ETAP) will review and develop a companion guide highlighting the similarities and differences of the intervention for dissemination to the wider RWHAP community, Department of Housing and Urban Development (HUD) programs, Department of Labor (DOL) programs, and other key stakeholders.

The intervention manual serves to document the intervention methodology, implementation, outcomes and lessons learned from the demonstration project at the City of Paterson, New Jersey, under this initiative. Furthermore, the specific purpose of the manual is to help others replicate the general model of the City of Paterson SPNS intervention. The intervention was implemented by the City of Paterson, a RWHAP Part A recipient, and Housing Opportunities for People with AIDS (HOPWA) recipients, based in Paterson, New Jersey.

Audience

This manual specifically targets HIV service providers, community stakeholders including local county, city, and state agencies who are interested in improving access and quality of services for people with HIV who are homeless or unstably housed and unemployed/underemployed.

The City of Paterson is a RWHAP recipient and HOPWA recipient serving the Bergen-Passaic Transitional Grant Area (TGA) in New Jersey. In partnership with the Bergen One-Stop Career Center funded by the U.S. Department of Labor, this intervention expands and enhances existing partnerships to better coordinate and integrate HIV care, housing, and employment services. The Paterson SMART CARE MANAGEMENT Intervention is designed to improve the coordination and integrations of HIV care services, housing services and employment services through process improvements in collecting, reporting and using HIV health outcome indicators to improve care management, by expanding and enhancing Citywide collaborations among HIV care and treatment, housing and employment service providers to build stronger interconnected interoperable referral systems and create a more integrated response network toward the goal of Ending the Epidemic.

Background and Intervention

Description of the Demonstration Site

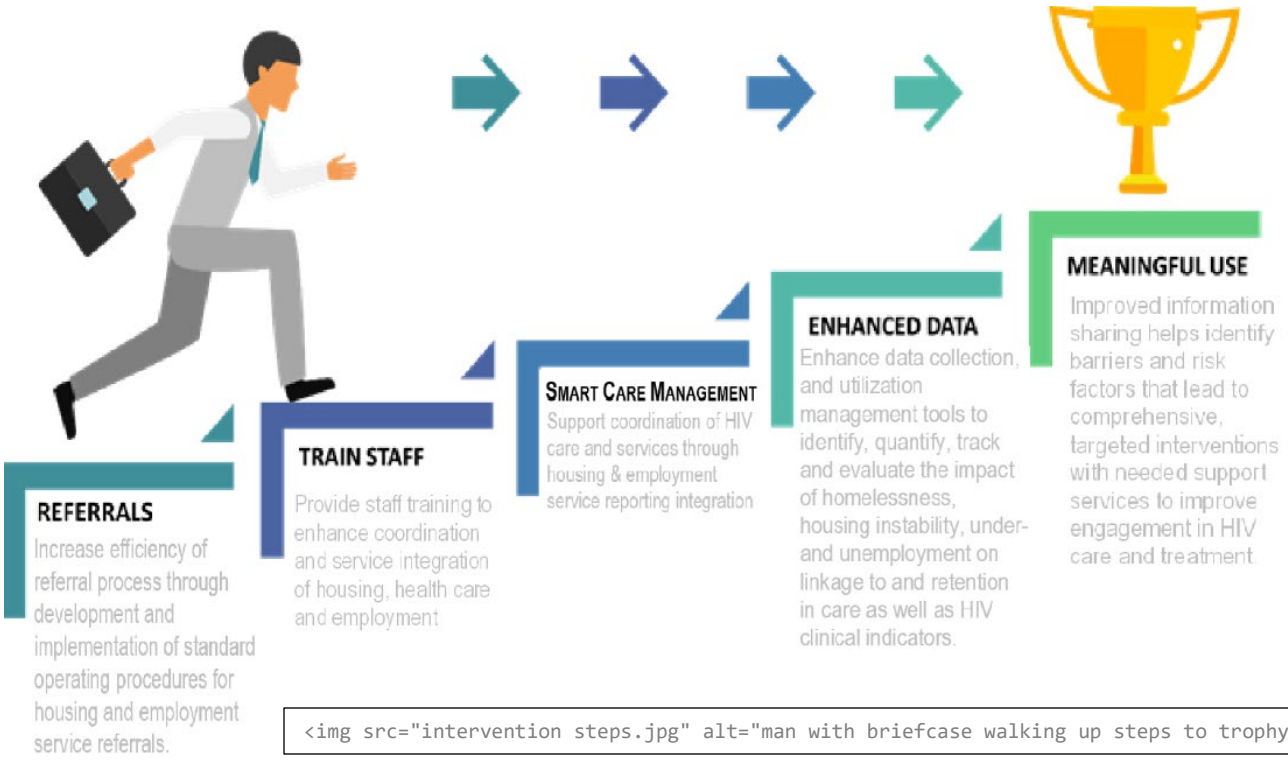
The City of Paterson HIV, Housing, and Employment Project addresses many issues faced by AIDS Service Organizations (ASO's)/Community Based Organizations (CBO's) in housing vulnerable populations in urban housing markets, including effective strategies and associated resources. Housing continues to be a critical unmet or under met need among people with HIV. The HIV, Housing, & Employment Project supports the design, implementation, and evaluation of innovative interventions that coordinate HIV care and treatment, housing, and employment services to improve HIV health outcomes for low-income, uninsured, and underserved people with HIV.

Demonstration Site Goals & Objectives

The overarching goal of this intervention is to use a coordinated approach, using technology, resources and expanded network of care to improve health outcomes of people with HIV across the TGA. By Intervening across disciplines and geographic areas to improve the integration of HIV care and treatment, housing, and employment services, the goal of building self-sustainability for people with HIV to live longer, healthier lives is achievable. The objectives of this intervention are to increase the number who know their HIV status, increase reengagement in HIV care and treatment and facilitate access to social determinants of health including housing and employment by:

- Conducting outreach to identifying and engage people with HIV eligible for or receiving services across systems
- Identitying remove specific barriers and risk factors, such as lack of stable housing, employment, underemployment and lack of viral load suppression, toward engagement and maintenance in HIV care and treatment.
- Creating an efficient multi-directional referral process to enhance medical and non-medical case management, improving communication, coordination and collaboration among HIV care, housing services, and employment providers, using IT supports to identity real by sharing up-to-date actionable information to inform care management across disciplines toward a fully integrated system of care;
- Realigning program operations and training staff across disciplines to coordinate health care, housing and employment services for all people with HIV through real-time coordinated referrals and case management through shared access to a single data system.

The City of Paterson SPNS intervention provides coordinated employment, housing and medical case management services to clients of Bergen-Passaic TGA case management services. The specific target population are case management recipients with incomes below 400% of federal poverty level who have unmet housing and/or employment needs, with a special focus on members of racial and ethnic minority communities.




```
<img src="intervention steps.jpg" alt="man with briefcase walking up steps to trophy">
```

Figure 1: Steps to Implementation

The Bergen-Passaic TGA, comprised of Bergen and Passaic Counties, and the City of Paterson, NJ, located in northeastern New Jersey bordering New York City and Newark[1], **is densely populated with** a general population of approximately 1.46 million,014, 16% of the State's population residing in the TGA. The majority of HIV cases are found in the urban centers of Paterson, Passaic City, and Hackensack. Approximately one-third of its residents live at or below 300% of the federal poverty level. Passaic County is among the poorest counties in New Jersey. Social and economic indicators rank Paterson among the worst in the state. The TGA is a rich mosaic of racial and ethnic cultures as well. In both counties combined, 30% are foreign born with more than fifty languages spoken in the home.[2]

The TGA's racial / ethnic composition is 74% White, 11% African American/Black, <1% American Indian/Alaskan Native, 8% Asian, 2.5% Multiracial, 31% Hispanic/Latino, 51% Male, 49% Female, 23% <18 years of age, and 15% >65 years old. The median age for the TGA is 37 years old.

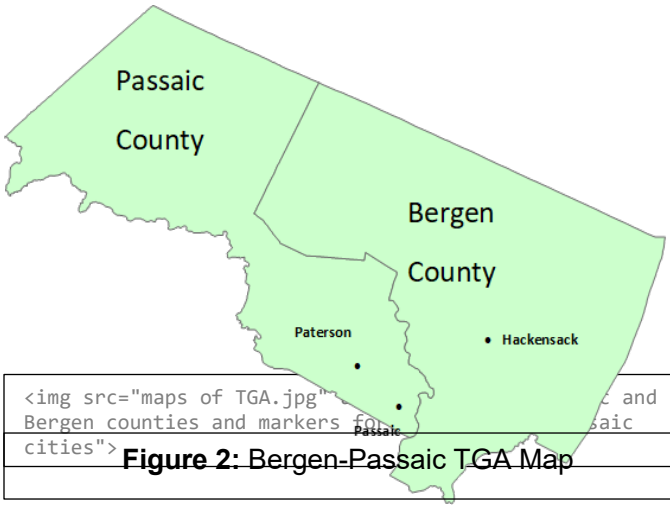


Figure 2: Bergen-Passaic TGA Map

The City of Paterson, the largest epi-center in the jurisdiction is one of ten IMPACT cities in the State with highest concentrations of HIV infection.[3] There are 4,418 people with HIV residing in the Bergen-Passaic TGA, 12% of all people with HIV in the State of New Jersey; the second highest among the nine New Jersey planning regions.

RWHAP Continuum of Care: The New Jersey Department of Health reports a total of 4,418 PWLH in the TGA, eCOMPAS/CAREWare data reports a total of 1,596 (100%) receiving services; 1,384 (87%) have been linked to care; 1,047 (66%) are retained in care; 1,455 (91%) are virally suppressed. Clients are referred and linked to primary medical care and medical case management services. Case managers complete the continuum for people with HIV by ensuring clients remain engaged in medical care and are linked to core and support services offered in the TGA.

The TGA consists of 14 RWHAP Part A and five MHAF subrecipients that provide an established service continuum, with few gaps, located primarily in the epicenters. Part A medical clinics provide high quality care; 88% of its patients are virally suppressed. Medical case managers work with clients to enhance treatment adherence and support retention in care. Our system further includes oral health care, mental health therapy, substance use treatment, early intervention, health insurance premium cost sharing, non-medical case management, outreach and six other critical support services, such as transportation and housing. As a result of the Affordable Care Act, the Part A Program has successfully transitioned clients to Medicaid or private insurance, seen improved access to medical services and less reliance on RWHAP as the payer of last resort.

The Bergen-Passaic TGA is densely populated with 3,865 persons per square mile in Bergen and 2,705 in Passaic, outpacing the state by more than 1,520 persons per square mile. Approximately one-third of residents live at or

[1] U.S. Bureau of the Census, 2016 American Community Survey 5-Year Estimates.

[2] Census.gov. (2017). State and County QuickFacts. Quickfacts.census.gov. Retrieved 15 August 2018, from http://quickfacts.census.gov/qfd/index.html

[3] IMPACT refers to a statewide study of ten cities in New Jersey with the highest prevalence of HIV.

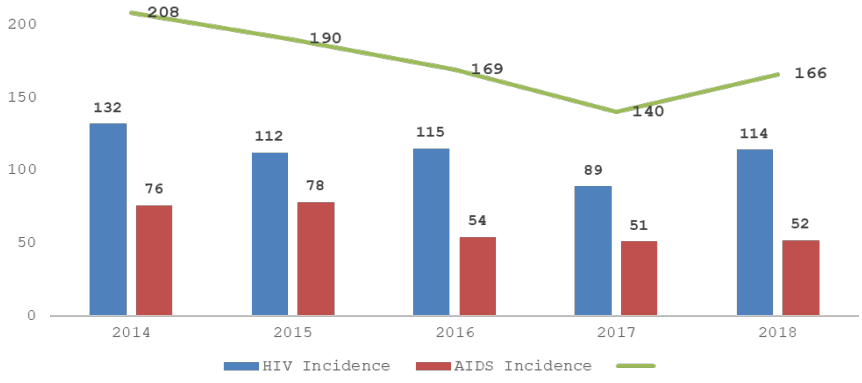
below 300% of the federal poverty level. Passaic County (48%) is among the poorest counties in the state based on the percentage of population living below 300% of the FPL.

The Bergen-Passaic TGA continues to experience social and economic problems in varying degrees of severity across the geographical areas. The TGA is a tale of two counties and a city. Passaic County differs significantly from Bergen County, and the City of Paterson differs from both. Bergen County (population 948,406), an affluent suburb of New York City, while economically stronger than Passaic County, contains pockets of poverty in the urban districts. Passaic County (population 512,607), on the other hand, is characterized by low economic status and a large presence of immigrant and minority populations. Paterson (population 148,678), with its extraordinary mix of cultures and races, is a haven for poverty, violence, and cultural diversity. When considering prevalence of HIV, Passaic County is worse than Passaic County, and Paterson is worse than both combined.

The TGA conducts annual needs assessment to identify needs, gaps, and barriers to care. The TGA collaborates with RWPB, RWPC, RWPD, HIV Prevention, NJ Cross-parts Collaborative, multiple community partners, and State Department of Health to conduct statewide needs assessments to identify and address common needs, as identified in the State's IHPCP. In 2016, a Community Health Needs Assessment was conducted and annually the TGA conducts client satisfaction surveys during RWHAP enrollment and recertification's. The data obtained from these need assessments were used to inform the service delivery plan.

In 2017, the TGA had 95 new cases of HIV/AIDS. From 2011-2015, the TGA has averaged 176 new HIV/AIDS cases per year. Testing and linkage efforts have become more targeted (based on needs assessment results) and thus, more individuals are being tested in high-risk areas, resulting in more individuals being linked to the Care Continuum. While testing and linkage efforts are aligning with the National HIV/AIDS Strategy (NHAS), supplemental funding is needed to continue the TGA's progress towards achieving the goal of "zero" new infections. Through expanded and targeted testing efforts, from 2011-2017, the TGA has seen a 28.4% decrease in new infections as depicted in **Figure 3**.

Figure 3: Bergen-Passaic TGA HIV Incidence 2014-2018



<img src="TGA HIV incidence chart 2014-2018" alt="Bergen Passaic TGA HIV Incidence 2014-2018">

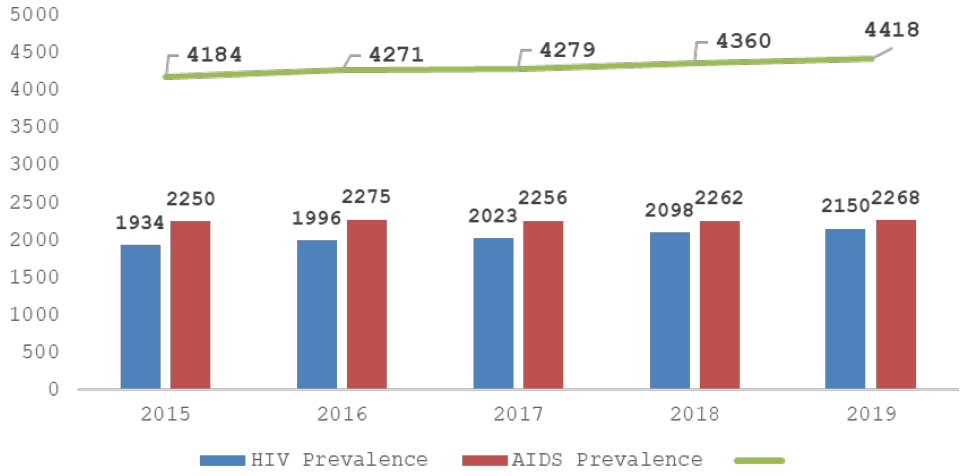
Thus, in the years from 2014-2017, the Bergen/Passaic HIV/AIDS incident rates showed a downward trend with significant decreases in HIV incidences in 2015 and AIDS incidence in 2016 with 2017 marking the lowest HIV/AIDS

incidences in the five-year period. However, the uptick in HIV incidences in 2018 was concerning and led the TGA to consider factors, such as housing instability and racial and ethnic disparities that led to the development of this intervention.

Significant disparities exist in the TGA among communities of color, African Americans/Black and Hispanic/Latino. The general population is comprised of only 11% African American/Black and 30% Hispanic/Latino and together account for more than 74% of all new HIV/AIDS infections. The emergent population include MSM ranging from 20-44 in age. Data also confirms that MSM sexual transmission account for more than 39% of all new infections. The IP has set goals that address these disparities and supplemental funding is needed to continue the implementation of the TGA's best practices (which has helped to decrease new infections by 23%) as well as continue efforts in decreasing stigma and increase retention in care and viral suppression for the TGA's HIV/AIDS increasing prevalence cases.

The TGA's HIV/AIDS prevalence population continues to grow. From 2011-2017, the TGA has experienced a 7.4% increase in HIV prevalence. **Figure 4** depicts the 5-year trend in HIV/AIDS prevalence in the TGA.

Figure 4. Bergen-Passaic TGA HIV Prevalence 2015-2019




```
<img src="TGA HIV incidence chart 2015-2019" alt="Bergen Passaic TGA HIV Incidence 2015-2019">
```

Demonstration Site Partners

City of Paterson Ryan White Division

The City of Paterson Ryan White Division administers the Ryan White HIV/AIDS Part A Program (RWHAP) for the Bergen-Passaic TGA provides comprehensive care and support services to persons with HIV/AIDS in the two northeastern counties of New Jersey. The program in its twenty-third year of continuous service to over 1,700 people with HIV, offering a comprehensive, high quality network of treatment and support services.

The Bergen-Passaic TGA has received RWHAP funds without interruption since 1994. It is proud of its history in serving people with HIV with high quality and culturally appropriate services focused on improving their health status and quality of life. Along with direct medical care services. Critical support services are also addressed in the continuum. Coordination with non-Ryan White service providers is ongoing and essential, particularly regarding efforts to find and engage individuals who are unaware of their HIV status or who have dropped out of care.

Bergen Family Center

Bergen Family Center's Outreach and Early Intervention Services identify and engage people with unknown HIV status and people with HIV who are out of care to facilitate linkages to and maintenance in medical care and support services.

Buddies of New Jersey

Buddies of New Jersey (NJB), a non-profit, community-based organization, is a resource center offering a network of support, education and services for people with HIV. Buddies of NJ, Inc. (NJB), 501(c)(3) is Bergen and Passaic County's Premier AIDS Service Organization (ASO). Buddies provides NJHS Licensed Substance Use Counseling & Treatment Services; Free Rapid HIV Testing & Counseling; PrEP Counseling and Linkage; Community Health Workers for Re-engagement; Case Management; Medical Case Management; Housing & Housing Assistance; Dental Services; Counseling Services; YMSM Support Spot; Peer Support Groups; Transportation; and a Food Bank. NJB is supported with federal grants from the Ryan White Care Act, HOPWA (Housing Opportunities for People With AIDS), and the New Jersey Department of Health.

CAPCO Resource Center

The Coalition on AIDS in Passaic County (CAPCO) is a private, nonprofit community-based organization (CBO) that provides medical case management and non-medical case management for people with HIV and other sexually transmitted infections (STIs) in Bergen and Passaic Counties. The organization was founded in 1985 as a grassroots support group for health care providers—who, amid the early spread of HIV, were desperate to support people with HIV. In 1991, CAPCO established the HIV Care Consortia in order to create new HIV services and facilitate access to existing services. Since that time, CAPCO continues to sponsor quarterly Coalition meetings (the second Wednesday of each quarter), where the primary purposes are (1) promoting health, prevention, and treatment services, (2) providing networking and educational programs on the newest trends/research, (3) providing suggestions to government bodies for the purposes of policy planning and decision-making. So, for over 25 years, CAPCO's 501(c)(3) resource center has linked people with HIV to prevention, treatment, care, and advocacy services.

Team Management 2000

Team Management 2000, Inc. (TM2K), is a minority owned 501(c) (3) non-profit community based Integrated Behavioral Healthcare organization with headquarters in Hackensack, New Jersey. TM2K has delivered core HIV services for over 20 years collectively in Bergen, Passaic, and Essex Counties. With more than 10 grant-funded programs, services are aimed at providing support to vulnerable populations (including youth and young adults ages 13-24) in need of housing, substance use treatment and mental health services, as well as LGBTQ and Ryan White funded HIV services and programs. TM2K's Project HEAL (Healthy Educational Alternative Lifestyles) service people with HIV and substance use disorders with an emphasis on addressing the health disparities for Black, Latino and LGBTQ, populations as well as people with histories of incarceration. HEAL provides Health Education/Risk Reduction services, HIV testing and counseling, case management, substance use and mental health counseling and treatment.

Collaborative Research LLC

Collaborative Research is a strategic planning health care firm dedicated to supporting local public health, social-service, and community-based organizations. Collaborative Research's services also specialize in health disparity issues such as: housing, mental health, substance use, homelessness and poverty. Collaborative Research provided weekly clinical supervision and highlighted overarching themes as part of ongoing process improvements made throughout the intervention implementation.

RDE Systems

RDE Systems, maker of the eCOMPAS® and e2® suite of software products, has been serving public health for over thirty years. RDE has grown only by referrals, and not through marketing and advertising and their business philosophy is: "If you do good things for good people, good things happen." RDE focuses on the long-term sustainability of interventions and is committed to Ending the HIV Epidemic, and serving those who serve people with HIV or with unknown HIV status.

The eCOMPAS systems are designed to meet all the data management needs of Ryan White, HOPWA, and HIV Prevention programs, including client data management and analysis, contract management, fiscal management and billing, client eligibility determinations, housing inventory management, data integration with EMRs and state and Federal data systems, client portals, automated Federal reporting, quality management and quality improvement, and client needs assessment and client satisfaction.

Demographics

As the HIV epidemic passes its thirty-fifth year, people with HIV are living longer and healthier lives and as a result the aging population continues to increase. As antiretroviral medications have brought about substantial improvements in health status, people with HIV no longer face the probability of early death. Health status has improved significantly as evidenced by an 80% viral suppression rate in the TGA. In 2019, people with HIV in the TGA totaled 4,418 persons, an increase of 6% since 2011. There were 166 new HIV diagnoses in 2018, an increase of 18.57% from 2017, reflecting the expanded and targeted testing initiatives throughout the TGA (see Figure 5). As of December 31, 2019, 73% (3,235/4,418) of the TGA's prevalence is age 45 and older; while 27% are younger than 45 years of age (1,183/4,418). The Latinx HIV population is seeing a constant increase in the TGA. Latinx with HIV

have increased in number and proportion. From 2013 to 2018, Latinx with HIV in the TGA increased by 15.79%; no other racial or ethnic group has shown this type of growth (see Figure 8).

Figure 5. Bergen Passaic HIV Epidemic 2011-2019 Compared to the General Population

Source: New Jersey Department of Health. (2020).
Attachment 3: HIV Demographic Table. Division of HIV, STI and TB Services (DHSTS): Epidemiologic Services Unit. New Jersey eHARS Data as of December

HIV Incidence		AIDS Incidence		HIV Prevalence		AIDS Prevalence		General Population	
2011	105	**2011**	96	**2011**	1,787	**2011**	2,165	**2011**	1,444,778
2012	104	**2012**	92	**2012**	1,806	**2012**	2,197	**2012**	1,445,958
2013	108	**2013**	92	**2013**	1,814	**2013**	2,232	**2013**	1,446,233
2014		**2014**	76	**2014**	1,858	**2014**	2,245	**2014**	1,446,771
2015	112	**2015**	78	**2015**	1,934	**2015**	2,250	**2015**	1,449,422
2016	115	**2016**	54	**2016**	1,996	**2016**	2,275	**2016**	1,447,096
2017	89	**2017**	51	**2017**	2,023	**2017**	2,256	**2017**	1,461,014
2018	114	**2018**	52	**2018**	2,098	**2018**	2,262	**2018**	1,461,014
2019	NA	**2019**	NA	**2019**	2,150	**2019**	2,268	**2019**	1,434,028

Figure 6 depicts socioeconomic data from the e2 data management system for 2019 on Federal Poverty Level (FPL), health insurance status, and housing for clients determined eligible and receiving RWHPA Part A service(s).[3] The TGA, in partnership with RWPB, RWPC, RWPD, HIV Prevention, NJ Cross-parts Collaborative, multiple community partners, and State Department of Health conduct statewide needs assessments and analysis of epidemiological data to identify emerging populations, as well as disparities among the identified emerging populations. Minorities were identified as disproportionately impacted by HIV/AIDS disease, particularly African American/Black and Hispanic/Latino. While White/Caucasian comprise 74% of the general population, they represent only 21% of people with HIV in the TGA. On the other hand, African American/Black's comprise only 11% of the TGA's general population but 28% of people with HIV. Hispanic/Latinos are 31% of the population but 47% of people with HIV.

Figure 6: Bergen and Passaic Counties Socio-demographic characteristics of the HIV epidemic 2019

Source: Bergen-Passaic TGA Ryan White Part A FY2019-2020 CCT Report. eCOMPAS, RDE Systems (2020).

Source: New Jersey Department of Health. (2020). Attachment 3: HIV Demographic Table. Division of HIV, STI and TB Services (DHSTS): Epidemiologic Services Unit. New Jersey eHARS Data as of December 31, 2019.

HIV Incidence Race / Ethnicity		**HIV Prevalence Race / Ethnicity**		**General Population Race / Ethnicity**	
20.8%	White	**25.5%**	White	**74.2%**	White
27.5%	Black/African American	**35.8%**	Black/African American	**11.2%**	Black/African American
46.7%	Hispanic	**36.6%**	Hispanic	**19.4%**	Hispanic
5.0%	Multiracial	**2.0%**	Multiracial	**2.5%**	Multiracial
HIV Incidence Age Groups		**HIV Prevalence Age Groups**		**General Population Age Groups**	
1.7%	<13 years	**0.12%**	<13 years	**22.2%**	<18 years
2.5%	13-19 years	**0.47%**	13-19 years	**62.5%**	18-64 years
60.8%	20- 44 years	**26.1%**	20- 44 years	**15.3%**	65+ years
24.2%	45- 59 years	**49.5%**	45- 59 years		
10.8%	60+ years	**23.8%**	60+ years		
HIV Incidence Gender		**HIV Prevalence Gender**		**General Population Gender**	
77.5%	Male	**66.3%**	Male	**48.7%**	Male
22.5%	Female	**33.7%**	Female	**51.3%**	Female

Figure 7 depicts the socioeconomic characteristics of RWHAP Part A clients as measured Federal Poverty Level data, Health Insurance Status, and Housing status for Fiscal Year 2019-2020 for the Paterson TGA.

Figure 7. Bergen and Passaic Counties socioeconomic characteristics of RWHAP Part A clients
Source: Bergen-Passaic TGA Ryan White Part A FY2019-2020 CCT Report. eCOMPAS, RDE Systems (2020). ***TOTAL TGA Incidence / Prevalence N=4,418***

Indicator	Total RWHAP Part A Clients	#	%
Federal Poverty Level (FPL) Data			
0% - 138% FPL	1,691	1352	84.7%
139% - 400% FPL		208	15.3%
Health Insurance Status			
Private	1,691	394	10.53%
Medicaid		360	9.63%
Medicare		161	4.30%
Other Public		61	1.63%
VA, Tricare and other military health care		0	0
IHS		0	0
Other/Unknown		469	27.73%
No insurance/uninsured		246	6.58%
Housing Status			
Permanent / Stable	1,691	1,590	94.1%
At-Risk / Homeless		43	2.5%
Homeless		58	3.4%

Figure 8. Bergen **and** Passaic Counties HIV Incidence and Prevalence of Emerging Populations.

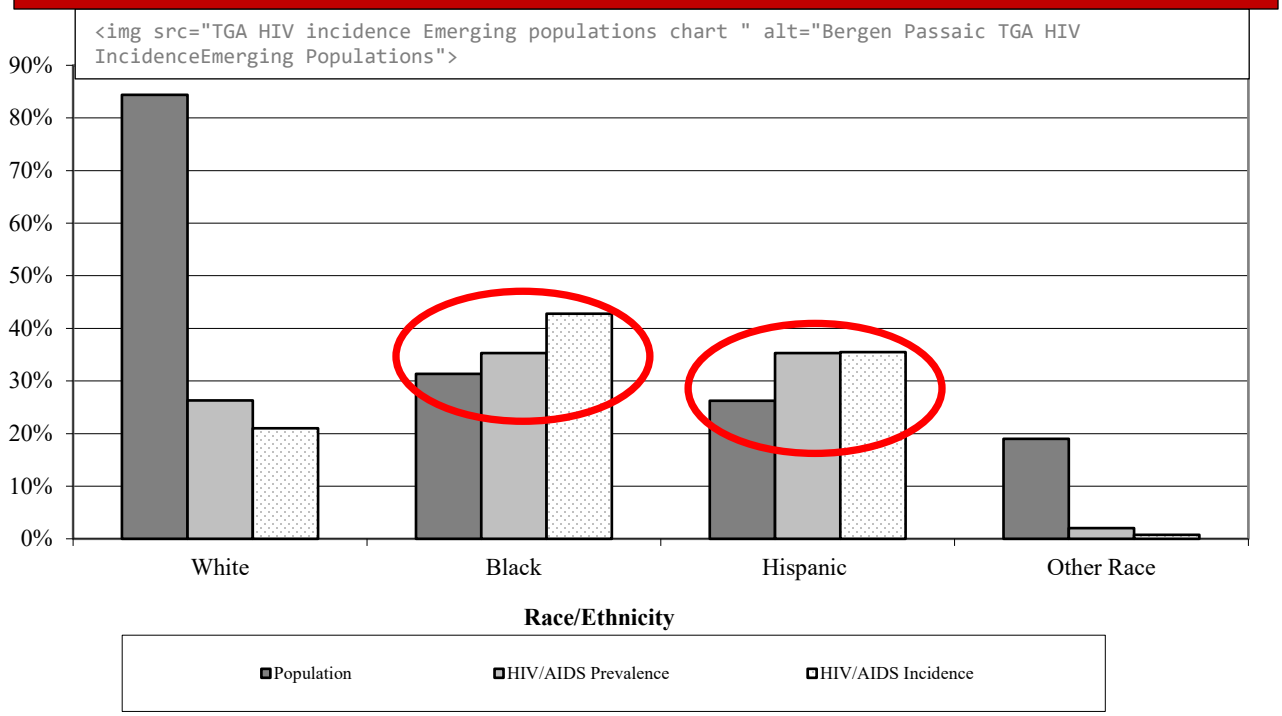
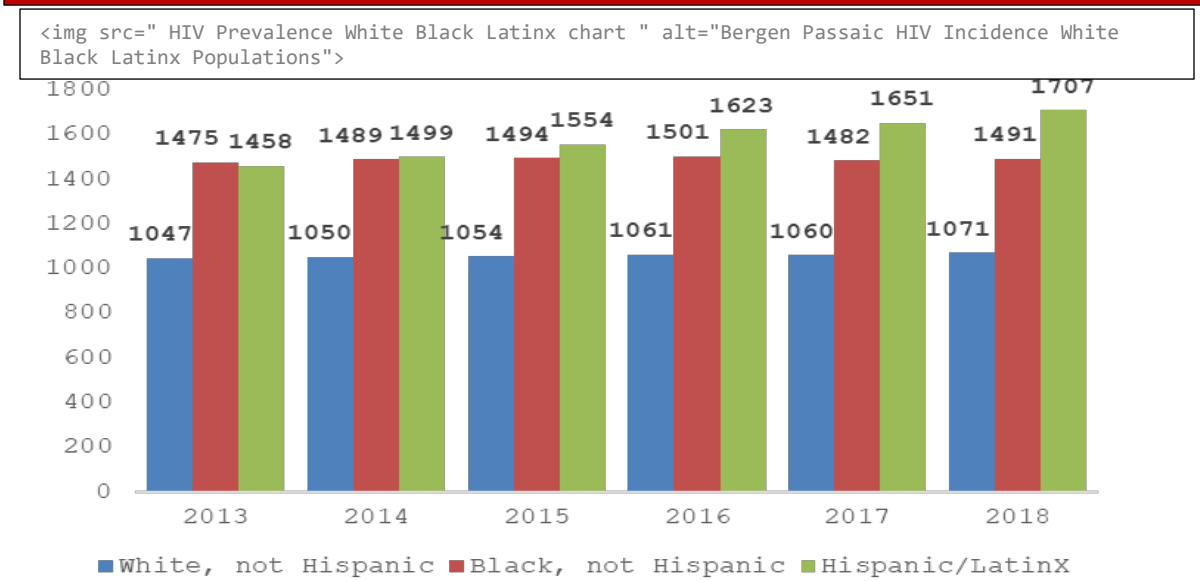


Figure 9. Bergen and Passaic Counties HIV Prevalence of White, Black, and LatinX demographics.



Theoretical & evidence informed frameworks

The City of Paterson HIV, Housing and Employment project builds upon two frameworks: (1) capacity development approach, using the "Getting to Work Technical Assistance Initiative" materials offered through the United States Department of Labor and Housing Opportunities for People with AIDS (HOPWA), a training curriculum for service providers to understand the impact of HIV on employment; and (2) Theory of Change, enhancing coordination and collaboration through Health Information Technology (HIT) solutions that optimize the efficiency of referrals among RWHAP and HOPWA subrecipients and organizations to improve coordinate RWHAP, HOPWA and employment services. Using these frameworks, HIT solutions facilitated access to the care management plans for each entity in this network of care serving the same person, improving coordination, reducing duplication of effort, working with real-time information to address the needs of the most vulnerable populations.

Training of staff and community partners is one key piece of the intervention for this SPNS intervention, and also builds upon the cross-sector alignment Theory of Change developed by the Robert Wood Johnson Foundation, the Georgia Health Policy Center, the Center for Sharing Public Health Services, and the Public Health National Center for Innovations. The framework emphasizes that improving health outcomes and social determinants of health indicators cannot be achieved by one sector, but innovation and collaboration across sectors is required for sustained change. Their model requires authentic community involvement, cross-sector alignment of goals, through transparency, shared data, and measurement systems.

Building on the services provided by the project partners began with the use of a "Housing First" approach where housing is the initial step in stabilizing the lives of people with HIV. Enhanced and informed – by SMART Care Management and integrating and with employment services and HIV as a package. The "Housing First" model relocates people from homeless services systems into permanent and affordable supportive housing as quickly as possible, then provides time-limited support services for their addiction and mental illness. Housing assistance, case management, and supportive services, including mental health and substance use treatment, provided together assists people with HIV to remain housed and prevent future homelessness. Homeless people with HIV face additional complications in their lives when they are unable to access primary health care providers, keep their medications if they are on the streets, and they often deal with untreated mental illness and drug addiction. These vulnerabilities are exacerbated when the individual is un/underemployed.

Pre-Implementation Activities

Asset Assessment

Project Recipient

City of Paterson Ryan White Division is the only RWHAP and HOPWA Programs in Bergan and Passaic Counties of New Jersey.

Funding

The City of Paterson HIV, Housing, and Employment Project is funded through HRSA's Special Projects of National Significance (SPNS) for a 3-year demonstration project. The Recipient proposes to leverage Ryan White case management funding and support services; and HOPWA services to provide more succinct services to improve the health outcomes of people living with HIV.

Recruitment of Project Staff

- Existing City of Paterson Ryan White Division staff were prepared to begin work immediately to launch the SPNS Housing & Employment Project; these included the Program Director and Case Managers Ryan .
- Key Ryan White and HOPWA Subrecipient SPNS Intervention staff were prepared to begin work immediately to launch the SPNS Housing & Employment Project.

Staff onboarding, training, and continuing education

- Training and capacity development of key staff began by utilizing HUD's Getting to Work three online modules to better understand the need to integrate employment services with HIV Care & Services as well as housing assistance. A sense of purpose and continuous income as a means to achieving viral suppression as well as stable housing were key takeaways. Trainings tailored to staff roles and responsibilities followed. Agencies wishing to implement a similar intervention to the City of Paterson SPNS intervention are encouraged to begin with the same Getting to Work, as well as basic orientation to local programs, agencies, and services.
- The City of Paterson SPNS intervention staff and partners engage in weekly Team meetings to verify interventions completed, potential clients, consented clients, and issues with reporting and documentation in RedCAP and eCOMPAS. All supervision takes places in a team approach in a group setting. Each group is comprised of staff from a variety of programs, to encourage cross-program sharing and learning.
- Monthly Clinical Supervision, facilitated by an external consultant, Collaborative Research, contracted by the City of Paterson, addressed overarching themes identified during weekly team meetings such as strategies for identifying at risk populations, conducting outreach and case discussions such as engaging people where they may be found and identifying and meeting their most immediate needs first.

Type of Activity	Organization	Comments
CAPC Team Meeting	Buddies	One session
Bergen Prison Site Visits	Buddies Team Management	At least monthly / as needed
Passaic Prison Site Visits	Bergen Family Center Team Management	At least monthly / as needed
Monthly partner call	Bergen Family Center Buddies CAPCO Paterson team Team Management	At least monthly / as needed
Transitional Care Coordination	Paterson team and intervention partners at Paterson Library	TA Team facilitated interactive training session on issues facing people with HIV after incarceration.

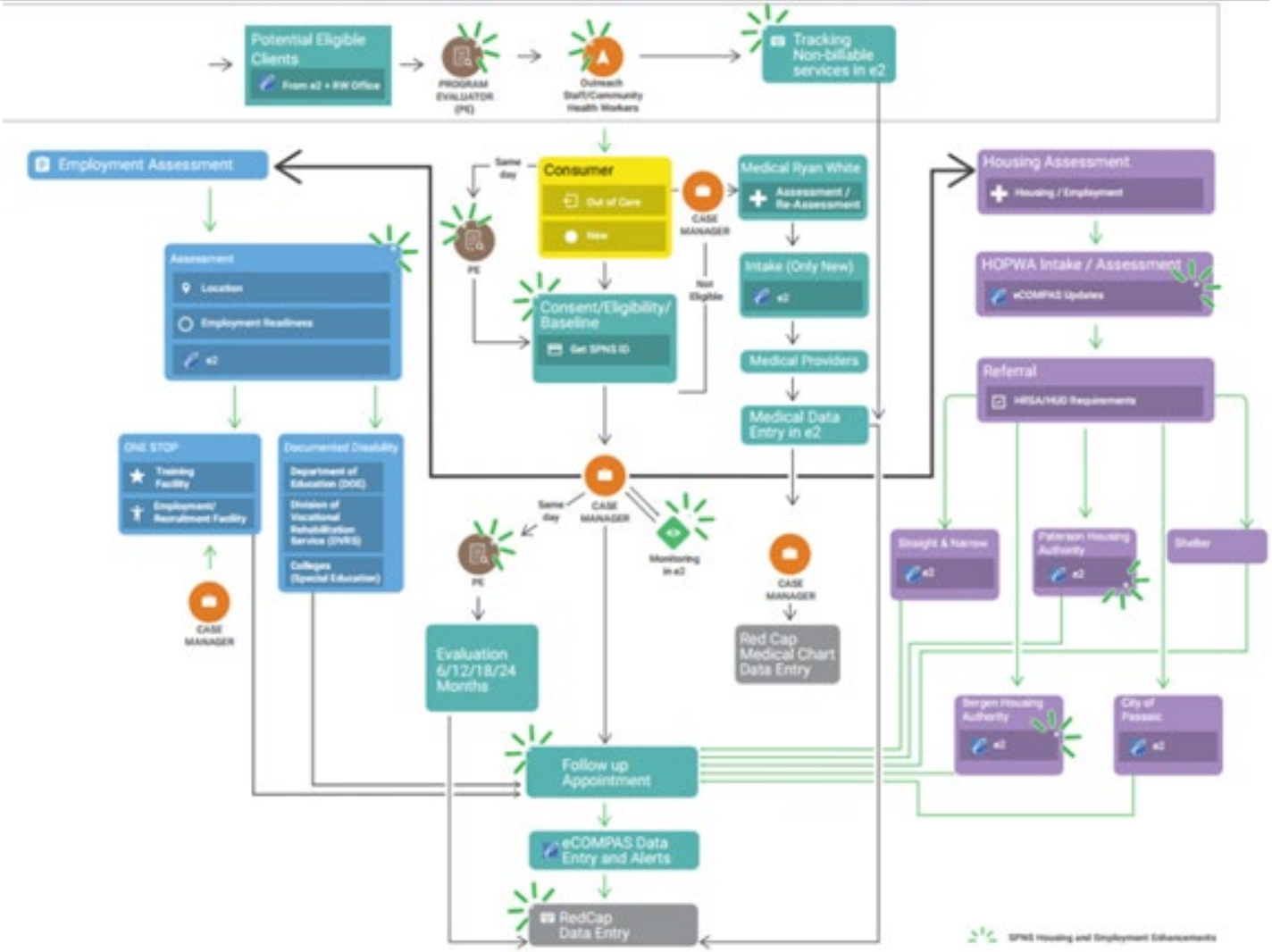
Referral mapping

Referral mapping is an essential tool pre-implementation as it assists in conceptualizing client flow, client expectations and staff roles and responsibilities. Referral mapping may take multiple iterations but allows individuals and agencies to create a roadmap for intervention implementation. The City of Paterson SPNS intervention began referral mapping during the application process which was useful in identifying key stakeholders and partners as well as mapping the workflow (see Figure 11) and illustrating the five Core Components of the intervention (see Figure 16).

KEYS TO SUCCESS

Early successes in enrollment, referrals, community response, and coordinated care can be credited to specific and strategic efforts to promote the launch of the City of Paterson intervention.

Figure 11: Workflow Diagram




```
<img src="Workflow diagram" alt="Smart Care Management workflow diagram inputs outputs across
five core components">
```

Project design & planning

Intensive efforts were undertaken to ensure the successful launch of the City of Paterson SPNS intervention. Careful attention was paid to promoting the intervention, focusing messaging specific to providers making referrals and discussing the intervention with potential clients, tailoring messaging to specific client populations.

Promoting the intervention

SPNS staff collaborate with various stakeholders internally on this project in multiple ways. The intervention director, technical managers and principal investigator meet with the SPNS partners, Ryan White and HOPWA subrecipients on a monthly basis to provide updates, client updates, and foster relationship building. Information regarding the SPNS intervention is shared at the monthly Ryan White Part A Planning Council meeting. Additionally, the City of Paterson SPNS team has presented to the Ryan White Planning Council on three occasions: 1) Planning Council; 2) Steering Committee; 3) Planning and Development Committee meetings. The presentations were informative and provided information regarding the nature of the SPNS intervention and the resources available to the community partners (see program flyers distributed in **Figures 13 & 14**).

Medical case managers meet within their respective agencies monthly regarding SPNS clients and potential eligible clients. SPNS staff meet weekly to discuss clients as well and receive supervision. This typically takes place utilizing teleconference to check in and provide updates. These efforts allow for information sharing, ensuring referral completion and collaboration across multiple services.

SPNS staff meet weekly to discuss the intervention as a whole, including some brief client-level discussions. In these meetings, staff discusses the successes and challenges of the intervention, brainstorm and collaborate around process improvement, provide updates about goals, and discuss the evaluation mechanism of the project. Meeting weekly enhances the consistency among service delivery for both providers and clients participating in the intervention and continues to enforce the expectations and service delivery.

The City of Paterson also collaborates and communicates with external stakeholders about this intervention including four main housing and employment partner organizations and invites other external collaborators, including the area housing authorities, reentry center director, and faith-based groups that visit local jails to participate in weekly meetings, phone calls, and presentations in an effort to work on systems level change. Large meetings are held in the Paterson Public Library meeting space. One partner participated in “Housing Collaborative Ambassador Training” hosted by the AIDS Resource Foundation for Children (ARFC) in New Brunswick NJ

Technical assistance meetings from BU ETAP team and BU ETAP consultants, Alison O Jordan and Jacqueline Cruzado, to discuss recruitment strategies and collaboration with the criminal justice system to engage client being release from incarceration. This included strategic planning regarding the intervention, SMART Care Management. removing barriers to housing and employment that impact people experiencing incarceration such as: documentation to determine eligibility for various housing services; resume building; addressing gaps associated with experiencing incarceration and interviewing skills around when and how to share incarceration history. Tools + Tips were shared and Paterson was able to collaborate with the Reentry group stationed in the Paterson jail and obtain required documents to facilitate placement.

The City of Paterson SPNS Program Director and Principal Investigator have also been a conversation between the local AIDS Education and Training Center, to discuss disseminating SPNS materials and partnering to identify eligible clients for the SPNS intervention.

Other external engagement included the distribution of Paterson project materials and information to both clients and providers throughout the TGA utilizing a variety of delivery methods including: flyers, posters, and bilingual advertisements in local newspapers (see Table II). The SPNS staff and partners have presented and distributed materials at a number of events, including local county/city jails, local state and federal prisons, local probation and parole, workforce development and housing authorities, and local churches.

Public Awareness Campaign

SPNS staff and community stakeholders developed a public awareness campaign to educate the community on the new SPNS intervention. Staff and stake holders were able to create and distribute information in both English and Spanish (see **Figure 12**). Some of these activities included:

- Handouts, flyers and local ads developed to engage clients (see **Figures 13, 14 & 15**);
- Materials posted on Buddies website, distributed and posted in 27+ locations;
- English and Spanish flyers distributed;
- Local newspaper ads were posted (Bergen and Passaic County);
- Online ad also posted;
- Spanish and English newspapers.

Figure 12: PRE-IMPLEMENTATION STRATEGIES / IMPLEMENTATION DEVELOPMENT			
Public Awareness Campaign *launched 3/12 2019*	• 540 Handouts distributed (see Figures 13 & 14) • 2 ads in local newspaper • TGA & Buddies' website	• 20 physical locations • 30 days English; 10d Spanish • www.njbuddies.org	*2 English & 1 Spanish flyers (see* **Figures 13 & 14***)*
Career Development Program*	Soft skills training program: • resume building, • cover letters, • employment applications	50 participants**	** Developed by Buddies of NJ, this program continues to be available to all People with HIV in the TGA* ***Includes all seen during project regardless of study participation.*
Jail to Community Linkages	Strategic planning to develop implementation plan for collaborating with corrections / correctional health service and reentry service provider	2 site visits	*Technical Assistance (TA) team worked with project leadership, met with sheriff, jail leadership, CHS leadership and reentry team director; walked through jail facility and identified potential space for training sessions.*
SMART CARE MANAGEMENT	Handout for Interventionist Trainings & Community Outreach (see **Figures 15F & 15B**)	2-sided full-page flyer distribute to Interventionist and partner organizations	*TA Team worked with project leadership to define, describe and illustrate core elements and key considerations to facilitate dissemination.*

Figure 13: Public Awareness "Contact Us" Campaign Flyer / Ad in English & Spanish

```
<img src="Contact us Flyer" alt="Public awareness campaign contact us flyer">
```

Figure 14: Public Awareness "Need Help?" Campaign Flyer / Ad in English

```
<img src="Need Help Flyer" alt="Public awareness campaign need help flyer">
```

Figure 15F: Handout for Interventionist Trainings & Community Outreach

FRONT

SPNS Improving HIV Health Outcomes through the Coordination of Supportive Employment and Housing Services

Supported by the City of Paterson Department of Health and Human Services
SPNS Grant H97HA31432
Presenters: Bergen-Passaic TGA, RDE Systems.

Smart Care Management

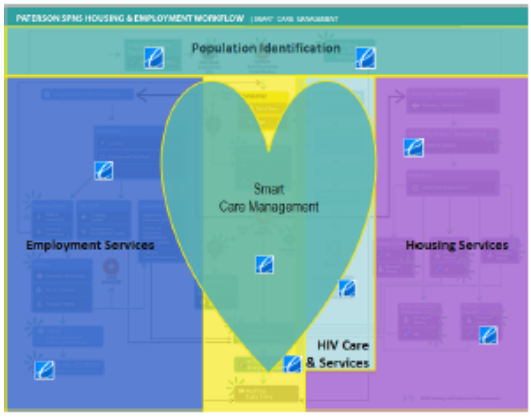


Fig 1. Smart Care Management- TGA's Intervention Model

- Smart Care Management is a strategic systems approach to facilitate needed access to and engagement in HIV care services.
- Smart Care Management leverages existing health, housing and employment services to improve HIV population health outcomes.

Goals:

- Coordinated approach using technology, resources and expanded network of care to deliver needed services and improve PLWH health outcomes across the TGA
- Self sustainability for PLWH to live longer healthier lives.

Objectives:

- Increase number who know their HIV status.
- Increase reengagement in HIV care and treatment.
- Facilitate access to social determinant of health including housing and employment.

IMPACT OF THE INTERVENTION

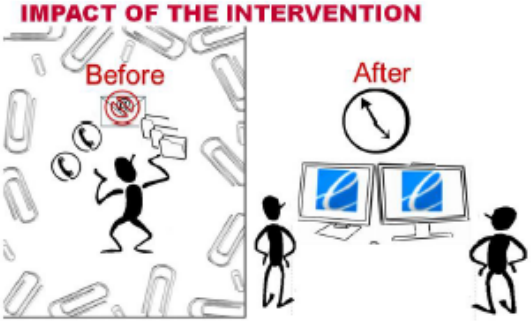


Fig 2. From Paper and phone calls to web-based

SMART CARE MANAGEMENT

Benefits of the Intervention: Data-driven Process Improvement

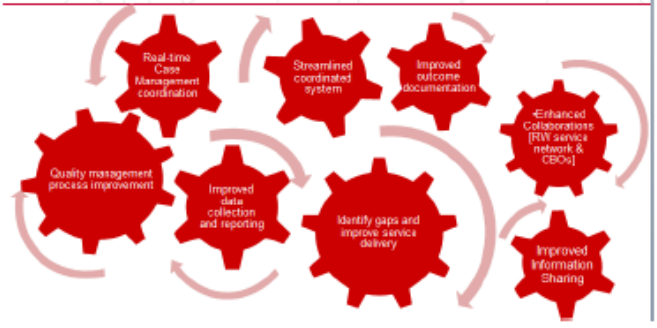


Fig 3. Benefits of Smart Care Management

- Smart Care Management uses IT solutions for quality management and more
- Smart Care Management includes strategic planning and program development, service integration, outcome reporting for quality improvement and population health management.

Key Partners

- RDE eCOMPAS
- Buddies of NJ
- Team Management
- CAPCO
- Bergen Family Center
- Straight & Narrow
- Bergen-Passaic Housing Authority
- Homeless Shelter network
- Bergen Housing Authority
- City of Passaic
- Other Ryan White, medical and housing providers
- Department of Education (DOE)
- Division of Vocational Rehabilitation Services (DVRS)
- One Stop Career Center
- Passaic County Jail
- Department of Parole
- Department of Probation
- Bergen-Passaic library
- County colleges
- NJ Reentry Program

This project was supported by the Health Resources and Services Administration (HRSA) of the U.S. Department of Health and Human Services (HHS) under grant number H97HA31432 Special Projects of National Significance (SPNS) Initiative, Improving Health Outcomes Through the Coordination of Supportive Employment & Housing Services. Contents here are solely the responsibility of the authors and do not necessarily represent the official views of the government.
Special thanks to TA providers: Alison O. Jordan and Jacqueline Cruzado-Quinones.

Figure 15B: Program Flyer for Interventionist Trainings & Community Outreach

BACK

SPNS Improving HIV Health Outcomes through the Coordination of Supportive Employment and Housing Services

Supported by the City of Paterson Department of Health and Human Services
SPNS Grant H97HA31432
Presenters: Bergen-Passaic TGA, RDE Systems.

Fig 4. Multi-lingual Public awareness campaign launched across the TGA

- Expand TGA's Resource Guide (NRG) with all Employment and Housing site location. The TGA's Resource guide has had: 180 Visits since SPNS enhancements launch.

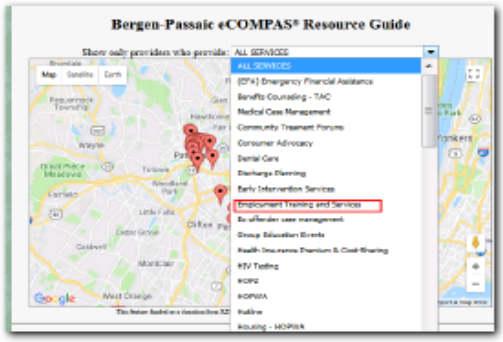


Fig 5. The TGA's Housing and Employment Resource guide for clients

- Replicate previous TGA's SPNS module, *MyCareContinuum* Dashboard for SPNS Housing and Employment initiative.
- Implement the Care Continuum for the three SPNS partners identified within the TGA and expand this further to remaining HOPWA and Ryan White sub-recipients .

Real-time eCOMPAS MyCareContinuum Dashboards

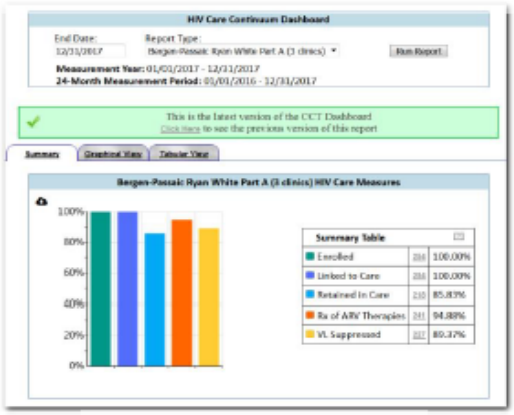


Fig 6. *MyCareContinuum* Dashboard – an example.

Low health literacy Patient Portal- e2MyHealth

- Expand previous TGA's SPNS module, e2MyHealth for SPNS Housing and Employment clients and further expand it to all HOPWA and Ryan White sub-recipients within the TGA.
- Incorporate Client Satisfaction Survey into the Patient Portal. Empower clients and streamline QM/QI activities.

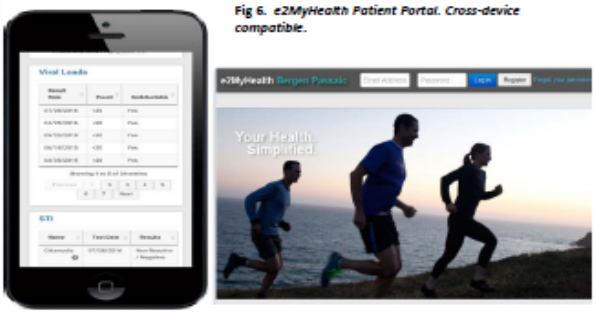


Fig 6. *e2MyHealth Patient Portal. Cross-device compatible.*

Contact Information

Millie Izquierdo
mizquierdo@patersonnj.gov
973-321-1234

Jesse Thomas
Jesse@rdesystems.com
www.e-compas.com
973-773-0244

```
<img src="Intervention overview flyer back" alt="Smart Care Management Intervention overview flyer back">
```

Intervention

Core Components

SMART CARE MANAGEMENT
SMART Care Management is a systemwide approach to facilitate engagement and maintenance in HIV care and services through housing and employment service integration. Smart Care Management is a strategic systems approach to facilitate needed access to and engagement in HIV care services. Smart Care Management leverages existing health, housing and employment services to improve HIV population health outcomes. **SMART CARE MANAGEMENT** uses IT solutions for quality management and more. Smart Care Management is uses a capacity development theoretical framework to inform strategic planning, intervention implementation, and service integration, and heory of Change framework to enhancing coordination and collaboration through HIT solutions and outcome reporting for quality improvement.

This population-based approach to identify new and out of care HIV clients and link to needed services toward improved HIV clinical outcomes. While implementing this intervention it is important to consider the skills required by each partner in order to meet the core competencies for each of the five components:

- Case manager training in tracking and documenting referrals as well as capacity to provide the needed direct and indirect services and supports to monitor clients progress through the SMART Care Management intervention.
- Culturally and linguistically appropriate staff at all levels.

Hallmarks of the intervention strategies include:
- Ryan White Part A program data system to track all activities;
- Community outreach staff / community health workers locate and engage clients using street outreach efforts and motivational interviewing;
- Social media outreach campaigns to spread the word (bus stop signs and website flyers);
- Relationships with community providers and government agencies;
- Gather information and refer for SMART CARE MANAGEMENT;
- Care Management using inter-agency network of case management services, outreach navigators and community health workers for client engagement, reengagement and maintenance in care;
- Build and maintain an TGA-wide network in core and support services;
- Use IT support to identify gaps in services, assess provider performance, facilitate quality management/ improvement;
- Case managers provide initial intake, service plans, reassessments and follow-up referrals, including housing, employment, education, vocational training and treatment adherence counseling;

- Provide or arrange for support services including Patient Navigation, Peer leaders, transportation assistance, accompaniment and personal care items as well as services offered through faith-based groups such as hot meals, food pantry, and clothes box.

Implementation Approach:

The Paterson SPNS intervention has the unique capacity to serve population in all communities using non-judgmental approach and willingness to offer walk-in hours and other methods to facilitate access to care and treatment. Further, all services are expected to be culturally and linguistically appropriate. SPNS staff, when available, should be representative of the population to be served using first language and recognizing individual needs and autonomy. The use of patient navigators and care coordinators to remove structural barriers to accessing care is integral in the success of the intervention by identifying barriers and pathways to over these barriers. Patient navigators and care coordinators work to develop:

- A network of HIV Primary Care providers through RW and other sources;
- Culturally appropriate Medical and non-Medical case management and patient navigation services;
- Case managers to coordinate with Smart Care Management case manager and provide Medical and non-Medical Case Management;
- Access to medication including ADAP, health insurance, e-prescribing, local pharmacies and medication delivery.

Coordination with Housing Services: A coordinated effort to secure a working relationship with housing service providers is essential to implement this intervention. Establishing and maintaining relationships with a comprehensive network of housing providers includes the local housing authority, HOPWA and HUD funded programs and a variety of housing options including Section 8, residential treatment programs, three-quarter housing alternatives to incarceration and other residential community programs, as well as shelters as a last resort. A plan for transitions from treatment to community or temporary to permanent housing programs should be considered in the planning phase when developing a client plan. Expanding and enhancing supportive scattered site housing with access to case management and other services must be determined to know the available resources for clients. Case Managers should conduct a Housing Needs Assessments to determine degree of housing instability and social support needs. These needs, when possible, should be conveyed to housing specialists familiar with housing resource eligibility (i.e. location, income, family composition and outcome reporting). Tools and resources available to housing specialists regarding housing, supportive housing and related support services are an important aspect of successfully creating a housing plan for clients. Real-time vacancy management system should be utilized when available.

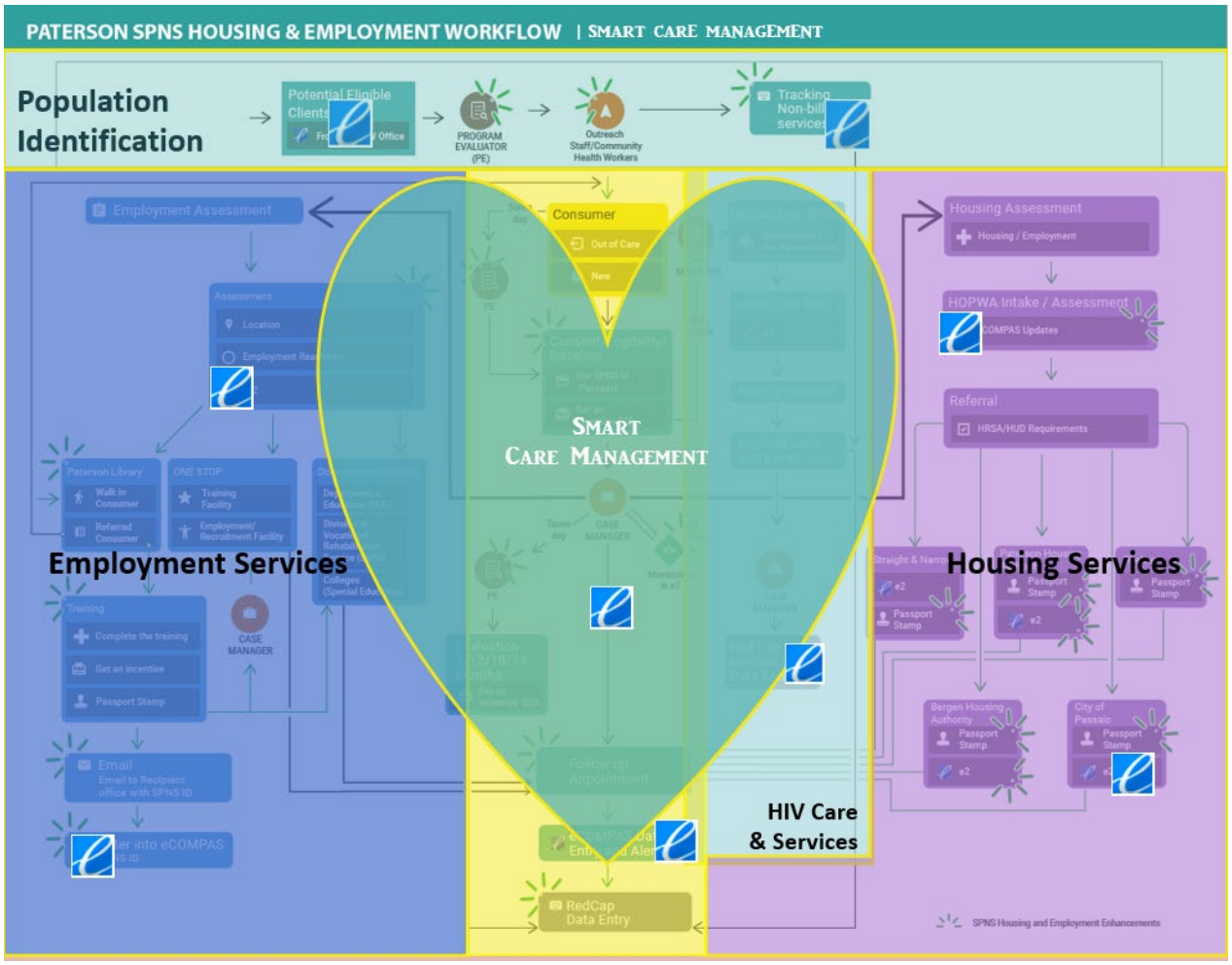
Coordination with Employment Services: The Paterson SPNS team find that coordination with employment services to be a core component of the SMART Care Management. When considering partnerships with employment services, consider their ability to be culturally responsive to the needs of the population, offer “right fit” services, employers, and administrative skills required for coordinating and collaborating across systems. Consider:

- Education, employment services and job training programs appropriate to the skills and need level of the identified population;
- Employment service staff with expertise in skill and program eligibility assessments;

- Skill and readiness assessment tools to determine education level and soft and hard skills training needs;
- Culturally and linguistically appropriate employers offering OJT and other supportive job training employment alternatives;
- Monitoring of living wages and provision of budget management;
- Skills and readiness assessment to determine needs for populations with and without recent history of employment;
- Resources including formal education, soft and hard skills training, and On-the-Job-Training (OJT) approaches to foster employment readiness and retention;
- Identification and access to social supports and programs to enhance work performance;
- Relationships with One-Stop Career Centers;
- Relationships with culturally competent employers.

There are five Core components of the SMART CARE MANAGEMENT intervention: 1) Population Identification, 2) SMART CARE MANAGEMENT, 3) HIV Care & Services, Housing Services and Employment Services (see Figure 16). There are a total of 25 core competencies and nine HIT “Smart Solution” enhancements.

Figure 16: SMART CARE MANAGEMENT: Five Core Components of the Intervention




```
<img src="Smart Care Management Components" alt="Smart Care Management five core components">
```

I. Population Identification - determine new and out of care clients and service needs:

- Identify people living with HIV in the Bergen-Passaic TGA who are not engaged in care and treatment.
- Outreach to community programs and in-reach to correctional systems are some strategic approaches to identify this population.
- Use e2 and RWHAP information to identify people who are not engaged and the most vulnerable populations (unstably housed, returning from incarceration, women)
- Use IT support to identify live time actionable care management tasks throughout health and human service providers across the Bergen-Passaic TGA.

A. Core Competencies:

- Use of Ryan White Part A program data system to track all activities
- Community outreach staff / community health workers locate and engage clients using street outreach efforts and motivational interviewing.
- Social media outreach campaigns to spread the word (bus stop signs and website flyers).
- Relationships with community programs and government agencies
- Gather information and refer for SMART CARE MANAGEMENT

B. SMART Solutions:

- Development and use of the ETAP Potential Eligible Clients Extract to identify people who are not engaged and vulnerable populations (i.e.unstably housed, returning from incarceration, women).
- Enhancement and use of Referrals Module to track nonbillable housing and employment services.

II. SMART CARE MANAGEMENT - facilitates engagement in care; coordinates care among service providers:

- Population-based approach to identify new and out of care HIV clients and link to needed services toward improved HIV clinical outcomes.
- Uses IT support to identify real-time actionable care management tasks throughout health and human service providers across the Bergen-Passaic TGA.
- At the heart of the intervention, the City of Paterson Department of Health and Human Services' Ryan White Part A Program works across systems to:
  - conduct outreach for patient reengagement,
  - identify and coordinate health care, housing, employment and other support services
  - identify, engage, support and maintain clients in HIV care and treatment.

A. Core Competencies:

- Care Management using inter-agency network of case management services, outreach navigators and community health workers for client engagement, reengagement and maintenance in care.
- Build and maintain an TGA-wide network in core and support services.

- Use IT support to identify gaps in services, assess provider performance, facilitate quality management/ improvement.
- Case managers provide initial intake, service plans, reassessments and follow-up referrals, including housing, employment, education, vocational training and treatment adherence counseling.
- Provide or arrange for support services including Patient Navigation, Peer leaders, transportation assistance, accompaniment and personal care items as well as services offered through faith-based groups such as hot meals, food pantry, and clothes box.

B. SMART Solutions

- The use of the eCOMPAS HIV Care Continuum Report and eCOMPAS Alerts Module to identify gaps in services, assess provider performance, facilitate quality management/improvement.
- Data entry into eCOMPAS to track client information and create alerts to notify intervention team and partners of gaps in the client engagement / reengagement.

III. HIV Care & Services - facilitate access to Primary HIV Care:

- Capacity to serve population in all communities using non-judgmental approach and willingness to offer walk-in hours and other methods to facilitate access to care and treatment.
- Culturally appropriate staff representative of the population to be served using first language and recognizing individual needs and autonomy.
- Patient navigators and care coordinators to remove structural barriers to accessing care.

A. Core Competencies:

- Network of HIV Primary Care providers through RW and other sources across the TGA.
- Culturally appropriate Medical and non-Medical case management and patient navigation services.
- Case managers to coordinate with Smart Care Management case manager and provide Medical and non-Medical Case Management.
- Access to medication including ADAP, health insurance, e-prescribing, local pharmacies and medication delivery.

B. SMART Solutions for HIV Care & Services

- Intake of new clients into electronic RWHAP data reporting system such as eCOMPAS.
- Medical data entry into electronic RWHAP data reporting system such as eCOMPAS.

IV. Housing Services - build on existing resources to support housing stability:

- Establish and maintain relationships with housing network including local housing authority, HOPWA and HUD-funded programs, including Section 8, residential treatment programs, ¾ housing alternatives to incarceration and other residential community programs.
- Plan for transitions from treatment to community or temporary to permanent housing programs.
- Expand / enhance supportive scattered site housing with access to case management and other services.

A. Core Competencies:

- Case Managers to conduct Housing Needs Assessments to determine degree of housing instability and social support needs.
- Housing specialists familiar with housing resource eligibility (i.e. location, income, family composition and CAPER reporting).
- Tools and resources available to housing specialists regarding housing, supportive housing and related support services.
- Real-time vacancy management system.
- Eviction prevention and legal assistance with constructive eviction.

B. SMART solutions for Housing Services:

- Housing and income information entered into eCOMPAS establishes a baseline and outcomes can be subsequently measured.
- The use of the eCOMPAS Referrals Module to refer the client to the appropriate (or "right fit") housing provider for services.
- The eCOMPAS Employment Referrals and Outcomes Module enhances eCOMPAS Referrals.

V. Employment Services - integrate / enhance employment services:

- Skills and readiness assessment to determine needs for populations with and without recent history of employment.
- Resources including formal education, soft and hard skills training, and OJT approaches to foster employment readiness and retention
- Identification and access to social supports and programs to enhance work performance
- Relationships with One-Stop Career Centers.
- Relationships with culturally competent employers

A. Core Competencies:

- Culturally appropriate employment specialists with expertise in skill and program eligibility assessments
- Skill and readiness assessment tools to determine education level and soft and hard skills training needs
- Education, employment services and job training programs appropriate to the skills and need level of the identified population
- Culturally appropriate employers offering OJT and other supportive job training employment alternatives.
- Monitoring of living wages and provision of budget management
- Case manager documenting referral and other direct and indirect services

B. SMART solutions:

- Case managers perform skills and readiness assessment to determine skill level and service needs for each client based on education level, acquired soft skills and employment history.
- The eCOMPAS Employment Referrals and Outcomes Module, saw the successful enhancement of the eCOMPAS Referrals Module.

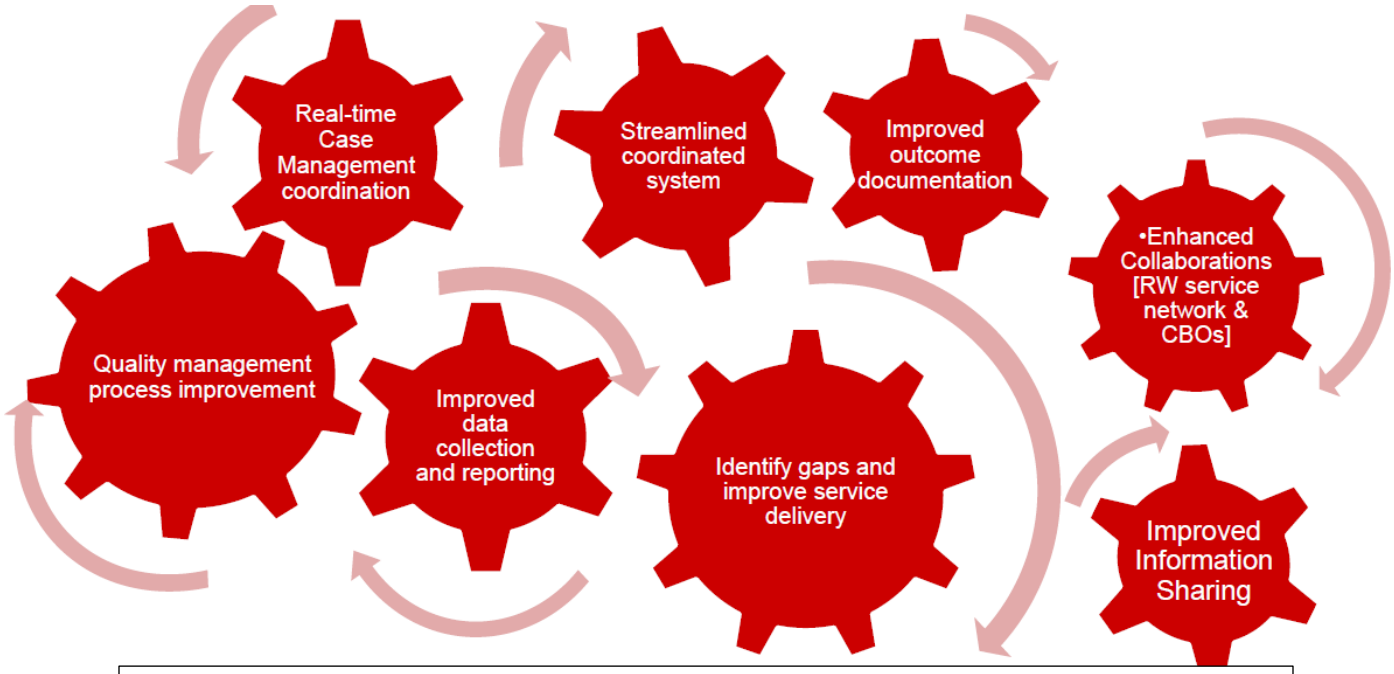
Special Population Enhancement

During the pre-implementation phase, the Paterson SPNS Staff and community stakeholders identified the need to reach the incarcerated population including those soon to return to the community after incarceration or those who are meeting with parole or probation. BU's Justice & Incarcerated Health Technical Assistance subject matter experts, Alison O. Jordan and Jacqueline Cruzado, provided technical assistance and support to the team. This led to expanding the reach of the intervention through a network of providers outside the traditional RW service model and enhanced the H&E efforts by establishing community collaborations with the local carceral agencies including local jails, probation and parole, as well as reentry services organizations and faith-based groups. Chaplains who volunteer in the Bergen County jails made several referrals (Bergen, Passaic, and Essex counties) for housing and reentry programs referred two potential SPNS H&E participants and facilitated housing and employment access for several people who needed access to housing as a condition of release. Bergen family center has ongoing communications Bergen county jail to facilitate both housing & employment services after incarceration for people soon to be released. These enhanced collaborations extended to the Bergen team management. CAPCO and Buddies were then able to added rapid HIV testing to their service model and facilitate linkages to in Lesson Learned: Work with your local jail when providing Housing and Employment services to people with HIV returning to the community. Documentation requirements, for Intensive outpatient programs (IOP) for example, necessitate coordination. Without such documentation, conditional release based on having stable housing and employment and relationships in place are not approved. Prior to initiating the SMART CARE MANAGEMENT intervention, it is essential to reach out to the right people in your area.

Benefits of SMART CARE MANAGEMENT: Data-driven Process Improvement

The benefits of the SMART Care Management process include a streamlined, coordinated system that facilitates improved data collection and reporting. Through the quality management process, certain improvements, including identification of service reporting gaps, facilitates more accurate assessments and improved service plans have been noted. An improved coordination of case management activities among case managers, community health workers, housing and employment specialists is also a documented benefit of the SMART Care Management process. By facilitating the HIT improvement to the data management system, collaborations between the Ryan White, HOPWA, and community partners and community-based organizations are better able to leverage resources and improves information sharing. Thus, resulting in an improved information sharing capabilities and improved outcome documentation, as well as meaningful use of data to better provide care and services to HIV positive individuals. [see Figure 17.]

Figure 17: Paterson SPNS Housing and Employment Data-Driven Process Improvement




```
<img src="Smart Care Management Process gears" alt="Smart Care Management 8 interlocking gears showing process flow">
```

Roles and Responsibilities of Project Partners

All project partners were required to attend basic trainings and other participated in enhance training and certifications including a Housing Collaborative Ambassador Training (see **Figure 18**).

Once a participant's eligibility is determined for the Paterson SPNS intervention and for the multi-site evaluation, clients met in-person with the Project Evaluator and Case Manager to consent for the multi-site evaluation. After an individual consented to participate, the baseline interview was conducted, and a gift card provided. From there a second in-person meeting between the client and the Case Manager would be held to conduct an acuity needs assessment, including both housing and employment needs, to determine case planning and next steps. Subsequently, the Case Manager initiated a warm "hand-off" to refer the client to the assigned housing / employment support specialist for a service needs assessment to determine the right fit programs and services. For persons choosing not to consent to the multi-site evaluation, no interview occurred, and the client was introduced directly to the Housing and / or Employment Support Specialist.

For both consenting and nonconsenting clients, the first introductory meeting with the Employment Support Specialist included an employability assessment and acted as an opportunity to begin fostering a trusting relationship. The initial meeting begins by completing the Paterson Assessment Tool for Medical Care, Employment, and Housing. These tools aim to ensure client are linked and retained in HIV medical care, assessing a clients employment status and employment readiness, and assessing a client's housing needs. The assessment also includes potential barriers to HIV medical care, gaining employment, and/or housing services; examples include a history of evictions, lack of work history, missing documentation (e.g., social security card, driver's license, birth certificate), unpaid utility bills, lack of transportation, history of felony convictions, childcare needs, and more.

Once all of the assessments are complete the information is entered into the eCOMPAS system (data system developed by RDE Systems for Ryan White/HOPWA reporting and management). to realize system process improvements to better inform the meaningful use of data for case management, housing specialists and employment partners including:

- Identify Eligible Client list technical requirements;
- Develop export file for Program Director/Principal Investigator to select Eligible Client list;
- Add new sites to RDE's National Resource Guide for subrecipients and community partners;
- SPNS Monitoring Dashboard to track client progress and outcomes throughout the life-cycle;
- Provide a tool to coordinate and improve quality of HIV, Housing and Employment actions leading to a coordinated system of care and sustained viral load suppression;
- Provide drill-down capabilities to enhance analysis, planning and decision-making regarding HIV care, housing and employment outcomes;
- Expand Bergen e2MyHealth to SPNS ETAP Target population and subrecipients/sites.

Figure 18: COMMUNITY PARTNER COLLABORATIONS

Training Type	Organizations	# trained

U.S. DOL Getting to Work (series of 3)	• Bergen County Housing Authority (HA) • Bergen Family Center • Buddies of New Jersey (NJ) • CAPCO • Team Management • Paterson Library • Paterson HA • St. Joseph Hospital • Paterson TGA	14
General Employment	• Bergen County HA • Buddies of NJ • CAPCO • Paterson Library • Paterson HA • Paterson TGA • St. Joseph Hospital	13
HIV Fundamentals	• Paterson Library	3
NIH Training	• Bergen County HA • Bergen Family Center • Buddies of NJ • CAPCO • Paterson Library • Paterson HA	14
Online Work Readiness Assessment for Case Managers	• Paterson TGA & Intervention Partners	14
Client Engagement Strategies	• Paterson TGA & Intervention Partners	14
CHW Certifications	• Bergen Family Center • Buddies of NJ • CAPCO	6
Housing Collaborative Ambassador Training*	• CAPCO	9

*https://www.evensi.us/nj-hiv-housing-collaborative-ambassador-training-series-917-biel-road-west-brunswick-middlesex-county-jersey-08901/268410557

Innovative Practices

Curbside Client Services:

During COVID-19, Buddies of NJ staff developed a drive-up, curbside client services tent. Staff were able to meet with clients from the comfort and safety of their vehicle. Buddies of NJ assessed client needs and assisted in the facilitation of service delivers while clients waited in the parking lot. This innovative practice allowed for clients to safely remain in their vehicle as the staff conducts face to face, intakes, assessments, screenings as necessary. Staff wear face masks/face shield, gloves during such interactions with the client. All paperwork is placed in an envelope and placed in a plastic bag.

Mobile Unit:

The development and expansion of mobile services for clients who are not able to travel was initiated to reach clients. This innovative practice allowed for clients to safely meet in the mobile unit as the staff conducts face-to-face intakes, assessments, and screenings as necessary. After each client meeting is conducted the mobile unit will be disinfected with all approved COVID-19 products. All appointments are spaced out to allow such cleaning methods.

Expanded Food Distribution:

The development and expansion of emergency food assistance as a response to COVID-19 affected clients and families. Expanded food distribution events have assisted Buddies of NJ, Inc. in ensuring access to food for our clients and the community at large. During the pandemic, numerous media outlets shared images of long lines and empty shelves at stores and supermarkets. We knew that we had to do something to secure proper nutrition in Bergen and Passaic counties (While maintaining social distancing). Our dedicated staff all volunteered to not only stay late but to also come in on their days off to participate. Our clients and the general community let us know how much they appreciated what we were doing and gave us feedback to let us know that we had to continue the intervention. In addition to expanded food distribution, Buddies of NJ, Inc. began to deliver food to clients who were disabled and to those that would not be utilizing our transportation service because of COVID-19 fears. In response, food distribution was enhanced with the inclusion of wellness checks with our Medical Case Manager, HIV Testing with our state-funded staff began. Buddies of NJ, Inc. assisted with food pantry items, meals, fresh produce, and clothing, and even distributed plants so that clients could learn how to grow food from home.

IT Solutions to Case Management Challenges

The development and expansion of the additional IT Solutions, including e2MyHealth Patient Portal, the eCOMPAS Electronic Referrals Module, the eCOMPAS Alerts Module, the eCOMPAS Consolidated Annual Performance and Evaluation Report (CAPER) and the eCOMPAS HIV Care Continuum Report allowed for SMART Solutions to service integration, documentation and reporting.

The eCOMPAS SPNS Monitoring Employment & Housing Dashboard, Out of Care Client Export file (Identification), National Resource Guides (Employment & Housing), and linkage to e2MyHealth (Care & Treatment) including a low health-literacy e2MyHealth Patient Portal.

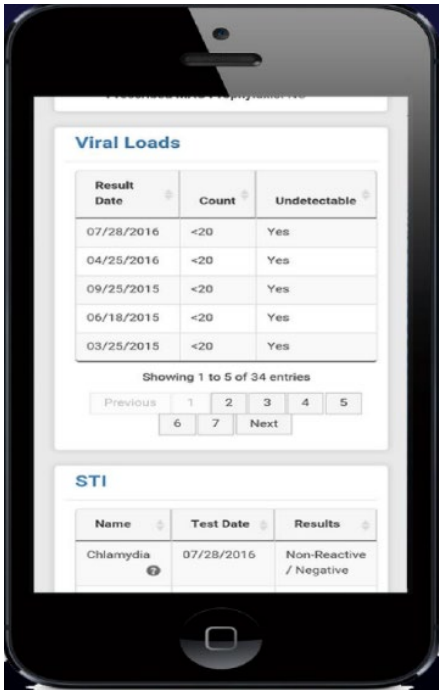
e2MyHealth Patient Portal

The e2MyHealth Patient Portal was leveraged for this project to empower clients with their own health information across the entire e2 Paterson Health Information Network. This Patient Portal has User-friendly design for low health literacy clients and uses simple English to describe medical concepts and educate clients toward improve client self-engagement in their health care information.

Key features of e2MyHealth that facilitated implementation of this intervention include:

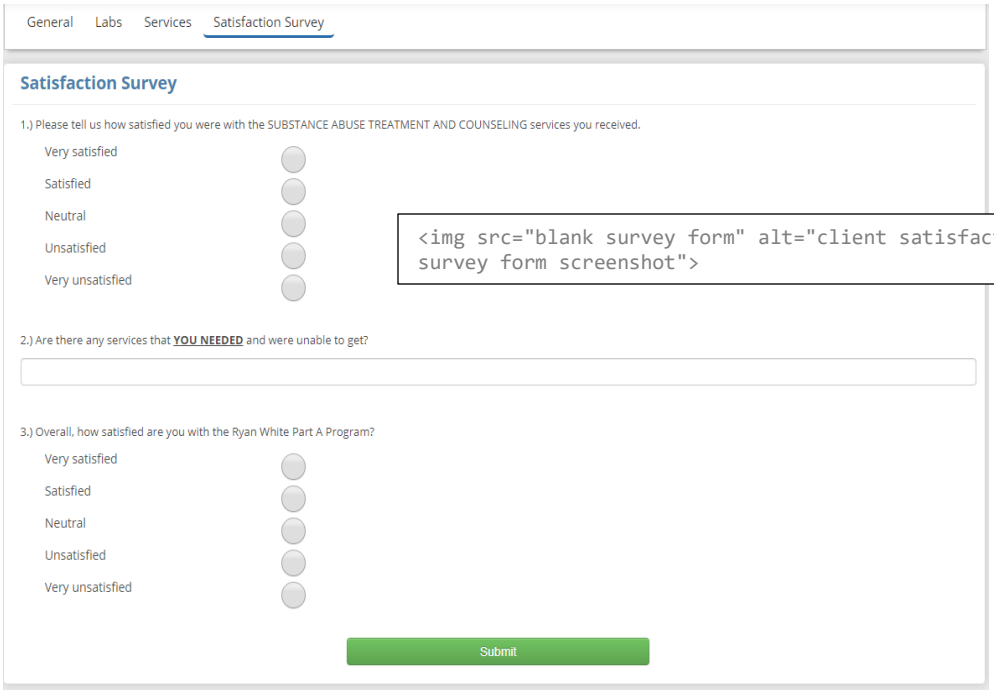
- Real-time data to empower decision-making;
- Easy and secure login;
- Care team information displayed;
- Upcoming appointment reminders to help clients stay on track;
- View medical and lab results (see Figure 19);
- View prescribed medications;
- Ability for clients to grant secure temporary access to others;
- Audit Log to support data quality and quality management efforts;
- Integration with MedLine Plus for plain English explanations to help users stay involved in their care;
- Electronic Client Satisfaction Survey (see Figure 20);
- Mobile / tablet and cross-browser compatible.

Figure 19: Sample of e2MyHealth Demonstration of Client Outcome




```
<img src="cell phone health record" alt="cell phone
e2my health record screenshot">
```

Figure 20: Sample of e2MyHealth Demonstration of Client Satisfaction Survey




```
<img src="blank survey form" alt="client satisfaction
survey form screenshot">
```

Electronic Referrals in eCOMPAS (see Figure 21)

- Automate the process of making, reviewing, and following up on referrals made;
- Easily manage incoming and outgoing referrals for clients to coordinate care between agencies
- Ability to track employment referrals;
- User-friendly design.

The eCOMPAS Interactive Resource Guide has the enhance capacity to allow subrecipients to send and receive direct referrals across disciplines

- Streamlines the process of making referrals;
- Allows subrecipients to directly collaborate for continuity of HIV care, coordinated with housing and employment services

Figure 21: Electronic Referrals

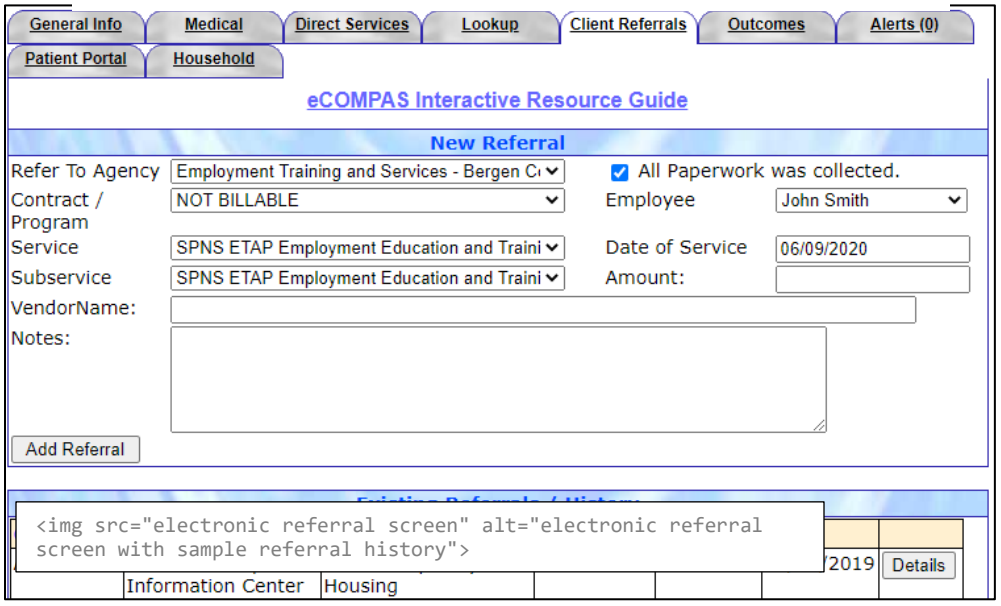


Figure 22: Housing & Employment Alerts in eCOMPAS

Type	Upcoming Alerts	Past-Due Alerts	Recommendation
Total number of clients eligible for employment and training referral to Paterson Library [?]	8	N/A	Refer the client to Paterson Library and add the service referral in the Referrals screen.
Total number of clients eligible for employment and training referral to Bergen County One Stop [?]	26	N/A	Refer the client to Bergen County One Stop and add the service referral in the Referrals screen.
Total number of clients eligible for employment and training referral to Passaic County One Stop [?]	8	N/A	Refer the client to Passaic County One Stop and add the service referral in the Referrals screen.
Total number of clients eligible for DVR referral [?]	3	N/A	Refer the client to DVRs and add the service referral in the Referrals screen.
Client referred for Employment Training to One-Stop Centers and pending service delivery and Referral close out. [?]	0	0	Follow up with Client or the Referred agency and mark the Referral as Complete.
Client referred for Employment Training to Paterson Library and pending service delivery and Referral close out. [?]	0	0	Follow up with Client or the Referred agency and mark the Referral as Complete.
Client referred for Employment Training to DVR and pending service delivery and Referral close out. [?]	0	0	Follow up with Client or the Referred agency and mark the Referral as Complete.
Client referred to a Shelter. Pending Referral close out. [?]	0	1	Follow up with Client or the Shelter they were referred to and mark the Referral as Complete.
HOPWA Services Delivered by the agency. Follow up appointment date missing. [?]	0	N/A	Schedule a follow up appointment with the client. Go to Service Entry screen, edit the service and add the next appointment date.

Housing and Employment Alerts **(Figure 22)**

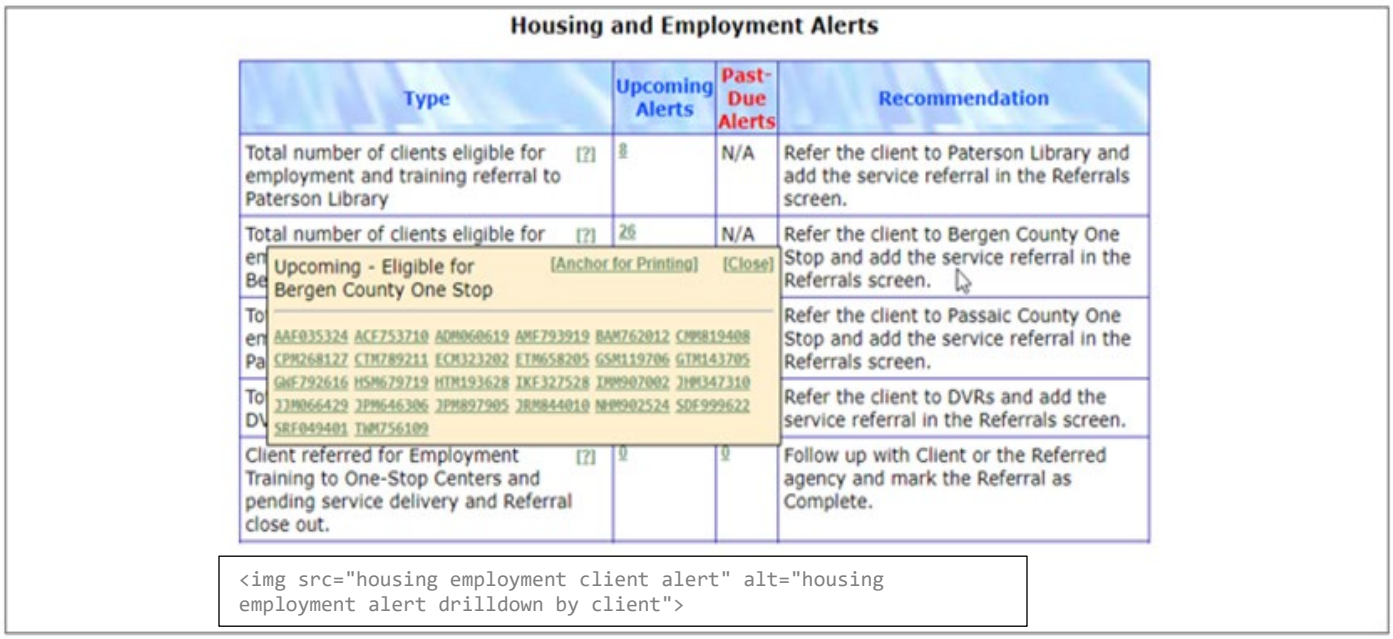
- Ability to view at a glance, clients in housing and employment indicators;
- Ability to view next steps or recommendations;
- User-friendly design;
- Ability to drilldown a list of clients (**Figure 23**);
- Weekly email alerts,

Key features of the Alerts Module benefits:

- Improve data quality;
- Empower user decision-making;
- Improve client housing and employment outcomes.

```
<img src="housing employment alerts" alt="housing employment
alerts by type number past-due recommendation">
```

Figure 23: Housing & Employment Alerts feature: Client Level Drilldown




```
<img src="housing employment client alert" alt="housing
employment alert drilldown by client">
```

One-Click Consolidated Annual Performance and Evaluation Report (CAPER)

- Automated reporting based on data collected in eCOMPAS;
- Explainers detailing report indicators;
- Ability to filter by provider, date and contract;
- Ability to drilldown a list of clients;
- User-friendly design.

Preparing the HOPWA CAPER Report in eCOMPAS:

- Saves time, reducing administrative burden
- Improves data quality – capturing all service records.

Figure 24: HOPWA CAPER Report

1. HOPWA Performance Planned Goal and Actual Outputs

	HOPWA Assistance	HOPWA Funds	
	Number of Households	HOPWA Budget	HOPWA Actual
HOPWA Housing Subsidy Assistance			
1. Tenant-Based Rental Assistance [?]	0	$0.00	$0.00
2a. Permanent Housing Facilities [?]	0	$0.00	$0.00
2b. Transitional/Short-term Facilities [?]	0	$0.00	$0.00
4. Short-Term Rent, Mortgage and Utility Assistance [?]	0	$0.00	$0.00
5. Permanent Housing Placement Services [?]	0	$0.00	$0.00
6. Adjustments for duplication (subtract)	0		
7. Total HOPWA Housing Subsidy Assistance [?]	**0**	**$0.00**	**$0.00**
Supportive Services			
11a. Supportive Services provided by project sponsors /subrecipient that also delivered HOPWA housing subsidy assistance [?]	0	$0.00	$0.00
11b. Supportive Services provided by project sponsors /subrecipient that only provided supportive services [?]	0	$0.00	$0.00
12. Adjustment for duplication (subtract)	0		
13. Total Supportive Services [?]	**0**	**$0.00**	**$0.00**
Grant Administration and Other Activities			
19. Project Sponsor Administration (maximum 7% of portion of HOPWA grant awarded)		$0.00	$0.00
20. Total Grant Administration and Other Activities [?]		**$0.00**	**$0.00**
			$0.00

```
<img src="hopwa caper report" alt="hopwa caper report with number of households budget actual funds">
```

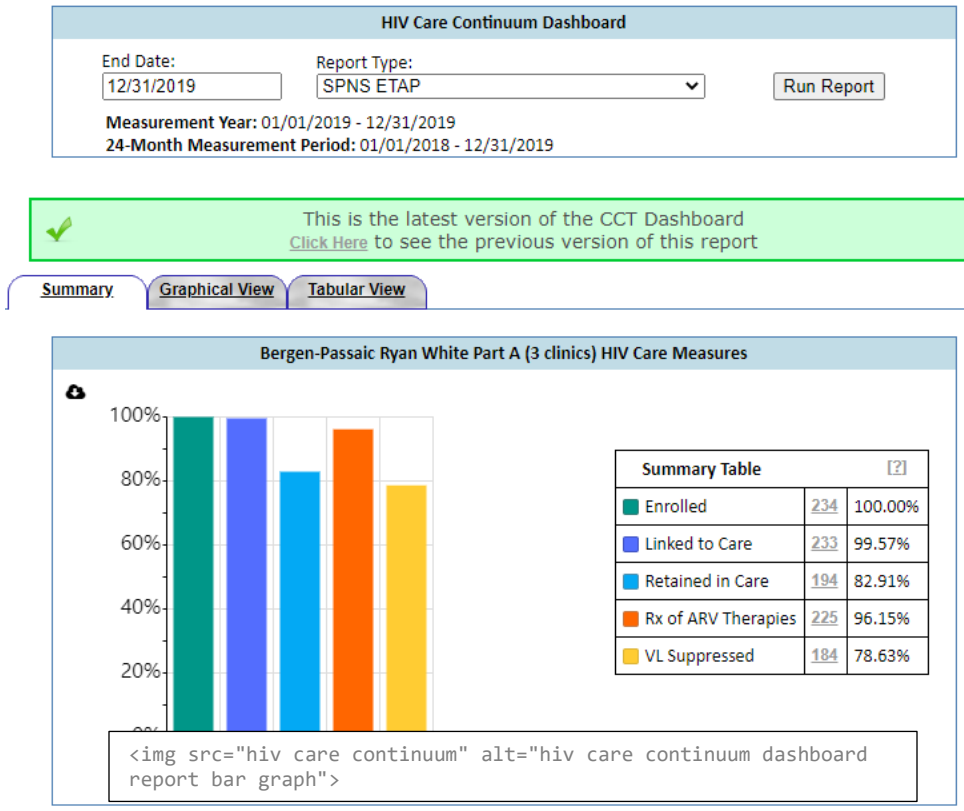
HIV Care Continuum Report in eCOMPAS

- East to use report dashboard feature automated Care Continuum Cascade ;
- Color-coded Summary table detailing report indicators;
- Easy to filter by date;
- Drilldown by sub-populations / client rosters
- Data views in table and/orchart format

Report facilitates the right next steps toward Ending the HIV Epidemic:

- Saving time;
- Improving data quality;
- Targeting interventions to identify gaps, remove barriers and achieve outcomes

Figure 25: HIV Care Continuum Report



Lessons Learned

Barriers and Challenges

Implementation Challenges

During the course of a three-year demonstration, continuous quality improvement and adaptations were made to improve the approach and final results. The experiences of this SPNS demonstration reflect this reality. Challenges to the initial work plan surfaced throughout, delaying completion of the work plan beyond original expectations. With determination and support, all five components of the SCM intervention have been addressed and objectives realized as practicable.

Enrollment: Finding clients 1) willing to participate and 2) who meet the eligibility criteria 3) participant engagement barriers. The Paterson TGA has a long history of providing HIV services and found that many participants, while they lacked stable housing and employment, were virally suppressed. Thus, when combing the roster to identify folks who were out of care and not virally suppressed, intervention eligibility criteria, there was not a large pool. While this was a challenge for the study, lessons for implementation include understanding that viral suppression can be achieve with people who lack stable housing and employment although this is not optimal for healthy communities. Other criteria, such as SF12 wellness scales may be a better indicator for people with HIV who are unstably housed or underemployed.

Staffing Challenges: Staff turnover coupled with a hiring delays were challenges to implementation. In addition to line staff, there were significant leadership shifts at the highest level of government. Jurisdictions need support from staff and administration. To address this challenge, the intervention director worked long hours and managed up and relied on community partners to address the requirements.

Startup: Time and effort to startup the project, including hiring a consultant to assist with the IRB approval, contract process, staff training needs (certifications), eligibility and implementation other requirements. Meeting baseline enrollment target.

Client Challenges: Access to substance use and behavioral health treatment, cultural appropriateness and/or competency of services, community program capacity and resource issues. Follow up with clients was difficult due to the inability to contact clients by cell phone.

Housing barriers that were encountered: securing housing for those with limited or bad credit, registered for sex offense changes, and people with mental health conditions.

Accomplishments and Successes

Stable Housing: The Paterson team successfully assisted 14 clients realize permanent/stable housing in both Bergen & Passaic Counties.

Client incentives: reach out to vendors for purchase of incentives and then get approval from City Council.

Transportation: Uber was used by subrecipients in Bergen County to transport clients for their initial interview. Other subrecipients used their own vehicles to bring clients to our office for their initial interview. Or Ryan White staff would go to client's location for interviews and follow up.

Client follow up: Ryan White Evaluators reached out to Partner agencies for contact assistance.

Shared support: Client challenges and barriers are identified and noted utilizing the eCOMPAS (e2) health information system. Using a case coordination data collection approach, once the barrier is recorded, intervention staff monitor it on the individual level; the broader team reviews barriers and challenges on the aggregate level as part of regular monitoring activities.

Collaborative approach: The City of Paterson was able to bring diverse organizations together as partners in addressing the needs of mutual clients across programs, counties and zip codes. Serving as the hub, the City of Paterson convened regular meetings bringing community partners together around a common purpose and creating a robust model for inter-disciplinary, cross-county collaborations.

Paterson's Ryan White program reached out to the City sheriff and plan to bring HIV Testing and other services to the jail once COVID19 restrictions are lifted

The City Sheriff introduced the Ryan White program to its reentry service program which referred participants for the study as well as other direct services

Buddies of NJ helped meeting survival needs for food clothing and shelter, and facilitated placement of seven of the 14 participants stably housed.

Buddies of NJ implemented a career development program geared towards helping individuals build employment skills and job readiness training including interviewing skills, resume building, access to job development opportunities as well as employment search and application process.

SMART Care Management: This intervention has streamlines inter-program referrals and allows for shared care management allowing for real time documentation and up-to-date reports on client housing, employment and engagement status, reducing administrative burdens and duplication of effort leading to improved care coordination and client outcomes.

VI. Dissemination Activities

Paterson's intervention staff actively disseminated information and findings about this work, including:

1. Published resources about the intervention (see attached).
2. Presentations about the intervention (see list below).
3. Dissemination and publicity activities in the community and to other area RWHAP-funded Parts about available intervention resources and outcomes.
4. Outreach about the intervention to local and regional AIDS Education and Training Centers (AETCs).
5. Posted on TargetHIV and AETC NCRC websites for download and use.

VII. Attachments (tools and forms for sections I-IV)

1. Job descriptions
2. Recruitment to Transition or Discharge Flow Charts
3. Referral and Screening form documents; Acuity tools.
4. Training and supervision tools
5. Evaluation (weekly QI reports)
6. Transition (acuity tools)
7. Sample policies and procedures (i.e. home visit protocols)
8. EMR modules
9. Helpful links
10. Products/materials that support implementation of the intervention-
11. Promotional content/products including multiple gift cards incentives

Data, Outcomes, and Evaluation

Evaluation

The evaluation was accomplished by measuring outcomes at multiple levels:
(1) **Individual level:** Empowerment and self -sustainability for people with HIV to live longer healthier lives.
(2) **Service level:** Improved care coordination led to engagement in HIV care and treatment, facilitate access to housing and employment, and an
(3) **Systems level:** Expanded network of care to deliver needed services improves systemwide outcomes. Leveraging past SPNS intervention technology innovations led to improved communication, data collection and reporting among Project Partners while enhance features to share the care across disciplines.

Findings and Results

Individual level.

On the individual level the SPNS team sought to bring about empowerment and self -sustainability for people with HIV to live longer healthier lives.

The City of Paterson's study consisted of 82 participants with 52 participants returning for the 6-month follow up interview and 22 for the 12-month follow up interview. From the information we were able to collect, we were able to determine the following outcomes from our SPNS initiative.

For employment, the SPNS team found a 21.4% increase in employment (full time/part time) from the baseline interview to the 12-month follow up, with 8 participants receiving new employment (3 full time / 5 part time). When asked, how confident are you in holding onto a job, participants had a 10.3% improvement that they confident or somewhat confident that they can hold onto a job.

Another outcome that came out of employment, saw that increase of median household income, from $4740.00 from the baseline interview, to $9696.00 from the 12-month follow up. That was an average improvement of $4,956.00. Unfortunately, due to the COVID-19 pandemic, many participants lost their employment in 2020.

For housing, the SPNS team found a 29.2% improvement in living situation for participants living in an apartment, house, room that they rent or living with a friend or family member. Out of the 82 participants the SPNS team was able to find housing for 16 participants, 10 in Passaic County and 6 in Bergen County. The SPNS team put a priority on finding housing for families, of which 6 were housed. Lastly when asked if the participants ever considered themselves homeless in the past 6 months (from the baseline interview to the 12-month interview), participants showed a 77.3% improvement, where they did not consider themselves homeless.

- **The family of 6.** One family was 3 weeks away from becoming homeless. Both parents had HIV, the husband was about to be laid off, and they had many bills to pay and no family support. Because of their need and the kids involved, the City of Paterson and its referral partners concentrated on this family intensively for two weeks.
- Through this effort, the family was able to remain stably housed, and a partnership between City of Paterson and St. Joseph's Hospital was formed. The Paterson SPNS team realized that they do not always know about people's needs because clients did not share this information. After helping this family, many clients came in because they felt comfortable disclosing their needs with the Paterson team, which was very exciting. The Paterson SPNS team is still helping clients within the City of Paterson's HOPWA program.

> ***Case Studies.*** During Year 2, the City of Paterson had been reaching out to explain the purpose of the intervention , to build relationships with providers who were not current partners but had clients who were undocumented or without insurance.

- **The young woman who felt "hopeless".** There was this young woman who had been diagnosed with HIV in 2014, and she was currently homeless, working several part-time jobs and going to school to complete her GED. Living in the homeless shelter made her realize she wanted a better life for herself, but she felt that there was nowhere to go for help, mentally or financially. Her doctors had suggested CAPCO, a Paterson SPNS partner, where she met with Case Manager Tisa Smith. Through the SPNS intervention, the case manager was able to find her current job, assist with case management services, transportation assistance, and emotional support.
- The young woman said that Tisa made her feel like other people wanted her to have a better life, so she felt like she was not the only one trying to improve her situation. Since September 2019, this young woman has been employed full-time and enjoys her work. She has been in her own studio apartment for over a year and feels like she is "in a good place physically and mentally". The young woman is still virally suppressed and undetected and is looking toward the future with hope and the new perspective that she can do more than just exist in her own life.

- **The homeless man and daughter.** Another success story of the Paterson SPNS initiative was the father who, along with his daughter, were sleeping in his car. Through the SPNS initiative and with the assistance of the housing authorities, the City of Paterson was able to place the man and his child into stable housing, in an apartment.

Service level

The Paterson SPNS intervention has developed Smart Care Management (SCM) as a strategic systems approach to facilitate needed access to and engagement in HIV care services. SCM leverages evidence-informed models of coordinated care in which HIV primary care is linked with case management, housing assistance, substance use and mental health treatment, as well as legal, employment and social services, to improve HIV population health outcomes. SCM utilizes the Ryan White Part A program data system (eCOMPAS) to track all activities and perform quality management. SMC includes strategic planning and intervention development, service integration, outcome reporting for quality improvement and population health management.
The Paterson SPNS team was able to identify 28 new housing and employment referral partners. The new partners included six employment training and services partners, and 22 housing services partners.

The direct benefits of Smart Care Management on this Project include:

1. Improved data collection and reporting resulting from a more streamlined and coordinated system – more timely assessment – better able to assist case managers with accurate and timely client level outcomes (CD4 vL) to properly assess engagement in / adherence to HIV Care and treatment.
2. Quality management process improvements, including identification of service reporting gaps, which facilitates more accurate assessments and improved service plans – able to identify out of care clients, missed appointments, continuity of provider, in or out of jail; assess PDSA level, updated CD4 vl for all clients and coordination of care across all HIV care management providers and integrate care coordination with H&E – this helps improve HIV outcomes as people who are stably housed have reduced food insecurity service and accurate reports regarding engagement in care and treatment.
3. Improved coordination of case management activities among case managers, community health workers, and housing and employment specialists
4. Collaborations between the RW service network and community-based organizations (CBOs) leverage resources and improves information sharing
5. Improved information sharing leads to improved outcome documentation

> ***The Housing & Employment Project has encouraged the City of Paterson to build referral relationships outside of the Project to further engage and retain vulnerable individuals. One new referral relationship with the local jail led to the prescreening of two individuals and the enrollment of one individual who would otherwise have been excluded from the initiative.***

System level

Systemwide, the intervention leveraged and enhanced existing resources, partnerships and HIT solutions to improve care coordination through data and resources sharing throughout the network of care, treatment, housing and employment services networks.

Through collaboration with partners and collaborators, including the planning council and new partnership with relationship with St Claire's, new referral resources for housing advocate, homeless services, and interdisciplinary referrals and collaborative relationships were initiated and sustained. Housing providers had units available, clients were identified and placed.

In addition, the eCOMPAS Alerts Module was enhanced with nine new housing and employment alerts. These alerts provided SMART Care Management interventionists with recommendations or next steps to take if a client was found in the indicator. These changes helped streamline the process of making referrals and helped improve the quality management process by allowing users to monitor alerts for potential eligible clients for employment or housing referrals. The eCOMPAS Housing Status Enhancements and CAPER Module, both saw the successful enhancement of eCOMPAS capture relevant client data for reporting, evaluation, and monitoring needs. The eCOMPAS Housing Status Enhancements and CAPER Module, both saw the successful enhancement of eCOMPAS to capture relevant client data for reporting, evaluation, and monitoring needs. These enhancements have led to time savings, as the previous paper-based CAPER report can now have its indicators automatically generated by eCOMPAS, helping staff work more effectively and efficiently freeing up valuable time to spend on providing HIV care services. These enhancements have led to time savings, as the previous paper-based CAPER report can now have its indicators automatically generated by eCOMPAS, saving staff time and freeing up valuable time to spend on providing HIV care services.

Approximately 270 hours a year spent on double data entry of services &

medical fields for hundreds of clients every year will be eliminated.

The eCOMPAS SPNS Monitoring Dashboard, Out of Care Client Export file, National Resource Guides, and linkage to e2MyHealth, saw many enhancements, the first enhancement was to create a low health-literacy e2MyHealth Patient Portal.

The e2MyHealth Patient Portal, which was first developed under the City of Paterson previous SPNS HIT Capacity Building Initiative, was expanded to SPNS ETAP clients and RW/HOPWA clients in the TGA, in addition, enhancements were made to e2MyHealth Patient Portal to integrate the Client Satisfaction Survey (CSS) into the platform, linking it to services received through eCOMPAS.

The patient portal was intended to facilitate self-empowerment, increase access to personal health information and improve health literacy through the internet. Case managers and clinical staff have continued to work to register and support patients to using the portal. By the end of Year 3, a total of 189 accounts have been created, a 70% increase since the beginning of this SPNS's initiative. Over the long term, a full evaluation of the extent to which these outcomes were achieved requires additional time to allow the portal to increase in utilization and for users to become familiar with it.

At the operational level, enhancements made to e2MyHealth Patient Portal achieved automating the CSS survey. RWHAP clients enrolled into the Patient Portal receive an email reminder, sent by the eCOMPAS system, to complete the CSS survey. Once completed, users of the eCOMPAS system can download the results in the form of an excel file for evaluation.

As a recommendation, RWHAP clients should continue to be encouraged to use the e2MyHealth Patient Portal and complete the CSS survey. Knowledge of the portal depends on the active involvement of the subrecipients who have direct contact with clients who would benefit from the portal.

Enhancements were also made to the eCOMPAS National Resource Guide (NRG). NRG was expanded to include employment training and housing services resources which is now accessible to the entire TGA network (RW and HOPWA). The Paterson SPNS team were able to identify 30 new resources, of which consisted of 23 locations for Passaic County shelters and emergency housing, 6 locations for employment training services and 1 location for housing and related services.

In addition, enhancements were made to the eCOMPAS HIV Care Continuum Dashboard. The Dashboard was first developed under the City of Paterson previous SPNS HIT Capacity Building Initiative, leveraging and expanding upon past SPNS innovations, the dashboard was enhanced to include the breakdown by service category and expanded to all RW/HOPWA providers in the TGA to assist monitoring activities. Enhancements lead to quality management process improvements, including identification of service reporting gaps, facilitates more accurate assessments and improved service plans.

The development of the eCOMPAS ETAP Potential Eligible Clients Extract export file assisted the Recipient (Paterson Intervention Director) review and filter clients for Outreach by Community Health Worker Initiative and Outreach staff. This enhancement came out of the partnership of the City of Paterson and RDE Systems, which came up with this solution to help the City of Paterson with the barrier of finding clients to participate in the study. This extract resulted in time savings for the Paterson Intervention Director.

Sustainability

The City of Paterson primary emphasis were on the eCOMPAS system enhancements for continuous monitoring and tracking. i.e., one-time capacity development resulting in sustainable systems that help structure process and team member activities long after the initiative closes, building on previously successful SPNS initiative. All products created for SMART Care Management will continue to be used by the Paterson TGA.

The activities carried out under the SPNS demonstration are complete, and enhancements to the eCOMPAS electronic health information system are permanent. The eCOMPAS system is maintained by RDE Systems and funded by the Part A Program. Intervention funding does not require additional support at this time, and all aspects are expected to sustain. Further, there are no additional funds from other sources available other than the Part A grant. These enhancements will continue to support the Paterson TGA and its Smart Care Management intervention.

Improvements toward Ending the Epidemic

The Housing & Employment Project participants enrolled in the Paterson SPNS intervention improved rates faster than the non-intervention clients served in the TGA for:

- Linkage (35%),
- Medication (11%), and
- Viral Load suppression rates (35%).

If this trend continues, the lasting results from this intervention will demonstrate long-term health outcome improvements that will move us toward Ending the HIV Epidemic.

The City of Paterson engages in continuous quality improvement and seeks to enhance and sustain features developed through SPNS initiatives. A prime example of this would come from the City of Paterson previous SPNS HIT Capacity Building Initiative. During that SPNS initiative the HIV Care Continuum Dashboard and e2MyHealth Patient Portal were developed. Seeing the effectiveness of those modules and wishing to expand upon it, these two modules were included in their current SPNS initiative. The SPNS initiative has helped the City of Paterson sustain and improve upon the replication of e2MyHealth, the low-literacy patient portal. e2MyHealth was originally designed by Columbia University-NYP and RDE from the SPNS Electronic Networks of Care initiative. This kind of cross-project replication and sustainability is both valuable and timely given the importance to help clients remain more connected virtually during the COVID-19 pandemic.

The CAREWare Data Import Module has helped the largest medical provider save significant amounts of time and data quality errors by automating the import of CAREWare data, and has contributed to a win-win collaborative approach between partner organizations and the Paterson TGA

The Atlanta EMA, administered out of Fulton County has replicated the City of Paterson's enhancements made to the User Satisfaction Survey model as they plan to conduct their region-wide Client Satisfaction and Needs Assessment (see **Figure 29**). This replication came from the connections bridged between the County of Fulton and the City of Paterson, facilitated by RDE Systems.

Figure 26: Ongoing Smart Solutions support Sustainability

Publication and Dissemination

During the three-year demonstration, the SPNS Team engaged in dissemination activities at three levels: (1) workshop and poster presentations at national conferences; (2) presentations at HRSA-sponsored meetings, both virtual and in-person; and (3) local presentations for the SPNS partners. The following summarizes the most important activities undertaken thus far and planned for 2021.

2020 National Ryan White Conference. On August 12, 2020 the SPNS Team conducted a workshop entitled "Housing, Employment and HIT Improve Access for Vulnerable Populations in Paterson NJ & Puerto Rico". Presenters were Milagros Izquierdo, Jesse Thomas, Alison O. Jordan, and Carmen Cosme. The workshop focused on how SPNS interventions used innovative approaches to target vulnerable populations to improve access to care by building workforce capacity, expanding housing and employment service collaboration, and using HIT solutions. Two case studies were presented to illustrate successful HIT-mediated data exchange and quality improvement efforts to increase client access to care by addressing housing and employment needs and how effective interventions at the individual, service and systems levels led to process efficiencies and quality improvements for federal reporting and care coordination at the One Stop Career Center of Puerto Rico and City of Paterson, New Jersey.

Other external conference presentations:

International Association of Providers of AIDS Care (IAPAC) Adherence 2020 November 2-3, 2020. Poster presentation. International Association of Providers of AIDS Care (IAPAC) Adherence 2021 November 7-9, 2021. Poster presentation (Proposed).

"El Whoosh: Innovative Data Exchange, Saving Time, Improving HIV Care Coordination in NYC Jails and Paterson, New Jersey" National Latinx Conference, May 17, 2019

Bergen and Passaic County Jails Presentation January 9, 2019

The Paterson Team participated in each Boston University annual meeting and site visit:

- September 22-24, 2020 Multisite Meeting (virtual meeting)
- August 26, 2020 BU Data Review (virtual meeting)
- June 11-13, 2019 Multisite Meeting
- May 7, 2019 BU Site Visit
- June 20, 2018 BU Site Visit

Subrecipients and collaboration partners received numerous opportunities to learn of SPNS activities. Most occurred during Collaboration or Quality Management meetings and are described below:

- eCOMPAS system training on updates to housing and employment features, August 16, 2018. Attendees included SPNS Team, Buddies of NJ, CAPCO, and Team Management.

- eCOMPAS system training on SPNS Monitoring Dashboard, November 29, 2018. Attendees included SPNS Team, Buddies of NJ, CAPCO, and Team Management.
- eCOMPAS webinar on CAPER Module, January 29, 2019. Attendees included SPNS Team and HOPWA subrecipients.
- eCOMPAS system training on SPNS Monitoring Dashboard, February 6, 2019. Attendees included SPNS Team, Buddies of NJ, CAPCO, and Team Management.
- eCOMPAS system training on e2MyHealth Patient Portal, May 29, 2019. Attendees included SPNS Team, Buddies of NJ, CAPCO, and Team Management.
- eCOMPAS system training on e2MyHealth Patient Portal, June 13, 2019. Attendees included SPNS Team and Paterson Planning Council.
- eCOMPAS site training including SPNS initiative features, December 2, 2019. Attendees included SPNS Team and RWHAP Part A/HOPWA subrecipients.

1. Replication + Sustainability: Adaptation of Past SPNS Initiative

The SPNS Housing & Employment Initiative build on past success by helping Paterson sustain and improve upon the replication of e2MyHealth, the low-literacy patient portal, originally designed by Columbia/NYP and RDE from the SPNS Electronic Networks of Care initiative, with Dr. Peter Gordon. Thus, the intervention added value through a cross-project replication and sustainability HIT effort that helped clients remain more connected virtually during COVID.

```
<img src="e2MyHealth portal" alt="e2MyHealth portal healthy
people running on beach">
```

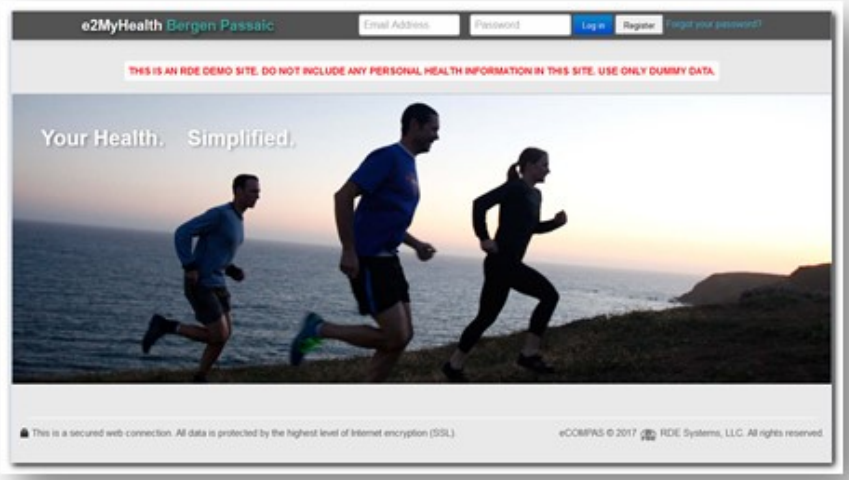


Figure 27. e2MyHealth Ryan White Patient Portal

2. Replication + Sustainability: Adaptation of HRSA Project with the Atlanta EMA

The Atlanta EMA, administered out of Fulton County is using the SPNS Housing & Employment enhancements to the Client Satisfaction model as they plan to conduct their region-wide Client Satisfaction and Needs Assessment, during COVID, and appreciated the user-friend, low-literacy client engagement tools this project has helped you take to the next level.

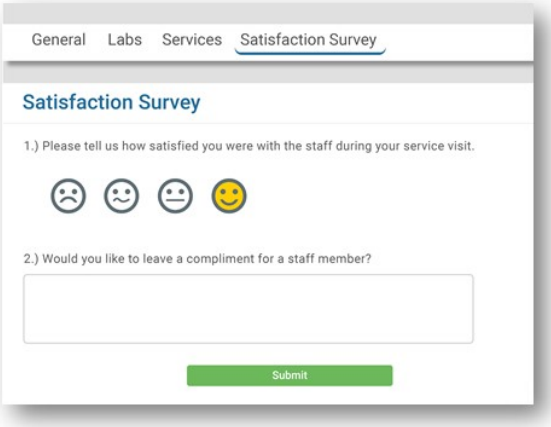


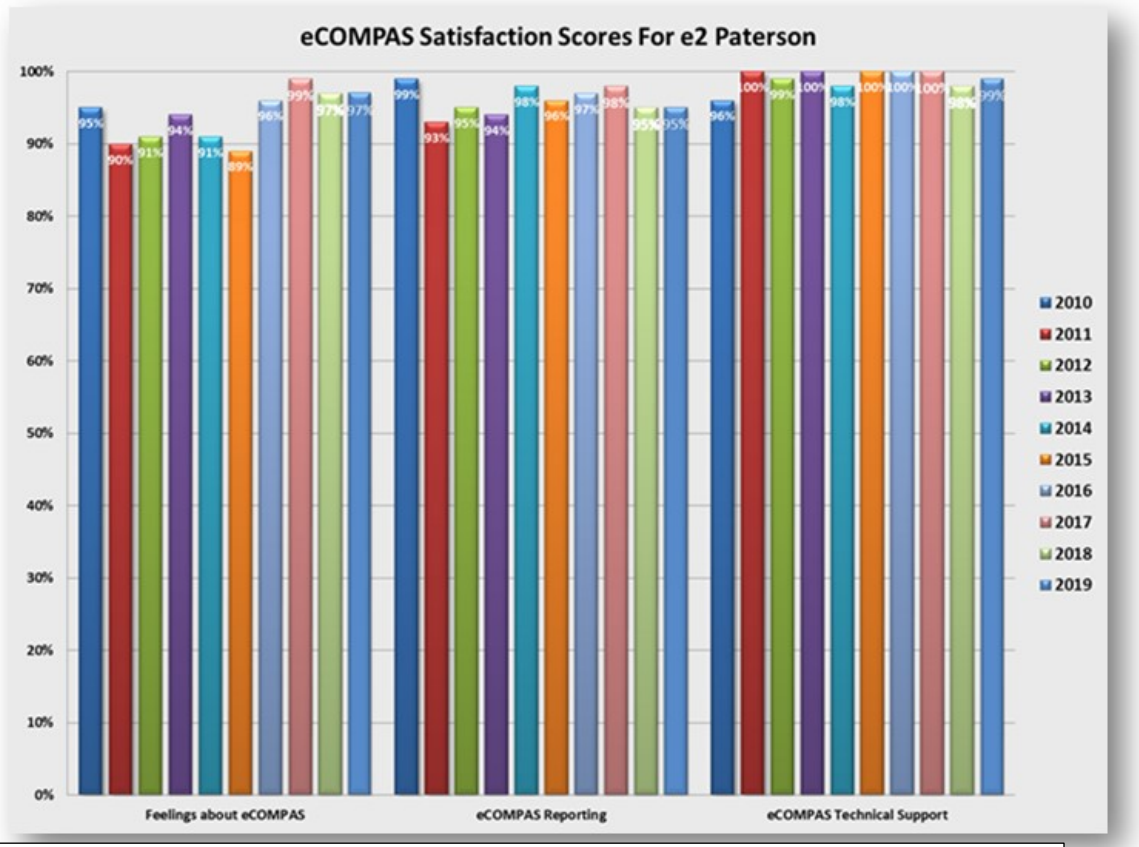
Figure 28. e2Community Mobile / Web

```
<img src="satisfaction survey"
alt="satisfaction survey with very sad
sad neutral and happy icons”>
```

3. End User Satisfaction Remains high with SPNS Enhancements for e2Bergen-Passaic

The support team at RDE conducts annual calls to survey end users and records response to the question: How satisfied are you with eCOMPAS on a scale of 0% to 100%? The eCOMPAS system enhancements for this are positively associated with continued consistently high satisfaction rating from the staff and partners that used the eCOMPAS system to enhance collaboration and communication as part of this intervention.

Figure 29. Extremely High End-User Satisfaction Ratings for e2Bergen-Passaic




```
<img src="satisfaction scores" alt="satisfaction bar chart 2010-2019 depicting rates
from 90-100% improving over time”>
```

Impactful Case Manager Stories and Client Stories

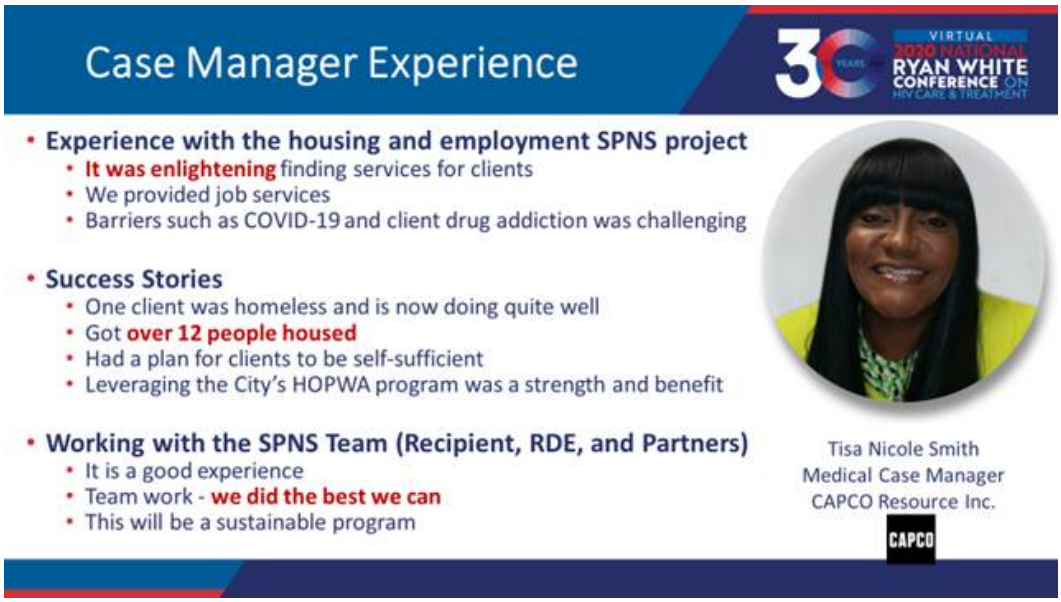
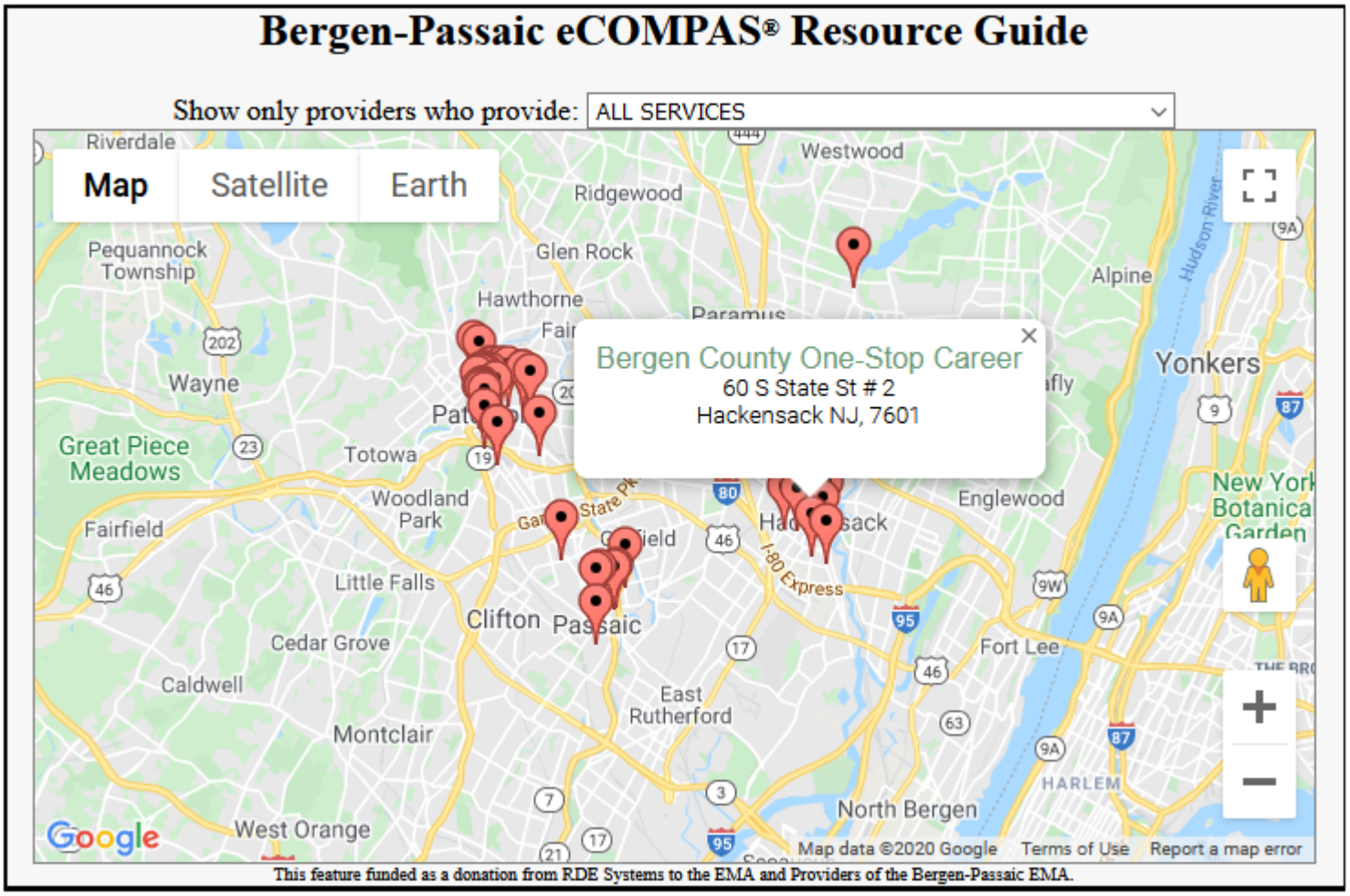


Figure 30. Compelling and Insightful Client and Case Manager Stories

```
<img src="case manager experience"
alt="case manager from CAPCO reports
success stories”>
```

The stories presented at the NRWC 2020 plus the new story you shared with me lend a real human element to this initiative and it's beautiful to hear the impact on real human lives of the HRSA SPNS initiative. For the full stories, see NRWC 2020 webinar.

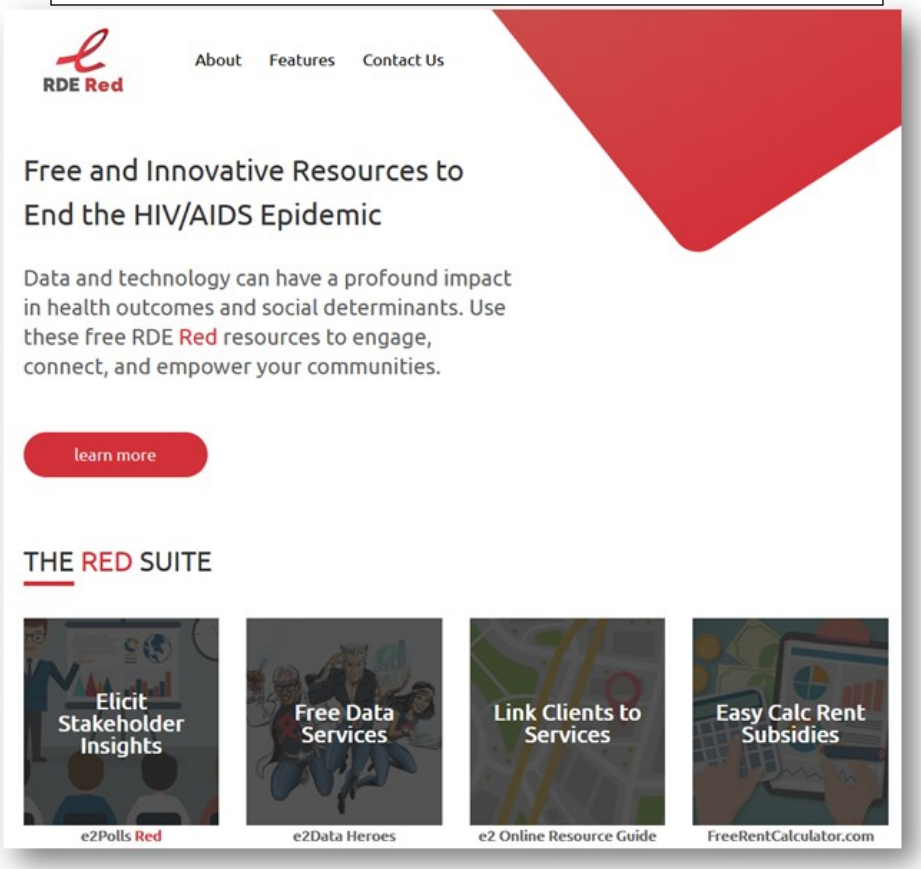
Figure 31. Mobile/Web Online Resource Guide Enhanced and Updated with New Partners




```
<img src="resource guide" alt="Bergen Passaic electronic map resource guide”>
```

RDE is proud of its free suite of apps and resources, RDE Red, and happy it came in useful for this SPNS initiative. If anyone else would like to use this free tools, they are available for any SPNS sites here: [RDE Red]

Figure 32. RDE Red – Free Apps and Resources




```
<img src="RDE Red" alt="RDE Red flyer listing free resources”>
```

Free Tools Utilized - RDE Red Program

The Free Rent Calculator and e2Polls Red has been used by the Bergen-Passaic SPNS Team and others to help improve complicated HUD tenant rent subsidy calculations, and improve stakeholder engagement using real-time polling, at no cost.

Thanks to Freeholder Pat Lepore for Jail Meeting Facilitation

We are grateful for Freeholder Lepore for connecting me with the Warden of Passaic County Jails, Michael Tolerico, which started a valuable partnership between the Jail and the TGA.

Future Visioning

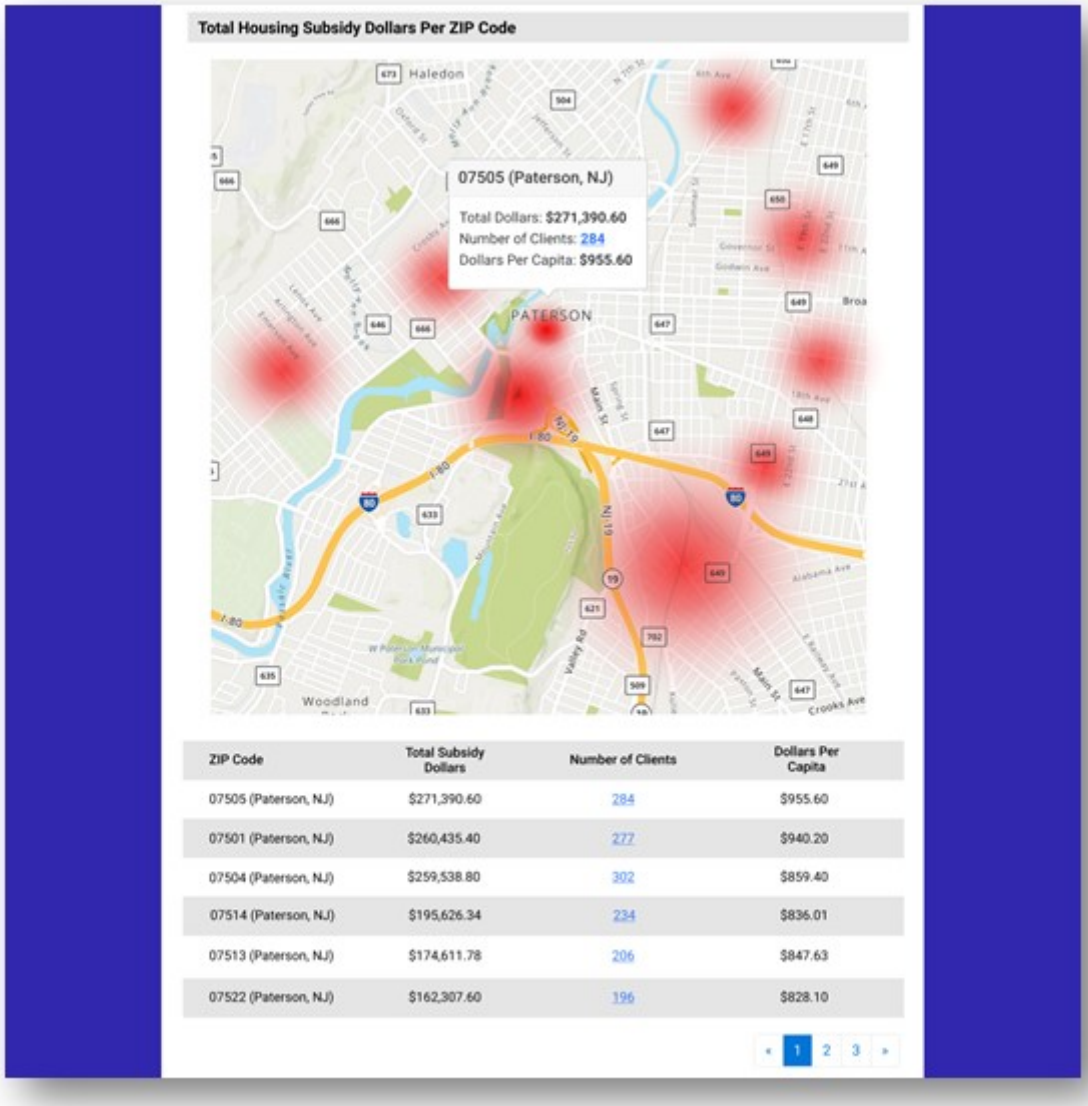
As part of the SPNS intervention, thinking about next level enhancements to benefit the intervention were fruitful, resulting in valuable Housing and Employment Dashboards using eCOMPAS to help further automate, and help identify gaps and take needed action to meet client needs .

Figure 33. Housing Dashboard

Figure 34. Employment & Training Cascade


```
<img src="employment cascade" alt="employment training cascade bar graph screen”>
```

Figure 35. Geospatial / Heat Mapping with Visual Analytics



ZIP Code	Total Subsidy Dollars	Number of Clients	Dollars Per Capita
07505 (Paterson, NJ)	$271,390.60	284	$955.60
07501 (Paterson, NJ)	$260,435.40	277	$940.20
07504 (Paterson, NJ)	$259,538.80	302	$859.40
07514 (Paterson, NJ)	$195,626.34	234	$836.01
07513 (Paterson, NJ)	$174,611.78	206	$847.63
07522 (Paterson, NJ)	$162,307.60	196	$828.10

« 1 2 3 »

```
<img src="hotspot map" alt="geospatial heat map with table zip codes dollars clients per capita”>
```

Disseminations Online

The full Bergen Passaic SPNS dissemination presentation, including illustrative client and case manager lived experiences, is available online at https://rw2020.e-compas.com/ The Bergen-Passaic TGA was also accepted to present a dissemination at IAPAC 2020.

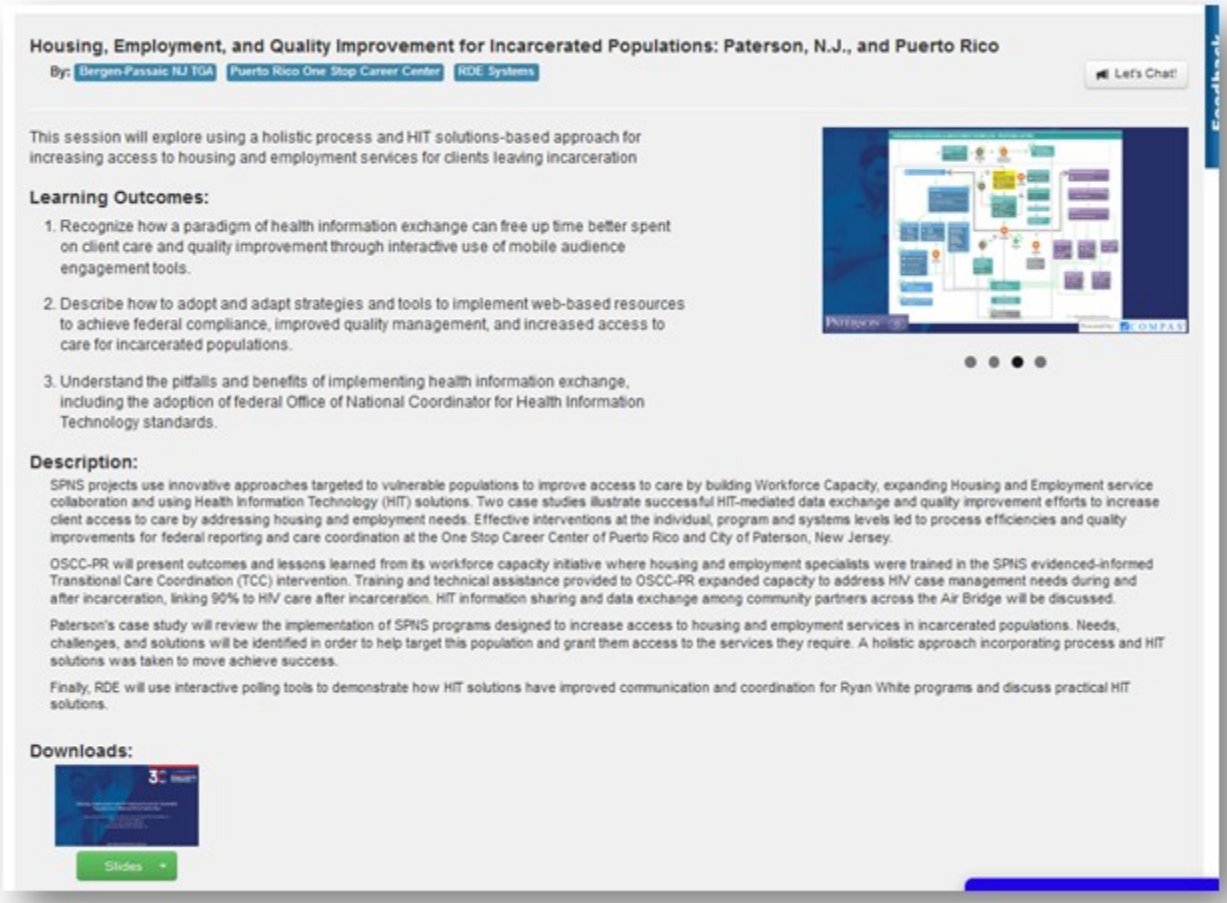


Figure 36. NRWC Full Presentation and Slides

```
<img src="disseminations online" alt="intervention summary with workflow and presentation cover page”>
```

Bergen-Passaic Dissemination and Landing Page

A website is being finalized to post useful information for those looking to replicate and adapt the intervention, and will be made available to all. Stay tuned! Until then, the NRWC 2020 dissemination page at https://rw2020.e-compas.com/ for slides and the webinar.