

PUERTO RICO

Integrated HIV Surveillance, Prevention and Care Plan

2017-2021



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PUERTO RICO





The Puerto Rico HIV Integrated Surveillance, Prevention, and Care Plan, 2017-2021 was coordinated by the Puerto Rico Department of Health. It was completed thanks to the collaboration of a multi-sectoral group composed of representatives of the community, non-profit and community-based organizations, prevention and treatment service providers, government agencies and the Academia.

Ana del Carmen Rius Armendariz, MD
Secretary of the Puerto Rico Department of Health

Ricardo L. Torres Muñoz, JD, MHSA, *Secretariat of Family Health and Integrated Services*
Angel Ortiz Ricard, JD, *CDC Senior Public Health Advisor*
Norma I. Delgado Mercado, PhD, *Director Ryan White Program, Part B / AIDS Drugs Assistance Program*
Sandra Miranda De León, MPH, *Acting Director, HIV/STD Prevention Programs /*
Director, HIV/AIDS Surveillance System,

Integrated Plan Steering Committee

Members of the HIV Community
Puerto Rico Department of Health
Secretariat of Family Health and Integrated Services
Ryan White Program, Part B / AIDS Drugs Assistance Program
HIV/STD Prevention Division
HIV/AIDS/STI Surveillance Office
OCASET

San Juan EMA
Municipality of San Juan
AIDS Task Force, San Juan EMA

Planning Advisory Bodies
San Juan EMA Planning Council
HIV Prevention Planning Group
Ryan White Part B Planning Body

Academia
AIDS Education Training Center
Graduate School of Public Health, University of Puerto Rico

Participants of the planning process

Members of the HIV Community

In alphabetical order

Administration of Mental Health and Anti-Addiction Services
AIDS Education Training Center
APSAPS
ASPIRA de Puerto Rico, Inc.
Bill's Kitchen
Casa Joven del Caribe, Inc.
Centro Ararat
Centro de Ayuda a Víctimas de Violación (CAVV)
Centro de Estudios Materno-Infantiles, Universidad de Puerto Rico, Recinto de Ciencias Médicas
Centro de Salud Integral de la Montaña
Migrants Health Center, Mayaguez
COAI, Inc.
Concilio de Salud Integral de Loíza, Inc.
Consortio Región Sur
CoPuReDa
Corporación de Servicios de Salud y Medicina Avanzada (COSSMA)
Correctional Health Services

Escuela Graduada de Salud Pública, Universidad de Puerto Rico
Estancia Corazón
Fondita de Jesús, Inc.
Fundación UPENS
Guara Bí, Inc.
HIV Prevention Planning Group
Hogar Crea, Inc.
Hogar de Ayuda el Refugio
Hogar Fortaleza del Caído
Hospital Ryder - Proyecto CIS

Iniciativa Comunitaria de Investigación, Inc. (ICI)
Instituto Pre-Vocacional e Industrial Arecibo
Instituto Pre-Vocacional e Industrial Bayamón
Instituto Pre-Vocacional e Industrial Mayaguez
La Perla de Gran Precio, Inc.
Lucha Contra el SIDA
Med Centro Ponce
Municipio Autónomo de San Juan, Centro Dr. Manuel Díaz García
Municipio Autónomo de San Juan, Vivienda Municipal
Municipio de Bayamón, Centro de Epidemiología de Bayamón

NeoMed Center, Programa SIVIF / Ryan White Parte C
Office of Veterans Affairs
Ponce Health Sciences University

PR CoNCRA, Inc. (Puerto Rico Community Network for Clinical Research)

Profamilia
Proyecto ACTU
Proyecto GAMMA; UPR-RCM
Proyecto Oasis de Amor, Inc.
Puerto Rico Department of Correction and Rehabilitation
Puerto Rico Department of Health
Puerto Rico Health Insurance Administration
Ryan White Part B Planning Body
Ryan White, Parte C, Centro de Salud de Lares
San Juan EMA Planning Council

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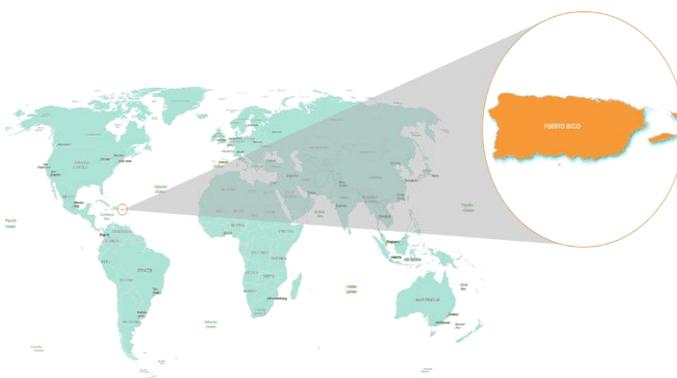
LIST OF ABBREVIATIONS

AETC - AIDS Education and Training Centers
AIDS- Acquire Immune Deficiency Syndrome, Stage 3 of the HIV infection
CAVV, Assistance Center for Victims of Rape, mentioned by its Spanish Acronym, *Centro de Ayuda a Víctimas de Violación*
CBO – Community Based Organization
CDC - Centers for Disease Control and Prevention
CHCs - Community Health Centers, (Section 330 CHCs)
COC – Continuum of Care, Sistema de Cuidado Continuo para personas sin hogar
Concilio – Multi-sectoral Council in Support of the Homeless Population
CPTETs - Centers for Prevention and Treatment of Transmissible Diseases, mentioned by its Spanish Acronym, *Centros para la Prevención y Tratamiento de Enfermedades Transmisibles*
HC – Heterosexual Contact
HIV - Human Immunodeficiency Virus
HOPWA - Housing Opportunities for Persons with AIDS Program
HPPG – HIV Prevention Planning Group
HRSA - Health Resources and Services Administration
HUD = Housing and Urban Department
MHAASA - Administration of Mental Health and Anti-Addiction Services, mentioned by its Spanish Acronym, ASSMCA, *Administración de Servicios de Salud y Contra la Adicción*
MMP- Medical Monitoring Project
MSA San Juan – Caguas - Guaynabo – Metropolitan Statistical Area of San Juan
MSM - Men who have Sex with Men
nPEP – Non-occupational post-exposure prophylaxis
OCASET - Central Office for AIDS Affairs and Transmissible Diseases , mentioned by its Spanish Acronym, *Oficina Central para Asuntos del SIDA y Enfermedades Transmisibles*
OCMA - Office of the Commissioner of Municipal Affairs
OITD - Office of Information and Technology Developments
PEP – Post-exposure prophylaxis
PID – Persons who inject drugs, (injection drug users IDUs)
PLWA – People living with AIDS
PLWH – People living with HIV infection
PRDCR – Puerto Rico Department of Correction and Rehabilitation
PRDF – Puerto Rico Department of Family
PRDLHR – Puerto Rico Department of Labor and Human Resources
PRDOH –Puerto Rico Department of Health
PrEP – Pre-exposure prophylaxis
PRHIA - Puerto Rico Health Insurance Administration
PRPD- Puerto Rico Police Department
PRPHA- Puerto Rico Public Housing Administration
RWBPB – Ryan White Part B Planning Body
San Juan EMA, SJEMA– San Juan Eligible Metropolitan Area
SJ MSA – San Juan – Caguas – Guaynabo Metropolitan Statistical Area
STI – Sexually Transmitted Infections
TB – Pulmonary Tuberculosis

INTRODUCTION

Puerto Rico (PR) is one of the jurisdictions within the United States (US) with a higher incidence and prevalence of the Human Immunodeficiency Virus (HIV). As of December 31, 2014, more than 47,000 people have been diagnosed with the HIV infection in Puerto Rico, and ranked 10th on the list of states/territories with the highest number of reported AIDS cases.¹

PR has been characterized by having a different HIV epidemic from the one in the US. The way the virus is transmitted has changed since the start of the epidemic. Injection drug use (IDU) was the principal mode of transmission during 1984–2002, followed by unprotected heterosexual contact during 2003–2012. In 2013 men having sex with men (MSM) without a condom became the principal mode of transmission in PR. In terms of treatment and care, advances in pharmacology have greatly benefitted people living with HIV in the island. Not only has HIV mortality been reduced but the quality of life of patients under treatment also improved. However, there are still gaps and disparities in HIV related services, as well as limitations in access to complementary supportive services.



This document presents the Integrated HIV Surveillance, Prevention and Care Plan for PR, 2017-2021 (referred to in the document as, Integrated Plan), in compliance with the requirements of the Health Resources and Services Administration (HRSA) and the Centers for Disease Control and Prevention (CDC).

The Integrated Plan development incorporated a participative planning and empowerment process through which representatives from the government, community based organizations (CBO's), private entities, both non-profit and for-profit, the community affected by HIV, and the Academia jointly identified needs and developed strategies to meet the objectives of the National HIV/AIDS Strategy, 2020² (NHAS) .

Following the federal government guidelines, the Integrated Plan has been organized in three major sections: (1) a statewide coordinated statement of needs; (2) the Integrated Plan developed with stakeholder groups; and, (3) monitoring and improvement.

¹ *Integrated Epidemiologic Profile for HIV Prevention in Puerto Rico: 2007-2013*, Surveillance Program HIV/AIDS | Division of Epidemiology, Department of Health.

² https://www.whitehouse.gov/sites/default/files/docs/estrategia_nacional_contra_el_vih sida_2020.pdf

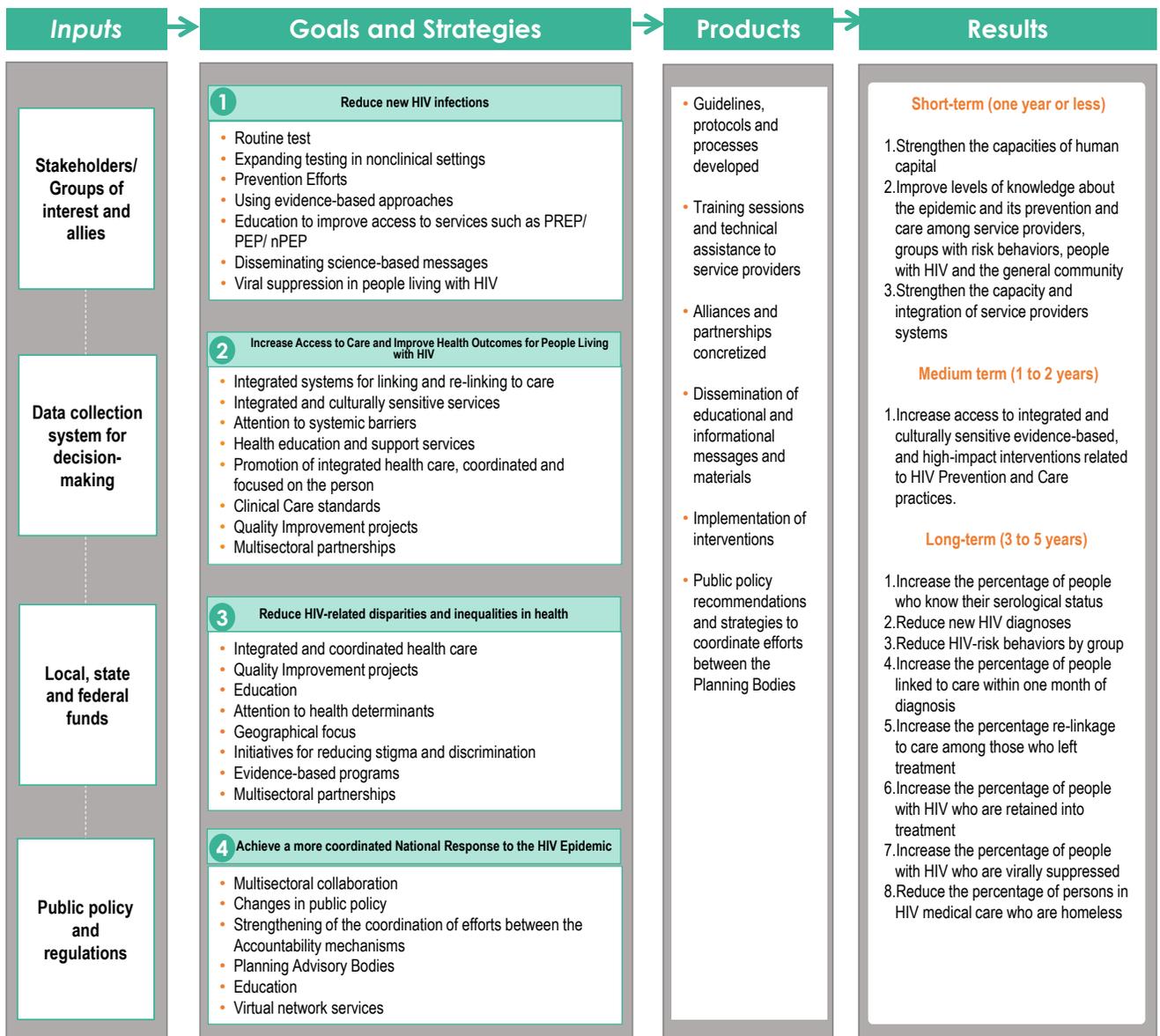
Figure 1: Logic Model of the plan

LOGIC MODEL FOR THE PUERTO RICO INTEGRATED HIV SURVEILLANCE, PREVENTION AND CARE PLAN 2017-2021

PROBLEM OR NEED: Puerto Rico is one of the jurisdictions within the U.S. with a higher incidence and prevalence of the Human Immunodeficiency Virus (HIV). As of December 31, 2014, more than 47,000 people had been diagnosed with HIV infection in Puerto Rico, and ranked 10th on the list of states/territories with the highest number of reported AIDS cases

STAKEHOLDERS/GROUPS OF INTEREST: Persons Living with HIV/AIDS, Populations with risk behaviors; funds recipients for HIV prevention and care services; the Academia, government institutions and private entities related to the provision of HIV and support services; other service providers; and the general population.

PHILOSOPHY AND VALUES: To achieve a multisectoral and coordinated response to HIV in the framework of the National Strategy, based on the use of the data for decision making, innovative evidence based strategies, and high impact interventions that will help to empower both, persons at risk and persons living with HIV, as well as the stakeholders who make up the network for the provision of HIV surveillance, prevention and care services in Puerto Rico.



SECTION I: STATEWIDE COORDINATED STATEMENT OF NEEDS

A- EPIDEMIOLOGY OVERVIEW

According to the guidelines for the development of the Integrated Plan provided by the CDC and HRSA, the following section affords a profile of the epidemic in PR; the HIV Care Continuum; the economic and human resources to address the epidemic; the needs, gaps, and barriers in providing HIV-related services, and data and information sources used to develop the needs assessment.

A- GEOGRAPHIC REGION OF THE JURISDICTION

PR is comprised by 78 municipalities and divided into 8 health regions (Figure 2). Most of the Puerto Rican population lives in the Metropolitan health region (Table 1).

PR's population was estimated at 3,474,182 in 2015. This represents a decrease of 6.65% when comparing to the 2010 Census. More than half of the municipalities experienced a decline in population during 2010-2015, including the municipalities in the Metropolitan region.

Figure 2: Health Regions in Puerto Rico, 2014



Aguadilla Region includes five municipalities: Aguada, Aguadilla, Isabela, Moca and San Sebastián.

Arecibo Region includes 12 municipalities: Arecibo, Barceloneta, Camuy, Ciales, Florida, Hatillo, Lares, Manatí, Morovis, Quebradillas, Utuado and Vega Baja.

Bayamón Region includes 11 municipalities: Barranquitas, Bayamón, Cataño, Comerío, Corozal, Dorado, Naranjito, Orocovis, Toa Alta, Toa Baja and Vega Alta.

Caguas Region includes 13 municipalities: Aguas Buenas, Aibonito, Caguas, Cayey, Cidra, Gurabo, Humacao, Juncos, Las Piedras, Maunabo, Naguabo, San Lorenzo and Yabucoa.

Fajardo Region includes 6 municipalities: Ceiba, Culebra, Fajardo, Luquillo, Río Grande and Vieques.

Mayagüez Region includes 10 municipalities: Añasco, Cabo Rojo, Hormigueros, Lajas, Las Marías, Maricao, Mayagüez, Rincón, Sabana Grande and San Germán.

Metropolitan Region includes 6 municipalities: Canóvanas, Carolina, Guaynabo, Loíza, San Juan and Trujillo Alto.

Ponce Region includes 15 municipalities: Adjuntas, Arroyo, Coamo, Guánica, Guayama, Guayanilla, Jayuya, Juana Díaz, Patillas, Peñuelas, Ponce, Salinas, Santa Isabel, Villalba and Yauco.

Table 1: Distribution of the general population by health region and sex, Puerto Rico, 2015

Health region	Sex				Total	
	Men		Women		Number	Percentage
	Number	Percentage	Number	Percentage		
Aguadilla	105,036	7.48	110,449	7.13	215,485	6.20
Arecibo	205,989	14.67	221,511	14.31	427,500	12.31
Bayamón	279,450	19.91	303,782	19.62	583,232	16.79
Caguas	268,988	19.16	295,049	19.05	564,037	16.24
Fajardo	60,597	4.32	66,208	4.28	126,805	3.65
Mayagüez	135,845	9.68	147,695	9.54	283,540	8.16
Metropolitan	347,894	24.78	403,781	26.08	751,675	21.64
Ponce	252,349	17.98	269,559	17.41	521,908	15.02
Total	1,403,799	100	1,548,475	100	3,474,182	100

Source: U.S. Census Bureau, Estimated Population of Puerto Rico to July 1, 2015.

AGE AND SEX

The median age of the residents of PR in 2015 was 40 years. Women accounted for 44.6% of the total population (Table 2). The median age of women was higher than the median age of men—41.8 and 38 years, respectively. Approximately, 30% of the population was between 15 and 34 years old in 2015. A higher percentage of women were 60 years old or more compared with

men—19.56% and 16.38%, respectively. On the other hand, a higher number of adolescents and young men between ages 15 and 24, compared with women of the same age, was observed.

Table 2: Distribution of the general population by age and sex, Puerto Rico 2015

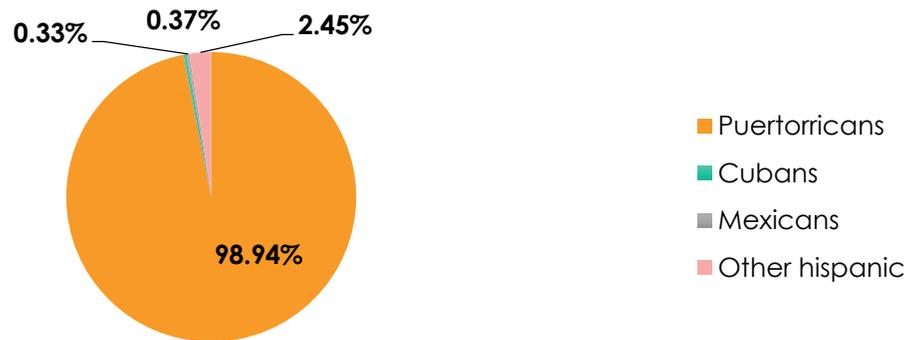
Age group (years)	Sex				Total	
	Men		Women		No.	%
	No.	%	No.	%		
0 – 14	304,479	18.38	288,555	15.87	593,034	17.07
15 – 24	250,150	15.10	241,210	13.27	491,360	14.14
25 – 34	211,022	12.74	222,606	12.24	433,628	12.48
35 – 44	209,483	12.65	231,549	12.74	441,032	12.69
45 – 54	213,796	12.91	243,505	13.39	457,301	13.16
55 – 64	195,887	11.83	234,978	12.92	430,865	12.40
65 or more	271,331	16.38	355,631	19.56	626,962	18.05
TOTAL	1,656,148	100	1,818,034	100	3,474,182	100

Source: U.S. Census Bureau, Estimated Population of Puerto Rico to July 1, 2015.

ETHNIC DEMOGRAPHIC COMPOSITION

According to data published by the US Census Bureau for 2015, a total of 3,437,388 people residing in PR are Hispanic (98.94%), while the remaining 1.06% identify themselves as non-Hispanic. Of the total of Hispanics, the 96.85% is Puerto Rican, 0.37% is Cuban, 0.33% is Mexican, the remaining 2.45% classify themselves as other Hispanic (Figure 3).

Figure 3: Distribution of the general population by ethnic group, Puerto Rico, 2015

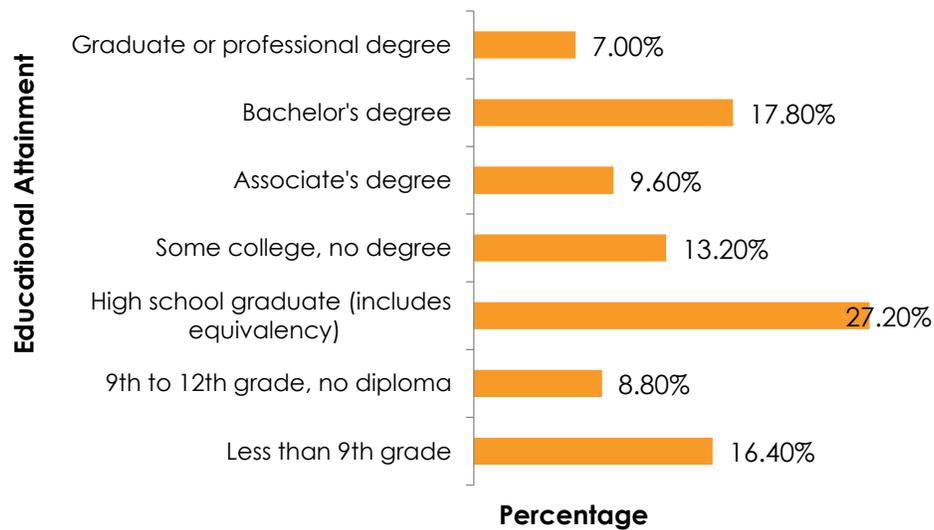


Source: U.S. Census Bureau, Puerto Rico Community Survey 2015.

EDUCATION

According to data from the PR Community Survey 2015, 27.18% of people aged 25 years and older (n=2,382,526) graduated from high school or earned a General Educational Development (GED) certificate, while 25.20% were school dropouts (Figure 4). The percentage of school dropouts in PR is twice the percentage when compared to the US. In addition, unlike the US, most of the students who dropped out of school in PR do so before reaching high school.

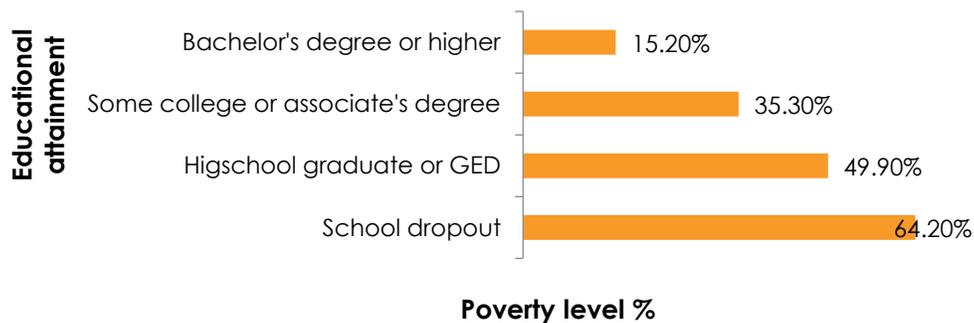
Figure 4: Educational attainment of the general population 25 years and over, Puerto Rico, 2015



Source: U.S. Census Bureau, Puerto Rico Community Survey 2015.

As the level of education increases, the poverty level decreases (Figure 5).

Figure 5: Poverty level of the population 25 years and over by educational attainment, Puerto Rico, 2015

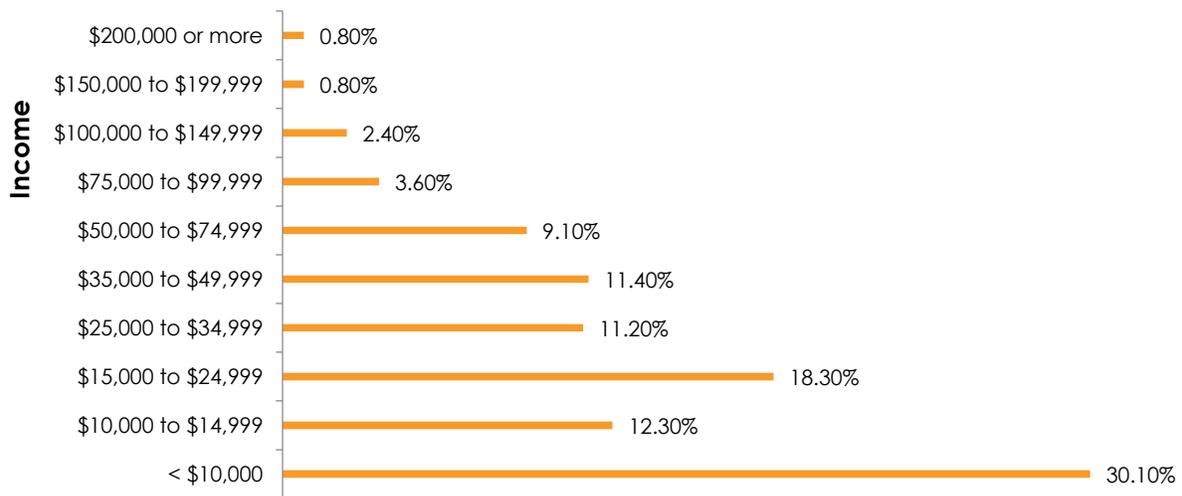


Source: U.S. Census Bureau, Puerto Rico Community Survey 2015.

INCOME

The median household income inflation-adjusted in 2015 in PR was \$18,626 and the median family income amounted to \$22,428. Compared to incomes at the national level, we can observe that both incomes are significantly lower in comparison to the US, median household income inflation-adjusted that was around \$55,775 and to the median family income that was \$68,260 (data not shown). The income of most Puerto Rican households is below \$10,000 per year (Figure 6).

Figure 6: Median household income of the general population, Puerto Rico, 2015



Source: U.S. Census Bureau, Puerto Rico Community Survey 2015.

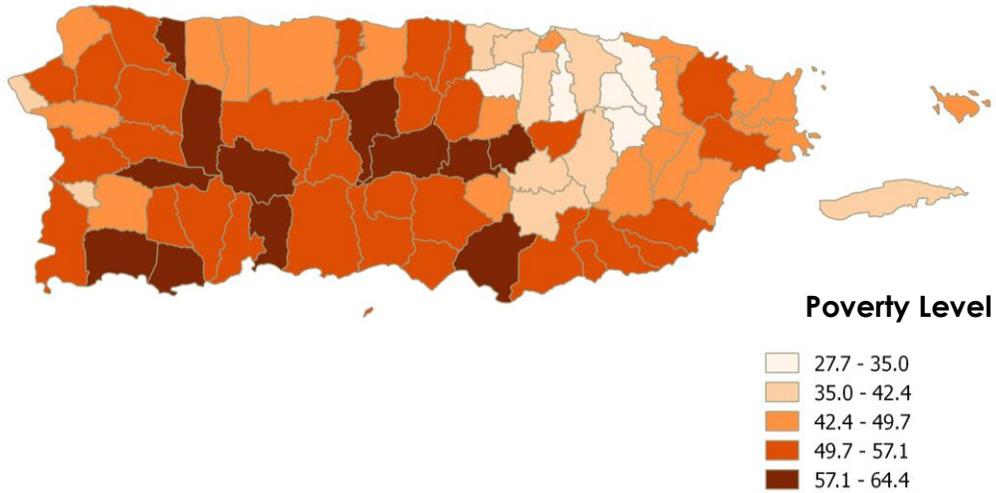
POVERTY LEVEL

During 2015, 46.1% of the individuals residing in PR were living under the federal poverty level during the past 12 months. This percentage is 2.9 times higher than the percentage of individuals below the national USA poverty level.

According to the five-year estimates of the PR Community Survey in 2014³, most of the municipalities in the central and west areas showed more than 50% of their inhabitants living below the federal poverty level (Figure 7), while most of the municipalities that make up the metropolitan area have the lowest poverty levels.

³ Data of 2014 is used for purposes of this map, as five year estimates 2015 was not available

Figure 7: Percentage of individuals below the poverty level by municipality of residence, 2010-2014



Source: U.S. Census Bureau, Puerto Rico Community Survey 2010-2014.

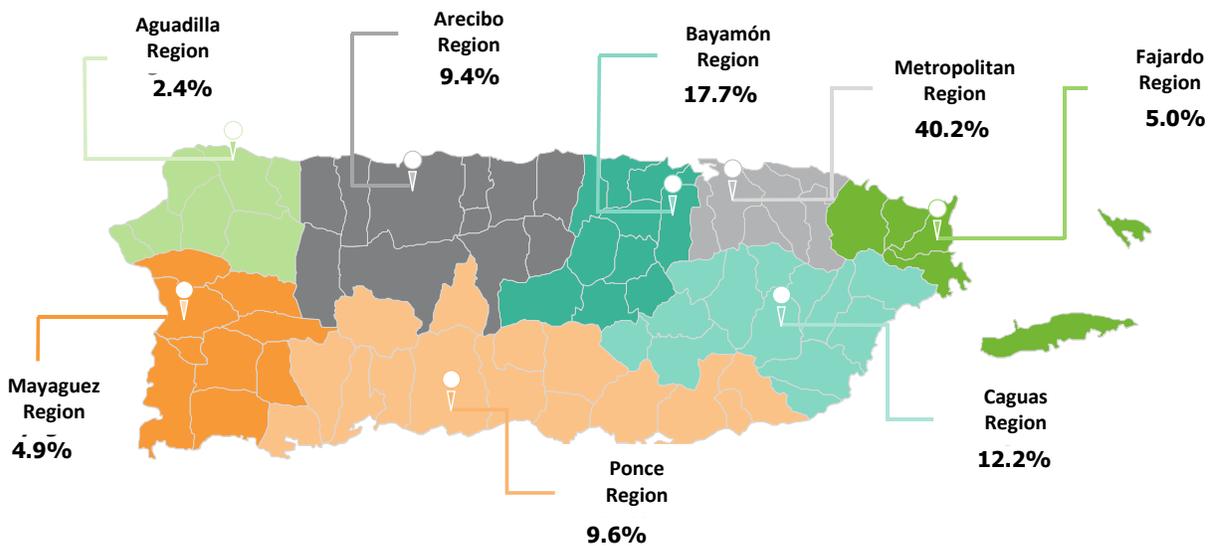
B- SOCIO-DEMOGRAPHIC CHARACTERISTICS

This section presents the characteristics and trends of newly HIV diagnosed individuals and people living with HIV in the jurisdiction during 2007 to 2013. However, in those instances where the information was available, data from 2014 was included.

DESCRIPTION OF NEW HIV DIAGNOSES IN 2014

In 2014, a total of 597 adults and adolescents ≥ 13 years old were diagnosed with the HIV infection in PR. The rate of HIV diagnosis in adults and adolescents was 19.76 per 100,000 population. The HIV diagnoses rate in men was 4 times greater than the HIV diagnoses rate in women (Table 3).

Figure 8: Percentage distribution of new HIV diagnoses by Health Region, Puerto Rico, 2014



In 2014, 191 people between the ages of 20 to 29 were diagnosed with HIV, this equals to 31.99% of the total number of cases diagnosed that same year. The diagnosis rate increases according to age group, it reaches the highest point in those between the ages of 25 to 29, it decreases among those between the ages of 30 to 34, and increases again among those aged 35 to 39 (Table 3).

Table 3: Demographic characteristics of adults and adolescents 13 years and older diagnosed with HIV infection, Puerto Rico, 2014

Demographic Characteristics	Number	%	HIV Diagnoses Rate (100,000 population)
Sex			
Men	469	78.56	27.60
Women	128	21.44	6.92
Age group			
13 – 19	22	3.69	6.32
20 – 24	102	17.08	39.34
25 – 29	89	14.91	39.52
30 – 34	58	9.72	26.07
35 – 39	70	11.72	31.10
40 – 44	71	11.89	31.33
45 – 49	60	10.05	26.09
50 – 54	41	6.87	17.53
55 – 59	41	6.87	18.27
60 – 64	25	4.19	11.94
≥ 65 years	18	3.01	2.92
Total	597	100.00	19.76

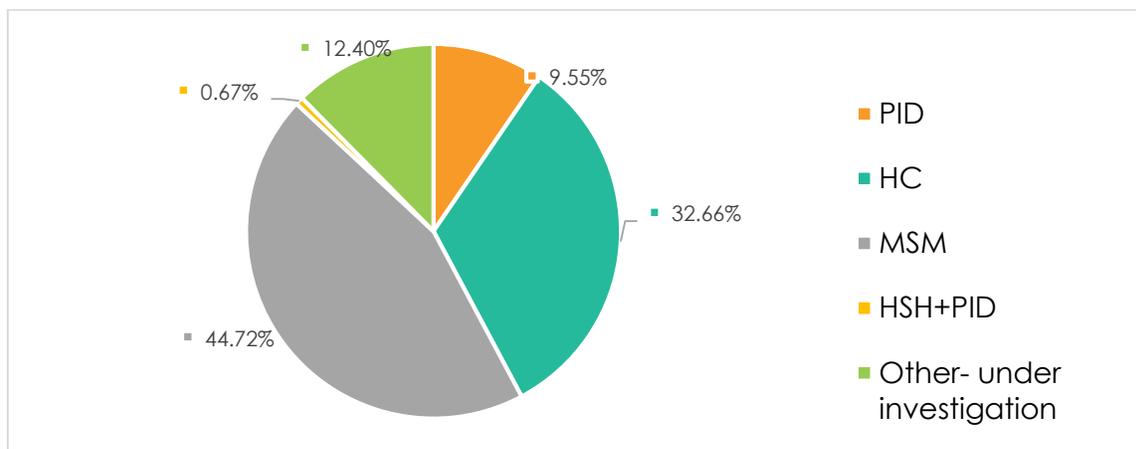
The distribution of new HIV diagnoses according to age and sex shows the group of men between the ages of 25 and 29 years old, and women between the ages of 35 and 39 years old, with the highest rate in 2014. When compared with women, the new HIV diagnosis rate is on average 12 times greater in men between ages 20 and 29 years old, and five times greater in men 60 years old and older (Table 4).

Table 4: Adults and adolescents 13 years and older diagnosed with HIV infection by age group and sex, Puerto Rico, 2014

Age Group (years old)	Men			Women		
	No.	%	HIV Diagnosis Rate (per100,000 population)	No.	%	HIV Diagnosis Rate (per100,000 population)
13 – 19	16	3.41	8.91	6	4.69	3.56
20 – 24	93	19.83	71.03	9	7.03	7.01
25 – 29	83	17.70	74.68	6	4.69	5.26
30 – 34	43	9.17	40.32	15	11.72	12.96
35 – 39	48	10.23	44.56	22	17.19	18.74
40 – 44	50	10.66	45.97	21	16.41	17.81
45 – 49	42	8.96	38.49	18	14.06	14.90
50 – 54	31	6.61	28.53	10	7.81	7.98
55 – 59	28	5.97	27.17	13	10.16	10.71
60 – 64	21	4.48	22.12	4	3.12	3.50
≥ 65	14	2.98	5.23	4	3.12	1.15
Total	469	100.00	27.60	128	100.00	6.92

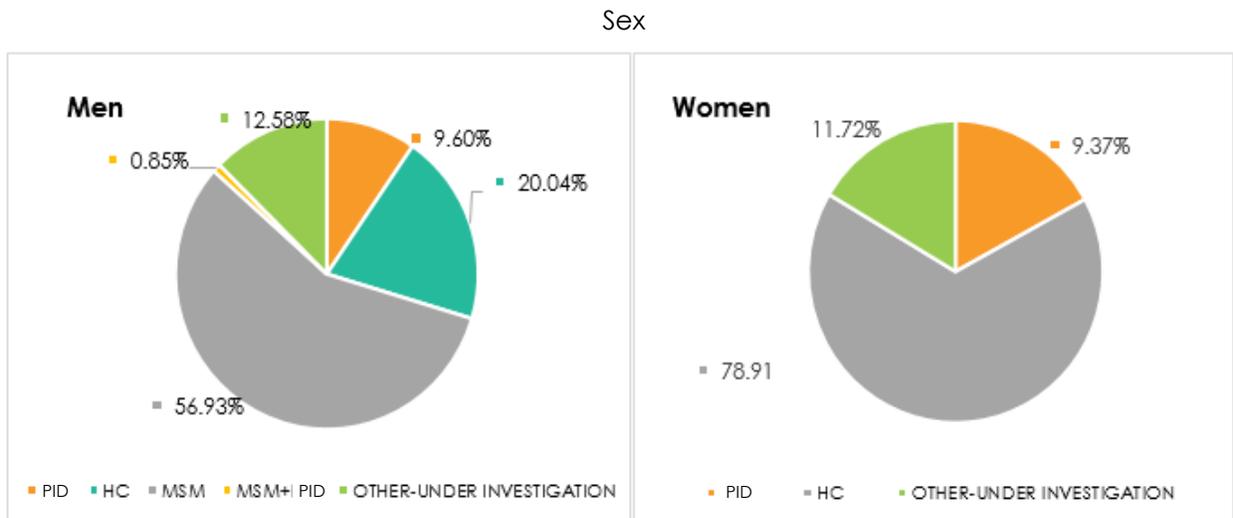
In 2014, unprotected sex among MSM was the transmission category reported most frequently in PR, followed by unprotected heterosexual contact, 44.72% and 32.66%, respectively (Figure 9).

Figure 9: Adults and adolescents 13 years and older diagnosed with HIV infection by transmission category, Puerto Rico, 2014



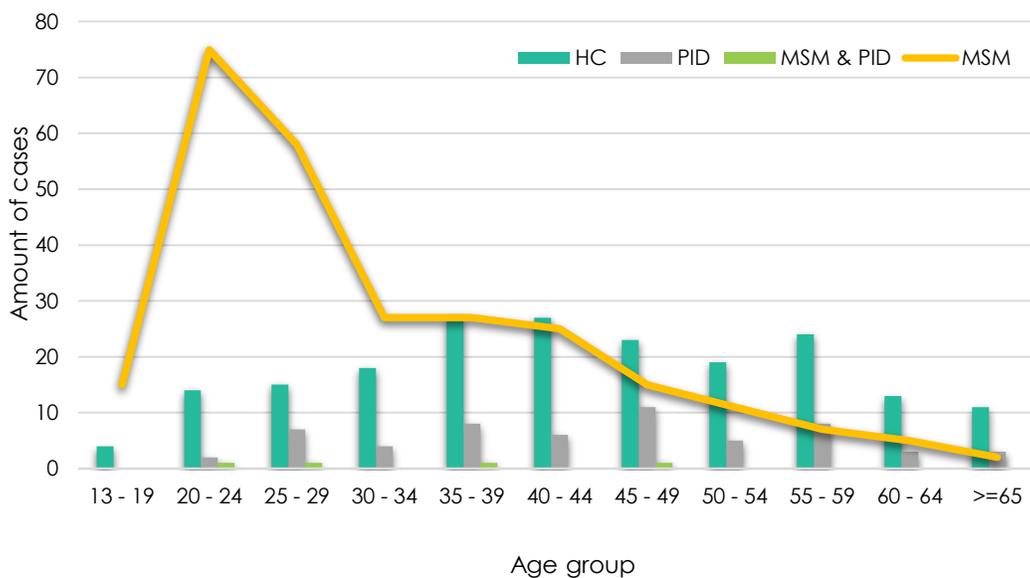
Among men, unprotected sex between men (56.93%) and unprotected heterosexual contact (20.04%) were the principal modes of transmission in 2014, while unprotected heterosexual contact (78.91%) was the mode of exposure reported most frequently by women (Figure 10).

Figure 10: Adults and adolescents 13 years and older diagnosed with HIV infection by sex and transmission category, Puerto Rico, 2014



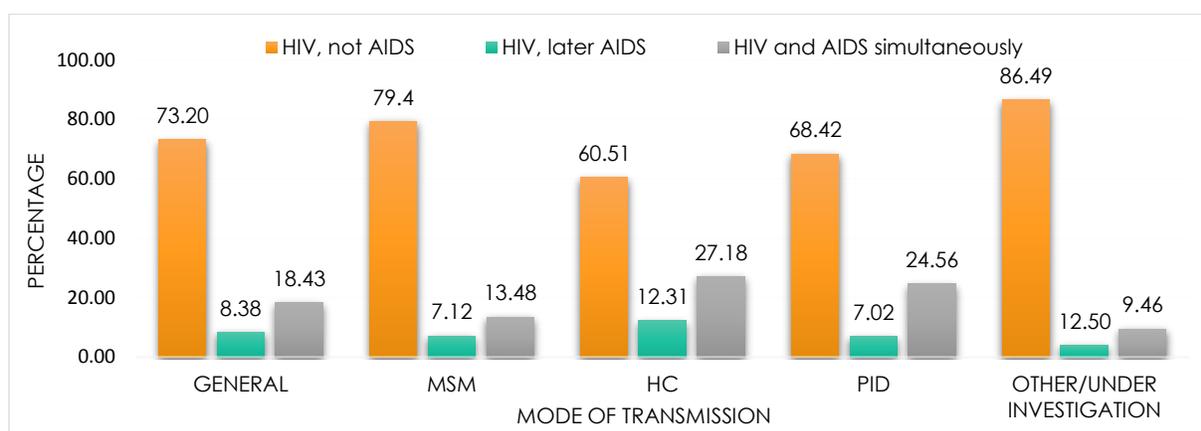
Unprotected sex between men is the principal mode of transmission category among adults and adolescents between the ages of 13 and 44, while the principal mode of transmission among people diagnosed with HIV after age 45 is unprotected heterosexual contact (Figure 11).

Figure 11: Adults and adolescents 13 years and older diagnosed with HIV infection by transmission category and age at HIV diagnosis, Puerto Rico, 2014



Approximately, one of every 5 adults and adolescents ≥ 13 years old that were diagnosed with HIV infection in 2014 were diagnosed in the infection's most advance stage, AIDS. The proportion was higher among heterosexual people (27.18%) than PID (24.56%) (Figure 12).

Figure 12: Adults and adolescents diagnosed with HIV infection by disease progression and transmission category, Puerto Rico, 2014



When analyzing the data for 2007-2013, it is observed that one out of individuals diagnosed with HIV infection in 2013, had their CD4 count under 200 cells per μL , hence increasing the probability of complications and mortality. PID have the highest proportion of not having a CD4 test done after diagnosis. (Table 5).

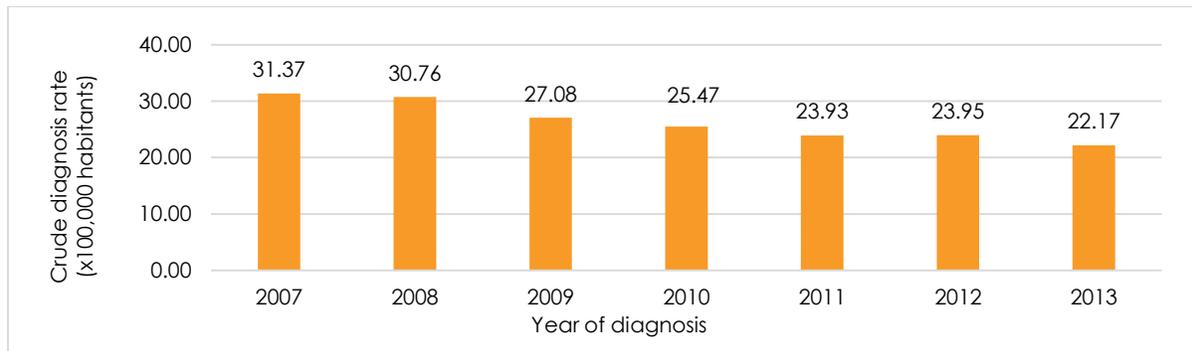
Table 5: Distribution of new HIV diagnoses by CD4 Lymphocyte cell count and transmission category in adults and adolescents ≥ 13 years old, Puerto Rico, 2013

Demographic Characteristics/ Transmission category	CD4 Count (first test after diagnosis)							
	<200 cells per μL		200 – 499 cells per μL		≥ 500 cells per μL		Unknown	
Sex								
Men	116	22.57	151	29.38	130	25.29	117	22.76
Women	33	20.12	39	23.78	49	29.88	43	26.22
Age Group								
13 – 19	2	10.00	7	35.00	10	50.00	1	5.00
20 – 24	11	12.79	29	33.72	34	39.53	12	13.95
25 – 29	13	16.67	22	28.21	26	33.33	17	21.79
30 – 34	12	13.64	33	37.50	26	29.55	17	19.32
35 – 39	18	26.87	14	20.90	17	25.37	18	26.87
40 – 44	23	33.33	17	24.64	15	21.74	14	20.29
45 – 49	23	26.74	25	29.07	15	17.44	23	26.74
50 – 54	14	16.67	23	27.38	21	25.00	26	30.95
55 – 59	12	28.57	10	23.81	6	14.29	14	33.33
60 – 64	11	33.33	6	18.18	5	15.15	11	33.33
≥ 65 years	10	40.00	4	16.00	4	16.00	7	28.00
Transmission category								
MSM	53	19.41	99	36.26	89	32.60	32	11.72
HC	65	28.76	53	23.45	61	26.99	47	20.80
PID	21	19.63	22	20.56	16	14.95	48	44.86
MSM & PID	3	18.75	4	25.00	7	43.75	2	12.50
Other/under investigation	7	12.50	12	21.43	6	10.71	31	55.36
Total	149	21.98	190	28.02	179	26.40	160	23.60

NEW HIV DIAGNOSES TRENDS 2007 – 2013

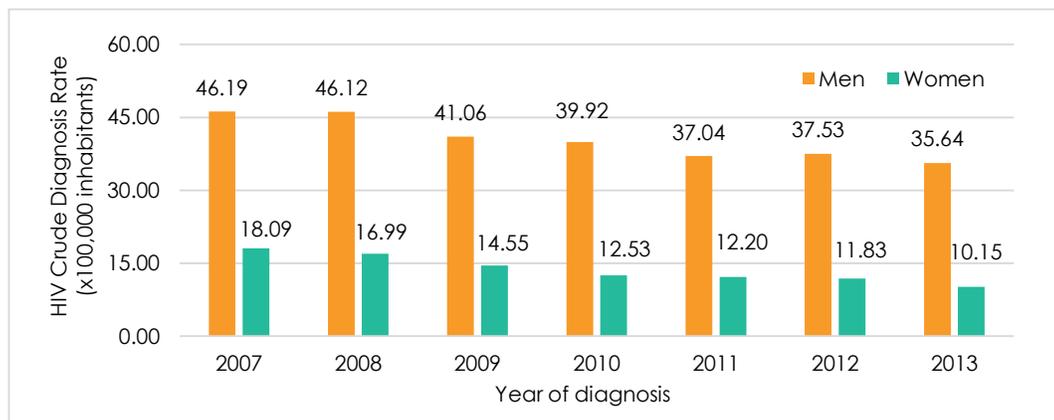
This section provides a comparison of the trends during 2007-2013, when a total of 5,710 new HIV cases were diagnosed among adults and adolescents. The HIV diagnoses rate presents a decrease during this period, however, in the last three years the rate has leveled off, possibly due to the reduction of the Puerto Rican population. The HIV diagnosis rate decreased 29%, from 31.37 in 2007 to 22.17 in 2013 (Figure 13).

Figure 13: Trends of adults and adolescents 13 years and older diagnosed with HIV infection, Puerto Rico, 2007-2013



The new diagnosis rate for HIV infection through unprotected sex presents a declining trend during the 2007 – 2013 period. However, the HIV diagnosis rate in men is approximately three times greater than the new HIV diagnoses rate in women (Figure 14).

Figure 14: Annual rates of HIV diagnoses by year of diagnosis and sex, Puerto Rico, 2007-2013



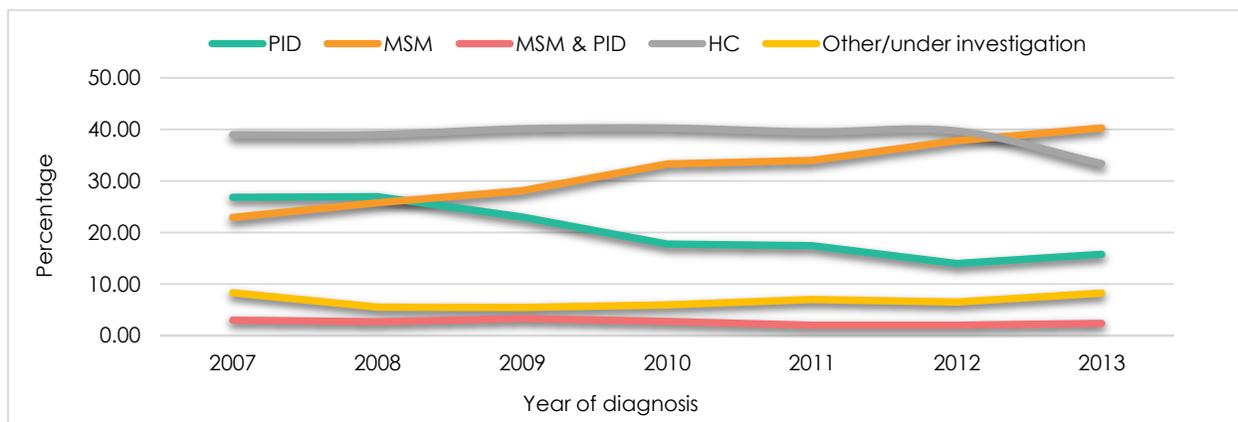
The new HIV diagnoses trend per age group shows that people ages 35 - 44 makes up the group with the highest diagnosis for the 2007 – 2013 period. Nonetheless, since 2011, the group of people between 25 and 34 years old have the highest diagnosis rate (Table 6).

Table 6: Annual rates of HIV diagnoses by age group, Puerto Rico, 2007- 2013

Age Group	Diagnosis Rate (x 100,000 habitants)						
	2007	2008	2009	2010	2011	2012	2013
13 – 19	6.36	8.14	4.49	7.11	5.49	5.91	5.50
20 – 24	31.83	28.59	28.67	27.60	28.70	38.44	32.49
25 – 29	45.40	43.25	37.38	38.50	40.44	41.41	34.42
30 – 34	46.73	45.73	50.68	44.32	36.39	38.01	37.81
35 – 39	56.34	54.30	47.34	38.13	32.71	29.69	29.03
40 – 44	58.04	60.37	52.65	47.06	38.61	38.69	29.75
45 – 49	53.00	51.57	40.34	43.15	41.90	39.58	36.27
50 – 54	40.93	36.32	32.29	27.52	36.54	30.09	35.67
55 – 59	22.81	21.11	23.32	18.78	22.24	16.83	18.61
60 – 64	13.85	18.69	9.34	16.97	10.20	10.84	15.77
≥ 65 years old	6.74	7.35	6.60	5.17	4.79	6.53	4.17
Total	31.37	30.76	27.08	25.47	23.93	23.95	22.17

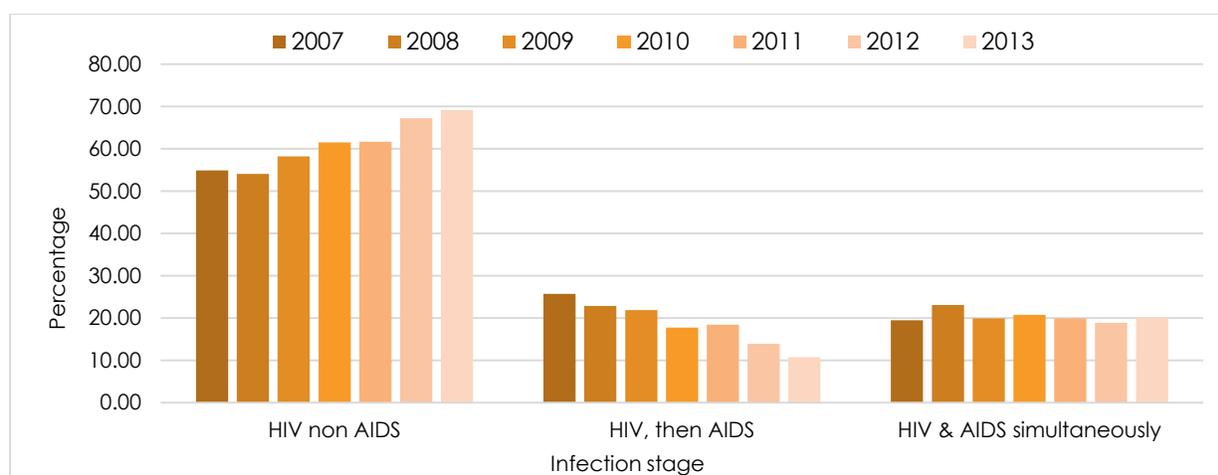
During the 2007 – 2012 period, unprotected heterosexual contact was the highest rate of new HIV cases diagnosed annually. The proportion of cases attributed to unprotected sex between men increased during the 2007 – 2013 period by approximately 75.69%, while the proportion of PID and heterosexual contact presented a decrease, -41.17% and -14.42%, respectively. In 2013, unprotected sex between men became the principal transmission category among Puerto Ricans (Figure 15).

Figure 15: Trends of HIV diagnoses by transmission category in adults and adolescents ≥13 years and older, Puerto Rico, 2007-2013



Early diagnosis of HIV infection is one of the priorities of the NHAS. Although the proportion of people that didn't progress to Stage 3 of the HIV infection increased during the 2007 – 2013 period, the proportion of people that were simultaneously diagnosed with HIV and AIDS remained constant during the period (Figure 16).

Figure 16: Percentage distribution of the HIV Disease Progression Category, Puerto Rico, 2007 – 2013



Note: * According to data reported until November 15, 2015.

PEDIATRIC HIV CASES IN PUERTO RICO**

During 2007 – 2013 there were 15 new diagnosed cases of HIV infection in children between the ages of 0-12, less than 1% of the total reported cases in PR (Table 7). Of those, eight (54.54%) were boys and seven (45.46%) were girls (data not shown). The declining trend observed in the HIV diagnosis and death due to mother to child transmission is partially attributed to the decrease in the number of diagnosed cases of HIV among women, the widespread use of antiretroviral therapies, and the availability of prophylaxis to treat opportunistic infections.

Table 7: Distribution of HIV infection cases diagnosed in children from ages 0 to 12 per year of diagnoses, Puerto Rico, 2007 – 2013

Diagnosis year	Number	HIV Diagnosis Rate (x 100,000 population)
2007	7	1.03
2008	3	0.46
2009	1	0.16
2010	3	0.48
2011	1	0.17
2012	0	0.00
2013	0	0.00
Total 2007 - 2013	15	0.35

When analyzing the data by mother's risk factor during 2007 – 2013 an HIV-positive mother risk represents the principal risk factor for the diagnosis of HIV infection in children (60.00%). In a third of pediatric cases a transmission category was not determined (Figure 17).

Figure 19: HIV prevalence and people below poverty level I⁴

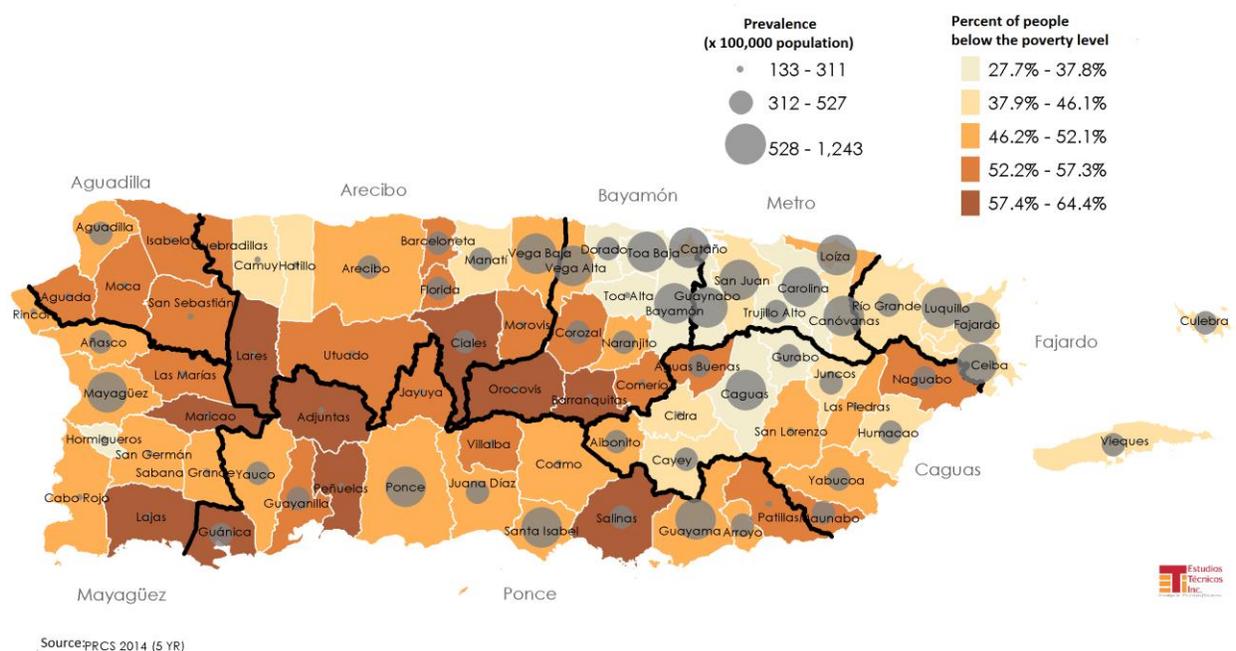


Table 8: Characteristics of people living with HIV, 2014

Demographic characteristics / transmission category	HIV Infection, Stages 0, 1, 2, unknown (HIV not AIDS)			HIV Infections, Stage 3 (AIDS)			HIV total		
	No.	%	Prevalence ^a	No.	%	Prevalence ^a	No.	%	Prevalence ^a
Sex									
Men	5,334	67.98	313.86	7,706	69.76	453.43	13,040	69.02	767.29
Women	2,512	32.02	135.86	3,340	30.24	180.65	5,852	30.98	316.51
Age group									
0 – 12	7	0.09	1.33	1	0.01	0.19	8	0.04	1.52
13 – 24	293	3.74	48.22	104	0.94	17.12	397	2.10	65.33
25 – 34	1,183	15.08	264.26	527	4.77	117.72	1,710	9.05	381.98
35 – 44	1,950	24.85	431.65	1,629	14.75	360.59	3,579	18.95	792.24
45 – 54	2,448	31.20	527.74	4,096	37.08	883.02	6,544	34.64	1,410.76
55 – 64	1,400	17.84	322.77	3,306	29.93	762.21	4,706	24.91	1,084.98
65 or more	565	7.20	91.57	1,383	12.52	224.15	1,948	10.31	315.72
Health Region									
Aguadilla	255	3.25	115.80	353	3.19	160.31	608	3.22	276.12
Arecibo	614	7.83	140.74	852	7.71	195.30	1,466	7.76	336.04
Bayamón	1,339	17.07	225.18	1,936	17.53	325.58	3,275	17.34	550.77

⁴ In order to define poverty, the Federal Census Bureau uses income thresholds that vary with family size and composition (age and head of household, for example). If the total family income is lower than the threshold for a particular family, every member is considered poor. The Thresholds are based on a study of the cost of living and the minimum income needed to meet basic needs such as housing and nutrition.

Demographic characteristics / transmission category	HIV Infection, Stages 0, 1, 2, unknown (HIV not AIDS)			HIV Infections, Stage 3 (AIDS)			HIV total		
	No.	%	Prevalence ^a	No.	%	Prevalence ^a	No.	%	Prevalence ^a
Caguas	998	12.72	174.13	1,330	12.04	232.06	2,328	12.32	406.19
Fajardo	278	3.54	214.52	382	3.46	294.77	660	3.49	509.29
Mayagüez	424	5.40	146.37	605	5.48	208.85	1,029	5.45	355.21
Metropolitan	3,057	38.96	396.63	3,792	34.33	492.00	6,849	36.25	888.63
Ponce	881	11.23	164.93	1,796	16.26	336.22	2,677	14.17	501.15

Transmission category

Men

PID	1,640	30.75	--	3,044	39.50	--	4,684	35.92	--
MSM	2,009	37.66	--	2,280	29.59	--	4,289	32.89	--
Heterosexual contact	1,033	19.37	--	1,608	20.87	--	2,641	20.25	--
MSM + PID	252	4.72	--	593	7.69	--	845	6.48	--
Other	4	0.07	--	19	0.25	--	23	0.18	--
RBI adult	331	6.21	--	62	0.80	--	393	3.01	--
Perinatal	51	0.96	--	86	1.12	--	137	1.05	--
Other / RBI pediatric	14	0.26	--	14	0.18	--	28	0.22	--
Subtotal	5,334	67.98	313.86	7,706	69.76	453.43	13,040	69.02	767.29

Women

Heterosexual contact	1,829	72.81	--	2,353	70.45	--	4,182	71.46	--
PID	455	18.11	--	853	25.54	--	1,308	22.35	--
Other	2	0.08	--	5	0.15	--	7	0.12	--
RBI adult	171	6.81	--	34	1.02	--	205	3.50	--
Perinatal	39	1.55	--	86	2.57	--	125	2.14	--
RBI pediatric	16	0.64	--	9	0.27	--	25	0.43	--
Subtotal	2,512	32.02	135.86	3,340	30.24	180.65	5,852	30.98	316.51
Total	7,846	100.00	221.11	11,046	100.00	311.30	18,892	100.00	532.41

Notes: Unadjusted data for the delay in reporting. The percentage column may not add to 100 due to rounding.

^a Prevalence of people diagnosed with HIV per 100,000 inhabitants.

^b Under current age calculated as of December 31, 2015.

C- BURDEN OF THE HIV INFECTION

The following section provides information on the situation of people living with HIV in PR, as well as other trends that provide a clear description idea of this population's needs and of those groups most affected by the epidemic.

PERSONS WHO INJECT DRUGS (PID)

Persons who inject drugs (PID) represented 20.24% of all HIV diagnosis during 2007 – 2013. Men represented 82.57% of the total cases attributed to injection drug use. The men to women ratio for this period was 4.5:1. Most new diagnosis among PID were on ages between 40 to 44 years old in residents of the Metropolitan Area (Table 9).

By December, 2013, a total of 6,219 PID lived with the HIV infection. Most are men (78.18%), between 50 and 54 years old (40.75%) and residents of the Metropolitan Area (32.48%) (Table 9).

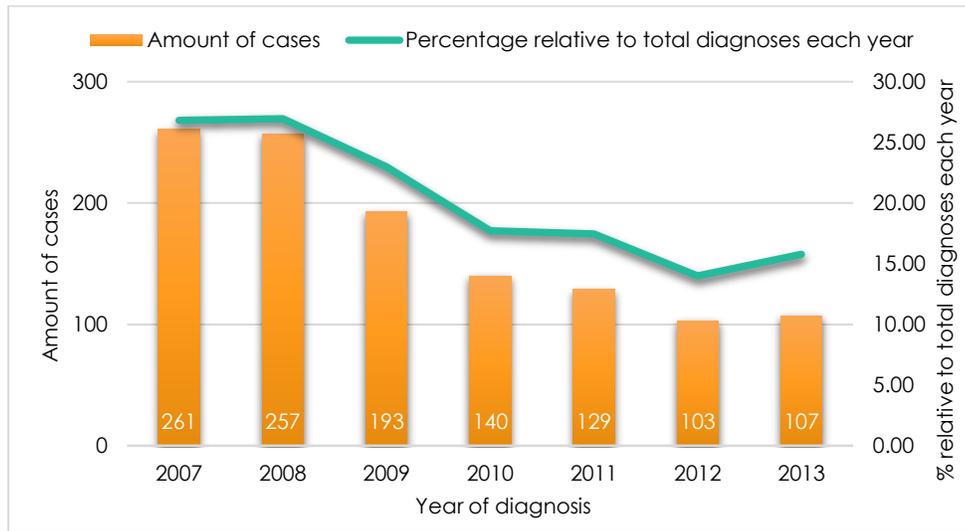
Table 9: New diagnoses and prevalence of persons who inject drugs diagnosed with HIV infection by selected demographic characteristics, Puerto Rico, 2007 - 2013

Demographic Characteristics	Newly diagnosed cases 2007 - 2013		Prevalence as of December 31, 2013	
	No.	%	No.	%
Sex				
Men	973	81.76	4,862	78.18
Women	217	18.24	1,357	21.82
Age Group **				
13 – 19	9	0.76	0	0.00
20 – 24	56	4.71	10	0.16
25 – 29	139	11.68	52	0.84
30 – 34	159	13.36	228	3.67
35 – 39	184	15.46	599	9.63
40 – 44	191	16.05	751	12.08
45 – 49	182	15.29	1,070	17.21
50 – 54	141	11.85	1,346	21.64
55 – 59	83	6.97	1,081	17.38
60 – 64	28	2.35	641	10.31
≥ 65 years old	18	1.51	441	7.09
Health Region				
Aguadilla	54	4.54	198	3.18
Arecibo	111	9.33	451	7.25
Bayamón	229	19.24	1,214	19.52
Caguas	123	10.34	759	12.20
Fajardo	26	2.18	199	3.20
Mayagüez	51	4.29	280	4.50
Metropolitan	459	38.57	2,058	33.09
Ponce	137	11.51	1,060	17.04
Total	1,190	100.00	6,219	100.00

**Age in new cases represents the age at the time of first HIV positive testing. Age in prevalent cases of HIV infection represents the age by December 31, 2013.

The new HIV diagnoses trend among PID presents a decreasing trend. During 2007 – 2013 the proportion of cases attributed to injection drug use decreased by 41.17% (Figure 20).

Figure 20: Number and percentage of PID diagnosed with HIV, 2007 - 2013



HETEROSEXUAL CONTACT

Unprotected heterosexual contact represented the transmission category reported most frequently among people diagnosed with HIV during the 2007 - 2013 (38.81%). It is the only transmission category where women exceeded men in the number of diagnoses. Most diagnoses occurred among individuals within the age group of 45-49 years old. Over a third of the total of new cases diagnosed during 2007 - 2013 were residing in the Metropolitan Area (Table 10).

As of December 2013, a total of 6,917 heterosexual persons were living with diagnosed HIV infection in PR. Most are women (61.36%), people between the ages of 50 and 54 (18.66%), and residents of the Metropolitan Area (36.20%) (Table 10).

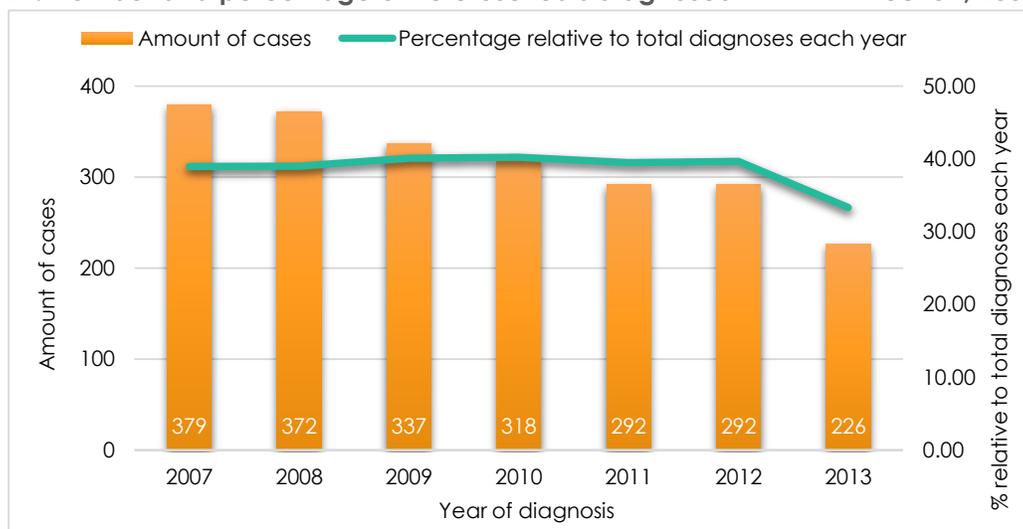
Table 10: New diagnoses and prevalence of heterosexuals diagnosed with HIV infection by demographic characteristics, Puerto Rico, 2007 - 2013

Demographic Characteristics	Newly diagnosed cases 2007 - 2013		Prevalence as of December 31, 2013	
	No.	%	No.	%
Sex				
Men	987	44.54	2,673	38.64
Women	1,229	55.46	4,244	61.36
Age Group **				
13 – 19	56	2.53	4	0.06
20 – 24	168	7.58	59	0.85
25 – 29	179	8.08	174	2.52
30 – 34	224	10.11	331	4.79
35 – 39	237	10.69	489	7.07
40 – 44	308	13.90	757	10.94
45 – 49	328	14.80	1037	14.99
50 – 54	263	11.87	1291	18.66
55 – 59	165	7.45	1041	15.05
60 – 64	124	5.60	708	10.24
≥ 65 years old	164	7.40	1026	14.83
Health Region				
Aguadilla	57	2.57	190	2.75
Arecibo	197	8.89	594	8.59
Bayamón	425	19.18	1,201	17.36
Caguas	260	11.73	916	13.24
Fajardo	79	3.56	274	3.96
Mayagüez	97	4.38	364	5.26
Metropolitan	900	40.61	2,504	36.20
Ponce	201	9.07	874	12.64
Total	2,216	100.00	6,917	100.00

**Age in new cases represents the age at the time of first HIV positive testing. Age in prevalent cases of HIV infection represents the age by December 31, 2013.

The trend seen in the number of HIV infection diagnoses attributed to unprotected heterosexual contact is declining; however, the proportion of diagnoses relative to the total yearly cases remained constant until 2012. In 2013, the proportion decreased by 15.98% (Figure 21).

Figure 21: Number and percentage of heterosexuals diagnosed with HIV infection, 2007 - 2013



MEN WHO HAVE SEX WITH MEN (MSM)

During 2007 – 2013, a total of 1,770 (31%) diagnosed cases of the HIV infection were attributed to unprotected sex between MSM. The distribution per age group in cases of HIV diagnoses during that period shows that the highest percentage was in those between 20 and 29 years old (35.20%). Forty percent of the total diagnoses during this period were residents of the Metropolitan Area (Table 11).

Table 11: New HIV diagnoses and prevalence of MSM by age group, Puerto Rico, 2007 - 2013

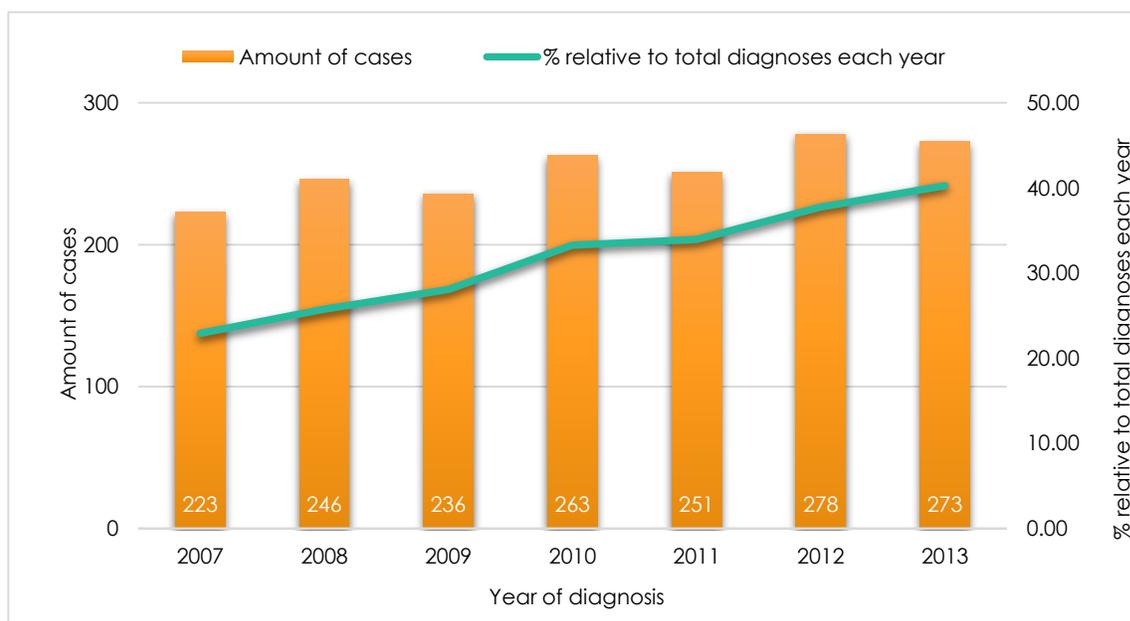
Demographic Characteristics	Newly diagnosed cases 2007 - 2013		Prevalence as of December 31, 2013	
	No.	%	No.	%
Age Group **				
13 – 19	65	3.67	4	0.10
20 – 24	308	17.40	105	2.50
25 – 29	315	17.80	303	7.22
30 – 34	269	15.20	386	9.20
35 – 39	199	11.24	378	9.01
40 – 44	224	12.66	453	10.80
45 – 49	175	9.89	694	16.54
50 – 54	106	5.99	769	18.33
55 – 59	49	2.77	510	12.15
60 – 64	35	1.98	287	6.84
≥ 65 years old	25	1.41	307	7.32
Health Region				
Aguadilla	60	3.39	152	3.62
Arecibo	117	6.61	299	7.13
Bayamón	262	14.8	595	14.18
Caguas	241	13.62	468	11.15

Demographic Characteristics	Newly diagnosed cases 2007 - 2013		Prevalence as of December 31, 2013	
	No.	%	No.	%
Fajardo	67	3.79	129	3.07
Mayagüez	102	5.76	261	6.22
Metropolitan	713	40.28	1,743	41.54
Ponce	208	11.75	549	13.08
Total	1,770	100.00	4,196	100.00

** Age in new cases represents the age at the time of first HIV positive testing. Age in prevalent cases of HIV infection represents the age by December 31, 2013.

Figure 22 shows the number in proportion to the total of HIV diagnosed cases attributed to unprotected sex between MSM. The trend seen in this group during 2007 – 2013 is increasing. In fact, this is the only risk group that presents an increase in the number of infections. In 2013, it became the primary transmission category in PR.

Figure 22: Number and percentage of MSM diagnosed with HIV infection, 2007 - 2013

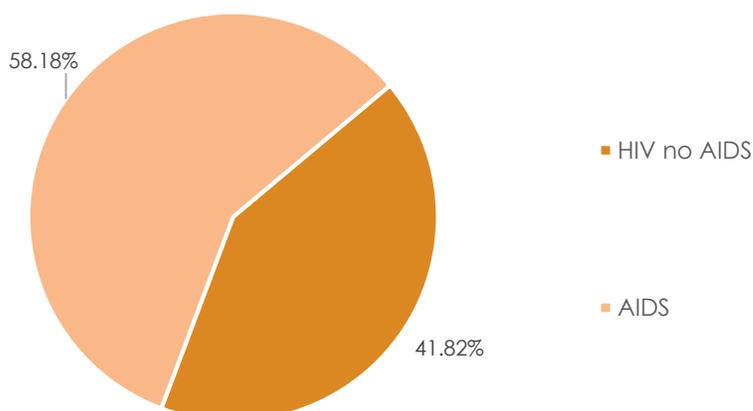


PEOPLE LIVING WITH DIAGNOSED HIV INFECTION WHO DID NOT RECEIVE PRIMARY MEDICAL CARE IN 2013

The framework developed by the University of California in San Francisco (UCSF) was used to determine the number of individuals aware of their infection receiving primary medical care. The absence of one or more of the following: viral load test, monitoring of CD4 cells, and/or antiretroviral therapy, was defined "the need for primary care coverage in 2013."

By December 2013, a total of 19,055 people were living with diagnosed HIV infection in PR. Of those, 58.18% (n = 11,087) had progressed to AIDS stage (Figure 23).

Figure 23: People living with diagnosed HIV infection by HIV Disease Stage, Puerto Rico: 2013



Out of the 19,055 individuals living with HIV by December 2013, 71.44% (n = 13,613) were engaged in primary medical care, while the remaining 28.56% (n = 5,442) had a need for primary medical care that was not covered. A higher percentage of PLWH had a need for primary medical care that was not covered, when compared to people living with AIDS (PLWA), 35.09% v. 25.32%, respectively, (Table 12).

Table 12: Estimate number of people living with diagnosed HIV infection who did not receive primary medical care, Puerto Rico, 2013

Population Size	Number	Data Source
A. Number of people living with AIDS by December 2013	11,087	Surveillance of HIV/AIDS
B. Number of people living with HIV not AIDS by December 2013	7,968	Surveillance of HIV/AIDS
People who received primary medical care	Number	Data Source
C. Number of people living with AIDS that received primary medical care in 2013	7,905	Health Insurance of Puerto Rico, Ryan White Medical Care Providers Part A, B, C, D, and eHARS.
D. Number of people living with HIV that received primary medical care in 2013	5,708	Health Insurance of Puerto Rico, Ryan White Medical Care Providers Part A, B, C, D, and eHARS.
People who did not receive primary medical care	Number	Results
E. Number of PLWA that did not receive primary medical care in 2013	3,182 (28.70%)	= 11,087 – 7,905
F. Number of PLWH that did not receive primary medical care in 2013	2,260 (28.36%)	= 7,968 – 5,708
G. Total number of people aware of their infection that did not receive primary medical care in 2013	5,442 (28.56%)	= 3,182 + 2,260

Table 13 presents the demographic characteristics and exposure category of adolescents and adults living with HIV and AIDS, classified in the category of needing primary medical care that is not covered in PR during 2013. Caution must be exercised when interpreting the data, since no information has been included concerning to people that accessed primary medical care services through private physicians, Medicare, and/or clinical trials. Therefore, the number of people that needed primary medical care that was not covered during 2013 is overstated.

The distribution of persons living with HIV and AIDS classified in the category of needing primary medical care that is not covered varies according to the infection's clinical stage. For instance, the proportion of men living with AIDS outside primary medical care during 2013 is higher when compared to men living with HIV, 73.32% and 71.73%, respectively. Furthermore, a higher proportion of people living with AIDS outside of primary medical care were 55 years old or older, compared to people living with HIV, 42.74% and 19.16%.

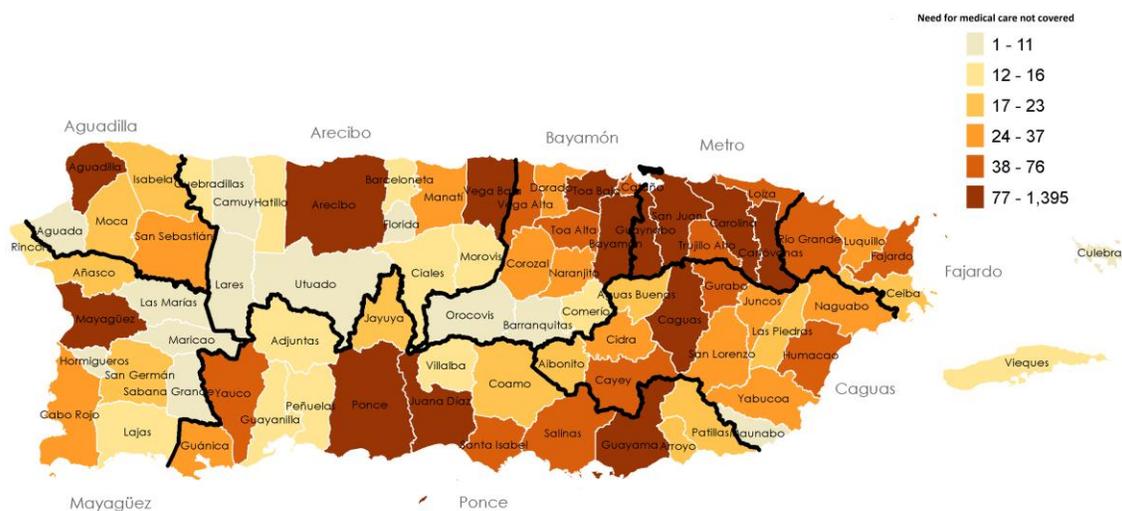
PID population represented the majority of patients living with HIV whose primary medical care need was not covered during 2013, 47.81%. Most HIV and AIDS cases, whose needs for primary medical care were not covered in 2013 were residents of the Metropolitan Area (38.02%).

Table 13: Characteristics of people living with diagnosed HIV infection who did not receive primary medical care, Puerto Rico, 2013

Demographic Characteristics/Exposure	PLWH n = 2,260		PLWA n = 3,182		Total n = 5,442	
	No.	%	No.	%	No.	%
Sex						
Men	1,621	71.73	2,333	73.32	3,954	72.66
Women	639	28.27	849	26.68	1,488	27.34
Total	2,260	100.00	3,182	100.00	5,442	100.00
Age						
0 - 12	1	0.04	0	0.00	1	0.02
13 - 24	55	2.43	31	0.97	86	1.58
25 - 34	373	16.50	98	3.08	471	8.65
35 - 44	714	31.59	389	12.23	1,103	20.27
45 - 54	684	30.27	1,304	40.98	1,988	36.53
55 - 64	315	13.94	933	29.32	1,248	22.93
65 or more	118	5.22	427	13.42	545	10.01
Total	2,260	100.00	3,182	100.00	5,442	100.00
Transmission category (Adults and adolescents)						
MSM	283	12.61	423	13.57	706	13.17
PID	914	40.73	1,649	52.90	2,563	47.81
MSM & PID	63	2.81	192	6.16	255	4.76
Heterosexual Contact	720	32.09	809	25.95	1,529	28.52
Other/ hemophilia/ transfusion	1	0.04	14	0.45	15	0.28
RNR/ under investigation	263	11.72	30	0.96	293	5.47
Total	2,244	100.00	3,117	100.00	5,361	100.00

Demographic Characteristics/Exposure	PLWH		PLWA		Total	
	n = 2,260		n = 3,182		n = 5,442	
	No.	%	No.	%	No.	%
Transmission category (Pediatric Cases)						
Perinatal transmission	12	75.00	63	96.92	75	92.59
RNR/under investigation	4	25.00	2	3.08	6	7.41
Total	16	100.00	65	100.00	81	100.00
Health Region						
Aguadilla	92	4.07	101	3.17	193	3.55
Arecibo	131	5.80	190	5.97	321	5.90
Bayamón	408	18.05	507	15.93	915	16.81
Caguas	245	10.84	334	10.50	579	10.64
Fajardo	73	3.23	114	3.58	187	3.44
Mayagüez	127	5.62	134	4.21	261	4.80
Metropolitan	868	38.41	1,201	37.74	2,069	38.02
Ponce	316	13.98	601	18.89	917	16.85
Total	2,260	100.00	3,182	100.00	5,442	100.00

Figure 24: Geographic distribution of people living with diagnosed HIV infection who did not receive primary medical care, Puerto Rico, 2013



Source: Integrated Epidemiologic Profile for HIV Prevention in Puerto Rico: 2007 – 2013, HIV/AIDS Surveillance Program, Epidemiology Division, Department of Health.

CO-MORBIDITY WITH TUBERCULOSIS

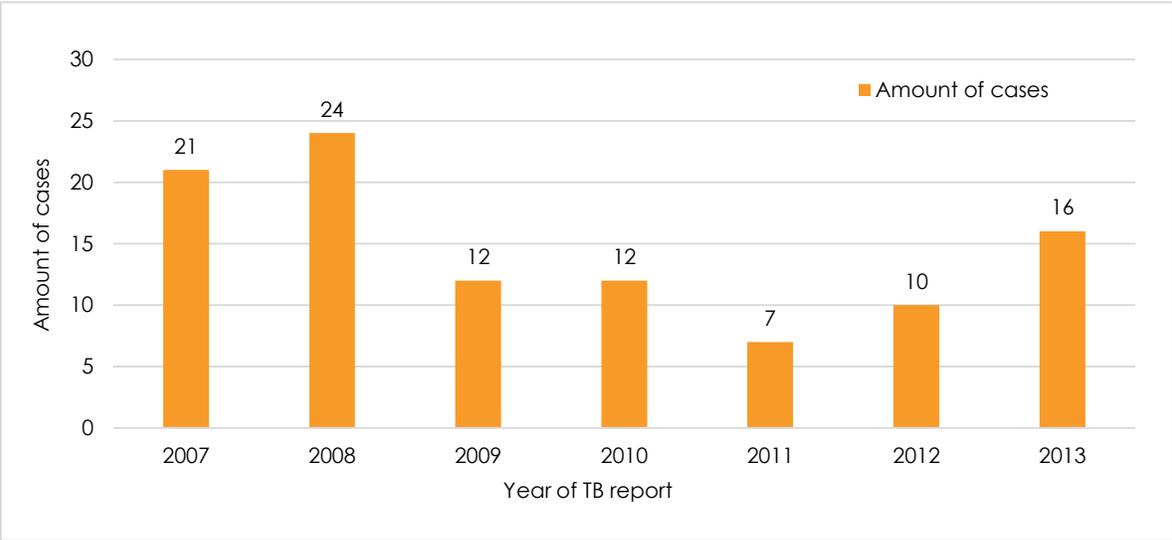
During 1981-2013, the Surveillance System reported 1,302 cases of HIV and tuberculosis (TB) co-infection. The distribution of cumulative cases indicates that the higher percentage of those reported with TB were men, people diagnosed with HIV between the ages of 30 - 34, PID, who were residents of the Metropolitan Area at the time of HIV diagnosis (Table 14).

Table 14: Distribution of demographic characteristics/exposure of people coinfected with HIV/TB per year of tuberculosis report, 1981-2013

Characteristics Demographics/ Transmission	2007 - 2013		Accumulated Total 1981 - 2013	
	Number	Percentage	Number	Percentage
Sex				
Men	79	77.45	1,042	80.03
Women	23	22.55	260	19.97
Age Group when Diagnosed with HIV				
0 – 12	0	0.00	3	0.23
13 – 19	2	1.96	15	1.15
20 – 24	8	7.84	90	6.91
25 – 29	17	16.67	241	18.51
30 – 34	15	14.71	291	22.35
35 – 39	14	13.73	227	17.43
40 – 44	9	8.82	186	14.29
45 – 49	22	21.57	119	9.14
50 – 54	6	5.88	46	3.53
55 – 59	5	4.9	45	3.46
60 – 64	1	0.98	20	1.54
≥ 65 years old	3	2.94	19	1.46
Health Region				
Aguadilla	1	0.98	26	2.00
Arecibo	6	5.88	67	5.15
Bayamón	22	21.57	257	19.74
Caguas	11	10.78	136	10.45
Fajardo	2	1.96	25	1.92
Mayagüez	1	0.98	48	3.69
Metropolitan	50	49.02	588	45.16
Ponce	9	8.82	155	11.90
Transmission Category				
MSM	7	6.86	131	10.06
HC	28	27.45	237	18.20
PID	60	58.82	802	61.60
MSM and PID	5	4.90	114	8.76
Other/under investigation	2	1.96	15	1.15
Perinatal transmission/ Other	0	0.00	3	0.23
Total	102	100.00	1,302	100.00

The highest proportion of co-infection cases were those diagnosed with HIV between the ages of 45 and 49 (Table 14). During 2007 – 2013 a total of 102 cases of HIV/TB co-infection were reported. The trend during this period varies. The highest number of cases was reported in 2008. The number of co-infection cases presents an increase during 2011 – 2013, (Figure 25).

Figure 25: Distribution of HIV/TB coinfection cases of people diagnosed with HIV per year of tuberculosis report, 2007 - 2013



MORTALITY TRENDS OF PERSONS WITH DIAGNOSED HIV INFECTION

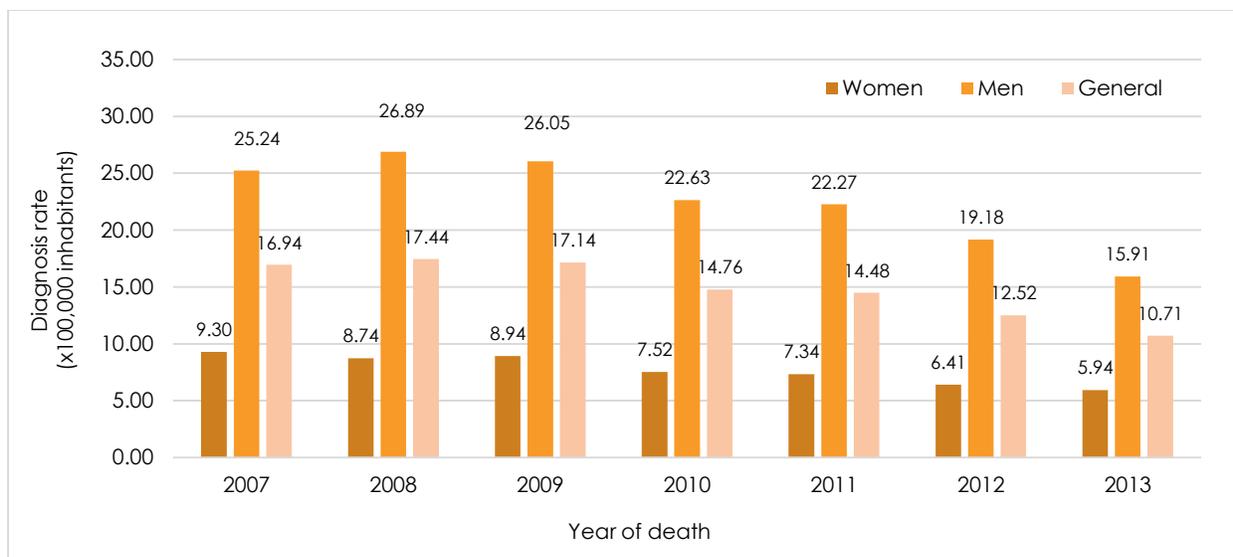
During 1981 - 2013, a total of 25,194 deaths among those living with HIV were reported to the HIV/AIDS Surveillance System. A downward trend in the number of deaths has been observed since 1994. Most deaths occurred among men, residents of the Metropolitan Area, and PID (Table 15).

Table 15: Deaths of persons with diagnosed HIV infection, 1981-2013

Characteristics Demographics/ Transmission category	2007 - 2013		Accumulated total 1981 - 2013	
	Number	Percentage	Number	Percentage
Sex				
Men	2,817	72.87	19,477	77.31
Women	1,049	27.13	5,717	22.69
Age Group at Time of Death				
0 – 12	2	0.05	231	0.92
13 – 19	18	0.47	82	0.33
20 – 24	30	0.78	505	2.00
25 – 29	103	2.66	2,134	8.47
30 – 34	232	6.00	4,049	16.07
35 – 39	358	9.26	4,969	19.72
40 – 44	568	14.69	4,464	17.72
45 – 49	752	19.45	3,311	13.14
50 – 54	669	17.30	2,222	8.82
55 – 59	429	11.10	1,270	5.04
60 – 64	308	7.97	845	3.35
≥ 65 years old	397	10.27	1,112	4.41
Health Region				
Aguadilla	137	3.54	786	3.12
Arecibo	332	8.59	18,55	7.36
Bayamón	689	17.82	4,260	16.91
Caguas	481	12.44	2,995	11.89
Fajardo	153	3.96	835	3.31
Mayagüez	226	5.85	1,250	4.96
Metropolitan	1,328	34.35	9,280	36.83
Ponce	520	13.45	3,933	15.61
Transmission category				
MSM	506	13.09	3,754	14.90
HC	1,230	31.82	5,808	23.05
PID	1,766	45.68	13,042	51.77
MSM and PID	230	5.95	1,818	7.22
Other/under investigation	105	2.72	470	1.87
Perinatal transmission/Other	29	0.75	302	1.20
Total	3,866	100.00	25,194	100.00

During 2007 – 2013, a total of 3,866 deaths of persons living with HIV/AIDS were reported (including AIDS). Of those, 2,817 deaths occurred in men group (72.87%) and 1,049 deaths occurred in women group (27.13%). The mortality rate of individuals diagnosed with HIV in 2007 was of 16.94 for every 100,000 inhabitants, while in 2013 it decreased to 10.71 for every 100,000 inhabitants. During 2007 – 2013 a downward trend was seen in HIV mortality rates in men and women, however, in comparison to women, more men die from the infection annually. The mortality rate in men diagnosed with HIV was approximately three times greater when compared to the mortality rate in women diagnosed with the infection (Figure 26).

Figure 26: Mortality trends of people with diagnosed HIV infection by sex, Puerto Rico, 2007 – 2013



According to the Department of Health's data, the HIV infection ranked 16th among the principal causes of death in PR in 2015. The HIV infection caused 197 deaths, representing 0.7% of the total deaths registered that year (Table 16).

Table 16: Top seventeen causes of death in Puerto Rico, 2015

Main cause of death	¹ Number	%	² Adjusted Rate
Malignant tumors	5,185	18.3	113.0
Heart disease	5,016	17.7	107.7
Mellitus diabetes	2,951	10.4	63.3
Alzheimer's disease	2,131	7.5	44.9
Cerebrovascular disease	1,310	4.6	28.1
Lower respiratory tract chronic disease	1,015	3.6	21.8
Accidents	934	3.3	23.3
Nephritis, nephrotic syndrome, and nephrosis	799	2.8	17.3
Sepsis	725	2.6	15.9
Pneumonia and influenza	636	2.2	13.7
Homicides	592	2.1	18.0
Hypertensive diseases and hypertensive kidney diseases	481	1.7	10.2
Chronic liver diseases and cirrhosis	250	0.9	5.5
Self-inflicted injury (suicide)	229	0.8	6.1
Anemias	212	0.7	4.5
Human Immunodeficiency Virus (HIV)	197	0.7	5.3
Pneumonitis due to solids and liquids	184	0.6	3.9
All causes	28,335		629.4

Source: PR Demographic Registry & Vital Statistics, Health Department.

¹ All data is subject to change pending the investigative process at the Forensic Science Institute.

Population was estimated to determine the adjusted rates according to the US Census Bureau.

Codification according to the Tenth International Classification of Diseases (ICD-10).

²Adjusted rate for every 100,000 people.

Date of archive July, 27, 2016.

D- INDICATORS OF RISK FOR HIV INFECTION

SEXUALLY TRANSMITTED INFECTIONS (STI): SYPHILIS / HIV

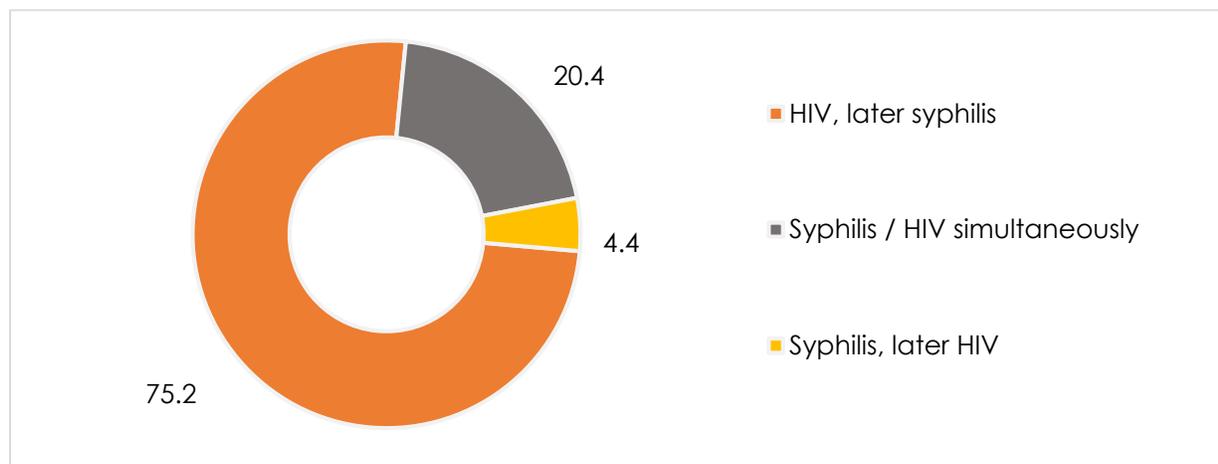
Sexually transmitted infections (STI) are used as an indicator of unprotected sex. According to the information published by the CDC, people who get an (STI) have a higher probability of contracting HIV, when compared to people who don't have an STI. Those living with HIV who contracts an STI could have a higher probability of transmitting the HIV infection to their sexual partners.

According to data reported to the STD Surveillance Office⁵, a total of 953 cases of syphilis were reported in 2014. Of those, 270 (28.3%) were among individuals with a diagnosis of HIV. Over 75%

⁵ Data as of November 15, 2015.

of people reported with syphilis in 2014 had a previous HIV diagnosis (Figure 27). The median time between the HIV diagnosis and the report of syphilis in 2014 was 86 months.

Figure 27: Sequence of events of people reported with syphilis in 2014



Men represent 94.4% of syphilis / HIV co-infection cases in 2014. Over 50% of co-infected individuals were between the ages of 13 and 34.

Table 17: HIV / syphilis co-infection according to select demographic characteristics, 2014

Demographic Characteristics	HIV / syphilis coinfection	
	No.	%
Sex		
Men	255	94.4
Women	15	5.6
Age Group		
13 – 24	55	20.4
25 – 34	91	33.7
35 – 44	58	21.5
45 – 54	47	17.4
55 – 64	15	5.6
65 or more	4	1.5
Health Region		
Aguadilla	3	1.1
Arecibo	24	8.9
Bayamón	41	15.2
Caguas	40	14.8
Fajardo	13	4.8
Mayagüez	11	4.1
Metropolitan	105	38.9
Ponce	33	12.2
TOTAL	270	100.0

Unprotected sex among MSM was the risk behavior most frequently reported (90.7%) during the past 12 months prior to the syphilis report (Figure 28), followed by unprotected sex with anonymous partners (50.0%), and unprotected sex while intoxicated (20.7%). Fifty percent had 2 or more sexual

partners during the past 12 months prior to the syphilis report. Approximately, one out of every four people reported consuming alcohol or marihuana in the 12 months prior to the report of syphilis.

Table 18: HIV / syphilis co-infection by risk behaviors and drug use, 2014

Risk Behaviors (12 months prior)	HIV / Syphilis Coinfection	
	No.	%
Sex with men	245	90.7
Sex with women	27	10.0
Sex while intoxicated	56	20.7
Sex with anonymous partners	135	50.0
Sex with PID	23	8.5
Exchange of sex for drugs and/or money	22	8.1
Number of partners		
0	11	4.1
1	117	43.3
2 - 4	90	33.3
≥ 5	40	14.8
Unknown	12	4.4
Use of drugs (12 months prior)		
General drugs	78	28.9
Injected drugs	8	3.0
Cocaine	13	4.8
Other drug ^a	72	26.7
TOTAL	270	100.0

^aThe 'other drug' The 'other drug' category includes alcohol consumption and/or marihuana use.

SEXUALLY TRANSMITTED INFECTIONS (STI): GONORRHEA / HIV

According to data reported to the STD Surveillance Office*, a total of 410 cases of gonorrhea were reported in 2014. Of those, 28 (6.8%) were diagnosed with HIV, a percentage that is noticeably less when compared with the HIV / syphilis co-infection.

Most of those who presented a gonorrhea / HIV co-infection in 2014 were men (96.4%), ages of 13 and 34 (67.9%). Unlike the HIV / syphilis co-infection cases, most people that presented a HIV / gonorrhea co-infection in 2014 resided in the Caguas region (35.7%).

Table 19: HIV / gonorrhea co-infection by select demographic characteristics, 2014

Demographic Characteristics	HIV / Gonorrhea Coinfection	
	No.	%
Sex		
Men	27	96.4
Women	1	3.6
Age Group		
13 – 24	8	28.6
25 – 34	11	39.3
35 – 44	3	10.7
45 – 54	6	21.4
55 – 64	0	0.0
65 or more	0	0.0
Health Region		
Aguadilla	0	0.0
Arecibo	2	7.1
Bayamón	3	10.7
Caguas	10	35.7
Fajardo	4	14.3
Mayagüez	0	0.0
Metropolitan	7	25.0
Ponce	2	7.1
TOTAL	28	100.0

Unprotected sex among MSM was the risk behavior most frequently reported among persons with an HIV / gonorrhea co-infection in 2014 (89.3%), followed by unprotected sex with anonymous partner (39.3%), and unprotected sex with PID (17.9%).

Table 20: HIV / gonorrhea co-infection per risk conducts and drug use, 2014

Risk Behaviors (12 months prior)	HIV / Gonorrhea Coinfection	
	No.	%
Sex with men	25	89.3
Sex with women	2	7.1
Sex while intoxicated	3	10.7
Sex with anonymous partners	11	39.3
Sex with PID	5	17.9
Number of partners		
0	4	14.3
1	21	75.0
2 - 4	2	7.1
≥ 5	0	0.0
Unknown	1	3.6
Use of drugs		
General drugs	5	17.9
Injected drugs	1	3.6
Cocaine	1	3.6
Other drug ^a	5	17.9
TOTAL	28	100.0

^a The 'other drug' category includes alcohol and/or marijuana consumption.

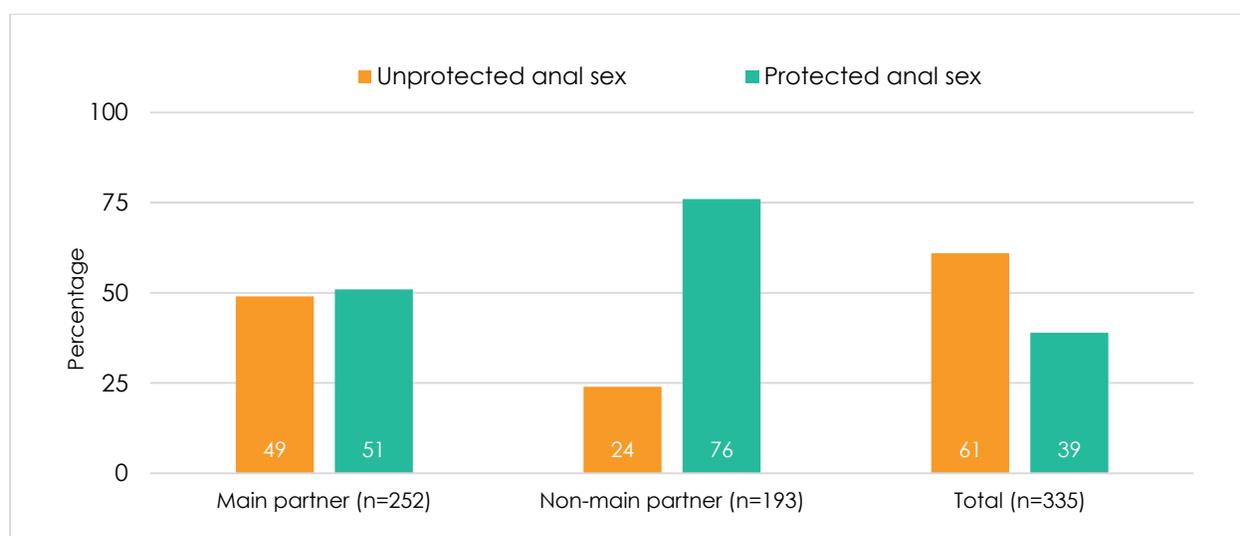
RISK INDICATORS OF HIV INFECTION – MSM, NATIONAL HIV BEHAVIORAL SURVEILLANCE (NHBS)

From October to December of 2011, as part of the National HIV Behavioral Surveillance (NHBS) activities, over 400 interviews were conducted among the MSM population that was 18 years or older, residents of the San Juan – Caguas – Guaynabo MSAs. For the purpose of examining the risks exclusively associated to the acquisition of HIV, HIV positive men were excluded, which reduced the number of interviews included in the analysis to 355.

UNPROTECTED SEX

Of the men interviewed in the study, 71% (n=252) reported having had anal sex with their main partners in the last 12 months prior to the interview and 54% (n=193) reported having had anal sex with non-main partners. Unprotected sex among participants who had anal sex was higher with main partners (49%), when compared with non-main partners (24%) (Figure 28).

Figure 28: Number and percentage of MSM participants who reported having had unprotected anal sex with their main or non-main partners, NHBS, 2011



Source: Centers for Disease Control and Prevention. HIV Risk, Prevention, and Testing Behaviors—National HIV Behavioral Surveillance System: Men Who Have Sex With Men, 20 U.S. Cities, 2011. HIV Surveillance Special Report 8. <http://www.cdc.gov/hiv/library/reports/surveillance/#special>. Published September 2014. Accessed May 1, 2015.

Eight percent 8% (n=27) of all respondents reporting having sex in the 12 months prior to the interview, also reported having sexual relations with women. Eight out of every ten, 81.5% (n=22) did not use a condom when having anal or vaginal intercourse.

USE OF DRUGS OR ALCOHOL

The three types of non-injected drugs most used within the sample were: marijuana (19%), amyl nitrite poppers (10%), and cocaine (7%). 82% (n=290) of respondents reported the consumption of alcoholic drinks in the 30 days prior to the interview. 23% (n=81) reported an excessive consumption of alcohol.

AWARENESS OF HIV STATUS

Not been aware of the partner's HIV status and practicing in high risk behaviors increases the possibility of acquiring/transmitting HIV. In 2011, a total of 374 respondents got tested for HIV. The prevalence of HIV in the sample was 9.6% (n=36). 75% (n=27) of HIV-positive people did not know they were infected with HIV.

HIV AND SEXUALLY TRANSMITTED DISEASE (STI) TESTING

CDC recommends that adolescents and adults between the ages of 13 and 64⁶ get tested for HIV once a year. This offers the possibility, for people who test positive to access the necessary medical and supportive services early on in the infection, to improve health outcomes and reduce the transmission to others. The proportion of respondents reporting ever being tested for HIV was 82%. Nonetheless, the proportion of respondents who were tested in the 12 months prior to the interview was of 49%, the lowest percentage among participating cities.

⁶ www.cdc.gov/hiv/testing.

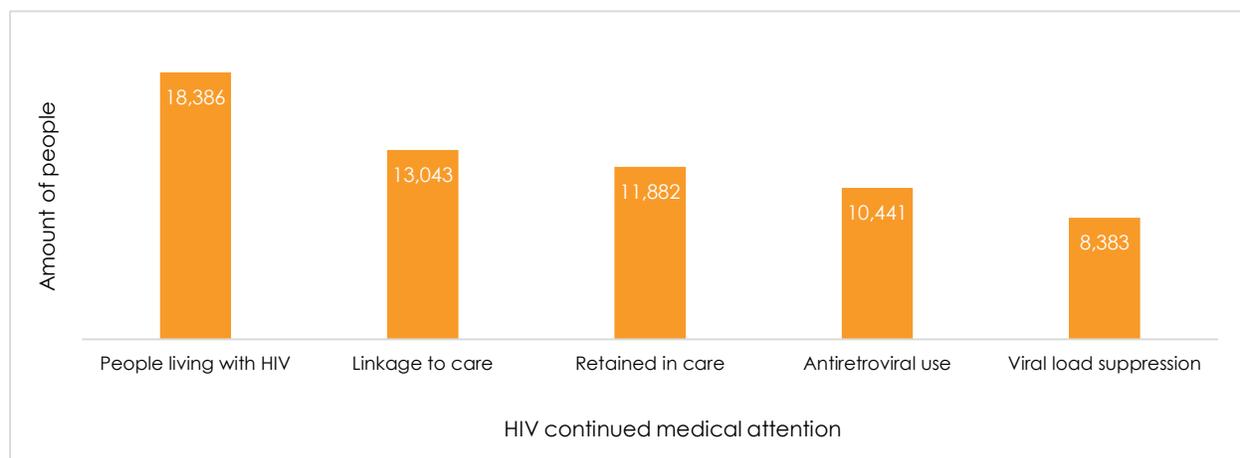
The CDC recommends that sexually active MSM get tested for STIs (syphilis, gonorrhea, chlamydia, and herpes) more frequently. According to NHBS data, only 31% of participants had been tested for STIs in the 12 months prior to the interview.

B. HIV CARE CONTINUUM

A – CARE CONTINUUM

As of December 2013, 18,386 persons ≥ 18 years old lived with an HIV infection diagnosis. It's estimated that 70.93% (n=13,043) were engaged in medical care. According to the PR Medical Monitoring Project (MMP), 91.10% of those (n=11,882) were retained in care. Among those retained in care, 87.87% (n=10,441) were receiving antiretroviral therapy. Among those receiving antiretroviral therapy, 80.29% (n=8,383) had a suppressed viral load. Generally, only 45.60% of those living with an HIV diagnosis reached viral suppression in 2013.

Figure 29: HIV Care Continuum in Puerto Rico, 2013



People living with HIV: total number of people ≥ 18 years old diagnosed with HIV by 2012, alive by the end of 2013. Data base that was used: HIV/AIDS Surveillance Program.

In medical care: people ≥ 18 years old with evidence of CD4, viral load, and/or antiretroviral therapy in 2013. Data base that was used: Study of Non-covered Needs of Primary Medical Care 2013 / Surveillance Program HIV/AIDS.

Retained in care: people ≥ 18 years old with evidence of CD4 and/or viral load tests at least twice in 2013 (minimum of 90 days between tests). Data base that was used: PR MMP – 2013 Cycle.

Antiretroviral use: people ≥ 18 years old retained in medical care, receiving antiretroviral therapy in 2013. Data base that was used: PR MMP – 2013 Cycle.

Viral load Suppression: people ≥ 18 years old receiving antiretroviral therapy, with suppressed viral load (<200 copies/ml) in 2013. Data base that was used: PR MMP – 2013 Cycle.

B – DESCRIPTION OF DISPARITIES IN ENGAGEMENT

The following table shows the HIV Care Continuum segregated by sub-populations, depending on demographic characteristics and modes of transmission. This data allows us to have a framework on the disparities in the different stages of the HIV Care Continuum in populations, such as MSM and PID.

Table 21: HIV Care Continuum by subpopulations, Puerto Rico, 2013

Demographic Characteristics/Exposure	Linkage to care		Retained in care		Antiretroviral Use		Viral Load Suppression	
	No.	Percentage*	No.	Percentage **	No.	Percentage †	No.	Percentage ‡
Sex								
Men	8,74	69.27	7,881	90.10	6,8	86.67	5,737	83.99
Women	4,29	74.61	3,979	92.61	3,5	89.66	2,663	74.64
Age								
18 – 24	355	82.56	296	83.35	221	75.02	166	74.97
25 – 34	1,39	75.58	1,137	81.26	852	74.98	604	70.93
35 – 44	2,83	72.44	2,410	84.88	1,9	81.73	1,525	77.46
45 – 54	4,78	70.96	4,601	96.10	4,2	92.18	3,431	80.89
55 or more	3,66	67.33	3,399	92.83	3,1	91.77	2,635	84.48
Category of Transmission (Adults and Teenagers)								
MSM	3,23	82.40	2,827	87.50	2,3	83.18	1,990	84.63
PID	3,59	58.63	3,365	93.66	3,0	90.36	2,402	78.99
MSM & PID	607	70.50	545	89.82	487	89.27	408	83.93
Heterosexual Contact	5,199	77.59	4,783	92.00	4,299	89.88	3,391	78.88

‡ Number of people with suppressed viral load, divided by the number of people in antiretroviral therapy.

Note. Percentage of each indicator is based on the previous step.

* Number of people receiving medical care, divided by the total number of people living with HIV.

** Number of people in continued medical care, divided by the number of people in medical care.

† Number of people in antiretroviral therapy, divided by the number of people under continued medical care.

Based on the HIV Care Continuum previously presented, the following conclusions can be made:

Linked in care*

- | A higher proportion of women was receiving medical care in 2013.
- | The proportion of people receiving medical care decreases as age increases.
- | Men who have unprotected sex with men have the highest proportion in medical care, while PID have the lowest ratio.

Retained in care**

- | The highest retention proportion occurs between PID, followed by unprotected heterosexual contact.
- | People over the age of 45 years old have the highest retention ratio.
- | The lowest retention proportion occurs among men who have unprotected sex with men.

Antiretroviral Use †

- | A higher proportion of women were receiving antiretroviral therapy.
- | The lowest proportion of people in antiretroviral therapy was between person's ages 18 to 34 years old.
- | About 90% of people receiving continued medical care were in antiretroviral therapy, except for MSM.

Viral Load Suppression†

- | Although a lower proportion of men were receiving antiretroviral therapy, a higher amount had a suppressed viral load.
- | People between the ages of 18 and 34 years old had the lowest proportion of viral suppression.

C – HIV CARE CONTINUUM UTILIZATION

In PR, the model used for the development of the HIV Care Continuum is one based on the reported prevalence. Each stage of the HIV Care Continuum is based on the number of people diagnosed and living with HIV reported in the jurisdiction. It does not include the estimated number of people unaware of their HIV positive status.

The different stakeholders invested on HIV in PR understand that in order to achieve the goals of the NHAS, it is necessary to achieve a high level of commitment in each of the stages of the continuum; the diagnosis of HIV, linkage to care, retention in care, antiretroviral use and viral load suppression. The use of this information is a key tool for the planning, and prioritization of the efforts for the prevention, diagnosis, and treatment of HIV in PR. It is also one of the main points of reference for the development of specific strategies aimed at improving the linkage and retention in care and for monitoring the effective use of resources.

The information of the HIV Care Continuum is updated periodically by the HIV Surveillance Program and it is shared with the different units of the Department of Health, including the Ryan White Part B Planning Body and the HIV Prevention Planning Group. Through the years, the analysis of the HIV Care Continuum has been expanded to include specific information categorized by sub-populations. There are plans to develop the analysis for the various health regions of the jurisdiction.

The HIV Care Continuum has also been integrated into the Quality Improvement Group as a key reference for the development of strategies for engagement and retention in care. All Ryan White Part B recipients and their providers are responsible for calculating a HIV Care Continuum of their clientele, and use it as a reference for their quality improvement plans and projects.

The HIV Care Continuum was updated for 2013. In addition, an analysis was developed specifically for the San Juan EMA. This information was shared with the participants who collaborated in the development of the Integrated Plan and used as a reference in the workshops held for the assessment and prioritization of needs and the development of strategies to address them.

C. FINANCIAL AND HUMAN RESOURCES INVENTORY

A- FUNDING SOURCES

This section provides information on the financial resources available in PR, to address the needs associated with HIV for surveillance, prevention and care. This section includes the sources of federal and local funds available addressing the HIV Continuum of Care, the amount of funds from each source, the agencies that receive these funds and the services provided with the funds.

Figure 30: Economic Resources Available in the jurisdiction

Description of funds						Served areas and relationship to the Care Continuum								
Sources of funds, as of FY 2015-2016	CFDA, if applicable	Program	Amount of funds \$	Percentage of funds	Service providers Agencies / Contracts	Offered services	Surveillance	Prevention	Diagnosis	Linkage to care	Retained in care	Antiretroviral use	Viral load Suppression	Supporting services
CDC Total	93.939	HIV Prevention Activities Non-Governmental Organization Based	\$2,383,275	3.0%	7	Provide assistance to the non-profit organizations to develop and implement effective and community-based HIV prevention programs. It seeks to promote the coordination of the efforts of primary and secondary prevention of HIV among community-based organizations, agencies that provide education and prevention of HIV and public organizations, including State and local health departments and substance abuse agencies. Finally, evaluate HIV prevention programs which provide support.								
	93.940	HIV Prevention Activities Health Department Based	\$6,438,627	8.2%	2	Support, implement and evaluate programs of primary and secondary HIV prevention implemented by the State. Particularly, prioritize the prevention of the HIV from high impact.								

Description of funds						Served areas and relationship to the Care Continuum								
Sources of funds, as of FY 2015-2016	CFDA, if applicable	Program	Amount of funds \$	Percentage of funds	Service providers Agencies / Contracts	Offered services	Surveillance	Prevention	Diagnosis	Linkage to care	Retained in care	Antiretroviral use	Viral load Suppression	Supporting services
	93.941	HIV Demonstration, Research, Public and Professional Education Projects	\$250,723	0.3%	1	The funds can be used to develop, implement and evaluate new interventions, including those aimed at people who are infected with HIV.								
	93.944	HIV/ AIDS Surveillance	\$1,287,835	1.6%	3	Through this program, a biological behavior monitoring system is established among high-risk populations (such as men who have sex with men, persons who inject drugs and heterosexuals at increased risk for HIV infection) in metropolitan statistical areas with the highest HIV prevalence in the United States.								
	93.977	Preventive Health Services STI Control Grants	\$1,201,897	1.5%	1	It emphasizes the development and implementation of uniform prevention and control programs at national scale focused on the activities of intervention designed to reduce the incidence of these diseases. Moreover, it								

Description of funds						Served areas and relationship to the Care Continuum								
Sources of funds, as of FY 2015-2016	CFDA, if applicable	Program	Amount of funds \$	Percentage of funds	Service providers Agencies / Contracts	Offered services	Surveillance	Prevention	Diagnosis	Linkage to care	Retained in care	Antiretroviral use	Viral load Suppression	Supporting services
						emphasizes applied research, demonstration and activities of public and professional education, which supports the core activities of the programs authorized under section 318b of the Public Health Service Act.								
CDC Total			\$11,562,357	15.0%										
HRSA	93.914	HIV Emergency Relief Project Grants (Ryan White Part A)	\$11,412,378	14.5%	17	Provides direct financial assistance to SJEMA in order to improve access to a Care Continuum, comprehensive, efficient, and high quality, community-based, for low-income people living with HIV and their families.								
	93.917	HIV Care Formula Grants B/ADAP, Part B Supplementarily/ ADAP ERF)	\$37,499,951	47.8%	1	Core medical services: Outpatient ambulatory health services, Drug Assistance Program for AIDS, home health care, home and community-based health services, medical								

⁷ Puerto Rico had a designation of a TGA (Ponce), however for the period of the implementation of this Plan, will be no longer active. During FY 2015-2016 the Ponce TGA received an allocation of \$2,096,992.

Description of funds						Served areas and relationship to the Care Continuum								
Sources of funds, as of FY 2015-2016	CFDA, if applicable	Program	Amount of funds \$	Percentage of funds	Service providers Agencies / Contracts	Offered services	Surveillance	Prevention	Diagnosis	Linkage to care	Retained in care	Antiretroviral use	Viral load Suppression	Supporting services
						nutritional therapy, and medical case management Support services: non-medical case management, outreach services, emergency financial assistance, food bank / meal delivery, housing, medical transportation to support a person living with HIV so it can achieve better health outcomes.								
	93.918	Grants to Provide Outpatient Early Intervention Services with Respect to HIV Disease (Ryan White Part C)	\$6,556,555	8.4%	10	Provide primary and comprehensive continuous care for HIV on an outpatient basis. This includes: 1) Early Intervention (which can include counseling, testing and referrals for HIV); 2) medical evaluation and clinical care; 3) other primary care services; 4) referrals to other health services.								

Description of funds						Served areas and relationship to the Care Continuum								
Sources of funds, as of FY 2015-2016	CFDA, if applicable	Program	Amount of funds \$	Percentage of funds	Service providers Agencies / Contracts	Offered services	Surveillance	Prevention	Diagnosis	Linkage to care	Retained in care	Antiretroviral use	Viral load Suppression	Supporting services
	93.153	Coordinated HIV Services and Access to Research for Women, Infants, Children, and Youth (Part D)	\$763,804	1.0%	2	Provide primary health care and family-centered support services for women, infants, children and young people living with HIV.								
HRSA Total			\$56,232,688	72.8%										
HUD	14.241	Housing Opportunities for Persons with AIDS (HOPWA)	\$7,435,004	9.5%	2	The program has the mission, through the Continuum of Care under the HOPWA funds, to coordinate, establish and implement services of Housing Assistance supplemented with Support Services.								
HUD Total			\$7,435,004	9.6%										
SAMHSA⁸	93.243	Substance Abuse and Mental	\$271,991	0.3%	1	The purpose of this program is to support a number of activities to assist								

⁸ The Puerto Rico Administration of Mental Health and Anti-Addiction Services, receives, from SAMHSA, the Substance Abuse Prevention and Treatment Block Grant (SABG) which provides funds to states and jurisdictions for the purpose of planning, carrying out and evaluating activities to prevent and treat substance abuse and related public health services, i.e., tuberculosis services and early intervention services for HIV. This Block Grant establishes a set-aside of 5% of the total allocation, for purposes of HIV services. The total allocation of the block grant for Puerto Rico during FY 2015-2016 is \$22,405,098.

Description of funds						Served areas and relationship to the Care Continuum								
Sources of funds, as of FY 2015-2016	CFDA, if applicable	Program	Amount of funds \$	Percentage of funds	Service providers Agencies / Contracts	Offered services	Surveillance	Prevention	Diagnosis	Linkage to care	Retained in care	Antiretroviral use	Viral load Suppression	Supporting services
		Health Services Projects of Regional and National Significance - HIV Capacity Building Initiative (HIV CBI)				beneficiaries in developing a solid foundation to provide and maintain affordable and quality science-based services, for substance abuse and HIV prevention services.								
		Substance Abuse and Mental Health Services Projects of Regional and National Significance - Minority Serving Institutions (MSIs) Partnerships with Community-Based Organizations (CBOs)	\$270,000	0.3%	1	The purpose of this program is to prevent and reduce substance abuse and the transmission of HIV / AIDS among populations at risk, including young Hispanic/Latino adults between the ages of 18 and 24. To meet the needs of these populations, CSAP seeks to develop agreements between MSI and community-based organizations to provide integrated prevention programs for substance abuse, hepatitis C and HIV.								

Description of funds						Served areas and relationship to the Care Continuum								
Sources of funds, as of FY 2015-2016	CFDA, if applicable	Program	Amount of funds \$	Percentage of funds	Service providers Agencies / Contracts	Offered services	Surveillance	Prevention	Diagnosis	Linkage to care	Retained in care	Antiretroviral use	Viral load Suppression	Supporting services
		Substance Abuse and Mental Health Services Projects of Regional and National Significance - Targeted Capacity Expansion: Substance Use Disorder Treatment for Racial/Ethnic Minority Populations at High-Risk for HIV/AIDS	\$1,519,946	1.9%	3	The purpose of this program is to expand treatment for substance use disorder, mental health and HIV services for high-risk populations, including Hispanic men and other racial / ethnic minorities and women, people over 18 years, including heterosexual, lesbian, gay, bisexual and transgender people, men who have sex with men, people who were imprisoned and their partners, people who have disorders because of substance use and those with mental disorders who are living with or at risk of contracting HIV / AIDS. This program ensures that the target population has access and receives appropriate mental health services.								
SAMHSA Total			\$2,061,937	2.7%										

Description of funds						Served areas and relationship to the Care Continuum								
Sources of funds, as of FY 2015-2016	CFDA, if applicable	Program	Amount of funds \$	Percentage of funds	Service providers Agencies / Contracts	Offered services	Surveillance	Prevention	Diagnosis	Linkage to care	Retained in care	Antiretroviral use	Viral load Suppression	Supporting services
Gran Total Federal funds*			\$77,291,986											
State Allocations*			\$57,603,263			Surveillance, Prevention and Care Services provided by state agencies.								
Gran Total State Allocations*			\$57,603,263											

* The Federal funds presented in the table, correspond to the Fiscal Year 2015-2016, according to information available in Spending.gov and HRSA.gov.

INSTITUTIONAL FRAMEWORK TO RESPOND TO HIV/AIDS IN PUERTO RICO

The PR Health Department is the agency responsible for all matters related to health and health services under Act 81-1912, as amended, and the provisions of Sections 5 and 6 of the Constitution of the Commonwealth of PR of July 25, 1952. The Department sets policy, oversees health services providers in PR, and ensures that the rules are followed for the general welfare of the population. In addition, it is responsible for the physical and mental health of Puerto Ricans. The Department's mission is to promote and maintain health as an indispensable condition for every human being to enjoy the physical, emotional and social wellbeing that allows the full enjoyment of life, and the contribution to productive and creative efforts for society. In addition, pursuant to Act 11-1976, as amended, Law of the Comprehensive Reform of Health Services in PR, all functions related to the entities responsible for the regulation of health professions in PR were transferred to the Department of Health.

Based on this regulatory framework, the PR Health Department is responsible for monitoring the HIV epidemic and developing and implementing public policies related to this matter. To address this area of responsibility, the agency has the Medicaid program, which provides the guidelines for the coverage of the Government Health Insurance Plan for beneficiaries living with HIV/AIDS as the PR Medicaid State Plan; the Epidemiology Division and its HIV / AIDS Surveillance Program; and the Assistant Secretariat of Family Health and Integrated Services, which oversees the Central Office for AIDS Affairs and Transmissible Diseases (OCASET, for its Spanish Acronym). OCASET oversees the provision of HIV Prevention and Care services. This last operating unit has the following organizational structures or programs in place to provide HIV / AIDS prevention and care services in Puerto Rico:

- **Ryan White Program, Part B / AIDS Drugs assistance program:** This program manages the funds under Part B of the Ryan White HIV / AIDS (PL 111-87, October 2009) aimed at ensuring access to clinical and support services, including medicines for medically indigent residents with Human Immunodeficiency Virus (HIV) and Acquired Immune Deficiency Syndrome (AIDS) population. Through the allocation of resources, necessary services are offered to the infected and affected population at the clinics of the Department of Health (Centers for Prevention and Treatment of Transmissible Diseases), private non-profit organizations and other providers island-wide, in accordance with the peculiarities of each geographical area. In September 2016, the network of Ryan White Program Part B / ADAP providers had 55 HIV service providers for eligible individuals throughout PR. This Program is divided into five core program units responsible for the planning and provision of health and support services for people with HIV and their families residing in PR. These are: HIV Complementary Services; Clinical and Support Services Coordination; AIDS Drug Assistance Program; Outreach and Retention in Care Unit; and Evaluation, Planning and Quality Improvement. In addition, the program addresses the needs of people with HIV eligible to interact with other service providers in the effective distribution of medications for HIV and opportunistic conditions on the island, support in co-payments, deductibles and / or coinsurance to eligible beneficiaries of the Health Insurance Assistance Program

(HIAP) and fund specialized tests for HIV and recently for hepatitis C as part of a Pilot Project of the OCASET for the Treatment of eligible Hepatitis C co-infected persons.

- **HIV/STI Prevention Division.** Its main function is to provide clinical and preventive services to the community to prevent HIV infection and other STIs in PR. Its mission is to promote—through education and prevention—lower risk practices, which prevent and stop the HIV infection and STIs in PR.
 - The HIV/STI Prevention Division provides services through the Centers for Prevention and Treatment of Transmissible Diseases (CPTET, known before as Immunology Centers). The services include: screening tests for: syphilis, gonorrhea, chlamydia, tuberculosis, viral hepatitis and HIV; guidance for HIV or STI prevention to people at high risk for the infections, education about negotiation and condom use to reduce risk of HIV and STI infection, education to people living with HIV on treatment and disclosure of their condition; and counseling, testing, and referral services for sexual partners exposed to HIV, among others. In addition, the HIV/STI Prevention Division offers community services such as: free condoms distributions at clinics and in the community, referrals to STIs and HIV prevention services, training and technical assistance to health professionals on issues related to STIs and HIV prevention. Similarly, the HIV/STI Prevention Division sponsors and collaborates with (CBOs) and other entities to offer HIV testing in community and clinical settings.
- **Transmissible Diseases Treatment Center.** Under the OCASET are the CPTET located in the eight health regions of PR. These local clinics offer preventive and treatment services for HIV and STIs, tuberculosis, viral hepatitis and other transmittable diseases.
- **Pharmacy Unit.** The pharmacy network of the Department of Health and the Ryan White Program Part B / ADAP has a Medications Distribution Center that purchases, stores and distributes medications for HIV, STIs, viral Hepatitis, TB and others.
- **HIV Community Services and Community-Based Organizations.** Under this unit is the Housing Opportunities for People with HIV / AIDS Program (HOPWA), described in more detail in the next section, and the Day Care Program for PLWH who are homeless.

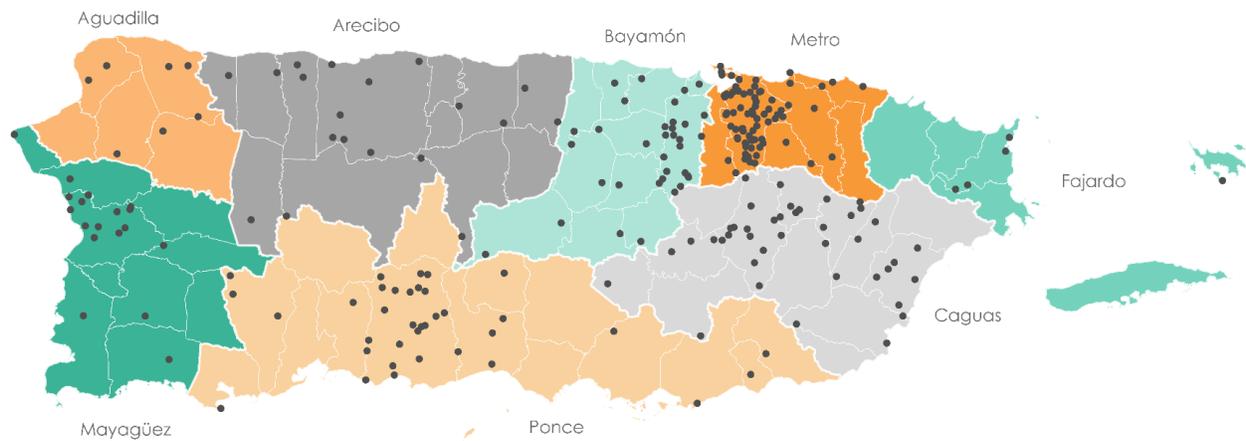
The Epidemiology and Research Office has the HIV/AIDS/STI Surveillance Office, which is responsible for monitoring and maintaining statistics on the incidence and prevalence of HIV/AIDS and other sexually transmitted diseases. The mission of the Office of Epidemiology is to protect the health of PR through the epidemiological profile of transmissible and non-transmissible diseases and conditions that have the greatest impact in PR. In addition this unit uses research methodologies in the collection, analysis, and systematic interpretation of data to advance the development and dissemination of recommendations for the control and prevention of major health problems.

This framework of services provided by the state through the Health Department is complemented with the work of various government agencies, nonprofit, and private entities, which provide services related to HIV surveillance, prevention, and care in PR. The following sections present a series of data and challenges related to the workforce in organizations working with HIV in PR, according to two sources, an inventory of service providers conducted in 2014 by the Department of Health and the most recent needs assessment performed by the "AIDS Education & Training Center Program Northeast / Caribbean" (hereinafter, AETC).

INVENTORY OF HIV AND STI'S SERVICE PROVIDERS IN PUERTO RICO, 2014

According to an inventory of HIV Service Providers conducted in 2014 by the Health Department, there are 102 organizations in PR that provide services related to HIV and STIs, which have 211 centers, as illustrated on the map below.

Figure 31: Geographical distribution of organizations that provide HIV and STI services in Puerto Rico



Note: Each point on the map equals 1 center.

These entities provide services to the general population and those who are most at high risk for HIV/STI infections. Mainly they serve MSM, youth, older adults, homeless, LGBT people, PLWH, PID, and heterosexuals. Services are provided by multidisciplinary health professionals: including physicians, health educators, case managers, clinical professionals, and behavioral health professionals, among others.

As part of the service inventory, an assessment was completed at these centers to collect more detailed information about available services, among other topics. Of the 211 identified centers, 60 participated in the assessment; from which, 41 (68.3%) were identified as non-profit, 17 (28.3%), as government agencies and 2 as private organizations (Figure 2).

The following tables (Table 22 and 23) provide a summary of some of the services provided by the 41 prevention and care centers that participated in the assessment.

Table 22: Prevention services offered by organizations (top 10)

Prevention services	No.	%
Referrals to rehabilitation centers	44	73.3%
Conferences (educational talks and others)	43	71.7%
Individual counseling	43	71.7%
Individual educational intervention	41	68.3%
Preventive counseling	39	65.0%
Screening / HIV testing at facility	37	61.7%
Educational group intervention	37	61.7%
Public information of HIV prevention	37	61.7%
Distribution of condoms and other prophylactics	36	60.0%
Social work	35	58.3%

Note: The numerical base is the 60 organizations interviewed that answered in this question. The sum of the percentages could be greater than 100% as the organizations could indicate more than one response, reason for which there is a multiple count for each of the responses given. In this illustration, only the top 10 services are included.

Table 23: Treatment services offered by organizations (top 10)

Treatment services	No.	%
Referrals to clinical services	39	65.0%
Nursing	38	63.3%
Case management for HIV	32	53.3%
Individual counseling	31	51.7%
Referrals to rehabilitation centers	31	51.7%
Counseling on adherence	28	46.7%
Conferences (educational talks and others)	27	45.0%
Transportation to HIV medical appointments	27	45.0%
Social work	26	43.3%
Psychologist	26	43.3%

Note: The numerical base is the 60 organizations interviewed that answered in this question. The sum of the percentages could be greater than 100% as the organizations could indicate more than one response, reason for which there is a multiple count for each of the responses given. In this illustration, only the top 10 services are included.

Of the 41 non-profit organizations that participated in the assessment, 27 (65.9%) indicated having nurses as part of their labor force, (56.1%), 23 organizations have clinical case managers and 22 (53.7%) have physicians to provide HIV-related services. However, only 4 (9.76%) organizations

mentioned having psychiatrists. Similarly, 2 (4.88%) of the organizations indicated having an epidemiologist as part of their staff (Table 24).

Table 24: Human resources in the NPOs that participated in the Survey

Human resources	No.	%
Nurses	27	65.9%
Clinical case manager	23	56.1%
Physicians	22	53.7%
Prevention case manager	21	51.2%
Outreach workers	21	51.2%
Counselors	19	46.3%
Psychologist	19	46.3%
Nutritionist	18	43.9%
Health educators	14	34.1%
Guidance counsellors	12	29.3%
Psychiatrists	4	9.8%
Epidemiologists	2	4.9%
Other	19	46.3%

Note: The numerical base is the 41 nonprofit organizations interviewed that answered in this question. The sum of the percentages could be greater than 100% as the nonprofit organizations could indicate more than one response, reason for which there is a multiple count for each of the responses given.

Among the 17 government centers, the human resources slightly vary in comparison to the non-profit organizations; nonetheless they are rationally similar. Of the 17 centers, 12 (70.6%) indicated having nurses and physicians, while 8 (47.1%) of them reported having clinical case managers. In contrast to non-profit organizations, 7 government agencies have Disease Intervention Specialist (DIS) among their staff. But, only 3 (17.6%) of the entities mentioned having prevention case managers. (Table 25).

Table 25: Human resources in the Public entities that participated in the Survey

Human resources	No.	%
Nurses	12	70.6%
Physicians	12	70.6%
Clinical case manager	8	47.1%
Epidemiological technicians	7	41.2%
Psychologist	7	41.2%
Health educators	6	35.3%
Outreach workers	6	35.3%
Counselors	5	29.4%
Guidance counselors	4	23.5%
Preventive case manager	3	17.6%
Nutritionist	3	17.6%
Other	10	58.8%

Note: The numerical base is the 17 government entities interviewed that answered in this question. The sum of the percentages could be greater than 100% as the government entities could indicate more than one response, reason for which there is a multiple count for each of the responses given.

The 2 private centers; reported having nurses and clinical case managers.

As mentioned in the previous section, the Department of Health has the responsibility of overseeing the different entities responsible for the regulation of health professions in PR. The following table illustrates the number of licensed professionals as of 2016, of those occupations that could be related to HIV care.

Table 26: Licensed health professionals in Puerto Rico, selected professions

Professions	2013-2016
Nursing Professionals	50,403
Generalist nurse	27,696
Licensed practical nurse	8,578
Associated nurse	12,384
Nurse specialist	1,728
Obstetric nurse	17
Physician	11,852
Generalist	4,238
Specialist	7,614
HIV Treaters*	-
Infectious diseases	83
Internal Medicine	1,677
Gastroenterology	170

Professions	2013-2016
Psychiatry	535
Professional Pharmacy	11,376
Pharmacist	3,231
Pharmacy assistant	8,145
Oral Health Professionals	3,992
Dentist	1,652
Dental assistant	2,291
Dental technician	22
Dental hygienist	27
Health Services Administration	393
Health Educator	67
Community Health Educator	158
Nutritionist and / or Dietitian	1,067
Psychologist	3,577
Medical Technician	3,969

*According to information provided by the HIV Treaters Medical Association of PR, as of 2016 there are 45 HIV Treaters certified by the American Academy of HIV Medicine, and other 90 HIV Treaters trained and with credits In HIV, qualified for certification.

The most recent information from the association of social workers, identifies a total of 7,796 licensed social workers as of this date.

NEEDS ASSESSMENT: AIDS EDUCATION & TRAINING CENTER PROGRAM NORTHEAST / CARIBBEAN, 2016

The most recent Needs Assessment carried out by the "AIDS Education & Training Center Program Northeast/Caribbean" (hereinafter, AETC) points out to (10) main challenges in the region⁹ identified by a sample¹⁰ of opinion leaders interviewed for the study. These include:

1. Retaining and re-engaging patients in care system
2. Mental health and substance abuse service integration
3. Implementing practice transformation, team-based care
4. Health literacy, communication
5. HIV stigma
6. Data for decision-making, "data to care"
7. Integration of prevention and care
8. Primary care and specialist roles and collaboration
9. Diversity of providers

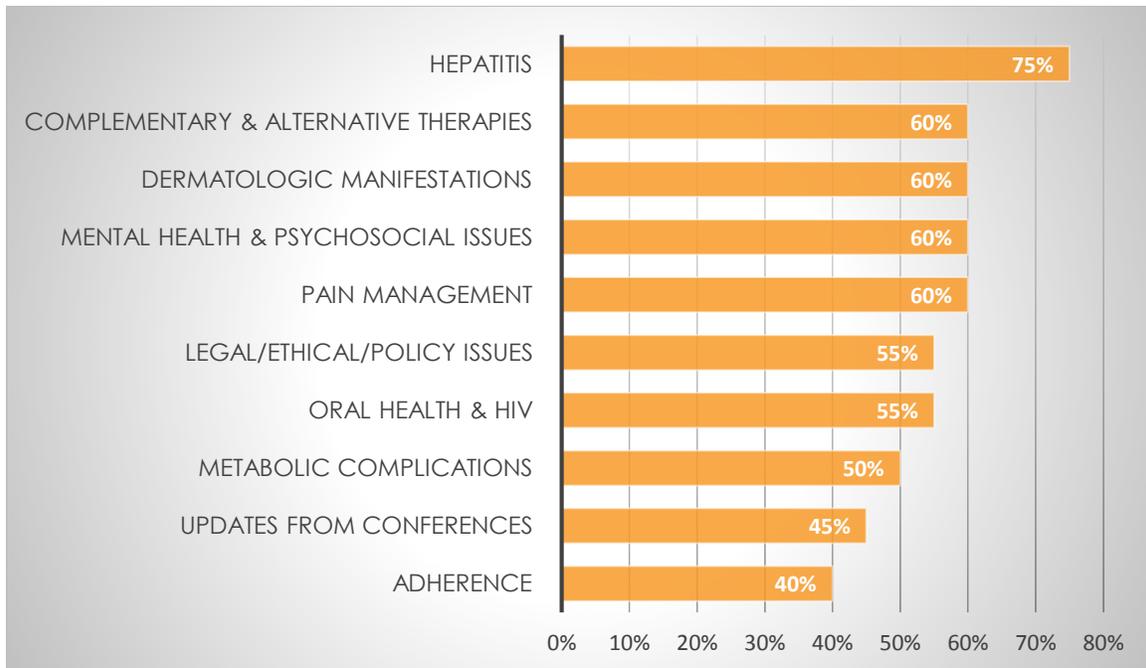
⁹ For purposes of AETC, the region to which Puerto Rico belongs also includes New York, New Jersey, and the Virgin Islands.

¹⁰ The data presented corresponds to the sample for the whole region. This was divided into three stages. The first stage involved 24 health professionals, a second stage in which 40 participated and a third stage in which 32 participated. The report does not include specific data for Puerto Rico.

10. PrEP implementation

The AETC identifies ten core issues for capacity building of HIV service providers in PR, as illustrated in the following graph:

Figure 32: Delphi Survey Results- Challenges

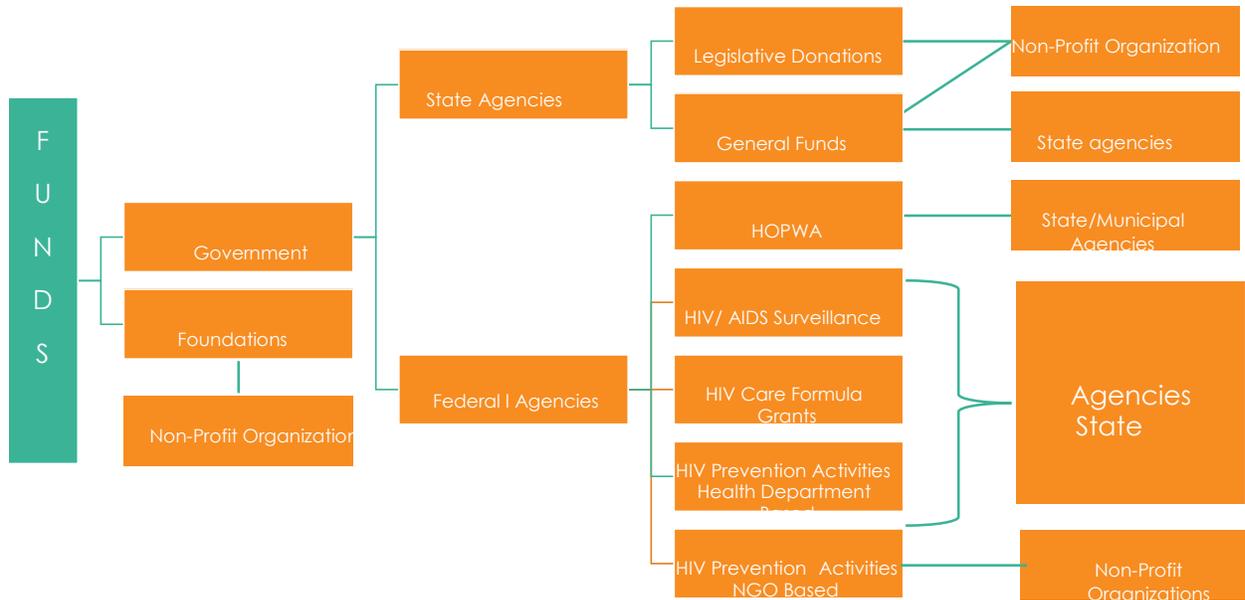


Source: Assessment of Needs "AIDS Education & Training Center Program Northeast/Caribbean", 2016

C – FUNDING SOURCES TO ENSURE CONTINUITY OF CARE

As illustrated in the table included in the Part A of this section, services related to surveillance, prevention and treatment of HIV in PR, are offered by combining local and federal funds. In addition, non-profit organizations receive funds from private foundations. However, there is no precise information on these funds and they vary greatly by year.

Figure 33: Interaction of Sources of Funds in Puerto Rico



STATE FUNDS

The Commonwealth of PR allocate resources of the General Fund, assigning them to the Department of Health, the Department of Corrections, the Administration of Mental Health and Addiction Services and the PR Health Insurance Administration to implement a comprehensive system of surveillance, prevention and care services in the jurisdiction.

FEDERAL FUNDS

PR receives federal funds to provide HIV prevention and treatment services mainly from two federal agencies: CDC and HRSA. It also receives funds from HUD and SAMHSA. These funds, as mentioned, are combined with local funds from various sources, to support the components of the HIV surveillance, prevention and treatment programs.

RESEARCH, SURVEILLANCE AND PREVENTION: FUNDS RECEIVED FROM THE CDC

Funds received from the CDC in the jurisdiction are mostly related to HIV surveillance and prevention and are received through two channels: PR's Department of Health and non-profit community-based organizations. In addition, some funds have been awarded to the university, for research purposes.

HUMAN IMMUNODEFICIENCY VIRUS (HIV)/ACQUIRED IMMUNODEFICIENCY VIRUS SYNDROME (AIDS) SURVEILLANCE (CDFA 93.944)

The objective is to monitor HIV disease in PR by improving HIV and AIDS surveillance and provide information useful for the design and implementation of HIV prevention and care activities. These funds are awarded to and administered by the Department of Health.

HEALTH DEPARTMENT BASED HIV PREVENTION ACTIVITIES (CFDA 93.940)

Funds received from this federal program, are used to support the design, implementation and evaluation of primary and secondary HIV prevention programs in PR, in particular, CDC's high impact HIV prevention initiatives. These funds are awarded to and administered by the Department of Health.

CONTROL GRANTS FOR PREVENTIVE HEALTH SERVICES FOR SEXUALLY TRANSMITTED DISEASES (93.977)

The funds are awarded to the Health Department and its goal is to reduce morbidity and mortality by preventing complications and cases of sexually transmitted infections (STIs).

It emphasizes the development and implementation of prevention and standardized national control programs focused on intervention activities designed to reduce the incidence of these diseases.

In addition, it focuses in applied research, demonstration and activities of public and professional education, which support the core activities authorized under section 318b of the Public Health Service Act.

NON-GOVERNMENTAL ORGANIZATION HIV PREVENTION ACTIVITIES (CFDA 93.939)

These funds are accessed directly by non-profit or non-governmental entities, for the development and implementation of effective community-based prevention programs, aligned with national goals. In addition, it seeks to promote coordination of efforts of primary and secondary HIV prevention among community-based organizations, agencies that provide services and HIV prevention education and public organizations, including the Department of Health.

In PR, several non for profit and community-based organizations receive funding from this program.

HIV DEMONSTRATION, RESEARCH, PUBLIC AND PROFESSIONAL EDUCATION PROJECTS (CFDA 93941)

These funds are awarded to develop, test and disseminate HIV prevention strategies through research on the prevention of HIV infection at the community level. The funds are used to develop, implement and evaluate new interventions, including those aimed at people who are infected with HIV.

These funds are awarded to the Medical Sciences Campus of the University of PR.

CARE AND TREATMENT FUNDS: RECEIVED FROM THE HEALTH RESOURCES AND SERVICES ADMINISTRATION (HRSA)

HIV CARE FORMULA GRANTS (CFDA 93.917) – RYAN WHITE PART B

The formula funds received from HRSA seek to improve the quality, availability and implementation of a continuous and integrated process for health care, treatment and support services for eligible people with HIV / AIDS.

Funds received under this program should be allocated to finance 75% of core medical services and 25% to pay for support services, including the following:

- **Core medical services:** outpatient ambulatory health services, Drug Assistance Program for AIDS, home and community based health services, medical nutritional therapy, and medical case management.
- **Support services:** non-medical case management, outreach services, emergency financial assistance, food bank / meal delivery, housing, medical transportation to support a person living with HIV so it can achieve better health outcomes.

HIV EMERGENCY RELIEF PROJECT GRANTS (CFDA 93.914) – RYAN WHITE PART A

This section provides direct financial assistance to the SJEMA, in order to improve access to a Care Continuum, comprehensive, effective, cost effective, high quality, community-based, for low-income people living with HIV and their families. It also seeks to strengthen strategies to reach minority populations.

Within this framework, the SJ EMA provides 13 core clinical services and 16 support services, which help to complement local resources to respond to the epidemic. Part A funds are used as a last resource, and the AIDS Tasks Force coordinates efforts with other stakeholders to avoid supplanting or duplicating efforts.

GRANTS TO PROVIDE OUTPATIENT EARLY INTERVENTION SERVICES WITH RESPECT TO HIV DISEASE (CFDA 93.918) – RYAN WHITE PART C

The purpose of these funds is to provide primary and comprehensive continuum of care for HIV on an outpatient basis. Including the following services:

1. Counseling, testing and referrals for HIV
2. Medical evaluation and clinical care;
3. Other primary care services, and
4. Referrals to other health services

During 2015, a total of 10 organizations received grants under this program.

COORDINATED HIV SERVICES AND ACCESS TO RESEARCH FOR WOMEN, INFANTS, CHILDREN, AND YOUTH (93.153) - RYAN WHITE PARTE D

These funds are directed to non-profit and community-based organizations focused on the provision of primary care for the family and support services for women, infants, children and young people living with HIV, in case that no other sources of funds are available to subsidize them. In 2015, two agencies in PR received funding under this Program.

SUPPORT SERVICES

DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT (HUD): HOUSING OPPORTUNITIES FOR PERSONS WITH AIDS (HOPWA-CFDA 14.241)

The goal of the HOPWA program is to provide a stable housing environment of short-term interventions for households that are experiencing a financial crisis as a result of issues arising from their HIV / AIDS HIV / AIDS condition.

The program has the task through the Continuum of Care under DS HOPWA funds, to coordinate, establish and implement Housing Assistance services supplemented with support services.

The emergency services assistance is used as part of a strategy to prevent homelessness, with the intention of reducing the risks of homelessness and improve access to health care and other support services necessary.

In PR, the Department of Health and the Municipality of San Juan receive funds from HOPWA.

SUBSTANCE ABUSE PREVENTION AND TREATMENT BLOCK GRANT (SABG) (SAMHSA) (CFDA 93.959)

This program, provides funds for the purpose of planning, carrying out and evaluating activities to prevent and treat substance abuse and related public health services, i.e., TB services and early intervention services for HIV. This Block Grant establishes a set-aside of 5% of the total allocation, for purposes of HIV services. In PR, the Administration of Mental Health and Addiction Services is the agency in charge of administering the funds and providing the above mentioned services.

SUBSTANCE ABUSE AND MENTAL HEALTH SERVICES ADMINISTRATION (SAMHSA) (CFDA 93.243)

Programs under SAMHSA have the responsibility to address as a priority the treatment of problematic substance use, prevention of mental health services, relevant at the regional and national level, providing assistance (grants and collaboration agreements)¹¹ to states, political subdivisions of states and organizations, public or private, non-profits. PR receives funding from various funds under this program, as detailed below:

"HIV CAPACITY BUILDING INITIATIVE" - CENTER FOR SUBSTANCE ABUSE PREVENTION (CSAP)

The purpose of this program is to support a number of activities to assist beneficiaries in developing a solid foundation to provide and maintain affordable and quality, science-based services, for substance abuse and HIV prevention. The program is aimed at non-profit, private and community based organizations engaged to prevent and reduce the onset of drug addiction and the spread of HIV / AIDS among at-risk populations, including adolescents and young adults from 13 to 24 years old from racial and ethnic minorities.

Strategies should combine education and awareness using social marketing campaigns, and testing services for HIV and viral hepatitis (C) in non-traditional settings and combining with prevention programs, substance abuse and HIV prevention for the population to serve.

¹¹ Cooperative agreements.

MINORITY SERVING INSTITUTIONS (MSI) PARTNERSHIPS WITH COMMUNITY-BASED ORGANIZATIONS (CBOS) - CENTER FOR SUBSTANCE ABUSE PREVENTION (CSAP)

The purpose of this program is to prevent and reduce substance abuse and the transmission of HIV / AIDS among at-risk populations, including Hispanic / Latino young adults between the ages of 18 and 24 years old. To meet the needs of these populations, CSAP seeks to establish agreements between MSI and CBOs to provide integrated programs for substance abuse and, prevention of Hepatitis C and HIV.

The objectives of this program are to support the four main objectives of the NHAS.

TARGETED CAPACITY EXPANSION: SUBSTANCE USE DISORDER TREATMENT FOR RACIAL / ETHNIC MINORITY POPULATIONS AT HIGH-RISK FOR HIV / AIDS

The purpose of this program is to expand treatment for the substance use disorder, mental health and HIV services for high-risk populations, including Hispanic men and other racial / ethnic women and minorities, over 18 years, including heterosexuals, lesbian, gay, bisexual and transgender people, MSM, people who were imprisoned, and their partners, people who have disorders of substance use and those with mental disorders and who are living with or at risk of HIV / AIDS (hereinafter, the target population) in the municipalities with the highest rates of HIV prevalence.

The expected results for the program should include reducing the negative impact of mental health problems; increase access and retention in the treatment of mental health conditions; reducing the risk of new HIV and viral hepatitis infections through increased testing and diagnosis of HIV and viral hepatitis, and increase the provision and linkage to treatment for HIV, including antiretroviral therapy (ART). This program seeks to ensure that the target population has access and receives the appropriate mental health services.

D – IDENTIFIED NEEDED RESOURCES

During the activities for the development of the Integrated Plan, participants identified a number of areas for which an increase in additional resources to strengthen the system for the provision of prevention, treatment and supportive services for people living with HIV / AIDS or at risk of becoming infected with HIV is needed. These areas include the following:

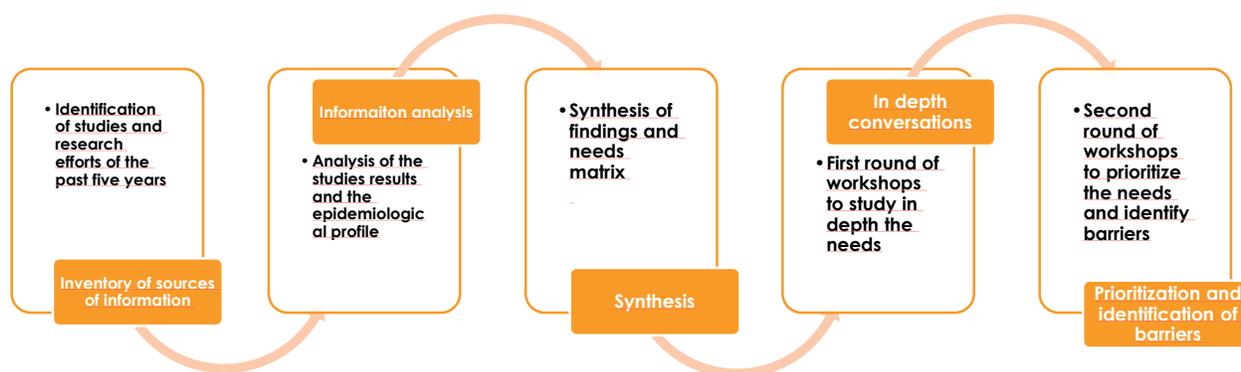
- Funds to subsidize interventions or prevention strategies such as PrEP /nPEP and needle exchange;
- Afford in the long term routine HIV testing for the general population in clinical settings;
- Funds for treatment of problematic use of substances, including injectable and non-injectable drugs;
- Funds for services related to mental health; and
- Funds for the provision of permanent housing and support services to people living with HIV / AIDS.

To address these areas of concern, a number of activities related to sustainability in the long term were included during in the strategic planning to integrate alliances for maximizing resources and engagement of the private sector (insurance companies, pharmaceuticals, etc.).

A- PROCESS TO IDENTIFY HIV PREVENTION AND CARE SERVICE NEEDS

The process of identifying the needs for the prevention and treatment of HIV in PR was based on a **multi-method approach of participatory planning**, through which representatives of the community infected and affected by HIV, the government, non-profit organizations, public institutions, the Academia and other groups of interest, not only participated in the identification and prioritization of the needs, but also developed together the strategies to address them (see section II-B, for details on the process).

Figure 34: Participatory process for the identification of needs



As a first step in identifying the needs, an inventory of studies and sources of information generated during the five years prior to the development of the Integrated Plan was conducted¹². These included, among others:

- studies commissioned by the Planning Advisory Bodies¹³,
- Prevention and Treatment studies of needs 2012 and 2014, carried out by the PRDOH
- information related to tests conducted in clinical and non-clinical environments,
- the epidemiological profile and the HIV Care Continuum developed by the HIV/AIDS Surveillance Program of the Epidemiology Division, and
- Investigations performed by the Academia¹⁴.

These sources were analyzed and synthesized, and based thereon, a series of workshops were designed to share the information with the groups of interest and, according to their various fields of experience, generate a discussion around those needs.

The workshops were organized in two rounds of two sessions each (one to discuss issues related to prevention and the other for discussing issues related to care). During the workshops, the participants were divided into small working groups, and through guided exercises, examined the needs of the groups that are most affected by these disparities (first round of workshops). Once

¹²See Annex 1, for the list of identified sources of information.

¹³ By Planning Bodies we refer to HIV Prevention Planning Group, the Ryan White Part B Planning Group and the San Juan EMA Counseling Planning Body.

¹⁴See Annex 2, for a summary of the needs identified in other studies.

deepened on the needs and its various manifestations, a second round of workshops was performed in which the needs were prioritized and barriers associated with them were identified. A total of **89 persons** participated in this process.

The information gathered at the workshops was also the subject of discussion in the meetings of the Project's Steering Committee. As described in greater detail in Section II-B, this committee is part of the participatory structure created for the development of the Integrated Plan and counted with representation of personnel from the Department of Health, the Planning Advisory Bodies, the Community and the Academia. A discussion session was also held with representatives of the Department of Health clinics, which involved a total of **54 persons**. The discussions held through these various activities, were framed under the goals and objectives of the NHAS.



Workshops developed for identifying HIV prevention and care needs.

B/C –HIV PREVENTION AND CARE SERVICE NEEDS OF PERSONS AT RISK FOR HIV AND PLWH. DESCRIBE SERVICE GAPS

PREVENTION NEEDS AND GAPS

During the sessions dedicated to the discussion of the prevention needs, participants agreed that over the past years, there has been an improvement in the HIV prevention services in PR, which is confirmed with a decline on the annual number of new diagnoses. This, according to the participants, is due largely to the development of educational campaigns, multi-sectoral collaborations, and access to resources for testing, condom distribution, high impact prevention interventions and access to HIV medication to maintain viral loads of PLWH suppressed. However, even though it is recognized that there have been significant advances in HIV prevention, the participants understood that there is still a high level of inequality in the diagnosis of the infection, on the access to epidemiological information and the availability of resources for prevention activities, particularly with specific groups, such as PID and the trans populations.

These inequalities are manifested at different levels, in both geographical and on socio-demographic factors. In geographical terms, inequalities are observed when comparing prevention efforts in the San Juan Metropolitan area and other urban centers with those in rural areas of the island that receive less attention because of their low population density. The population of immigrants was also identified as one of the groups that is affected by their situation regarding citizenship and their fear of being deported, which sometimes limits their access to services. Particularities by age group were also discussed. It was argued that young people do not use prevention practices and maintain risk behaviors, because they are fearless to the epidemic. Advances in HIV treatment have generated a sense of confidence that contributes to new diagnoses among young MSM of ages 13 to 29. The workshop participants emphasized the need for a public policy adopted to attend these new trends related to the epidemic.

During the workshops, stigma and discrimination were discussed in depth as aspects that limit or hinder the effectiveness of prevention efforts. Therefore, it was mentioned the importance of new education initiatives with gender perspective to promote safe sex practices and to prevent sexually transmitted diseases. These initiatives have expanded during recent years but there are still barriers to their full establishment as a public policy. There was a consensus on recognizing that there is the need to develop a public policy and prevention efforts that take into account the sociological changes that have occurred in the past two decades in particular those related to the LGBTIQ community.

It was emphasized the need to implement innovative strategies and interventions for prevention, based on evidence. One of the strategies that was widely discussed by the participants was PrEP. It was emphasized the importance of educating about the intervention and to create the appropriate structure for its implementation. Currently there are providers in PR who provide this service through collaborative agreements with the distributor of the medication. Similarly, the structured distribution of condoms and needle exchange programs have been implemented successfully in some parts of PR but still require a lot of efforts to improve their access. In addition, it was mentioned the need to develop local measures for HIV prevention that take into

consideration the particularities of PR and the specific needs of people with risk behaviors and those affected by HIV.

The following table summarizes, in order of priority the needs identified by participants as a result of the workshops held. The participants had an initial discussion of the list of needs derived from other studies and sources of information, and agreed upon those needs that are still present in the jurisdiction. Once the needs were validated, each participant gave a priority level based on a scale in which 1 was the need of greater priority. To obtain a final list of priority needs, the scores given by all participants were analyzed, and added up based on a formula of the inverse of the scale. Then, needs were ordered from highest to lowest score. In the table, the first column shows the order of priority given by the participants based on the results of the exercise. The second column describes the needs identified by workshop participants. The third column includes the total score for every need depending on the application of the scale. The fourth column, summarizes those populations most affected by each need, or for which there are major gaps. Finally, the fifth column summarizes other observed disparities, according to the participants' expertise.

Figure 35: Needs and Prevention gaps identified

Prevention needs				
Priority	Need	Score	Population	Disparities
1	Access and exchange of information for purposes of HIV/STI's decision-making processes and planning	HIV: 325 STI's: 322	HIV: Young, MSM, women, Trans Population STIs: Young, MSM, Trans Population	HIV: geographical STIs: geographical, gender identity
2	Public policy for sex education with a gender perspective	282	Young, Trans Population , heterosexuals, MSM, women	Socioeconomic status, age, religion
3	Availability and access to needle exchange programs	274	PID, Trans Population , inmates and ex-inmates	Geographical
4	Early sexual education, with a gender perspective	259	Young, MSM, older adults, heterosexuals, Trans Population	Religious beliefs, stigma
5	Dissemination and education to providers and people with high-risk behaviors about new strategies for prevention (PrEP, / PeP,)	248	MSM, heterosexuals, people with high-risk behavior, women	Access to medical insurance, geographical, sexual orientation
6	Develop and make accessible HIV prevention strategies for persons that are HIV positive	235	MSM, PID, people with high-risk behaviors, Youth	Geographical, stigmata
7	Education about safer sex practices, correct use of condoms and other methods of protection	213	Youth, MSM, Trans Population , women, older adults	Stigma, geographical, sexual orientation
8	Increase and diversification of HIV/ITS testing scenarios	186	Youth, MSM, older adults, homeless persons	Geographical
9	Distribution and access to condoms, especially to people with high-risk behaviors	174	Youth, women, MSM, PID	Geographical, gender identity, socioeconomic status, sexual orientation
10	Educational campaigns on education and prevention of HIV, STIs and Hepatitis C focused by groups of persons with high-risk behaviors	110	Youth, women, MSM, PID, Trans Population	Age, sexual orientation, geographical, immigration status (language)

Note: The basis of this illustration is composed of the 38 people who participated in the prevention workshop and completed the exercise. As an appendix, a table is included with other prevention needs identified by participants of the treatment sessions that were conducted. That information was also used by the participants of the sessions for the development of prevention strategies.

TREATMENT NEEDS

As for the level of progress and current status of goal number two of the NHAS, related to care and treatment, the vast majority of the workshops participants indicated that there has been an improvement compared to the past five years. Generally, the participants highlighted improvements in both the provision of services and accessibility to treatment, medications and linkage to services. However, the vast majority recognized that despite the progress of the past years, much work remains to be done. In this context, gaps were identified for transportation, access to housing, inter-agency communication, access to information and limited availability of treatment centers outside the metropolitan area, among others.

The participants identified linkage to care as the most critical need, particularly in the context of new parameters presented by the NHAS: linking people within a month after diagnosis. The participants identified the socioeconomic status and the geographical aspect, as two of the areas where the greatest disparities can be observed regarding this need. It was also stated how this need becomes more relevant and urgent for the young, homeless, PID and the older adults populations.

Limited access to transportation services was identified as one of the barriers to access services. It is also a need widely discussed on the studies related to care needs analyzed as part of the planning process (2012 and 2014). According to participants, populations that are particularly affected by the limited access of transportation services are the older adults, homeless and PID populations. Socioeconomic status and the geographical differences were also identified as disparities in access to transportation services.

Access to medical, nursing and laboratory services, emerged as a need for some of the special populations living with HIV. It was pointed out that the trans populations, older adults, PID, and homeless populations are the most affected by the limited access to physicians, nurses and laboratory services. Similarly, the groups were emphatic in identifying stigma as a limiting factor in access to services for these populations. As for retention in care, limitations were identified particularly in the young, homeless and PID populations. Moreover, regarding accesses to medications, although the participants indicated that there was a substantial improvement compared with the past five years, a number of populations were identified for which it is imperative to strengthen the access to medications. Those populations include: young, older adults, homeless, and PID. They also identified geographical differences in the provision of services, socioeconomic status, limited access of transportation and medical insurance coverage as aspects that limit access to medications.

Adherence counseling was also identified as an area where there are gaps in particular for the older adults, young, homeless and the PID populations. Similarly, case management services, were highlighted as a priority area, particularly for the trans populations, MSM, homeless and PID populations. In relation to case management services, it was identified that stigma demonstrated by services providers and the mental health condition of the populations served as aspects that limit access to services.

Related to treatment of people living with HIV and the access to medical specialists (gynecologists, urologists, neurologists, oncologists, gastroenterologists, among others) the

participants raised great concern, particularly regarding the trans population, homeless and PID populations. It was highlighted that stigma and access to medical insurance coverage as two of the main factors affecting this need. The need to educate health care professionals of PR in order to reduce stigma was identified as a need at the macro level. The development of a public policy to make compulsory and/or increase HIV education to health professionals was proposed as a possible solution. Similarly, other limitations associated to the social and economic context of PR was highlighted, for example the migration of health professionals, which has caused a decline in the professional resource bank in the Commonwealth.

Changes in public policy and the need to make the rules more flexible on places where people covered by the state health insurance can access primary medical care were also mentioned as possible solutions for increasing access to care. In Puerto Rico attitudinal barriers linked to stigma still exists limiting access to care and leading the persons living with HIV to seek services outside their geographic area. However, the public system does not necessarily provide the flexibility to support access to care in those instances, especially primary health care.

Limited access to mental health services (coverage and access to psychologists, psychiatrists, coordination for drug and alcohol treatment), and the need for permanent housing and assisted living were also identified as a gap that affects access to care. The latter is particularly associated with older adult, homeless and PID populations.

The following table summarizes, in order of priority, the needs linked to care and treatment, identified by participants as a result of the workshops. The first column shows the order of priority given by the participants based on the results of the exercise. The second column describes the needs identified by workshop participants. The third column includes the total score for every need depending on the application of the scale. The fourth column summarizes those populations most affected by each need, or for which there are major gaps. Finally, the fifth column summarizes other observed disparities, according to their different fields of experience.

Figure 36: Care and treatment identified needs and gaps

NEEDS RELATED TO CARE AND TREATMENT				
<i>Priority</i>	<i>Necessity</i>	<i>Score</i>	<i>Populations</i>	<i>Disparities</i>
1	Linkage to treatment	476	Young, Homeless persons, PID	Geographical, socioeconomic status
2	Transportation to medical appointments	452	Older adults/seniors, homeless persons, PID	Geographical, socioeconomic status
3	Access to physicians, nurses and laboratories	422	PID, homeless persons, Trans Population , older adults	Geographical, socioeconomic status , stigma, gender identity
4	Retention in treatment	414	Young, Homeless persons, PID	Geographical, socioeconomic status , stigma
5	Access to medications	385	PID, homeless persons, young, older adults	Geographical, socioeconomic status , medical insurance coverage, transportation
6	Mental health services (coverage and access to psychologists, psychiatrists, coordination for drug and alcohol treatment)	363	PID, homeless persons, young, transsexual	Stigma, geographical, sexual orientation
7	Housing	284	PID, homeless persons, older adults	Geographical, socioeconomic status
8	Adherence counseling (professional assistance to help remember when to take medications, attend medical and laboratory appointments, among others)	263	PID, homeless persons, older adults, young	Geographical, educational level, socioeconomic status
9	Access to medical specialists (gynecologist, urologist, neurologist, oncologist and gastroenterologist, among others)	247	Homeless persons, older adults, Trans Population	Stigma, medical insurance coverage
10	Case management services	247	PID, homeless persons, MSM, transsexual	Stigma, geographical, mental health
11	Development of a public policy for compulsory HIV education to health professionals	182	Young, persons with high-risk behavior, older adults, PLWH	Stigma, socioeconomic status and educational

Note: The basis of this illustration is composed of the 48 people who participated in the treatment workshops and completed the exercise. As an appendix, a table is included with other care and treatment needs identified by participants of the prevention sessions that were conducted. That information was also used by the participants of the sessions for the development of treatment strategies.

D – BARRIERS TO HIV PREVENTION AND CARE

Once the needs related to the prevention and treatment for HIV were identified and prioritized, the workshop participants identified the barriers that prevent access to such services. The barriers were defined as follows:

- Social barriers (poverty, cultural, stigma)
- Federal, State or Municipal barriers related to public policy (for an example health plan coverage)
- Barriers linked to the Department of Health (staff capacity in terms of development and training, and lack of personnel, administrative processes)
- Programmatic barriers (for an example infrastructure, availability of funds, information systems)
- Service providers barriers (lack of resources, levels of expertise)
- Barriers linked to beneficiaries (transportation, homelessness or housing instability, poverty, stigma, co morbidity, among others).

As seen in the first two tables, the main barriers identified are associated with social factors and to programs and providers.

As an attachment to this document, the barriers identified in detail for every need are included. The information resulting from this exercise was used in subsequent workshops to develop activities to identify how to address or overcome these barriers.

Figure 37: Summary of barriers associated with prevention

Needs	Barriers					
	Programs	Service providers	Federal, state or municipal	Social	Linked to the beneficiaries	Administrative structure
1 Access and exchange of information for purposes of HIV's decision-making processes and planning	11	7	11	8	4	10
2 Access and exchange of information on STI's decision-making processes and planning	10	9	9	8	7	7
3 Public policy for sex education with a gender perspective	11	12	18	21	8	14
4 Availability and access to needle exchange programs	28	27	29	27	22	24
5 Early sexual education, with a gender perspective	15	19	22	28	17	21
6 Dissemination and education to providers and people with high-risk behaviors about new strategies for prevention (PrEP, PeP)	27	29	26	25	20	20

Needs	Barriers						
	Programs	Service providers	Federal, state or municipal	Social	Linked to the beneficiaries	Administrative structure	
7	Develop and make accessible HIV prevention strategies with persons that are HIV positive	24	27	14	27	15	18
8	Education about safer sex practices, correct use of condoms and other methods of protection	22	25	24	31	19	15
9	Increase and diversification of HIV/ITS testing scenarios	24	25	23	28	21	20
10	Distribution and access to condoms, especially to people with high-risk behaviors	23	17	27	32	21	14
11	Educational campaigns on education and prevention of HIV, STIs and Hepatitis C focused by groups of persons with high-risk behaviors	27	18	28	31	14	27

Figure 38: Summary of barriers associated with care and treatment services, in mention order

Necessities	Barriers						
	Programs	Service providers	Federal, state or municipal	Social	Linked to the beneficiaries	Administrative structure	
1	Linkage to treatment	34	32	28	39	34	17
2	Transportation to medical appointments	35	27	31	30	26	17
3	Access to physicians, nurses and laboratories	26	31	30	29	30	16
4	Retention in treatment	28	23	17	39	38	13
5	Access to medications	23	30	25	33	33	15
6	Mental health services (coverage and access to psychologists, psychiatrists, coordination for drug and alcohol treatment)	30	35	34	39	32	21
7	Housing	28	15	29	31	21	17
8	Adherence counseling (professional assistance to help remember when to take medications, attend medical and laboratory appointments, among others)	22	26	15	27	30	12

	Necessities	Barriers					
		Programs	Service providers	Federal, state or municipal	Social	Linked to the beneficiaries	Administrative structure
9	Access to medical specialists (gynecologist, urologist, neurologist, oncologist and gastroenterologist, among others)	20	31	25	27	23	17
10	Case management services	16	9	8	11	10	11
11	Development of a public policy for compulsory HIV education to health professionals	13	12	18	15	2	10

E. DATA: ACCESS, SOURCES, AND SYSTEMS

A. DATA SOURCES

For the purpose of carrying out the needs assessment presented previously, different information sources were combined. The epidemiological profile was prepared by the staff of the HIV/AIDS Surveillance Program of the PR Health Department using the following sources of information,:

- Data from the PR AIDS Surveillance System
- Data from National HIV Behavioral Surveillance (NHBS)
- U.S. Census Bureau¹⁵

For purposes of conducting the unmet need analysis, databases from Ryan White recipients Parts A, B, C & D, was used, as well as databases from PR's Public Health Insurance Plan.

Moreover, as a starting point for identifying needs and provide information that could serve as input to encourage discussion during workshops with special interest groups, studies conducted by the Health Department and the Academia were identified during the five years preceding the integrated planning process (see Annex 1 for the list of references consulted), among which are:

HIV and STI Needs Assessment (2014), *Estudios Técnicos, Inc.* for the PR Department of Health.

Ryan White Part B, Needs Assessment and Satisfaction Study (2012).

Study on Risk Behaviors among Men between the Ages of 13 and 24 who Have Sex with Men (2015), *Estudios Técnicos, Inc.* for the PR Department of Health.

Ryan White Part B Needs Assessment (2013)

For a full list of references, refer to the attachments.

¹⁵ The information collected includes the estimate of the Puerto Rican population to July 1st of each year during the 2007–2014 period by age, sex, and municipality of residence. In addition, the median age of the population by sex and population density was obtained. The information was obtained through the internet at the following address: <http://factfinder.census.gov/faces/nav/jsf/pages/index.xhtml>

B. POLICIES THAT SERVED AS BARRIERS

The PR AIDS Surveillance System was implemented in 1987 and is in charge of the identification, quantification, and documentation of individuals diagnosed with HIV/AIDS, according to the CDC case definition. It is responsible for maintaining a proactive epidemiological surveillance and protect the confidentiality of the HIV/AIDS cases. The report sheet collects the demographic, geographical, epidemiological, and clinical information of the population affected by the virus. On January 2003, the Administrative Order 177 entered into effect, establishing the mandatory reporting of HIV or AIDS infection. The reporting of the cases should not exceed five working days after the date of diagnosis. In 2015, the Administrative Order Number 336 enter into effect, establishing the use of the new algorithm for HIV testing, which allows identification of infection in the acute period.

Moreover, the HIV/AIDS Behavioral Risk Surveillance System is an anonymous cross-sectional survey held annually in the San Juan-Caguas-Guaynabo Metropolitan Statistical Area. It consists of three rounds of interviews; each cycle studying the risk behaviors of one of the populations identified as high risk for HIV infection. The first cycle corresponded to the MSM population. The eligibility criteria for monitoring behavior in this population are: (1) MSM; (2) 18 years of age or older; (3) residents of the San Juan MSA; (4) who have not previously participated in the study during the present cycle.

LIMITATION OF THE REPORTING OF HIV DIAGNOSIS

Although the reporting of HIV cases (independently of AIDS) represents the most accurate accounting for the total cases of HIV infection compared with AIDS cases, it is limited by the following:

- | People who tested for the virus anonymously and did not report to the PR HIV/AIDS Surveillance System.
- | Underestimation of newly infected cases (people who do not know their HIV status because they have not performed the screening test or simply do not feel at risk of infection.)

LIMITATIONS OF STUDIES REVIEWED AS PART OF THE PLANNING PROCESS

Some of the studies used as a reference for carrying out the exercise of identifying and prioritizing needs have limitations regarding the sampling frame because they are based on non-probabilistic samples. Therefore, the findings derived from these investigations, could not be extrapolated to the universe and served more as a reference for conversations during the workshops in conjunction with other sources of information and experiences of the participants themselves.

C. DATA THE PLANNING GROUP WOULD HAVE LIKED TO USE IN THE ASSESSMENT OF NEEDS

Epidemiological information related to the profile and needs of the trans population in PR was not available for the decision making process. Similarly, in terms of available data sources for the decision making process, it would have been desirable to have more information around the funds aimed to address HIV on the incarcerated population and more details around the human resources that work with HIV in the jurisdiction.

It should be noted that due to cleansing, maturing and validation of epidemiological HIV data, as required by CDC, the year base for the information presented in the workshop sessions for the purposes of the Unmet Needs and the HIV Care Continuum was 2013. The update of both analyses is projected to be completed before the end of 2016. The information will be shared with both Planning Advisory Bodies and other stakeholders for any necessary amendments to the Integrated Plan.

SECTION II: INTEGRATED HIV SURVEILLANCE, PREVENTION AND CARE INTEGRATED PLAN

A. INTEGRATED PLAN

This section includes the Integrated Plan developed for the jurisdiction. .It includes the following components:

Goals: broad statement of purpose that describes the expected long-term effects of activities consistent with the NHAS.

Objectives: measurable statements that describe results to be achieved.

Strategies: the approach by which the objectives will be achieved.

Activities: Steps and actions required to implement the strategy and achieve the objectives.

Target populations: The group of individuals, organizations or other entities to which the activity is directed; that is, expected to be affected or impacted by the activity. Depending on the activity, may include groups of people with risk behaviors, people living with HIV, service providers, service managers and the Academy, among others.

Responsible: Groups, organizations or sectors that play an important role in the implementation of the strategies and activities.

Indicators: Data, measures or information sources through which the expected outputs of each activity are measured.

The resources committed by the jurisdiction toward implementing the activities, are included in Section I-B of this document.

There were two types of barriers identified through the planning process that may affect the implementation of the plan: barriers associated with the financial crisis / condition of the government of PR and those related to the limitations imposed by the existing legal framework and public policy. Additionally, it is also challenging the facilitation or implementation of the necessary communication, coordination, collaboration and accountability systems needed to bring together the different sectors involved in the provision of HIV prevention and care services to facilitate or enhance integration of services. To address these barriers, various strategies and activities are included in the Integrated Plan, particularly in Goal # 4.

GOAL 1:

Reduce New HIV Infections

Objective 1.1: Increase from 88% to 90% the percentage of people living with HIV who know their serostatus

Strategy	Activities	Target populations	Timeframe	Responsible/Collaborators	Indicators
1.1. A Implementation of routine HIV testing for the general population in clinical settings.	Develop and disseminate a guide of best practices for the implementation of routine HIV testing in PR.	Clinical scenarios ¹⁶ , Health professionals	By June, 2017	PRDOH (OCASET) Academia	<ul style="list-style-type: none"> Developed guide Number of clinical scenarios which received the guide Number of health professionals who received the guide
	Expand educational efforts and training to health professionals about routine testing and everything related to the diagnosis.	Health Professionals	Continuous during the period	Health Professionals Councils, PRDOH (OCASET), AETC, Insurance companies, Examining Boards, Professional Associations, Academia	<ul style="list-style-type: none"> Number of activities and training sessions provided Number of participants
	Promote and expand access to HIV testing in clinical settings by implementing the guidelines of practical improvements on routine HIV testing.	Clinical scenarios, Health Professionals, including primary care physicians and hospitals	Continuous during the period	PRDOH (OCASET), Funds recipients for HIV services, service providers, insurance companies ¹⁷ , Office of the Commissioner of Insurance Department of Correction	<ul style="list-style-type: none"> Number of tests Positivity Number of clinical scenarios Number of health care providers
	Develop and implement a strategy for routine HIV testing to make it sustainable in the long term.	Department of Health, Service Providers ¹⁸	2018-2021	PRDOH (OCASET) Funds recipients for HIV services, Service Providers, Private Entities	<ul style="list-style-type: none"> Developed strategy Number of clinical scenarios that received the guide Number of providers who received the guide Number of scenarios where the routine test service remains

¹⁶ By clinical scenarios it refers to the wide range of clinical providers, private, public and non-profit. Therefore it includes medical offices, hospitals, and community health centers Section 330 (Primary Health Centers 330), among others.

¹⁷ “Funds recipients for HIV services” refers to those entities that receive funds from the Department of Health, HRSA or CDC to provide prevention or treatment services for HIV.

¹⁸ Service providers refers to public, private for-profit or private nonprofit entities that provide services related to the prevention or treatment of HIV in the jurisdiction, regardless if they are recipients of funds under the CDC or HRSA.

Strategy	Activities	Target populations	Timeframe	Responsible/Collaborators	Indicators
1.1 B. Identify efficient efforts for HIV testing services to be provided to populations at risk, (particularly PID, MSM, Young MSM ¹⁹ , Trans Population, Heterosexual Women and other emerging populations) in non-clinical settings.	Development and promotion of recommendations to address the barriers that have been identified in laws/regulations/policies applicable to sample collection related to rapid testing in non-traditional settings	PRDOH, Service Providers, College of Medical Technologists, PRHIA, Insurance Commissioner, HIV Community	By December, 2017	Service entities, PRDOH (OCASET, Legal Office, SARAF, for its Spanish Acronym), College of Medical Technologists, Public Policy Committee ²⁰	<ul style="list-style-type: none"> List of recommendations to be promoted for the removal of identified barriers
	Increase non-clinical scenarios where HIV testing is performed, aimed at populations with risk behaviors	Service entities, service providers	Continuous during the period	PRDOH (OCASET), Funds recipients for HIV services,	<ul style="list-style-type: none"> Number of non-clinical scenarios Number of tests performed in non-clinical scenarios by region and municipalities Positivity
	Implement innovative testing activities ²¹ focused on populations with high HIV risk behaviors	PID, MSM, Young MSM, Trans Population	Continuous during the period	Service entities, PRDOH (OCASET), Funds recipients for HIV services,	<ul style="list-style-type: none"> Number of activities implemented Number of participants
	Design and implement educational campaigns that are culturally competent and focused on diverse populations and/or populations with high risk behaviors in order to raise awareness around the screening and prevention of HIV and other STIs.	Young, Young MSM, Trans Population, Heterosexual Women, PID, MSM, emerging populations	Continuous during the period	PRDOH (OCASET) Public and Private Sectors Academia	<ul style="list-style-type: none"> Number of designed educational campaigns Number of published educational campaigns Date and duration of the campaign Media Campaign's Reach²²

¹⁹ For purposes of this intervention, young MSM is defined as men between the ages of 13 to 29 years.

²⁰ Public Policy Committee refers to the Multi-sectoral Committee proposed to be created as part of Goal # 4 strategies. It will seek to strengthen public policy and promote greater involvement of the country's sectors related to surveillance, prevention and treatment of HIV/AIDS, STIs, Hepatitis and TB in Puerto Rico.

²¹ By innovative HIV testing activities, it means that activity or combination of activities, creative, effective, cost-efficient, that produces sustainable results and greater impact on preventing HIV in specific groups or communities.

²² Campaign's reach means the number and/or percent of people who were exposed to the campaign.

Strategy	Activities	Target populations	Timeframe	Responsible/Collaborators	Indicators
	Promote changes in legislation to allow for rapid testing to be performed in non-clinical settings as well as the use of other new testing technologies	Providers at non clinical scenarios	2018	Service providers, PRDOH (OCASET, Legal Office, SARAF), College of Medical Technologists, Public Policy Committee	<ul style="list-style-type: none"> List of recommendations on legislation
1.1 C To intensify the efforts to prevent HIV in communities where HIV infection is most concentrated, focusing on the HIV-negative people with high risk behaviors (MSM, Young MSM, Trans Population , PID, Heterosexual Women) and people living with HIV	To Monitor the existing data of HIV infection and prevention efforts to direct resources to the areas identified having the highest HIV incidence and prevalence.	HIV Surveillance System Prevention Division	Continuous during the period	PRDOH (OCASET, Surveillance Office) Funds recipients for HIV services,	<ul style="list-style-type: none"> Updated epidemic information Information on targeted resources Updated information on prevention efforts
	Allocate resources in accordance to the geographical distribution of the infection and the areas of highest incidence and prevalence.	Young MSM, MSM, Trans Population , PID, Heterosexual Women	Continuous during the period	PRDOH (OCASET, Surveillance Office), service providers	<ul style="list-style-type: none"> Report on resources allocated by area and incidence and prevalence by geographic area
	To develop and disseminate a protocol to identify risk factors and management and/or referral of people with negative results, that are at considerable risk for acquisition of HIV.	Service providers, non-clinical scenarios	2018	PRDOH (OCASET) Funds recipients for HIV services, Service providers	<ul style="list-style-type: none"> Developed protocol Number of service providers which received the protocol

Objective 1.2 Reduce the number of new diagnoses by at least 25 percent.

Strategy	Activities	Target populations	Timeframe	Responsible/Collaborators	Indicators
1.2.A To expand prevention initiatives for HIV with a combination of approaches based on evidence, targeted at people with risk behaviors ²³ for HIV infection, including MSM, PID, PUD, Heterosexual Behavior, Sex Workers, Trans Population and Homeless Persons.	Expand the scope of the needle exchange strategy and harm reduction island wide.	MSM, PID, Sexual workers, Heterosexual behavior, Homeless, Trans Population	Continuous during the period	PRDOH (OCASET), Fund providers, Service providers Public-Private Partnerships, CoPuReDa, for its Spanish Acronym MHAASA	<ul style="list-style-type: none"> • Number of needle exchange programs and harm reduction island wide • Number of participants in needle exchange programs and harm reduction island wide
	To promote the availability, accessibility and acceptability of condom distribution through a structural intervention. ²⁴	Service entities	Continuous during the period	Funds recipients for HIV services, Service providers	<ul style="list-style-type: none"> • Number of collaborators for condoms distribution • Number of condoms distributed • Variety of condoms distributed
	To strengthen the link to services ²⁵ to prevent new infections in HIV-negative people who maintain risk behaviors.	People with risk behaviors	Continuous during the period	PRDOH (OCASET), Funds recipients for HIV services, MHAASA Service providers	<ul style="list-style-type: none"> • Number of persons referred to services
	To strengthen the implementation or expansion of high impact prevention interventions (HIP, for its acronym in English) based on evidence, to reduce risk behaviors.	People with risk behaviors	Continuous during the period	PRDOH (OCASET), Funds recipients for HIV services, Service Providers Academia	<ul style="list-style-type: none"> • Number of implemented interventions • Number of participants of high impact interventions

²³ Risk behaviors includes those behaviors as, for example, problematic substance use, sex with multiple partners and unprotected sex, which could increase the risk of contracting HIV.

²⁴ According to the CDC, a structural intervention, seeks to produce changes in the environment or context that are aimed at increasing the availability, accessibility and acceptability in the use of condoms.

²⁵ Services refers, for example, to those related to STIs, Tuberculosis and Hepatitis C, among others.

Strategy	Activities	Target populations	Timeframe	Responsible/Collaborators	Indicators
	To establish Multi-sectoral collaboration agreements to impact populations through non-traditional activities aimed at HIV prevention.	Government and non-government agencies, private sector	Continuous during the period	PRDOH (OCASET), Funds recipients for HIV services, Government and non-government agencies	<ul style="list-style-type: none"> Number of established agreements
1.2. B To expand access to prevention services using innovative and evidence-based strategies, including combined approaches aimed at people living with HIV.	Promote the identification and allocation of resources for the development of innovative local evidenced based interventions	Academia, Funds recipients for HIV services	Continuous during the period	PRDOH (OCASET), Academia, Funds recipients for HIV services	<ul style="list-style-type: none"> Number of projects aimed at the study and development of innovative local interventions and evidence-based
	Strengthen the integration and early link to treatment and other supportive services for people living with HIV in order to keep a suppressed viral load.	People living with HIV	Continuous during the period	HUD, MHAASA, PRDF, PRDHL, PRDOH, PRDCR	<ul style="list-style-type: none"> Numbers of linkages to care Number of referrals to support groups Number of referred persons linked to services
	Strengthen the partner notification strategy at the moment of testing and as routine during the provision of care and treatment.	People living with HIV and their partners	Continuous during the period	PRDOH (OCASET, CPTETs, for their Spanish acronym), Health Services Providers	<ul style="list-style-type: none"> Number of persons linked to PS Number of tests performed
	Intensify efforts to promote linkage to care, medication adherence and retention in treatment.	People living with HIV	Continuous during the period	PRDOH (OCASET, HIV Surveillance Office), Funds recipients for HIV services, CBO	<ul style="list-style-type: none"> Number of linkages to care Number of persons retained on treatment
	Strengthen the availability, accessibility and acceptability of condom distribution through structural intervention.	Service entities	Continuous during the period	PRDOH (OCASET), Funds recipients for HIV services, Service providers	<ul style="list-style-type: none"> Number of collaborators for condoms distribution Number of condoms distributed
	Strengthen the implementation or expansion of evidence based high impact prevention interventions (HIPS) to reduce risk behaviors.	People living with HIV	Continuous during the period	PRDOH (OCASET), Funds recipients for HIV services, Service providers	<ul style="list-style-type: none"> Number of interventions Number of participants

Strategy	Activities	Target populations	Timeframe	Responsible/Collaborators	Indicators
	Design and implement culturally relevant and competent educational campaigns that addressing issues of stigma and discrimination on HIV and sexuality.	MSM, Trans Population , Young (13-29), Women, PID, general community	Continuous during the period	PRDOH (OCASET), Government and non-government agencies, Planning Advisory Bodies	<ul style="list-style-type: none"> • Number of educational campaigns designed • Number of published educational campaigns • Date and duration of the campaign • Media • Campaign's reach
	Develop and disseminate a guide of standards of care for people at significant risk of contracting HIV in order to educate them about the PrEP intervention.	People with significant risk behavior	By June, 2017	PRDOH (OCASET), Service providing agencies, PrEP/PEP Advisory Committee, Academia	<ul style="list-style-type: none"> • Developed Guides • Number of providers which received the guide
1.2. C To implement education activities to increase knowledge about effective prevention services, including pre-exposure prophylaxis (PrEP) and post-exposure prophylaxis (PEP/nPEP).	Educate clinical service providers about the importance of PrEP/nPEP.	Service Providers, Insurance companies/Office of the Commissioner of Insurance	By June, 2019	PRDOH (OCASET), AETC, Academia, Medical/Clinical/Administrative Directors, PrEP/PEP Advisory Committee /Hospitals, CPTETs	<ul style="list-style-type: none"> • Number of performed educational activities • Number of providers that participate of the educational campaigns • Number of representatives from insurance companies participating in educational activities
	Educate the public about PrEP/PEP/nPEP, its benefits and how to access it.	Population in general and people with significant risk behaviors	2019	PRDOH (OCASET, CAVV), Service providing agencies, PrEP/PEP Advisory Committee, community-based organizations, hospitals Association, Academia, and other collaborators	<ul style="list-style-type: none"> • Number of performed educational activities • Number of participants of the educational activities realized

	Facilitate the access to PrEP/PEP/nPEP in populations with risk behaviors.	Population in general and people with significant risk behaviors	2019	PRDOH (OCASET), Service providing agencies, PrEP/PEP Advisory Committee	<ul style="list-style-type: none"> • Number of providers offering PrEP/PEP/nPEP • Number of PrEP/PEP/nPEP referrals • Number of persons using PrEP/PEP/nPEP
	Monitor and evaluate the implementation of PrEP/nPEP in populations with significant risk behaviors.	Service Providers, Insurance Companies	2020-2021	PRDOH (OCASET), Service providing agencies, PrEP/PEP Advisory Committee Academia	<ul style="list-style-type: none"> • Monitoring reports and evaluation according to indicators to be developed

Objective 1.3 Reduce the percentage of men who have sex with men, young men who have sex with men and women with heterosexual behavior who have engaged in HIV-risk behaviors by at least 10 percent.

Strategy	Activities	Target populations	Timeframe	Responsible/Collaborators	Indicators
1.3. A To deliver prevention strategies, scientifically based and age-appropriate to address HIV risk reduction among MSM, young MSM and heterosexual women.	Establish partnerships with the Department of Education, universities and post-secondary institutions to implement strategies and activities around HIV and STI prevention.	Department of Education, University and non-University Postsecondary Institutions	Continuous during the period	PRDOH (OCASET, Division of Mothers and Children), Department of Education, Service Providers, Public Policy Committee, Academia	<ul style="list-style-type: none"> • Number of agreements/ alliances with educational institutions • Number of activities carried out by entities as part of those agreements • Number of people participating of the activities
	Ensure the availability, accessibility and acceptability of condom distribution through structural intervention aimed at MSM, young MSM and heterosexual women.	Service entities	Continuous during the period	PRDOH (OCASET), Funds recipients for HIV services, Service providers PRDOH (OCASET), AETC, College of Medical Technologists, Professional Associations and Boards of Examiners, HIV Treaters Association, PRHIA, (ASES, for its Spanish Acronym), Insurance Companies, CoPuReDa	<ul style="list-style-type: none"> • Number of collaborators for the distribution of condoms • Variety of condoms distributed • Number of condoms distributed to the young

	Promote education on PrEP/PEP/nPEP among young people at significant risk.	Young MSM	By July, 2018	PRDOH (OCASET, Division of Mothers and Children), Agencies that provides services, Academia	<ul style="list-style-type: none"> • Number of educational activities carried out • Number of young people participating in educational activities
	Strengthen the implementation of evidence based, high impact prevention interventions (HIP) or other public health strategies to reduce risk behaviors among Young MSM.	Young MSM	By July, 2018	PRDOH (OCASET), service providers, Academia	<ul style="list-style-type: none"> • Number of high impact prevention interventions implemented • Number of participants at the high impact prevention interventions
Strategy	Activities	Target populations	Timeframe	Responsible/Collaborators	Indicators
1.3.B. Provide prevention comprehensive strategies, age-appropriate and scientifically accurate prevention messages and sex education addressing HIV risks for young MSM and Transgender individuals.	Establish an agreement with the Department of Education and other entities that group together private schools and alternative schools to facilitate the development and implementation of a comprehensive sexual education curriculum for young people.	Teachers in general and other personnel in schools	2019	PRDOH (OCASET, Division of Mothers and Children), Department of Education, Entities grouping private schools and alternative schools	<ul style="list-style-type: none"> • Established collaborative agreement • Developed or modified curriculum
	Provide technical assistance to the Department of Education and private schools in the country, for the implementation of updated scientifically based HIV and STIs in the school population.	Young MSM and Trans	Continuous during the period	PRDOH (OCASET, Division of Mothers and Children), Department of Education, Agencies providing services, Association of Private Education	<ul style="list-style-type: none"> • Number of technical assistance sessions • Number of participants in technical assistance sessions

Strategy	Activities	Target populations	Timeframe	Responsible/Collaborators	Indicators
1.3.C To disseminate scientific-based HIV prevention messages that are appealing to the community around HIV risks and prevention strategies among young MSM and Trans.	Develop an educational campaign to eliminate the stigma and barriers that limits HIV prevention and treatment.	Young MSM	Continuous during the period	PRDOH (OCASET, Division of Mothers and Children), Department of Education, Service Providers, Academia, Private sector	<ul style="list-style-type: none"> • Number of designed educational campaigns • Number of published educational campaigns • Date and duration of the campaign • Exposure to media • Campaign's reach
	Strengthen efforts to disseminate information, education and HIV prevention messages using digital tools and new media/communication technologies.	Young MSM	Continuous during the period	PRDOH (OCASET, Division of Mothers and Children), Department of Education, Service Providers, Academia	<ul style="list-style-type: none"> • Number of transmitted messages through digital media²⁶

²⁶ By digital media it refers to the Internet, social networks, cellular and other non-traditional media that make use of new technologies.

GOAL 2:

Increase Access to Care and Improve Health Outcomes for People Living with HIV

Objective 2.1: Increase the percentage of newly diagnosed persons linked to HIV medical care within one month of their HIV diagnosis to at least 85 percent.

Strategy	Activities	Target populations	Timeframe	Responsible/Collaborators	Indicators
2.1.A To establish integrated systems to link people to clinical care immediately after HIV diagnosis.	Educate health professionals, HIV Care Liaison Staff and clinical case management personnel, epidemiology technicians and professionals at pharmacies, hospitals, emergency rooms and multidisciplinary teams on the importance of early linkage to treatment.	Healthcare professionals HIV Care Liaison Staff Clinical management personnel	Annually	PRDOH (OCASET), Funds recipients for HIV services, AETC, Academia Insurance Companies, PRHIA, Commissioner of Insurance/Community Health Centers (Section 330 CHCs) Hospitals Association	<ul style="list-style-type: none"> Number of educational activities Number of health professionals and other personnel involved in educational activities
	Strengthen education and training for licensed health professionals around the importance of prevention, management and service network for HIV treatment services.	Licensed health professionals	Continuous during the period	PRDOH (OCASET), Funds recipients for HIV services, Service providers, AETC, Examining Boards and Professional Associations	<ul style="list-style-type: none"> Number of educational and training activities performed (including the activity title and the date it was offered) Number of licensed health professionals who participated in education and training activities
	Promote education on issues related to early linkage to HIV care as a requirement for continuous education, for the renovation of health professional license, among other issues related to HIV.	Licensed health professionals	2018	PRDOH (OCASET), Examining Boards and Professional Associations	<ul style="list-style-type: none"> Number of credits required to the health professionals as a result of these efforts
	Establish education campaigns for the population and for clinical service providers to promote the importance of early linkage to HIV care.	Support and clinical services providers	Continuous during the period	PRDOH (OCASET and Communications Office) Funds recipients for HIV services, Service providers, Clinical Service Providers, Planning Advisory Bodies	<ul style="list-style-type: none"> Evidence of the education campaign for the population and service providers. - Date and duration of the campaign - Media used - Number of messages by media
	Promote the implementation of extended service hours for HIV/STI care and treatment services.	HIV Clinical Services Providers	2017	PRDOH (OCASET), HIV and STIs Clinical Services Providers	<ul style="list-style-type: none"> Number of clinical centers with extended service hours compared to previous service hours previous to the implementation of the activity

					- Evidence of extension of service hours in clinical services
	Develop standard guidelines for the establishment of a patient navigation model for linkage to care and other supportive services, according to the patient's needs.	Providers of HIV Prevention and Care Services	2017-2018	PRDOH (OCASET), CBO and Funds recipients for HIV services	<ul style="list-style-type: none"> Uniform guides and/or developed protocols for the implementation of the patient navigation model - Approval date for guidelines and/or protocols
	Implement a universal consent sheet that will simplify the process for searching and linking newly HIV diagnosed persons to care and other supportive services.	Providers of HIV Prevention and Care Services	2017	PRDOH (OCASET, Legal Office), Funds recipients for HIV services, Planning Advisory Bodies	<ul style="list-style-type: none"> Implemented universal consent form - Date approved - Starting using date
Strategy	Activities	Target populations	Timeframe	Responsible/Collaborators	Indicators
2.1 B. To implement integrated and culturally sensitive services to link populations such as MSM, young MSM, PID and transgender into care.	Increase the number of culturally sensitive trained health care providers on how to provide culturally sensitive services to HIV positive MSM, young MSM, PID, transgender populations.	Service providers	Continuous during the period	PRDOH (OCASET, Human Resources), AETC, Funds recipients for HIV services, Academia, MHAASA	<ul style="list-style-type: none"> Number of providers who receive training on culturally sensitive approaches on services towards populations: Young MSM, PID and Trans Population diagnosed with HIV.
	Provide training to existing providers as well as health related professions students in sensitivity and management of HIV positive MSM, young MSM, and transgender populations.	Service Providers Student of health related professions	Continuous during the period	PRDOH (OCASET, Human Resources Office), AETC, Funds recipients for HIV services, Insurance Companies, Office of the Commissioner of Insurance, MHAASA, Academia	<ul style="list-style-type: none"> Number of training activities to existing providers <ul style="list-style-type: none"> - Dates Number of providers who participated in the training.
	Develop and implement culturally sensitive protocols to link and provide clinical services to HIV positive MSM, young MSM, PID, transgender populations and the criteria for their evaluation.	Service providers	2017-2018	PRDOH (OCASET, Public Policy Committee), Funds recipients for HIV services, Planning Advisory Bodies, MHAASA	<ul style="list-style-type: none"> Evidence of developed culturally competent protocol <ul style="list-style-type: none"> - Protocol title Approval date

	Adapt existing forms, according to the protocols developed for clinical interventions that are culturally sensitive to HIV positive MSM, young MSM, PID and transgender populations.	Service providers	2017-2018	PRDOH (OCASET, Public Policy Committee), Funds recipients for HIV services	<ul style="list-style-type: none"> Evidence of adapted formularies <ul style="list-style-type: none"> Formularies list Revision date
	Provide training on the developed culturally sensitive protocol to link and provide clinical services to HIV positive MSM, young MSM, PID and transgender populations.	Service providers	2018 and above	PRDOH (OCASET, Public Policy Committee) Funds recipients for HIV services	<ul style="list-style-type: none"> Number of providers receiving training about the protocol
	Implement and monitor the implementation of a culturally sensitive protocol to link and provide clinical services to HIV positive MSM, young MSM, and transgender populations.	Service providers	2018-2021	PRDOH (OCASET, Public Policy Committee), Funds recipients for HIV services	<ul style="list-style-type: none"> Number of entities that adopted the protocol Number of MSM linked to services on entities that adopted the protocol Number of Young MSM linked to services on entities that adopted the protocol Number of PID linked to services on entities that adopted the protocol Number of Trans linked to services on entities that adopted the protocol
Strategy	Activities	Target populations	Timeframe	Responsible/Collaborators	Indicators
2.1.C To address the systemic barriers to early linkage of the newly HIV diagnosed persons.	To identify and deepen on the systemic barriers that hinder linkage to care of persons recently diagnosed with the HIV infection over a period of 30 days or less.	Providers of HIV Prevention and Care Services	2017	PRDOH (OCASET), Legal Office), Funds recipients for HIV services, Planning Advisory Bodies	<ul style="list-style-type: none"> Inventory or list of identified systemic barriers
	Develop strategies to address identified systemic barriers in order to facilitate linkage newly HIV diagnosed individuals into care within 30 days or less of the diagnosis.	Providers of HIV Prevention and Care Services	2018	PRDOH (OCASET), Funds recipients for HIV services, Planning Advisory Bodies	<ul style="list-style-type: none"> List of developed strategies to address the systemic barriers that were identified

	Disseminate the strategies that address systemic barriers to achieve early linkage to care.	Providers of HIV Prevention and Care Services	2018	PRDOH (OCASET), Funds recipients for HIV services, Planning Advisory Groups	<ul style="list-style-type: none"> • Number of disseminated reports on strategies to address identified systemic barriers, methods and/or activities to disseminate information • List of activities conducted, dates and persons reached
	Implement strategies that address the systemic barriers that support early linkage of people newly diagnosed with HIV and the integration of care system.	Providers of HIV Prevention and Care Services	2018-2021	PRDOH (OCASET), Funds recipients for HIV services	<ul style="list-style-type: none"> • Number of entities that adopted some of the strategies to address systemic barriers • Number of implemented strategies that address systemic barriers • Number of newly diagnosed PLWH that linked early to care for each facility or entity that adopted the developed strategies
	Evaluate the implemented strategies that address systemic barriers for early linkage (30 days) of people with a new HIV diagnose.	Providers of HIV Prevention and Care Services	2020	PRDOH (OCASET), Funds recipients for HIV services, Planning Advisory Bodies	<ul style="list-style-type: none"> • Quarterly progress reports to measure the increase or change in compliance with the indicator for early linkage to early care.

Objective 2.2 Increase the percentage of persons with diagnosed HIV infection who are retained in HIV medical care to at least 90 percent.

Strategy	Activities	Target populations	Timeframe	Responsible/Collaborators	Indicators
2.2. A To strengthen the service infrastructure to increase the capacity of the integrated health system, and the number and diversity of clinical providers for prevention, treatment and supportive services available for people living with HIV.	Develop an integrated system of prevention, clinical and supportive services for the implement coordinated and focused efforts to address the needs of the target populations.	Service providers	2018	PRDOH (OCASET, Public Policy Committee) Service Providers, PRHIA/ Planning Advisory Bodies, MHAASA, Patient Attorney's Office, Academia	<ul style="list-style-type: none"> Evidence of developed integrated services system <ul style="list-style-type: none"> Areas Components Implementation Plan
	Establish agreements to develop effective systems of coordination, communication and collaboration for prevention, treatment and supportive services to increase availability of services.	Service Providers Government Agencies Private Entities	2018-2019	PRDOH (OCASET, Legal Office), Funds recipients for HIV services	<ul style="list-style-type: none"> Number of established agreements and list of organizations/providers with which agreements were established. <ul style="list-style-type: none"> Evidence of collaborative agreements
	Educate service providers around the new system of coordinated care, focused on the needs of the population with emphasis on retention in care and adherence to treatment.	Health Providers, Linkage to care personnel	2019-2020	PRDOH (OCASET), Funds recipients for HIV services, AETC	<ul style="list-style-type: none"> Number of performed educational activities Number of service providers who participated in the educational activities
	Monitor the implementation of the integrated prevention, treatment and supportive services.	Service providers	2019-2021	PRDOH (OCASET), Planning Advisory Bodies	<ul style="list-style-type: none"> Quarterly Progress Report in compliance with the Implementation Plan for each point of interest: A) prevention, b) treatment and c) support, on the following variables: <ul style="list-style-type: none"> Number of people who received services Units of services that were provided

Strategy	Activities	Target populations	Timeframe	Responsible/Collaborators	Indicators
2.2.B To educate PLWH on available prevention, care and other supportive services available.	Develop guidelines for the implementation of the peer facilitators model.	PLWH Service providers	2018	PRDOH (OCASET), Planning Advisory Bodies, Funds recipients for HIV services, PLWH	<ul style="list-style-type: none"> Evidence of performed activities to enact the guidelines of the model implementation. Number of people reached in activities
	Develop and publish an Internet page with information around HIV prevention, care and supportive services available for people living with HIV.	General population	2018	PRDOH (OITD, Office of Communications, OCASET), Funds recipients for HIV services, Planning Advisory Bodies	<ul style="list-style-type: none"> Evidence of the website developed Number of people who visited the page
	Develop/update brochures including information around available HIV prevention, care and other supportive services.	PLWH General Population Service Providers	2018-2019	PRDOH (OCASET, AIDS Surveillance Office) Funds recipients for HIV services, CBOs, Planning Advisory Bodies	<ul style="list-style-type: none"> List of updated informative materials <ul style="list-style-type: none"> Updating date
	Develop and implement an educational campaign that promotes available treatment and supportive services for linkage, re-linkage and retention in HIV care	PLWH	Continuous during the period	PRDOH (Office of Communications, OCASET) Funds recipients for HIV services, CBO, Planning Advisory Bodies	<ul style="list-style-type: none"> Evidence of the educational campaign focused towards linkage, re-linkage and retention in care Date and duration of the campaign Media Messages per media used

Strategy	Activities	Target populations	Timeframe	Responsible/Collaborators	Indicators
2.2.C To promote integrated and coordinated health care services focused on HIV positive patients that supports retention in care.	Develop and disseminate guidelines on evidence-based strategies for retention, with emphasis on HIV positive young, PID, homeless, women, older adults and trans Population.	Service Providers	Continuous during the period	PRDOH (OCASET), Funds recipients for HIV services, MHAASA, CBOs, Planning Advisory Bodies	<ul style="list-style-type: none"> Guidelines of Evidence-based strategies developed. Publication of guides on evidence-based strategies. <ul style="list-style-type: none"> -Approval date Evidence of the distribution of guidelines <ul style="list-style-type: none"> - Number of entities to which the guidelines were sent to
	Provide training to health care providers on the guidelines developed with an emphasis on retention of HIV positive adherence of young people, PID, Homeless Persons, women, older adults and Trans Population with HIV.	Service Providers	Continuous during the period	PRDOH (OCASET), AETC, CDC	<ul style="list-style-type: none"> Number of training activities performed <ul style="list-style-type: none"> - Dates in which the training was offered Number of providers who participated in training activities
	Encourage the creation of support groups that promote retention in care of PLWH.	Young, PID, Homeless persons, older adults, and women with HIV	Continuous during the period	PRDOH (OCASET), Funds recipients for HIV services, Planning Advisory Bodies and CBOs	<ul style="list-style-type: none"> Number of activities aimed at promoting the creation of support groups Number of support groups created Average number of persons participating in support groups
	Increase evidenced-based screening and treatment of mental health disorders and problematic substance use (including alcohol) of PLWH.	PLWH	Continuous during the period	Clinical Service Providers, Funds recipients for HIV services, MHAASA, PRHIA, Insurance Companies, Office of the Commissioner of Insurance	<ul style="list-style-type: none"> Base number for measuring the increase in number of screenings for mental health and problematic substance use, respectively Number of PLWH with mental health screenings conducted

					<ul style="list-style-type: none"> • Number of PLWH with problematic substance use conducted • Number of services performed for mental health treatment • Number of services performed for the treatment of problematic substance use • Number of referrals for mental health treatment • Number of referrals for treatment of problematic substance use
	Increase access to transportation services for care and supportive services.	PLWH	Continuous during the period	Funds recipients for HIV services, Medicaid Program (PRHIA), Medicare, Municipalities	<ul style="list-style-type: none"> • Base Number of PLWH who received medical transportation • Number of people who received transportation services to access care and support services • Number of transportation services provided

Objective 2.3 Increase the percentage of persons with diagnosed HIV infection who are virally suppressed to at least 80 percent.

Strategy	Activities	Target populations	Timeframe	Responsible/Collaborators	Indicators
2.3.A To promote integrated and coordinated health care services focused on the person living with HIV	Maintain access to new medications for HIV treatment in direct coordination with the PRHIA.	PLWH	Continuous during the period	PRDOH (OCASET, Pharmacy Advisory Committee, ADAP Advisory Committee), PRHIA, Insurance Companies	<ul style="list-style-type: none"> • Updated HIV drug formularies • Number of new HIV medications approved by the PRHIA to be part of the agreement with the PRDOH, Ryan White Part B/ADAP Program

which supports viral load suppression.	Facilitate annual training for physicians, case managers and other clinical staff that provide services to PLWH, on new medications available for HIV care.	Clinical Service providers and case managers	Continuous during the period	PRDOH (OCASET), AETC, Academia, College of Medical Technologists, Professional Associations and Boards of Examiners, HIV Treaters Association, PRHIA, Insurance Companies, Funds recipients for HIV services	<ul style="list-style-type: none"> • Number of training activities offered to the clinical staff • Number of participants who in the training activities
	Promote the use of best clinical practices for PLWH, according to the HIV Treatment Guidelines.	Clinical Service providers in general	Continuous during the period	PRDOH, (OCASET) HIV Treaters Association, AETC, College of Physicians-Surgeons of PR Insurance Companies, Patient Advocate	<ul style="list-style-type: none"> • Number of evidence-based best practices identified • Number of training activities for the updating of evidence-based best practices • Number of updates to distributed guides <ul style="list-style-type: none"> - Distribution date - Update date
	Implement evidence-based strategies aimed at promoting adherence in populations such as PID, Homeless Persons, young and older adults, among others.	Service providers	Continuous during the period	PRDOH (OCASET), Academia, Funds recipients for HIV services, Service Providers	<ul style="list-style-type: none"> • Number of performed activities on evidence-based strategies to promote adherence • Number of providers who participated in the activities of evidence-based strategies to promote adherence
	Encourage the development of support groups for not virally suppressed persons and people who have abandoned treatment.	PLWH	Continuous during the period	PRDOH (OCASET), Funds recipients for HIV services, Service Providers and Planning Advisory Bodies	<ul style="list-style-type: none"> • Number of activities performed to promote the creation of support groups • Number of support groups created • Average number of persons participating in support groups
	Promote the implementation of projects of continuous quality improvement to identify the reasons for non-suppression and develop strategies aimed at	Service providers	Continuous during the period	PRDOH (OCASET), Clinical Service Providers and Funds recipients for HIV services, including its committees or quality	<ul style="list-style-type: none"> • Number of continuous quality improvement implemented projects

	achieving suppression among the recipients of HIV care.			improvement programs, Planning Advisory Bodies	<ul style="list-style-type: none"> • Progress report to indicate the change in viral load suppression
Strategy	Activities	Target populations	Timeframe	Responsible/Collaborators	Indicators
2.3.B To establish standards of clinical care in each treatment center based on the updated guidelines for HIV treatment, published by the Federal Department of Health.	Review the protocols and standards of clinical care of the centers that provide treatment for HIV, according to updated guidelines.	Clinical Service Providers	2017	PRDOH (OCASET), Clinical Service Providers	<ul style="list-style-type: none"> • List of protocols and clinical care standards reviewed
	Provide training on the updated guidelines for HIV treatment, as they are published by the Federal Department of Health.	Clinical Service Providers	2018-2021	PRDOH (OCASET), AETC	<ul style="list-style-type: none"> • Number of training activities on the updated guidelines for HIV treatment • Number of participants on the trainings about the guides/guidelines
	Implement updated clinical care standards updated in clinical centers.	Clinical Service Providers	2018-2021	PRDOH (OCASET), Clinical Service Providers, Funds recipients for HIV services	<ul style="list-style-type: none"> • Number of updated standards of clinical care in the clinical centers • Implementation Date
	Design mechanisms to monitor compliance with standards of care.	Clinical Service Providers	Continuous during the period	PRDOH (OCASET), Service Providers, Funds recipients for HIV services	<ul style="list-style-type: none"> • Evidence of designed monitoring mechanisms • Compliance report with implemented standards of care
Strategy	Activities	Target populations	Timeframe	Responsible/Collaborators	Indicators
2.3.C To promote quality improvement projects aimed at achieving sustained viral load suppression for two years in PLWH.	Provide technical assistance to service providers in designing quality improvement programs.	Clinical Service Providers	Continuous during the period	PRDOH (OCASET), <i>National Quality Center</i>	<ul style="list-style-type: none"> • Number of technical assistance sessions conducted • Number of service providers receiving technical assistance
	Identify the number of PLWH who meet the criteria of suppressed viral load in each clinical center for one year, and those that meet the criteria for two years.	PLWH , Clinical Service Providers	Continuous during the period	PRDOH (OCASET, AIDS Surveillance Office), Service providers, Fund recipients for HIV services	<ul style="list-style-type: none"> • Number of PLWH identified that meet the criteria of suppressed viral load for each

					clinical center, for one year, and those that meet the criteria for two years.
	Implement a quality improvement project that supports retention and adherence to treatment through evidence-based strategies	Clinical Service Providers	Continuous during the period	PRDOH (OCASET, AIDS Surveillance Office), Service Providers, Fund recipients for HIV services, AETC	<ul style="list-style-type: none"> • Number and list of evidence-based strategies that support retention and adherence to treatment • Number of organizations that have implemented at least one evidence-based practice aimed at supporting retention and adherence to treatment
	Monitor the viral load of PLWH identified in each clinical center.	PLWH	Continuous during the period	PRDOH (OCASET, Program Ryan White Part B/ADAP, AIDS Surveillance Office), Service Providers, Fund recipients for HIV services	<ul style="list-style-type: none"> • Quarterly progress reports on the levels of viral load of PLWH identified in each clinical center

Objective 2.4 Reduce the percentage of persons in HIV medical care who are homeless to no more than 5 percent.

Strategy	Activities	Target populations	Timeframe	Responsible/Collaborators	Indicators
2.4. A To join efforts with public and private entities to address housing needs of the homeless people living with HIV.	Coordinate meetings with government agencies that administer housing funds.	Government agencies Continuum of Care Systems for Homeless Population (COCs, for its acronym in English) ²⁷	2017	PRDOH (OCASET), Housing Services Providers, Multi-sectoral Council in Support of the Homeless Population ²⁸ , PRDH, PRPHA, PRDF, HOPWA Program (San Juan, PRDH)	<ul style="list-style-type: none"> • Number of meetings held • Number of participants in meetings <ul style="list-style-type: none"> • - Minutes of the meetings • - List of significant agreements

²⁷The Continuum of Care System is an organism/body confined to a geographical area, created under the federal regulations applicable to the programs aimed for the homeless persons, which provides the main vehicle/ for planning to meet the needs of that population. Actually, in Puerto Rico there are two recognized CoC by the Federal Department of Housing (HUD, for its acronym in English), which provide services related to housing and emergency assistance, transitional housing and permanent housing with supportive services, miscellaneous services, with the goal of achieving stability in the long term for the homeless. These CoC systems are: *Balance del Estado* (CoC PR 502) and *Coalicion de Coaliciones* (CoC PR 503). The Department of the Family is the Partner Agency CoC PR 502, while *Coalicion de Coaliciones* is the collaborating agency of CoC PR 503.

²⁸Law 130 of 27 September 2007, created the Multi-sectoral Council in Support of the Homeless Population (the Council), and attached to the Department of the Family. The Council is aimed at addressing the various situations that daily traverse the homeless, and thus achieve a real transformation in their living conditions. In addition, it also seeks promoting the smooth access of existing services and the rapid integration with the community; to establish its duties and responsibilities, continuous development and review of public policies and strategic planning; to promote the search, assignment and authorization for matching funds. Also, to ensure the Multi-sectoral compliance of the programs and services through its *Liaison Office of Programs and Coordination of Services for the Homeless Population* ". [Taken from: <http://www2.pr.gov/agencias/secretariado/Pages/ConcilioMultisectorial.aspx>].

	Establish working arrangements to meet the housing needs of homeless PLWH to create a network of providers.	CoCs Government Agencies	2018-2019	PRDOH (OCASET), Housing Services Providers, PRDH, PRPHA, PRDF, HOPWA Program, Multi-sectoral Council, CoCs	<ul style="list-style-type: none"> Number of working arrangements to meet the need for housing for PLWH and homeless (list of organizations)
	Identify organizations that provide housing assistance services, such as emergency shelters, transitional and permanent housing.	CoCs	2017	PRDOH (OCASET), Service providers for temporary housing subsidized by RW, PRDH, PRPHA, PRDF, HOPWA	<ul style="list-style-type: none"> Inventory of organizations that provide housing assistance
	Develop a directory of agencies that provide housing services (shelter, transitional housing and permanent housing).	CoCs	2017	PRDOH (OCASET), Service providers for temporary housing subsidized by RW, Multi-sectorial Council, CoCs, PRDH, PRPHA, PRDF, HOPWA	<ul style="list-style-type: none"> Directory of agencies that provide housing services developed
	Capacitation to service providers about treatment services for HIV and the scope of the working arrangements to meet the housing needs of homeless PLWH	Service providers	2018	PRDOH (OCASET), CoCs, HIV Service Providers, Service providers for temporary housing subsidized by RW, PRDH, PRPHA, PRDF, HOPWA, Multi-sectoral Council	<ul style="list-style-type: none"> Number of training activities to service providers about HIV treatment and the scope of agreements to address the housing needs of PLWH <ul style="list-style-type: none"> -Activities date -Activities places Number of suppliers who participated in training activities
Strategy	Activities	Target populations	Timeframe	Responsible/Collaborators	Indicators
2.4. B To address the needs associated with housing and other needs of PLWH to prevent them from the risk of losing their home.	Promote the integration of the risk of homelessness in the needs assessments that is conducted as part of the case management.	Case management and patient navigators components of HIV service providers	2017-2018	Case management and patient navigators component of HIV service providers	<ul style="list-style-type: none"> Case Management Needs Assessment Form updated Number of participants who received the assessment of risk of homelessness
	Coordinate housing assistance through referrals in the network of service providers.	Service providers	2018-2021	Service Providers, Funds recipients for HIV p services, COCs, HOPWA, PRDH, PRPHA, Municipalities, Municipal consortiums	<ul style="list-style-type: none"> Number of coordinated and completed referrals for housing assistance Number of participants who benefited from housing assistance

Strategy	Activities	Target populations	Timeframe	Responsible/Collaborators	Indicators
	Monitor and follow up of referrals coordinated for housing service.	Service providers	2018-2021	PRDOH (OCASET), Funds recipients for HIV services, HOPWA Fund Administration, PRDH, PRPHA, Municipalities, Municipal consortiums	<ul style="list-style-type: none"> Quarterly progress reports to expose the number of coordinated housing service referrals.
2.4. C To expand the coordination of referrals system to connect PLWH to housing services.	Develop informational materials on available services.	Case management and patient navigators components of HIV service providers	Continuous during the period	PRDOH OCASET, Funds recipients for HIV prevention and treatment services, HOPWA Fund Administration, PRDH, PRDF, PRPHA, CoCs	<ul style="list-style-type: none"> Information material developed
	Conduct training activities for providers around available services.	Case management and patient navigators component of HIV service providers	Continuous during the period	PRDOH OCASET, Funds recipients for HIV services, OCMA, HOPWA Fund Administration, PRDH, PRDF, PRPHA, CoCs	<ul style="list-style-type: none"> Number of training activities for providers about services <ul style="list-style-type: none"> - Date - Training place - Distributed informative material Number of service providers who participated in the training
	Conduct informative activities for patients around available services.	PLWH	Continuous during the period	PRDOH OCASET, Funds recipients for HIV services, OCMA, HOPWA Fund Administration, PRDH, PRDF, PRPHA, CoCs	<ul style="list-style-type: none"> Number of informative sessions to for patients on available services <ul style="list-style-type: none"> - Date - Informative sessions place - Informative material distributed Number of patients receiving the information
	Analyze linkage data and use of housing services through the monitoring of coordinated referrals.	Service providers	Continuous during the period	PRDOH (OCASET), RW Programs, OCAM, HOPWA Fund Administration, PRDH	<ul style="list-style-type: none"> Number of referrals coordinated and completed Number of persons linked to services Number of services offered

Objective 2.5: To achieve that at least 70% of people out of care²⁹ re-engage to treatment.

Strategy	Activities	Target populations	Timeframe	Responsible/Collaborators	Indicators
2.5. A To establish integrated systems to re-engage persons living with HIV who have been out of care for six months or more.	Develop a standard protocol for re-linkage into care that considers the model of HIV Navigation Services among others.	Service Providers	2017	PRDOH (OCASET), Funds recipients for HIV services	<ul style="list-style-type: none"> Uniform Guidelines and / or developed protocols <ul style="list-style-type: none"> Date of approval of the guidelines and / or protocols
	Include the forms and other working tools used by the providers in the developed protocol.	Service Providers	2017-2018	PRDOH (OCASET), Funds recipients for HIV services	<ul style="list-style-type: none"> Evidence of forms/formularies adapted <ul style="list-style-type: none"> Forms/Formularies lists Revision Date
	Provide training on the re-linking protocol developed, for people out of care.	Service Providers	2018-2021	PRDOH (OCASET), Funds recipients for HIV services	<ul style="list-style-type: none"> Number of providers who receive training about the protocol or guidelines
	Implement and monitor the execution of the protocol for re-linking persons out of care	Service Providers	2018-2021	PRDOH (OCASET, Public Policy Committee), Funds recipients for HIV services	<ul style="list-style-type: none"> Number of entities that adopted the protocol Number of re-linked persons after being 6 or more months out of care

²⁹ Out of care persons are defined as those who during a period of six months or more, have not done laboratories, have not gone to pick up their medications or have not attended a medical appointment.

Strategy	Activities	Target populations	Timeframe	Responsible/Collaborators	Indicators
2.5 B. To promote the use of best practices and culturally sensitive activities for re-linkage into treatment efforts.	Identify best practices and culturally sensitive activities aimed towards re-linkage to care.	MSM, young MSM, women with heterosexual behavior and, Trans Population	2020	PRDOH (OCASET), Academia, Funds recipients for HIV services	<ul style="list-style-type: none"> List of identified best practices
	Disseminate and facilitate the implementation of the identified best practices and culturally sensitive activities for re-linkage into care.	Service Providers	2020-2021	PRDOH (OCASET), Service Providers, Funds recipients for HIV services	<ul style="list-style-type: none"> Number of best practices implemented Number of providers implementing the best practices
	Monitor the implementation of the best practices and culturally sensitive activities for re-linkage into care that are adopted.	Service Providers	2020-2021	PRDOH (OCASET), Service Providers, Funds recipients for HIV services	<ul style="list-style-type: none"> Report of the monitoring results
Strategy	Activities	Target populations	Timeframe	Responsible/Collaborators	Indicators
2.5. C To implement efforts to search for persons living with HIV who have been out of care for six months or more	Continue with the efforts to identify cases of persons living with HIV who have been out of treatment for more than six months.	PRDOH / Service Providers	Continuous during the period	PRDOH (OCASET), Service Providers, Funds recipients for HIV services	<ul style="list-style-type: none"> Number of identified cases
	Continue with the implementation of outreach activities aimed to make contact with and to re-link the persons living with HIV who have been out of treatment for more than six months.	PRDOH / Service Providers	Continuous during the period	PRDOH (OCASET), Service Providers, Funds recipients for HIV services	<ul style="list-style-type: none"> Percent of cases contacted and re- linked to treatment.

GOAL 3:

Reduce HIV-related Disparities and Inequalities in
Health

Objective 3.1 Increase the percentage of youth and persons who inject drugs with diagnosed HIV infection who are virally suppressed to at least 80 percent.

Strategy	Activities	Target populations	Timeframe	Responsible/Collaborators	Indicators
<p>3.1.A To promote integrated and coordinated health care services that support the viral load suppression on both, the young and PID living with HIV.</p>	<p>Assess the disparities and inequalities in accessing HIV care services in populations of young people and PID living with HIV.</p>	<p>Young people and PID with HIV</p>	<p>2017-2018</p>	<p>PRDOH (OCASET, Assistant Secretariat of Planning), Funds recipients for HIV services, Planning Advisory Bodies, Ryan White Interparts Committee, MHAASA, Service Providers, Professional Association, Academia, PRHIA, Office of the Commissioner of Insurance, CoPuReDa, Multi-sectoral Council in Support of the Homeless Population, Insurance Companies</p>	<ul style="list-style-type: none"> • Results report of the evaluation of disparities and inequalities. • Quarterly report of disparities on viral load suppression by age groups and risk factors.
	<p>Adapt the evidence-based strategies that address disparities and inequalities identified for populations of young people and PID living with HIV to access HIV care services.</p>	<p>Service providers, Government agencies, Faith-based organizations, CBOs</p>	<p>2018-2019</p>	<p>PRDOH (OCASET), Funds recipients for HIV services, Planning Advisory Bodies, Ryan White Interparts Committee, MHAASA, Service Providers, Professional Associations, Academia, PRHIA, Office of the Commissioner of Insurance, CoPuReDa, Multi-sectoral Council in Support of the Homeless Population, Insurance Companies, PRPD</p>	<ul style="list-style-type: none"> • List of evidence-based strategies tailored to address the disparities and inequalities identified.
	<p>Provide training to health care providers on identified evidence-based strategies targeted towards young people and PID living with HIV.</p>	<p>Clinical Service Providers</p>	<p>2019-2020</p>	<p>PRDOH (OCASET), AETC, Funds recipients for HIV services, MHAASA, Service Providers, Professional Associations, Academia, PRHIA, Office of the Commissioner of Insurance, Academia, CoPuReDa, Multi-sectoral Council in Support of the Homeless Population, PRPD</p>	<ul style="list-style-type: none"> • Number of educational and training activities undertaken, including activity (s) title (s) and date (s) in which they were offered. • Number of clinical service providers who participated in

					the training on evidence-based strategies identified.
	Implement evidence-based strategies identified for populations of young people and PID living with HIV.	Clinical Service Providers	2019-2021	PRDOH (OCASET), AETC, Funds recipients for HIV services, MHAASA, Service Providers, Professional Associations, Academia, PRHIA, Office of the Commissioner of Insurance, Academia, CoPuReDa, Multi-sectoral Council in Support of the Homeless Population, PRPD	<ul style="list-style-type: none"> List of evidence-based strategies that were implemented.
	Assess the reach of the strategies implemented in the populations of young people and PID living with HIV.	Clinical Service Providers	2020-2021	PRDOH (OCASET), AETC, Funds recipients for HIV services, MHAASA, Service Providers, Professional Associations, Academia, PRHIA, Office of the Commissioner of Insurance, Academia, CoPuReDa, Multi-sectoral Council in Support of the Homeless Population, PRPD	<ul style="list-style-type: none"> Level of compliance corresponding to implementing measures/indicators developed for the strategies related to: <ul style="list-style-type: none"> Viral load suppression Linkage to services for HIV care ARV Retention in care
Strategy	Activities	Target populations	Timeframe	Responsible/Collaborators	Indicators
3.1. B To promote quality improvement projects aimed at achieving viral load suppression among both the young and PID living with HIV.	Identify the number of young people and PID living with HIV who meet the criteria of non-suppressed viral load in each clinical center.	Young people and PID living with HIV with non-suppressed viral load	Continuous during the period	Funds recipients for HIV services, PRDOH (OCASET, AIDS Surveillance Office), CAREware Administrators	<ul style="list-style-type: none"> Number of young people and PID living with HIV who meet the criteria of non-suppressed viral load in each clinical center.
	Implement quality improvements projects focusing on reaching viral load suppression in the young and PID living with HIV	Clinical Service providers	2018-2021	Funds recipients for HIV services, PRDOH (OCASET), CAREware Administrators, AIDS Surveillance Office, Planning Advisory Bodies,	<ul style="list-style-type: none"> List quality improvement projects

				Ryan White Interparts Committee, MHAASA	
	Monitor viral loads of PLWH identified in each clinical center.	People living with HIV with unsuppressed viral load	Continuous during the period	Fund recipients for HIV prevention and treatment services, PRDOH (OCASET), CAREware Administrators, AIDS Surveillance Office, Planning Advisory Bodies, Ryan White Interparts Committee, MHAASA	<ul style="list-style-type: none"> Quarterly report on compliance with the implementing measure related to the suppression of viral load for each clinical center
Strategy	Activities	Target populations	Timeframe	Responsible/Collaborators	Indicators
3.1. C To educate the young and PID living with HIV populations around available prevention and care services and the importance of retention in care and adherence to treatment, respectively.	Identify the appropriate orientation strategies using a study or assessment among the young people and PID.	Case management and service navigators component, health educators and other personnel related to adherence	2017-2018	PRDOH (OCASET), Funds recipients for HIV services, Planning Advisory Bodies, MHAASA, CoPuReDa, Municipalities, Multi-sectoral Council in Support of the Homeless Population, PRPD	<ul style="list-style-type: none"> List of appropriate orientation strategies identified for young people and PID.
	Implement counseling strategies on available services and the importance of retention in care and adherence to treatment targeted to the young and PID populations living with HIV	Young and PID	2018-2021	PRDOH (OCASET), Funds recipients for HIV services, clinical service providers, Ryan White Interparts Committee, Planning Advisory Bodies, MHAASA, CoPuReDa, Municipalities, Multi-sectoral Council in Support of the Homeless Population, PRPD	<ul style="list-style-type: none"> List of implemented strategies to provide guidance to young people and PID about available services and the importance of retention and adherence to treatment
	Evaluate retention and adherence in HIV care of the young and PID populations living with HIV.	Young and PID	2020-2021	PRDOH (OCASET), Funds recipients for HIV services, clinical service providers, Ryan White Interparts Committee, Planning Advisory Bodies, MHAASA, CoPuReDa, Municipalities, Multi-sectoral Council in Support of the Homeless Population, PRPD	<ul style="list-style-type: none"> Level of compliance with the implementing measures/indicators of retention and adherence in the young and PID populations.

Objective 3.2 Reduce geographical disparities in care and support services for PLWH.

Strategy	Activities	Target populations	Timeframe	Responsible/Collaborators	Indicators
<p>3.2 A To address the social determinants of health and co-factors contributing to the increase of new HIV cases through mechanisms that will ensure equal access to treatment and supportive services.</p>	Design and conduct an assessment to identify the social health determinants associated with HIV.	PLWH	2017-2018	PRDOH (OCASET), Ryan White Interparts Committee, Planning Advisory Bodies, CoPuReDa, Academia, Government Agencies, Municipalities, Municipal Consortiums, Funds recipients for HIV services	<ul style="list-style-type: none"> • Outcomes report of the study designed to identify the social determinants of health associated with HIV. • List of social determinants of health identified according to the study
	Establish culturally sensitive initiatives to address the most significant social determinants of health associated to HIV, identified through the assessment.	Service providers	2018-2021	PRDOH (OCASET), Ryan White Interparts Committee, Government Agencies, Municipalities, Municipal Consortiums, Funds recipients for HIV services, Academia	<ul style="list-style-type: none"> • List of social determinants of health identified according to the study
	Monitor and evaluate the level of culturally sensitive initiatives that were implemented.	Service providers	2018-2021	PRDOH (OCASET), Ryan White Interparts Committee, Planning Advisory Bodies, Funds recipients for HIV services	<ul style="list-style-type: none"> • Level of execution/compliance of indicators or measures that were developed for the initiatives established to address social determinants.

Strategy	Activities	Target populations	Timeframe	Responsible/Collaborators	Indicators
3.2 B To establish health service and supportive projects to meet the needs identified in the east, south east, southwest and northwest regions of PR, as defined by the PR Department of Health.	Establish a working committee that includes representation of the regions identified.	HIV providers by region, east, southeast, southwest and northwest of PR. Affected community	2018-2019	PRDOH (OCASET), Planning Advisory Bodies ³⁰ , Ryan White Interparts Committee, Government Agencies, Municipalities	• Established working committee with representation from the identified regions.
	Make an inventory of non-available but necessary services in the identified regions.	Working committee Service providers	2019	PRDOH (OCASET), Fund recipients for HIV services, Planning Advisory Bodies, Ryan White Interparts Committee, Municipalities, Community Health Centers (CHCs, by its English acronym).	• Evidence of inventory of non-available and needed services in the regions identified.
	Identify available funds to meet the needs of identified services.	Service providers	2018	PRDOH (OCASET), Service Providers, Planning Advisory Bodies, Ryan White Interparts Committee, CHCs	• Identified available funds.
	Include the unavailable services that are necessary in the provider's services plan for the identified regions.	Service providers	2019-2021	PRDOH (OCASET), Fund recipients for HIV services, Planning Advisory Bodies, Ryan White Interparts Committee, Municipalities, CHCs	• List of necessary services not available that were added to the provider's services plan.

³⁰By Planning Bodies we refer to HIV Prevention Planning Group, the Ryan White Part B/ADAP Planning Body and the San Juan EMA Planning Council.

Strategy	Activities	Target populations	Timeframe	Responsible/Collaborators	Indicators
3.2 C To establish mechanisms to reduce stigma and discrimination towards PLWH in the workplace.	Identify effective strategies to promote the leadership of PLWH in the workplace setting.	PLWH	2017-2018	PRDOH (OCASET), Ryan White Interparts Committee, PRDLHR, Planning Advisory Bodies, Fund recipients for HIV services, Patient Attorney's Office, Civil Rights Commission	<ul style="list-style-type: none"> List of identified effective strategies.
	Develop a work plan to disseminate information on the rights of PLWH to which they are entitled to, including labor protections.	Planning Advisory Bodies	2018-2019		<ul style="list-style-type: none"> Work plan to disseminate information about the treatment and rights of PLWH developed
	Evaluate interventions that were implemented as part of the work plan developed.	Planning Advisory Bodies	2019-2021		<ul style="list-style-type: none"> Report of evaluations results of implemented interventions. Execution level/compliance of the indicators or execution measures corresponding to the indicators that were developed for each of the implemented interventions as part of the Work Plan.

Objective 3.3 Reduce disparities in the rate of new diagnoses by at least 3 percent in the following groups: men who have sex with men, young MSM, Women with heterosexual behavior and Trans Population.

Strategy	Activities	Target Populations	Timeframe	Responsible/Collaborators	Indicators
3.3A To expand the scope of evidence-based programs that address the social determinants of health.	Make use of the available data and existing researches to determine disparities in new HIV diagnoses.	Young MSM, MSM, Women with heterosexual behavior, Trans population	September, 2019	Academia, PRDOH (OCASET), Planning Advisory Bodies	• Number of disparities identified
	Identify evidence-based interventions to reduce disparities related to new HIV diagnoses.	Young MSM, MSM, Women with heterosexual behavior, Trans population	2020	PRDOH (OCASET), Academia, Fund recipients for HIV services	• List of identified EBIs
	Disseminate and facilitate the implementation of evidence-based interventions to reduce disparities related to new HIV diagnoses.	Service providers	2020-2021	PRDOH (OCASET), Fund recipients for HIV services	• Number of EBIs that were implemented
	Monitor the implementation of evidence-based interventions to reduce disparities related to new HIV diagnoses.	Service providers	2020-2021	PRDOH (OCASET), Service Providers, Fund recipients for HIV services	• Number of providers implementing the EBIs
Strategy	Activities	Target Populations	Timeframe	Responsible/Collaborators	Indicators
3.3 B To promote multi sectoral collaboration to reduce HIV stigma and discrimination in the MSM, young MSM, trans, and	Adopt best practices that are culturally sensitive to the MSM, young MSM, trans, and heterosexual women populations.	Young MSM, MSM, Women with heterosexual behavior, Trans Population	2019	PRDOH (OCASET), Funds recipients for HIV prevention and treatment services, Ryan White Interparts Committee, Planning Bodies ,HIV Service Providers, Civil Rights Commission	• Number of best practices adapted

heterosexual women populations.	Provide training to healthcare service providers on best practices adapted to be culturally sensitive to MSM, young MSM, trans, and heterosexual women populations.	Service providers, in particular the case management component and service navigator	2020	PRDOH (OCASET), Ryan White Interparts Committee, AETC, Academia, Civil Rights Commission	<ul style="list-style-type: none"> • Number of training activities • Number of providers who participated in training activities
	Educate the service providers to reduce stigma and discrimination based on sexual orientation, including aspects related to sexual identity, gender expression and prevention of gender-based violence.	People living with HIV	Continuous during the period	PRDOH (OCASET) Funds recipients for HIV services, Ryan White Interparts Committee, Planning Advisory Bodies, Civil Rights Commission, Academia	<ul style="list-style-type: none"> • Number of educational activities undertaken. • Number of providers who participated in training activities
	Promote, among health and case management related professionals, the requirement of continuous education addressing elimination or reduction of stigma and discrimination based on sexual orientation, gender expression and prevention of gender-based violence.	Health related professions and case management	2018	PRDOH (OCASET, Legal Division), Examining Boards	<ul style="list-style-type: none"> • Number of credits required in those subjects
	Develop educational campaigns on stigma and discrimination to empower the MSM and transgender populations.	Young MSM, MSM, Women with heterosexual behavior, Trans Population	Continuous during the period	PRDOH (OCASET) Funds recipients for HIV services, Ryan White Interparts Committee, Planning Advisory Bodies, Patient Attorney's Office, Academia, Commission of Civil Rights, alliances with the private sector	<ul style="list-style-type: none"> • Number of educational campaigns designed • Number of educational campaigns published • Date and duration of the campaign • Outreach media • Number of people impacted
	Implement community mobilization strategies to reduce stigma and discrimination towards the MSM and transgender populations.	Young MSM, MSM, Women with heterosexual behavior, Trans Population	2018-2021	PRDOH (OCASET, Communications Office), Funds recipients for HIV services, Planning Advisory Bodies, Patient Attorney's Office, Academia, AETC, CBOs, Insurance Companies, Private Sector, Associations of Health	<ul style="list-style-type: none"> • Number of implemented strategies • Number of persons/entities involved • Number of people impacted

Strategy	Activities	Target Populations	Timeframe	Responsible/Collaborators	Indicators
3.3 C To develop a multi sectoral collaboration to reduce HIV stigma and discrimination against people living with HIV.	Adopt best practices that are culturally sensitive to people living with HIV, focused on reduction of stigma and discrimination.	PLWH	2019	PRDOH /OCASET, Ryan White Interparts Committee and Planning Advisory Bodies	<ul style="list-style-type: none"> • Number of best practices adapted
	Provide training to health care providers on best practices that are culturally sensitive to people living with HIV.	Service providers	2020	PRDOH (OCASET) Fund recipients for HIV prevention and treatment services, Ryan White Interparts Committee , Planning Advisory Bodies , AETC, Pharmaceutical Companies	<ul style="list-style-type: none"> • Number of training activities carried out. • Number of providers who participated in the training activities.
	Educate health care providers to address stigma and discrimination against people living with HIV.	Service providers	Continuous during the period	PRDOH (OCASET) Fund recipients for HIV prevention and treatment services, Ryan White Interparts Committee , Planning Advisory Bodies, Civil Rights Commission	<ul style="list-style-type: none"> • Number of educational activities carried out. • Number of providers who participated in educational activities
	Educate the staff working in the media around the existing stigma and discrimination against people living with HIV.	Service providers	Continuous during the period	PRDOH (OCASET) Fund recipients for HIV prevention and treatment services, Ryan White Interparts Committee , Planning Advisory Bodies, Civil Rights Commission	<ul style="list-style-type: none"> • Number of educational activities carried out. • Number of providers who participated in educational activities
	Develop educational campaigns aimed to reduce stigma and discrimination and to empower people of the population living with HIV.	PLWH	2020	PRDOH (OCASET) Fund recipients for HIV prevention and treatment services, Ryan White Interparts Committee , Planning Advisory Bodies, Patient Attorney's Office, Academia	<ul style="list-style-type: none"> • Number of educational campaigns designed • Number of educational campaigns published

					<ul style="list-style-type: none"> • Date and duration of the campaign • Outreach media • Number of people impacted
	Implement community mobilization strategies to reduce stigma and discrimination against people living with HIV.	People living with HIV	2018-2021	PRDOH (OCASET) Fund recipients for HIV prevention and treatment services, Partnerships with the private sector, Academia	<ul style="list-style-type: none"> • Number of implemented strategies • Number of persons/entities involved • Number of people impacted

GOAL 4:

Achieve a more coordinated National Response to
the HIV Epidemic

Objective 4.1 Promote a public policy aimed at integrating the efforts for surveillance, prevention and treatment of HIV.

Strategy	Activities	Target Populations	Timeframe	Responsible/Collaborators	Indicators
<p>4.1. A To create a Multi-sectoral committee to strengthen the public policy and promote greater involvement of the jurisdiction's sectors related to surveillance, prevention and care of HIV/AIDS, STIs, viral Hepatitis and TB in PR.</p>	Create the Multi-sectoral committee.	Multi-sectoral (Government Agencies, Private entities, Legislature, Service providers, CBOs, HIV Community)	2017	PRDOH (OCASET, Legal Office), Planning Advisory Bodies, Fund recipients for HIV services, CBOs, HIV Community, Health Advisor of the Executive Branch, CoPuReDa, Representative of the legislature, PRHIA, Office of the Commissioner of Insurance, Service Providers	<ul style="list-style-type: none"> Established multi-sectoral Committee List of members by sector they represent
	Develop strategies to address the needs of public policy identified in the Integrated Plan.	Multi-sectoral (Government Agencies, Private entities, CBO, HIV Community)	2018	Multi-sectoral Committee, Community	<ul style="list-style-type: none"> List of strategies to address the needs of public policy
	Disseminate the strategies developed among various stakeholders for input.	Multi-sectoral (Government Agencies, Private entities, CBO HIV Community)	2018	Multi-sectoral Committee, HIV Community	<ul style="list-style-type: none"> List of disseminated strategies <ul style="list-style-type: none"> signature of the representatives of different groups and date evidencing the dissemination to stakeholders List of comments and recommendations issued by the stakeholders to who the strategies were reported
	Present a package of legislative and regulatory measures that provides an integrated and culturally sensitive response for surveillance, prevention and care of HIV, STIs, TB and viral Hepatitis.	Legislature	2018-2019	Multi-sectoral Committee, HIV Community	<ul style="list-style-type: none"> Legislative and regulatory packages submitted List of legislative and regulatory measures presented to provide an integrated and culturally sensitive response for surveillance, prevention and treatment of HIV, STI, TB and viral Hepatitis.

Strategy	Activities	Target Populations	Timeframe	Responsible/Collaborators	Indicators
	Identify the criteria for evaluating public policy changes proposed by the committee.	Multi-sectoral (Government Agencies, Private entities, CBO, HIV Community))	2020	Multi-sectoral Committee	<ul style="list-style-type: none"> List of criteria / indicators developed in response to changes in public policy derived from the work of the Multi-sectoral Committee
4.1. B Use an approach based on best practices to strengthen the coordination of efforts between the Planning Advisory Bodies on the implementation of the Integrated Plan.	Identify the best practices to strengthen the coordination of efforts between the Planning Bodies for the implementation of the plan.	Planning Advisory Bodies	2017	PRDOH, Planning Advisory Bodies	<ul style="list-style-type: none"> List of identified best practices to strengthen the coordination of efforts between the Planning Advisory Bodies
	Implement the best practices identified to strengthen the coordination of efforts between the Planning Bodies for the implementation of the plan.	Planning Advisory Bodies	2018	PRDOH, Planning Advisory Bodies	<ul style="list-style-type: none"> List of the best implemented practices to enhance the coordination of efforts between the Planning Advisory Bodies
	Monitor the implementation the best practices to strengthen the coordination efforts between the Planning Advisory Bodies for the implementation of the plan.	Planning Advisory Bodies	2019	PRDOH, Planning Advisory Bodies	<ul style="list-style-type: none"> Quarterly reports about the implementation of best practices to strengthen the coordination of efforts between the Planning Advisory Bodies. List of implementing/indicators measures developed to monitor the implementation and compliance with practices implemented. Quarterly report about the level of compliance with the measures/indicators related to the implemented practices to strengthen the coordination of efforts between Planning Advisory Bodies

Strategy	Activities	Target Populations	Timeframe	Responsible/Collaborators	Indicators
4.1.C To educate stakeholders around changes in public policy that affect the provision of services related to prevention and care of for HIV	Identify the appropriate communication channels to share with stakeholders changes in policies.	Multi-sectoral (Government Agencies, Private entities, CBO, HIV Community, Legislature)	Continuous during the period	PRDOH (OCASET, Communications), HIV Community, Multi-sectoral Committee, Legislature, Academia, Communications Schools	<ul style="list-style-type: none"> List of identified communication channels, according to the stakeholders and to policies developed.
	Implement outreach and education activities and strategies.	Multi-sectoral (Government Agencies, Private entities, CBO, HIV Community)	Continuous during the period	PRDOH (OCASET, Communications), HIV Community, Multi-sectoral Committee, Academia, Communications Schools	<ul style="list-style-type: none"> Identified communication channels List of activities and education strategies that were implemented to instruct and notify changes in public policy resulting from the efforts of the Public Policy Committee List of activities and dissemination strategies that were implemented to communicate and disseminate public policy changes that took effect. Type of disclosure media used.

Objective: 4.2 To develop and/or enhance planning and collaboration to support a coordinated response to HIV in terms of prevention, care and treatment.

Strategy	Activities	Target Populations	Timeframe	Responsible/Collaborators	Indicators
4.2.A To educate or provide information on an annual basis around about the of HIV / AIDS, STIs, viral Hepatitis and TB epidemiology in PR.	Design the strategies for education and information dissemination.	PRDOH AETC Planning Advisory Bodies	2017	PRDOH (OCASET, Epidemiological Surveillance, Communications Office), PRHA, Office of the Commissioner of Insurance, Planning Advisory Bodies, AETC	<ul style="list-style-type: none"> List of strategies designed to educate periodically on the epidemiology and services available for HIV/AIDS, STIs, viral Hepatitis B and TB prevention and care List of strategies designed for the dissemination of epidemiological information and services available

					for HIV/AIDS, STIs, viral Hepatitis B and TB prevention and care
	Identify the fields to be included in a periodical publication addressing the HIV/STIs, viral Hepatitis and TB epidemiology in PR.	PRDOH (OCASET, Epidemiological Surveillance) Planning Advisory Bodies, AETC, Academia	2017	PRDOH (OCASET, Epidemiological Surveillance, Communications Office), PRHIA, Office of the Commissioner of Insurance, Planning Advisory Bodies, AETC	<ul style="list-style-type: none"> List and operational definition of the fields to be identified to be included in the periodical publication about epidemiology and HIV/STIs, TB and viral Hepatitis in PR Structure or outline of the publication in which the fields/elements to be included in the periodical publication on epidemiology and HIV/STIs, viral Hepatitis and TB in PR are identified
	Develop a periodical publication.	PRDOH	2018	PRDOH (OCASET, Epidemiological Surveillance, Communications Office), PRHIA, Office of the Commissioner of Insurance, Planning Advisory Bodies, AETC	<ul style="list-style-type: none"> Copy of the periodical publication about epidemiology and HIV/STIs, TB and Hepatitis services in PR Number of publications distributed Estimated impact based on the average of people exposed per copy
	Conduct forums to support the integration, coordination and collaboration of the sectors who are consumers of information related to HIV/AIDS, STI, viral Hepatitis and TB epidemiological information in PR.	PRDOH (OCASET, Epidemiological Surveillance) Planning Advisory Bodies, AETC, Academia	2019	PRDOH (OCASET, Epidemiological Surveillance, Communications Office), PRHIA, Office of the Commissioner of Insurance, Planning Advisory Bodies, AETC	<p>Evidence that the forums took place:</p> <ul style="list-style-type: none"> Date and duration Number of representatives who attended, corresponding to the different sectors/agencies/organizations.
Strategy	Activities	Target Populations	Timeframe	Responsible/Collaborators	Indicators
4.2. B To establish mechanisms for accountability around the Integrated Plan strategies.	Implement the processes of gathering information from service providers to document	PRDOH, Planning Advisory Bodies	2017	PRDOH (OCASET, Surveillance Office, Assistant Secretariat of Planning), SJEMA, Community, Planning Advisory Bodies, Service Providers, Funds recipients for HIV services,	<ul style="list-style-type: none"> List of processes and information collection mechanisms that were implemented so that service providers can document the work done in order for the progress of the activities

	the progress of activities of the Integrated Plan.				established under the Integrated Plan to be demonstrated.
	Determine the level of compliance with the strategies proposed in the Integrated Plan.	PRDOH, Planning Advisory Bodies	2017-2021	PRDOH (OCASET, Surveillance Office, Assistant Secretariat of Planning), SJEMA, HIV Community, Planning Bodies, Service Providers, Funds recipients for HIV services,	<p>Level of compliance with the strategies proposed in the Integrated Plan.</p> <ul style="list-style-type: none"> • List of developed implementing measures/indicators developed to monitor the implementation and corresponding progress to the strategies proposed in the Integrated Plan • Quarterly Reports of compliance with the implementing measures/indicators developed to monitor the implementation and corresponding progress to the strategies proposed in the Integrated Plan.
	Disseminate information to stakeholders on the progress and compliance with the Integrated Plan	HIV Community, Service Providers and other groups of stakeholders	2017-2021	PRDOH (OCASET, Surveillance Office, Assistant Secretariat of Planning), HIV Community, Planning Bodies, Service Providers, Funds recipients for HIV services,	<ul style="list-style-type: none"> • Quarterly progress and compliance reports presented to the stakeholders groups <ul style="list-style-type: none"> ○ Signed procedure sheets of different groups and date, evidencing the dissemination and compliance of the Quarterly Progress Report with respect to the strategies proposed in the Integrated Plan.
	Develop and implement measures and strategies to ensure compliance and progress of the Integrated Plan	PRDOH, Planning Advisory Bodies, Service Providers	2017-2021	PRDOH (OCASET, Surveillance Office, Assistant Secretariat of Planning), HIV Community, Planning Bodies, Service Providers, Funds recipients for HIV services,	<ul style="list-style-type: none"> • List of developed and implemented measures

Strategy	Activities	Target Populations	Timeframe	Responsible/Collaborators	Indicators
4.2. C To establish a virtual network for the beneficiaries of the Health Insurance Plan of the Government of PR to make available access to integrated health services anywhere on the island, including mental health and problematic substance use services.	Coordinate meetings with individuals or groups of interest	HIV Community and Service Providers, PRHIA	2017	Insurance Companies, Ryan White Interparts Committee, Planning Advisory bodies PRHIA, PRDOH (OCASET), Patient Attorney's Office, Service Providers	<ul style="list-style-type: none"> • Number of meetings • Number and sectors representing the entities that participated in the meetings, Assistance Register of participants in the meetings • Meetings minutes
	Identify mechanisms to make the necessary changes in contracting with providers.	Service providers PRHIA	2017	Insurance Companies, Ryan White Interparts Committee, Planning Advisory bodies PRHIA, PRDOH (OCASET), Patient Attorney's Office, Service Providers	<ul style="list-style-type: none"> • List of efforts or mechanisms identified to establish necessary changes in the contracting of providers
	Implement the changes identified in contracting with providers.	Service providers PRHIA	2018-2021	Insurance Companies, Ryan White Interparts Committee, Planning Advisory bodies PRHIA, PRDOH (OCASET), Patient Attorney's Office, Service Providers	<ul style="list-style-type: none"> • List of changes implemented in the process of contracting providers
	Evaluate the implementation of the new virtual model.	Service providers PRHIA	2021	Insurance Companies, Interparty Committees, Planning bodies PRHIA, PRDOH (OCASET), Patient Advocate Office, Service Providers	<ul style="list-style-type: none"> • Progress Reports of the implementation of the new model or system • Report on results of the implementation of the new model or system <ul style="list-style-type: none"> ○ List of enforcement measures/indicators developed to monitor the implementation of the new model resulting from changes made to the process of contracting providers. ○ Quarterly Report of compliance level with the enforcement measures/indicators developed to monitor the implementation of the new model resulting from changes made to the process of contracting providers.

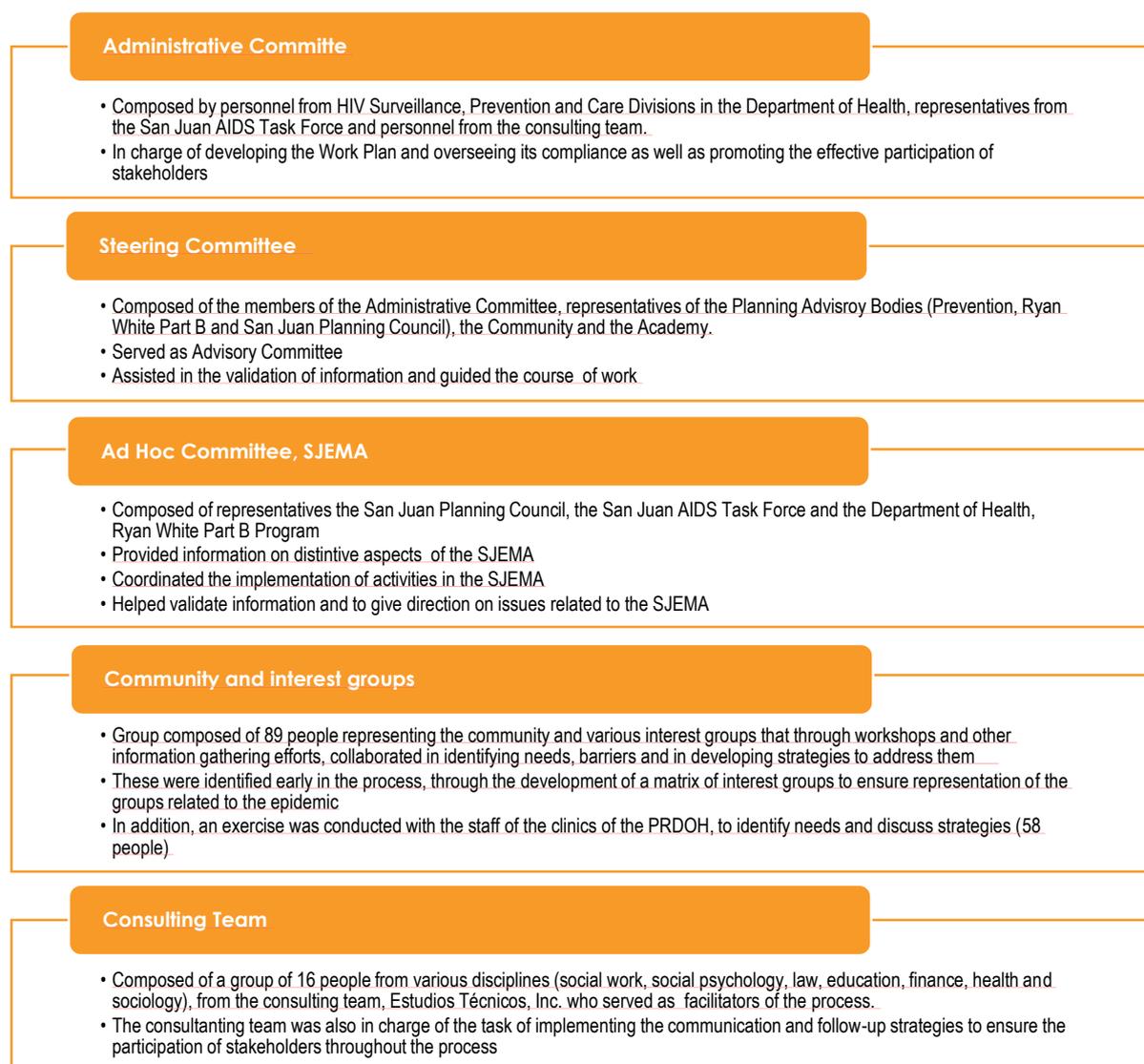
B. COLLABORATIONS, PARTNERSHIPS AND STAKEHOLDER INVOLVEMENT

SPECIFIC CONTRIBUTIONS OF STAKEHOLDERS

The Integrated Plan was developed through a multi-method approach of participatory/empowerment planning, through which representatives of the government, community infected and affected by HIV, non-profit organizations, public institutions, the Academia and other stakeholders participated in the identification and prioritization of needs and the development of strategies to address the gaps in services. The purpose of using this type of approach was to lay the foundations for the structure of collaborations and integration, needed to implement the Integrated Plan and achieve a coordinated response to HIV in PR.

To ensure the participation of the community, the Planning Advisory Bodies and the different stakeholders, a structure of five committees or working groups was established, as described in the following Figure.

Figure 39: Working groups involved in the planning process

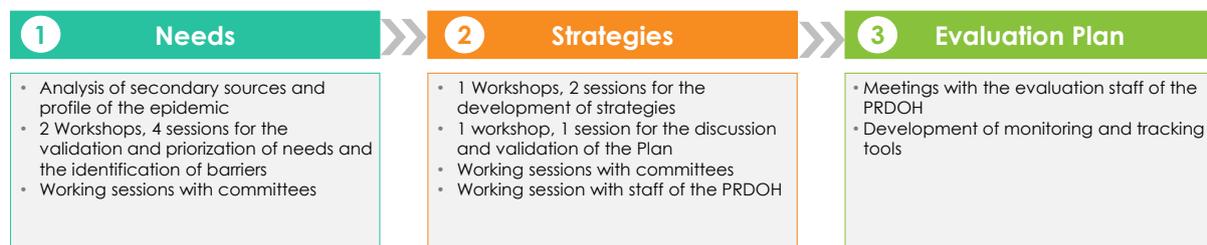


Moreover, the work and activities carried out were organized in three stages, as presented in the figure below. This allowed the representatives of the various groups to participate in the process to actively:

- identify the needs, gaps and barriers,
- develop strategies and activities, and
- validate the Plan.

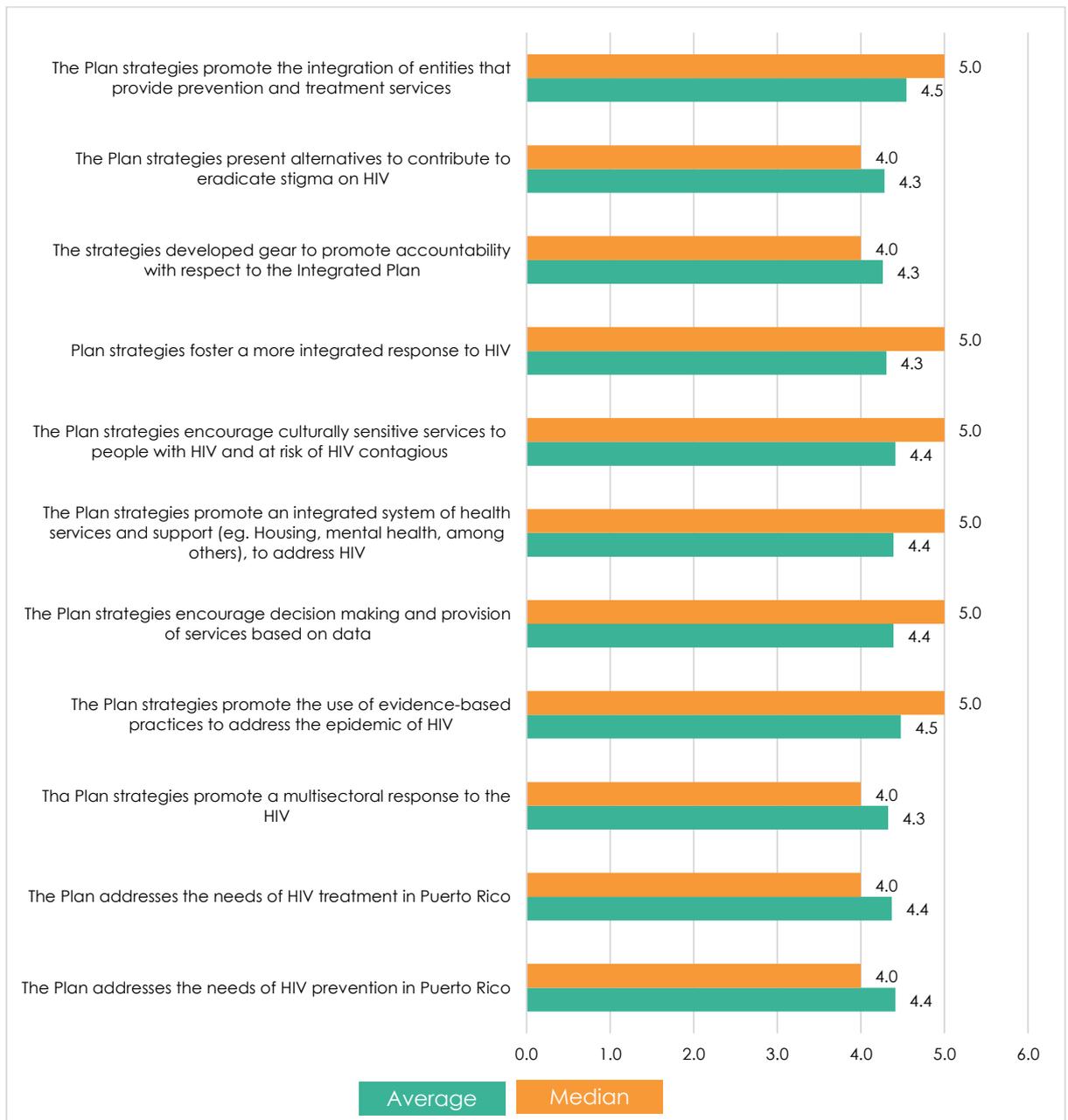
To keep participants active throughout the process, various strategies were used, including meetings to informing around the process, follow-up calls and sending materials via the Internet. It should be noted that the approach used in the SJEMA for the preparation of the Integrated Plan was similar to that used for the Jurisdiction (PR). In addition, representatives of the AIDS Task Force and San Juan Planning Council participated in the activities of the jurisdiction.

Figure 40: Integrated Plan development stages



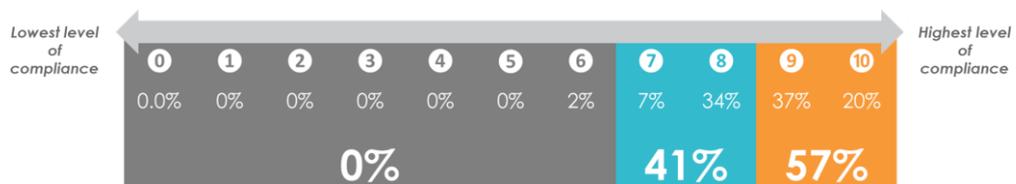
During the last workshop for the validation of the Integrated Plan, participants had the opportunity to discuss in detail the strategies and activities proposed. They also completed an individual exercise, where they analyzed the Integrated Plan in light of the parameters established in the guidance provided by CDC and HRSA for integrated planning. The results of this exercise are included below.

Figure 41: Results of the individual validation exercise



Note: The base of this illustration is made up of the 48 people who participated of the last workshop and completed the validation exercise.

Figure 42: Points given to the draft presented with respect to compliance with the requirements of the CDC and HRSA for the elaboration of the plan



GROUPS OF INTEREST NOT PRESENT IN THE PLANNING PROCESS

The different stages presented in Figure 40, had the participation of all the groups that were initially identified as part of the interest groups related to HIV in PR and the SJEMA. However, during conversations with the stakeholders, other interest groups were identified, which are understood to be important for purposes of the implementation of the strategies. These include, representatives of the private sector (private insurance and pharmaceutical companies, among others) and Government agencies like the Department of Education, and the PR Police Department. The Department of Health, as part of the dissemination of the Integrated Plan activities, will be contacting and conducting activities with these groups of interest.

PROVIDE LETTER OF CONCURRENCE

The letter of concurrence signed by both Planning Advisory Bodies is included as an attachment.

C PEOPLE LIVING WITH HIV (PLWH) AND COMMUNITY ENGAGEMENT

A – HOW ARE PEOPLE INVOLVED IN INTEGRATED PLAN DEVELOPMENT

As mentioned in a previous section, at the beginning of the planning process a matrix of stakeholders, was developed to ensure that the different groups related to the epidemic were represented during the process. Consequently, during the planning process, community members as well as representatives of groups with risks behaviors or the entities that provide services to these populations were represented, including: PID, MSM, homeless persons and the Trans Population, among others.

B – DESCRIBE THE INCLUSION OF PLWH WITH INTEGRATED PLAN DEVELOPMENT

PLWH contributed to the Integrated Plan in two ways: through the participation in the work groups described in the Figure 39, and through the presentations to the Planning Advisory Bodies. Of the total of participants of the workshops carried out for the identification of needs and development of strategies, 12% identified themselves as members of the HIV-positive community (Figure 43).

Figure 43: Representation by sector

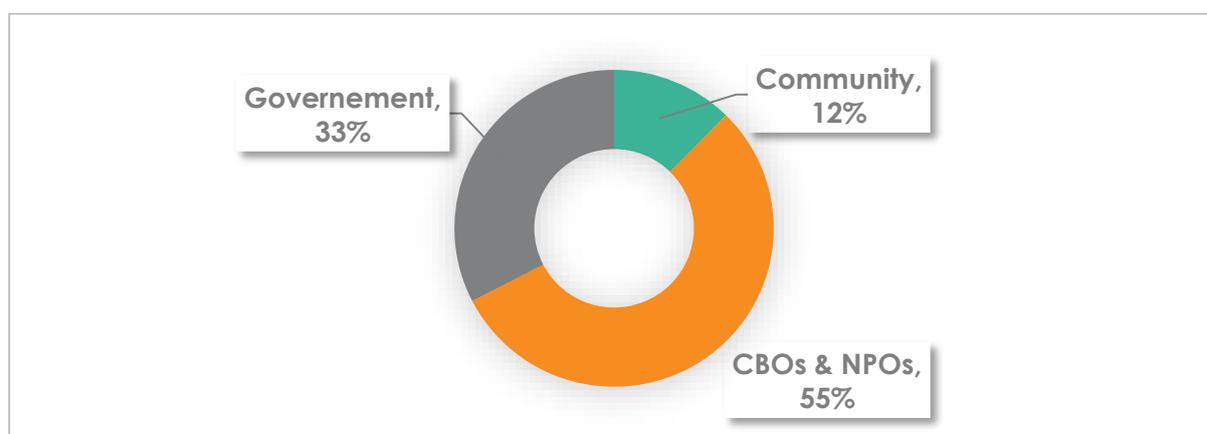
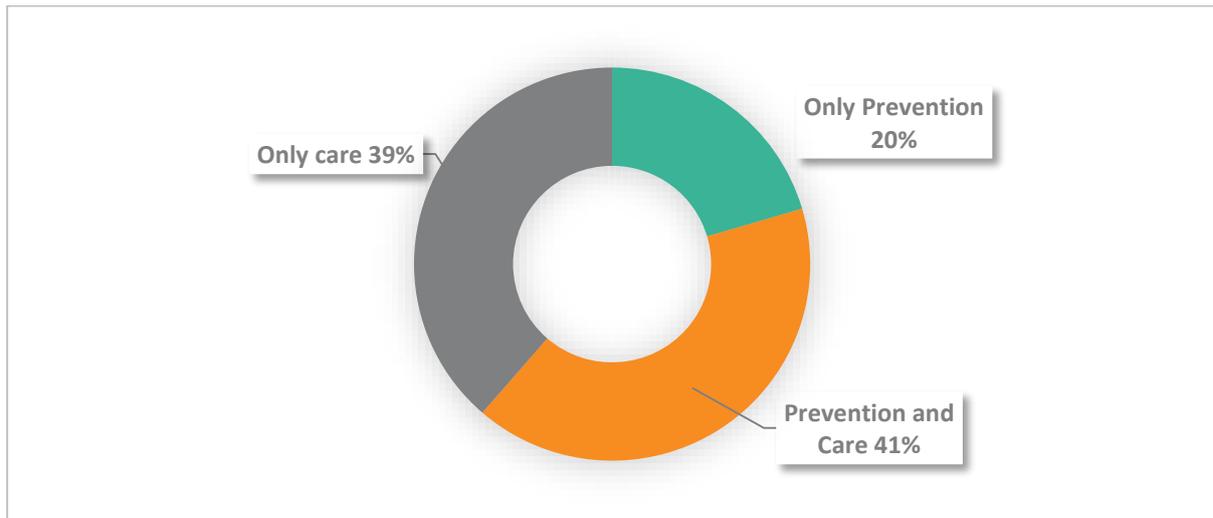


Figure 44: Distribution of participants by type of services



Note: The base of this illustration consists of the 89 people who participated in the workshops held for the development of the Plan.

C – METHODS FOR INVOLVING COMMUNITIES, PEOPLE LIVING WITH HIV AND POPULATIONS WITH RISK BEHAVIOURS IN THE IDENTIFICATION OF NEEDS AND THE PLANNING PROCESS

As mentioned in a previous section, the process to develop the Integrated Plan was based on a multi-method participatory/empowerment approach, which promoted the active involvement and representation of people living with HIV and populations with risky behaviors to ensure that it responded to the prevention and care needs of these populations. For purposes of maintaining the community engaged in the process, different approaches were used, including: workshops, meetings, sending material via Internet and telephone follow-up calls. The use of these different mechanisms allowed representatives of these various groups of stakeholders to actively participate in the identification of needs, but also in the development of strategies and activities that form the Jurisdiction's and the SJEMA Plans.

SECTION III: MONITORING AND IMPROVEMENT

A. PROCESSES TO PROVIDE INFORMATION ON A REGULAR BASIS TO PLANNING BODIES AND STAKEHOLDERS ABOUT THE PROGRESS OF THE PLAN

As part of the Integrated Plan's development process, a permanent Steering Committee was established with personnel representing the different divisions of the Department of Health that work with HIV Surveillance, Prevention and Care as well as other parties, including representatives of the Planning Advisory Bodies of Prevention, Ryan White Part B and Ryan White Part A programs, the Academia and the Community. Additional members will be added as necessary - including representatives of the Ryan White Interparts Committee³¹. The aim of this work group is to provide guidance and feedback for its implementation. For this, fixed meetings will be set on a quarterly basis.

The Steering Committee will also be a link with the Planning Advisory Bodies³². In a quarterly basis, the PR Health Department will issue progress reports and a space will be separated during the periodic meetings held by the Planning Advisory Bodies to present the reports and receive feedback. The feedback received during these meetings will be discussed at the quarterly meetings of the Steering Committee, to develop measures to address the areas of recommendation.

At the end of each program year, a summary report will be published, with the products and results of the Integrated Plan at that time. This report will be shared and discussed with the Planning Advisory Bodies and the Steering Committee to identify adjustments, amendments or measures necessary to ensure compliance and progress of the Plan. Similarly, the report will be available on the website of the Department of Health to receive feedback and comments from citizens.

B. PLAN TO MONITOR AND EVALUATE THE IMPLEMENTATION OF THE GOALS AND OBJECTIVES OF THE INTEGRATED PLAN

The PR Department of Health developed an evaluation plan that will allow for the monitoring of the implementation of the Integrated Plan, based on the principles of process evaluation and the evaluation outcomes.

Through an approach that will use various sources of information, data and indicators on the products of the established activities and the results with respect to the four goals of the NHAS will be collected. The sources to be used will include, among others:

- monthly reports of service providers and recipients of funds for prevention and care services;

³¹ The Ryan White Interparts Committee is the body composed of administrators of RW programs in Puerto Rico, in charge of strengthening the coordination and delivery of services for people living with HIV through collaboration, discussion and management decisions of the parties that make up the Ryan Act White in Puerto Rico.

³² In this instance the Phrase Planning Advisory Bodies, include the RW Interparts Committee.

- information and official statistics from the HIV Surveillance System of the Department of Health of PR;
- studies commissioned by the Planning Advisory Bodies; and
- data from other official sources such as:
 - Prevention: the STD Management Information System, Evaluation Web® (tests related), locally developed database for condoms distribution intervention;
 - Care: CAREWare, local database of the Ryan White Program, Early Identification of Individuals with HIV (EIIHA Database);
 - Database of the Linkage to care staff (TEC Database), database of Community Outreach personnel (TAC Database), and the Pharmacy Benefit Manager (PMB) database;
 - Database of the PR Health Insurance Administration;
 - Databases available in the Secretariat of Planning and Development of the Department of Health (reports on the utilization of private insurance companies).

In instances where data depends on reports to be provided by service providers, guides and standard tools for collecting information on interventions carried out by them will be developed.

The information collected through these various sources will be aggregated and submitted to the Planning Advisory Bodies and the Plan's Steering Committee, on a quarterly basis, to keep them informed on the progress of the Integrated Plan and to receive their input. The responsibilities of compiling the information, analysis and report writing will be headed by an Evaluation and Monitoring Sub-Committee of the Steering Committee, composed of representatives from the evaluation units of the divisions of HIV and STD Prevention, Ryan White Program Part B of the Department of Health, HIV/AIDS Surveillance and OCASET of the Department of Health.

For the purpose of maintaining the tract of the products of each activity the jurisdiction developed a monitoring tool using Excel that will allow the members of the Evaluation and Monitoring Sub-committee to maintain the control of the implementation schedule.

Figure 45: Example of screen of the tracking sheet developed to monitor indicators related to processes and products

PLAN INTEGRADO DE VIGILANCIA, PREVENCIÓN Y TRATAMIENTO DEL VIH EN PUERTO RICO									
Project Tracking Tool META#1									
Current Status					Deliverables				
Status	Date	Priority	Task	Objectives	Description	Deliverable(s)	Deadline	% Done	Days Left
Approved			Estrategia 1.1A		1.1.A Viabilizar la implementación de la prueba rutinaria del VIH para la población general en los escenarios clínicos.				
-			Actividad 1		Desarrollar y diseminar una guía de mejores prácticas para la implementación de la prueba rutinaria de VIH en Puerto Rico.	Guía desarrollada	6/30/2017		294
-						Número de profesionales de la salud que recibieron la guía	6/30/2017		294
-			Actividad 2		Ampliar los esfuerzos de educación y adiestramiento a profesionales de la salud sobre la prueba rutinaria y todo lo relacionado al diagnóstico.	Número de actividades y sesiones de capacitación previstas	12/31/2019		1197
-					Promover y ampliar acceso a pruebas de VIH en los escenarios clínicos mediante la implementación de las guías de mejores prácticas sobre la prueba rutinaria del VIH.	Número de participantes	12/31/2019		1197
-			Actividad 3			Número de pruebas	12/31/2019		1197
-						Número de escenarios clínicos	12/31/2019		1197
-			Actividad 4		Desarrollar e implementar una estrategia para que la prueba rutinaria del VIH sea sustentable en el largo plazo.	Número de proveedores de la salud	12/31/2019		1197
-						Estrategia desarrollada	12/31/2019		1197
-						Número de escenarios clínicos que recibieron la guía	12/31/2019		1197
-						Número de proveedores que recibieron la guía	12/31/2019		1197
-						Número de escenarios donde se mantiene el servicio de prueba rutinaria	12/31/2019		1197
-					1.1.B. Determinar esfuerzos eficientes para que los servicios de pruebas del VIH en escenarios no-clínicos se puedan proporcionar a las poblaciones de mayor				

As for the evaluation of results, it is included below the matrix of indicators by goal of the NHAS.

QUESTIONS AND INDICATORS OF RESULTS

Goals	Goal 1: Reduce new HIV infections			Goal # 2: Increase access to care and treatment to improve the health of people living with HIV					Goal # 3: Reduce HIV-related disparities and health inequities			Goal # 4: Achieve a more coordinated national response	
Objectives	1.1 Increase to 90% the percentage of people living with HIV who know their HIV serostatus.	1.2 Reduce by 25% the number of HIV cases diagnosed and reported	1Reduce by a 10% the percentage of MSM, Young MSM and Heterosexual women who present risk behaviors for infection	2.1 Increase to 85% the percentage of people with new diagnosis linked to HIV care within one month from diagnosis.	2.2 Ensure that at least 70% of the people out of care would re-link to treatment.	2.3 Increase to 90% the PLWH who are retained in treatment	2.4 Increase to 80% of PLWH who are virally suppressed	2.5 Reduce to no more than 5% the homeless people receiving medical care for HIV	3.1 Increase to 80% the suppression of HIV viral load in young persons who inject drugs	3.2 Reduce geographical disparities of treatment and support services for PLWH	3.3 Reduce the disparities in the rate of new diagnoses by 3% in the groups of MSM, Young MSM, Heterosexual women and Trans Population.	4.1 Promote a public policy aimed at integrating the efforts of surveillance, prevention and treatment of HIV.	4.2 Develop and/or strengthen the planning and collaboration to support a coordinated response to HIV in terms of surveillance, care and treatment of HIV
Threshold	From 88% to 90% by 2021	Percentage reduction in the number of positive cases diagnosed from 2017 by 2021	Percent reduction in MSM, Young MSM and Heterosexual women presenting risk behaviors 2017 to 2021	From 36.4% to 85% by 2021	From 68% to 70% in 2021	From 62.9% to 90% by 2021	From 41.4% to 80%, by 2021	No more than 5% by 2021.	From 41.4% to 80% by 2021	Reduction in the percentage of people who present disparities associated with the access to treatment and support services for the period of 2017 to 2021	Percent reduction in number of positive PRHIA diagnosed from 2017 to 2021 among MSM, Young MSM, Heterosexual women and Trans		
Audience	Surveillance office and prevention service providers	Prevention service providers	Prevention service providers, agencies and entities related to education	Health professionals, HIV Care Liaison Staff, clinical management and support personnel, HIV prevention and treatment services providers	Health professionals, HIV Care Liaison Staff, clinical management and support personnel, HIV prevention and treatment services providers	Treatment services providers	Treatment services providers	HIV prevention and treatment services providers, State agencies related to housing, continuum of care systems for the homeless population, case management and navigation personnel	Treatment services providers	Treatment and Support services providers	MSM, young MSM, women with heterosexual behavior, Trans Population, service providers, in particular the component of case management and HIV care navigator, people living with HIV	Multi-sectoral entities and communities	Planning Advisory Bodies, Multi-sectoral entities and communities
Evaluation question	How effective are our screening processes?	How effective are our prevention efforts?	How effective are our efforts aimed at reducing risk behaviors in populations of MSM, Young MSM and Women with heterosexual conduct?	How effective are our efforts to link newly diagnosed persons?	How effective are we on re-linking people who left treatment?	How effective are we on retaining people in treatment?	How effective are we on keeping suppressed the viral load of people living with HIV?	How effective are we on providing permanent housing opportunities for PLWH?	How effective are we on keeping suppressed the viral load among young people (13 to 29 years) and PID with HIV?	How effective are we on reducing disparities in the provision of treatment and support services for PLWH?	How effective are we on reducing the number of new diagnoses among MSM, young MSM, heterosexual women and Trans?	How effective are we at achieving public policy changes aimed at integrating surveillance, prevention and treatment efforts of HIV?	How effective we are at integrating and directing the surveillance, prevention and treatment efforts of HIV in order to achieve a more coordinated response to the epidemic?

QUESTIONS AND INDICATORS OF RESULTS

Goals	Goal 1: Reduce new HIV infections			Goal # 2: Increase access to care and treatment to improve the health of people living with HIV					Goal # 3: Reduce HIV-related disparities and health inequities			Goal # 4: Achieve a more coordinated national response	
Performance indicators	Percent of people who know their serostatus	Number of newly diagnosed persons	Percent of MSM, Young MSM and heterosexual women who have risk behaviors	Percent of people over 18 years old who had at least one medical visit after being notified with an HIV diagnosis and that such visit happened within a month of the diagnose	Percent of people over 18 years old that re-linked to treatment, after being 6 months or more out of treatment	People over 18 years old with evidence of testing positive on CD4 and/or viral load at least twice during the specified year	People over 18 years old receiving antiretroviral therapy with suppressed viral load (<200 copies/ml) for the specified year.	Percentage of people receiving treatment who do not have permanent housing	Young people between 13-29 years, and PID receiving antiretroviral therapy with suppressed viral load (<200 copies/ml) for the specified year.	Percent of people whose treatment needs and support services are served	Number of newly diagnosed among MSM, young MSM, heterosexual women and Trans	New public policies related to surveillance, prevention and treatment of HIV	Establishment of mechanisms for accountability and feedback / Implementation of virtual network services
Instruments of information collection	Providers reports	Providers reports	Youth Risk Behavioral Surveillance System	Providers reports / CAREware	Providers reports/ CAREware	Providers reports/ CAREware	Providers reports/ CAREware	Reports from Providers/Homeless Count (Point in Time Survey), HMIS Statistics	Providers reports/ CAREware	Commissioned studies	Providers reports	Documentation of Multi-sectoral Committee and Department of Health	Documentation of Planning Bodies meetings/PRHIA Statistics
Source of Data	Official Statistics, Surveillance Office and Prevention Division, Department of Health	Official Statistics, Surveillance Office and Prevention Division, Department of Health	Official Statistics, Surveillance Office and Prevention Division, Department of Health	Official Statistics, Surveillance Office and Ryan White Part B Program, Department of Health	Official Statistics, Surveillance Office and Ryan White Part B Program, Department of Health	Official Statistics, Surveillance Office and Ryan White Part B Program, Department of Health	Official Statistics, Surveillance Office and Ryan White Part B Program, Department of Health, Continuum of Care Systems	Official Statistics, CoCs and Ryan White Part B Program	Official Statistics, Surveillance Office and Ryan White Part B Program, Department of Health, Continuum of Care Systems	Department of Health, Ryan White Part B Program	Official statistics, Surveillance Office and Prevention Division, Department of Health	Department of Health	Department of Health, PRHIA
Data frequency collection	Monthly	Monthly	Bi-Annual	Monthly	Bi-annual	Monthly	Monthly	Monthly	Monthly	Annually	Monthly	Annually	Monthly
Reporting frequency	Quarterly	Quarterly	Bi-Annual	Quarterly	Quarterly	Quarterly	Quarterly	Annually	Quarterly	Annually	Quarterly	Annually	Quarterly

C. STRATEGY TO USE SURVEILLANCE DATA AND PROGRAM DATA TO EVALUATE AND IMPROVE THE RESULTS IN HEALTH ALONG THE HIV CARE CONTINUUM

To evaluate and improve health outcomes across the HIV continuum of care, the Health Department will capitalize in the structure developed and implemented by the Division of HIV/STD Prevention and the Ryan White Part B/ADAP Program, both under the direction of the Auxiliary Secretary of Family Health and Integrated Services and OCASET. This evaluation will be made based on the data collected through the HIV Surveillance System and the databases used by the prevention and care programs.

In the case of the Division of Prevention of HIV and STDs, it has a Monitoring, Evaluation and Quality Assurance Unit, which provides support for all other units related to the prevention of HIV and STIs, and has responsibility of implementing evaluation and quality assurance activities. The team of this unit is composed of three evaluators, who are responsible for the development of evaluation plans based on a participatory process with stakeholders.

As part of routine processes for the implementation of evaluation and quality assurance plans, this group is responsible for monitoring and analyzing any change in the epidemiology of HIV and its impact on prevention activities and interventions. Thus, monitoring and evaluation of activities and prevention interventions is done in the light of the observed changes in epidemiology. The information collected is analyzed based on the behavior of the epidemic by geographical area, the needs identified in these areas and resources, materials and funds available to meet them. This analysis leads, in turn, into concrete recommendations relating to prevention services.

Moving forward in the continuum of care, the Ryan White Part B / ADAP Program will implement and evaluate the Integrated Plan through its Planning, Evaluation and Quality Improvement Unit. This unit, led by Ryan White Part B / ADAP Program Director, is responsible for identifying effective strategies and approaches to provide information to the Program and program administrators to develop and / or modify existing protocols and procedures. In addition, it conducts studies and evaluations on different areas of service, revises work protocols and - with the other units of the program - seeks to develop and implement procedures to improve care and support services to meet the needs of people living with HIV. The unit consists of one evaluator, one planning analyst, two CAREware data managers, two data entry resources and one community liaison officer.

Among the roles assumed by the Unit is the management of the Quality Improvement Program; the Ryan White Part B / ADAP Planning Body; the Ryan White Interparts Committee; the data collection system; and analysis of services provided to PLWH (CareWare) in the Program's providers network and databases generated for gather information regarding linkage, re-linkage and retention in care.

Through projects such as the Ryan White Part B / ADAP Planning Body and the Quality Improvement Program, it ensures that the priorities and needs identified in the provision of services to PLWH are discussed through a process of community participation. Both projects have the representation and active participation of PLWH, the Academia, and people with expertise in providing health services, including sub-recipients from the Ryan White Part B / ADAP and recipients from the Ryan White Part A, C, D and F, among other collaborators.

Through the structure of the Ryan White Part B / ADAP Planning Body, shown in Figure 45, the group works with the needs identification, analysis and implementation of feasible strategies to address priority issues. Figure 46, shows the planning cycle which is set annually and is guided by the

strategic plan that is developed based on the needs of the jurisdiction (Statewide Coordinated Statement of Needs).

Figure 46: Structure of the Planning Body

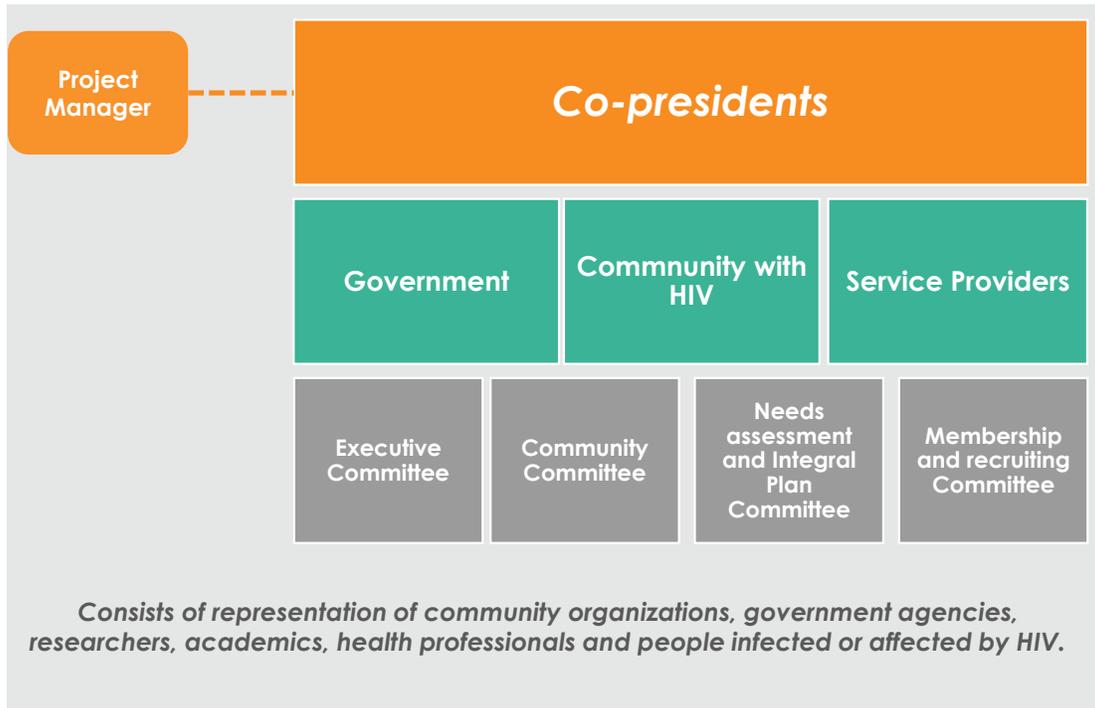
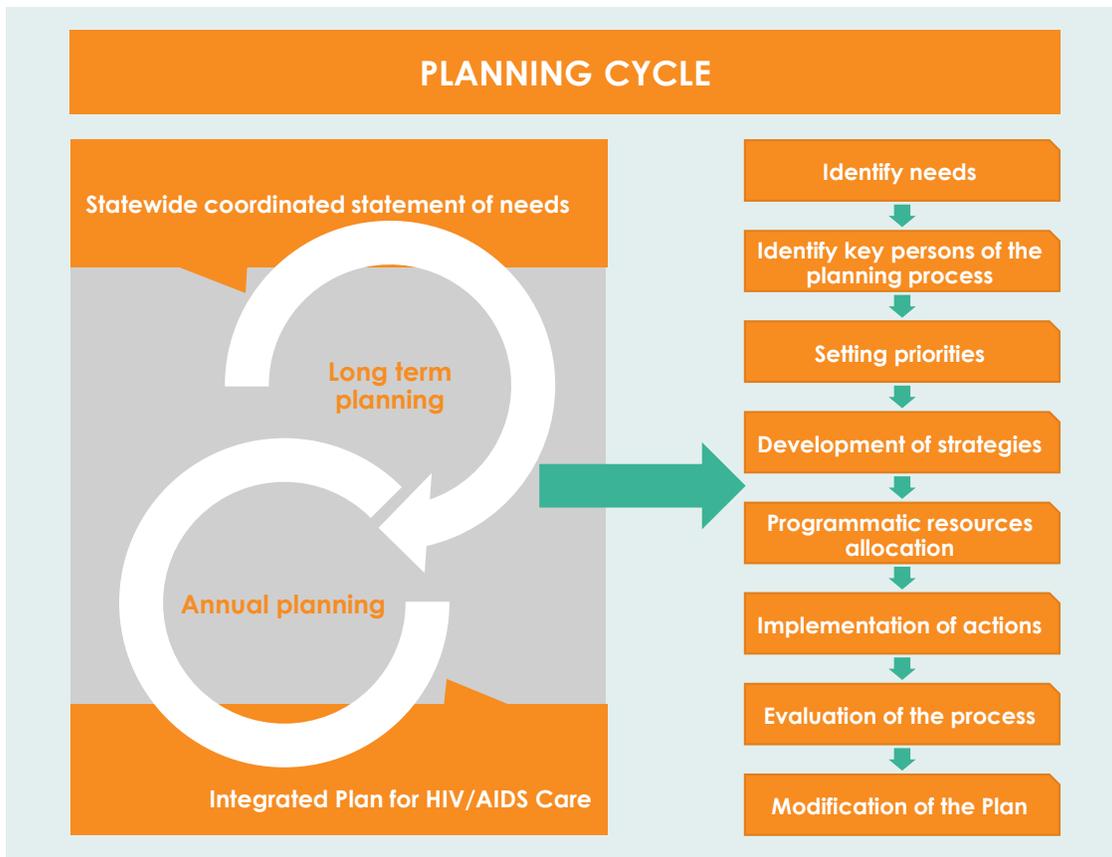
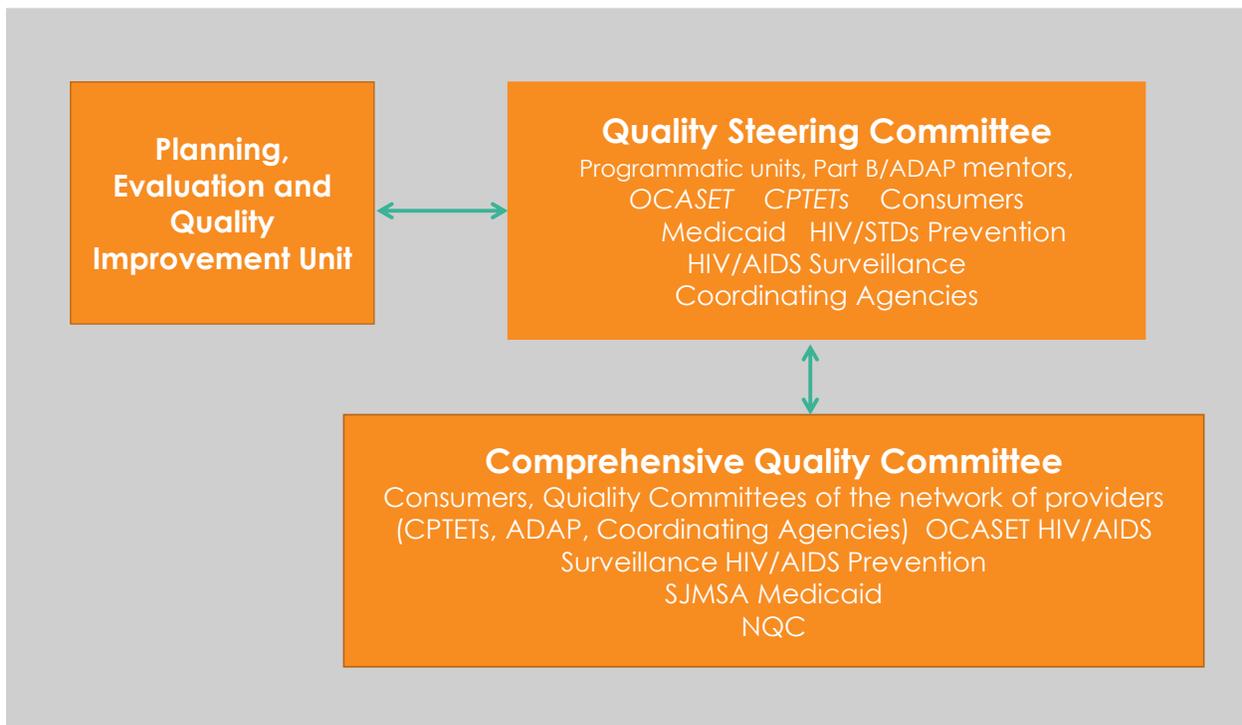


Figure 47: Planning Cycle



Other important projects of this unit and that will also collaborate in the implementation of the Integrated Plan is the Quality Improvement Program. The Program has been able to successfully establish an infrastructure based into three basic components, with clearly defined roles and responsibilities. These components include, as illustrated in the following diagram: the Evaluation Unit, Planning and Quality Improvement Unit; the Quality Steering Committee; and the Comprehensive Quality Committee. Its mission is to "ensure that clinical and support services provided by organizations funded by Ryan White in PR are accessible and in accordance with the standards of most recent treatment" while its vision embraces "agencies providing effective and efficient quality services, aimed at improving the health and well-being status of all people living with HIV".

Figure 48: Components of the Quality Improvement Program



Within this structure, the Quality Steering Committee is the responsible unit for overseeing and planning quality improvement activities. The Committee meets monthly and is made up of 15 members who at each meeting they review the data derived from CAREWare, work plans for quality improvement and propose specific actions to improve clinical quality at all levels of service subsidized by Ryan White Part B/ADAP providers network.

The third component, the Comprehensive Quality Committee, composed of representatives of all Ryan White Part B/ADAP Program providers, as well as representation of the external network that includes parts A, C, & D, meets quarterly to discuss the implementation of Quality Improvement Program and provide their input on the matter. They have the responsibility to implement quality improvement plans in each of its entities, while collaborating with the Steering Committee. During meetings and through other mechanisms of communication, the Comprehensive Quality Committee serves as a channel to disseminate critical information related to the management of the Quality Improvement Program. All organizations that are part of the Integrated Quality Committee are asked to align their individual plans with those of the jurisdiction. Progress with respect to the jurisdiction Integrated Plan is reviewed regularly by the Steering Committee and progress reports are made public during meetings of the Comprehensive Quality Committee.



PUERTO RICO

September 12, 2016

Ms. Gabrielle O'Meara
Public Health Advisor
Center for Disease Control and Prevention
1600 Clifton Rd
MS E-58
DHAP/PPB
Atlanta, GA 30333

José E. Au Lay, MD, MMS, MSIA
Senior Public Health Analyst
Division of Service Systems HAB/HRSA
US Department of Health and Human
Services
5600 Fishers Lane RM 7A-55
Rockville, MD 20857-0001

Dear Ms. O'Meara and Dr. Au Lay:

The Puerto Rico HIV Planning Group (PRHPG) and the Ryan White Part B Planning Body concur with the following submission by the Puerto Rico Department of Health (PRDOH) in response to the guidance set forth for health departments and HIV planning bodies funded by the CDC's Division of HIV/AIDS Prevention (DHAP) and HRSA's HIV/AIDS Bureau (HAB) for the development of an Integrated HIV Prevention and Care Plan.

For the purposes of developing the Integrated HIV Surveillance, Prevention and Care Plan, the PRDOH used an approach based on community participatory planning, including RWHAP Parts A, B, C, D, F, CDC recipients and sub-recipients, people living with HIV (PLWH), and other stakeholders. The ultimate purpose for using such approach was to assist in establishing the basis of a proper structure that would facilitate the plan's implementation and allow the jurisdiction to achieve the objectives of the National HIV/AIDS Strategy (NHAS). The specific mechanisms implemented for receiving and integrating the input of these stakeholders, included the following: 8 workshop sessions for identifying needs and developing strategies, establishing joint committees, meetings with committees and other stakeholders to integrate the feedback received. The same methodology was used in the San Juan MSA (RWHAP Part A), and both plans (the jurisdiction's and the SJMSA plan), contain strategies that are aligned, for addressing the four goals of the NHAS.

The planning bodies reviewed the Integrated HIV Surveillance, Prevention and Care Plan submission to the CDC and HRSA to verify that it describes how programmatic activities and resources are being allocated to the most disproportionately affected populations and geographical areas that bear the greatest burden of the HIV disease. The planning bodies concur that the Integrated HIV Surveillance, Prevention and Care Plan submission fulfills the requirements put forth by the Funding Opportunity Announcement PS12-1201 and the Ryan White HIV/AIDS Program legislation, and program guidance.

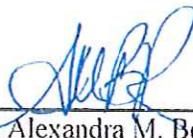
The signatures below confirm the concurrence of the planning body with the Integrated HIV Prevention and Care Plan.

Sincerely,

Date: September 12, 2016



Miguel A. Delgado Rivera
Community Co-Chair
HIV Planning Group



Ms. Alexandra M. Bonnet
CBOs Co-Chair
HIV Planning Group



Raymond Pérez Rivera, MD
State Co-Chair
HIV Planning Group



Anselmo Fonseca
HIV Sector Community
Co-Chair
RW Part B Planning Body



Gonzalo Maldonado
Service Providers Sector
Co-Chair
RW Part B Planning Body



Ydmary Reyes, MPH
Governmental Sector
Co-Chair
RW Part B Planning Body

- | **Accumulated Cases:** total number of diagnosed and reported HIV/AIDS cases during a specific time period. It includes cases of deceased patients.
- | **Co-infection:** The coexistence of a disease or infection and HIV infection or AIDS.
- | **HIV primary medical care:** initial medical evaluation and health care consistent with the E.U. guidelines of Public Health for the treatment of HIV.
- | **Epidemiology:** the study of the frequency, distribution and determinants of health states or events in specific populations and the application of this study to the control and prevention of health problems.
- | **Socioeconomic status:** a measure of social and economic factors that helps on the description of the position of an individual in society.
- | **Estimate:** when available data is not precise, an estimate based on available information and how that information can be generalized to larger populations is used.
- | **Stratification:** the analysis of the exposure-disease population subgroups relation.
- | **Demographic factors:** background information on the population of interest.
- | **Cumulative incidence:** total number of new cases over a specific time period between the total number of people at risk during the same period.
- | **Confidence interval:** range of values that consider the real value to a level of statistical certainty. Usually the confidence interval used is 95%.
- | **Median:** the average value of a set of values.
- | **Morbidity:** disease frequency in the population.
- | **Mortality:** total number of people who have died as a result of infection with HIV or AIDS.
- | **Need for medical care not covered:** the lack of evidence of one or more of the following components: viral load test, CD4 cell monitoring and/or antiretroviral therapy for a specific period.
- | **Epidemiological profile:** document that describes the HIV and AIDS epidemic in several populations in terms of **person** (sociodemographic, clinical and behavioral characteristics), **place** - geographical or political boundaries - and **time** (calendar year, trends over time).
- | **Prevalence:** total number of people affected, present in the population in a specific period divided by the number of people present in the population during the same period.
- | **Average/Mean:** the sum of all observations divided by the number of observations.
- | **Range:** difference between the largest and smallest sample observation/value.
- | **Ratio:** relative representation of the size of two numbers.
- | **Report Delay:** time between the diagnosis of HIV infection or AIDS and the moment when the report is received in the Department of Health.
- | **AIDS:** stage 3 of the HIV infection, classified when the immune system of a person infected with HIV becomes severely compromised (measured by CD4 cell count) and/or the person becomes ill with an opportunistic infection.
- | **Rate:** frequency measurement of an event or a disease compared with the number of people at risk of the event or illness.
- | **Trend:** a shift in the long-term frequency, usually ascending, descending or stable.

| **HIV/AIDS Surveillance:** the systematical and continuous compilation, analysis and interpretation of AIDS data to be used in planning, implementation and evaluation of prevention strategies and health care.

APPENDIX C. LIST OF REFERENCES REVISED FOR THE NEEDS ASSESSMENT

- Coming Out to Health Care Providers in Puerto Rico: Opportunities for Prevention, Linkage and Engagement in Care (2015), Miranda, Ríos, Díaz, Torres, Ávila, Rolón & Colón.
- Continuo de la Atención del VIH Puerto Rico: 2010, Programa Vigilancia de VIH/SIDA, División de Epidemiología, Departamento de Salud
- Continuo de la Atención del VIH Puerto Rico: 2012, Programa Vigilancia de VIH/SIDA, División de Epidemiología, Departamento de Salud
- Continuo de la Atención del VIH, 2010 – 2013, Programa Vigilancia de VIH/SIDA, División de Epidemiología, Departamento de Salud
- Datos epidemiológicos de Clamidia, Gonorrea y Sífilis, Puerto Rico (2014), Sistema de Vigilancia de ITS, Programa de Vigilancia VIH/SIDA/ITS/VHC/TB, Departamento de Salud de Puerto Rico
- Diagnoses of HIV Infection in the United States and Dependent Areas, (2014), CDC.
- Directorio de servicios de prevención y tratamiento (2014), Estudios Técnicos, Inc. para el Departamento de Salud.
- Encuesta de Satisfacción Ryan White Parte B (s.f), Programa Ryan White, Parte B.
- Estudio de necesidades de Prevención y Tratamiento del VIH y ETS (2014), Estudios Técnicos, Inc. para el Departamento de Salud.
- Estudio de Necesidades y Satisfacción con los Servicios VIH/SIDA (2010), Programa Ryan White Parte B.
- Evaluación de las Campañas Relacionadas a la Prevención del VIH y la Distribución Estructurada de Condones, 2015, Estudios Técnicos, Inc. para el Departamento de Salud.
- Evaluación de preparación ("Readiness Assessment") para la intervención de PrEP en Puerto Rico, (2015). Estudios Técnicos, Inc. para el Departamento de Salud.
- Estudio sobre las conductas de riesgo entre el grupo de hombres entre las edades de 13 y 24 años que tienen sexo con hombres (2015), Estudios Técnicos, Inc. para el Departamento de Salud.
- Evaluación de Satisfacción de la Calidad de los Condones provistos como parte de la Estrategia de Distribución de Condones (2015), Departamento de Salud.
- Late Diagnosis of HIV Infection in Metropolitan Areas of the United States and Puerto Rico (2015). Hall HI, Tan T y Espinoza L.
- Informe Estudio de Necesidades a Personas con VIH Ryan White Parte B (2013), Programa Ryan White Parte B.
- Informe resultados encuesta de Satisfacción Servicios a pacientes VIH Ryan White Parte B (2012), Programa Ryan White Parte B.
- Informe Semestral de la Vigilancia del VIH en Puerto Rico (Abril, 2015), Programa Vigilancia de VIH/SIDA, División de Epidemiología
- Part B/ADAP: HIV Continuum of CARE Number of PLWH Enrolled in Part B/ADAP Care January-December 2014

Perfil de los programas de Intercambio de Jeringuillas en Puerto Rico (2014). Cusman Vega, Intercambios Puerto Rico & Torres Cardona, Iniciativa Comunitaria, para el Grupo de Planificación para la Prevención del VIH.

Perfil Epidemiológico Integrado para la Prevención del VIH en Puerto Rico: 2007 – 2013, Programa Vigilancia de VIH/SIDA, División de Epidemiología, Departamento de Salud

Prevalence of diagnosed HIV infection, 2012 -2014, Programa Vigilancia de VIH/SIDA, División de Epidemiología, Departamento de Salud

Resultados del Cuestionarios a Proveedores de Servicios: Retención y búsqueda a cuidado de personas con VIH (s.f.), Grupo de Planificación Ryan White Parte B.

Sistema de Pruebas Rutina VIH: Evaluación del Proyecto (2014), Health Track para el Departamento de Salud.

Understanding differences in HIV/HCV prevalence according to differentiated risk behaviors in a sample of PWID in rural Puerto Rico (2016). Abadie, Welch-Lazoritz, Gelpi-Acosta, Reyes & Dombrowski.

Addressing the HIV/AIDS Epidemic Among Puerto Rican People Who Inject Drugs: The Need for a Multiregion Approach (2014), Deren, Gelpí, Albizu, González, Des Jarlais & Santiago.

APPENDIX D. ADDITIONAL TABLES

Prevention needs according to previous research	Goal 1	Goal 2	Goal 3	Goal 4
	Reduce the number of new HIV infections	Increase Access to Care and Treatment to Improve the Health of people Living with HIV	Reduce HIV-Related Disparities and Health Inequities	To Achieve a More Coordinated National Response
1 Access to condoms, especially in risk groups	x		x	
2 Access and exchange of information on STI's for the processes of decision-making and planning	x		x	x
3 Access and exchange of information on HIV for the processes of decision-making and planning	x		x	x
4 Increase and diversification of HIV testing places	x	x	x	
5 Increase and diversification of STI testing places		x	x	
6 Educational campaigns on education and prevention of HIV, focused on risk groups	x			
7 Availability and access to needle exchange programs	x			
8 Availability and access to treatment programs for substance abuse		x	x	
9 Distribution and access to condoms	x			
10 Outreach and education to providers and groups at risk about new strategies for prevention (PrEP)	x	x		
11 Early sexual education and with gender perspective.	x		x	
12 Education about safer sex practices, correct use of condoms and other methods of protection	x			
13 Prevention strategies with HIV positive people	x	x		
14 Limited access to STI testing, particularly for people covered by government health plan		x	x	x
15 Public policy aimed to improve services for injecting drug users (correct use of paraphernalia and needle exchange services, among others).		x	x	x
16 Public policy for sex education with a gender perspective	x		x	x

Treatment needs according to previous research	Goal 1 Reduce the number of new HIV infections	Goal 2 Increase Access to Care and Treatment to Improve the Health of people Living with HIV	Goal 3 Reduce HIV-Related Disparities and Health Inequities	Goal 4 To Achieve a More Coordinated National Response
Access to medicines	x	x	x	
Access to doctors, nurses and laboratories	x	x	x	
Access to medical specialists (gynecologist, urologist, neurologist, oncologist and gastroenterologist, among others)	x	x	x	
Adherence counseling (professional assistance to help you remember when to take medications, attend medical appointments and laboratories, among others)	x	x	x	
Treatment retention	x	x	x	
Link to treatment	x	x	x	
Emergency economic assistance to pay utilities		x	x	x
Housing		x	x	x
Hospice		x	x	x
Food and nutrition services at home		x	x	
Financial assistance for food vouchers		x	x	
Medical equipment		x	x	
Health care at home		x	x	
Nutritional supplements		x	x	
Transportation to medical appointments		x	x	
Vision-related services (ex. Payment of eyeglasses)		x	x	
Dental Care services		x	x	
Mental Health Services (Coverage and access to psychologists, psychiatrists, coordination for drug treatment and alcohol)		x	x	x
Treatment for substance abuse		x	x	x
Access to information (guidance on services available for your condition and how to get services)	x	x	x	x
Level of knowledge on procedure for filing complaints and express recommendations.		x	x	x
Coordination and communication among health professionals		x		x
Case management services		x		x

Barriers to Treatment identified needs											
Barriers	Link to Treatment	Transportation to medical appointments	Access to doctors, nursing and laboratories	Treatment retention	Access to Medicines	Mental Health Services (Coverage and access to psychologists, psychiatrists, coordination for drug treatment and alcohol)	Housing	Adherence counselling (professional assistance to help you remember when to take medications, attend medical appointments and laboratories, among others)	Access to medical specialists (gynecologist, urologist, neurologist, oncologist and gastroenterologist, among others)	Case management services	Development of public policy for compulsory HIV education to health professionals
Social	1) Stigma 2) Poverty 3) Acceptance 4) Family Issues	1) Poverty 2) Stigma	1) Stigma 2) Poverty 3) Transportation access	1) Poverty 2) Lack of Education and knowledge 3) Lack of Family support	1) Poverty 2) Stigma and discrimination 3)	1) Cultural Stigma 2) Poverty 3) Family support	1) Poverty 2) Cultural Estigma	1) Stigma 2) Poverty 3) Mental Health	1) Cultural Stigma 2) Poverty 3) Issues for transgenders	1) Cultural Stigma 2) Poverty	1) Stigma and prejudice
Federal, state and municipality	1) Insufficient Funds 2) Deficiency on health care coverage 3) Public Policy Issues 4) Geographic Limitations	1) Insufficient Funds 2) Deficiency on health care coverage 3) Limitation on transportation services	1) Deficiency on health care coverage 2) Insufficient Funds 3) Ineffective design and lack of access to services	1) Insufficient Funds 2) Deficiency on health care coverage	1) Deficiency on health care coverage 2) Shortage of medications 3) Access limitations	1) Insufficient funds 2) Deficiency on health care coverage 3) not given the necessary emphasis to treatment	1) Lack of funds 2) Eligibility Process 3) Stigma	1) Deficiency on health care coverage 2) Insufficient funds	1) Deficiency on health care coverage 2) Insufficient funds	1) Funds limitations	1) Bureaucracy, regulations 2) Treatment philosophy 3) Insufficient funds
Linked to administrative body	1) Bureaucracy and administrative process 2) Requirement 3) Geographic limitations	1) Bureaucracy administrative process 2) Insufficient Funds 3) Insufficient public transportation	1) Bureaucracy and administrative process 2) change of government	1) Bureaucracy and administrative process 2) Limited staff 3) Economic Limitation	1) Bureaucracy and administrative process 2) Health Care Insurance	1) Lack of Funds 2) Lack of Personnel 3) It is not seen as a priority	1) Bureaucracy and administrative process 2) Lack of funds	1) Bureaucracy and administrative process 2) Lack of Funds 3) Lack of trained staff	1) Bureaucracy and administrative process 2) Deficient programs 3) Lack of specialized training	1) Lack of trained staff	1) Bureaucracy and administrative process 2) limitations on Personnel 3) Lack of resources
Programs	1) Lack of Funds 2) Limited information 3) Deficient infrastructure for the provision of services	1) Insufficient Funds 2) Infrastructure Limitations 3) lack of Integration within municipalities	1) Allocation of funds 2) Limited Access 3) Limited staff	1) Insufficient Funds 2) Limited medical staff 3) Lack of flexibility in scheduling 4) Deficient infrastructure for the provision of services	1) Insufficient Funds 2) Limited access for medications 3) Deficient infrastructure for the provision of services	1) Insufficient Funds 2) Lack of specialized staff 3) Deficient infrastructure for the provision of services 4) No programs with the necessary focus	1) Insufficient Funds 2) Infrastructure limitations and housing programs	1) Insufficient Funds 2) Lack of Protocols and Specialized staff	1) Insufficient Funds 2) Insurance Health Care Issues 3) Limited Information	1) Insufficient Funds 2) Lack of these type of programs	1) Insufficient Funds 2) No government support
Service providers	1) Lack of Specialized staff 2) Lack of resources	1) Lack of resources 2) Limitation on transportation 3) Lack of specialized staff	1) Lack of specialized personnel 2) Limited access, especially in rural areas	1) Lack of specialized staff 2) Limited Resources	1) Lack of specialized personnel 2) Lack of resources 3) Limited access to pharmacies	1) Limited Resources 1) Lack of specialized staff	1) Limited Resources 2) Lack of Information	1) Lack of resources and availability 2) Limitation on access 3) Health Care	1) Lack Personnel 2) Transportation Limitations 3) Limited Resources	N/A	1) Lack of information and education 2) Social Stigma and Lack of sensibility
Linked to Beneficiaries	1) Limited transportation 2) Poverty 3) Lack of specialized staff 4) Lack of Knowledge	1) Poverty 2) Limited transportation 3) Stigmas	1) Limited transportation 2) Lack of Knowledge	1) Limited transportation 2) Housing instability/Homelessness 3) Poverty	1) Limited transportation 2) Poverty 3) Housing instability/Homelessness	1) Limited transportation 2) Social Stigma 3) Poverty	1) Housing instability/Homelessness 2) Poverty	1) Housing instability/Homelessness 2) Social Stigma 3) Poverty	1) Limited transportation 2) Poverty 3) Stigma social 4) Lack Integrated Programs	1) Transportation 2) Do not see utility program	1) Poverty and Mental Health

Barriers to prevention identified needs											
Barriers	Access and exchange of information of HIV for the decision-making processes and planning	Access and exchange of information of STI for the decision-making processes and planning	Public policy for sex education with gender perspective	Availability and access to needle exchange programs	Early sexual education with gender perspective.	Outreach and education to providers and groups at risk on new strategies for prevention (PrEP and PEP)	Prevention strategies with HIV-positive	Education about safer sex practices, correct use of condoms and other methods of protection	Increase and diversification of HIV testing scenarios	Distribution and access to condoms, especially to groups at risk	Educational campaigns on education and prevention of HIV, STD and Hepatitis C focused on people with high-risk behaviors
Social	1) Stigma (religious/cultural)	1) Stigma (religious/cultural) 2) Poverty	1) Stigma (religious/cultural) 2) Active role of religious fundamentalist groups 3) Lack resources 4) Lack of Knowledge	1) Stigma (religious/cultural) 2) Program Costs 3) Legal Barriers and/or operational	1) Stigma (religious/cultural) 2) Active role of religious fundamentalist groups	1) Stigma (religious/cultural) 2) Educational Level 3) high medical costs in relation to income	1) Stigma (religious/cultural) 2) Poverty	1) Stigma (religious/cultural) 2) Educational Level	1) Stigma (religious/cultural) 2) Poverty	1) Stigma (religious/cultural) 2) Educational Level 3) Poverty	1) Stigma (religious/cultural) 2) Educational Level 3) Social class and gender
Federal, state and municipal	1) Insufficient Funds 2) Public Policy regulation	1) Insufficient Funds 2) Limited Coverage on Health Care Plan	1) Insufficient Funds 2) Ideological and Public Policy limitations 3) Limited Coverage on Health Care Plan	1) Insufficient Funds 2) Legal or Public Policy obstruction 3) Limited Coverage on Health Care Plan	1) Insufficient Funds 2) Public Policy and Organizational Limitations 3) Limited Coverage on Health Care Plan 4) Staff Capacity	1) Health Care Limitations 2) Insufficient Funds 3) Lack of education and Stigma	1) Insufficient Funds 2) Coverage on Health Care Plan	1) Public Policy 2) Insufficient Funds 3) Lack of youth outreach 4) Limitations by the public education system	1) Limitations by the public education system 2) Insufficient Funds 3) Municipal ruling and regulations 4) Coverage on Health Care Plan	1) Insufficient Funds 2) Limitations by the public education system 3) Public Policy 4) Coverage on Health Care Plan	1) Insufficient Funds 2) Limited access public education 3) Organizational Limitations 4) Coverage on Health Care Plan 5) Administrative Laws
Linked to administrative body	1) Educational Practices organizational capacity and Infrastructure 2) Data Management 3) Bureaucracy and administrative process	1) Staff Capacity 2) Data Management 3) Bureaucracy	1) Bureaucracy and administrative process 2) Insufficient Funds 3) Limitations of Health Care coverage	1) Limitation of Funds 2) Bureaucracy and administrative process 3) Staff limitations 4) Health Care Insurance	1) Educational Practices Organizational capacity and Infrastructure, 2) Bureaucracy and administrative process 3) Insufficient Funds 4) Limitations Health Care	1) Bureaucracy and administrative process 2) Staff limitations 3) Limitations Health Care 4) Social Stigma	1) Bureaucracy and administrative process 2) funding limitations 3) Staff Capacity	1) Bureaucracy and administrative process 2) Insufficient Funds 3) Limited staff and prejudice from officials 4) Refund Process 5) Health Care Plan	1) Bureaucracy and administrative process 2) Insufficient Funds 3) Health Care 4) Rebursement process	1) Bureaucracy and administrative process 2) Insufficient Funds	1) Bureaucratic inefficiency 2) Insufficient Funds 3) Election Cycle 4) Staff Capacity
Programs	1) Insufficient Funds 2) Limited Information 3) Infrastructure	1) Insufficient Funds 2) Limited Staff	1) Insufficient Funds 2) Personnel Limitations 3) Wrong approach of the program	1) Insufficient Funds 2) Geographical limitations-focus on metro area - 3) Staff Limitation 4) Wrong approach of the program	1) Insufficient Funds 2) Infraestructura 3) Staff Capacity 4) Limitation on health insurance coverage 5) Information System	1) Insufficient Funds 2) Lack of information 3) Program focus	1) Insufficient Funds 2) Infrastructure and integrated services 3) Staff trained or capacity limitations	1) Insufficient Funds 2) Focus of Campaigns and infrastructure 3) Limited Information 4) Transportation access	1) Insufficient Funds and lack of resources 2) Infrastructure, location and disponsibility 3) Campaigns with the wrong focus	1) Insufficient Funds and lack of resources 2) Campaigns with the wrong focus 3) Stigma established by Public Policy	1) Insufficient Funds 2) Availability and information management 3) Campaigns that are not designed for appropriate populations
Service Providers	1) Lack of Resources	1) Lack of staff and specialized staff 2) Lack of information and education 3) Lack of resources	1) Lack of Specialized personnel 2) Lack of Resources	1) Lack of Resources 2) Lack of specialist 3) Limited trained Providers 4) Lack of information	1) Lack of staff and specialist 2) Stigma (religious/cultural) 3) Lack of education	1) Lack of Resources 2) Lack of education and scientific knowledge 3) Staff limited capacity 4) limited access	1) Lack of Resources 2) lack education 3) Limited information	1) Stigma (religious/cultural) 2) Lack of Resources 3) Staff Capacity 4) Outreach population methods	1) Lack of Resources 2) Staff poorly trained 3) Limited access by region	1) Lack of Resources 2) Insufficient funds 3) Limited Personnel 4) Lack integration within programs	1) Lack of Resources 2) Limited personnel 3) Stigmas 4) Educational campaigns with little content or wrong approach
Linked to Beneficiaries	1) Lack of information 2) Lack of transportation	1) Limited Knowledge 2) Poverty 3) Stigma	1) Limited Information 2) Homelessness 3) Limited Transportation	1) Limited access within geographical areas 2) Lack of awareness 3) Criminal status and poverty	1) Stigma (religious/cultural) 2) Poverty (religious/cultural) 3) Lack of education	1) Lack coverage health care 2) homelessness 3) Poverty 4) Lack of information	1) Stigma 2) Lack of information 3) Transportation	1) Limited skills and access 2) Poverty 3) Stigma	1) Transportation 2) Accessibility 3) Poverty 4) Stigma	1) Stigma 2) Lack of awareness 3) Poverty 4) Transportation	1) Lack of data 2) Poverty and homelessness 3) Lack access 4) Lack of legal awareness 5) Social Stigma

SAN JUAN ELEGIBLE METROPOLITAN AREA





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The Puerto Rico HIV Integrated Surveillance, Prevention, and Care Plan for the San Juan Eligible Metropolitan Area (San Juan EMA), 2017-2021 was coordinated by the Department of Health of the Commonwealth of Puerto Rico, the Municipality of San Juan through the AIDS Task Force, and the San Juan EMA Advisory Council. It was completed thanks to the collaboration of a multi-sectorial group composed of representatives of the community, non-profit and community-based organizations, prevention and treatment service providers, government agencies and the Academia.

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ABBREVIATIONS

AETC - AIDS Education and Training Centers

AIDS- Acquire Immune Deficiency Syndrome, Stage 3 of the HIV infection

AMHAS - Administration of Mental Health and Addiction Services

CBO – Community Based Organization

CDC - Centers for Disease Control and Prevention

CHCs - Community Health Centers, (Section 330 CHCs)

COC – Continuum of Care, Sistema de Cuidado Continuo para personas sin hogar

Concilio – Multi sectoral Council in Support of the Homeless Population

CPTETs - Centers for Prevention and Treatment of Transmissible Diseases, mentioned by its Spanish Acronym, *Centros para la Prevención y Tratamiento de Enfermedades Transmisibles*

HC – Heterosexual Contact

HIV - Human Immunodeficiency Virus

HOPWA - Housing Opportunities for Persons with AIDS Program

HP – Homeless Persons

HPPG – HIV Prevention Planning Group

HRSA - Health Resources and Services Administration

HUD = Housing and Urban Department

IDUs - Injection Drug Users

MSA San Juan – Caguas - Guaynabo – Metropolitan Statistical Area of San Juan

MSM - Men who have Sex with Men

nPEP – Non-occupational post-exposure prophylaxis

OCASET - Central Office of AIDS and Transmissible Diseases Affairs, mentioned by its Spanish Acronym, *Oficina Central para Asuntos del SIDA y Enfermedades Transmisibles*

OCMA - Office of the Commissioner of Municipal Affairs

OITD - Office of Information and Technology Developments

PEP – Post-exposure prophylaxis

PID – Persons who injects drugs

PLWA – People living with AIDS

PR Vocational Rehabilitation Administration

PLWH – People living with diagnosed HIV infection

PRDCR – Puerto Rico Department of Correction and Rehabilitation

PRDF – Puerto Rico Department of Family

PRDLHR – Puerto Rico Department of Labor and Human Resources

PRDOH –Puerto Rico Department of Health

PrEP – Pre-exposure prophylaxis

PRHIA - Puerto Rico Health Insurance Administration

PRPD Puerto Rico Police Department

PRPHA PR Public Housing Administration

PUD – Persons who use drugs

RWBPG – Ryan White Part B Planning Group

San Juan EMA, SJEMA– *San Juan Eligible Metropolitan Area*

STI – Sexually Transmitted Infections

TB – Pulmonary Tuberculosis

INTRODUCTION

This section presents the Integrated HIV Surveillance, Prevention and Care Plan for the San Juan Eligible Metropolitan Area (SJEMA), 2017-2022, (referred to in the document as, Integrated Plan), in compliance with requirements of the Health Resources and Services Administration (HRSA) and the Centers for Disease Control and Prevention (CDC).

The SJEMA comprises 30 municipalities, whose population in 2014 represented 49.41% of the residents in Puerto Rico (1,753,211 inhabitants). By December 31, 2014, a total of 28,634 people had been diagnosed with HIV. Men (73.3%), persons who inject drugs (PIDs), and people between the ages of 25 and 34 (34.5%) represented the groups with the highest percentage of cumulative cases. Most people diagnosed with HIV in the SJEMA are concentrated in 5 municipalities (67.9%): San Juan, Bayamón, Carolina, Guaynabo, and Toa Baja.

The Integrated Plan, developed to respond to the SJEMA epidemic, was prepared according to a similar approach and in coordination with the Jurisdiction's (Puerto Rico). It incorporated a participative planning and empowerment process through which representatives from the community, public agencies, private entities, both non-profit and for-profit, and Academia jointly identified needs and developed strategies to meet the objectives of the National HIV/AIDS Strategy, to2020¹ (National Strategy in what follows).

Following Federal Government guidelines, the document has been organized in three major sections: (1) a coordinated statement of need assessment; (2) a second section with the Plan developed with stakeholder groups; and (3) a section dealing with monitoring and improvement.

The Plan presented, provides the basis for a multi-sectorial and integrated approach, and in this manner contributes to the prevention of the epidemic and the improvement of the quality of life of persons living with HIV in the SJEMA and Puerto Rico.

¹ https://www.whitehouse.gov/sites/default/files/docs/estrategia_nacional_contra_el_vih sida_2020.pdf

SECTION I: STATEMENT OF NEED

According to the Integrated Plan Guides published by the CDC and HRSA, the following section provides a profile of the epidemic in the SJEMA, the HIV care continuum; economic and human resources to deal with the epidemic; the needs, gaps and barriers in the provision of HIV services; and the data and sources of information used to carry out the needs assessment.

A- EPIDEMIOLOGIC OVERVIEW

A - GEOGRAPHIC REGION OF THE JURISDICTION

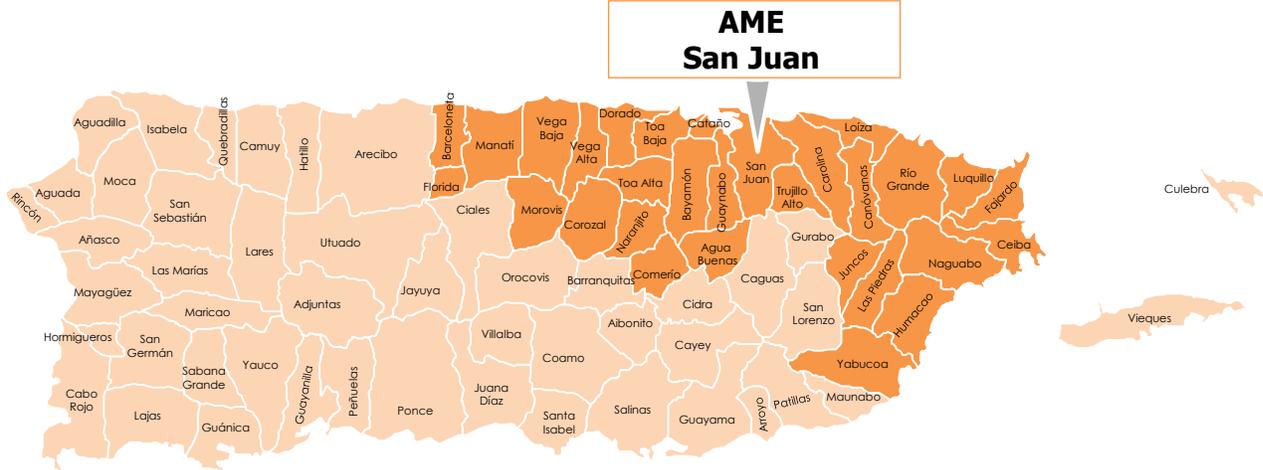
Puerto Rico is one of the jurisdictions within the U.S. with a higher incidence and prevalence of the Human Immunodeficiency Virus (HIV) infection. As of December 31, 2014, more than 47,000 people had been diagnosed with HIV infection in Puerto Rico, ranked 10th on the list of states/territories with the highest number of reported Stage 3 (AIDS) cases.²

The Puerto Rican archipelago has been characterized by having a different HIV epidemic than the one in the United States. Since the start of the epidemic, the way the virus is transmitted has changed several times. Intravenous drug use was the main mode of transmission during the 1984–2002 period, followed by unprotected heterosexual contact during the 2003–2012 period. It is not until 2013 that unprotected sex among men is positioned as the main mode of transmission in Puerto Rico. With respect to treatment and care, advances in pharmacology have greatly benefitted HIV positive persons. Not only has HIV infection mortality been reduced but the quality of life of patients under treatment has improved. However, there are still gaps and disparities in HIV related services, as well as limitations in access to complementary support services.

The San Juan Eligible Metropolitan Area (San Juan EMA or SJEMA) comprises 30 municipalities: Aguas Buenas, Barceloneta, Bayamón, Canóvanas, Carolina, Cataño, Ceiba, Comerío, Corozal, Dorado, Fajardo, Florida, Guaynabo, Humacao, Juncos, Las Piedras, Loíza, Luquillo, Manatí, Morovis, Naguabo, Naranjito, Río Grande, San Juan, Toa Alta, Toa Baja, Trujillo Alto, Vega Alta, Vega Baja, and Yabucoa (Figure 1).

² *Integrated Epidemiologic Profile for HIV Prevention in Puerto Rico: 2007-2013*, Surveillance Program HIV/AIDS | Division of Epidemiology, Department of Health.

Figure 1 : MUNICIPALITIES THAT COMPRISE THE SAN JUAN EMA



The resident population in the San Juan EMA was estimated at 1,753,211 in 2014, which represents 49.41% of the Puerto Rican population. Two thirds of the population reside in the following municipalities: San Juan, Bayamón, Carolina, Guaynabo, Toa Baja, Toa Alta, Trujillo Alto, Vega Baja, Humacao, and Río Grande. A higher percentage of women reside in the San Juan EMA compared to men, 52.6% and 47.4%, respectively (Table 1).

Table 1 : DISTRIBUTION OF POPULATION ACCORDING TO SEX AND MUNICIPALITY OF RESIDENCE, SAN JUAN EMA, 2014

Municipality	Sex				Total	
	Men		Women			
	No.	%	No.	%	No.	%
San Juan	168,109	19.5	197,466	20.6	365,575	20.0
Bayamón	92,445	10.7	101,765	10.6	194,210	10.6
Carolina	76,499	8.9	89,321	9.3	165,820	9.1
Guaynabo	44,032	5.1	48,767	5.1	92,799	5.1
Toa Baja	39,731	4.6	44,434	4.6	84,165	4.6
Toa Alta	36,155	4.2	38,682	4.0	74,837	4.1
Trujillo Alto	33,618	3.9	37,401	3.9	71,019	3.9
Vega Baja	27,119	3.1	29,047	3.0	56,166	3.1
Humacao	26,543	3.1	29,341	3.1	55,884	3.1
Río Grande	25,705	3.0	26,963	2.8	52,668	2.9
Canóvanas	23,001	2.7	24,456	2.5	47,457	2.6
Manatí	19,823	2.3	21,852	2.3	41,675	2.3
Juncos	19,199	2.2	20,903	2.2	40,102	2.2
Vega Alta	18,737	2.2	20,499	2.1	39,236	2.2
Las Piedras	18,731	2.2	19,940	2.1	38,671	2.1

Municipality	Sex					
	Men		Women		Total	
	No.	%	No.	%	No.	%
Dorado	18,377	2.1	19,887	2.1	38,264	2.1
Yabucoa	17,490	2.0	18,389	1.9	35,879	2.0
Corozal	17,419	2.0	18,274	1.9	35,693	2.0
Fajardo	16,017	1.9	18,032	1.9	34,049	1.9
Morovis	16,060	1.9	16,134	1.7	32,194	1.8
Naranjito	14,615	1.7	14,987	1.6	29,602	1.6
Loíza	13,182	1.5	14,883	1.6	28,065	1.5
Aguas Buenas	13,416	1.6	14,057	1.5	27,473	1.5
Naguabo	12,757	1.5	14,129	1.5	26,886	1.5
Cataño	12,468	1.4	13,806	1.4	26,274	1.4
Barceloneta	11,965	1.4	12,993	1.4	24,958	1.4
Comerío	10,091	1.2	10,162	1.1	20,253	1.1
Luquillo	9,102	1.1	10,236	1.1	19,338	1.1
Ceiba	5,930	0.7	6,677	0.7	12,607	0.7
Florida	5,963	0.7	6,448	0.7	12,411	0.7
TOTAL	864,299	47.4	959,931	52.6	1,824,230	100.0

Source: U.S. Census Bureau, Estimates of Resident Population for Puerto Rico: July 1, 2014.

The median age of residents of the San Juan EMA in 2014 was of 38.4. The median age of women was higher than the median age of men, 40.0 and 36.7, respectively. Twenty-seven percent of the total San Juan EMA population was between the ages of 15 and 34 in 2014. A higher percentage of women were 65 or older, when compared to men, 19.0% and 15.6%, respectively. By contrast, a higher percentage was seen of adults and adolescents between the ages of 15 and 34, compared to women of the same age (Table 2).

Table 2 : DISTRIBUTION OF THE GENERAL POPULATION BY AGE AND SEX, SAN JUAN EMA, 2014

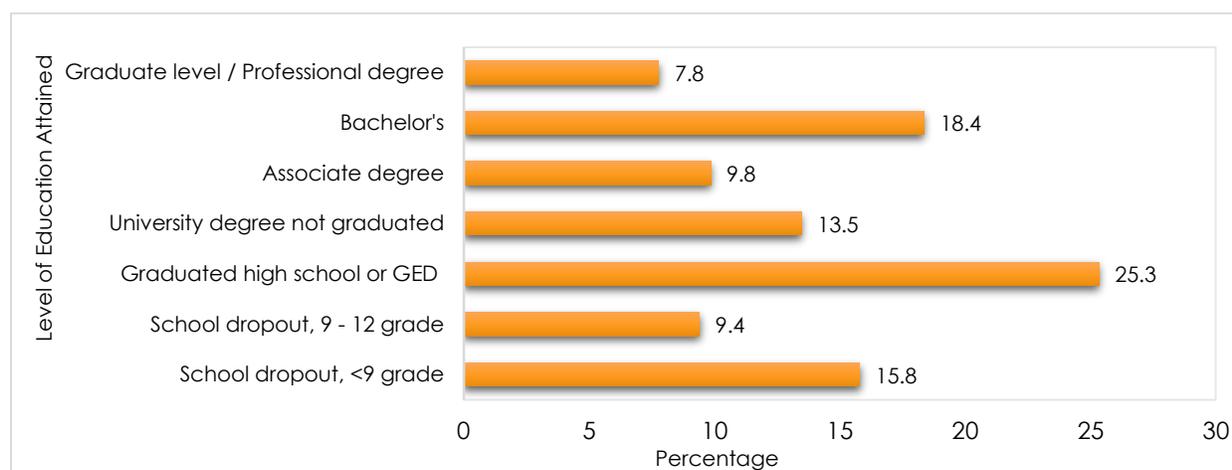
Age group (years)	Men		Women		Total	
	No.	%	No.	%	No.	%
0 – 9	103,818	12.0	98,349	10.2	202,167	11.1
10 – 14	60,561	7.0	56,485	5.9	117,046	6.4
15 – 19	64,694	7.5	61,726	6.4	126,420	6.9
20 – 24	65,911	7.6	66,307	6.9	132,218	7.2
25 – 29	57,648	6.7	60,193	6.3	117,841	6.5
30 – 34	55,596	6.4	61,489	6.4	117,085	6.4
35 – 39	55,757	6.5	61,813	6.4	117,570	6.4
40 – 44	55,643	6.4	61,424	6.4	117,067	6.4
45 – 49	55,953	6.5	62,380	6.5	118,333	6.5
50 – 54	55,624	6.4	65,575	6.8	121,199	6.6
55 – 59	51,649	6.0	62,527	6.5	114,176	6.3
60 – 64	46,942	5.4	59,382	6.2	106,324	5.8
≥ 65	134,503	15.6	182,281	19.0	316,784	17.4
TOTAL	864,299	47.4	959,931	52.6	1,824,230	100.0

Source: U.S. Census Bureau, Estimates of Resident Population for Puerto Rico: July 1, 2014.

EDUCATION

According to data of the Puerto Rico Community Survey, 74.8% of people over the age of ≥ 25, residents of the San Juan EMA (1,257,616 inhabitants) had graduated from high school or had a General Educational Development (GED) certificate, while 25.2% were school dropouts (Figure 2).

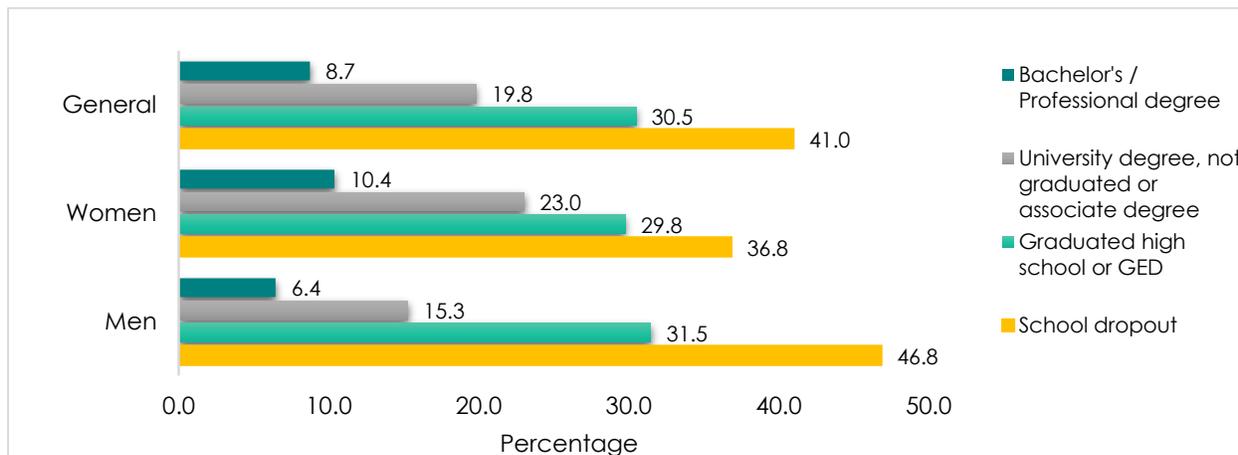
Figure 2 : EDUCATIONAL ATTAINMENT OF THE GENERAL POPULATION 25 YEARS AND OVER, SAN JUAN EMA, 2010 – 2014



Source: U.S. Census Bureau, Puerto Rico Community Survey, 2010 – 2014.

As the level of education rises, the percentage of individuals below the poverty line is reduced. The percentage of school dropouts under the federal poverty level is higher among men, when compared to women, 46.8% and 36.8%, respectively (Figure 3). On the contrary, the percentage of women below the poverty level with some college, no degree or who have an associate's degree, bachelors or professional degree is greater when compared to men, 33.4% and 21.7%, respectively.

Figure 3 : POVERTY LEVEL OF THE GENERAL POPULATION 25 YEARS AND OVER BY EDUCATIONAL ATTAINMENT, SAN JUAN EMA, 2010 – 2014

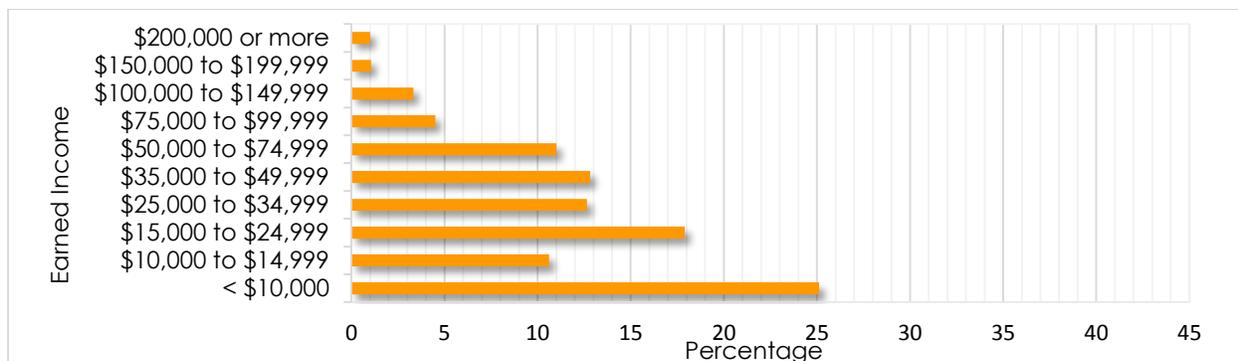


Source: U.S. Census Bureau, Puerto Rico Community Survey, 2010 – 2014.

INCOME

The inflation-adjusted average income of the household was \$19,042 in 2014. The family income median rose to \$22,693. 25% of homes belonging to the San Juan EMA earned an income of under \$10,000 a year (Figure 4). The municipality of Comerío has the highest percentage of homes that earn an income of under \$10,000 (39.0%); while the Guaynabo municipality has the lowest percentage (16.7%).

Figure 4 : MEDIAN HOUSEHOLD INCOME OF THE GENERAL POPULATION, SAN JUAN EMA, 2010 – 2014

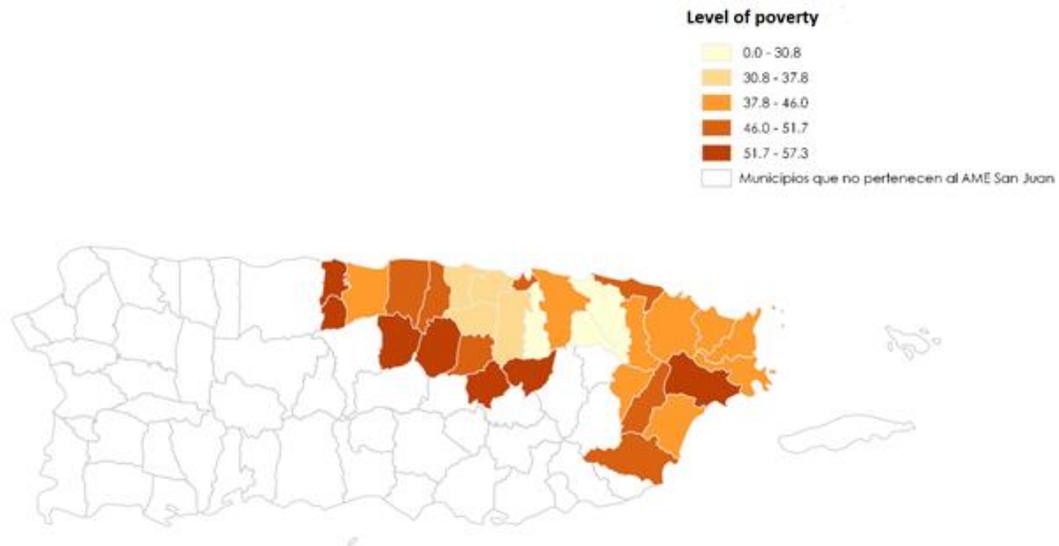


Source: U.S. Census Bureau, Puerto Rico Community Survey, 2010 – 2014

POVERTY LEVEL

During the 2010 - 2014 period, 44.3% of individuals residing in the San Juan EMA were living under the federal poverty level in the last twelve months. According to the five-year estimates of the Puerto Rico Community Survey, over 50% of the residents in seven municipalities lived under the federal poverty level (Figure 5), while most municipalities that make up the Metropolitan area have the lowest poverty levels.

Figure 5 : PERCENTAGE OF INDIVIDUALS BELOW THE FEDERAL POVERTY LEVEL BY MUNICIPALITY OF RESIDENS, SAN JUAN EMA, 2010-2014



Source: U.S. Census Bureau, Puerto Rico Community Survey, 2010 – 2014.

B- SOCIO-DEMOGRAPHIC CHARACTERISTICS

This section presents the characteristics and trends of newly diagnosed and PLWH in the SJEMA. The analysis period is from 2007 to 2013. However, in those instances where the information is available to 2014, the data for that year is presented.

HIV PREVALENCE

By December 31, 2014³, a total of 12,159 people lived with a HIV diagnosis in the San Juan EMA (Table 3). During the past decade, the advances achieved in the areas of prevention and care, particularly in the area of pharmacology, has caused a reduction in the number of new cases. About a third of PLWH in the San Juan EMA reside in the municipality of San Juan.

³ Information reported as of December 31, 2015.

Figure 6: People living with diagnosed HIV infection by municipality of residence, San Juan EMA, 2014

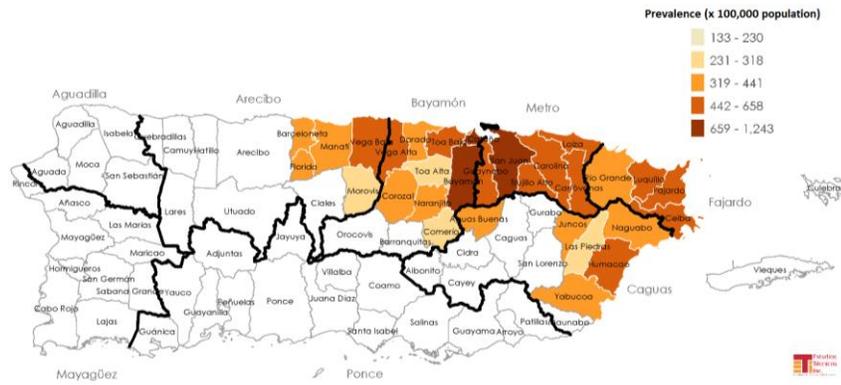
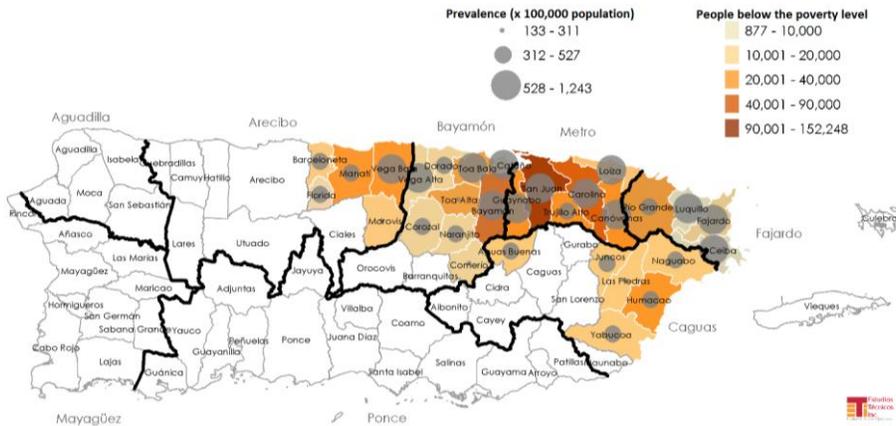


Figure 7: People living with diagnosed HIV infection by municipality of residence and poverty level⁴, San Juan EMA, 2014



⁴ To measure poverty, the Federal Census Bureau uses a set of income thresholds that vary according to the size of the family and its structure (ages, head of household). If the family's total income is less than the threshold stated for that type of household, all individuals in that family are considered poor. Thresholds are determined in accordance with the cost of living and minimum income necessary to satisfy basic needs, like housing and food.

Table 3: Prevalence of people diagnosed with HIV infection at the end of 2014 by stage of HIV infection, , AME San Juan

Demographic characteristics / transmission category	HIV Infections, Stages 0, 1, 2, unknown (HIV not AIDS)			HIV Infections, Stage 3 (AIDS)			HIV total		
	No.	%	Prevalence ^a	No.	%	Prevalence ^a	No.	%	Prevalence ^a
Sex									
Men	3,588	67.72	415.13	4,77	69.	552.47	8,363	68.78	967.60
Women	1,710	32.28	178.14	2,08	30.	217.31	3,796	31.22	395.45
Age group^b									
0 – 12	5	0.09	1.57	1	0.0	0.31	6	0.05	1.88
13 – 24	173	3.27	66.89	56	0.8	21.65	229	1.88	88.54
25 – 34	823	15.53	350.32	321	4.6	136.64	1,144	9.41	486.96
35 – 44	1,318	24.88	561.72	978	14.	416.81	2,296	18.88	978.53
45 – 54	1,657	31.28	691.77	2,55	37.	1,067.08	4,213	34.65	1,758.85
55 – 64	935	17.65	424.04	2,04	29.	926.98	2,979	24.50	1,351.02
65 or more	387	7.30	122.17	905	13.	285.68	1,292	10.63	407.85
Transmission category									
Men									
PID	1,095	30.52	--	1,82	38.	--	2,919	34.90	--
MSM	1,339	37.32	--	1,45	30.	--	2,793	33.40	--
Heterosexual	714	19.90	--	1,08	22.	--	1,794	21.45	--
MSM + PID	149	4.15	--	302	63.	--	451	5.39	--
Other	3	0.08	--	12	0.2	--	15	0.18	--
RBI adult	257	7.16	--	44	0.9	--	301	3.60	--
Perinatal	24	0.67	--	51	1.0	--	75	0.90	--
Other / RBI	7	0.20	--	8	0.1	--	15	0.18	--
Subtotal	3,588	100.00	415.13	4,77	100	552.47	8,363	100.00	967.60
Women									
Heterosexual	1,228	71.81	--	1,46	70.	--	2,690	70.86	--
PID	320	18.71	--	546	26.	--	866	22.81	--
Other	2	0.12	--	3	0.1	--	5	0.13	--
RBI adult	127	7.43	--	24	1.1	--	151	3.98	--
Perinatal	18	1.05	--	43	2.0	--	61	1.61	--
RBI pediatric	15	0.88	--	8	0.3	--	23	0.61	--
Subtotal	1,710	100.00	178.14	2,08	100	217.31	3,796	100.00	395.45
Total	5,298	128.19	290.42	6,86	100	376.10	12,159	129.14	666.53

Notes: Data not adjusted for reporting delay. The percentage column may not add to 100 due to rounding.

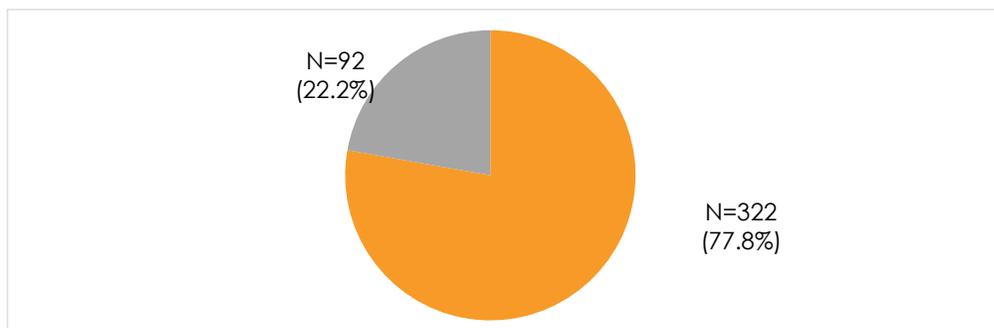
^a Prevalence of people diagnosed with HIV per 100,000 population.

^b Current age calculated as of December 31, 2015.

DESCRIPTION OF NEW HIV DIAGNOSES IN 2014

In 2014, a total of 414 cases of HIV infections were diagnosed in adults and teenagers ≥13 years and older among residents of the San Juan EMA (Table 3). The HIV infection diagnoses in San Juan EMA residents represent 69.3% of the total cases diagnosed in Puerto Rico. Men represent 3 out of 4 new diagnoses in the EMA (Table 4).

Figure 8: Percentage of new HIV infection diagnoses by sex, San Juan EMA, 2014



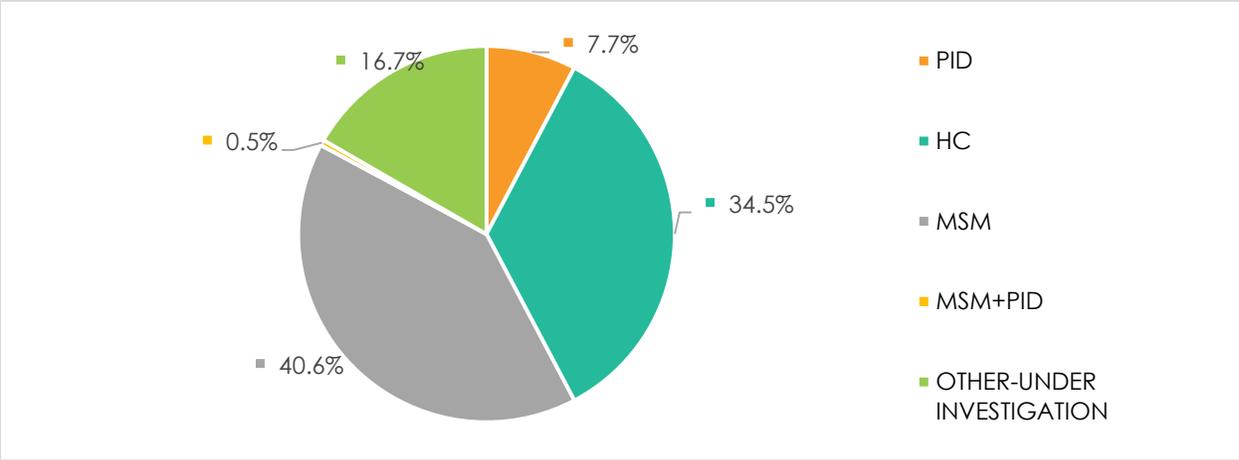
Most diagnoses in the San Juan EMA correspond to people between the ages of 20 – 29. In 2014, 130 people between the ages of 20 to 29 were diagnosed with HIV infection, equivalent to 31.4% of the total amount of cases diagnosed that same year. (Table 3). In 2014, one out of every 5 men residents of the San Juan EMA were diagnosed with the HIV infection between the ages of 20 - 24. Among women, most diagnoses took place between the ages of 40 – 49 (Table 3).

Table 4 : Adults and adolescents 13 years and older diagnosed with HIV infection by sex and age group, San Juan EMA, 2014

Age group (years old)	Men		Women		Total	
	No.	%	No.	%	No.	%
13 – 19	11	3.4	3	3.3	14	3.4
20 – 24	63	19.6	5	5.4	68	16.4
25 – 29	58	18.0	4	4.3	62	15.0
30 – 34	29	9.0	12	13.0	41	9.9
35 – 39	33	10.2	13	14.1	46	11.1
40 – 44	34	10.6	14	15.2	48	11.6
45 – 49	31	9.6	17	18.5	48	11.6
50 – 54	20	6.2	9	9.8	29	7.0
55 – 59	20	6.2	9	9.8	29	7.0
60 – 64	15	4.7	3	3.3	18	4.3
≥ 65	8	2.5	3	3.3	11	2.7
Total	322	100.0	92	100.0	414	100.0

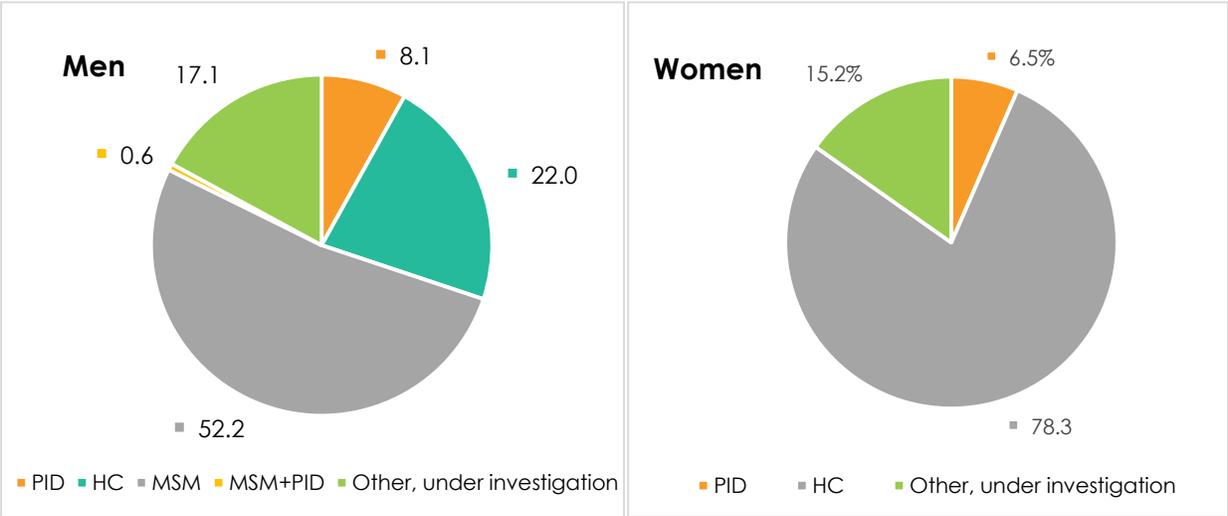
Unprotected sex among MSM was the mode of transmission reported most frequently in the San Juan EMA in 2014, followed by unprotected heterosexual contact, 40.62% and 34.5%, respectively (Figure 9).

Figure 9: Adults and adolescents 13 years and older diagnosed with HIV infection by transmission category, San Juan EMA, 2014



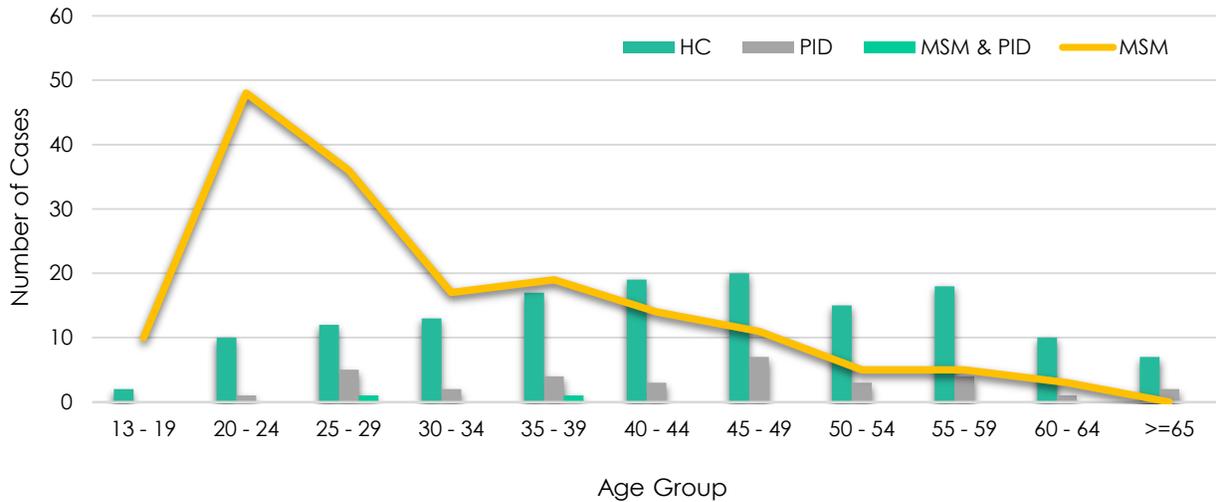
Among men residents of the San Juan EMA, unprotected sex between men (52.2%) and heterosexual contact (22.0%) were the main modes of transmission in 2014, while unprotected heterosexual contact (78.3%) was the mode of exposure reported most frequently in women (Figure 10).

Figure 10 : Adults and adolescents 13 years and older diagnosed with HIV infection by sex and transmission category, San Juan EMA, 2014



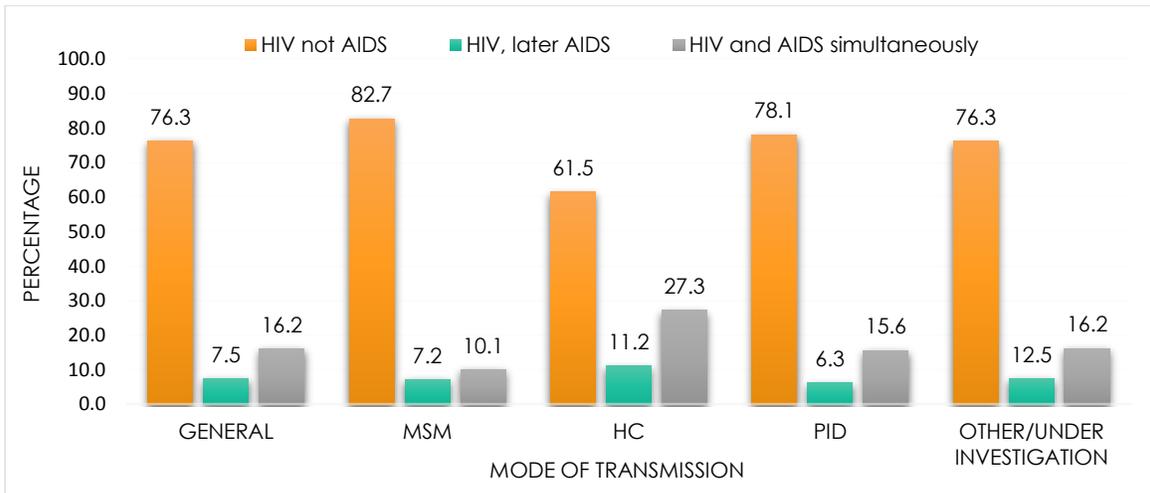
Unprotected sex between men is the primary transmission category among adults and adolescents between the ages of 13 and 39, while the main transmission category among people diagnosed with HIV after age 40 is heterosexual contact without a condom (Figure 11).

Figure 11: Adults and adolescents 13 years and older diagnosed with HIV infection by transmission category and age at HIV diagnosis San Juan EMA, 2014



Approximately, one out of every 6 adults and teenagers ≥ 13 years old diagnosed with HIV in 2014 were in the infection's most advanced stage (AIDS). The percentage was greater among heterosexual people (27.3%) and injected drug users (15.6%) (Figure 12).

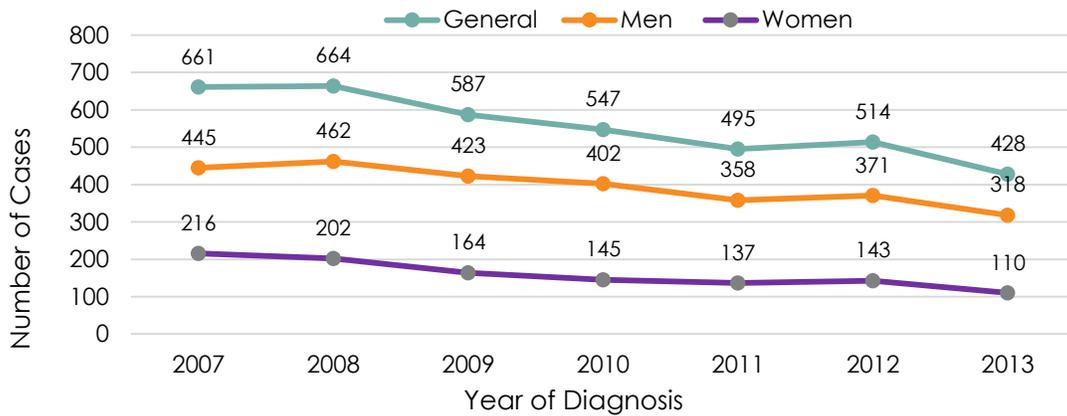
Figure 12 : Adults and adolescents diagnosed with HIV infection by disease progression and transmission category, San Juan EMA, 2014



NEW HIV DIAGNOSES TRENDS, 2007 – 2013

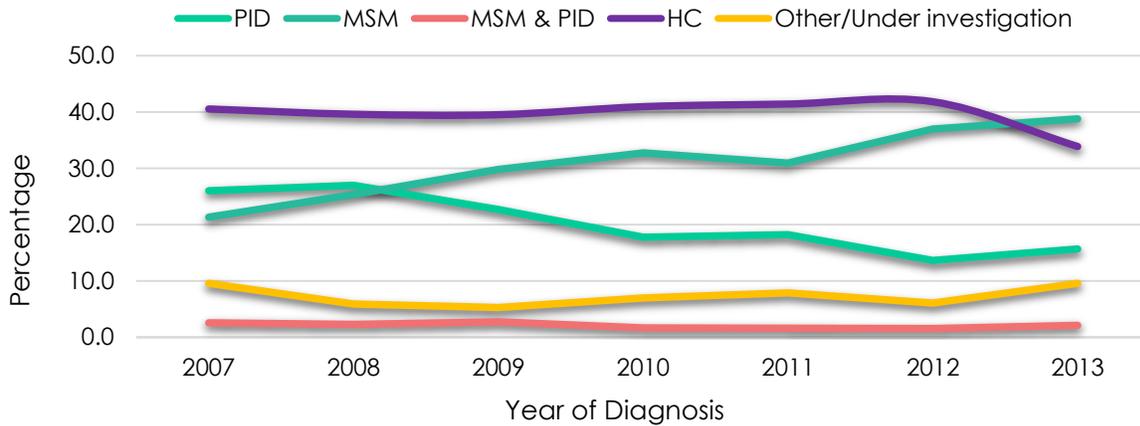
During the 2007 – 2013 period, a total of 3,896 adolescents and adults ≥ 13 years old residents of the San Juan EMA were diagnosed with HIV. The number of HIV diagnoses presents a decrease during this period on a general level and per sex. The number of new HIV diagnoses in men is approximately 2.5 times greater than the number of new HIV diagnoses in women during the 2007 – 2013 period (Figure 13).

Figure 13 : Adults and adolescents 13 years and older diagnosed with HIV infection by sex and year of diagnosis, San Juan EMA, 2007 – 2013



Unprotected heterosexual contact (HC) was the mode of transmission reported most frequently during this period (Figure 14). Although HIV diagnoses generally present a downward trend, an increase has been observed in the percentage of cases attributed to unprotected sex among men. In 2007, the percentage of cases attributed to sex between men was only 21.3%, while in 2013 it grew to 38.8%, hence becoming the main mode of transmission in the San Juan EMA. The percentage of cases attributed to sex between men increased during this period by approximately 82%; while the percentage of injected drug users and sex between heterosexual people presented a decrease, -40% and -16%, respectively (Figure 14).

Figure 14 : Trends of HIV diagnoses by transmission category in adults and adolescents ≥13 years and older, San Juan EMA, 2007 – 2013



C- BURDEN OF HIV

NEED OF PRIMARY MEDICAL CARE THAT IS NOT COVERED, SAN JUAN EMA, 2013

As of December 31, 2013, a total of 12,209⁵ persons were living with a diagnosis of the HIV infection in the San Juan EMA. Of these, 56.5% had progressed to the infection's Stage 3. In 2013, 8,717 (71.4%) residents of the San Juan EMA living with a diagnosis of the HIV infection received primary medical care, while the remaining 28.6% did not receive medical care that year (Table 5).

Table 5 : Number of people living with diagnosed HIV infection who did not receive primary medical care, SAN JUAN EMA, 2013

Population Size	Number
A. Number of people living with AIDS by December 31, 2013	6,901
B. Number of PLWH not AIDS by December 31, 2013	5,308
People who received primary medical care	Number
C. Number of PLWA that received primary medical care in 2013	4,895
D. Number of PLWH that received primary medical care in 2013	3,822
People who did not receive primary medical care	Number
E. Number of PLWA that did not receive primary medical care in 2013	2,006 (29.1%)
F. Number of PLWH that did not receive primary medical care in 2013	1,486 (28.0%)
Total number of people aware of their infection that did not receive primary medical care in 2013	3,492 (28.6%)

The majority of individuals that did not receive medical care in 2013 were men, between the ages of 45 and 54, and injected drug users (Table 6).

⁵ Data used for the unmet need analysis, corresponds to the period ending June 30, 2015; thus it differs to the number presented in a previous section for the estimate of persons living HIV in the SJEMA.

Table 6 : Characteristics of people living with diagnosed HIV infection who did not receive primary medical care, San Juan EMA, 2013

Demographic Characteristics/Exposure	PLWH by December 31, 2013		People who received primary medical care		People who did <u>not</u> receive primary medical care	
	No.	No.	%	No.	%	
Sex						
Men	8,367	5,776	69.03	2,591	30.97	
Women	3,842	2,941	76.55	901	23.45	
Age groups						
0 - 12	10	9	90.00	1	10.00	
13 - 24	334	282	84.43	52	15.57	
25 - 34	1,333	1,013	75.99	320	24.01	
35 - 44	2,584	1,899	73.49	685	26.51	
45 - 54	4,390	3,126	71.21	1,264	28.79	
55 - 64	2,560	1,773	69.26	787	30.74	
65 or more	998	615	61.62	383	38.38	
Transmission category (Adults and Teenagers)						
MSM	2,718	2,231	82.08	487	17.92	
PID	3,911	2,302	58.86	1,609	41.14	
MSM & PID	464	325	70.04	139	29.96	
Heterosexual Contact	4,534	3,536	77.99	998	22.01	
Other/ hemophilia/ transfusion	20	11	55.00	9	45.00	
RNR/ under investigation	382	172	45.03	210	54.97	
Transmission category (Pediatric Cases)						
Perinatal transmission	141	106	75.18	35	24.82	
RNR / under investigation	39	34	87.18	5	12.82	
Total	12,209	8,717	71.40	3,492	28.60	

Over 70% of the total of those that did not receive primary medical care in 2013 reside in the municipalities of San Juan, Bayamón, Carolina, Guaynabo, and Toa Baja (Figure 15).

Figure 15 : People living with diagnosed HIV infection who did not receive primary medical care by municipality of residence, SAN JUAN EMA, 2013

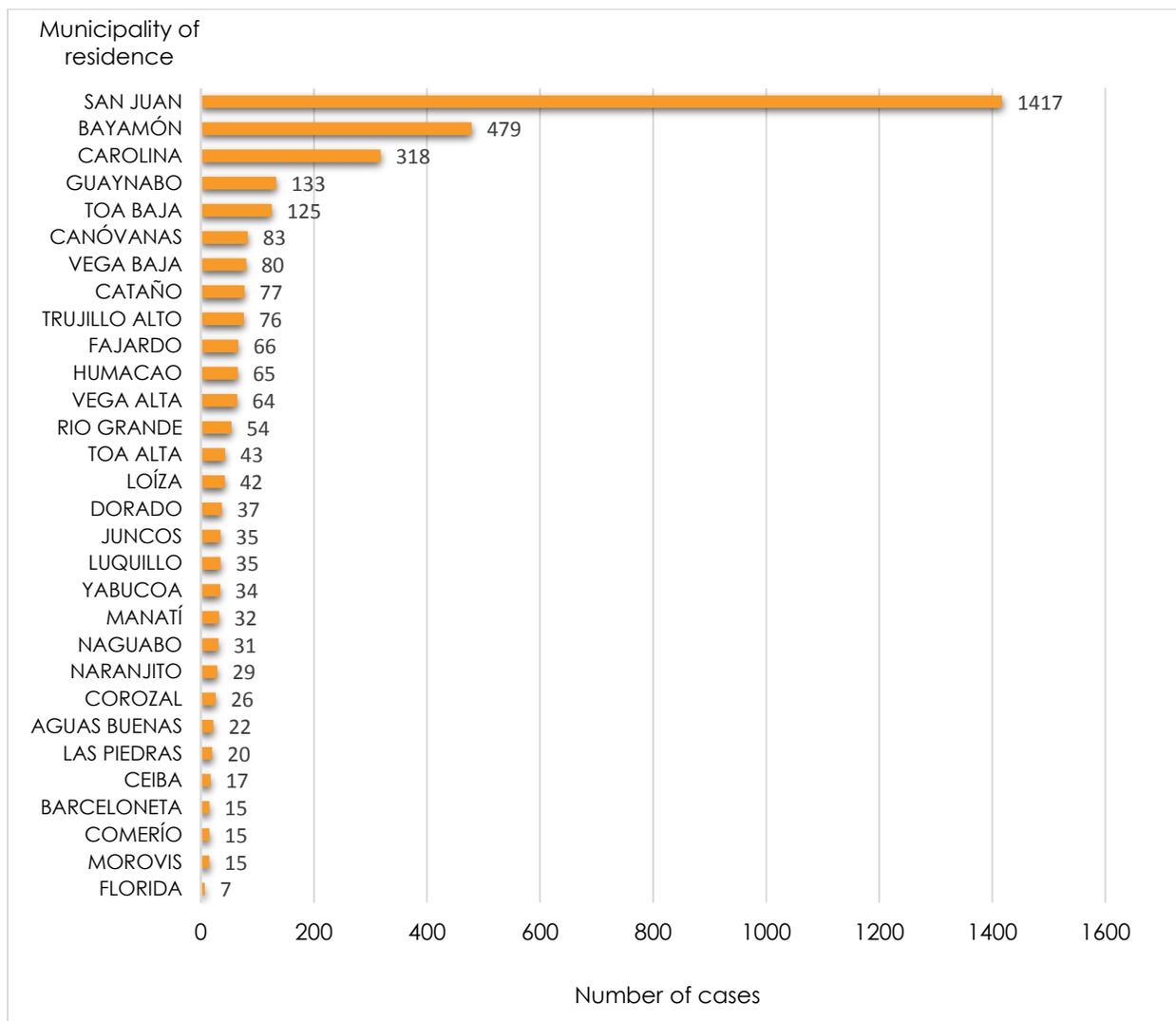
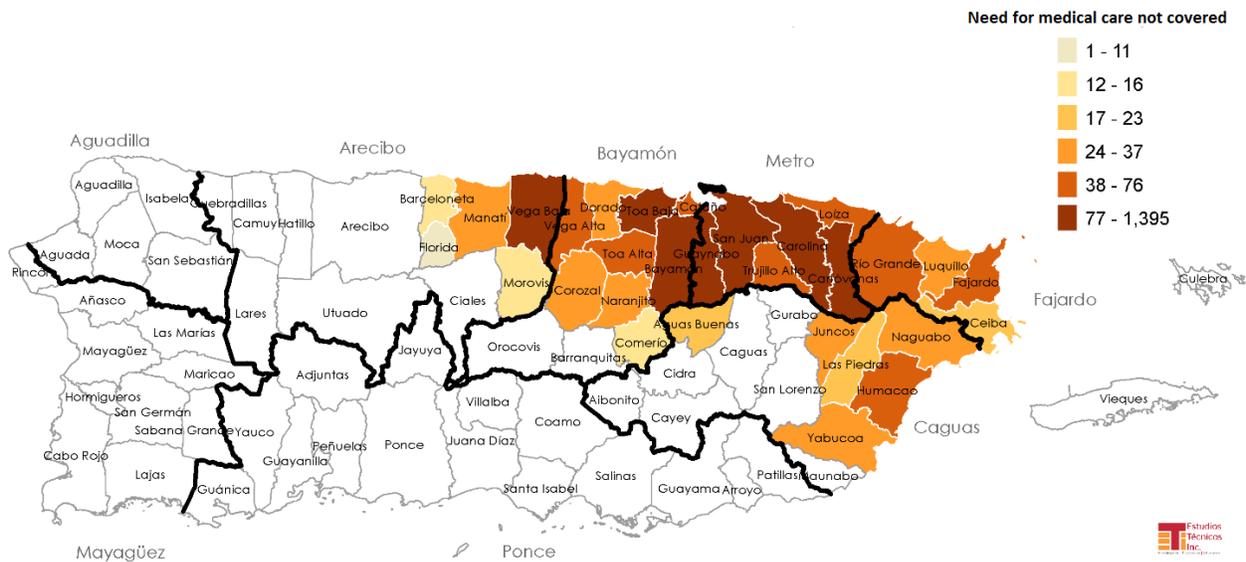
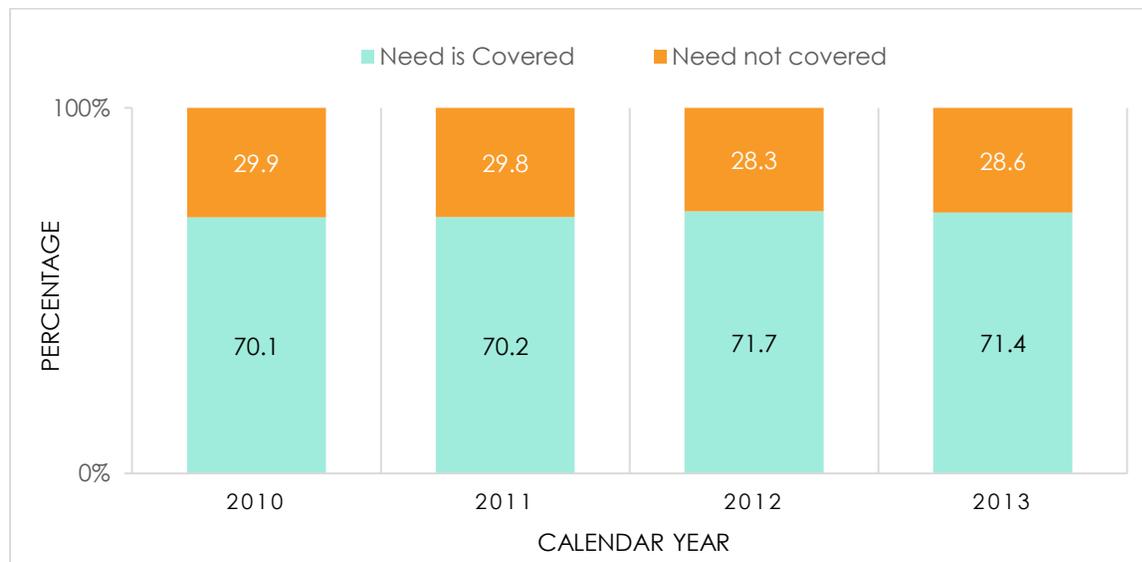


Figure 16 : Persons living with diagnosed HIV infection who did not receive primary medical care, EMA San Juan, 2013



During the 2010 – 2013 period, the percentage of the population residents of the San Juan EMA that were not receiving primary medical care slightly diminished (Figure 17).

Figure 17: People living with diagnosed HIV infection that did not receive primary medical care, SAN JUAN EMA, 2010 – 2013



MORTALITY OF PERSONS LIVING WITH A DIAGNOSED HIV INFECTION, SAN JUAN EMA

During 1981 – 2013, there were a total of 16,142 reported deaths of persons living with a diagnosis of HIV infection, residents of the San Juan EMA. Most deaths occurred among men and persons who inject drugs (Table 7).

Table 7 : Deaths of persons with diagnosed HIV infection, 1981-2013

Characteristics Demographics/Transmission	2007 - 2013		Accumulated Total 1981 - 2013	
	Number	Percentage	Number	Percentage
Sex				
Men	1,852	72.5	12,420	76.9
Women	701	27.5	3,722	23.1
Age Group*				
0 - 12	1	0.0	158	1.0
13 – 19	9	0.4	47	0.3
20 – 24	19	0.7	303	1.9
25 – 29	70	2.7	1,349	8.4
30 – 34	159	6.2	2,579	16.0
35 – 39	240	9.4	3,168	19.6
40 – 44	375	14.7	2,916	18.1
45 – 49	486	19.0	2,119	13.1
50 – 54	468	18.3	1,440	8.9
55 – 59	287	11.2	813	5.0
60 – 64	189	7.4	541	3.4
≥ 65 years old	250	9.8	709	4.4
Transmission category				
MSM	322	12.6	2,547	15.8
HC	819	32.1	3,639	22.5
PID	1,159	45.4	8,291	51.4
MSM and PID	157	6.1	1,117	6.9
Other/under investigation	81	3.2	352	2.2
Perinatal transmission/Other	15	0.6	196	1.2
Total	2,553	100.00	16,142	100.00

*Age of diagnosis.

D – INDICATORS OF RISK FOR HIV INFECTION

The following section provides a description of risks indicators for HIV infection in the San Juan - Caguas - Guaynabo Metropolitan Statistical Area. Although the data is based in a different geographical definition as that of the SJEMA, it incorporates several municipalities (as San Juan) where the majority of the PLWH in the Area reside. As well, the indicators are based in the population of MSM. As it was mentioned in a previous section, unprotected sex among men, was the mode of transmission reported most frequently in the San Juan EMA in 2014.

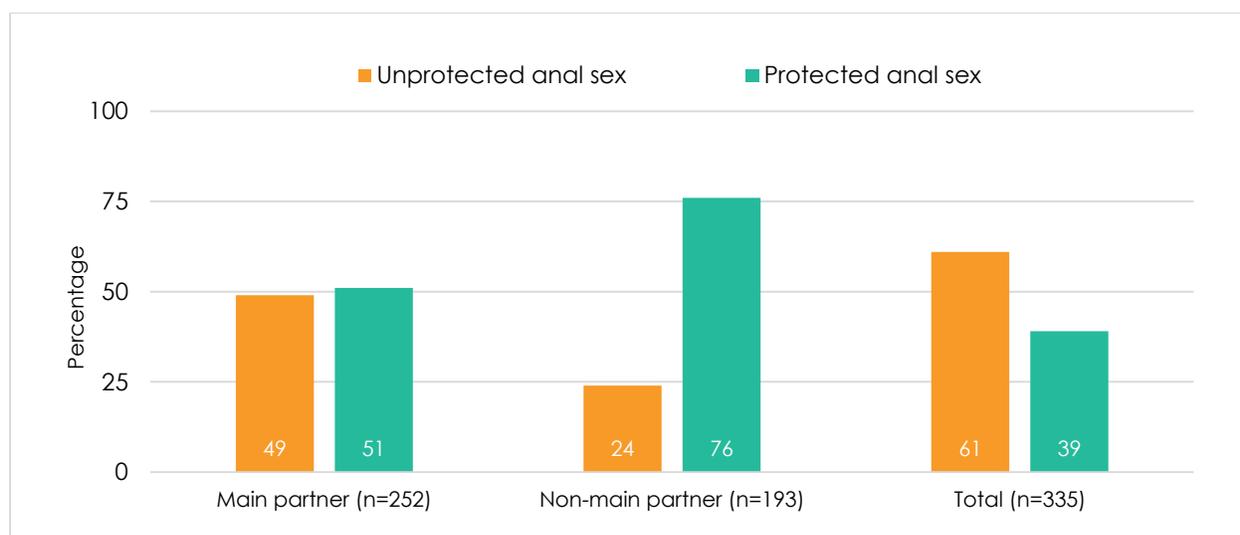
RISK INDICATORS OF HIV INFECTION – MSM, NHBS

From October to December of 2011, over 400 interviews were carried out in the MSM population who were 18 years old or older, residents of the San Juan – Caguas – Guaynabo MSA, as part of the National HIV Behavioral Surveillance (NHBS) activities. For the purpose of examining the risks exclusively associated to the acquisition of HIV, the analysis of men whose state of infection was HIV positive was excluded, which decreased the number of interviews included in the analysis to 355.

UNPROTECTED SEX

Of the men interviewed in the behavior study, 71% (n=252) reported having had anal sex with their main partners in the last 12 months before the interview and 54% (n=193) reported having had anal sex with non-main partners. Unprotected sex among participants who had anal sex was higher with main partners (49%), when compared with non-main partners (24%) (Figure 18).

Figure 18 : Number and percentage of MSM participants who reported having had unprotected anal sex with their main or non-main partners, NHBS, 2011



Source: Centers for Disease Control and Prevention. HIV Risk, Prevention, and Testing Behaviors—National HIV Behavioral Surveillance System: Men Who Have Sex With Men, 20 U.S. Cities, 2011. HIV Surveillance Special Report 8. <http://www.cdc.gov/hiv/library/reports/surveillance/#special>. Published September 2014. Accessed May 1, 2015.

Eight percent (8%) of all respondents (n=27) that reported having had sex in the 12 months prior to the interview had sexual relations with women. 81.5% (n=22) did not use a condom when having anal or vaginal sexual relations.

USE OF DRUGS OR ALCOHOL

The three types of non-injected drugs that are most used within the sample were: marijuana (19%), amyl nitrite poppers (10%), and cocaine (7%). 82% (n=290) of respondents reported the consumption of alcoholic drinks in the 30 days prior to the interview. 23% (n=81) reported an excessive consumption of alcohol.

AWARENESS OF THE INFECTION STATUS

The unawareness of the partner's infection status and incurring in risky behavior increases the possibility of acquiring/transmitting HIV. In 2011, a total of 374 respondents got tested for HIV. The prevalence of HIV in the convenience sample was of 9.6% (n=36). 75% (n=27) of HIV-positive people did not know they were infected with HIV.

HIV AND SEXUALLY TRANSMITTED INFECTIONS (STI) TEST RECORD

Currently the CDC recommends that teenagers and adults between the ages of 13 and 64 get tested for HIV once a year. This way, those who test positive can get the necessary medical and support services early on, in order to avoid health complications and reduce the transmission to others. The ratio of respondents that reported having gotten tested for HIV at some point was 82%. Nonetheless, the ratio of respondents who had done so in the 12 months prior to the interview was of 49%, the lowest percentage among participating cities.

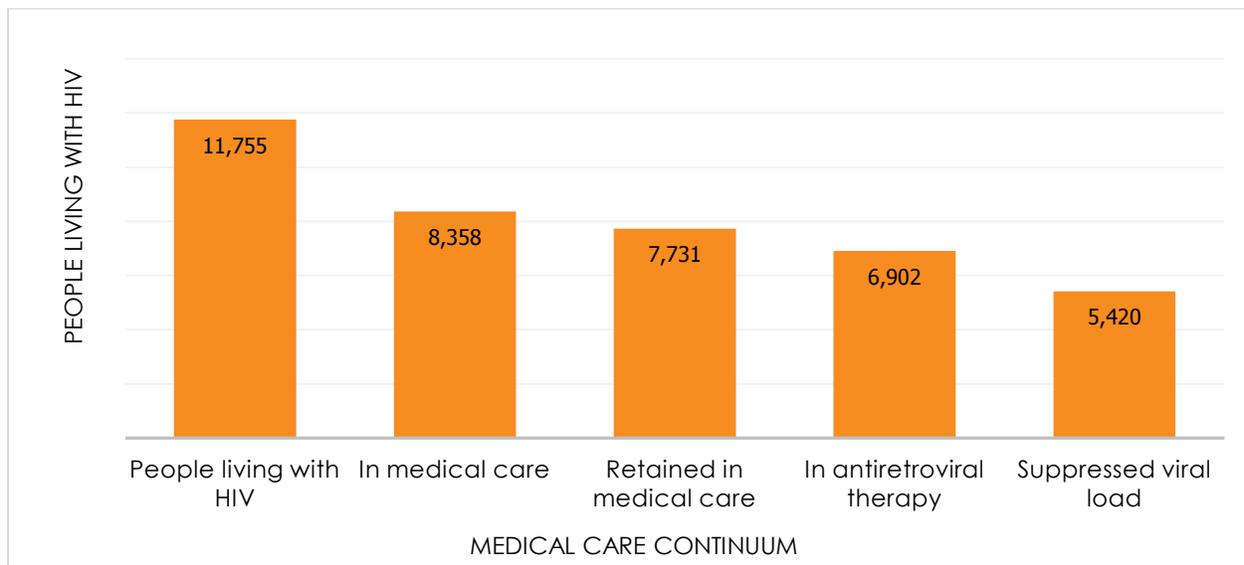
The CDC recommends that sexually active MSM get tested for STIs (syphilis, gonorrhea, chlamydia, and herpes) more frequently. According to NHBS data, only 31% of participants had been tested for STIs in the 12 months prior to the interview.

B. HIV CARE CONTINUUM

A – CARE CONTINUUM

By the end of 2013, 11,755 residents of the San Juan EMA lived with an HIV infection diagnosis. Of those, 71.10% received primary medical care in 2013. Among people that received primary medical care, 92.50% were retained in medical care. Among the people retained in medical care, 89.29% were receiving antiretroviral therapy. Among those receiving antiretroviral therapy, 78.53% had a suppressed viral load⁶. Overall, 46.1% of people living with diagnosed HIV infection residing in the SJEMA had a suppressed viral load in 2013.

Figure 19 : HIV care continuum, San Juan EMA, 2013



Persons living with HIV: total number of people ≥18 years old diagnosed with HIV infection by 2012, alive by the end of 2013. Data base that was used: HIV/AIDS Surveillance Program.

Linkage to care: people ≥18 years old with evidence of CD4, viral load, and/or antiretroviral therapy in 2013. Data base that was used: Study of Non-covered Needs of Primary Medical Care 2013 / Surveillance Program HIV/AIDS.

Retained in care: people ≥18 years old with evidence of CD4 and/or viral load tests at least twice in 2013 (minimum of 90 days between tests). Data base that was used: PR MMP – 2013 Cycle.

Antiretroviral use: people ≥18 years old retained in medical care, receiving antiretroviral therapy in 2013. Data base that was used: PR MMP – 2013 Cycle.

Viral load Suppression: people ≥18 years old receiving antiretroviral therapy, with suppressed viral load (<200 copies/ml) in 2013. Data base that was used: PR MMP – 2013 Cycle.

Regarding linkage to care, the proportion of persons living in the SJ EMA who were linked to medical care within the first three months after the diagnosis of HIV, amounted to 65.9% in 2014. However, this proportion is less than 85%, the minimum target set for the year 2015. The young persons between the ages 13 to 24 years, the men who have sex with men and the heterosexual

¹ Percentage based on the step prior to the HIV care continuum, San Juan EMA.

persons had the highest percent of linkage to medical care, while the persons who inject drugs and the persons whose risk factor has not been identified, had the lowest percent.

Table 8: Adults and teenagers ≥13 years old linked to primary medical care, AME San Juan, 2014

Characteristics demographics/transmission	Persons diagnosed with HIV	Persons linked to medical care			
		≤1 month		≤3 months	
		No.	%	No.	%
Sex					
Men	322	168	52.2	211	65.5
Women	92	45	48.9	62	67.4
Age group					
13-24	82	45	54.9	61	74.4
25-34	103	53	51.5	71	68.9
35-44	94	51	54.3	66	70.2
45-54	77	32	41.6	40	52.0
55-64	47	27	57.5	29	61.7
>=65	11	5	45.5	6	54.6
Transmission Category					
MSM	168	97	57.7	127	75.6
PID	32	11	34.4	12	37.5
MSM & PID	2	1	50.0	2	100.0
Heterosexual contact	143	82	57.3	103	72.0
RNR / RBI	69	22	31.9	29	42.0
TOTAL	414	213	51.5	273	65.9

B-DESCRIPTION OF DISPARITIES IN ENGAGEMENT

Due to the limitations of the data used for estimates of the HIV Care Continuum of the San Juan EMA, the information by subpopulation would not be representative, as the sample is representative of people in medical care for the whole area, not by subgroups.

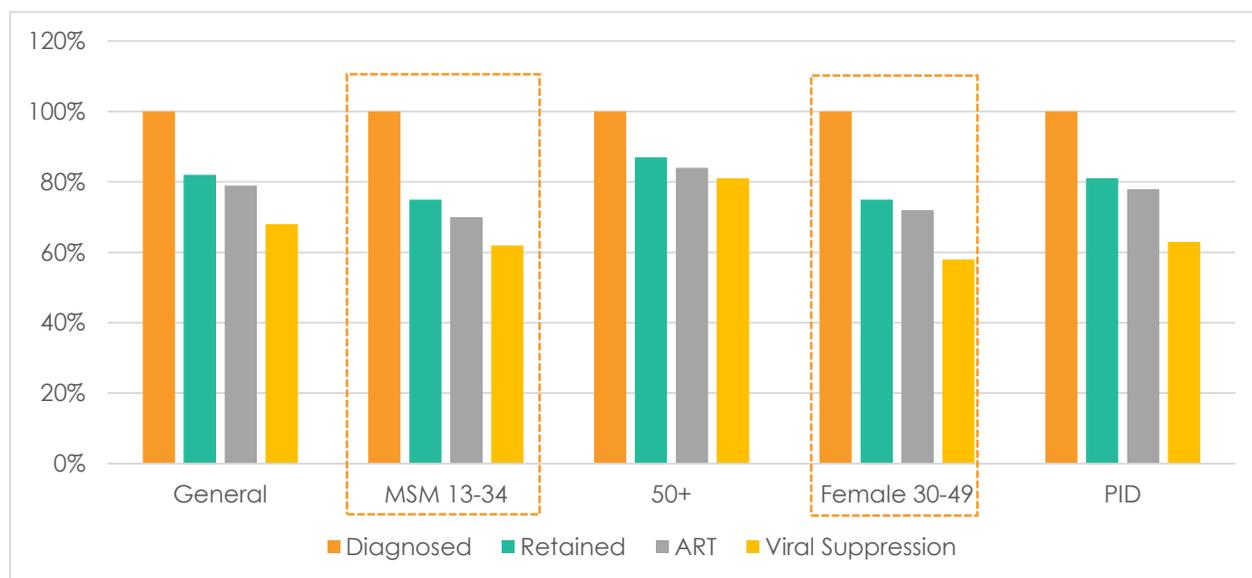
Based on those limitations, the information presented in this section is based on data of active clients in the CAREware database, Ryan White Part A. It, as well, does not represent a probabilistic sample by subpopulations, but provides insight regarding disparities in engagement among key populations, such as females, and young MSM.

Table 9: Analysis of disparities in the HIV Care Continuum, according to data of active clients in CAREWare

HCC STAGE	General		MSM 13-34		50+		Female 30-49		PID	
Diagnosed	3834	100%	313	100%	1956	100%	549	100%	588	100%
Retained	3133	82%	234	75%	1702	87%	411	75%	476	81%
ART	3029	79%	219	70%	1650	84%	398	72%	456	78%
Viral Suppression	2604	68%	194	62%	1586	81%	319	58%	371	63%

 Disparity is observed when the percentage of the stage is significantly lower than for the general population

Figure 20: Analysis of disparities by subpopulations, Ryan White Part A database

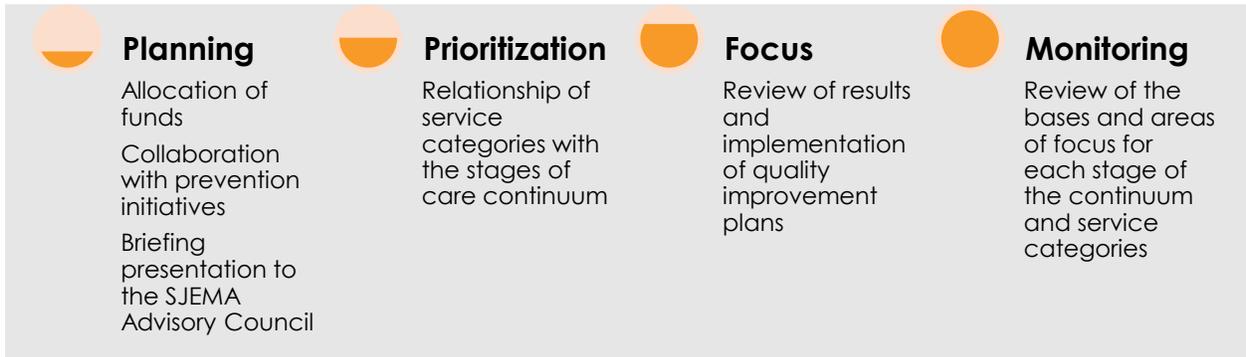


C – HIV CARE CONTINUUM UTILIZATION

In Puerto Rico, the model used for the elaboration of the HIV Care Continuum is one based on the reported prevalence. Each stage of the Continuum is based on the number of people diagnosed and living with HIV reported in the jurisdiction. It does not include the estimated number of people who have not been diagnosed, who are living with HIV.

The different actors linked to the subject of HIV in Puerto Rico understand that to accomplish the goals of the National Strategy, it is necessary to achieve a high level of commitment in each of the stages of the Care Continuum. That is to say, the diagnosis of HIV, linkage to medical care, continuous medical care (retention), antiretroviral therapy and viral load suppression. In this direction, the use of this information is a key tool in the planning, prioritization and focus of the efforts for the prevention and diagnosis of HIV in Puerto Rico. It is also one of the main points of reference for the development of specific strategies aimed at improving linkage and retention

into care and for the monitoring the effectiveness in the use of resources. The Care Continuum has also been integrated into the stages of the Quality Management Program as a key reference for the development of strategies. The following chart summarizes this approach as used in the SJ EMA.



For purposes of the integrated planning process, the Care Continuum was updated to 2013. In addition, an analysis was developed specifically for the San Juan MSA (San Juan Metropolitan Statistical Area). This information was shared with the participants who collaborated in the preparation of the plan and used it as a reference in the workshops held for the identification and prioritization of needs and the developing of strategies to address them.

C. FINANCIAL AND HUMAN RESOURCES INVENTORY

A- FUNDING SOURCES

This section provides information on financial resources available in EMA San Juan, to satisfy the needs for surveillance, prevention and treatment related to HIV, according to Federal Government Guidelines. Included in the section are the sources of federal and local funds needed for taking care of the various stages of the Care Continuum for HIV, the amount of funds from each source, the agencies that receive these funds and the services provided with the funds.

Figure 21 : Economic Resources Available in the San Juan EMA

Source of funds			Services and relationship to the HIV Care Continuum								
Source of Funds	Estimated amount \$ of funds for 2016	Percentage of fund	Services provided	Prevention	Diagnosis	Linkage to care	Retained in medical care	Antiretroviral therapy	Viral Load Suppression	Supporting services	
Ryan White (Part A)	\$14,000,000	12.40%	Home and Community Based Health Services								
			Home Health Care								
			Case management - non clinical								
			Medical case management								
			Medications (HIV)								
			Assistance Program Deductibles and Copayments								
			HIV test								
			Mental Health								
			Oral Health								
			Early intervention services								
			Rehabilitation services								
			Medical transportation services								
			Housing services								
			Legal services								
			Ambulatory medical services								
			Medical nutrition therapy								
			Treatment for Problematic Substance Use - Ambulatory								
Treatment for Problematic Substance Use – Residential											

Source of funds			Services and relationship to the HIV Care Continuum							
Source of Funds	Estimated amount \$ of funds for 2016	Percentage of fund	Services provided	Prevention	Diagnosis	Linkage to care	Retained in medical care	Antiretroviral therapy	Viral Load Suppression	Supporting services
Ryan White (Part B, ADAP, Base MAI)	\$25,445,286	22.53%	Financial assistance in case of Emergency							
			Food Bank / Food brought home							
			Home and Community Based health Services							
			Home Health Care							
			Case management - Support							
			Medical case management							
			Medications (HIV, opportunistic infections, Hepatitis C and for side effects)							
			Oral Health							
			Medical transportation services							
			Housing services							
			Ambulatory medical services							
			Medical nutrition therapy							
Ryan White (ADAP ERF)	\$9,558,425	8.46%	Medications (HIV, opportunistic infections, Hepatitis C and for side effects)							
Ryan White (Part B supplementary)	\$14,349,570	12.71%	Medications (HIV, opportunistic infections, Hepatitis C and for side effects)							
Ryan White (Part C)	\$3,182,405	2.82%	Home and Community Based Health Services							
			Health education/Risk reduction							
			Case management - Support							
			Medications (HIV, opportunistic infections, Hepatitis C and for side effects)							

Source of funds			Services and relationship to the HIV Care Continuum							
Source of Funds	Estimated amount \$ of funds for 2016	Percentage of fund	Services provided	Prevention	Diagnosis	Linkage to care	Retained in medical care	Antiretroviral therapy	Viral Load Suppression	Supporting services
			HIV test							
			Mental health							
			Oral health							
			Early intervention services							
			Medical transportation services							
			Ambulatory medical services							
			Medical nutrition therapy							
Ryan White (Part D)	\$739,192	0.65%	Child care							
			Health education/Risk reduction							
			Case management - Support							
			Medical case management							
			Medications (AIDS)							
			HIV test							
			Mental health							
			Early intervention services							
			Medical transportation services							
			Ambulatory medical services							
Medical nutrition therapy										
Other funds from ADAP	\$32,000,000	28.34%	Medications (AIDS)							
			Health insurance assistance program							
			Mental Health							
			Ambulatory medical services							
HOPWA	\$2,653,364	2.35%	Food Bank / Food brought home							
			Home and Community Based Health Services							

Source of funds			Services and relationship to the HIV Care Continuum							
Source of Funds	Estimated amount \$ of funds for 2016	Percentage of fund	Services provided	Prevention	Diagnosis	Linkage to care	Retained in medical care	Antiretroviral therapy	Viral Load Suppression	Supporting services
			Case management - Support							
			Medical case management							
			Oral Health							
			Economic assistance in case of Emergency							
			Psychosocial Support Services							
			Rehabilitation services							
			Medical transportation services							
			Housing services							
			Treatment for Problematic Substance Use - Residential							
SAMHSA	\$627,954	0.56%	Case management - Support							
			Mental Health							
			Ambulatory medical services							
Centers for Disease Control (CDC)	\$1,385,615	1.23%	Case management - Support							
			HIV test							
			Early intervention services							
			Medical transportation services							
			Legal services							
			Ambulatory medical services							
State funds	\$2,870,450	2.54%	Health education/Risk reduction							
			Case management - Support							
			Early intervention services							
			Community participation services							
			Medical transportation services							

Source of funds			Services and relationship to the HIV Care Continuum							
Source of Funds	Estimated amount \$ of funds for 2016	Percentage of fund	Services provided	Prevention	Diagnosis	Linkage to care	Retained in medical care	Antiretroviral therapy	Viral Load Suppression	Supporting services
			Housing services							
			Legal services							
			Ambulatory medical services							
Municipal Funds	\$4,032,622	3.57%	Health education/Risk reduction							
			Case management - Support							
			Medications (AIDS)							
			HIV test							
			Mental Health							
			Early intervention services							
			Medical transportation services							
			Housing services							
			Legal services							
			Ambulatory medical services							
			Treatment for Problematic Substance Use - Residential							
			Other Federal funds	\$1,318,508	1.17%	Counseling for adherence to treatment				
Health education/Risk reduction										
Case management - Support										
Medical case management										
Medications (AIDS)										
Mental Health										
Medical transportation services										
Housing services										
Treatment for Problematic Substance Use - Residential										

Source of funds			Services and relationship to the HIV Care Continuum							
Source of Funds	Estimated amount \$ of funds for 2016	Percentage of fund	Services provided	Prevention	Diagnosis	Linkage to care	Retained in medical care	Antiretroviral therapy	Viral Load Suppression	Supporting services
Program Income	\$762,100	0.67%	Health education/Risk reduction							
			Case management - Support							
			Medical case management							
			Medications (AIDS)							
			Mental Health							
			Oral Health							
			Early intervention services							
			Medical transportation services							
			Ambulatory medical services							
			Medical nutrition therapy							
Total	\$112,925,491	100.00%								

B – HIV WORKFORCE

GENERAL BACKGROUND AND INSTITUTIONAL FRAMEWORK IN PUERTO RICO

The Puerto Rico Health Department is the agency responsible for all matters related to health and health services under Act 81-1912, as amended, and the provisions of Sections 5 and 6 of the Constitution of the Commonwealth of Puerto Rico of July 25, 1952. The Department sets policy, oversees health services providers in Puerto Rico, and ensures that the rules are met to ensure the general welfare of the population. In addition, it is responsible for the physical and mental health of Puerto Ricans. The Department's mission is to promote and maintain health as an indispensable condition for every human being to enjoy the physical, emotional and social wellbeing that allows the full enjoyment of life, and the contribution to productive and creative efforts for society. In addition, pursuant to Act 11-1976, as amended, Law of the Comprehensive Reform of Health Services in Puerto Rico, all functions related to the entities responsible for the regulation of health professions in Puerto Rico were transferred to the Department of Health. This includes functions related to licensing, license renewals, continuing education and certification of specialized professionals.

Based on this regulatory framework, the Puerto Rico Health Department is responsible for monitoring the HIV epidemic and developing and implementing public policies related to this matter. To address this area of responsibility, the agency has the Medicaid program, which provides the guidelines for the coverage of the Government Health Plan for beneficiaries living with HIV as the Puerto Rico Medicaid State Plan; Epidemiology Division and its HIV / AIDS Surveillance Program; and the Assistant Secretariat of Family Health and Integrated Services, which has the Central Office AIDS and Transmissible Diseases Affairs (OCASET, for its Spanish Acronym) from which the HIV Prevention and Care services are offered. This last operating unit has several organizational structures or programs that work with the different aspects related to HIV / AIDS in Puerto Rico, including: Ryan White Program, Part B / ADAP; HIV/STI Prevention Division; Treatment Division and Transmittable Diseases; Pharmacy Unit; and the Community Services Organizations and Community Based HIV. Moreover, the Epidemiology and Research Office has the HIV/AIDS/STI Surveillance Office, which is responsible for monitoring and maintaining statistics on the incidence and prevalence of HIV/AIDS and other sexually transmitted diseases.

This framework of services that the State provides through the Department of Health, is complemented by the work of various government agencies, non-profits and private entities that provide services related to the surveillance, prevention and treatment of HIV in Puerto Rico.

HUMAN RESOURCES IN THE SJEMA, RYAN WHITE PART A FUNDS

To respond to the needs of the epidemic and as a requirement of the Ryan White Act to create an independent administrative structure to administer title I funds, now named Part A funds, the Municipality of San Juan established the AIDS Task Force. The office goal is to combine efforts of collaboration between community organizations, maximize existing resources and provide technical assistance to improve those necessary areas.

At the time of the drafting of this Plan, there were a total of 22 active services providers under the Ryan White part A funds, of which eight (8) provide clinical services, according to the Treatment

Guidelines of the Public Health Service; and fourteen (14) provide support services, that address other needs related to HIV status such as housing needs or treatments for the problematic use of substances. The following graph, lists the main services provided by these organizations.

Figure 22 : Services more frequently offered by Ryan White Part A sub-recipients

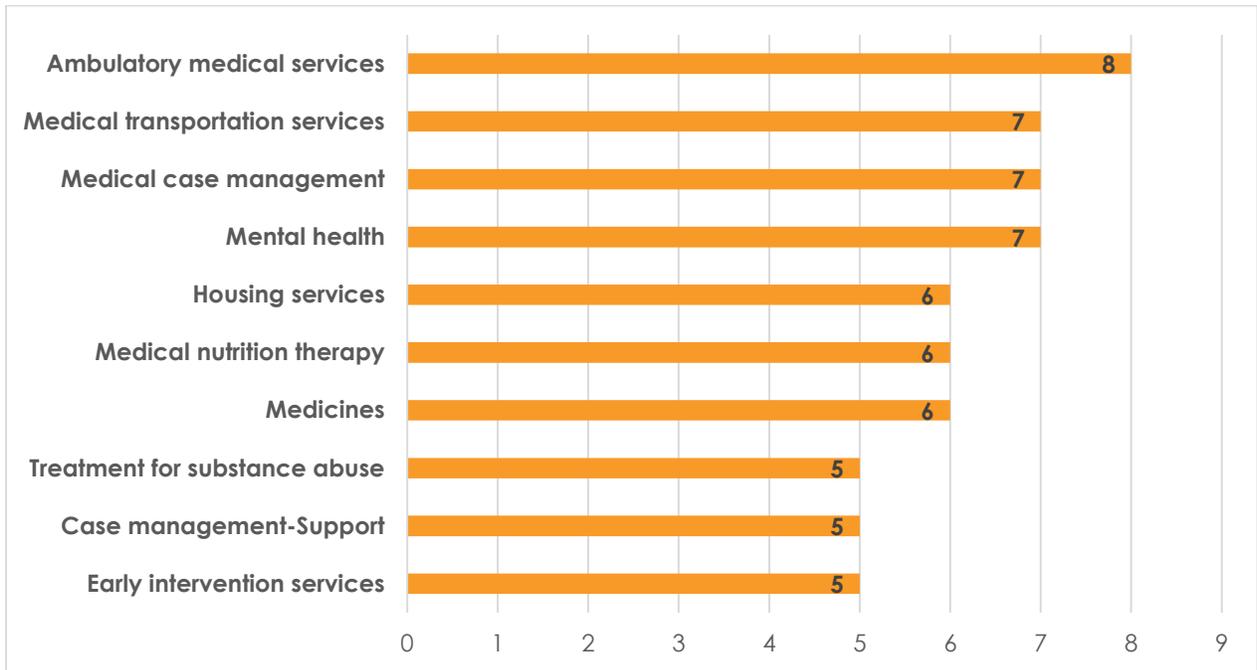
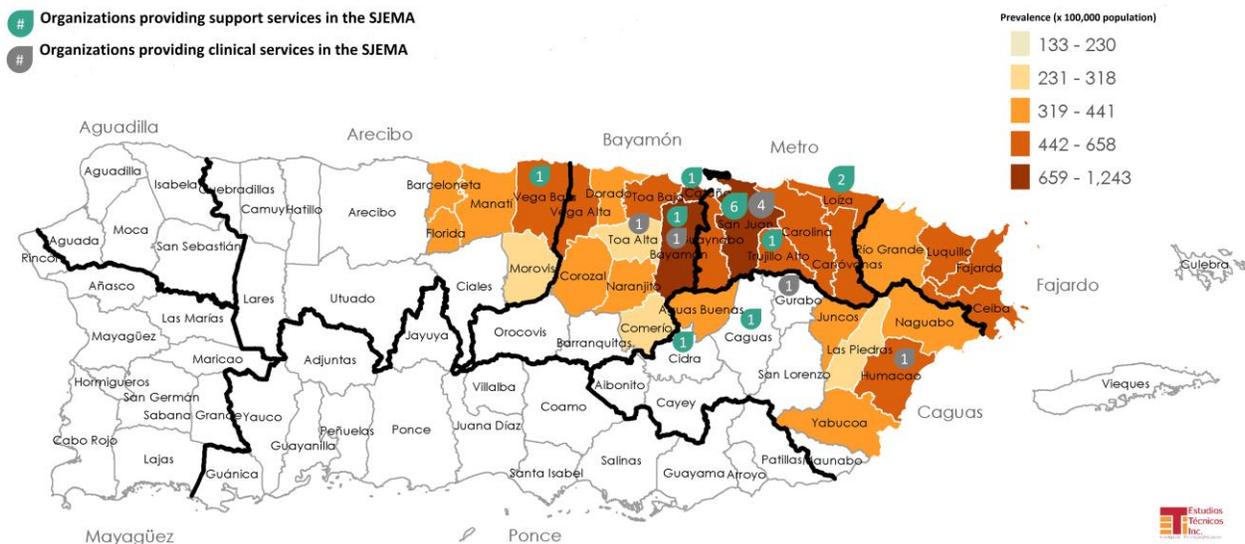
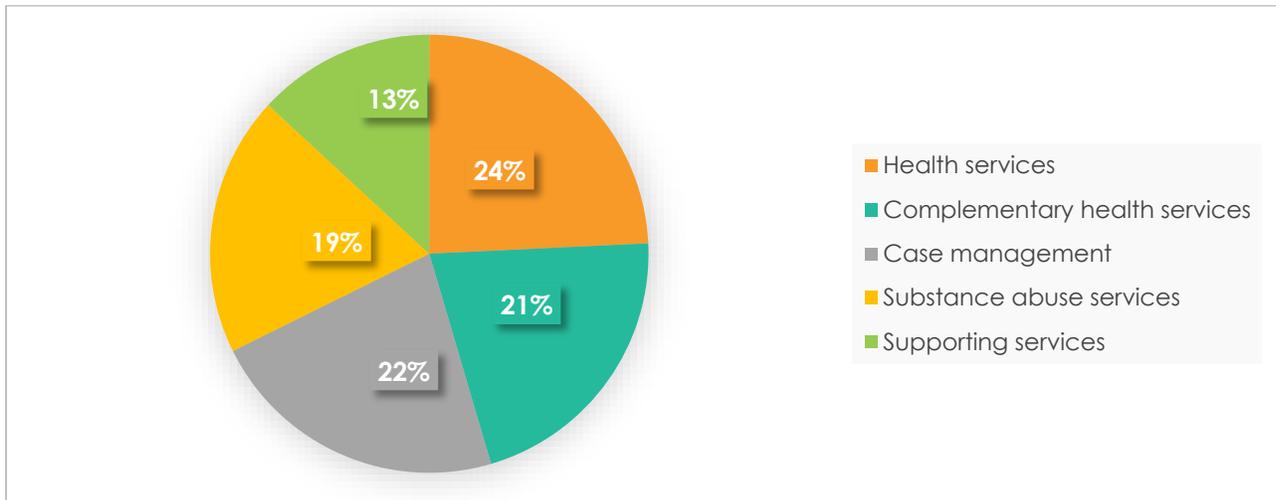


Figure 23 : Geographical distribution of funding Ryan White Part A sub-recipient organizations of the San Juan EMA, añadir año



To provide these services, the organizations have a multi-disciplinary team, mainly formed of health professionals, followed by case management and personnel for the treatment of problematic substances use.

Figure 24 : Human resources by type of services in the San Juan EMA



Source: Human resources inventory carried out by the AIDS Task Force, April 2016

Table 10 : Human resources in the San Juan EMA, by position

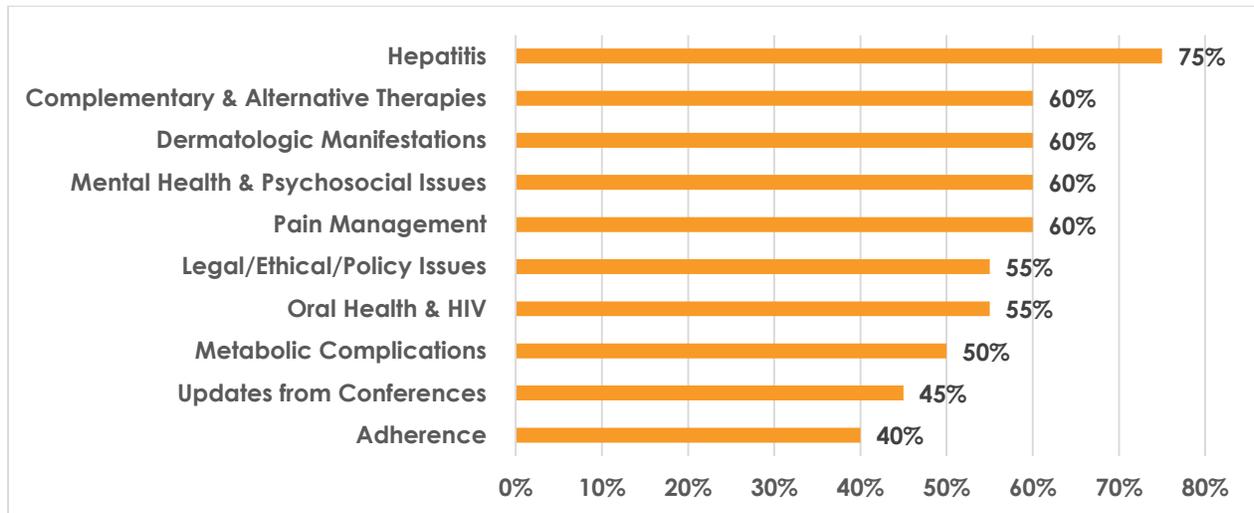
POSITION	TOTAL
Patient Assistance	6
Dental assistant	2
Pharmacy assistant	3
Driver	7
Chefs (Substance Abuse)	2
Chefs (Housing)	1
Addiction Counselor	3
Nutritional Counselor	11
Mental Health Counselor	1
Coordinator (Substance use)	1
Program Coordinator (Early Intervention)	1

POSITION	TOTAL
Clinical Coordinator and Monitoring	1
Dentist	2
Housing Director	1
Internal day Director (Substance Abuse.)	1
Health Educator	1
Maintenance Worker (Housing)	1
Detox Managers	3
Housing Managers	2
Nurses	20
Nurses (Substance Use)	14
Nurse (Home Health Care)	1
Nurse (Home Health service)	1
Addiction Specialist	4
Licensed Lawyers	3
Case Managers- Support	27
Clinical Case Managers	15
Case Managers (Housing Support)	3
Physician (Substance use)	8
Physician (Health Care/Home Bas Com.)	1
Physician (Health Care/Home Based)	1
Physician Specialist	10
Physician General	6
Internal Physician	2

POSITION	TOTAL
Primary Physician	6
Legal officer	1
OPR Provider (Early Intervention.)	2
Psychologist	12
Psychologist (Substance Use)	2
Psychologist (pediatric)	1
Psychiatrist	3
Area Supervisor (Substance use)	1
Housing Technician	3
Psychosocial technician (Health Care / Home)	1
Psychosocial technician (Clinical Case Management)	2
Physical Therapist (Rehabilitation)	2
Social Worker (Substance use)	1
Social Worker (Clinical Case Manager)	2
Social Worker (Case Manager)	6
Clinical Social Worker (Mental Health)	2

During the workshops conducted as part of the process of development the Integrated Plan, continuous training of health professionals and other human resources working with HIV was identified as a priority area. In that respect, the most recent needs assessment carried out by the "AIDS Education & Training Center Program Northeast/Caribbean" (AETC), which was published in June 2016, identified ten main topics to train HIV service providers in Puerto Rico, as shown in the following graph:

Figure 25: Ten main topics to train the HIV workforce in Puerto Rico, according to providers' response

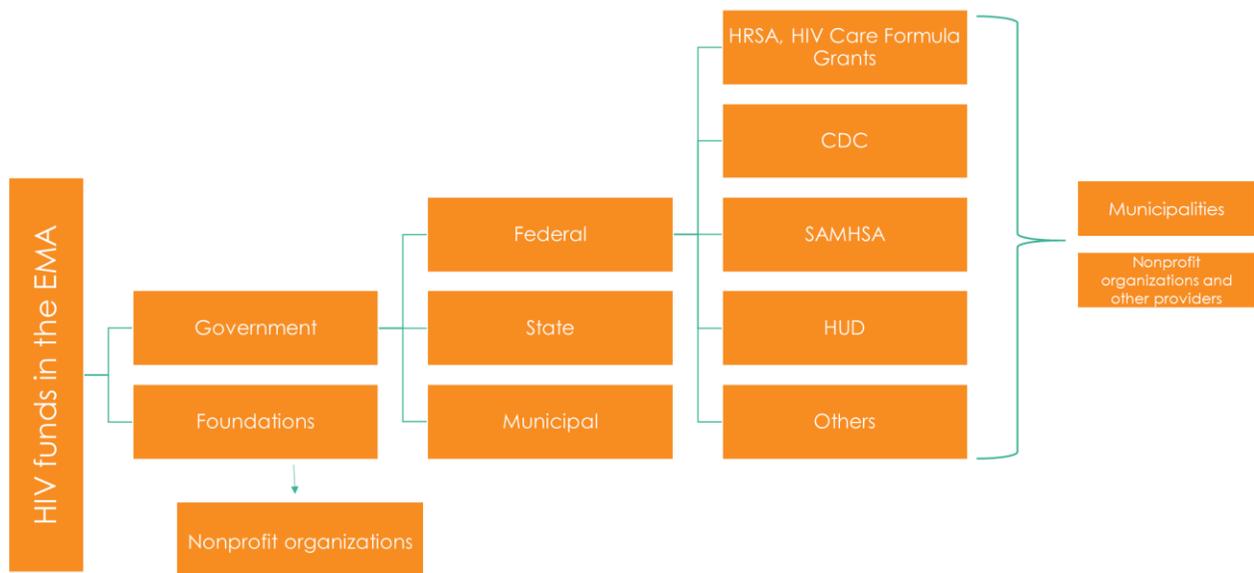


Source: Needs Assessment, "AIDS Education & Training Center Program Northeast/Caribbean", 2016

C – FUNDING SOURCES TO ENSURE CONTINUITY OF CARE

As illustrated in the table included in Part A of this section, services related to surveillance, prevention and care of HIV in the SJ EMA are offered by combining state, municipal and federal funds. In addition, non-profit organizations can and do receive funds from private foundations. However, there is no precise information on these funds and the grants may vary greatly year on year.

Figure 26 : Interaction of funding sources in the San Juan EMA



The main Federal Government fund that the SJEMA administers comes from HRSA, in particular from the HIV Emergency Relief Project Grants (CFDA 93.914), Ryan White Part A funds. This source of funding seeks to provide direct financial assistance to eligible metropolitan areas (EMA) and areas of transitional subsidies (TGA's) that have been most severely affected by the HIV epidemic in order to improve access to a care continuum, comprehensive, effective, cost effective, high quality, community-based, for low-income PLWH and their families. It also seeks to strengthen strategies to reach minority populations.

Within this framework, the SJ EMA provides 13 core clinical services and 16 support services, which help to complement local resources to respond to the epidemic. That is, Part A funds are used as a last resource, and the AIDS Tasks Force coordinates efforts with other stakeholders to avoid supplanting or duplicating efforts.

The priorities in the distribution of these funds, is carried out by the SJ EMA Planning Council, by representatives of the community, community based organizations, community leaders and service providers. To determine priorities, stimulate the interaction of these sources of funds and maximize available resources, the Planning Council analyzes fiscal and programmatic information to determine the efficiency and effectiveness of services provided, as to ensure the accessibility and availability of services to people with HIV. Likewise, the allocation of resources is based on the analysis of the results in each of the stages of the HIV Care Continuum and the needs assessment commissioned by the Council.

Another significant source of funding received from the Federal Government is the funds from HUD (Housing Opportunities for Persons with AIDS (HOPWA-CFDA 14.241). These resources help complement essential supporting services needed by persons with HIV/AIDS and their families. In particular, the program is aimed at developing strategies to meet the housing needs complemented by support services to low-income PLWH and their families.

The ultimate goal of the program is to provide a stable environment of housing for families who are experiencing an economic crisis as a result of difficulties that PLWH confront.

Through the Care Continuum model ("Care Continuum"), preventive or palliative services that promote the quality of life are offered.

In Puerto Rico, the Department of Health and the Municipality of San Juan are recipients of HOPWA funds, but the Municipality of San Juan is the administrator of both assignments (state and municipal).

These federal funds, as detailed in the table presented in Part A of this section, are combined with state and municipal government resources, aimed at providing a wide range of services related to prevention, diagnosis, care and support to PLWH or with risk behaviors, which include: Health Education / Risk Reduction, Case Management - Support, Medications (VIH), HIV testing, Mental Health, Early Intervention Services, Transportation to Medical Services, Housing Services, Legal Services and Medical Outpatient Services.

D – IDENTIFIED NEEDED RESOURCES

During the activities for the development of the Plan (as) participants mentioned a number of areas where it is understood that it is necessary to raise additional resources to strengthen the system of provision of prevention, care and support for PLWH and with risk behaviors.

These areas include the following:

- Funds for treatment of problematic use of substances, including injectable and non-injectable drugs;
- Funds for services related to mental health; and
- Funds for the provision of permanent housing and support services to people with HIV.

To meet these areas of concern, a number of activities related to the sustainability of the activities in the long term was included in the Plan, comprising the development of strategic alliances for maximizing resources and the involvement (engagement) of the private sector (insurance, pharmaceuticals), among others.

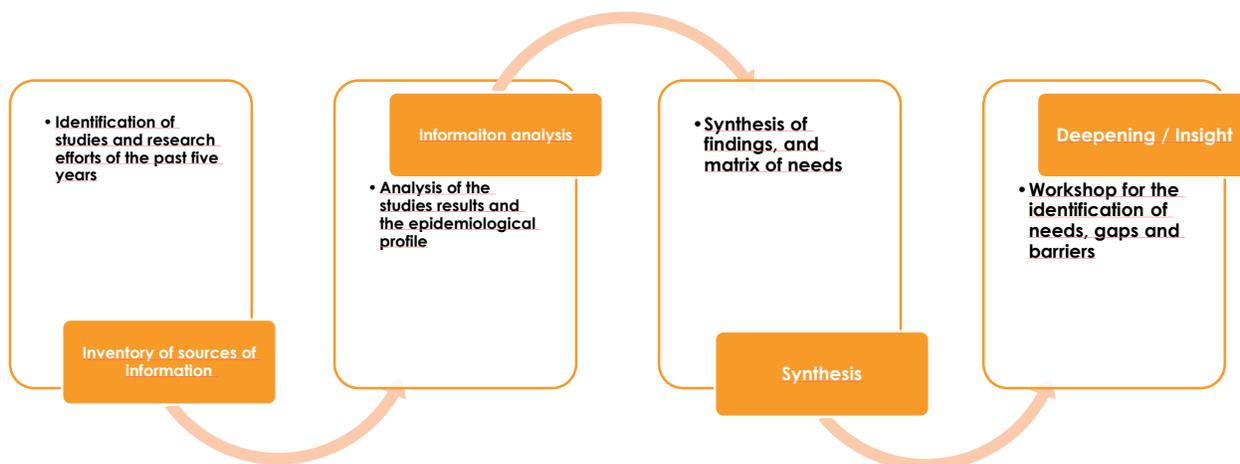
It should be noted, moreover, that two of these areas of concern, (funds for the treatment of problematic use of substances and funds for services related to mental health), were also identified in the Needs Assessment conducted in 2016 for the SJ EMA. The information of the study was obtained through a series of interviews with the 22 service providers funded by the Ryan White Part A Program.

D. ASSESSING NEEDS, GAPS AND BARRIERS

A- PROCESS TO IDENTIFY HIV PREVENTION AND CARE SERVICE NEEDS

The process to identify prevention and care service needs and gaps was based on a multi-method approach of participatory planning, through which representatives of the community, non-profit organizations, public institutions, the Academia and other groups of interest, participated in the identification and prioritization of the needs, and in the development of strategies to address them (see section II-B, for details on the process).

Figure 27 : Participatory process for the identification of needs



As a first step in identifying the needs, an inventory of the studies and sources of information generated during the five years prior to the elaboration of the Plan was conducted. These included, among others:

- studies commissioned by the Planning Bodies, including the Ryan White Part B / ADAP Planning Group, the SJ EMA Planning Council and the Planning Group for HIV Prevention,
- Prevention and care needs assessment, carried out by the Department of Health in 2012 and 2014,
- information of the tests conducted in clinical and non-clinical environments,
- the profile of the epidemic and the Care Continuum developed by the HIV/AIDS Surveillance Program of the Epidemiology Division, of the Department of Health, and
- Investigations performed by the Academia⁷.

These sources were used to identify relevant findings that were presented to the stakeholders in a workshop to generate a discussion of the needs, service gaps and barriers.

During the workshop, the participants were organized into small working groups that, through a guided exercise, delved into the needs, the groups that are most affected and other disparities. Once deepened on the needs and its various manifestations, the needs were prioritized and barriers associated with these were identified. A total of 60 individuals participated in this process.

The information gathered at the workshops was also subject of discussion in the meetings of the Project's Steering Committee. As described in greater detail in Section II-B, this committee is part of the participatory structure developed for the preparation of the Plan and counted with representation of personnel from the Department of Health, the Planning Advisory Bodies, the Community and the Academia.

While developing the Plan, a Needs Assessment of the SJ EMA was being conducted. This study was also revised as part of the final phase of development of the Integrated Plan, and some of its most relevant findings are included in the discussion. The SJ EMA Needs Assessment involved a representative sample of participants from 26 of the 30 municipalities that form the region, and the 22 sub-recipients of funds under the Ryan White HIV / AIDS Part A.

⁷See Appendixes, for a summary of the needs identified in other studies.



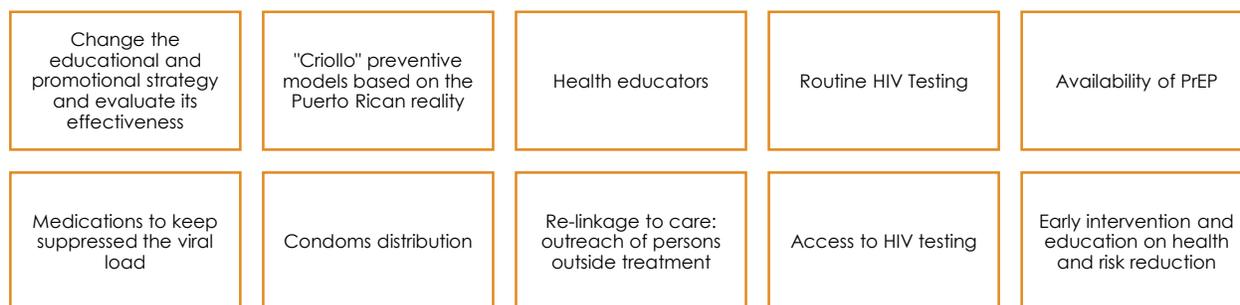
Workshop for identifying prevention and care needs.

PREVENTION NEEDS AND SERVICE GAPS

In general terms the participants of the workshops carried out agreed that there has been an improvement on HIV prevention in Puerto Rico during the past decade. However, they also argued that although there has been progress, it remains necessary to educate the population on the subject and expand such educational efforts to the educators and service providers. They also raised the issue that despite the decline in new infections, there is still a long way to go because there are groups for which the trend is reversed, as the population of young people and heterosexuals.

Regarding necessary services to meet Goal #1 of the National HIV/AIDS Strategy, and thus reduce the incidence of new HIV infections, the participants pointed to ten areas of need, some of these framed on early intervention, the adaption of prevention strategies to our local context, and re-linkage to care.

Figure 28 : Prevention Needs identified by the workshop participants



CARE NEEDS AND SERVICE GAPS

In terms of Goal # 2 of the National Strategy and the increase in access to care and treatment to improve the health outcomes of people living with HIV, the participants of the workshop generally agreed that there has been progress. However, disparities are seen in the San Juan EMA, in geographical terms. As an example of this concern some of the participants mentioned a disparity in the availability and access to services in rural areas inside the geographic zone of the EMA in comparison to urban areas, particularly the Metropolitan Area. Similarly, others mentioned, the need to strengthen the use of models such as HIV Navigation Services as a strategy to promote linkage to care.

Also, the workshop participants were concerned about the treatment disparities they observed towards groups, such as persons who inject drugs. They believe that the disparities towards this group are triggered in part by stigma. Thus, the participants agreed that there are still some populations where we have not advanced into capturing, linking them to early care, retaining them in care and maintaining the viral load suppressed. Therefore, some of the participants understand that it is important to start taking into consideration the populations that face more

disparities, such as transgender communities and the population of persons living in rural areas. Similarly, and according to the perception of the participants, there are challenges in the population of heterosexual women and older adults in terms of the disparities they confront.

The following Figure summarizes, in order of priority, the care and treatment needs identified by participants as a result of the workshop held. For purposes of carrying out the exercise, the participants had an initial discussion of the list of needs derived from other studies and sources of information, and agreed upon those needs that are still present in the jurisdiction. Once the needs were validated, each participant gave a priority level based on a scale in which 1 was the need of greater priority. To obtain a final list of priority needs, the scores given by all participants were analyzed, and add up based on a formula of the inverse of the scale. Then, needs were ordered from highest to lowest score. In the table, the first column shows the order of priority obtained by that service need, the second column describes the need, while the third column mentions the populations that according to the experience of the participants, are most affected by those specific needs. Finally, the fourth column lists other related disparities and gaps.

Figure 29 : Most urgent Service needs and gaps mentioned by the participants

	MOST URGENT NEEDS (first 10)	POPULATIONS MOST AFFECTED	OTHER DISPARITIES
1	Medications	Ex-inmates, PIDs	Geographical, (Northeast towns) and economic
2	Outpatient medical services	PIDs, inmates, transsexuals	Geographical, (Northeast towns)
3	Mental Health	PIDs, elderly, young	Geographical, (Northeast towns), socioeconomic level, education, institutional
4	Assistance Program for copayments and deductibles	Persons with HIV	Socioeconomic level
5	Medical case management	PIDs	Geographical
6	Early intervention services	PIDs, young, MSM, persons with mental health problems, women	Socioeconomic level, age
7	Medical transportation services	Persons with disabilities	Socioeconomic level, unequal access
8	Medical nutrition therapy	MSM, Young, Custodial parents of minors	Geographical, Northeast towns, socioeconomic status
9	Case management - support	Persons with HIV, PIDs	Geographical
10	At home health care	Persons at an end stage, HIV-positive patients, older adults	Geographical (Municipalities of the Northeast Region), institutional, age, disabilities

As part of the discussions, some participants agreed that it is necessary to educate the society to reduce or eliminate the stigma and discrimination against persons living with HIV. Moreover, other participants added the importance of providing immediate support to promote linkage to services and empower the population in terms of their condition. Others added that there is the need to provide specialized services for women because of the different roles that they play. These roles hinder the access to care for them, creating a gender disparity. The services aimed at the young people were the other services mentioned as necessary for the reduction on disparities. This because according to the participants, the children who were infected, who are now young, access the services with limitations and is a population that requires a lot of attention because of all its peculiarities and the challenge of retaining them. According to participants, there is the need to offer more specialized services with a greater understanding and appreciation for them. Finally, other disparities mentioned were the geographical area and the health plans coverage (socioeconomic).

On the other hand, the Needs Assessment of the San Juan EMA, Ryan White Program, Part A, 2015-2017 abounds on a number of specific needs by groups of interest.

Similarly, the study shows how Puerto Rico has experienced, like other jurisdictions, fiscal cuts. The San Juan EMA has not been the exception. This, in turn, translates into reduced funding designated to Part A to provide services for the HIV population. According to the providers of Part A interviewed as part of the Needs Assessment, more than half have had to cut services in several areas as is the case of nutrition services, counseling, alternative therapies, community outreach, and prevention campaigns. This due to the reduction of funds and to reinforce or reallocate resources to areas that will support patient retention in health care.

D – BARRIERS TO HIV PREVENTION AND CARE

Once the needs related to the prevention and treatment of HIV are identified and prioritized, the workshop participants identified the barriers that prevent access to such services. According to the guidelines provided by the CDC and HRSA, the types of barriers were defined as follows:

- Social barriers (poverty, cultural, stigma)
- Federal, State or Municipal barriers related to public policy (for an example health plan coverage)
- Barriers linked to the Administrative Structure (staff capacity in terms of development and training, and lack of personnel, administrative processes)
- Program barriers (for an example infrastructure, availability of funds, information systems)
- Service providers barriers (lack of resources, levels of expertise)
- Barriers related to beneficiaries (transportation, homelessness or housing instability, poverty, stigma, co morbidity, among others)

The next Figure summarizes the results of this exercise. As an attachment to this document, the barriers identified in detail for every need are included. The information resulting from this exercise was used in subsequent workshops to develop activities to address or overcome those barriers.

Figure 30 : Identified barriers

Necessities	Barriers					
	Social	Federal, State or municipal	Administrative Structure	Programs	Service providers	Barriers related to beneficiaries
1 Medicines	15	29	15	16	11	17
2 Outpatient services	23	28	19	21	24	24
3 Mental health	28	22	13	16	20	21
4 Assistance Program for copayments and deductibles	15	19	9	11	7	11
5 Medical case management	4	5	7	10	13	4
6 Early intervention services	16	11	8	16	13	7
7 Medical transportation services	16	7	7	12	15	8
8 Medical nutrition therapy	2	5	2	5		5
9 Case management - support	3	4	-	2		-
10 Health care at home	3	5	4	2		4

E. DATA: ACCESS, SOURCES, AND SYSTEMS

A. DESCRIBE MAIN DATA SOURCES

For the purpose of carrying out the needs assessment presented previously, different information sources were combined. The epidemiological profile was prepared by the staff of the HIV/AIDS Surveillance Program of the Puerto Rico Health Department using the following sources of information, mainly:

- Data from the Puerto Rico AIDS Surveillance System
- Data from National HIV Behavioral Surveillance (NHBS)
- U.S. Census Bureau⁸

For purposes of conducting the unmet needs analysis, databases from Ryan White funds Parts A, B, C & D, was used, as well as databases from Puerto Rico's Public Health Plan.

⁸ The information collected includes the estimate of the Puerto Rican population to July 1st of each year during the 2007–2014 period by age, sex, and municipality of residence. In addition, the median age of the population by sex and population density was obtained. The information was obtained through the internet at the following address: <http://factfinder.census.gov/faces/nav/jsf/pages/index.xhtml>

Moreover, as a starting point for identifying needs and provide information that could serve as input to encourage discussion during the workshop with stakeholders, studies conducted by the Puerto Rico Health Department and the Academy were identified during the five years preceding the integrated planning process including:

- HIV and STI Needs Assessment (2014), *Estudios Técnicos, Inc.* for the PR Department of Health.
- Ryan White Part B, Needs Assessment and Satisfaction Study (2012).
- Study on Risk Behaviors among Men between the Ages of 13 and 24 who Have Sex with Men (2015), *Estudios Técnicos, Inc.* for the PR Department of Health.
- Ryan White Part B Needs Assessment (2013)

For a full list of references, refer to the Attachments.

B. DESCRIBE DATA POLICIES THAT SERVED AS BARRIES

The Puerto Rico AIDS Surveillance System was implemented in 1987 and is in charge of the identification, quantification, and documentation of individuals diagnosed with HIV/AIDS, according to the CDC case definition. It is responsible for maintaining a proactive epidemiological surveillance and protect the confidentiality of HIV/AIDS cases. The report sheet collects the demographic, geographical, epidemiological, and clinical information of the population affected by the virus. On January 2003, Administrative Order 177 entered into effect, establishing the mandatory reporting of HIV or AIDS infection. The reporting of the cases should not exceed five working days after the date of diagnosis. In 2015, Administrative Order Number 336 was signed, establishing the use of the new algorithm for HIV testing, which allows identification of infection in the acute period.

Moreover, the HIV/AIDS Behavioral Risk Surveillance System is an anonymous cross-sectional survey held annually in the San Juan-Caguas-Guaynabo Statistical Area (San Juan MSA). It consists of three rounds of interviews; each cycle studying the risk behaviors of one of the populations identified as high risk for HIV infection. The first cycle corresponded to the MSM population. The eligibility criteria for monitoring behavior in this population are: (1) men who have sex with men; (2) 18 years of age or older; (3) be residents of the San Juan MSA; (4) who have not previously participated in the study during the present cycle.

LIMITATION OF THE REPORTING OF HIV DIAGNOSIS

Although the reporting of HIV cases (independently of AIDS) represents the most accurate accounting for the total cases of HIV infection compared with AIDS cases, it is limited by the following:

- | Persons who tested for the virus anonymously and did not report to the Puerto Rico VIH/AIDS Surveillance System.
- | Underestimation of newly infected cases (people who do not know their HIV status because they have not performed the screening test or simply do not feel at risk of infection.)
- |

LIMITATIONS OF STUDIES REVIEWED AS PART OF THE PLANNING PROCESS

Some of the studies used as references for carrying out the exercise of identifying and prioritizing needs have limitations regarding the sampling frame because they are based on non-probabilistic samples. Therefore, the findings derived from these investigations, could not be extrapolated to the universe and served more as a reference for conversations during the workshops in conjunction with other sources of information and experiences of the participants themselves.

C. DESCRIBE ANY DATA THAT WAS NEEDED BUT NOT AVAILABLE

During the workshops and meetings of the committees there were two categories of detailed information for decision-making that would have been desirable to have available. These are the epidemiology of viral hepatitis in the wider population with HIV and information about the profile and needs of transgender population in Puerto Rico.

It should be noted that due to cleansing, maturing and validation of epidemiological HIV data, as required by CDC, the year base of the information presented in the workshop session for purposes of the Unmet Need and the HIV Care Continuum was 2013. The update of both analysis is projected to be completed before the end of 2016, for information to be shared with the Planning Advisory Bodies and other stakeholders for any necessary amendments to the Integrated Plan.

SECTION II: INTEGRATED SURVEILLANCE, PREVENTION AND CARE PLAN

A. INTEGRATED PLAN

This section presents the Integrated Plan developed for the SJ EMA. According to Federal Guidelines, it includes the following components:

Goals: broad statement of purpose that describes the expected long-term effects of activities consistent with the National Strategy.

Objectives: measurable statements that describe results to be achieved.

Strategies: the approach by which the objectives will be achieved.

Activities: Steps and actions required to implement the strategy and achieve the objectives.

Target populations: The group of individuals, organizations or other entities to which the activity is directed; that is, expected to be affected or impacted by the activity. Depending on the activity, may include groups of people with risk behaviors, PLWH, service providers, service managers and the Academy, among others.

Responsible: Groups, organizations or sectors that play an important role in the implementation of the strategies and activities.

Indicators: Data, measures or information sources through which the expected outputs of each activity are measured.

The resources committed by the jurisdiction toward implementing the activities, are included in Section I-B of this document.

As for the barriers that potentially could affect the implementation of the Plan, participants in the planning process identified two main types of barriers: barriers associated with the fiscal condition of Puerto Rico and those related to the limitations imposed by the legal framework and public policy. On the other hand, it represents a challenge to integrate the efforts of the various sectors involved with HIV and to establish the necessary communication, coordination and accountability systems to enhance collaboration. To address these barriers, various strategies and activities are included in the Plan, particularly in Goal # 4.

GOAL 1:

Reduce New HIV Infections

Objective 1.1 Increase the percentage of persons living with HIV who know their serostatus to at least 90 percent.

Strategy	Activities	Target population	Timeframe	Responsible / Collaborators	Indicators
1.1.A Continue with the implementation of early intervention activities in the San Juan EMA	Development of recommended guidelines for an intervention based on patient navigation that incorporates, monitoring appointments, accompaniment, among other things focused on adherence to treatment.	Service providers of the Ryan White Part A program	2017	Ryan White Part A program (SJ EMA), PRDOH, SJ EMA Planning Council	<ul style="list-style-type: none"> Developed guidelines
	Dissemination of guidelines	Service providers of the Ryan White Part A program	2018-2021	Ryan White Part A program (SJ EMA), SJ EMA Planning Council	<ul style="list-style-type: none"> Documents with evidence of guidelines publication.
	Continue with outreach efforts directed to early intervention.	PLWH	Continuous during the period	Providers of Ryan White Part A program	<ul style="list-style-type: none"> Number of cases identified through outreach efforts
	Continue efforts to identify the needs of those diagnosed and their families.	PLWH and their families	Continuous during the period	Providers of Ryan White Part A program	<ul style="list-style-type: none"> List of needs identified and source of information
	Continue to provide adherence counseling services, through providers	PLWH(older adults)	Continuous during the period	Providers of Ryan White Part A program	<ul style="list-style-type: none"> Number of PLWH receiving counseling services in adherence.

Strategy	Activities	Target population	Timeframe	Responsible / Collaborators	Indicators
1.1.B Support the state and the entities involved in efforts to expand access to primary and prevention, making use of innovative ⁹ and evidence-based ¹⁰ , strategies, including combined approaches aimed at PLWH	Promote integration, early linkage ¹¹ and re-engagement to treatment and support services ¹² for PLWH to keep the viral load of the community suppressed.	PLWH	Continuous during the period	SJEMA, HUD, AMHAS, PRDF, PRDWHR, PRDOH, PRDCR	<ul style="list-style-type: none"> • Number of linkages to care • Number of referrals to Support services • Number of referrals completed • Number of PLWH with viral load suppression that were linked to care
	Intensify efforts to promote linkage to care, adherence, retention in treatment and viral load suppression.	PLWH	Continuous during the period	SJEMA, Funds recipients for HIV prevention and care services	<ul style="list-style-type: none"> • Number of linkages to care • Number of persons retained on treatment • Number of persons with viral load suppression
	Collaborate on efforts of the jurisdiction (Puerto Rico) aimed at strengthening the implementation or expansion of high impact prevention interventions (HIP) evidenced based, for the reduction of risk behaviors.	PLWH	Continuous during the period	SJEMA, PRDOH, Funds recipients for HIV prevention and care services, Service providers	<ul style="list-style-type: none"> • Number of High Impact Interventions implemented in the SJEMA. • Number of participants of the interventions

⁹ By innovative activities, means that activity or combination of activities, creative, effective, cost-efficient, that produces sustainable results and greater impact on preventing HIV in specific groups or communities.

¹⁰ A strategy or evidence-based practice is one that combines information coming from experts, scientific evidence and information about the values of beneficiaries to provide a high quality service that reflects the values and needs of beneficiaries and at the same time achieve the objectives tracings.

¹¹ Early linkage refers to linkage to care within a month since the person is diagnosed with HIV infection.

¹² Support services refer to mental health services, housing services, among others that contribute to improving the health outcomes of people living with HIV.

Strategy	Activities	Target population	Timeframe	Responsible / Collaborators	Indicators
<p>1.1.C Promote coordination of education activities to increase awareness about access to effective primary and secondary prevention, including pre-exposure prophylaxis (PrEP) and post-exposure prophylaxis non-occupational and occupational.</p>	<p>Assist in coordinating education efforts to clinical service providers about the importance of PrEP / PEP / nPEP.</p>	<p>Service providers, Insurance companies, Office of the Commissioner of Insurance</p>	<p>June 2019</p>	<p>SJEMA, PRDOH, AETC, Academia, Medical Directors, PrEP/PEP Advisory Committee/Hospitals, CPTETs</p>	<ul style="list-style-type: none"> • Number of educational activities for clinic service providers in the SJEMA about PrEP / PEP / nPEP. • Number of providers that participate in the educational activities in the SJEMA. • Number of representatives from insurance companies participating in educational activities serving in the SJEMA
	<p>Collaborate in efforts to educate the public about PrEP / PEP / nPEP, its benefits and how to access them.</p>	<p>General population and persons with risk behaviors</p>	<p>For December 2019</p>	<p>SJEMA, PRDOH, Agencies that provide services, PrEP/PEP Advisory Committee</p>	<ul style="list-style-type: none"> • Number of performed educational activities in the SJEMA directed to the general public • Number of participants of the educational activities conducted in the SJEMA
	<p>Collaborate in the dissemination of guidelines developed by the state on standards of care for people at significant risk of HIV to educate them about PrEP.</p>	<p>Service providers of the Ryan White Part A program</p>	<p>2018</p>	<p>SJEMA, SJEMA Planning Council</p>	<ul style="list-style-type: none"> • Number of providers in the SJEMA that received the guide.

Objective 1.2 Reduce the percentage of MSM, Young people, Young MSM and heterosexual women who have engaged in HIV-risk behaviors by at least 10 percent.

Strategy	Activities	Target population	Timeframe	Responsible / Collaborators	Indicators
1.2.A Encourage the use of scientifically based and age-appropriate prevention strategies to address HIV risk reduction among MSM, young MSM, youth and heterosexual women.	Participate in establishing partnerships with the Department of Education, universities and post-secondary institutions and other entities related to education, to implement strategies and activities to prevent HIV and STIs.	PRDE, Universities, Postsecondary non-university institutions, other entities related to education	Continuous during the period	PRDOH, Ryan White Part A Program (SJEMA) PRDOE, Service Providers of the, Academia	<ul style="list-style-type: none"> Number of agreements in which the San Juan EMA participates for the implementation of HIV and ITS prevention activities.
	Promote education about PrEP in young population with a significant risk.	Young people Young MSM	Continuous during the period	Ryan White Part A Program (SJEMA) Planning Council, Service Providers of the Ryan White Part A program	<ul style="list-style-type: none"> Number of educational activities about PrEP directed to Young people in the SJEMA collaborates. Number of Young people participating in educational activities.
	Contribute to the strategy of the jurisdiction (Puerto Rico) to strengthen the implementation or expansion of evidence-based high impact prevention public health strategies (HIP) to address issues regarding the reduction of risk behaviors among young MSM.	Young people Young MSM MSM Heterosexual women	Continuous during the period	Ryan White Part A, (SJEMA), Service Providers of the Ryan White Part A program	<ul style="list-style-type: none"> Number of prevention interventions of high impact implemented in the SJEMA. Number of participants of interventions of high impact prevention in the SJEMA.
	Promote health education and risk reduction activities in the AME.	Health services Providers	Continuous during the period	Ryan White Part A (SJEMA), PRDOH, Service Providers of the Ryan White Part A program	<ul style="list-style-type: none"> Number of educational activities that the SJEMA promotes regarding risk reduction Number of people participating in the activities

Strategy	Activities	Target population	Timeframe	Responsible / Collaborators	Indicators
1.2.B Provide prevention and sex education comprehensive strategies, age-appropriate and scientifically accurate addressing HIV risks for the general population through various programs of government agencies.	Participate in agreements with the Department of Education and other entities related to primary education on the development and implementation of a comprehensive sex education curriculum for young people.	Young CH, Young MSM, Young bisexual, Trans population	2019	PRDOH, Ryan White Part A Program (SJEMA) Agencies that provide services, Private Education Association.	<ul style="list-style-type: none"> Established collaborative agreements involving the SJEMA for purposes of developing a comprehensive sex education curriculum for young people
	Collaborate with the state to provide technical assistance to schools in the San Juan EMA, updated and scientifically based on the prevention of HIV and STIs in the school population, including peer training efforts.	Teachers and other staff at schools	Continuous during the period	PRDOH, SJEMA, PRDOE, Agencies that provide services, Private Education Association.	<ul style="list-style-type: none"> Number of technical assistance sessions offered Number of participants in technical assistance sessions, per school Number of schools in the SJEMA to which the TA was provided
Strategy	Activities	Target population	Timeframe	Responsible / Collaborators	Indicators
1.3.C Disseminate appealing, scientific-based messages about HIV risks and prevention strategies among	Contribute to the state strategy of strengthening efforts to disseminate information, education and HIV prevention using digital tools and new communication technologies.	Young CH, Young MSM, Young bisexual, Trans population	Continuous during the period	PRDOH, SJEMA, PRDE, Service providers of the Ryan White Parte A program, Private Education Association, Academia	<ul style="list-style-type: none"> Number of messages transmitted through digital media ¹³ regarding HIV prevention and education Digital media reach¹⁴

¹³ By digital media we refer to the Internet, social networks, cellular and other non-traditional media that make use of new technologies.

¹⁴ In the case of digital media, reach refers to the amount of likes, shares and other indicators that show how many people were exposed to campaigns and demonstrated openness to it (engagement).

young MSM and Trans Population.	Collaborate in the development of educational campaigns to eliminate stigma and barriers to HIV prevention and treatment.	Young MSM, Trans population	Continuous during the period	PRDOH, SJEMA Planning Council, PRDE, Service providers of the Ryan White Parte A program, Academia	<ul style="list-style-type: none"> • Number of designed educational campaigns • Number of published educational campaigns <ul style="list-style-type: none"> • Date and duration of the campaign • Exposure / disclosure media • Campaign's reach¹⁵
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¹⁵ Campaign's scope/reach means the number and/or percent of people who were exposed to the campaign.

GOAL 2:

Increase Access to Care and Improve
Health Outcomes for Persons Living
with HIV

Objective 2.1: Increase the percentage of persons with diagnosed HIV infection who are retained in HIV medical care to at least 90 percent.

Strategy	Activities	Target population	Timeframe	Responsible / Collaborators	Indicators
2.1. A Ensure linkage to care and support services culturally appropriate to support patient retention	Develop culturally appropriate educational materials aimed at Service Providers of the Ryan White Part A Program to support patient retention.	Service providers of the Ryan White Part A program in the SJEMA	2017	Ryan White Part A Program (SJEMA) SJEMA Planning Council (Council), PRDOH, AETC, Academy	<ul style="list-style-type: none"> Developed materials directed to support retention in care
	Disseminate educational materials through social networks, medical offices, Web pages, laboratories and hospitals	Service providers of the Ryan White Part A program in the SJEMA	2018 and beyond	Ryan White Part A Program (SJEMA) SJEMA Planning Council (Council)	<ul style="list-style-type: none"> Documentation showing material dissemination
	Conduct education activities about adherence to treatment for HIV positive patients.	HIV positive persons	Continuous during the period	Service providers of the Ryan White Part A program, PRDOH, SJEMA Planning Council (Council), Academy	<ul style="list-style-type: none"> Number of activities in the SJEMA regarding adherence to treatment Number of positive people who participate in activities
	Through strategies such as peer training, educate families, caregivers and significant others on adherence to treatment.	Families, caregivers and significant others	Continuous during the period	Service providers of the Ryan White Part A program, Providers of Part C, SJEMA Planning Council, Academia	<ul style="list-style-type: none"> Number of activities in the SJEMA aimed at educating families, caregivers and significant others on adherence. Number of family members, caregivers and significant others receiving education in adherence.

Strategy	Activities	Target population	Timeframe	Responsible / Collaborators	Indicators
2.1 B. Increase awareness and use of evidence-based strategies aimed at adherence to treatment.	Development of guidelines, protocols and strategies for adherence to care and treatment based on evidence-based practices.	Service providers of the Ryan White Part A program	Continuous during the period	Ryan White Part A Program (SJEMA), SJEMA Planning Council, Academia, DHPR, AETC	<ul style="list-style-type: none"> • Protocol, guidelines and strategies developed regarding adherence to treatment
	Provide continuous training to medical and case management / clinical staff on the use of evidence-based strategies	Physicians and other clinical professionals working in the private, public and non-profit organizations providing HIV treatment	Continuous	Ryan White Part A Program (SJEMA), SJEMA Planning Council, Academia, PRDOH	<ul style="list-style-type: none"> • Number of physicians and health professionals receiving training about the use of evidence-based strategies
	Conducting educational activities for Service Providers of the Ryan White Part A Program to promote the integration of the use of evidence-based strategies, such as peers interventions	Service providers of the Ryan White Part A program	2018/2021 ¹⁶	Ryan White Part A Program (SJEMA), SJEMA Planning Council, Academia, PRDOH	<ul style="list-style-type: none"> • Number of activities in the SJEMA • Number of Service providers of the Ryan White Part A program that participated in the activities
	Peer training to provide interventions within the Care Continuum with the objective of retention.	Service providers of the Ryan White Part A program / Peers	Continuous during the period	Ryan White Part A Program (SJEMA), SJEMA Planning Council, Academia, Departamento de Salud	<ul style="list-style-type: none"> • Number of trained peers to promote retention in care

¹⁶ 2018, is established as the date, as among the strategies proposed by the jurisdiction (Puerto Rico), the enactment of guidelines for the model of peer facilitators is included in 2018.

	Identify new proposals for research and development of competences of health professionals clinical and non-clinical (NIH, pharmaceutical)	San Juan EMA, SJEMA Planning Council, Academia	Continuous during the period	Academia, Ryan White Part A (SJEMA)	<ul style="list-style-type: none"> Sources of funds identified Submitted proposals
	Carry out measurement and evaluation efforts on the implementation or use of evidence-based campaigns	San Juan EMA, SJEMA Planning Council, Academia	2018-2021	Ryan White Part A Program (SJEMA), SJEMA Planning Council, Academia, service providers of the Ryan White Part A program	<ul style="list-style-type: none"> Evaluation reports of campaigns developed by the SJEMA
Strategy	Activities	Target population	Timeframe	Responsible / Collaborators	Indicators
2.1.C Continue with education efforts aimed at care retention of PLWH	Maintain updated informative materials on HIV available services in the SJEMA.	AME SJEMA Planning Council	Continuous during the period	Ryan White Part A Program (SJEMA), SJEMA Planning Council	<ul style="list-style-type: none"> Documentation or evidence of the updated material
	Continuously disseminate the information materials on HIV-related services available in the SJEMA, through campaigns and other outreach efforts	People with HIV	Continuous during the period	Ryan White Part A Program (SJEMA), SJEMA Planning Council Service providers of the Ryan White Part A program	<ul style="list-style-type: none"> Education campaigns carried out in the SJEMA Places where information materials are disclosed Number of people who received or were exposed to information material
	Provide individualized counseling and education to people with HIV regarding retention in care	People with HIV	Continuous during the period	Service providers of the Ryan White Part A program	<ul style="list-style-type: none"> Number of persons who received counseling
	Encourage the development of peer education services to people diagnosed with HIV	People with HIV	2018-2021	Ryan White, Part A (SJEMA), AETC, Private providers	<ul style="list-style-type: none"> Number of persons who received education by peers regarding retention in care

	Conduct workshops and other educational activities for people with HIV	People with HIV	Continuous during the period	Ryan White Part A Program (SJEMA), SJEMA Planning Council PRDOH, Service providers of the Ryan White Part A program	<ul style="list-style-type: none"> • Number of activities in the AME • Number of PLWH that participated in these activities
	Encourage the development of peer support groups	People with HIV	Continuous during the period	Ryan White Part A Program (SJEMA), SJEMA Planning Council PRDOH Service providers of the Ryan White Part A program	<ul style="list-style-type: none"> • Number of Support groups established • Number of people participating in Support groups
2.1.D Increase system capacity to strengthen service delivery throughout the process of Care Continuum for HIV.	Promote the participation of the SJEMA providers in the integrated system of prevention, clinical and supportive services for the coordinated and focused attention on the needs of the population to be developed by the jurisdiction (Puerto Rico).	Service providers of the Ryan White Part A program	2018	Ryan White Part A Program (SJEMA), PRDOH, SJEMA Planning Council, Service providers of the Ryan White Part A program	<ul style="list-style-type: none"> • Number of SJEMA providers who participated in the integrated system of prevention, clinical and supportive services for the coordinated and focused attention on the needs of the population
	Promote the participation of service providers in agreements to develop effective systems of coordination, communication and collaboration for clinical prevention, treatment and support services that increase the capacity and diversity of services	Service providers of the Ryan White Part A program	2018	Ryan White Part A Program (SJEMA), PRDOH, SJEMA Planning Council, Service providers of the Ryan SJEMA e Part A program	<ul style="list-style-type: none"> • Number of providers in the SJEMA participating in the agreements
	Collaborate with jurisdiction (Puerto Rico) in the education to the service providers about the new system of coordinated care and focused on the needs of the population with emphasis on retention and adherence to treatment.	Service providers of the Ryan White Part A program	2018	Ryan White Part A Program (SJEMA), PRDOH, SJEMA Planning Council, Service providers of the Ryan White Part A program	<ul style="list-style-type: none"> • Number of educational activities in the SJEMA • Number of service providers who participated in educational activities

Objective 2.2 Increase the percentage of newly diagnosed persons linked to HIV medical care within one month of their HIV diagnosis to at least 85 percent.

Strategy	Activities	Target population	Timeframe	Responsible / Collaborators	Indicators
2.2.A Provide patient navigation and linkage to prevention and care services.	Adopt the guidelines developed by the jurisdiction for the establishment of patient navigation model for the linkage from diagnosis to clinical and complementary services, according to the patient's needs.	Service providers of the Ryan White Part A program	2018	Ryan White Part A Program (SJEMA), SJEMA Planning Council, Service providers of the Ryan White Part A program DHPR, AETC	<ul style="list-style-type: none"> Uniform guides and/or developed protocols for the implementation of the patient navigation model for early linkage to care
	Integrate the navigation function within the Care Continuum and linkage case management	Service providers of the Ryan White Part A program	Continuous during the period	Service providers of the Ryan White Part A program, DHPR	<ul style="list-style-type: none"> Number of service providers of the Ryan White Part A program that integrated the navigation within the Care Continuum
	Provide ongoing training to clinical case management service providers and support services on patient navigation training, links to other services, as well as other aspects of their role as case managers	Case management in general	2018-2021	Ryan White Part A Program (SJEMA), SJEMA Planning Council, Service providers of the Ryan White Part A program	<ul style="list-style-type: none"> Number of training activities carried out for the case management personnel in the SJEMA. Number of case managers who participated in the activities of the SJEMA.
	Strengthen partnerships between agencies and organizations providing services to people with HIV	Public and private entities that provide services to people with HIV	2017-2021	Ryan White Part A Program (SJEMA), Service providers of the Ryan White Part A program	<ul style="list-style-type: none"> Number of agreements signed in SJEMA

	Update and disseminate the updated material of the inventory of resources, services related to HIV and support services available in the SJEMA, through campaigns and other outreach efforts	Service providers of the Ryan White Part A program	Continuous during the period	Ryan White Part A Program (SJEMA), SJEMA Planning Council Service providers of the Ryan White Part A program	<ul style="list-style-type: none"> • Education campaigns carried out in the SJEMA • Places where information materials are disclosed • Number of people who received or were exposed to informative material
Strategy	Activities	Target population	Timeframe	Responsible / Collaborators	Indicators
2.2.B Establish integrated systems to link people to clinical care immediately after their HIV diagnosis, through culturally sensitive services and according to the needs of each population.	Collaborate in the efforts to educate health professionals, liaison personnel and clinical case management personnel, epidemiology technicians and professionals at pharmacies, hospitals, emergency rooms and multidisciplinary teams on the importance of early linkage to care.	Healthcare professionals, Liaison personnel, clinical management personnel	Annual	PRDOH Ryan White Part A Program (SJEMA), Service providers of the Ryan White Part A program, AETC, Academia Insurance, ASES, Insurance Commissioner	<ul style="list-style-type: none"> • Number of educational activities regarding early linkage to care • Número de profesionales de la salud y otro personal que participan de las actividades educativas
	Collaborate with jurisdiction in the establishment of an education campaign for the population and clinical service providers to promote the importance of early linkage to care	Service providers of the Ryan White Part A program, SJEMA Planning Council	Continuous during the period	PRDOH, Ryan White Part A Program (SJEMA), Service providers of the Ryan White Part A program, SJEMA Planning Council	<ul style="list-style-type: none"> • Evidence of the education campaign about linkage to care, for the population and service providers. <ul style="list-style-type: none"> - Date and duration of the campaign - Means of disclosure/ Disclosure media used - Amount of messages by media
	Promote the use of the universal consent form/sheet to be developed by the jurisdiction (Puerto Rico) to facilitate outreach and linkage to care of newly diagnosed with HIV.	Service providers of the Ryan White Part A program, SJEMA Planning Council	2017	PRDOH, Ryan White Part A Program (SJEMA), Service providers of the Ryan White Part A program, SJEMA Planning Council	<ul style="list-style-type: none"> • Number of providers using the universal consent form/sheet

	Promote among service providers in the AME the use of standardized tools focused on general and specific patient needs.	Service providers of the Ryan White Part A program, SJEMA Planning Council	2018	Service providers of the Ryan White Part A program, SJEMA Planning Council	<ul style="list-style-type: none"> Standardized tools developed Standardized tools adopted
Strategy	Activities	Target population	Timeframe	Responsible / Collaborators	Indicators
2.2.C Expand the integrated and culturally sensitive services to link to care PID, young population, MSM, people with mental health problems, older adults, homeless persons, heterosexual women and Trans population.	Increase the number of trained and culturally sensitive providers in serving PID, young population, MSM, people with mental health problems, older adults, homeless persons, heterosexual women and Trans population.	Service providers	Continuous during the period	Ryan White Part A Program (SJEMA), DRPR, AETC, Service providers of the Ryan White Part A program, SJEMA Planning Council, AMHAS	<ul style="list-style-type: none"> Number of providers who receive training on culturally sensitive approaches in serving PID, young population, MSM, people with mental health problems, older adults, homeless persons, heterosexual women and Trans population.
	Provide training to existing providers in sensitivity serving PID, young population, MSM, people with mental health problems, older adults, homeless persons, heterosexual women and Trans population.	Service providers	Continuous during the period	Ryan White Part A Program (SJEMA), DRPR, AETC, Service providers of the Ryan White Part A program, SJEMA Planning Council, AMHAS, Insurance Companies, Commissioner OF insurance, AMHAS, DHPR	<ul style="list-style-type: none"> Number of training to existing providers <ul style="list-style-type: none"> Dates Number of providers who participated in the training
	To develop and implement a culturally sensitive protocol or guidelines to link and provide clinical services to PID, young population, MSM, people with mental health problems, older adults, homeless persons, heterosexual women and Trans population.	Service providers	2018-2021 ¹⁷	PRDOH (OCASET, Public Policy Committee), Service providers of the Ryan White Part A program, SJEMA Planning Council, AMHAS	<ul style="list-style-type: none"> Number of providers that adopted the protocol or guidelines in the SJEMA Date of adoption

<p>Promote among service providers in the SJEMA the use of standardized tools focused on providing culturally sensitive services for the population of PID, young population, MSM, people with mental health problems, older adults, homeless persons, heterosexual women and Trans population.</p>	<p>Service providers of the Ryan White Part A program, SJEMA Planning Council</p>	<p>2018</p>	<p>Service providers of the Ryan White Part A program, SJEMA Planning Council</p>	<ul style="list-style-type: none"> • Standardized tools developed • Standardized tools adopted for service providers in the SJEMA
<p>Encourage providers of services in the SJEMA the coordination of clinical case management and support services for the population of PID, young population, MSM, people with mental health problems, older adults, homeless persons, heterosexual women and Trans population.</p>	<p>PID, young population, MSM, people with mental health problems, older adults, homeless persons, heterosexual women and Trans population.</p>	<p>2017-2021</p>	<p>Service providers of the Ryan White Part A program, SJEMA Planning Council</p>	<ul style="list-style-type: none"> • Number of providers that integrate clinical case management and support services for the population of PID, young population, MSM, people with mental health problems, older adults, homeless persons, heterosexual women and Trans population.
<p>Train and provide information to service providers about clinical and support services available in the AME for the population of PID, young population, MSM, people with mental health problems, older adults, homeless persons, heterosexual women and Trans population.</p>	<p>Service providers of the Ryan White Part A program, SJEMA Planning Council</p>	<p>2017-2021</p>	<p>Service providers of the Ryan White Part A program, SJEMA Planning Council</p>	<ul style="list-style-type: none"> • Number of training activities in the SJEMA regarding services available for PID, young population, MSM, people with mental health problems, older adults, homeless persons, heterosexual women and Trans population. • Number of suppliers in the SJEMA who participated in training activities

Objective 2.3 Reduce the percentage of persons in HIV medical care who are homeless to no more than 5 percent.

Strategy	Activities	Target population	Timeframe	Responsible / Collaborators	Indicators
2.3.A To join efforts with public and private entities to work with the housing needs of the homeless PLWH.	Coordinate meetings with government agencies and municipalities that administer housing funds.	Government agencies, municipalities, CoC for homeless people(CoCs) ¹⁸	2017	SJEMA, Service providers of the Ryan White Part A program, SJEMA Planning Council, Multi-sectorial Council in Support of the Homeless Population ¹⁹ , PRDH, PRPHA, PRDF, HOPWA Program (Municipality of San Juan, PRDOH)	<ul style="list-style-type: none"> • Number of meetings held • Number of participants in meetings <ul style="list-style-type: none"> - Minutes of the meetings • List of significant agreements
	Establish working arrangements to meet the housing needs of PLWH and homeless to create a network of suppliers.	Government agencies, municipalities CoCs	2018-2019	SJEMA, Service providers of the Ryan White Part A program, SJEMA Planning Council, PRDOH, PRPHA, DF, HOPWA, Multi-sectorial Council, CoCs, Bank Association	<ul style="list-style-type: none"> • Number of working arrangements to meet the need for housing PLWH and homeless (list of organizations)

¹⁸ The Continuum of Care System is an organism/body confined to a geographical area, created under the federal regulations applicable to the programs aimed for the homeless persons, which provides the main vehicle/ for planning to meet the needs of that population. Actually, in Puerto Rico there are two recognized CoC by the Federal Department of Housing (HUD, for its acronym in English), which provide services related to housing and emergency assistance, transitional housing and permanent housing with supportive services, miscellaneous services, with the goal of achieving stability in the long term for the homeless. These CoC systems are: Balance del Estado (CoC PR 502) and *Coalición de Coaliciones* (CoC PR 503). The Department of the Family is the Partner Agency CoC PR 502, while *Coalición de Coaliciones* is the collaborating agency of CoC PR 503.

¹⁹ "Law 130 of 27 September 2007, created the Multi-sectorial Council in Support of the Homeless Population (the Council), and attached to the Department of the Family. The Council is aimed at addressing the various situations that daily traverse the homeless, and thus achieve a real transformation in their living conditions. In addition, it also seeks promoting the smooth access of existing services and the rapid integration with the community; to establish its duties and responsibilities, continuous development and review of public policies and strategic planning; to promote the search, assignment and authorization for matching funds. Also, to ensure the multi-sectorial compliance of the programs and services through its Liaison Office of Programs and Coordination of Services for the Homeless Population ". [Taken from: [http://www2.pr.gov/agencias/secretariado/Pages/Concilio Multisectorial.aspx](http://www2.pr.gov/agencias/secretariado/Pages/Concilio%20Multisectorial.aspx)].

	Identify and develop a directory of agencies that provide housing services (shelter, transitional housing and permanent housing) in the San Juan EMA.	CoCs	2017	SJEMA, Service providers of the Ryan White Part A program, SJEMA Planning Council, PRDOH, PRPHA, DF, HOPWA, Multi-sectorial Council, CoCs, Bank Association	<ul style="list-style-type: none"> Inventory of organizations that provide housing assistance in the SJEMA
2.3.B Identify and address the needs associated with housing and other needs of PLWH to prevent them from the risk of losing their home.	To encourage the integration of the risk of homelessness in the assessment conducted as part of the case management.	Case management, Service providers of the Ryan White Part A program	2017-2018	Case management component of the service providers of the Ryan White Part A program	Number of participants who received the assessment of needs for the risk of homelessness in in the SJAME
	Develop information materials on available housing services.	Service providers of the Ryan White Part A program	2017-2018	SJEMA, SJEMA Planning Council	<ul style="list-style-type: none"> Information materials developed regarding housing services in the SJAME
	Coordinate housing assistance through sharing information [necessary documentation, case history] and provide referrals at the coordinated network of Service Providers of the Ryan White Part A program.	Service providers of the Ryan White Part A program	2018-2021	Service providers of the Ryan White Parte A program, COC, HOPWA, PRDH, PRPHA	<ul style="list-style-type: none"> Number of coordinated and completed referrals for housing assistance Number of participants who benefited from housing assistance
	Monitor the follow up of referrals coordinated for housing service.	Service providers of the Ryan White Part A program (SJEMA)	2018-2021	SJEMA, Service providers of the Ryan White Parte A program, Administration of HOPWA, PRDH, PRPHA	<ul style="list-style-type: none"> Quarterly progress reports to expose the number of coordinated housing service referrals.
	Promote technical assistance on housing related legal aspects	Service providers of the Ryan White Part A program	Continuous during the period	CoC,s	<ul style="list-style-type: none"> Technical assistance sessions on the subject Number of providers receiving technical assistance

2.3.C Expand the coordination of referral system to connect PLWH to housing services.	Develop information materials on available services.	Service providers of the Ryan White Part A program	2017-2018	Ryan White Part A Program (SJEMA),, SJEMA Planning Council	<ul style="list-style-type: none"> • Information material developed
	Conduct training activities for providers about the available services.in the San Juan EMA and in the jurisdiction	Service providers of the Ryan White Part A program	2018-2019	Ryan White Part A Program (SJEMA),, SJEMA Planning Council, CoCs	<ul style="list-style-type: none"> • Number of training activities for providers about services <ul style="list-style-type: none"> - -Date - -Training place - -Distributed informative material • Number of service providers of the Ryan White Part A program who participated in the training
	Conduct orientation activities for patients on available housing services.	PLWH	2018-2019	Ryan White Part A Program (SJEMA),, Service providers of the Ryan White Part A program, Administration of HOPWA, PRDH, PRPHA, SJEMA Planning Council, CoCs	<ul style="list-style-type: none"> • Number of orientations/counseling for patients on available housing services <ul style="list-style-type: none"> - -Date - -Training place - -Informative distributed material • Number or patients receiving the orientation/counseling
	Analyze data on linkage to housing services and use of services through the monitoring of coordinated referrals	Service providers	2017-2021	Ryan White Part A Program (SJEMA),, Service providers of the Ryan White Part A program, Administration of HOPWA, PRDH, SJEMA Planning Council, CoCs	<ul style="list-style-type: none"> • Number of referrals coordinated and completed • Number of persons linked to housing services • Number of services offered

GOAL 3:

Reduce HIV-Related Health Disparities
and Health Inequities

Objective 3.1 Reduce disparities in the rate of new diagnoses by at least 15 percent in the following groups: MSM, youth, heterosexual women and Trans populations.

Strategy	Activities	Target population	Timeframe	Responsible / Collaborators	Indicators
3.1.A Promote coordination of efforts to promote employment opportunities and job training for PLWH contributing to their social mobility.	Make an inventory of programs to Support employment aimed to guide HIV population in the San Juan EMA.	PLWH and persons with risk behaviors	2017	Ryan White Part A Program (SJEMA), SJEMA Planning Council	<ul style="list-style-type: none"> Developed inventory
	Develop guidelines on employment opportunities, the ADA law and other aspects related to employment, to PLWH n and employers	PLWH and persons with risk behaviors and employers	Continuous during the period	Ryan White Part A Program (SJEMA), SJEMA Planning Council, PRDLHR, PRDOH, Service providers of the Ryan White Part A program, Civil Rights Commission, WIOA Consortiums	<ul style="list-style-type: none"> Number of orientations activities carried out regarding employment opportunities in the SJEMA Number of people participating in these activities.
	Participate and promote job fairs in the SJEMA which can impact the HIV population	PLWH and persons with risk behaviors and employers	Continuous during the period	Service providers of the Ryan White Part A program, WIOA Consortiums	<ul style="list-style-type: none"> Number of job fairs conducted in the SJEMA
	Promote collaborative agreements with incentive programs for employers among the service providers of the Ryan White Part A program.	Service providers, PLWH and persons with risk behaviors	Continuous during the period	Ryan White Part A Program (SJEMA), SJEMA Planning Council, PRDLHR, PRDOH, Service providers of the Ryan White Part A program, PRVRA, WIOA Consortiums	<ul style="list-style-type: none"> Number of agreements between the SJEMA service providers and employers to provide job incentive programs for PLWH

Strategy	Activities	Target population	Timeframe	Responsible / Collaborators	Indicators
3.1.B Promote multi-sectorial collaboration to reduce stigma and discrimination of HIV particularly among LGBTT populations with problematic substance use, victims of gender violence, among other groups.	Establish partnerships with AETC, the PRDOH and universities to continuously educate health professionals and students on HIV-related stigma and discrimination	Service providers of the Ryan White Parte A program, Academia	Continuous during the period	Ryan White Part A Program (SJEMA), SJEMA Planning Council, PRDOH, Service providers of the Ryan White Part A program, Academia	<ul style="list-style-type: none"> • Collaboration agreements signed • Training activities provided as a result of the agreements
	Provide trainings to participants, providers and community-based and faith-based organizations to reduce stigma and discrimination HIV	Service providers of the Ryan White Parte A program, community-based and faith-based organizations	Continuous during the period	Ryan White Part A Program (SJEMA), SJEMA Planning Council, PRDOH, Academia	<ul style="list-style-type: none"> • Training activities carried out • Number of participants involved in the activities
	Develop agreements with the private sector to promote campaigns together to reduce stigma and discrimination HIV	Private Sector	Continuous during the period	Ryan White Part A Program (SJEMA), SJEMA Planning Council, PRDOH	<ul style="list-style-type: none"> • Agreements with private sector entities for campaigns and education activities aimed to reduce the HIV-related stigma.
Strategy	Activities	Target population	Timeframe	Responsible / Collaborators	Indicators
3.1.C Develop educational campaigns to reduce stigma and discrimination of HIV, with regard to MSM populations, youth and women, among others.	Develop educational campaigns to eliminate stigma and barriers that limit the prevention and treatment of HIV.	<p>Service providers of the Ryan White Parte A program, Academia</p> <p>LGBT populations with problematic substance use, victims of gender violence, among other groups Otros grupos o sectores relacionados</p>	Continuous during the period	Ryan White Part A Program (SJEMA), SJEMA Planning Council, DHPR, Service providers of the Ryan White Part A program, Academia, Civil Rights Commission.	<ul style="list-style-type: none"> • Number of educational campaigns designed • Number of educational campaigns published <ul style="list-style-type: none"> • Date and duration of the campaign • Media outreach • Campaign reach

	Promote the empowerment of PLWH through providing them orientation regarding their rights	PLWH	2017	Ryan White Part A Program (SJEMA), SJEMA Planning Council, Service providers of the Ryan White Part A program, Academia, Civil Rights Commission.	<ul style="list-style-type: none"> • Number of orientation activities carried out regarding the rights of PLWH • Number of people receiving counseling
	Collaborate on educational activities aimed at educating the staff working in the mass media	Staff in the mass media	Continuous during the period	Ryan White Part A Program (SJEMA), SJEMA Planning Council, DHPR, Service providers of the Ryan White Part A program, Academia, Civil Rights Commission. Media	<ul style="list-style-type: none"> • Number of activities in which the SJEMA collaborates aimed to educate staff in mass media.

Objective 3.2 Increase the percentage of young men and women, people who inject drugs and people with problematic use of substances with diagnosed HIV infection who are virally suppressed to at least 80 percent.

Strategy	Activities	Target population	Timeframe	Responsible / Collaborators	Indicators
3.2 A Promote an integrated and coordinated health care to address psychosocial factors to support the suppression of viral load in young men and women, people who inject drugs and	Increase the capacity of providers on valid interventions for emergency management while linking them to mental health services	Service providers of the Ryan White Part A program	2019	SJEMA, Service providers of the Ryan White Part A program, AMHAS, ASES	<ul style="list-style-type: none"> • Service providers that provide case management integrated to mental health services.
	Establish collaborations and agreements with entities in the San Juan EMA that promote services that can be provided as psychosocial support and mental health services to populations of young men and women and people who inject drugs with HIV	Service providers of the Ryan White Part A program	2018	SJEMA, Service providers of the Ryan White Part A program	<ul style="list-style-type: none"> • Number of suppliers who provide psychosocial Support and mental health services to populations of Young men and women and people who inject drugs with HIV.

people with problematic substance use	Promote the accompaniment services to appointments between the service providers in the Sn Juan EMA	Service providers of the Ryan White Part A program	2017-2021	Service providers of the Ryan White Part A program	<ul style="list-style-type: none"> Number of suppliers that provides accompaniment services to appointments.
	Through training, strengthen providers' follow up strategies for people living with HIV	Service providers of the Ryan White Part A program	2017-2021	Ryan White Part A Program (SJEMA),, Service providers of the Ryan White Part A program	<ul style="list-style-type: none"> Training activities carried out in the San Juan EMA Number of providers participating in the training activities
Strategy	Activities	Target population	Timeframe	Responsible / Collaborators	Indicators
3.2 B Expand the reach of evidence-based programs that address the social determinants of health.	Identify evidence-based initiatives aimed at addressing the social determinants of health associated with HIV.	Service providers of the Ryan White Part A program	2017	PRDOH, Ryan White Part A Program (SJEMA),, Service providers of the Ryan White Part A program, Academia	<ul style="list-style-type: none"> List of evidence based initiatives to address social determinants of health associated with HIV.
	Conducting educational activities to Service Providers of the Ryan White Part A Program to promote the integration of the use of evidence-based strategies, such as intervention by peers	Service providers of the Ryan White Part A program	2018/2021 ²⁰	Ryan White Part A Program (SJEMA),, SJEMA Planning Council, Academia, PRDOH	<ul style="list-style-type: none"> Number of activities in the SJEMA Number of service providers in the Ryan White Part A program that participated in the activities
	Peer training to provide interventions within the Care Continuum with the aim of retention of young people and people who inject drugs.	Peers	Continuous during the period	Ryan White Part A Program (SJEMA),, SJEMA Planning Council, Academia, PRDOH	<ul style="list-style-type: none"> Number of trained peers
	Develop culturally appropriate educational and evidence-based materials targeted to Service Providers Ryan White Part A Program to support	Service providers of the Ryan White Part A program in AME	2017	Ryan White Part A Program (SJEMA), SJEMA Planning Council, Department	<ul style="list-style-type: none"> Developed materials

²⁰ 2018 is established as the date, as the publication of guidelines for the model of peer facilitators is included with a due date of 2018.

	the retention of young patients and people who inject drugs.			of Health, AETC, Academia	
	Disseminate educational materials through social networks, medical offices, Web pages, laboratories and hospitals	Service providers of the Ryan White Part A program in AME	2018 - 2021	SJEMA, SJEMA Planning Council	<ul style="list-style-type: none"> • Documentation showing disseminated material
Strategy	Activities	Target population	Timeframe	Responsible / Collaborators	Indicators
3.2 C To educate the Young people and people with problematic substance use about available services and the importance of retention and adherence to treatment, respectively.	Provide individualized counseling and education services to young and PID population about the importance of retention and adherence to treatment	Young people and PID with HIV	Continuous during the period	Service providers of the Ryan White Part A program, SJEMA Planning Council, Academia	<ul style="list-style-type: none"> • Number of activities in the SJEMA • Number of youth and PID that received counseling
	Providing educational services to peers of Young people diagnosed with HIV and PID	Young people and PID with HIV	2018-2021	PRDOH, AETC, private providers	<ul style="list-style-type: none"> • Number of youth and PID that received education from peers
	Carry out educational campaigns and guidance activities aimed at the population of young and PID with HIV to make them aware of the importance of retention and adherence to treatment	Young people and PID with HIV	2017-2021	Ryan White Part A Program (SJEMA), Service providers of the Ryan White Part A program	<ul style="list-style-type: none"> • Number of youth and PID receiving counseling

GOAL 4:

Achieve a More Coordinated National
Response to the HIV Epidemic

Objective: 4.1 Promote a public policy aimed at integrating the efforts for surveillance, prevention and treatment of HIV.

Strategy	Activities	Target population	Timeframe	Responsible / Collaborators	Indicators
4.1.A To create a Multi-sectorial Committee to strengthen the public policy and promote greater involvement of the sectors related to surveillance, prevention and care of HIV/AIDS, STD's, Hepatitis and TB in Puerto Rico.	Gather information from SJEMA service providers, the community and other stakeholders on needs for changes in public policy	Service providers of the Ryan White Part A program, Community and other groups of interest in the AME.	2017	Ryan White Part A Program (SJEMA), SJEMA Planning Council	<ul style="list-style-type: none"> List of identified changes needed in the public policy
	Collaborate in the formulation of strategies to address public policy needs identified in the Integrated Plan.	Multi-sectorial (Government Agencies, Private entities, CBO, Community))	2018	Multi-sectorial Committee	<ul style="list-style-type: none"> List of strategies to address the needs of public policy
	Collaborate with the Multi sectorial Committee on the dissemination and collection of input on strategies formulated between the various stakeholders in the San Juan EMA.	Multi-sectorial (Government Agencies, Private entities, CBO, Community))	2018	Multi-sectorial Committee	<ul style="list-style-type: none"> List of disseminated strategies <ul style="list-style-type: none"> Processed sheets with signature of the representatives of different groups and date evidencing the dissemination to stakeholders identified List of comments and recommendations issued by the stakeholders to who the strategies were reported

Strategy	Activities	Target population	Timeframe	Responsible / Collaborators	Indicators
4.1.B To use an approach based on best practices to strengthen the coordination of efforts between the Planning Advisory Bodies on the implementation of the Integrated Plan.	Collaborate with the Jurisdiction in the identification of best practices to strengthen coordination of efforts between the Planning Advisory Bodies.	Planning Advisory bodies	2017	PRDOH, SJEMA, Planning Advisory Bodies	<ul style="list-style-type: none"> List of identified best practices to strengthen the coordination of efforts between the Planning Advisory Bodies.
	Implement best practices to strengthen coordination of efforts between the Planning Advisory Bodies.	Planning Advisory bodies	2018	PRDOH, SJEMA, Planning Advisory Bodies	<ul style="list-style-type: none"> List of the best implemented practices to enhance the coordination of efforts between the Planning Bodies.
Strategy	Activities	Target population	Timeframe	Responsible / Collaborators	Indicators
4.1.C Disseminate information about changes in public policy related to HIV	Identify the most appropriate communication channels for the dissemination of information in the SJEMA	Multi-sectorial (Government Agencies, Private entities, CBO, Community))	2017	PRDOH, Ryan White Part A Program (SJEMA), Multi-sectorial Committee, Legislature	<ul style="list-style-type: none"> List of identified communication channels, according to the stakeholders and to policies developed.
	Implement activities and strategies of outreach and education when changes in public policy arise.	Multi-sectorial (Government Agencies, Private entities, CBO, Community))	2017-2021	PRDOH (OCASET, Communications), Multi-sectorial Committee, Media, SJEMA	<ul style="list-style-type: none"> List of activities and education strategies that were implemented to instruct and notify changes in public policy in the jurisdiction. Type of divulgation channels used.

	Provide technical assistance with respect to changes in public policy that affect the provision of services for prevention and treatment for HIV to	Service providers of the Ryan White Parte A program	2017-2021	DS, SJEMA, Multi-sectorial Committee, SJEMA Planning Council, Media	<ul style="list-style-type: none"> • Technical assistance sessions provided • Entities impacted through technical assistance efforts.
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Objective: 4.2 To develop and/or enhance planning and collaboration to support a coordinated response to HIV in terms of prevention, care and treatment.

Strategy	Activities	Target population	Timeframe	Responsible / Collaborators	Indicators
4.2.A Educate periodically about epidemiology and HIV / AIDS, STD's, Hepatitis and TB services in Puerto Rico.	Collaborate in identifying the appropriate strategies for education and dissemination of information in the SJEMA.	AME PRDOH AETC Planning Groups	2017	PRDOH, Ryan White Part A Program (SJEMA), ASES, Office of the Commissioner of Insurance, Planning Advisory Bodies, AETC	<ul style="list-style-type: none"> • List of strategies designed to educate periodically on the epidemiology and services available for care and attention of HIV /AIDS, STIs, Hepatitis B and TB.
	Contribute to the periodical dissemination of HIV / AIDS, STD, Hepatitis and TB to be developed by the PRDOH.	Provedores de Servicios Programa Ryan White Parte A	2018	PRDOH, Ryan White Part A Program (SJEMA), ASES, Office of the Commissioner of Insurance, Planning Advisory Bodies, AETC, Academia	<ul style="list-style-type: none"> • Number of publications distributed in the SJEMA
	Collaborate in conducting forums in the SJEMA to support the integration, coordination and collaboration of the sectors related to epidemiology and HIV / AIDS, STD, Hepatitis and TB services in Puerto Rico.	DS, AME, Planning bodies, AETC, Academia	2019	PRDOH, Ryan White Part A Program (SJEMA), ASES, Office of the Commissioner of Insurance, Planning Advisory Bodies, AETC, Academia	<p>Evidence that the forums took place:</p> <ul style="list-style-type: none"> • Date and duration • Number of representatives who attended, corresponding to the different sectors/

Strategy	Activities	Target population	Timeframe	Responsible / Collaborators	Indicators
4.2.B To establish mechanisms for accountability about the Integrated Plan strategies on monitoring, prevention and treatment.	Adopt the processes of information gathering from Service Providers of the PRDOH to document the progress of activities of the integrated plan.	DS San Juan EMA Planning bodies	2017	PRDOH, SJEMA, Planning Advisory Bodies, Service providers of the Ryan White Part A program, other funds recipients for HIV prevention and treatment services	<ul style="list-style-type: none"> List of processes and information collection mechanisms that were implemented so that service providers of the Ryan White Part A program can document the work done in order for the progress of the activities established under the Integrated Plan can be evidenced / demonstrated.
	Provide guidance to Service Providers Ryan White Part A Program on the processes to be implemented for gathering information	DS San Juan EMA Planning bodies	2017	DHPR, SJEMA, Planning Advisory Bodies	<ul style="list-style-type: none"> Number of oriented service providers of the Ryan White Part A program.
Strategy	Activities	Target population	Timeframe	Responsible / Collaborators	Indicators
4.2.C Share information through the SJEMA Advisory	Collaborate in the accountability monitoring of Service providers of the Ryan White Part A program.	Service providers of the Ryan White Parte A program.	2017-2021	SJEMA, SJEMA Planning Advisory Bodies, PRDOH	<ul style="list-style-type: none"> Number of Service Providers of the Ryan White part A program up to date.

Council with respect of the progress of the Integrated Plan	Disseminate the progress and compliance with respect to the Plan to the interest groups of the SJEMA	Community, Service providers of the Ryan White Part A program and other groups of interest/stakeholders	2017-2021	DH, SJEMA, Planning Advisory Bodies, Service providers of the Ryan White Part A program, other funds recipients for HIV prevention and treatment services	<ul style="list-style-type: none"> • Quarterly progress and compliance reports presented to the interest groups
	Collaborate in the development and implementation of measures and strategies to ensure compliance and progress of the Plan	DS San Juan EMA Planning bodies	2017-2021	DH, SJEMA, Planning Advisory Bodies, Service providers of the Ryan White Part A program, other funds recipients for HIV prevention and treatment services	<ul style="list-style-type: none"> • List of developed and implemented measures.

B. CONTRIBUTORS, PARTNERSHIPS AND INVOLVEMENT OF STAKEHOLDERS

SPECIFIC CONTRIBUTIONS OF STAKEHOLDERS

The Integrated Plan was developed through a multi-method approach of participatory/empowerment planning, through which representatives of the community infected and affected by HIV, non-profit organizations, public institutions, the Academia and other stakeholders participated in the identification and prioritization of needs and the development of strategies to address the gaps in services. The purpose of using this type of approach was to lay the foundations for the structure of collaboration and integration, needed to implement the Integrated Plan and achieve a coordinated response to HIV in Puerto Rico.

To ensure the participation of the community, the Planning Advisory Bodies and the different stakeholders related to the epidemic, a structure of five committees or working groups was established, as described in the following Figure.

Figure 31: Working groups involved in the planning process

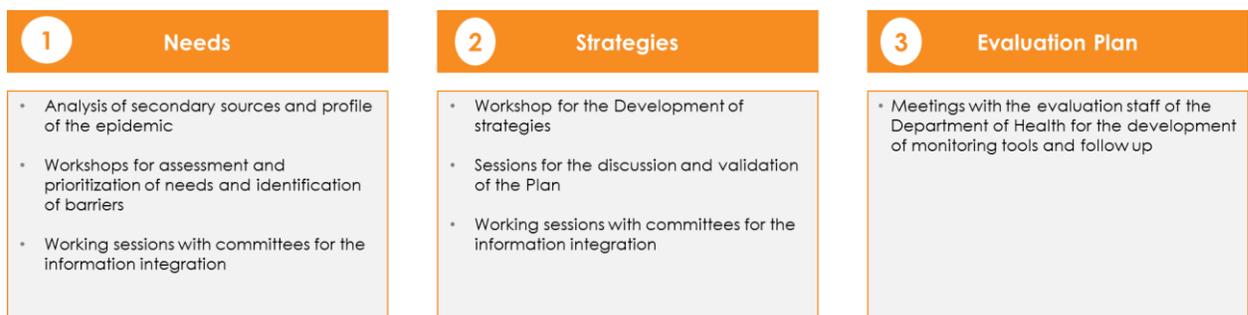


Moreover, the work and activities carried out were organized in three stages, as presented in the figure below. This method of organization, allowed the representatives of the various stakeholders to actively participate in:

- identifying the needs, gaps and barriers,
- developing strategies and activities, and
- Validating the Plan.

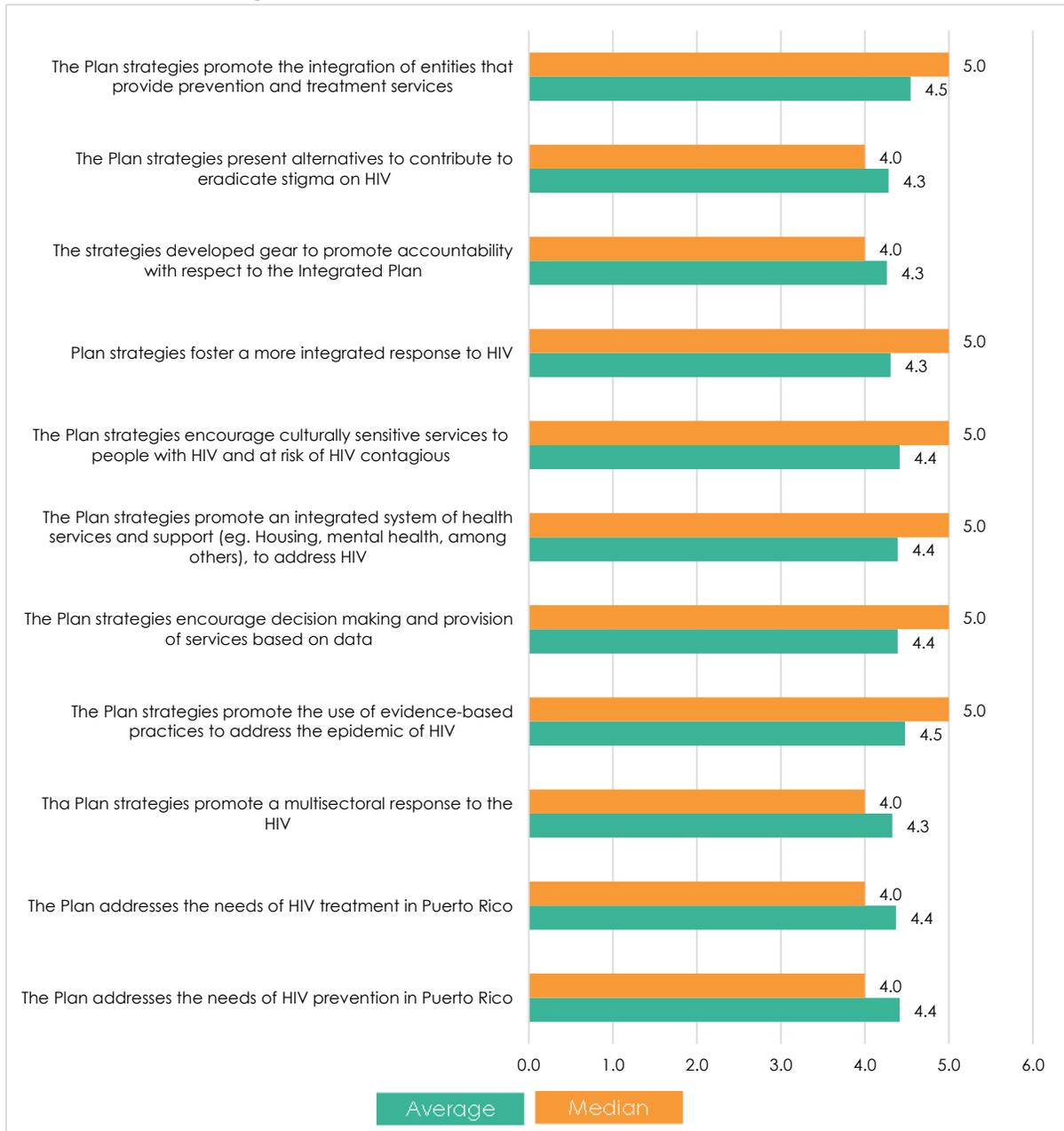
To keep participants active throughout the process, various strategies were used, including meetings to inform about the process, follow-up calls and sending materials via the Internet. It should be noted that the approach used in the SJEMA for the preparation of the Plan was similar to that used for the Jurisdiction (Puerto Rico). In addition, representatives of the AIDS Task Force and SJEMA Advisory Council participated in the activities of the jurisdiction.

Figure 32 : Plan development stages



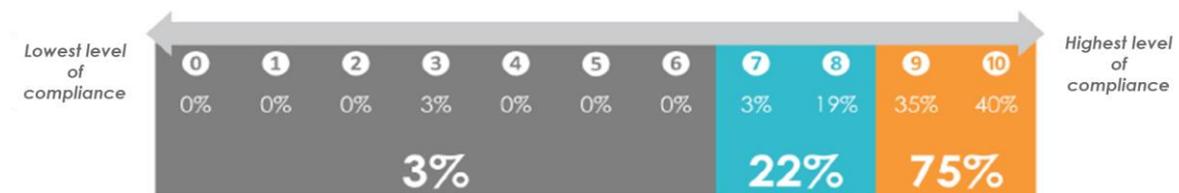
During the last validation Ryan White Part A Program (SJEMA), workshop, participants had the opportunity to discuss in detail the strategies and activities proposed for the Plan. They also completed an individual exercise, where they analyzed the Plan developed in the light of the parameters that establish the guidelines from the CDC and HRSA. The results of this exercise are included below.

Figure 33 : Results of the individual validation exercise



Note: The base of this illustration is made up of the 48 people who participated of the last validation workshop and completed the evaluation sheet.

Figure 34 : Points given to the draft presented with respect to compliance with the requirements of the CDC and HRSA for the elaboration of the plan



GROUPS OF INTEREST NOT PRESENT IN THE PROCESS OF PLANNING

The different stages presented in Figure 32, had the participation of all the groups that were initially identified as part of the interest groups related to HIV in Puerto Rico and the SJEMA. However, during the conversations with the stakeholders, other interest groups were identified, which are understood to be important for purposes of the implementation of the strategies. These include, for example, representatives of the private sector (private insurance and pharmaceutical companies, among others) and Government agencies like the Department of Education, and the Puerto Rico Police Department. The Department of Health, as part of the dissemination of the Plan tasks, will be contacting and conducting activities with these groups.

LETTER OF CONCURRENCE

The letter of concurrence of the SJEMA Advisory Council, is included as an attachment.

C. INVOLVEMENT OF PLWH AND THE COMMUNITY

A – HOW PEOPLE INVOLVED IN THE DEVELOPMENT OF THE PLAN IS RELATED WITH THE EPIDEMIC IN THE REGION

As mentioned in a previous section, at the beginning of the planning process a matrix of stakeholders, was developed to ensure that the different groups related to the epidemic were represented during the process. Consequently, during the planning process, community members as well as representatives of groups with risks behaviors or the entities that provide services to these populations were represented, including: injection drug users, men who have sex with men, homeless persons and the Trans Population, among others.

B – HOW PLWH CONTRIBUTED TO THE PLAN

People with HIV contributed to the Plan in two ways: through the participation in the groups of work described in a previous section, and through the presentations to the Planning Advisory Bodies. Of the total of participants of the workshops carried out for the identification of needs and development of strategies, 15% identified themselves as members of the HIV-positive community.

C - METHODS FOR THE IDENTIFICATION OF NEEDS AND THE PLANNING PROCESS INVOLVING COMMUNITIES, PLWH AND POPULATIONS WITH RISK BEHAVIOURS

To ensure that it responded to the prevention and care needs of these populations. For purposes of maintaining the community engaged in the process, different approaches were used, including approaches utilized included: workshops, meetings, sending material via Internet and telephone follow-up. The use of these different mechanisms allowed representatives of these various stakeholders to actively participate in the identification of needs, but also in the development of strategies and activities that form the Jurisdiction's and the SJMSA Plans.

SECTION III: MONITORING AND IMPROVEMENT

A. PROCESSES TO PROVIDE INFORMATION ON A REGULAR BASIS TO PLANNING BODIES AND STAKEHOLDERS ABOUT THE PROGRESS AND ADVANCE OF THE PLAN

As part of the Integrated Plan's development process, a permanent Steering Committee was established with personnel representing the different divisions of the Department of Health that work with HIV Surveillance, Prevention and Care as well as other parties, including representatives of the SJEMA AIDS Task Force, the Planning Advisory Bodies of Prevention, Ryan White Part B and Ryan White Part A programs, the Academia and the Community. Additional members will be added as necessary - including representatives of the Ryan White Joint Committee²¹. The aim of this work group is to provide guidance and feedback for its implementation. For this, fixed meetings will be set on a quarterly basis.

The Steering Committee will also be a link with the Planning Bodies²². In a quarterly basis, the Puerto Rico Health Department will issue progress reports and a space will be separated during the periodic meetings held by the Planning Advisory Bodies to present the reports and receive feedback. The feedback received during these meetings will be discussed at the quarterly meetings of the Steering Committee, to develop measures to address the areas of recommendation.

At the end of each program year, a summary report will be published, with the products and results of the Plan at that time. This report will be shared and discussed with the Planning Advisory Bodies and the Steering Committee to identify adjustments, amendments or measures necessary to ensure compliance and progress of the Plan. Similarly, the report will be available on the website of the Department of Health to receive feedback and comments from citizens.

B. PLAN TO MONITOR AND EVALUATE THE IMPLEMENTATION OF THE GOALS AND OBJECTIVES OF THE PLAN

The San Juan EMA, will collaborate with the evaluation strategy proposed by the jurisdiction (Puerto Rico). Through this strategy, we seek to provide the data and information needed to nurture decision making processes for the proper implementation of the Integrated Plan and keep record of the goals set out in this Plan. Therefore, the Evaluation Plan proposed, covers two domains of evaluation: process evaluation and outcome evaluation.

The expected results for the four goals of the Integrated Plan shall be measured on the basis of the information and official statistics of the Monitoring Program, attached to the Department of Health. These include the following indicators:

²¹ The Ryan White Joint Committee is the body composed of administrators of RW programs in Puerto Rico, in charge of strengthening the coordination and delivery of services for people with HIV through collaboration, discussion and management decisions of the parties that make up the Ryan Act White in Puerto Rico.

²² In this instance the Phrase Planning Advisory Bodies, include the RW Joint Committee.

1. Percent of persons who know their HIV status
2. Risk behaviors by group
3. Percentage of people with newly diagnosis linked to medical care of HIV in the period of one month from its diagnosis
4. Percentage PLWH that are retained in treatment
5. PLWH who are virally suppressed
6. PLWH receiving medical care that have a home
7. HIV viral load suppression by group

In the case of data and indicators activities the data will be collected through various sources that include:

1. Monthly reports of service providers and recipients of funds for of HIV prevention and treatment services;
2. Official statistics and information;
3. Studies commissioned by the Bodies Planning Advisers; and
4. Data from other official sources as the CareWare Data System.

In the instances in which the data depends on reports submitted by service providers, the SJEMA will adopt the guidelines and standardized instruments that the Department of Health will be developing.

Note also that the San Juan EMA has a structure for the monitoring of projects subsidized with Ryan White Part A program funds, comprising four main activities: progress reports; visits to the projects; review of customer records; and technical assistance activities.

C. STRATEGY TO USE SURVEILLANCE DATA AND PROGRAM DATA TO EVALUATE AND IMPROVE THE RESULTS IN HEALTH ALONG THE HIV CARE CONTINUUM

Processes for utilization of the surveillance and program data to evaluate and improve the health outcomes across the HIV Care Continuum in the area of the SJEMA, will capitalize in the structure developed through the Quality Improvement Program implemented in San Juan EMA.

This Quality Improvement Program aims to establish the necessary methods to ensure compliance with the regulations applicable to HRSA, compliance with the specific goals set by the SJEMA for various services, ensure high levels of satisfaction among customers and improve the health outcomes for participants.

The responsibility for monitoring and managing the activities of the Quality Improvement Program lies in the Quality Improvement Committee, which reports to the AIDS Task Force. All stakeholders and consumers are represented in the committee structure, which consists of eleven members. Among the responsibilities of this Committee are reviewing the goals and desired results for Quality Improvement Program, selection of performance measures, evaluation of results, communication of findings and the development of strategies to improve quality.

Moreover, clinical providers subsidized with funds from HRSA, are required to have, at the same time, improvement plans that meet quality indicators of HIV / AIDS Bureau (HAB). The non-clinical services providers, on the other hand, should document and provide support for patients to access and stay in care, and integrate indicators for this purpose.



AME DE SAN JUAN
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SAN JUAN EMA
HIV / AIDS PLANNING COUNCIL

September 27, 2016

Ms. Marean Duarte
Division of Service Systems HAB/HRSA
US Department of Health and Human
Services
5600 Fishers Lane RM 7A-55
Rockville, MD 20857-0001

Dear Ms. Duarte:

The Ryan White Part A, San Juan EMA HIV/AIDS Planning Council, concurs with the following submission by the Puerto Rico Department of Health (PRDOH) in response to the guidance set forth for health departments and HIV planning bodies funded by the CDC's Division of HIV/AIDS Prevention (DHAP) and HRSA's HIV/AIDS Bureau (HAB) for the development of an Integrated HIV Prevention and Care Plan.

For the purposes of developing the Integrated HIV Surveillance, Prevention and Care Plan, the PRDOH used an approach based on community participatory planning, including RWHAP Parts A, B, C, D, F, CDC recipients and sub-recipients, people living with HIV (PLWH), and other stakeholders. The ultimate purpose for using such approach was to assist in establishing the basis of a proper structure that would facilitate the plan's implementation and allow the jurisdiction to achieve the objectives of the National HIV/AIDS Strategy (NHAS). The specific mechanisms implemented for receiving and integrating the input of these stakeholders, included the following: 8 workshop sessions for identifying needs and developing strategies, establishing joint committees, meetings with committees and other stakeholders to integrate the feedback received. The same methodology was used in the San Juan EMA (RWHAP Part A), and both plans (the jurisdiction's and the SJEMA plan), contain strategies that are aligned, for addressing the four goals of the NHAS.

The Ryan White Part A Planning Council reviewed the Integrated HIV Surveillance, Prevention and Care Plan submission to the CDC and HRSA to verify that it describes how programmatic activities and resources are being allocated to the most disproportionately affected populations and geographical areas that bear the greatest burden of the HIV disease. The Planning Council *concurs* that the Integrated HIV Surveillance, Prevention and Care Plan submission fulfills the



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requirements put forth by the Funding Opportunity Announcement PS12-1201 and the Ryan White HIV/AIDS Program legislation, and program guidance.

Sincerely,

Ivette González, Chair
RW Part A-San Juan EMA HIV/AIDS Planning Council

PO Box 21405, San Juan, Puerto Rico 00928-1405
Teléfono: (787) 977-0542 Fax: (787) 721-3646

- | **Accumulated Cases:** total number of diagnosed and reported HIV/AIDS cases during a specific time period. It includes cases of deceased patients.
- | **Co-infection:** The coexistence of a disease or infection and HIV infection or AIDS.
- | **HIV primary medical care:** initial medical evaluation and health care consistent with the E.U. guidelines of Public Health for the treatment of HIV.
- | **Epidemiology:** the study of the frequency, distribution and determinants of health states or events in specific populations and the application of this study to the control and prevention of health problems.
- | **Socioeconomic status:** a measure of social and economic factors that helps on the description of the position of an individual in society.
- | **Estimate:** when available data is not precise, an estimate based on available information and how that information can be generalized to larger populations is used.
- | **Stratification:** the analysis of the exposure-disease population subgroups relation.
- | **Demographic factors:** background information on the population of interest.
- | **Cumulative incidence:** total number of new cases over a specific time period between the total number of people at risk during the same period.
- | **Confidence interval:** range of values that consider the real value to a level of statistical certainty. Usually the confidence interval used is 95%.
- | **Median:** the average value of a set of values.
- | **Morbidity:** disease frequency in the population.
- | **Mortality:** total number of people who have died as a result of HIV infection.
- | **Need for medical care not covered:** the lack of evidence of one or more of the following components: viral load test, CD4 cell monitoring and/or antiretroviral therapy for a specific period.
- | **Epidemiological profile:** document that describes the HIV infection epidemiology in several populations in terms of **person** (sociodemographic, clinical and behavioral characteristics), **place** - geographical or political boundaries - and **time** (calendar year, trends over time).
- | **Prevalence:** total number of people affected, present in the population in a specific period divided by the number of people present in the population during the same period.
- | **Average/Mean:** the sum of all observations divided by the number of observations.
- | **Range:** difference between the largest and smallest sample observation/value.
- | **Ratio:** relative representation of the size of two numbers.
- | **Report Delay:** time between the diagnosis of HIV infection or AIDS and the moment when the report is received in the Department of Health.
- | **AIDS:** stage 3 of the HIV infection, classified when the immune system of a person infected with HIV becomes severely compromised (measured by CD4 cell count) and/or the person becomes ill with an opportunistic infection.
- | **Rate:** frequency measurement of an event or a disease compared with the number of people at risk of the event or illness.
- | **Trend:** a shift in the long-term frequency, usually ascending, descending or stable.

| **HIV Disease Surveillance:** the systematical and continuous compilation, analysis and interpretation of HIV infection data to be used in planning, implementation and evaluation of prevention strategies and health care.

APPENDIX C. LIST OF REFERENCES REVISED FOR THE NEEDS ASSESSMENT

- Coming Out to Health Care Providers in Puerto Rico: Opportunities for Prevention, Linkage and Engagement in Care (2015), Miranda, Ríos, Díaz, Torres, Ávila, Rolón & Colón.
- Continuo de la Atención del VIH Puerto Rico: 2010, Programa Vigilancia de VIH/SIDA, División de Epidemiología, Departamento de Salud
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- Continuo de la Atención del VIH, 2010 – 2013, Programa Vigilancia de VIH/SIDA, División de Epidemiología, Departamento de Salud
- Datos epidemiológicos de Clamidia, Gonorrea y Sífilis, Puerto Rico (2014), Sistema de Vigilancia de ITS, Programa de Vigilancia VIH/SIDA/ITS/VHC/TB, Departamento de Salud de Puerto Rico
- Diagnoses of HIV Infection in the United States and Dependent Areas, (2014), CDC.
- Directorio de servicios de prevención y tratamiento (2014), Estudios Técnicos, Inc. para el Departamento de Salud.
- Encuesta de Satisfacción Ryan White Parte B (s.f), Programa Ryan White, Parte B.
- Estudio de necesidades de Prevención y Tratamiento del VIH y ETS (2014), Estudios Técnicos, Inc. para el Departamento de Salud.
- Estudio de Necesidades y Satisfacción con los Servicios VIH/SIDA (2010), Programa Ryan White Parte B.
- Evaluación de las Campañas Relacionadas a la Prevención del VIH y la Distribución Estructurada de Condones, 2015, Estudios Técnicos, Inc. para el Departamento de Salud.
- Evaluación de preparación ("Readiness Assessment") para la intervención de PrEP en Puerto Rico, (2015). Estudios Técnicos, Inc. para el Departamento de Salud.
- Estudio sobre las conductas de riesgo entre el grupo de hombres entre las edades de 13 y 24 años que tienen sexo con hombres (2015), Estudios Técnicos, Inc. para el Departamento de Salud.
- Evaluación de Satisfacción de la Calidad de los Condones provistos como parte de la Estrategia de Distribución de Condones (2015), Departamento de Salud.
- Late Diagnosis of HIV Infection in Metropolitan Areas of the United States and Puerto Rico (2015). Hall HI, Tan T y Espinoza L.
- Informe Estudio de Necesidades a Personas con VIH Ryan White Parte B (2013), Programa Ryan White Parte B.
- Informe resultados encuesta de Satisfacción Servicios a pacientes VIH Ryan White Parte B (2012), Programa Ryan White Parte B.
- Informe Semestral de la Vigilancia del VIH en Puerto Rico (Abril, 2015), Programa Vigilancia de VIH/SIDA, División de Epidemiología
- Part B/ADAP: HIV Continuum of CARE Number of PLWH Enrolled in Part B/ADAP Care January-December 2014

Perfil de los programas de Intercambio de Jeringuillas en Puerto Rico (2014). Cusman Vega, Intercambios Puerto Rico & Torres Cardona, Iniciativa Comunitaria, para el Grupo de Planificación para la Prevención del VIH.

Perfil Epidemiológico Integrado para la Prevención del VIH en Puerto Rico: 2007 – 2013, Programa Vigilancia de VIH/SIDA, División de Epidemiología, Departamento de Salud

Prevalence of diagnosed HIV infection, 2012 -2014, Programa Vigilancia de VIH/SIDA, División de Epidemiología, Departamento de Salud

Resultados del Cuestionarios a Proveedores de Servicios: Retención y búsqueda a cuidado de personas con VIH (s.f.), Grupo de Planificación Ryan White Parte B.

Sistema de Pruebas Rutina VIH: Evaluación del Proyecto (2014), Health Track para el Departamento de Salud.

Understanding differences in HIV/HCV prevalence according to differentiated risk behaviors in a sample of PWID in rural Puerto Rico (2016). Abadie, Welch-Lazoritz, Gelpi-Acosta, Reyes & Dombrowski.

Addressing the HIV/AIDS Epidemic Among Puerto Rican People Who Inject Drugs: The Need for a Multiregion Approach (2014), Deren, Gelpí, Albizu, González, Des Jarlais & Santiago.

APPENDIX D. ADDITIONAL TABLES

Service required	Social barriers	Federal, state or municipal barriers	Barriers related to the administrative structure	Program barriers	Service providers barriers	Barriers related to beneficiaries
Medicine	Education Level	Medical insurance coverage	Recruitment processes	Availability of funds	Lack of resources	
	Poverty	High costs	Bureaucracy	Allocation of funds	Levels of specialization	
	Stigma		Staff capacity	Restricting funds available	Poor coordination with the Department of Health	
	Homelessness or housing instability		Poor coordination			
	Transportation					
	Socioeconomic level					
Ambulatory medical services	Stigma	Medical insurance coverage	Service providers	Cuts	Levels of specialization	Fear of process
	Socioeconomic level	Bureaucracy	Number of staff	Availability of funds	Lack of resources	Substance use
	Education Level	ASES Public policy	Government change	Distribution of funds	Doctors identify themselves as HIV doctors	Access
	Poverty			Belated funds	Lack of interest	Comorbidity
	Lack of sensibility with LGBTT, PID and homeless population.			Information System	Providers location	

Service required	Social barriers	Federal, state or municipal barriers	Barriers related to the administrative structure	Program barriers	Service providers barriers	Barriers related to beneficiaries
	Homelessness or housing instability					
	Unauthorized immigrants					
	Transportation					
Mental health	Stigma	Medical insurance coverage	Bureaucracy	Availability of funds	Lack of resources and programs	Homelessness or housing instability
	Socioeconomic level	Bureaucracy	Lack of action and implementation from authority for service improvements	Infrastructure	No treatment for alcohol abuse	Substance abuse
	Poverty	Federal funds public policy	Staff capacity	Planning	Access to services	Comorbidity
	Cultural sensitivity	Lack of local public policy	Lack of collaboration with other agencies	Access	Perceived need	
	Homelessness or housing instability			Poor coordination	Staff saturation	
Assistance Program for copayments and deductibles	Poverty	Medical insurance coverage	Staff capacity	Availability of funds	Lack of resources	Access
	Socioeconomic level	Bureaucracy	Administrative processes			Poor knowledge of available resources
	Cultural					
	Education Level					
	Socioeconomic level					

Service required	Social barriers	Federal, state or municipal barriers	Barriers related to the administrative structure	Program barriers	Service providers barriers	Barriers related to beneficiaries
	Homelessness					
Medical case management	Stigma					
	Invisibility of certain populations	Medical insurance coverage	Staff capacity	Lack of funds	Lack of resources	
	Poverty	Lack of regulation for professionals	Administrative processes	Availability of funds	Continuity of services	
	Homelessness		Bureaucracy	Infrastructure	Levels of specialization	
			Administrative Burn out	Information System	Poor sensibility	
			Staff training	Establish roles	Saturation	
				Lack of resources		
Early intervention services	Stigma	Political relationship	Staff capacity	Availability of funds and human resources	Levels of specialization	Challenging attitudes
	Poverty	Medical insurance coverage	Program requirements	Allocation of funds	Communication and cooperation between programs	Lack of interest
	Education Level	Federal legislation	Poor interagency communication	Access	Lack of resources	
	Cultural	Lack of Public Policy for routine tests				
	Transportation	Excess reports required				

Service required	Social barriers	Federal, state or municipal barriers	Barriers related to the administrative structure	Program barriers	Service providers barriers	Barriers related to beneficiaries
Medical transportation services	Poverty	Bureaucracy	Administrative processes	Availability of funds	Lack of providers	Lack of available resources
	Stigma			Lack of funds	Lack of resources	
	Socioeconomic level			Continuity of services	Availability of funds	
	Geography			Infrastructure	Coverage criteria	
	Transportation					
	Poverty					
	Homelessness					
Medical nutrition therapy	Poverty		Administrative processes	Availability of funds	Lack of resources	
	Education Level					
	Cultural		Limited availability of programs	Do not follow protocol		
Case management - support	Socioeconomic level	Medical insurance coverage			Lack of providers	
		Bureaucracy		Implementation barriers		
Health care at home	Poverty			Availability of funds	Lack of resources	Lack of information about available services.
	Family abandonment			Human resources availability	Levels of specialization	

Note: Some of the barriers mentioned like the ones of the beneficiaries, were moved to the appropriate category, as defined by the guidelines provided by the federal government.