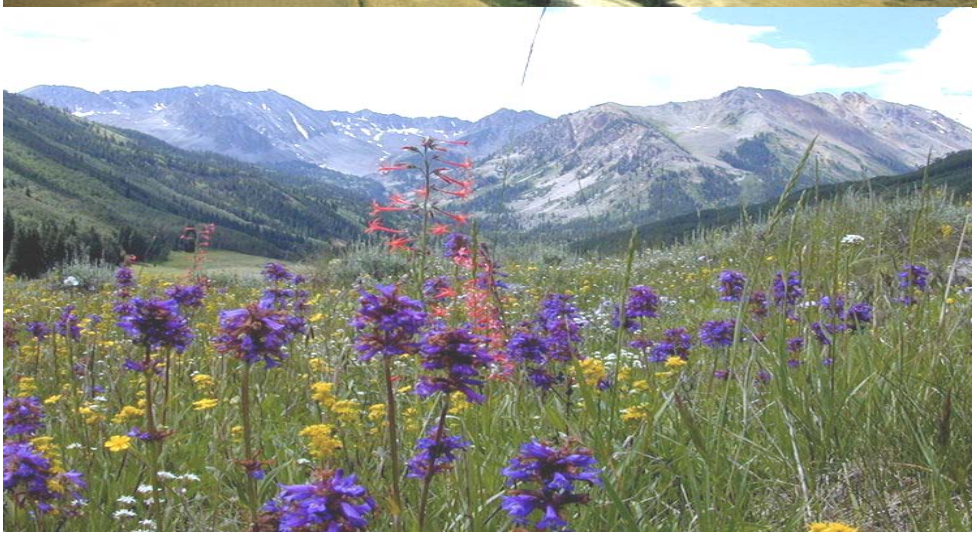
Colorado Part B Comprehensive Plan for HIV Care and Treatment

2012 – 2015



Colorado Department of Public Health and Environment

Colorado Part B Comprehensive Plan for HIV Care and Treatment

July 1, 2012 – March 31, 2015

Table of Contents

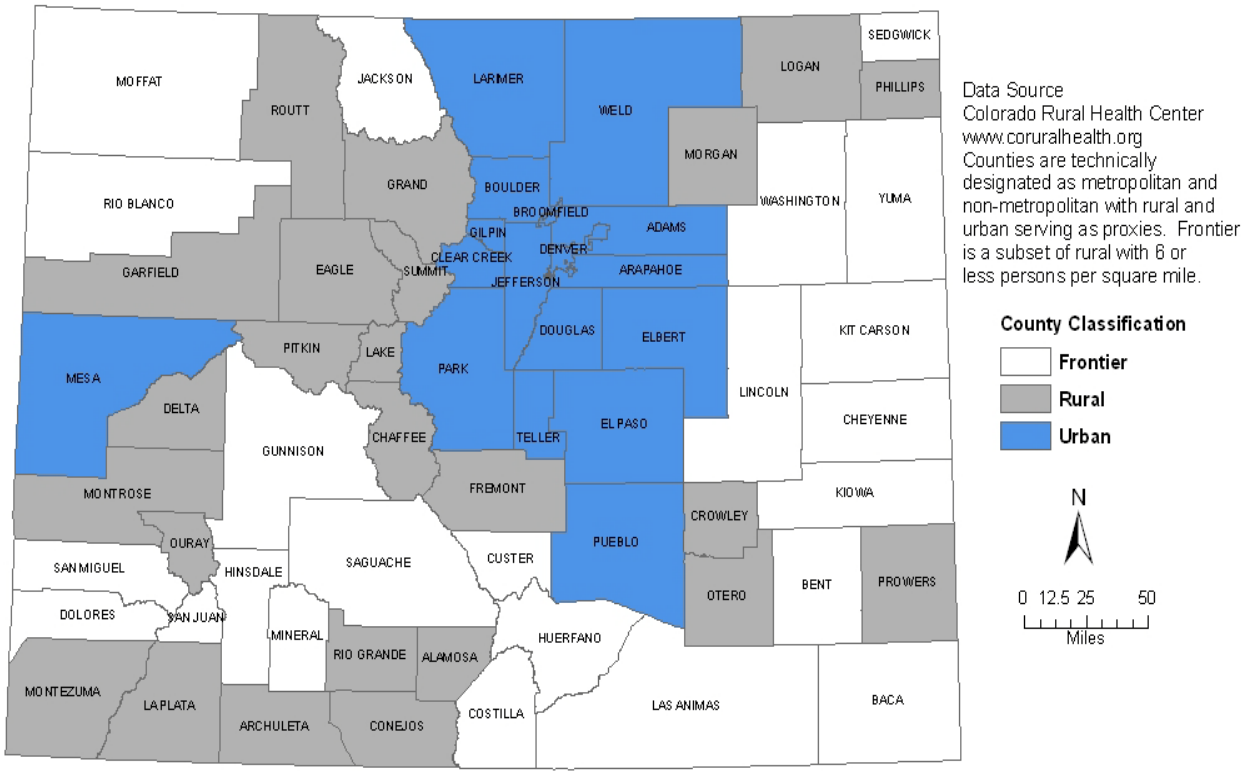
Chapter I –Where We Are Now: Our Current System of Care

A. Colorado's HIV/AIDS epidemic

1. Description of Colorado

- According to the 2010 U.S. Census, Colorado's population is 5,029,196, a 17 percent increase over the 2000 U.S. Census.
- Colorado's population is 70 percent White, 21 percent Hispanic, 4 percent Black, 2.6 percent Asian Pacific Islander, 0.6 percent American Indian. Individuals identifying as two or more races comprise an additional 2 percent of the population.
- Twenty-one percent of Coloradans identify as Hispanic or Latino ethnicity
- According the Kaiser Family Foundation, Colorado was in a tie with 5 other states for having the ninth highest proportion of uninsured persons; 14 percent, slightly lower than the national average of 16 percent.
- In 2010, cancer remains the leading cause of death in Colorado.
- In 2010, 36,453 persons were incarcerated in Colorado prisons and jails, representing incarceration rates of 445 and 292 per 100,000, respectively.

Figure 1.1 - Map of Colorado by County Classification[1]



[1] Colorado Rural Health Center

Geography
Colorado is a geographically rural state. Colorado has 64 counties across a landmass of 104,095 square miles. The majority of Colorado's population resides in 17 counties designated as metropolitan areas as defined by the U.S. Office of Management and Budget. These counties include: Adams, Arapahoe, Boulder, Broomfield, Clear Creek, Denver, Douglas, El Paso, Elbert, Gilpin, Jefferson, Larimer, Mesa, Park, Pueblo, Teller and Weld. The designation of Frontier is a subset of rural, given to those counties with six or fewer persons per square mile. All three classifications and their counties are pictured in **Figure 1.1** above.

Age
Table 1.1 shows the population by age and gender.

Table 1.1 - 2009 Colorado Population by Age and Gender[2]

Age Group	Male	Percent	Female	Percent	Total	Percent
<10	354,143	14.0	338,420	13.5	692,563	13.8
10-14	170,192	6.8	162,462	6.5	332,654	6.6
15-19	175,730	7.0	163,745	6.5	339,475	6.8
20-24	181,765	7.2	166,850	6.7	348,615	6.9
25-29	192,007	7.6	180,452	7.2	372,459	7.4
30-34	181,317	7.2	172,502	6.9	353,819	7.0
35-39	182,350	7.2	171,255	6.8	353,605	7.0
40-44	175,758	7.0	170,281	6.8	346,039	6.9
45-49	185,148	7.3	186,487	7.4	371,635	7.4
50-54	184,243	7.3	186,820	7.4	371,063	7.4
55-59	161,766	6.4	166,598	6.6	328,364	6.5
60-65	132,389	5.3	136,891	5.5	269,280	5.4
>65	243,854	9.7	305,771	12.2	549,625	10.9
Total	2,520,662	100.0	2,508,534	100.0	5,029,196	100.0

Race
The following tables show race by gender (**Table 1.2**) and county (**Table 1.3**). It should be noted that population totals presented in these tables and subsequent tables may vary slightly due to different data sources.

[2] Colorado State Demography Office, State Population by Age and Gender, 2010.

Table 1.2 - 2010 Colorado Population by Race and Gender[3]

Race	Male	Percent	Female	Percent	Total	Percent
White (Non-Hispanic)	1,756,868	69.7	1,763,925	70.3	3,520,793	70.0
Hispanic	529,799	21.0	508,888	20.3	1,038,687	20.7
Black (Non-Hispanic)	100,158	4.0	88,620	3.5	188,778	3.8
Asian/Hawaiian/Pacific Islander (Non-Hispanic)	64,330	2.6	76,895	3.1	141,225	2.8
American Indian/Alaskan Native (Non-Hispanic)	15,884	0.6	15,360	0.6	31,244	0.6
Two or More Races (Non-Hispanic)	49,808	2.0	51,039	2.0	100,847	2.0
Total	2,520,662	100.0	2,508,534	100.0	5,029,196	100.0

Table 1.3 - 2010 Colorado Counties Percent of the Population by Race[4]

County	White (Non-Hispanic)	Hispanic	Black (Non-Hispanic)	Asian/PI (Non-Hispanic)	Amer. Indian/ AK Native (Non-Hispanic)	Multiple Races (Non-Hispanic)	Total Population
Adams	53.2	38	2.8	3.6	0.6	1.7	441,603
Alamosa	49.6	46	0.9	0.9	0.9	1.5	15,445
Arapahoe	63.2	18.4	9.7	5.2	0.4	2.8	572,003
Archuleta	78.2	17.8	0.3	0.7	1.4	1.5	12,084
Baca	87.7	9.2	0.5	0.2	1	1.2	3,788
Bent	59	30.5	7.6	0.9	1.4	0.6	6,499
Boulder	79.4	13.3	0.8	4.1	0.4	1.9	294,567
Broomfield	79.4	11.1	0.9	6.1	0.4	1.9	55,889
Chaffee	86.6	9.4	1.5	0.6	0.8	1	17,809
Cheyenne	88.1	9.7	0.4	0.6	0.6	0.7	1,836
Clear Creek	92.1	4.7	0.6	0.6	0.6	1.3	9,088
Conejos	41.8	56	0.1	0.3	0.6	1	8,256
Costilla	30.8	66	0.2	1	0.8	0.9	3,524
Crowley	57.9	29	9.5	1	1.6	1	5,823
Custer	92	4.7	1	0.4	0.5	1.3	4,255
Delta	83	14	0.4	0.5	0.6	1.3	30,952
Denver	52.2	31.8	9.7	3.4	0.6	2.1	600,158
Dolores	90.9	4	0.1	0.2	2.7	2.1	2,064
Douglas	*85.2*	*7.5*	*1.1*	*3.8*	*0.3*	*2*	*285,465*
Eagle	67.3	30.1	0.5	1	0.3	0.8	52,197

[3] U.S. Census Bureau, 2009 American Community Survey Detailed Tables, Race by Gender.
[4] U.S. Census Bureau, 2010

County	White (Non-Hispanic)	Hispanic	Black (Non-Hispanic)	Asian/PI (Non-Hispanic)	Amer. Indian/ AK Native (Non-Hispanic)	Multiple Races (Non-Hispanic)	Total Population
Elbert	91	5.3	0.7	0.8	0.5	1.6	23,086
El Paso	72	15.1	5.8	3	0.6	3.5	622,263
Fremont	80.4	12.3	3.9	0.6	1.5	1.3	46,824
Garfield	68.8	28.3	0.4	0.7	0.5	1.1	56,389
Gilpin	90.9	4.9	0.5	1.5	0.6	1.4	5,441
Grand	89.7	7.5	0.3	0.9	0.4	1.2	14,843
Gunnison	89.1	8.2	0.3	0.6	0.4	1.3	15,324
Hinsdale	93.2	2.8	0.4	0.4	0.8	1.7	843
Huerfano	61.9	35.3	0.3	0.4	0.8	1.2	6,711
Jackson	87.4	10.8	0	0.1	0.9	0.8	1,394
Jefferson	79.9	14.3	0.9	2.6	0.5	1.6	534,543
Kiowa	93.3	5.6	0.2	0	0.2	0.7	1,398
Kit Carson	76.4	19	2.6	0.5	0.6	0.8	8,270
Lake	58.2	39.1	0.3	0.4	0.6	1.1	7,310
La Plata	80.3	11.8	0.3	0.6	5	1.8	51,334
Larimer	84.5	10.6	0.8	2	0.4	1.7	299,630
Las Animas	54.2	41.6	1.3	0.7	1.1	1.2	15,507
Lincoln	79.5	12.5	5.1	0.7	0.7	1.4	5,467
Logan	78.2	15.6	3.9	0.6	0.8	0.9	22,709
Mesa	83.1	13.3	0.5	0.8	0.6	1.5	146,723
Mineral	95.2	2.9	0.3	0.1	0.6	0.8	712
Moffat	82.7	14.4	0.2	0.6	0.7	1.3	13,795
Montezuma	75.1	11	0.2	0.5	11.4	1.7	25,535
Montrose	77.5	19.7	0.3	0.6	0.5	1.3	41,276
Morgan	61.7	33.8	2.7	0.5	0.4	0.9	28,159
Otero	56.5	40.3	0.5	0.8	0.6	1.2	18,831
Ouray	93.4	4.4	0.1	0.7	0.3	1	4,436
Park	91.6	4.8	0.4	0.6	0.7	1.7	16,206
Phillips	79.4	18.7	0.3	0.7	0.3	0.6	4,442
Pitkin	87.9	9.1	0.5	1.2	0.1	1.1	17,148
Prowers	62.7	35.2	0.4	0.3	0.5	0.7	12,551
Pueblo	54.1	41.4	1.7	0.8	0.6	1.3	159,063
Rio Blanco	86.3	10	0.7	0.5	0.7	1.7	6,666
Rio Grande	55.1	42.4	0.2	0.4	0.9	0.9	11,982
Routt	90.6	6.8	0.4	0.7	0.3	1.1	23,509
Saguache	56.4	40.1	0.2	0.8	1.1	1.3	6,108
San Juan	85.1	12	0	1	0.1	1.4	699
San Miguel	88.5	8.6	0.3	0.8	0.4	1.3	7,359

County	White (Non-Hispanic)	Hispanic	Black (Non-Hispanic)	Asian/PI (Non-Hispanic)	Amer. Indian/ AK Native (Non-Hispanic)	Multiple Races (Non-Hispanic)	Total Population
Sedgwick	85.6	12.1	0.3	0.7	0.3	0.9	2,379
Summit	82.7	14.2	0.7	1	0.2	1	27,994
Teller	90.6	5.5	0.4	0.7	0.7	1.9	23,350
Washington	89.4	8.5	0.6	0.2	0.1	1	4,814
Weld	67.6	28.4	0.8	1.2	0.6	1.4	252,825
Yuma	77.9	20.8	0.2	0.2	0.3	0.5	10,043

Poverty and Income

In 2009, the U.S. American Community Survey estimated Colorado's median household income to be $56,222 and the state's national poverty ranking was 22nd. The United States Department of Agriculture estimates the percent of Coloradans living below the poverty level to be 13 percent in 2009. **Table 1.4** shows the percent of population below poverty level per county in 2009.

Table 1.4 - Percentage of the Population Under the Poverty Level by County (2009)[5]

County	Percentage Under Poverty Level	County	Percentage Under Poverty Level	County	Percentage Under Poverty Level
Colorado	12.6	Elbert	5.4	Montezuma	16.9
		El Paso	11.5	Montrose	12.8
Adams	13.3	Fremont	18.1	Morgan	14.4
Alamosa	22.2	Garfield	8.6	Otero	13.6
Arapahoe	12.3	Gilpin	7.3	Ouray	8.5
Archuleta	12.9	Grand	8.5	Park	9.1
Baca	18.3	Gunnison	13.4	Phillips	12.4
Bent	37.2	Hinsdale	11.2	Pitkin	6.5
Boulder	12.9	Huerfano	26.9	Prowers	23.1
Broomfield	4.9	Jackson	15.0	Pueblo	16.9
Chaffee	12.0	Jefferson	8.1	Rio Blanco	7.7
Cheyenne	13.4	Kiowa	14.8	Rio Grande	17.0
Clear Creek	8.1	Kit Carson	15.4	Routt	6.4
Conejos	24.5	Lake	13.8	Saguache	30.1
Costilla	27.4	La Plata	11.6	San Juan	13.5
Crowley	53.0	Larimer	14.7	San Miguel	10.7

[5] U.S. Department of Agriculture, Economic Research Service, 2009 County-Level Poverty Rates for Colorado.

County	Percentage Under Poverty Level	County	Percentage Under Poverty Level	County	Percentage Under Poverty Level
Custer	13.9	Las Animas	18.5	Sedgwick	15.5
Delta	13.9	Lincoln	16.7	Summit	8.7
Denver	18.8	Logan	17.0	Teller	8.2
Dolores	12.4	Mesa	11.8	Washington	12.1
Douglas	3.3	Mineral	10.5	Weld	14.8
Eagle	8.0	Moffat	10.1	Yuma	13.3

Insurance

According to the Kaiser Family Foundation, 17 percent of Colorado's population was uninsured in 2008-2009. This is slightly lower than the U.S. estimate of 19 percent in 2009. **Table 1.5** shows that the percentage of Colorado's population not covered by health insurance was much greater among Hispanics (32 percent) than among Whites (13 percent).

Table 1.5 - Percentage of the State Non-Elderly Adults without Health Insurance Coverage by Race and Ethnicity (State Data 2008-2009, U.S. 2009)[6]

Race	Colorado	United States
White (Non-Hispanic)	12.8	14.0
Hispanic	32.4	34.0
Black (Non-Hispanic)	25.8	22.6
Other	18.5	17.9
Total	17.4	18.9

Education

According to the Colorado Department of Education, in 2009 there was a combined public and non-public school enrollment of 832,368 persons in Colorado. School enrollment was comprised of 61 percent White, 28 percent Hispanic, 6 percent Black, 4 percent Asian and 1 percent American Indian. The overall dropout rate in Colorado during the 2008-2009 school year was 3.6 percent. **Table 1.6** shows the percent of the population graduating from high school and college by gender. Compared to other metropolitan statistical areas (MSA) and the state as a whole, the Boulder MSA had the highest proportion of higher education degrees. The Grand Junction MSA had the highest proportion of high school graduates or General Education Development (GED). The Greeley MSA had the highest proportion of the population without a high school diploma or GED.

[6] Henry J. Kaiser Family Foundation State Health Facts

Table 1.6 - Percentage of Population 25 Years Old and Over, High School Graduates or Higher Degree by Gender and Metropolitan Statistical Areas 2009[7]

	No HS Diploma/GED			HS Grad/Equivalent			Higher Degree		
Area	Men	Women	Total	Men	Women	Total	Men	Women	Total
Boulder MSA	7.0	6.2	6.6	13.1	14.5	13.8	63.5	60.6	62.1
Colorado Springs MSA	7.4	7.4	7.4	21.8	24.1	23.0	46.8	42.0	44.4
Denver-Aurora-Broomfield MSA	12.0	11.1	11.5	22.4	22.8	22.6	44.9	43.8	44.4
Fort Collins-Loveland MSA	7.7	5.6	6.7	21.2	21.7	21.4	49.1	49.1	49.1
Grand Junction MSA	11.5	11.1	11.3	33.3	30.1	31.6	31.8	34.5	33.2
Greeley MSA	18.2	14.4	16.3	27.2	27.3	27.2	33.8	35.5	34.6
Pueblo MSA	15.7	14.5	15.0	29.0	29.3	29.2	29.7	31.4	30.6
Colorado	11.8	10.5	11.1	23.7	23.7	23.7	43.4	42.8	43.1
United States	16.1	14.8	15.4	29.2	29.4	29.3	35.0	34.9	35.0

Incarcerated persons

According to the Colorado Department of Corrections (CDOC), 23,210 persons were incarcerated in 2009. Twenty-two state correctional facilities housed 14,615 inmates, and the remaining 8,595 inmates were housed in contract facilities or county jails. Seven CDOC facilities are located in Fremont County. Colorado's incarcerated population is 12.5 percent female and 87.5 percent male. Racial characteristics of the inmate population are as follows: 44 percent White, 35 percent Hispanic, 17 percent Black, 3 percent American Indian, and 1 percent Asian.

2. Epidemiological profile of HIV/AIDS in Colorado

The STI/HIV Surveillance Program at Colorado Department of Public Health and Environment (CDPHE) estimates that 11,198 were living with HIV or AIDS as of June 30, 2011. This figure includes only those people diagnosed with HIV in Colorado and believed to be still living; it does not include people diagnosed in other states or people who are living with HIV who have not yet been diagnosed. The data used to develop these estimates is limited; a section describing the limitations on the data may be found on page 12.

Table 1.7 provides the demographic profile of persons diagnosed with HIV in Colorado by June 30, 2011 for whom no death records have been documented. These prevalence data are categorized according to residence inside and outside of the Denver area. Other categories include gender, age group, race/ethnicity, birth origin (inside or outside of the U.S.), year of HIV diagnosis, and disease status (either HIV or AIDS). Males, by far, outnumber females living with HIV/AIDS in Colorado (89 percent versus 11 percent); however the proportion of female cases is somewhat higher outside of the Denver area (15 percent versus 10 percent). The majority (65

[7] U.S. Census Bureau, 2009 American Community Survey.

percent) of all cases are among people over the age of 44, reflecting the current trend of people living with HIV or AIDS (PLWH/A) living longer. The mean age is 48 and the median age is 49. African Americans are disproportionately represented among Colorado cases, accounting for 14 percent of the cases compared to only four percent of the state's population. What is not shown in Table 1 is the highly disproportionate representation of African American women among female cases, accounting for 32 percent of those cases. Whites are somewhat underrepresented among all cases, accounting for 64 percent of HIV cases and 70 percent of the population, and white women only represent 42 percent of the female cases. Latino cases are more proportionate to the Latino population numbers (19 percent of cases and 21 percent of the population). Latina women accounted for 22 percent of female cases. Surveillance data show that among all living Colorado cases, 44 percent have a documented AIDS diagnosis.

Men who have sex with men (MSM), including those who also have a history of injection drug use (MSM/IDU), have always dominated the epidemic in Colorado, accounting for almost three quarters (73 percent) of the cases. The proportion of the total cases documented as IDU alone has always been lower in Colorado relative to many other states, currently making up eight percent of the total number of cases, compared to approximately 19 percent nationwide. Documented heterosexual (HET) cases represent 10 percent of all cases. This percentage reflects only HIV positive males who report heterosexual sex as their only risk and for whom there is a documented HIV positive female partner. All other males are included in the "Unknown" transmission category. Cases in this category make up nine percent of all Colorado cases. A closer look at those who are included in this "unknown" category shows that males make up 74 percent, African Americans of both genders 20 percent, Latinos 26 percent, and Whites only 47 percent.

Table 1.7 - Colorado cases of HIV/AIDS as of June 30, 2011, by geographic location*

	Denver Metro		Non-Denver		All	
	N	%	N	%	N	%
Total	8699	100	2499	100	11,198	100
Sex at Birth						
Male	7816	90	2117	85	9,933	89
Female	883	10	382	15	1,265	11
Age Group						
<15	23	<1	8	<1	31	<1
15 - 19	13	<1	9	<1	22	<1
20 - 24	122	1	41	2	163	1
25 - 34	867	10	250	10	1,117	10
35 - 44	1920	22	561	22	2,481	22
45 - 64	5280	61	1489	60	6,769	60
65 and over	474	5	141	6	615	5
Race/Ethnicity						
White	5575	64	1626	65	7,201	64
Latino	1592	18	481	19	2,073	19
Black	1313	15	307	12	1,620	14
Other	170	2	66	3	236	2
Unknown	49	1	19	1	68	1

Race/Ethnicity by Birth Origin* **						
White US Born	5482	63	1598	64	7080	63
Hispanic US	1138	13	319	13	1457	13
African American US Born	1018	12	262	10	1280	11
Hispanic Non-US	454	5	162	6	616	6
African Non-US Born	295	3	45	2	340	3
Other US born	160	2	68	3	228	2
Other Non-US Born	152	2	45	2	197	2
Year of HIV Diagnosis						
Before 1990	2184	25	510	20	2,694	24
1990 - 1995	1979	23	597	24	2,576	23
1996 - 2000	1316	15	442	18	1,758	16
2001 - 2005	1476	17	431	17	1,907	17
2006 - 2011	1725	20	512	20	2,237	20
Unknown	19	<1	7	<1	26	<1
Disease Status						
HIV	4955	57	1324	53	6,279	56
AIDS	3744	43	1175	47	4,919	44
Documented Transmission Category**						
MSM	5828	67	1361	54	7,189	64
HET	808	9	283	11	1,091	10
MSM & IDU	748	9	201	8	949	8
IDU	561	6	287	11	848	8
Perinatal	35	<1	18	1	53	<1
Other	30	<1	14	1	44	<1
Unknown	689	8	335	13	1,024	9

*These figures include all HIV cases diagnosed in Colorado for which no mortality information has been documented.

** All percentages have been rounded to the nearest whole percent and may not equal 100%.

*** The country of origin was not systematically collected for cases diagnosed before the implementation of HARS, and may not accurately reflect the origin of these cases.

Table 1.8 displays Colorado incidence data on persons diagnosed with HIV from January 1, 2006, to December 31, 2010. One difference between the more recent data as compared to the prevalence data is that it includes a somewhat higher proportion of female cases (14 percent versus 11 percent). Another is seen in the age groups, with 58 percent of all of the newer cases falling into the 25 to 34 and 35 to 44 year age groups. The mean age of those diagnosed within that five-year period was 40 and the median age was 39. Among race/ethnic groups, African Americans are even more overrepresented at 17 percent (over four times their proportion of the population), and African American females accounted for 44 percent of all female cases (11 times their proportion of the population). The proportion of Latino HIV cases exceeded Latino population proportions by five percentage points at 26 percent, with Latina females at 24 percent of all female cases. Another difference is in the higher proportion of foreign-born cases in the incidence data at 16 percent. Within the documented transmission categories, MSM and MSM/IDU make up a smaller percentage of the total at 69 percent, and IDU alone were down to five percent. Documented heterosexual cases were up to 15 percent and those with unknown risk were up to 12 percent of the incident cases.

Table 1.8 - Colorado cases of HIV diagnosed between 2006 – 2010 by geographic location

	Denver Metro		Non-Denver		All	
	N	%	N	%	N	%
Total	1650	100	515	100	2,165	100
Sex at Birth						
Male	1423	86	430	84	1,853	86
Female	227	14	85	17	312	14
Age Group						
<15	14	1	5	1	19	1
15 - 19	5	<1	1	<1	6	<1
20 - 24	95	6	31	6	126	6
25 - 34	499	30	152	30	651	30
35 - 44	484	29	131	25	615	28
45 - 64	509	31	179	35	688	32
65 and over	44	3	16	3	60	3
Race/Ethnicity						
White	842	51	305	59	1,147	53
Latino	435	26	128	25	563	26
Black	312	19	63	12	375	17
Other	61	4	19	4	80	4
Birth Origin						
White US Born	831	50	300	58	1131	52
Hispanic US	304	18	78	15	382	18
African American US Born	196	12	48	9	244	11
Hispanic Non-US	131	8	50	10	181	8
Black/African Non-US Born	116	7	15	3	131	6
Other US born	40	2	11	2	51	2
Other Non-US Born	32	2	13	3	45	2
Disease Status						
HIV	977	59	303	59	1,280	59
AIDS	673	41	212	41	885	41
Documented Transmission Category						
MSM	1068	65	287	56	1,355	63
HET	243	15	74	14	317	15
MSM & IDU	92	6	31	6	123	6
IDU	71	4	28	5	99	5
Perinatal	11	1	3	1	14	1
Other	-	-	1	<1	1	<1
Unknown	165	10	91	18	256	12

* All percentages have been rounded to the nearest whole percent and may not equal 100%.

Limitations of the data

Although a wealth of information was gathered through the data collection methods used in this needs assessment, all assessments have limitations, especially those concerning the degree to which the sample of respondents is representative. The sample of participants who completed the survey for this study was predominantly made up of clients receiving AIDS Drug Assistance Program (ADAP) services or services provided by AIDS Service Organizations (ASOs) and should not be considered representative of all PLWH in Colorado. Although interviews were conducted with fifteen people who had spent substantial periods of time out of care, the greatest

limitation in this particular study can be seen in the low level of participation of people who were not currently receiving medical care and other related services. This was especially the case among survey respondents living outside of the Denver area. Future needs assessments should place an emphasis on gaining more perspective from people who are not getting the medical care and other assistance they need. People who were better off financially and who had private health insurance were also underrepresented given that they would likely not have received a survey sent to ADAP and ASO clients. Also, only the information provided by those who responded to the survey and those PLWH who agreed to participate in the interviews could be incorporated in this report. Some who did participate in interviews may have altered their responses out of concern for being judged or jeopardized in some way. Furthermore, approximately three percent of the survey respondents did not provide their county of residence or zip code. Data from these surveys were included with the data on non-Denver residents, making up about nine percent of the non-Denver total. This potentially could have skewed the information somewhat.

The STI/HIV Surveillance Program at CDPHE provided aggregate data used for this study. These data are also inherently limited in that they are dependent on reporting by laboratories and providers within Colorado and by health departments across the country. The surveillance database is not intended to monitor the current locations of Colorado cases, but information is updated as it is received. PLWH frequently move between states and do not necessarily access care when they do or do not access it right away. Therefore, in these cases, no reporting occurs until care is accessed and reports from the new state of residence are sent. Some PLWH who were originally diagnosed with HIV in Colorado may pass away in other states, the records of which may not get back to the Surveillance Program in a timely manner. All of this makes it difficult to have an accurate count of the number of PLWH living in Colorado at any given time. Another limitation stems from the fact that the only consistent indicator that a person is in care is through the reporting of viral load and CD4 tests. Although other indicators of care are available to CDPHE, they are not available for all PLWH living in the state. Additionally, viral load tests for people currently living in the state who were originally diagnosed with HIV in other states are not included in the Colorado statistics. Given these circumstances, current data are not available for a large number of the people considered as Colorado HIV cases, making it especially difficult to assess the total number of people currently living with diagnosed HIV in Colorado and the number of people not receiving HIV care. An additional limitation of the surveillance data is that address data were not systematically entered into the HIV/AIDS Reporting System (HARS) prior to 2007.

3. Estimated number of people living with HIV but unaware of their HIV serostatus

The estimated number of living HIV positive individuals in Colorado who were unaware of their status as of June 30, 2011, using the Estimated Back Calculation (EBC) methodology, is calculated as follows:

$$\frac{\text{.21 national proportion of undiagnosed HIV}}{(1 - .21) = .79} \times \text{11,198 people diagnosed with HIV and living in Colorado as of 6/30/2011} = \text{2,977 estimated Coloradans unaware of their HIV positive serostatus}$$

In terms of geography, applying the same EBC methodology, it is estimated that the total breaks down as follows:

Denver Area 2,312
Outside the Denver Area 665

It is important to note that these are estimates based on multiple assumptions. Place of residence is typically determined at time of diagnosis and may not be accurate due to subsequent client relocation. As described in more detail later in this Plan, some areas of the state (including some larger rural communities) have very high percentages of clients concurrently diagnosed with HIV and AIDS, meaning that they have delayed HIV testing for months or years. Such delays may compromise the accuracy of the estimate overall and the estimated breakdown between Denver area and outside the Denver area.

B. Current continuum of care

1. Inventory of services funded by Ryan White Part B

Part B in Colorado funds agencies and clinics statewide, but primarily targets areas outside of the Denver Transitional Grant Area (TGA). Part B manages the AIDS Drug Assistance Program (ADAP) and programs to help clients with the costs of health insurance. Part B also manages "Bridging the Gap, Colorado," a state pharmaceutical assistance program that pays for premiums, co-payments, and other costs for people who have a Medicare Part D prescription drug plan and sustains client access to prescribed medications while they are in the Part D "coverage gap."

Through this funding, the following services were made available with Part B funding in the year that ended December 31, 2011:

- AID drug assistance, including assistance with insurance and Medicare costs
- Outpatient ambulatory care
- Oral health care
- Early intervention services
- Mental health services
- Medical nutrition services
- Medical case management
- Outpatient substance abuse treatment, including screening, brief intervention, brief therapy, referral to treatment, and provision of treatment
- Nonmedical case management
- Emergency Financial Assistance
- Food bank
- Health education/risk reduction
- Housing
- Linguistic services
- Medical transportation

- Outreach
- Psychosocial support services
- Referral
- Adherence counseling
- Specialized outreach and education for minority populations

Grids showing providers and associated services funded by Part B follow as **Table 1.9** and **Table 1.10.**

Table 1.9 - Core Services Funded by Part B

Core Service Providers	Medication Assistance (ADAP)	Outpatient Medical Care	Oral Health	Early Intervention	Health Insurance (ADAP)	Mental Health	Medical Nutrition	Medical Case Management	Sub Abuse Treatment Outpatient
Beacon Center for Infectious Disease		X	X			X	X	X	X
Boulder County AIDS Project			X		X[8]	X		X	
Colorado Department of Public Health and Environment	X				X				
Children's Hospital Immunodeficiency Program		X	X	X		X	X		X
Colorado Health Network (statewide)					X				
Northern Colorado CHN office			X		X[1]	X	X	X	X
Southern Colorado CHN office			X	X	X[1]	X		X	X
Western Colorado CHN office			X	X	X[1]	X		X	X
Denver Health		X		X		X			X
Peak Vista Community Health Center		X							
St. Mary's Hospital (Grand Junction)		X	X						X
University of Colorado, School of Medicine									X

[8] Enrollment Site Only

Table 1.10 - Support Services Funded by Part B

Providers	NonMedical Case Management	Emergency Financial Assistance	Food Bank	HE/RR	Housing	Linguistic Services	Transportation	Psychosocial Support	Outreach	Referral
Beacon Center for Infectious Disease							X			
Boulder County AIDS Project	X	X	X		X	X	X	X	X	
Colorado Department of Public Health and Environment	X									
Children's Hospital Immunodeficiency Program					X		X			
Northern Colorado AIDS Project	X	X	X		X		X	X	X	
Southern Colorado AIDS Project	X	X	X		X		X	X	X	
Western Colorado AIDS Project	X	X	X	X	X	X	X			X

2. Inventory of services funded through other sources

Services Supported with Part A Funding

Part A in Colorado funds services for residents of the Denver TGA, which includes Adams, Arapahoe, Broomfield, Denver, Douglas, and Jefferson counties. Funded services are:

- AID drug assistance (local)
- Outpatient ambulatory care
- Oral health care
- Early intervention services
- Health insurance premium and cost sharing assistance
- Home health care
- Home and community based services
- Mental health services
- Medical case management
- Outpatient substance abuse treatment
- Emergency Financial Assistance
- Food bank
- Housing
- Medical transportation

Grids showing providers and associated services funded by Part A follow as **Table 1.11** and **Table 1.12.**

Table 1.11 - Core Services Funded by Part A

Core Service Providers	Medication Assistance (ADAP)	Outpatient Medical Care	Oral Health	Early Intervention	Home & Community Based Health	Mental Health	Home Health	Medical Case Management	Sub Abuse Treatment Outpatient
Asian Pacific Development Center									X
Children's Hospital	X	X		X		X			
Clinica Tepeyac		X							
Colorado Health Network						X		X	X
Denver Health	X	X		X		X			X
Empowerment Program								X	X
Howard Dental			X						
It Takes A Village								X	X
Jewish Family Services					X				
Mental Health Center of Denver						X			
Metro Community Provider Network		X							
Mile High Council									X
Rocky Mountain CARES (MCC of the Rockies)				X				X	
Servicios de la Raza						X		X	
Sisters of Color United for Education						X		X	X
University of Colorado Hospital Infectious Disease Group Practice	X	X		X		X			
Visiting Nurse Association							X		

Table 1.12 - Support Services Funded by Part A

Support Service Providers	Food Bank	Emergency Financial Assistance	Housing	Medical Transportation
Colorado Health Network	X	X	X	X
Denver Health				X
Empowerment Program				X
Project Angel Heart	X			
Servicios de la Raza				X

Services Supported with Part C Funding

There are four medical providers supported with Part C funding in Colorado.

St. Mary's Hospital and Medical Center provides comprehensive primary and specialty HIV care to people living with HIV/AIDS in western Colorado, as the HIV primary and specialty care services provider in the 22 county region of western Colorado. Care is delivered in accordance with the most current national treatment guidelines. HIV experts from the Infectious Disease Group at the University of Colorado in Denver travel to Grand Junction twice a month and Durango quarterly to provide HIV specialty care in conjunction with a local primary care physician. The Western Colorado Part C Clinic saw 228 unduplicated patients in 2010, a five percent increase from 2010. Services provided include oral health care, mental health care, counseling and testing, case management, general and preventive health education, and medication adherence on-site with nutrition consultations. While St. Mary's is a comprehensive primary care clinic, they refer patients outside the clinic for medications, some substance abuse treatment, and specialty services such as surgery, dermatology, and gastroenterology to name a few.

Pueblo Community Health Center's (PCHC) mission to provide primary health care to those in need is enhanced with their Ryan White Part C grant. This grant allows PCHC to provide outpatient early intervention and primary health care services for HIV positive persons residing in 17 counties of southeastern Colorado: Pueblo, Alamosa, Baca, Bent, Chaffee, Conejos, Costilla, Crowley, Custer, Fremont, Huerfano, Kiowa, Las Animas, Otero, Prowers, Rio Grande and Saguache. HIV/AIDS Care at Pueblo Community Health Center includes: primary health care and services; medical case management; perinatal care; preventive, developmental and diagnostic services for infants and children; diagnostic laboratory and radiology; referrals to specialty care; HIV testing and counseling; pharmaceutical services; oral healthcare; outpatient substance abuse therapy and counseling; outpatient mental health care; nutritional counseling; drug treatment adherence counseling; HIV prevention education with HIV positives; coordination and follow-up after hospital care; 24-hour coverage; and coordination of services with community organizations serving those living with HIV/AIDS.

The HIV Primary Care Clinic (HIV PCC) at Denver Health provides comprehensive HIV primary care and other services as outlined in the Health and Human Services guidelines as their first priority. Addressing maintenance of active patients in care (so more focus on following up with patients who do not call or show up for scheduled appointments) is an additional priority. The HIV PCC has begun to incorporate hepatitis C services into their clinic. Comprehensive mental health assessment and treatment is available in the clinic. Referral to outpatient services for substance abuse is routinely done in the clinic. Primary and secondary prevention is an additional focus of their clinical work. HIV PCC provides some testing and counseling services, which have an additional goal of prevention; they also provide free condoms to their patients and other patients at Eastside Health Clinic. Referrals to other service providers are an essential part of the services in the clinic.

In Denver, the Part C clinic funds a part-time Linkage to Care coordinator in the Part A program, which helps facilitate rapid and seamless enrollment of new clients. The rest of the coordinator's

time is spent providing outreach to patients lost to follow up and providing appointment reminder calls. An automated list of patients without a visit in the prior six months is generated monthly, and patients who do not present for routine laboratory follow up in the appointed time are also identified for outreach, even if it falls within a six-month window.

The process at the HIV PCC is the same as for the Part A clinic at Denver Health: clients undergo financial screening yearly by enrollment specialists. While most clients receive a rating through the Colorado Indigent Care Program (CICP), the specialists identify whether patients are eligible for coverage through Medicare, Medicaid, private insurance, or veterans' benefits. If changes in status occur between screenings, the Licensed Clinical Social Worker assists with application and transition to these other programs.

At the HIV PCC, nurse intakes incorporate mental health and substance abuse screening and include standardized tools such as the PHQ-9 (Patient Health Questionnaire) depression score and SBIRT (screening, brief intervention, and referral to treatment). All new clients are then referred for psychiatric assessment by the clinic therapist, utilizing an opt-out approach. Appropriate patients are further referred to the staff psychiatrist. Primary care physicians screen their clients for substance abuse at all subsequent non-urgent clinic visits.

At the HIV PCC, almost all clients meet with their medical case manager, receiving a comprehensive psychosocial assessment and individualized care plan. The physician and medical case manager may refer the client to additional services and community-based organizations as necessary and desired. Clients of the highest complexity and/or need are discussed during a monthly interdisciplinary care conference attended by the primary physician, psychiatrist, therapist, nurse, medical assistant, dietician, and medical case manager.

The Part C program at Denver Health utilizes a robust electronic health record and data warehouse to track and improve multiple quality measures. Automated queries produce monthly reports on nearly all of the HRSA HIV AIDS Bureau quality measures. Bimonthly quality improvement workgroup meetings are used to strategize and improve these measures using the PDSA (Plan, Do, Study, Act) model.

There are two HIV primary care specialists supported with Part C funding at the Beacon Center for Infectious Disease (BCID) in Boulder. The Beacon Center of Boulder Community Hospital provides comprehensive primary and specialty HIV care to people living with HIV/AIDS in Boulder, Broomfield, Clear Creek, Gilpin, Larimer, and Weld County Colorado. BCID is the only Part C funded HIV primary and specialty care provider in the region. The BCID providers maintain their HIV specialist credentialing through the American Academy of HIV Medicine, and provide care utilizing the most current HHS HIV treatment guidelines. The Beacon Center for Infectious Disease Part C Clinic saw 335 unduplicated patients in 2011, a six percent increase from 2010. Services include all Ryan White early intervention and core services, including outpatient/ambulatory care, and specialty care via referral (e.g., dermatology, cardiology, nephrology, endocrinology, urology, neurology, ophthalmology, oral health, HIV specific nutritional counseling, general surgery, etc.) The clinic also provides treatment for co-infected patients with hepatitis C.

Additionally, the clinic provides Part B funded onsite medical case management with a Licensed Clinical Social Worker (LCSW), who provides all adherence, outreach, and SBIRT services. BCID facilitates Case Consultations with local ASO for mutual clients/patients to address care related issues with its HIV+ population. The clinics services include enrolling eligible patients into financial assistance programs (e.g., Colorado Indigent Care Program, internal Sliding Scale services, AIDS Drug Assistance Programs, Medicaid, Medicare, etc.) Pharmacy services provided via 340B contract through the Apothecary pharmacy with extensive experience in working with PLWH/A. The clinic also provides transportation assistance in the form of gas cards for patients and funds allocated directly to the rural Northern Colorado AIDS Project.

The Beacon Center provides onsite mental health counseling at the Beacon Center and Mapleton Counseling Center by LCSW and master's level trained staff. The onsite HIV experienced psychiatrist that works one-day per week at the clinic. Behavioral health and substance abuse services are supported by Part B funds at Boulder Community Hospitals Outpatient Mapleton Counseling Center. The clinic has 24-hour on-call physicians available for afterhours and weekends.

Services Supported with Part D Funding

Ryan White Part D funds care for women, infant, children, and youth (WICY) through the Children's Hospital Immunodeficiency Program (CHIP). CHIP is the only program in the Rocky Mountain Region specifically dedicated to providing HIV care and outreach for infants, children, youth, young adults and women. CHIP served 332 children, youth and women in 2011, including following 32 indeterminate infants. CHIP serves all patients regardless of their ability to pay or their immigration status.

Part D currently supports:

- HIV comprehensive care to youth and young adults (age 13-24) based both at Children's Hospital and Denver Health.
- Comprehensive care for infants and children and families living with HIV infection.
- Comprehensive care for HIV pregnant women and their infants, including direct HIV and antepartum care, coordination of labor and delivery services, and education and support to regional and statewide providers in order to screen and treat pregnant women living with HIV, with the goal of preventing transmission of HIV to the infant.
- Core support and other support services provided in conjunction with medical services
- Region-wide programs for prevention and screening to at-risk youth.

The target area for services supported by the Part D grant is the Colorado Front Range which includes the Denver metropolitan area as well as counties extending north and south of Denver, encompassing the majority of WICY living in Colorado. However, since CHIP is the only program with comprehensive perinatal and pediatric HIV care programs in the Rocky Mountain region, CHIP also provides direct and/or consultative medical care and support services for children and pregnant women living throughout the Colorado and neighboring states. Part D supports CHIP to provide technical assistance and capacity building requests for HIV/AIDS services organization serving children, youth and women. Care for WICY is provided at several sites including Children's Hospital Colorado (CHC), University of Colorado Hospital (UCH), Denver Health Medical Center (DHMC),

Southern Colorado AIDS Project (SCAP), and youth-serving outreach sites throughout the Denver metro area.

Comprehensive, multi-disciplinary, family-centered care—

Infants, Children, Youth care
Multidisciplinary care for infants, children, youth, and pregnant women is provided at the Children's Hospital Colorado (CHC), a primary and tertiary care facility located at the center of the Denver metropolitan area and easily accessible from the other cities in the state. Fully-staffed multi-disciplinary clinics are held weekly with daily clinics for urgent needs or to accommodate clients' schedules. Medical care and medical case management is provided in tandem at the same visit. The clinic is staffed by a cadre of physicians (pediatricians, internists, adolescent medicine, and infectious disease), mid-level providers, nurses, and on-site specialists (mental health counselor, dietician, pharmacist; developmental psychologists) who provide state-of-the-art HIV medical care. Additional specialists are available by consultation within the facility (e.g. neurologist, pulmonologist, gastroenterologist, dentist, adolescent gynecologist). Several clinics at CHC are devoted solely to HIV-infected youth. These clinics provide primary health care, HIV specialty care, and sexual health care. The youth client is seen in tandem by either a physician or mid-level provider and a youth-trained social worker, which allows the team to seamlessly address the medical and psychosocial aspects of care. They assess housing, finances, mental health, and sexual risk at each visit. Substance abuse is assessed semi-annually by the SBIRT screening tool and followed up by the more comprehensive ASSIST questionnaire, with subsequent counseling or referral to our mental health specialist as appropriate.

In addition to the youth care provided at CHC, a Part D subcontract funds a satellite clinic located at Denver Health Medical Center (DHMC). This clinic serves youth who reside near DHMC which is in the center of Denver. This specialized youth clinic occurring twice monthly is staffed collaboratively by CHIP and DHMC providers and a CHIP medical social worker. A Part D supported DHMC practitioner is the youth's day-to-day primary care provider.

Pregnancy
CHIP provides direct care to pregnant women include antiretroviral treatment specialized for pregnancy as well as antepartum assessments and case management. Visits are combined whenever possible with the mother's visit with an obstetrical provider or, in some cases the CHIP provider will travel to the High Risk obstetrical clinic to facilitate care. An interim summary is prepared and sent to the delivery site after each visit in order to assure delivery and newborn care are coordinated. The majority of women deliver at UCH or DHMC where CHIP supports obstetric providers with HIV expertise. For women residing outside the Denver metro area the CHIP provider and pharmacist communicate with the delivery site to insure that the perinatal and postnatal period is handled optimally in terms of drugs administered, diagnostic procedures, and care of the newborn.

CHIP maintains a program for providing and updating education concerning management of these women to obstetrical hospitals and providers in their service area. This emphasizes early diagnosis, referral, and treatment. Ten training sessions were provided in the metro Denver and Colorado Front Range in the past year to nurses, physicians, and pharmacists on current perinatal guidelines and the local Hotline. Outreach and networking occurs with the local refugee health program to explain services available for women and families. A Perinatal HIV Consult Line insures that callers connect, 24 hours a day, to CHIP regarding any perinatal HIV questions or needs. These efforts facilitate timely entry into care during pregnancy (and proper management).

Reproductive Counseling
The CHIP program for pre-pregnancy planning leads to safe conception in discordant couples and reduces the risk of super-infection in dually-infected couples. Since its inception HOPE has counseled 72 clients. All babies were born uninfected.

Women's care
CHIP is seeking Part D funds to begin a new collaboration with the Infectious Disease Group Practice (IDGP) sited at the University of Colorado Hospital (UCH). This expansion of the Part D project will increase care for women who are over age 25yr (non-youth) and non-pregnant. Part D will support an infectious disease physician with expertise in women's care and a CHIP women's medical social worker will be embedded in the IDGP clinic.

Other Core and Support Services
Part D funds medical case management, mental health, substance use screening, medical transportation, developmental assessments, translation services, permanency planning, child care, and concrete needs emergency assistance for CHIP clients. These services are available to clients seen at any of their clinics. In addition, to facilitate care for WICY living in southern Colorado, Part D subcontracts with an AIDS service organization (Southern Colorado AIDS Project) located in Colorado Springs. This agency provides medical case management and medical transportation for WICY living in their catchment area.

HIV testing, Outreach, linkage to care, engagement in care
Part D provides some support for CHIP's robust youth outreach program that provides counseling and testing for youth age 13 to 24 at metro-wide community-based agencies. Over 1,200 youth received HIV testing through its permanent and diverse outreach sites (19 sites) and at five community events that CHIP managed or supported in 2011. In 2011 the CHIP Youth Project (CYP) tested 1,195 youth through at 19 diverse outreach sites that CHIP manages and supports. Six positive tests were confirmed and each person was linked to care. Furthermore, CHIP provided HIV testing to over 175 youth at the CHIP-supported Youth Alley during Pridefest 2011 and at four other events (35 tests); one youth was identified as HIV positive and linked to care. The emergency rooms at University of Colorado Hospital (UCH) and Denver Health Medical Center (DHMC) as well as the Denver Public Health Department refer newly identified youth to CHIP's youth program. Linkage is facilitated by CHIP's youth outreach worker who will meet newly diagnosed patients and bring him/her to clinic to begin their care. Through these efforts, CHIP enrolled 37 additional youth into care in 2011.

<u>Services Supported with Part F Funding</u>

The Part F Community-Based Dental Partnership Program (CBDPP) is housed at the University of Colorado School of Dental Medicine (UCSDM) on the Anschutz Medical Campus. Nationally, the CBDPP was first funded in FY 2002 to increase access to oral health care services for HIV positive persons while providing education and clinical training for dental care providers, especially those located in community-based settings. To achieve its goals, the CBDPP works through multi-partner collaborations between dental and dental hygiene education programs and community-based dentists and dental clinics. Community-based program partners and consumers help design programs and assess their impact.

The statewide, multi-site CBDPP, established in August 2002, is unique among the 13 CBDPP nationwide. The collaborative partners include the UCSDM, the Colorado AIDS Education and Training Center (CAETC) and UCSDM community-based clinical education sites located near Ryan White medical care clinics, thus enhancing comprehensive care and coordinated services for the majority of Colorado's HIV patients. The four community-based dental partners in targeted underserved areas of Colorado are the Marillac Clinic on the Western Slope, the Pueblo Community Health Center in Southern Colorado, Longmont Salud Clinic in Central Colorado, and the Howard Dental Center in Metropolitan Denver. The grant also has allowed the UCSDM general practitioner residents based in the Sands House Clinic to become the referral center for tertiary dental care from all of the CBDP.

One of the greatest national healthcare workforce shortage areas is oral care, which holds true in Colorado as well. HIV consumer surveys consistently report that oral care is a high priority service need, but one that is more difficult to access than many other services. This is generally understood as a provider shortage issue. The CBDPP is intended to expand the HIV oral care workforce, and thus access to care for patients, through enhancing HIV oral care skills of their staff as well as participating in student and resident training.

With growing attention to the number of individuals who are living with HIV infection, but are unaware of their status, CBDPP dental programs are strengthening linkages to local HIV testing programs and, in some cases, assessing the feasibility of implementing HIV testing in dental settings. This will likely be diagnostic testing recommended when oral signs and symptoms are consistent with HIV infection.

Services Provided by the AIDS Education and Training Center (AETC)

The Colorado AETC (CAETC), a local performance site of the Mountain Plains AETC, is a major provider of HIV education, consultation and technical assistance for clinicians and health care organizations in Colorado. The focus of the program is to train clinicians to deliver quality HIV care to PLWH/A and to serve as a resource on HIV/AIDS.

Specific CAETC educational objectives include:

- Conducting educational encounters with targeted and hard-to-reach providers
- Conducting advanced clinical training for targeted providers
- Facilitating clinical consultations regarding various HIV care issues
- Developing, revising, and distributing original enduring materials on HIV-related topics
- Serving as an HIV care capacity building resource, including for community health centers and patient centered medical homes

CAETC provider training places emphasis on:

- Targeted providers: physicians, physician assistants, nurse practitioners, nurses, dentists, hygienists, and pharmacists
- Providers serving minority populations, rural areas, and Ryan White funded sites.
- Varied topics including risk assessment, HIV testing, HIV care setting prevention education, post-exposure prophylaxis, comprehensive care and treatment guidelines,

antiretroviral therapy, and co-morbid conditions, including hepatitis, mental health and substance use
- Interactive and creative teaching methods
- On site training based on local needs
- Addressing cultural competency and incorporating culturally guided interventions
- Workforce development to address the limited number of providers who are educated to provide HIV care
- Health professions student training
- Other activities consistent with the National HIV/AIDS Strategy and shifting health care environment

The Colorado AETC collaborates with other programs around a variety of initiatives, including:
- The Minority AIDS Initiative (MAI) testing capacity project on the Western Slope
- The Federal Trainings Centers Collaborative (FTCC), including the Denver Prevention and Training Center, the JSI Reproductive Health Training Center, the National Native American AIDS Prevention Center, the Hepatitis and Addiction Technology Transfer Centers, and the Rural Center for AIDS Programming
- The Colorado Department of Public Health and Environment in implementation of CDC's HIV testing expansion designation for Colorado

A Colorado AETC goal is to initiate, expand, and enhance quality improvement programs to improve training capabilities. Specific QI improvement areas include: training capacity and effectiveness; consistency of training curricula/materials with DHHS treatment guidelines; impact of training on practice behavior; and assuring cultural competency of training materials, curricula and faculty.

<u>Other Publicly-Funded Services for PLWH/A in Colorado</u>

Primary and specialty health care through Medicaid
In Colorado, PLWH/A may be eligible for a special waiver program, called the "Home and Community Based Services Waiver for Persons Living with AIDS" or "HCBS-PLWA" waiver. To qualify for this waiver, PLWH/A must meet the eligibility criteria for one of the Medicaid program categories; the waiver can then expand the benefit available to them. The most common category under which PLWH/A qualify for Medicaid is known as "Aid to the Needy Disabled."

If the client is under the age of 64 and does not have dependent children, the client must be determined blind or disabled by the Social Security Administration (SSA) standards. Clients deemed eligible for Supplemental Security Income (SSI) from SSA automatically receive Medicaid.

To qualify for a waiver, the applicant's income must be less than $1,986 (300 percent, or three times, the SSI allowance) per month and countable resources less than $2,000 for a single person or $3,000 for a couple. The applicant must also be at risk of placement in a nursing facility, hospital, or intermediate care facility for the mentally retarded (ICF/MR). To utilize waiver

benefits, clients must be willing to receive services in their homes or communities. A client who receives services through a waiver is also eligible for all basic Medicaid covered services except nursing facility and long-term hospital care. When a client chooses to receive services under a waiver, the services must be provided by certified Medicaid providers or by a Medicaid contracting managed care organization. The cost of waiver services cannot be more than the cost of placement in a nursing facility, hospital, or ICF/MR.

The primary purpose of the HCBS-PLWA waiver is to provide a home or community based alternative to hospital or specialized nursing facility care. The medical criterion is that the client requires nursing facility or hospital level of care. For those who qualify under HCBS-PLWA, the available services (above and beyond those generally available under Medicaid) are: adult day services, personal emergency response system, homemaker services, non-medical transportation, personal care, and private duty nursing.

Some PLWH/A qualify for an alternative waiver, called the "HCBS Waiver for Persons who are Elderly, Blind, and Disabled." Many PLWH/A chose this waiver over the HCBS-PLWA waiver because the list of services is more inclusive, including: adult day services, alternative care facilities, community transition services, consumer directed attendant support, personal emergency response system, home modifications, homemaker services, in-home support services, non-medical transportation, personal care, and respite care.

According to the Kaiser Family Foundation, in 2008 (the most recent year for which data is available) 71 PLWH/A participated in the HCBS-PLWA waiver program. The total per-participant cost was $7,408. An additional 696 PLH/A received Medicaid through other plans. For example, they may qualify for Medicaid because they are receiving Supplemental Security Insurance (SSI) or they may qualify for family Medicaid because they have dependent children. Overall, Colorado Medicaid spending on enrollees in 2007 was $14.3 million or $18,718 per capita. [9]

Currently, Colorado Medicaid ranks very low compared to other states in terms of eligibility, scope of services, quality of care, and reimbursement. For example, the organization Public Citizen gave Colorado an overall ranking of 375.5 out of a possible 1,000 on these measures of Medicaid, giving Colorado a rank of 43 out of the 50 states.[10]

An expansion of Colorado Medicaid is underway, with major implications for PLWH/A. A combination of funding from a hospital provider fee and a federal match from Medicaid has allowed for the development of two new plans: buy in for working disabled people and coverage for adults without dependents. The buy in program allows disabled, working people to have access to the standard Colorado Medicaid benefit package by paying a monthly premium which ranges from $0 to $200, depending on annual income. Subsidy from Ryan White for premiums and copayments is allowed on an unlimited basis by Colorado Medicaid. However, to qualify as disabled, a person must meet medical criteria established by the Social Security Administration, meaning that many people with HIV whose condition is stable will qualify. The second program, for adults without dependents, is initially being offered only to people at or below 10 percent of

[9] http://www.statehealthfactsonline.org/
[10] http://www.citizen.org/medicaid

federal poverty, and it will be capped at 10,000 enrollments. Although this coverage could benefit many PLWH/A (including the majority of people on Colorado ADAP), the demand for the limited slots is likely to leave many PLWH/A applicants on waiting lists for many months or years.

For those who can qualify and enroll, Colorado Medicaid does cover a substantial portion of the medical needs of a person living with HIV, including: physician visits, podiatry services, nurse practitioner services, licensed psychologist services, nurse midwife services, outpatient substance abuse treatment, limited inpatient psychiatric services, prescription drugs, telemedicine services, prenatal care services, limited case management, immunizations, hospice services, lab and x-ray, private duty nursing services, inpatient hospital services, outpatient hospital services, emergency services, residential child health care services, family planning services, nursing facilities services, optometrist services, home health services, eyeglasses for adults after eye surgery, durable medical equipment and disposable supplies, physical, occupational and speech therapy, and medical transportation.

Housing Opportunities for People with AIDS (HOPWA)
Federal Housing Opportunities for People with AIDS (HOPWA) funding provides HIV/AIDS specific housing assistance and related supportive services in communities across Colorado and the nation. Working in partnership with community based organizations these funds are generally appropriated and disbursed at a Federal level. Additionally, these funds then channel down through state and local governments such as the State of Colorado and The City of Denver.

On a broad scale, HOPWA funds may be used to meet a variety of low-income housing and development objectives. These objectives include, but are not limited to, the acquisition, rehabilitation, or development of new construction intended supplement the limited supply of existing affordable housing units specifically intended to reduce the incidence of homelessness, and provide much needed stability to those living in communities with HIV/AIDS.

In the Denver Eligible Metropolitan Statistical Area (EMSA), the City and County of Denver's Office of Economic Development administers HOPWA funds for all the local area AIDS Service Organizations (ASOs), including several medical case management agencies. Services provided in the EMSA include: PHP (permanent housing placement/deposit) assistance, STRMU (short term mortgage and utilities) assistance, TBRA (tenant based rental assistance), subsidized HOPWA units, residential housing with supportive services for the chronically homeless, day shelter and medication adherence services for homeless people living with HIV/AIDS, housing development, and a variety of general supportive services. Respectively, STRMU and PHP funds are most often used to prevent evictions and assist with deposits. Additionally, the Denver EMSA has established a successful Single Payer system to track HOPWA and Ryan White Part A emergency housing expenditures, and reduce the duplication of services.

For Colorado service areas outside of the Denver EMSA, the HOPWA grantee is the Division of Housing in the Colorado Department of Local Affairs. The Colorado HOPWA formulary funds assistance program is known as CHAMP. The Colorado fiscal agent for HOPWA is CAP (Colorado AIDS Project), which collaborates with local case management agencies to distribute funds where they are needed on both a local and a statewide level.

Statewide, HOWPA funds generally provide similar opportunities and assistance. Clients apply for these funds through Ryan White funded service providers. To be eligible for direct HOPWA assistance those living with HIV/AIDS must be actively case managed, and have an annual household income of no more than 80 percent of the area median income. Clients receiving HOPWA TBRA pay no more than 30 percent of their adjusted household income, 10 percent of their gross income, or a housing allowance as designated by a public welfare agency. Any client receiving rental assistance must be in a housing unit that charges at or below the Fair Market Rent (FMR) schedule as set forth by the Department of Housing and Urban Development.

For the most current funding period 1,258 Colorado clients had received some level of support through HOPWA.

Colorado's HIV/AIDS Health Care Providers

The vast majority of people living with HIV or AIDS in Colorado receive their care from less than 100 physicians and other health care professionals. The major practices serving PLWH/A are shown in **Table 1.13.**

Table 1.13 – Major Medical Practices Serving PLWH/A in Colorado

Practice Name	Provider Names	On-site clinics	Jurisdiction Limits
APEX Family Medicine	MD: Scott, Mohr, Young, PA: Carter,	Denver	Statewide
Beacon Center for Infectious Disease	MD: King, Pujet, Roa, Turner NP: Maltzman	Main clinic in Boulder, with periodic clinics in Fort Collins and Greeley	Residents of Boulder, Broomfield, Clear Creek, Gilpin, Larimer, and Weld counties
Boulder Medical Center	MD: Brandt	Boulder	Statewide
Children's Hospital Immunodeficiency Program	MD: Reirden, Abzug, Levin, McFarland, Weinberg NP: Barr, Witte, Kennedy, Dunn, Paul, Kinzie	Main facility is in Aurora; periodic clinics at Denver Health	Statewide
Clinica Tepeyac	MD: Burman PA: Hansen	Denver	Statewide
Colorado Infectious Disease Associates	MD: Kaufman, Ku, Eison, Pawlowski, Tilquist	Denver	Statewide
Colorado Springs Health Partners	MD: Silveria NP: Parres	Colorado Springs	El Paso county and surrounding area
HIV Primary Care Clinic at Denver Community Health	MD: Blum (J), Adams, Ginosar	Denver	Statewide for those eligible for Medicaid and Children's Health Plan Plus; others must be Denver residents
Denver Health Infectious Disease Clinic	MD: Burman, Belknap, Thrun, Gardner, Reves, Fukutaki PA: Logan NP/RN: Caraway, Ingrando, Sampson, Schimmel	Denver	Statewide for those eligible for Medicaid and Children's Health Plan Plus; others must be Denver residents
Denver Infectious Disease Center Consultants	MD: Greenberg, Hammer NP: Young. Kressy	Denver	Statewide
Family Centered Medicine	NP: Prutch	Denver	Statewide
Front Range PC	NP: Mack		
Four Corners Infectious Disease	MD: Salka	Durango	Southwest Colorado

Practice Name	Provider Names	On-site clinics	Jurisdiction Limits
Infectious Disease Consultants	MD: Blum (R), Terra, Gill, Drummond NP: Perrett	Denver	Denver
Infectious Disease Specialists	MD: Brookmeyer, Hackenberg, Hofflin, Kleiner, Strandberg, Weber, Gates	Colorado Springs	Statewide
Kaiser Permanente Infectious Disease Practice	MD: Bruce, Edell, Kuhns, Mogyoros RN: Bridge	Main infectious disease practice is in Downtown Denver, but PLWH/A may receive primary care in other Kaiser offices	Must reside in specific portions of Adams, Arapahoe, Boulder, Clear Creek, Denver, Douglas, Elbert, El Paso, Gilpin, Jefferson, Larimer, Park or Weld counties
MCPN (Metropolitan Community Provider Network)	PA: delArmi MD: Amador, Arami, Barker, Barter, Creech, Ferrer, Gehred, Martin, Mathad, McLean, Mockler, Munoz, Parmar, Perna, Reddy, Saproo, Schlegel, Tellez	Arapahoe, Jefferson, Adams, and Park Counties and the cities of Lakewood and Aurora	Must reside in Arapahoe, Jefferson, Adams, or Park counties
Mountain Family Health Center	MD: Mizner	Glenwood Springs	Garfield county
National Jewish Health HIV Clinical and Research Program	MD: Huitt, Kasperbauer, Lichtenstein	Denver	Statewide
North Metro ID	MD: Cullinan	Westminster	
Peak Vista Community Health Center	MD: Walker-Conner PA: Davenport NP: Janty	Colorado Springs	El Paso and Teller county residents only
Private practice	MD: Alford	Denver	Metro Denver
Private practice	MD: Gill, Schoenwald	Longmont	Statewide
Pueblo Community Health Center	MD: Schwartz RN: Grove	Pueblo	Alamosa, Baca, Bent, Chaffee, Conejos, Costilla, Crowley, Custer, Fremont, Huerfano, Kiowa, Las Animas, Otero, Prowers, Pueblo, Rio Grande, or Saguache counties
Rocky Mountain Infectious Disease Consultants	Ong, Peskind, Cobb	Fort Collins	Statewide
Rocky Mountain Infectious Disease Specialists	MD: Clover, Gardner, Harte, Kearns, Neid, Wendel	Aurora	Statewide
St. Mary's Family Medicine	MD: Davis, Dickenson, Neese NP: LeBaron, Walker	Grand Junction, with periodic clinics in Durango	Residents of Archuleta, Delta, Dolores, Eagle, Garfield, Grand, Gunnison, Hinsdale, Jackson, Lake, La Plata, Mesa, Moffat, Montezuma, Montrose, Ouray, Pitkin, Rio Blanco, Routt, San Juan, San Miguel, or Summit counties
South Denver Infectious Disease Specialists	MD: Golub, , Messa, Williams, Nyatsatsang	Englewood	Statewide
University of Colorado Infectious Disease Group Practice	MD: Barron, Beckham, Campbell, Carten, Castillo, Connick, Erlandson, Johnson, Levi, Madinger, Meditz, Moroni, Nichol, Rogers,	Aurora (with periodic clinics in Grand Junction, Pueblo, and Durango)	Statewide

Practice Name	Provider Names	On-site clinics	Jurisdiction Limits
	Saveli, Wilson NP: Nielsen, Starr		
Veterans Administration (VA), Denver	MD: Bessesen, Shapiro, Redington NP: Stamper	Denver	Statewide, for those with VA benefits
Veterans Administration –Mesa Co.	MD: Meyer, Davis, Janoff	Grand Junction	Statewide, for those with VA benefits
Western Infectious Disease Consultants	MD: Des Jardin, Fujita, Lucks, Wieland, Mason, Oyer	Wheat Ridge	Statewide

Oral Health Care

Access to oral health care is problematic in Colorado overall, and is particularly problematic for low income, uninsured PLWH/A with ongoing need for specialized dentistry.

For rural PLWH/A accessing oral health care often involves considerable travel. According to a report from the Colorado Rural Health Center[11], nearly half of Colorado counties are currently designated as a geographic or low-income Dental Health Professional Shortage Areas. This affects even those with adequate dental insurance or other means for payment.

PLWH/A that rely on Medicaid face additional barriers paying for oral health care. To be eligible for coverage, the oral health condition must be demonstrated to be related to a "chronic medical condition in which there is documentation that the medical condition is exacerbated by a condition of the oral cavity." In some instances, HIV/AIDS could potentially be considered such a chronic medical condition, if the oral health provider is willing and able to assemble the necessary documentation. Colorado Medicaid will also cover adult oral health care if it is "emergency" and is related to "a condition of the oral cavity that would result in acute hospital medical care and or subsequent hospitalization if no immediate treatment is rendered." The following services/treatments are not a benefit for adult clients under any circumstances: preventive services to include prophylaxis, fluoride treatment and oral hygiene instruction; treatment for dental caries, gingivitis and tooth fractures; restorative and cosmetic procedures; inlay and onlay restorations; crowns; treatment of the oral cavity in preparation for partial or full mouth dentures; and assessment for, delivery of dentures or subsequent adjustments to dentures and bridges.[12]

In spite of the fact that the health care system has been dealing with HIV/AIDS for over 25, it remains an illness that quickly separates one from access to routine health care. An adult living with HIV/AIDS faces tremendous challenges in achieving access to oral health care.

First, many oral health care practitioners remain fearful of patients with HIV/AIDS. While no oral health care professional has ever been infected with the HIV virus through an occupational exposure, there is an increased level of concern regarding hepatitis C (HCV) infections. While the HIV virus is short-lived, the HCV virus is not. Health care professionals throughout the nation are at serious risk of exposure through workplace accidents (needle-sticks and splashes). The level of HCV co-infection is high. Second, the cost of oral health care is frequently

[11] http://www.coruralhealth.org

[12] HCPF Rules, 10 CCR 2505-10, available at http://www.colorado.gov/cs/Satellite?c=Page&cid=1214427706870&pagename=HCPF%2FHCPFLayout

prohibitive to people living with a chronic illness. The monthly cost of anti-viral medications for HIV/AIDS patients oftentimes exceeds $2,000, making additional expenditures difficult. Third, oral health care is frequently a misunderstood component of the health care system in the United States. Fourth, PLWH/A needs continue to evolve with the changing nature of HIV/AIDS. As they lead longer, healthier lives, many are able to return to part-time or full-time work. Many are beginning to reassert themselves over their lives. Full health includes oral health care, and many patients return to optimum health through the provision of the full range of oral health care available today. But many patients remain quite ill and the nature of their oral health problems is sometimes overwhelming. Patients may exhibit complex problems such as diabetes, thrush, mycobacterium avium intracellular complex (MAC), cytomegalovirus (CMV), hepatitis, tuberculosis, multiple neuropathies, HIV wasting, acute necrotizing ulcerative periodontitis (ANUP), dementia and many more. Some of these are related directly to HIV/AIDS and others are a result of medications. The challenge of providing oral health care to patients with multiple health care complications is daunting. Fifth, the absence of early and adequate oral health care can lead to serious, life threatening infections, particularly in the immune suppressed patient. The oral manifestations of HIV/AIDS are significant and can mark advancement of the disease. Specific lesions may indicate the progression of the disease from an HIV diagnosis to that of full-blown AIDS. In many cases, complete oral examinations have averted an AIDS diagnosis.

3. Interaction of Ryan White funded services with other services

In six instances (Denver Health, University of Colorado Hospital, Beacon Clinic, St. Mary's Family Medicine, Children's Hospital, and Pueblo Community Health Center) Part B has augmented funding from Parts A, C or D to assure better coordination and a more complete continuum of care.

As a condition for receiving services, all clients are evaluated on intake for other potential third party payers, including Medicaid and Medicare. When alternative payers are located, clients are referred accordingly. When clients require assistance with premiums and out of pocket costs in order to continue coverage from third party payers, the Colorado AIDS Drug Assistance Program provides such assistance if clients meet ADAP income, residency, and other eligibility criteria.

To assure coordination with Medicaid, staff from the Ryan White Part B program serve on multiple Medicaid committees, particularly those that offer the most potential benefit to PLWH/A. Specifically, staff has participated in the design and implementation of a new Medicaid plan for low income adults without dependents as well as a new buy-in plan for working people with disabilities.

Ryan White Part B staff interacts extensively with the Medicare-sponsored State Health Insurance Assistance Program in Colorado. This includes attending SHIP-sponsored training as well as conducting periodic case review of clients with complicated Medicare issues.

4. Effects of state and local budget cuts

Although many other types of programs in Colorado have experienced deep budget cuts, health care in general, and HIV care in particular, have remained steady. As compared to many other states, Colorado does fund a relatively higher percentage of ADAP using general fund and Tobacco master settlement funding, as compared to dependence on federal funding.

C. Description of need

Need for specific services

To gain information about the most important issues faced by PLWH/A and their most important needs, several different approaches and three different samples of respondents were utilized in the 2011 needs assessment process. One of these approaches consisted of three open-ended questions included on the survey asking respondents what they thought were the most important issues faced by PLWH/A, what their most important needs were, and what they would recommend to improve the lives of PLWH/A. **Table 1.14** shows a summary of the responses to these questions from those living outside of the Denver area. Another survey question asked respondents what they thought were the three top issues they wanted help with after first learning they had HIV. **Table 1.15** shows the most common responses to this question from both in Denver and out of Denver respondents. Similar questions about important issues and needs of PLWH/A and needs when first diagnosed were posed to people participating in the interviews, including those who had an AIDS diagnosis soon after their initial HIV diagnosis and those who had spent substantial time out of care since their diagnosis.

Table 1.14 – Most important issues and needs of PLWH/A and recommendations for improving the lives of PLWH/A as reported by survey respondents

Most Important Issues Facing PLWH/A N=230			**Most Important Needs of PLWH/A N=215**			**Recommendations for Improving Lives of PLWH/A N=198**		
Issue	**#**	**%**	**Need**	**#**	**%**	**Recommendation**	**#**	**%**
Access to care and medications	122	53%	Medical care and medications	136	63%	Taking responsibility for one's own health	48	24%
Stigma/ discrimination	75	33%	Basic needs (housing, food, income, transport.)	73	34%	Ensure easier access to affordable care and treatment	46	23%
Meeting basic needs (housing, food, income, transportation)	59	26%	Social support/ social interactions	55	26%	Improve people's ability to meet basic needs	35	18%
Mental health issues	41	18%	Acceptance/ address stigma	21	10%	Ensure social support and opportunities for social interactions	22	11%
Staying healthy mentally and physically	24	10%	Good mental and physical health	17	8%	Educate the public and address stigma	18	9%
Lack of social support/isolation	16	7%	Mental health care	12	6%	Ensure access to mental health care	16	8%
Issues around taking medications (including side effects)	11	5%	Quality care	11	5%	Provide updated and understandable information to clients	12	6%

Table 1.15 –Top issues with which survey respondents needed help upon diagnosis with HIV

Top Issues	Denver Area N=568		Non-Denver/Unknown N=253		Total N=821	
Need	**#**	**%**	**#**	**%**	**#**	**%**
Finding a doctor or provider	296	52%	164	65%	460	56%
Getting medications	308	54%	147	58%	455	55%
Emotional support	319	56%	133	53%	452	55%
Information about HIV and how it would affect me	256	45%	99	39%	355	43%
Getting health insurance	141	25%	57	23%	198	24%
Getting laboratory tests	138	24%	56	22%	194	24%
Mental health concerns	135	24%	33	13%	168	20%
Housing/rent assistance	108	19%	29	11%	137	17%
Emergency financial assistance	100	18%	27	11%	127	15%
Getting dental care	100	18%	25	10%	125	15%
Services for other medical conditions	50	9%	21	8%	71	9%
Getting food	51	9%	13	5%	64	8%
Transportation	43	8%	12	5%	55	7%
Other	30	5%	16	6%	46	6%
Substance abuse concerns	31	5%	6	2%	37	5%

Self-empowerment

It is notable that the most commonly mentioned recommendation by PLWH/A on how to improve their lives was "taking responsibility for one's own health." As HIV medications continue to improve quality of life, lowering and keeping viral loads at undetectable levels, PLWH/A have greater possibilities for returning to work, moving away from dependence on short term emergency services, and achieving self-sufficiency. At the same time, there is a recognition that making these types of life changes can be very challenging and can be easily disrupted by changes in physical health, recurrence of substance use or mental health issues, economic downturns, and other psychosocial stressors. This calls for a funded system that is oriented toward self-empowerment, but flexible enough to immediately resume assistance when requested and necessary.

Access to Medical Care and Treatment

Access to care and medications was cited as a most important issue by 53 percent of the non-Denver survey respondents and as a most important need by 63 percent. Expressed concerns were predominantly about meeting these medical needs given the high costs of care and medications and the costs of insurance coverage and co-pays that many found difficult to afford. Those who were receiving assistance with medical coverage were concerned about being able to maintain access during hard economic times when cutbacks are common. Others thought that the income caps to receive assistance were too low, preventing them from qualifying and making it difficult to pay for care and meet other expenses. Many who were receiving assistance or who had applied for assistance discussed how cumbersome and complicated the processes often were, involving large amounts of paperwork. Respondents living in some parts of Colorado reported that it could be very difficult to access appropriate care because of the lack of infectious disease doctors in their area, laboratories for testing, or pharmacies that carried the appropriate

medications. Other comments included difficulties in making appointments due to job conflicts or having insurance that did not cover all that they needed.

Finding a doctor or provider and getting medications were also among the top responses to the survey question about what people needed most when first diagnosed. Fifty-six percent of the entire sample and 65 percent of the out of Denver sample selected finding a doctor or provider as a top initial need. Additionally, 55 percent of the entire sample and 58 percent of the out of Denver sample selected getting medications as a top initial need. Recommendations from survey respondents around this issue included ensuring people's access to quality and appropriate medical care and medications. For some, quality care included both medical expertise and respectful treatment of patients. Ensuring access most often involved recommendations for lowering the costs of medications, making it easier for working people to qualify for assistance in paying the costs of care and treatment, and simplifying the process of enrolling in programs. Other related recommendations included: having a universal health care system ensuring care and treatment for all PLWH/A and having more medications and supplements covered by insurance or ADAP.

Interview participants were provided a much more open-ended forum to discuss their most important issues and needs. Interestingly, access to health care and medications were the least often discussed when participants were asked what PLWH/A needed most. Only one of the participants who had a history of being out of care mentioned the need for doctors and medications as among the most important when first diagnosed. Most of the interview participants who had concurrent HIV/AIDS diagnoses found out about their diagnoses when they were already very ill, so receiving immediate medical care was more of an issue for them.

Meeting basic needs

The second most common set of needs and the third most commonly described issues faced by those with HIV that were reported by the survey respondents concerned the difficulties that many have in meeting their basic needs for housing, income, food, and transportation. The respondents spoke of how struggling to meet such needs made it even more difficult for people to access care services and adhere to treatment regimens, underscoring the need for people to have some stability in their lives to better maintain their health. Additionally, many of the recommendations provided by non-Denver area survey respondents for improving the lives of PLWH/A also underscored the difficulties associated with having HIV and being poor, recommending more widespread assistance in meeting basic needs. Some respondents stressed the need for ensuring better access to housing assistance or more affordable housing. Balancing issues associated with low incomes and access to benefits put some in very precarious positions as several respondents mentioned how small increases in income or benefits could lead to the loss of other benefits or disqualification from assistance programs, which meant an overall loss in income and benefits. Some stressed how they wanted to work and increase their income but feared losing critical benefits, and they emphasized the need for more flexibility within the system making it possible for people to earn more income and still qualify for assistance. One survey respondent mentioned that so often all family resources go toward basic survival needs, leaving nothing for occasional recreation such as seeing a movie. Housing and other basic needs such as financial assistance, food, and transportation were selected as most important issues upon HIV diagnosis more

frequently by those living in the Denver area than among those living outside of Denver or for whom county of residence was unknown.

Interview participants also considered having stability in their lives and being able to meet basic needs as one of the most important issues for PLWH/A, especially the need for stable housing. One spoke of how easy it is to give up on everything if a person does not have a place to live. Another talked about how important it is to have a place to go, think, and sort out how things are going and what needs to be done. A third said that if people are worried about where they are going to stay, they will not prioritize taking care of their health and how not having a place to clean up can be demoralizing. One spoke of needing a stable place to store medications properly and not risk having them stolen. Another person summarized the importance of housing stressing that once a person gets housing, other things tend to fall into place. Lack of transportation was also discussed as a barrier to accessing services by both Denver and out of Denver participants, emphasizing the need for bus passes and gas vouchers to help people keep appointments and access pharmacies. Some mentioned how insufficient income can make people have to choose between buying food and other necessities and accessing expensive medications or making co-pays for care. Others mentioned how having HIV may prevent people from working. Several of the interview participants spoke of having serious financial concerns when they were first diagnosed with HIV and needing help accessing both health insurance and income.

Social and emotional support

Just over one quarter of the survey respondents emphasized the need for PLWH/A to have better social and emotional support and more social interactions with others, including others living with HIV. Emotional support was selected by 55 percent of the total survey sample and 53 percent of the out of Denver sample as one of the top issues they needed help with upon diagnosis of HIV, ranking almost equally to finding a doctor or provider and getting medications. Respondents in the 20 - 24 age group selected emotional support as a top issue more often than people over 45 (69 percent versus 50 percent). More Latinos selected emotional support than those from any other ethnic group with 60 percent indicating it was a top issue, compared to 56 percent of African Americans and 48 percent of whites. Respondents stressed how critical social support is to many people who are dealing with HIV and the feelings of fear, loneliness, and rejection that often accompany the disease. Therefore many survey respondents recommended building more social dimensions or provision of social support into the assistance provided to PLWH/A, including organizing support groups and social events.

Among interview participants who had spent time out of care, the need for support was the most commonly cited. This was especially the case when asked about what they and others needed most when they were first diagnosed with HIV. For some this meant the need to be able to gain support from and to socialize with others with HIV, either as part of support groups or a mentoring program. For others it was about having someone to talk to who they could trust and who could offer them encouragement, reassurance, and hope. Some specified the need for family, friends, and community to offer them support and understanding. Even though many were dealing with serious illness, interview participants who had concurrent HIV/AIDS diagnoses also most often spoke of needing support when they first found out they had HIV. For them this included support from family, partners, doctors, counselors, or just someone who was not judgmental that they could talk to.

Stigma and discrimination

A third of the survey respondents addressing the question about important issues faced by PLWH/A mentioned the difficulties associated with HIV-related stigma and discrimination, which they thought was quite prevalent. People talked of being subjected to judgment, bad treatment, and rejection by others, often leading to depression or feelings of anger, isolation, and shame. Many lamented the ignorance of the general public about HIV, expressing unfounded fears about contact with those who are HIV positive. Some reported that they had told very few people about their status due to the stigma. Respondents emphasized the needs for acceptance and to have stigma addressed. Recommendations concerning addressing HIV-related stigma emphasized the need for more education directed to the public about the disease. The powerful impact of stigma on PLWH/A was also commonly discussed in the interviews with PLWH/A. In these interviews, participants spoke of others being afraid of them or of having casual contact with them, thinking they might contract the disease. Others spoke of PLWH/A being denied jobs based on similar misinformation about how HIV is spread. Some described feeling like an outcast and the impact of that on their mental health or of not being able to disclose their status in certain settings for fear of violence. Interview participants also stressed the need for better public information to confront stigma, dispel misinformation, and generate better acceptance and understanding of PLWH/A.

Mental health assistance

The fourth set of issues reported by survey respondents as most important for PLWH/A centered on mental health. Both dealing with their diagnosis as well as the stigma were said to cause feelings of depression, anxiety, stress, loneliness, isolation, and low self-esteem. Some also discussed problems with the high costs of mental health treatment and the limited number of available options for care. Maintaining good emotional health was considered as a most important need by many of the respondents, and was reported by 20 percent of the survey sample as one of the top three issues they needed help with when first diagnosed. Ensuring access to counseling and other types of mental health care was among the recommendations for improving the lives of PLWH/A for eight percent of the survey sample. Given that over half of the survey respondents reported having mental health problems, the percentage of those expressing a need for access to mental health care was relatively low. When asked about what issues arose for them when they were first diagnosed with HIV, interview participants who had spent time out of care most often spoke of dealing with depression and related emotions such as fear, disbelief, shame, guilt, and anger, some of which was exacerbated by HIV-related stigma. Several reported needing counseling at the time. **Table 1.16** summarizes survey responses related to mental health.

Table 1.16 – Mental health responses from survey respondents

	Denver Metro		Non-Denver		All	
	N	%*	N	%*	N	%*
Respondent's self described mental health						
Poor	77	13	28	10	105	12
Fair	206	35	77	29	283	33
Good	238	40	125	47	363	42
Excellent	67	11	34	13	101	12
No Response	7	1	3	1	10	1

Respondent experienced symptoms of depression in past 12 months						
Yes	388	65	145	54	533	62
No	193	32	112	42	305	35
No Response	14	2	10	4	24	3
Respondent felt they needed help with mental health in last 12 months						
Yes	339	57	138	52	477	55
No	252	42	125	47	377	44
No Response	4	1	4	1	8	1
Respondent has had a diagnosis of mental disorder**						
Any Mental Health dx	385	65	157	59	542	63
Depression	318	53	131	49	449	52
Anxiety	209	35	86	32	295	34
Bipolar	102	17	31	12	133	15
Other	56	9	20	7	76	9
OCD	35	6	7	3	42	5
Schizophrenia	20	3	3	1	23	3

* All percentages have been rounded to the nearest whole percent and may not equal 100%.
**Respondents selected all that apply, therefore does not sum to 100 percent.

Substance use assistance

Survey respondents reported a history of substance use issues at rates beyond what would be expected of the general population. The rates of use reported in these questions, and the percentages that report they "should cut down" and "need help cutting down" in the prior 12 appears to contradict the relatively low need for substance abuse services expressed by survey respondents. This is probably indicative of the stigma attached to substance use and the lack of readiness to confront and deal with it. It reinforces the need for more comprehensive screening, brief intervention, and motivational referral to services as needed. Substance use responses are summarized in **Table 1.17**.

Table 1.17 – Substance use responses from survey respondents

	Denver Metro		**Non-Denver**		**All**	
	N	**%***	**N**	**%***	**N**	**%***
Respondent ever drinks or uses drugs						
Yes	**364**	**61**	**132**	**49**	**496**	**58**
No	221	37	131	49	352	41
No Response	10	2	4	1	14	2
Of those that drink or use drugs, respondents felt they should cut down on alcohol or drug consumption in past 12 months (N=496)						
Yes	142	39	50	38	192	39
No	201	55	81	61	282	57
No Response	21	6	1	1	22	4
Of those that drink or use drugs, respondents felt they needed help cutting down in past 12 months (N=496)						
Yes	85	23	24	18	109	22
No	199	55	85	64	284	57
No Response	80	22	23	17	103	21

* All percentages have been rounded to the nearest whole percent and may not equal 100%.

Need for HIV information

Another important set of needs reported by survey respondents related to information. People stressed that it was important for PLWH/A to have updated information about HIV in general and about their own personal health, what they needed to do to take care of themselves, and where they could go to access services. The need for information about HIV and how it would affect them ranked fourth among the most important issues survey respondents reported needing help with when first finding out they had HIV, with 43 percent of the entire sample and 39 percent of the out of Denver sample selecting it. Women selected information about HIV much more often than men (52 percent versus 39 percent). Fifty-eight percent of African Americans chose information about HIV compared to 41 percent of Latinos and 39 percent of whites. When asked what they needed most when they first found out they had HIV, the interview participants also discussed the importance of information, ranking it second after the need for support. The types of information people said they needed included information about HIV and how it would affect them, how HIV was no longer a death sentence, and what they needed to do to access services, including some form of case management.

Other issues, needs, and recommendations

Other issues that were less commonly mentioned as being most important by survey respondents included: staying healthy, both mentally and physically, and the difficulties adhering to medication regimens and dealing with medication side effects. Among the recommendations for improving the lives of PLWH/A, respondents most frequently wrote about what PLWH/A should do for themselves to maintain their health including: making sure they make it to all of their doctor's appointments and adhering to their treatment regimens, getting exercise and eating right, keeping a positive attitude, and living a healthy lifestyle. Some mentioned that having affordable access to recreation centers and gyms would help facilitate this process as well as access to nutritious foods. Among interview participants, other issues and needs they discussed included struggling with maintaining one's confidentiality or deciding who to tell and how they would broach the subject. One person spoke of needing help with disclosure issues. Several participants spoke of developing or worsening substance abuse problems that arose when they found out they had HIV.

Needs of people who are unaware of their HIV-positive serostatus

The needs of PWH/A who are unaware of their serostatus can be better understood by analyzing data about people who delay HIV testing. Over a third of the 2,154 people (35 percent) diagnosed with HIV in Colorado from 2006 through 2010 received a diagnosis of AIDS within a year of their initial HIV diagnosis, most of whom received their AIDS diagnosis at almost the same time as they found out they had HIV. These cases are referred to as "concurrent HIV/AIDS" and **Table 1.18** shows the percent of each demographic and risk group that received such diagnoses. Of the 1,846 males diagnosed from 2006-2010, 36 percent had concurrent diagnoses as compared to 32 percent of the 308 females diagnosed during that time. Among MSM, 34 percent had concurrent HIV/AIDS diagnoses and among heterosexual men, 49 percent had concurrent diagnoses. Those under the age of 35 were much less likely to have had concurrent diagnoses compared to those 35 and over (23 percent versus 42 percent). Almost half (47 percent) of those over 45 had concurrent diagnoses. Among race/ethnic groups, whites and African Americans had similar percentages of concurrent diagnoses (32 and 34 percent respectively), and 37 percent of U.S. born Latinos had concurrent diagnoses. However the

percentage of Latinos born outside the U.S. with concurrent HIV/AIDS diagnoses was much higher at 56 percent.

Table 1.18 - Percent of all Coloradans diagnosed (Dx) between 2006 and 2010 with concurrent HIV/AIDS diagnoses by demographic, risk, and geographic groups

	Concurrent HIV/AIDS Dx		Non-concurrent AIDS Dx		HIV		Total
	N	%	N	%	N	%	N
All	762	35	122	6	1270	59	2,154
Sex at Birth							
Male	662	36	108	6	1076	58	1,846
Female	100	33	14	5	194	63	308
Age Category							
<25	25	17	6	4	118	79	18
25 - 34	162	25	32	5	453	70	647
35 - 44	228	37	45	7	339	55	612
45 - 64	317	46	37	5	332	48	686
65 and over	30	50	2	3	28	47	60
Race/ Ethnicity by Birth Origin							
White-US Born	359	32	70	6	702	62	1,131
Latino-US Born	143	37	25	7	214	56	382
Black-US Born	79	32	12	5	153	63	244
Other US Born	17	33	3	6	31	61	51
Latino - Non-US born	100	57	3	2	74	42	177
Other - Non-US born	64	38	9	5	96	57	169
Documented Transmission Category							
MSM	453	34	75	6	823	61	1,351
IDU	40	40	10	10	49	50	99
MSM & IDU	38	31	13	11	70	58	121
Male Heterosexual	56	49	7	6	51	46	114
Female Heterosexual	63	31	10	5	129	64	202
Other	2	14	-	-	12	86	14
Unknown	110	44	7	3	136	54	253
County Type of Residence							
Denver Metro	568	35	104	6	970	59	1,642
Non-Denver	194	38	18	4	300	59	512

* All percentages have been rounded to the nearest whole percent and may not equal 100%.

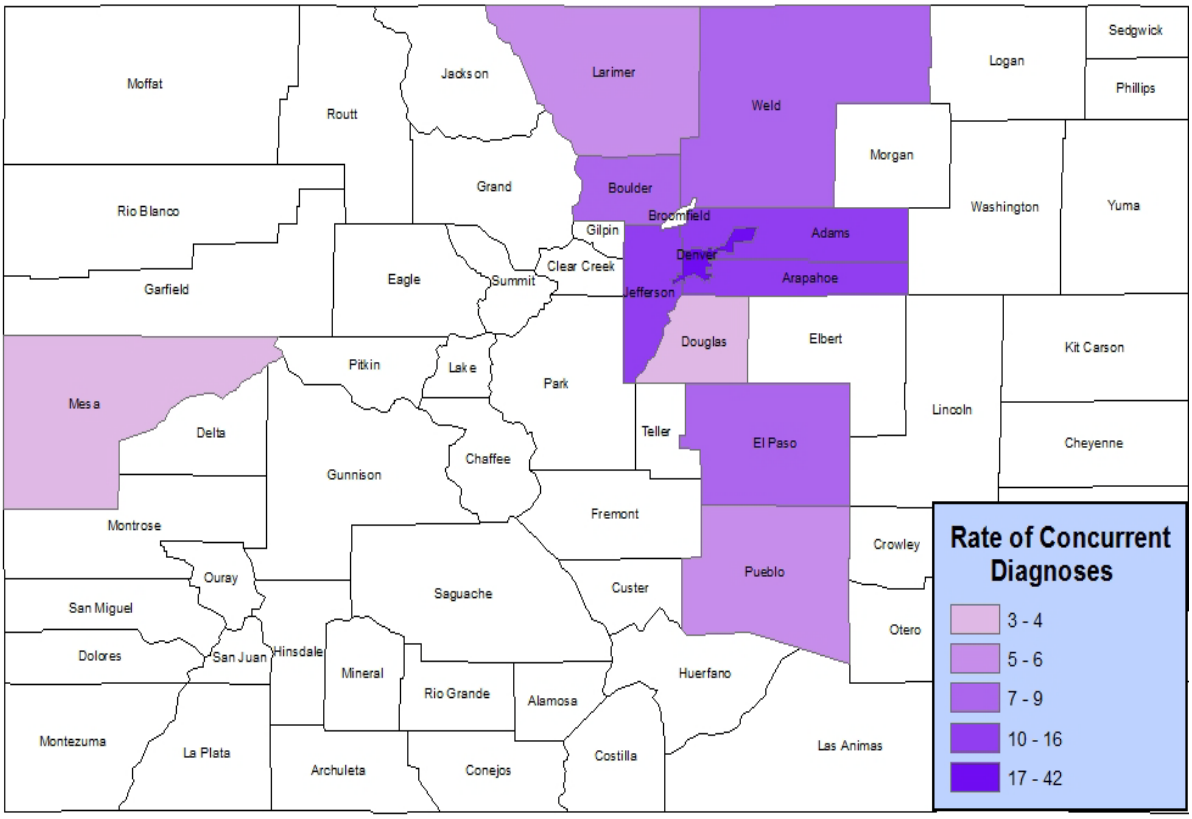
In many ways, the rates of concurrent diagnoses mirror the rates of HIV cases in general, with the highest concentrations in the Denver area. Overall, there was only a 3.3 percent difference between the proportions of concurrent diagnoses in the Denver area and other parts of the state. However, a closer look shows that some parts of the state have higher proportions of concurrent diagnoses relative to the total number of incident cases than others. An analysis of the proportion of concurrent cases relative to total incident cases using geocoded data from 2007 to mid 2011 was conducted at both the county and zip code level. This time period was chosen because address data were not systematically entered into HARS prior to 2007.The analysis showed that among counties with at least 25 incident cases during that time period, the proportion of

concurrent cases ranged as high as 56 percent of the total HIV incident cases. Among zip codes with over 10 incident cases during that time period, the proportion ranged as high as 69 percent.

Figure 1.2 displays the geographic distribution of the rates of concurrent cases diagnosed between 2007 and mid 2011 by county. **Figure 1.3** shows the proportions of concurrent diagnoses relative to the total number of cases of HIV by county during the same period, excluding counties with less than 25 incident cases. However, it is important to note that among those excluded counties that had at least one incident case during that time period, an average of 41 percent of cases involved concurrent diagnoses. The proportions ranged from zero to 100 percent. This analysis shows Weld County with the highest proportion of concurrent diagnoses at 56 percent, although the incident rate in Weld County is relatively low, accounting for two percent of the total cases in Colorado. Weld is followed by Jefferson with 41 percent concurrent cases and eight percent of the epidemic, Adams with 40 percent concurrent cases and 10 percent of the epidemic, and Boulder with 38 percent of concurrent cases and four percent of the epidemic. Denver County had, by far, the highest number of concurrent diagnoses (N=235), but the proportion of concurrent cases relative to total cases in Denver County was 33 percent, slightly below the state average of 35 percent. Forty percent of all incident cases during that time period were in Denver County.

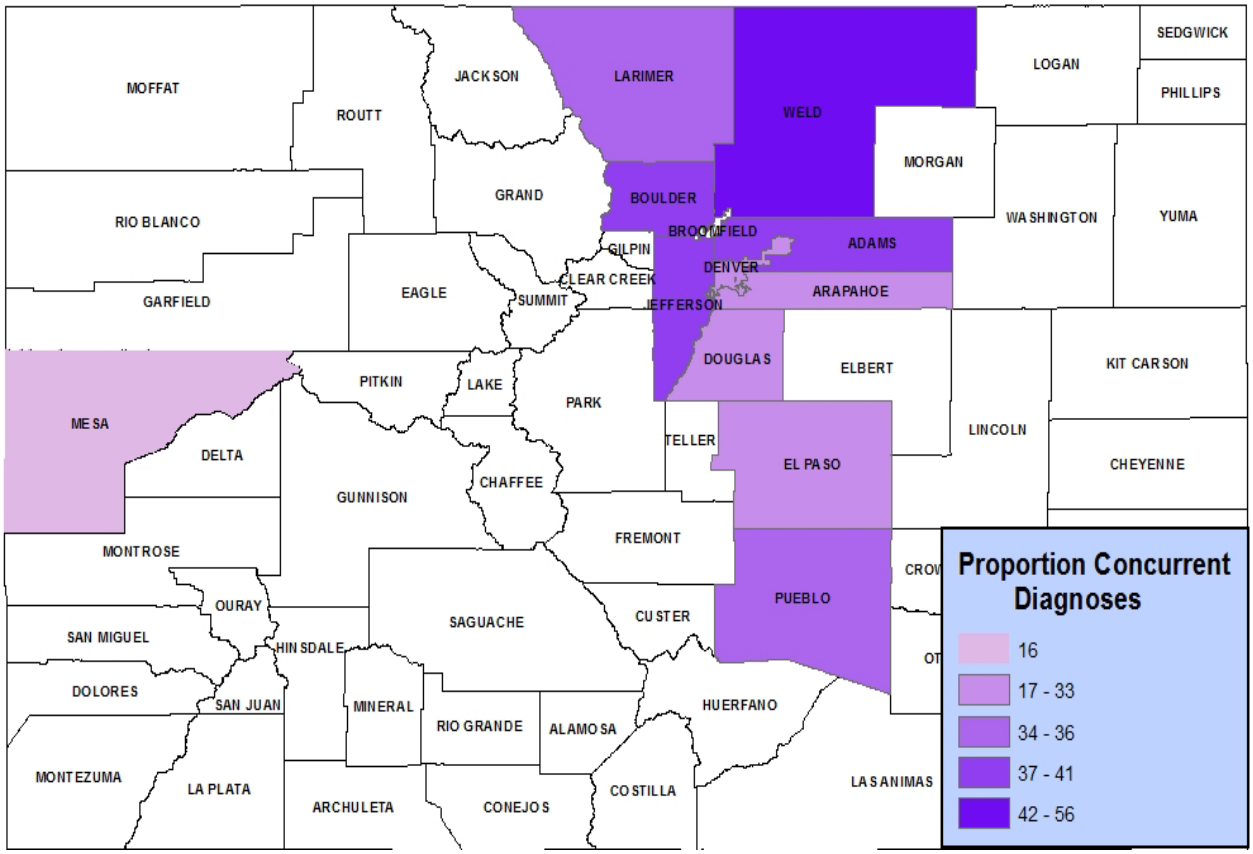
A similar analysis of the distribution of proportions of concurrent cases by zip code focused only on zip codes with 10 or greater incident cases over the four and a half year period. All of the zip codes with the most reported incident cases during this period (>30 incident cases; range = 32 to 88 cases) were located in the Denver area and had proportions of concurrent diagnoses close to or below the state average of 33 percent. Zip codes with the highest proportions of concurrent diagnoses (>40 percent of incident cases) but with incident case numbers less than 30 during the four and a half year period were located in Denver, Jefferson, Adams, El Paso, and Weld counties. A total of 62 zip codes around the state with low HIV incidence had rates of concurrent HIV and AIDS diagnoses of at least 50 percent.

Figure 1.2 - Rates per 100,000 of Colorado incident cases of HIV with concurrent AIDS diagnoses: 2007-2011 by county



Counties in white had fewer than 25 HIV cases diagnosed from 2007 to mid 2011 and were excluded from the analysis.

Figure 1.3 - Proportions of Colorado incident cases of HIV with concurrent AIDS diagnoses relative to all incident HIV cases: 2007-2011 by county



Counties in white had fewer than 25 HIV cases diagnosed from 2007 to mid 2011 and were excluded from the analysis. Collectively, the average proportion of concurrent cases relative to all incident cases for those counties was 40 percent and ranged from 0 to 100 percent.

Drawing from the 2011 needs assessment, survey respondents who had reported the same calendar year of diagnosis for their HIV and AIDS were considered as having concurrent diagnoses. Note that this could potentially underestimate the number of respondents who had an AIDS diagnosis within 12 months of HIV if they did not occur in the same calendar year. Overall, the sample of survey respondents had a much lower proportion of those with concurrent HIV/AIDS diagnoses than the Colorado epidemic as a whole. Only 22 percent of all survey respondents self-reported having had a concurrent diagnosis. This lower percentage was prevalent throughout all of the demographic categories, not exceeding 25 percent in any category. Among the survey respondents who were diagnosed with HIV between 2006 and 2010, 27 percent had a concurrent diagnosis. Those categories with the highest proportions of people with concurrent diagnoses in that five-year period, immigrants and those over 44 years of age did not exceed 35 percent. There were 15 (two percent) respondents whose diagnoses were only one year apart, some of which could have been classified as concurrent if the month of diagnosis had been collected.

When asked why they decided to test for HIV at the time they were first diagnosed, survey respondents who had concurrent AIDS diagnoses most commonly responded that they did so due

to illness (see **Table 1.19**). This is especially high given that illness was not one of the choices provided on the survey, and respondents wrote it in under "other." Responses such as "my doctor suggested it" and "it was offered during a medical visit" were also frequent among this group and could also indicate that many of them were sick at the time. Those who did not have an AIDS diagnosis soon after their initial HIV diagnosis most commonly reported testing because they wanted to know their status, with only 15 percent reporting that it was because their doctor suggested it and 11 percent due to illness. Those without concurrent diagnoses much more commonly responded that they tested because a sexual partner had tested positive than those with concurrent diagnoses (16 percent versus seven percent). This was also the case for those reporting testing because an organization offered it (11 percent versus five percent), suggesting the need for testing to be made available in more venues that people tend to access. There were few differences in the reported reasons for testing between those living in the Denver area and those outside of Denver. Five percent of women who did not have concurrent AIDS diagnoses reported testing due to pregnancy, and only two percent tested because it was offered to them by an organization. This compares to 14 percent of MSM and 13 percent of IDU who were offered testing at an organization, suggesting the need to offer testing to women in more places that they are likely to frequent.

Table 1.19 - Top five reasons for testing of survey respondents diagnosed with AIDS in the same year as HIV compared to those who did not have AIDS

Concurrent HIV/AIDS diagnoses (N=190)		Non-concurrent (different calendar-year) or no AIDS diagnosis (N=655)	
I became sick*	30%	Wanted to know status	29%
My doctor suggested it	28%	Had unprotected sex	18%
Wanted to know status	16%	Sexual partner tested positive	16%
Offered during medical visit	13%	My doctor suggested it	15%
Sexual partner tested positive	7%	I became sick*	11%
Had unprotected sex	7%	Organization offered it	11%

*Written in as "Other" response
Respondents were asked to mark all that apply. Responses do not sum to 100 percent.

Twelve people who had received an AIDS diagnosis soon after being diagnosed with HIV for the first time participated in one-on-one interviews. All but four had been initially diagnosed with HIV within the 12 months prior to participating in the interview. Four of the interview participants reported never having been previously tested for HIV. Three reported that the last time they tested negative for HIV was between two and six years prior to their HIV diagnosis. Five of the participants reported to have tested negative between three and 12 months prior to their HIV diagnosis. All of this information is based on self-report and would need to be investigated further to document the actual dates of previous negative tests before drawing any conclusions related to the time of progression to AIDS among these participants.

When asked about the reason for testing when they were diagnosed with HIV, nine of the 12 participants were tested because they were extremely ill, with all but one of the nine testing while in the hospital. Those who offered information about their initial CD4 counts said that they were already down to double and single digits when their first laboratory tests were done. Among the other three individuals, one found out he was positive after donating plasma at a time when he needed some quick money. Another tested as part of an annual routine physical, and the

third tested after finding out that a partner had tested positive. One of those who tested due to illness said that he had been misdiagnosed for around six months, having received treatment for another condition during that time.

The interview participants were then asked why they had delayed getting tested for HIV. Three of them did not think they were at risk because, as heterosexuals, they thought they did not fit the profile of people who tend to be at risk for HIV. Three gay men who were interviewed spoke of times when they were not routinely tested for HIV because they were in (what they thought) were monogamous relationships. One gay man asked his doctor why he had never tested him and was told that it was because he had children. Two other gay men thought that their doctors had been testing them over the years, but they had not. Three participants said that they had not delayed testing, reporting to have tested negative within the previous several months. When asked what might have encouraged them to test sooner, two people responded that having their doctors talk to them about HIV and offer the tests would have helped. Three others said they would have tested more often if testing were more available and affordable in the areas where they live or if testing were available in more venues with people encouraging them to test. One respondent said that he would have tested sooner if he had more information about HIV and risk behaviors.

In an effort to gain ideas from PLWH/A about how to increase HIV testing and lower the proportion of people who find out about their diagnoses when they already have advanced disease, these interview respondents were asked for their opinions about increasing testing. Most of their responses fell into two general categories: 1) Increase the availability of testing, and 2) Increase awareness and education about HIV. In terms of increasing availability, several respondents talked about how important it is for doctors to be more proactive about HIV, talking to their patients about risks and making testing available during appointments. Others mentioned the importance of outreach, with friends, PLWH/A, and outreach workers encouraging people to test and then making testing available in many venues including health centers, bars, colleges, on the streets, and in a mobile van. Two emphasized the importance of having testing available for free, and three others noted that wherever testing was offered, it needed to be discrete given the stigma surrounding HIV. Those who thought it was important to increase knowledge and raise awareness about HIV in order to increase testing offered several different ideas as to the information that would be important to share. Some thought it important for people to understand their risks better. This included: heterosexuals knowing that they could be at risk, gay men in relationships better understanding their partners' risks as well as their own, and gay men who were insertive partners ("tops") knowing they still had risk. Others thought it was important for people to understand that HIV is not a death sentence, and the sooner people find out they are positive, the earlier they can receive effective treatment and also prevent spreading the disease to their sex partners. Two people recommended that HIV testing be mandatory. Two others pointed out that some people just couldn't be encouraged to get tested no matter what one says to them.

At present, laws and regulations in Colorado do not criminalize HIV transmission. If such laws or regulations were to be instituted in the state, there is significant reason to be concerned that people might delay or avoid HIV testing. As a result, HIV advocates in Colorado have made it a high priority to prevent and oppose any action to criminalize HIV transmission.

2. Capacity development needs resulting from disparities in historically underserved communities and rural communities

HIV care services are not equally distributed throughout Colorado. The greatest concentration of care providers is in the Denver metropolitan area, including both HIV specialty care and HIV primary care providers. Colorado has been successful in building HIV care capacity in several communities outside Denver and has developed a model that could be replicated. The first step in the model is locating a community clinic (FQHC or similar clinic) that has a general interest and willingness to expand their HIV care capacity. The second step is to identify specific staff at the clinic who have an interest in HIV care and offering them training and technical assistance to expand their knowledge and expertise. The staff should include both clinical staff (physician, physician assistant, nurse, etc.) as well as administrative and coordinating staff. The third step is to identify one or more HIV specialists willing to travel to the local site at least monthly to participate in pre-arranged "HIV clinics," both seeing some patients with HIV directly and offering specialty consultation on others. The fourth step is a set of collaborative meetings during which the logistics and resources needed for the HIV clinics is set, including the development of a budget request to Part B, Part C, or other outside funding source. The fifth step is the implementation of the plan, which could include development of a contract, memoranda of understanding, and other means to acquire needed resources.

In the past, the AETC has been a key partner in promoting this capacity development model, delivering advice during the planning stages, training as needed, and ongoing technical assistance during implementation.

D. Priorities for allocation of Ryan White Part B funds

Based on the needs identified in the needs assessment process, Colorado has set the following priorities for allocation of Part B funds.

Service Category	Service Type
AIDS Drug Assistance	Core
Nonmedical Case Management	Support
Substance Abuse Treatment - Outpatient	Core
Outpatient Ambulatory Medical Care	Core
Oral Health	Core
Medical Case Management	Core
Adherence	Support
Mental Health	Core
Early Intervention (other than HIV testing)	Core
Direct Emergency Financial Assistance	Support
Outreach	Support
Housing	Support
Food Bank	Support
Transportation	Support
Minority AIDS Initiative Education	MAI
Minority AIDS Initiative Outreach	MAI
Early Intervention - HIV Testing	Core
Referral	Support
Linguistic Services	Support
Health Education/Risk Reduction	Support
Psychosocial Support	Support
Medical Nutrition	Core
Legal Services	Support

To fulfill its mandate to serve the entire state of Colorado, emphasizing the areas outside the Denver TGA, these funds will be made available through a formula that includes both HIV epidemiology and overall population size.

E. Gaps in care

Questions were posed to all of the participants in the needs assessment about gaps in care. They were asked to describe the HIV care, treatment, and related services that they had been able to access and those they had not been able to access.

Two percent of survey respondents indicated that they were not currently receiving HIV care, and two percent did not respond. Of the 822 survey respondents who were in care, 60 percent reported receiving HIV care, defined as "doctor visits, lab tests, etc.", more than three times in the last 12 months (**Table 1.20**).

Table 1.20 - Number of times in-care survey respondents cited receiving HIV care in the past 12 months

	Denver		Non Denver		Total	
	N	%	N	%	N	%
Once	34	6	9	4	43	5
Twice	81	14	32	13	113	14
Three times	93	16	63	25	156	19
More than three times	353	62	144	57	497	60
No Response	7	1	6	2	13	2
Total	568		254		822	

Ninety-six percent of the survey respondents who were currently receiving HIV care reported following up on their doctors' recommendations for laboratory tests, such as CD4 and viral load tests. Ninety-two percent followed up through their doctors recommendations for filling their prescription medications (**Table 1.21**). Ninety-one percent reported following through on both recommendations. Four percent of in-care survey respondents indicated that their doctor did not recommend lab tests, prescription medications, or both.

Table 1.21 - Number of in-care survey respondents who reported following through on their doctor's recommendations for laboratory tests and prescription medications

	Denver		Non Denver		Total	
	#	%	#	%	#	%
Total in-care respondents	568	100	254	100	822	100
Respondent followed through on recommendation for lab tests						
Yes	547	96	240	94	787	96
No	2	0	0	0	2	0
Not Recommended	11	2	6	2	17	2
No Response	8	1	8	3	16	2
Respondent followed through on recommendation for prescription medications						
Yes	534	94	226	89	760	92
No	4	1	2	1	6	1
Not Recommended	14	2	13	5	27	3
No Response	16	3	13	5	29	4

Table 1.22 displays a summary of survey responses to questions concerning the services participants had needed in the previous 12 months and those that they had received based on

location of residence. A high ratio of respondents who received a service to those who needed, but did not receive the service indicates a need that is well met. The ratio of met to unmet need for visits to medical providers and laboratory test was high both in and out of Denver. Dental care, however, had a much lower ratio of met to unmet need, with only 1.9 to 1 among Denver respondents, and 2.7 to 1 among non-Denver respondents. Overall, the ratios of met to unmet need were higher for non-Denver residents compared to those residing within the Denver area, in spite of the fact that a higher percentage of respondents out of Denver indicated the need for many of the services. This was especially the case for services such as: 1) Case management (11.5 to 1 met to unmet outside of Denver versus 3.7 to 1 in Denver); 2) Emergency financial services (3.5 to 1 in non-Denver versus 1.3 to 1 in Denver); 3) Transportation (3.6 to 1 for non-Denver versus 1.5 to 1 in Denver); 4) Nutritional counseling or supplements (1.7 to 1 for non-Denver versus 1 to 1.1 in Denver); and 5) Support groups or peer counseling (1.5 to 1 in Denver versus 2.9 to 1 to non-Denver). Child care was needed least frequently, but was received by less than 33 percent of those that needed it.

Table 1.22 - Ratio of survey respondents indicating that they received a service to those who indicated they needed but did not receive the service, and the total number who indicated need.

	Denver Ratio of met to unmet need	Total need (from 515 respondents)	Non-Denver Ratio of met to unmet need	Total need (from 240 respondents)
Visits to doctors, nurses, and other medical providers	(17.5 : 1)	459	(21.5 : 1)	225
Laboratory tests (CD4, viral load, etc.)	(16.6 : 1)	454	(21.8 : 1)	228
Help buying the prescriptions you need	(10.6 : 1)	385	(11.9 : 1)	181
Dental care	(1.9 : 1)	339	(2.7 : 1)	178
Case management	(3.7 : 1)	235	(11.5 : 1)	163
Help getting or paying for health insurance	(3 : 1)	271	(2.6 : 1)	113
Emergency financial assistance (utilities, etc.)	(1.3 : 1)	168	(3.5 : 1)	103
Individual or group counseling for mental health	(3 : 1)	178	(4.2 : 1)	83
Groceries or prepared meals	(2.3 : 1)	163	(3.3 : 1)	81
Help getting or staying in housing	(2.2 : 1)	149	(3.1 : 1)	66
Transportation to and from medical or other services	(1.5 : 1)	140	(3.6 : 1)	69
Nutritional counseling or supplements	(1 : 1.1)	123	(1.7 : 1)	68
Support groups or peer counseling	(1.5 : 1)	127	(2.9 : 1)	63
Help buying over-the-counter medication	(1 : 1.1)	118	(1.3 : 1)	63
Alternative care (acupuncture, herbal remedies, etc.)	(1 : 2)	92	(1.5 : 1)	57
Education-related services	(1.3 : 1)	79	(1.2 : 1)	33
Substance abuse treatment/counseling (out patient)	(3.9 : 1)	73	(4 : 1)	25
Home health care or other in-home assistance	(1.3 : 1)	44	(1.6 : 1)	26
Substance abuse treatment (residential)	(2.3 : 1)	33	(5 : 1)	12
Child care while accessing medical or other services	(1 : 2)	17	(1 : 2.5)	11

A closer look at the extent to which certain demographic groups within the survey sample reported needing services and receiving the services they needed shows some substantial differences. The population groups in **Table 1.23** indicated a higher average number of needs

than all survey respondents, or a indicated that a higher proportion of those needs were unmet. The aging population (45 and older) is also considered a special population, however they indicated having, on average, only 5.4 needs, and only 21 percent on average were not being met. Other populations that indicated higher than average need, but did not have sufficient survey responses were male-to-female transgender, American Indian/Alaskan natives, Native Hawaiians, and non-US born Black or African.

Table 1.23 - Special population groups who indicated more needs than the survey average, or a higher proportion of needs not being met.

Population Group	Respondents (N)	Average unmet needs	Average total needs	Proportion of needs unmet
All Survey Respondents	**755**	**1.75**	**7.47**	**0.23**
Homeless in previous 2 years	88	3.33	9.55	0.35
In jail or prison since HIV dx	143	2.7	9.55	0.28
IDU likely mode of transmission	51	2.1	8.51	0.25
All Black/African American	70	2.22	7.96	0.28
Heterosexual Male	47	1.87	7.19	0.26
Non-US born Hispanic	45	1.6	6.76	0.24
Women	124	1.73	7.79	0.22

Table 1.24 displays the ratio of survey respondents that received to those that did not receive a needed service for the 10 services most frequently indicated as needed by the demographic groups considered special populations. Those who reported that they had been homeless in the last two years had the lowest ratio of received to not received for visits to medical providers and laboratory tests. Survey respondents who listed intravenous drug use as a likely mode of infection had a high met-to-unmet ratio for individual or group mental health counseling, and all respondents who indicated a need for outpatient substance abuse treatment reported receiving it. More than half of those who reported being incarcerated since HIV diagnosis and 55 percent of those who had been homeless in the last two years reported needing transportation assistance, compared to less than 30 percent of all survey respondents.

Table 1.24 - Ratio of those who received service to those who needed but did not receive service for the top ten needed services of special populations

	Aging (45+) (Ratio of met to unmet need) N=456	Incarcerated (Ratio of met to unmet need) N=143	Homeless (Ratio of met to unmet need) N=88	IDU(Ratio of met to unmet need) N=51
Visits to doctors, nurses, and other medical providers	(18.1 : 1) 420	(15.5 : 1) 132	(10.9 : 1) 83	(21.5 : 1) 45
Laboratory tests (CD4, viral load, etc.)	(18.2 : 1) 422	(18.1 : 1) 134	(12.3 : 1) 80	(21.5 : 1) 45
Help buying the prescriptions you need	(11.8 : 1) 346	(7.8 : 1) 114	(4.2 : 1) 62	(8 : 1) 36
Dental care	(2.5 : 1) 305	(1.5 : 1) 107	(1.1 : 1) 60	(1 : 1) 38
Case management	(5.5 : 1) 239	(3.9 : 1) 89	(3.9 : 1) 59	(2.1 : 1) 28
Help getting or paying for health insurance	(3 : 1) 235	(2.1 : 1) 88	(1.3 : 1) 54	(4.5 : 1) 33
Emergency financial assistance (utilities, etc.)	(1.6 : 1) 141	(1.5 : 1) 77	(1.1 : 1) 44	(2.6 : 1) 25

	Aging (45+) (Ratio of met to unmet need) N=456	Incarcerated (Ratio of met to unmet need) N=143	Homeless (Ratio of met to unmet need) N=88	IDU(Ratio of met to unmet need) N=51
Individual or group counseling for mental health	(3.8 : 1) 134	(4.5 : 1) 71	*	(10.5 : 1) 23
Groceries or prepared meals	(2.8 : 1) 137	(2.4 : 1) 68	(1.8 : 1) 51	(2.6 : 1) 18
Help getting or staying in housing	(2.3 : 1) 122	(2.1 : 1) 68	(1.1 : 1) 47	(2.5 : 1) 21
Transportation to and from medical or other services	*	(2 : 1) 73	(1.2 : 1) 48	(2.6 : 1) 18
Help buying over-the-counter medications	*	*	*	(1 : 1) 18
Substance abuse treatment/counseling (out patient)	*	*	*	(all) 18

*Not a top need for this population

Affordability of services, particularly health care services, is often linked to gaps in care. To address affordability issues, the needs assessment asked specific questions about sources of payment for medical services. The Colorado Indigent Care Program (CICP) and Medicare were listed as top sources of payment for medical services both for Denver and outside of Denver survey respondents. ADAP and Bridging the Gap were the top sources of payment for medications. A higher proportion of the non-Denver survey respondents reported using private insurance, personal savings, and family and friends to pay medical expenses than those residing in the Denver Metro area (**Table 1.25**).

Table 1.25 - Sources of payment for medical care and for medications

	Denver				**Non-Denver**				**Total**	
	N	**%**			**N**	**%**				
Payment Source Question- No Response	28	5			9	3			**37**	4
Which of the following did you receive assistance from in the past year?	Medical Care		Medications		Medical Care		Medications		Care	Meds
	N	%	N	%	N	%	N	%	N (%)	N (%)
AIDS Drug Assistance Program (ADAP)	124	21	440	74	40	15	152	57	164 (20)	592 (72)
Bridging the Gap, Colorado	79	13	170	29	29	11	60	22	108 (13)	230 (28)
Colorado Indigent Care Program (CICP)	234	39	144	24	72	27	39	15	306 (37)	183 (22)
Medicare	202	34	134	23	80	30	46	17	282 (34)	180 (22)
Personal income or savings	96	16	99	17	61	23	59	22	157 (19)	158 (19)
Medicaid	113	19	82	14	62	23	37	14	175 (21)	119 (14)
Family/Friends	40	7	41	7	23	9	31	12	63 (8)	72 (9)
Private health insurance through work	39	7	35	6	37	14	34	13	76 (9)	69 (8)
Individual health insurance plan	33	6	28	5	24	9	22	8	57 (7)	50 (6)
Pharmacy Company Assistance Program	16	3	26	4	8	3	17	6	24 (3)	43 (5)
Other (describe)	24	4	23	4	20	7	11	4	44 (5)	34 (4)
Coverage under a spouse/partner's health insurance plan	11	2	10	2	8	3	7	3	19 (2)	17 (2)
Cover Colorado	10	2	11	2	5	2	4	1	15 (2)	15 (2)
Don't know/not sure	7	1	6	1	8	3	6	2	15 (2)	12 (1)
Veteran's Administration	6	1	5	1	6	2	7	3	12 (1)	12 (1)
Indian Health Services	2	<1	1	<1	1	<1	1	<1	3 (0)	2 (0)

One question posed to survey respondents asked what medications or medical care people were not receiving because they were not covered under their medical plans or because people could not afford them. A total of 170 respondents provided answers to this question, 105 from the Denver area and 65 from outside of Denver. **Table 1.26** shows the types of medications that respondents said they were not receiving. Medications for mental health disorders such as depression or anxiety were the most commonly reported by survey respondents statewide, and more frequently reported by Denver area residents than by those from outside of Denver (16 percent versus nine percent). Pain medications were also reported as not received more frequently by Denver area residents (15 percent versus nine percent). Stomach medications were reported as not received by 14 percent of the Non-Denver respondents and 12 percent of the Denver area residents who responded to the question. Medications that were listed by less than four percent of the total survey respondents included cancer medications, eye medications, and drugs for chronic obstructive pulmonary disease, genital warts, gastro esophageal reflux disease, drinking cessation, and smoking cessation, and 30 different types of medications were each mentioned by only one person.

Table 1.26 - Medications reported by survey respondents as ones they could not access

	Total Survey Respondents (N=170)		**Denver (N=105)**		**Non-Denver (N=65)**	
	n	%	n	%	n	%
Psych meds	23	14	17	16	6	9
Pain meds	22	13	16	15	6	9
Stomach meds	22	13	13	12	9	14
Nutritional supplements	14	8	9	9	5	8
Blood pressure meds	12	7	9	9	3	5
Sleeping aids	9	5	7	7	2	3
Cholesterol meds	9	5	6	6	3	5
Heart meds	7	4	6	6	1	2
Allergy meds	7	4	5	5	2	3
Erectile dysfunction drugs	7	4	5	5	2	3
HIV meds	7	4	5	5	2	3
Testosterone	7	4	5	5	2	3
Vitamins	7	4	5	5	2	3

Table 1.27 summarizes responses about care-related services people living outside of Denver who reported not being able to access. Dental care topped the list with 32 percent of those who responded to the question reporting this as an unmet need. Eye care ranked second, reported by 23 percent of those responding, and alternative care such as acupuncture and massage was reported by 14 percent.

Table 1.27 - Medical care reported as not received by non-Denver based survey respondents

Out-of Denver only N=65	N	%
Dental care	21	32
Eye care	15	23
Alternative care	9	14
Mental health care	6	9
Other care	6	9
Chiropractor	3	5
Emergency care	2	3
Hearing	2	3
Labs	1	2

Needs identified through interviews of PLWH/A

Over two thirds of the interview respondents who had been out of care for extended periods of time got back into care because they were sick, most to the point where they needed to be hospitalized. Most then were linked to ongoing care and related services by clinic staff, many of whom facilitated not only access to doctors appointments and medications, but also services such as CICP, Social Security, case management, and counseling. Many of the participants were very complimentary of their doctors and the staff at certain clinics for helping them understand HIV and the care process, linking them to medical care and treatment, helping them to find other needed services, and helping them with the paperwork to enroll in those services. About half of the interview participants received help accessing care and related services from community-based organizations (CBOs) that provide services to the homeless and ASOs. Decreasing substance abuse and improved mental health, including an increased desire to live and an acceptance or diminishing fear of HIV, were also cited by participants as helping them to access care, as were advice from other PLWH/A, family encouragement, partner support, and better proximity to clinics. One participant said that increasing knowledge about the services available helped him to access care, and another said changes in his income lead to him being eligible for services for which he previously did not qualify.

Interview respondents were also asked about any barriers they faced when trying to get into care, and their answers were quite varied. Three respondents from outside the Denver area spoke of the lack of providers specializing in HIV in their areas. The ones that were available were sometimes not a good fit for the person. Issues related to being homeless or extremely poor caused barriers for three other respondents, including transportation problems in getting to appointments, loss of an acceptable method of identification, and having medications and paperwork stolen. Three others spoke of barriers related to insurance, the high costs of medications when not sufficiently covered by insurance, limitations on covered providers, and high co-pays for doctors' appointments. Two others mentioned the long waits getting in to see a doctor as barriers to care. Other barriers included having trouble adhering to medication regimens and the large amount of paperwork necessary to access care.

All of the people who were interviewed because they already had AIDS at their first HIV diagnosis had accessed care very soon after their diagnosis, and all seemed satisfied with the care they were receiving. Although some expressed having bad experiences with doctors in the

emergency departments where they were first diagnosed, most described a very smooth process of getting linked to very good doctors, to medications, and to other needed services such as Medicare, disability benefits, emotional support, and assistance meeting basic needs for food and transportation. Clinic staff in both Denver and Pueblo were cited for their comprehensive approaches to getting the medical and other needs of their clients met, as well as for making follow-up calls to clients when they had not shown up for appointments or to help them access services. Some had received help accessing care and other services from ASOs. Several participants mentioned the good results they have had in their CD4 and viral load counts since accessing medications.

A few respondents did mention some problems in accessing care. Two of these interview participants who had private insurance at the time of their HIV diagnoses had lost their insurance since. One was very concerned about accessing care and meeting living expenses until clinic staff helped to link him to care and disability benefits. The other had to wait six months for insurance after getting a new job, but the ADAP helped him with information and medications. One man with private insurance spoke of paying $6,000 in co-pays, which depleted his savings. Some mentioned the high costs of care and treatment and expressed concerns about ever losing their benefits or for those who are not insured and not receiving similar assistance. One person spoke of a delay of approximately three months after his diagnosis in getting his medication. He was the only respondent who thought that the process of accessing care was somewhat difficult and took too long. Another did not like the counseling he had received from an ASO, and had not tried to seek it elsewhere.

Given that most of the respondents to these particular interviews had good experiences in accessing the care, treatment, and other services they needed, a few did not have any suggestions about how to improve people's access to these services. The majority stressed, however, that even though there are great programs out there, it was important that PLWH/A have access to information about what services are available and how to access them. Such information could be made available through public information, clinic staff, case managers, doctors, and through support groups. One respondent stressed how difficult it was to get the appropriate information to people who do not want others to know about their status. Some stressed how lost they would have been if they had not received information and assistance. One emphasized the difficulties filling out large amounts of paperwork to qualify for programs if there is no knowledgeable person to help. Two participants spoke of the need for better access to transportation so that people could access help. Others stressed the need to help people acquire basic needs to help them stay in care.

When asked about any unmet needs, over half of the interview respondents said that they had none because they had been so well taken care of by providers. Those who did identify unmet needs described housing assistance, specialty medical care, counseling and support groups, education assistance, opportunities for socializing, and assistance in learning to disclose their HIV status. When asked about needs that are most commonly not met for others, housing was mentioned most frequently by interview participants. Programs for housing assistance were said to be underfunded. Therefore the assistance was limited and the wait lists long. The second most common unmet need was for mental health treatment, counseling and emotional support. A third need that often went unmet was for income, either through a job or disability benefits, which

were said to be difficult to get. Several participants talked about how hard it was to get qualified for federal programs such as Social Security disability, Medicare, and the food stamp program. Although several people said that food from food banks was often easy to get, accessing truly nutritious food was said to be difficult. Other needs that were said to often go unmet for PLWH/A were for HIV and other medications, education, relationships, transportation to appointments, and information on available services. When asked about what services tended to be the easiest and hardest to access, responses ranged substantially and reflect the very different experiences that people have in accessing the medical and other services that they need. Several people made the point that there are services available, but people need to know how to find them which is not always easy.

When asked about what types of people had the hardest time gaining access to the services they need, respondents thought that poor people, especially the homeless had the hardest time. Not being able to afford transportation to appointments was one reason given. One person disagreed saying that the homeless could get everything they need if they are in Denver. Another person thought that it was actually those people who were functional and had jobs that had a harder time because they had to pay for everything, although persons with good incomes and insurance were mostly seen by others as those with the least difficulties accessing what they need. Several interviewees responded that people who are trying to hide the fact that they have HIV from others have the hardest time getting services because they do not want to risk others' finding out if they do access services. People from small towns and people from out of the area were said to have a hard time because they may be the least likely to know about what services are available. One person spoke of those who have not adapted well to their diagnosis and who could not manage to do what needed to be done as having the hardest time. Agreeing with this statement, some added that people who were mature, mentally stable, and with good self-esteem were more likely to be able to accept that they have HIV and take the steps needed to get medical and other services.

F. Prevention needs

Colorado's Care and Treatment Program exists as a separate program within the STI/HIV Section, along with programs for prevention and surveillance. This organizational structure facilitates continual collaboration and joint planning. The STI/HIV Section has identified a continuum of services around HIV that integrate prevention and care.

CONTINUUM OF HIV SERVICES						
	Primary Prevention	Early Identification of HIV Infection	Linkage to Care	Adherence to/ Retention in Care	Behavioral Services for PLWH/A	Intensive Services for People with Highest Risk Behaviors
Primary Targets	HIV negative people (to prevent them from becoming HIV positive)	PLWH/A	PLWH/A	PLWH/A	PLWH/A	PLWH/A

This continuum fully incorporates recent guidance from the Centers for Disease Control and Prevention emphasizing the important role of HIV care and treatment in preventing further transmission of HIV. Lowering viral loads, and keeping them undetectable, for as many PLWH/A as possible for as long as possible has been adopted as the most definitive performance indicator for the Section, across all the Section programs.

This continuum also acknowledges that PLWH/A face complex challenges in achieving viral suppression. Testing as early as possible in the course of infection, and gaining immediate access to high quality medical care and medications are critical. Over the longer term, remaining adherent and retained in care is extremely difficult, particularly for PLWH/A with behavioral issues such as depression and addiction. A very small group of PLWH/A have such complex psychosocial situations that they require the most intensive forms of case management and other services in order to achieve stability and meet basic needs. A combination of prevention and care funding will be utilized in a coordinated fashion to establish and maintain this full continuum, matching the intensity of needs for as long as necessary in the lives of PLWH/A.

Primary HIV prevention
2012 marks the beginning of a new strategic approach to control and prevent HIV in Colorado. The HIV prevention activities include expanded testing, linkage to care, prevention with HIV positive persons, condom distribution and a policy initiative to implement sexual health education in the state high schools. The Colorado approach to HIV prevention is aligned with the National HIV and AIDS Strategy sponsored by the Center for Disease Control (CDC).

Expanded HIV testing
The Section launched a five-year expanded HIV testing initiative in Colorado that focuses on the Counties with highest prevalence of HIV infection. The Section designated five counties as the Metropolitan Statistical Area (MSA) after careful socio-cultural analyses that factored the distinctive geographical distribution of the HIV epidemic in Colorado. The HIV testing effort is contracted with the Denver Health Department which leads the consortium of the five Counties, hereinafter referred as “the Collaborative”. The contract with the Collaborative is to promote or coordinate opt-out HIV testing of patients ages 13-64 in healthcare settings located within the five-county jurisdiction comprised of Adams Arapahoe, Denver, Douglas and Jefferson Counties. Within the defined jurisdiction, the Collaborative will implement and/or coordinate HIV testing in non-healthcare settings using multiple strategies informed by surveillance data. The Collaborative will support enhanced and targeted HIV testing activities in venues that reach persons with undiagnosed HIV infections. Targeted populations encompass MSM, IDU, African American and Hispanics. The Collaborative will work cooperatively with Community Based Organization (CBO) to ensure the provision of test results, and linkage to care particularly to clients testing HIV positive;. The Section will continue to promote routine, early HIV screening for all pregnant women, according to current CDC recommendations. The Section will continue to support HIV testing activities in other parts of the state with State funds. The Section will continue to facilitate voluntary testing for other STDs (e.g., syphilis, gonorrhea, chlamydial infection), HBV, HCV, and TB, in conjunction with HIV testing, including referral and linkage to appropriate services, including behavioral health services.

Prevention with HIV positives persons
With the adoption of the new HIV prevention strategy, persons testing HIV positive or currently living with HIV/AIDS are deemed high priority within the jurisdiction’s HIV prevention

activities. The STI/HIV Section leadership started an integrated planning process that streamlines the programmatic interventions of HIV prevention, partner services, surveillance and Ryan White funded care programs. The STI/HIV integration initiative devised an enhanced linkage to and retention in HIV care plan with a network of health educators serving as nexus between the community-based organizations and health care agencies. The Section is leveraging funding and programmatic activities conducted in partner services, Ryan White funded services and HIV prevention resources to enhance access to behavioral and clinical risk screening followed by risk reduction interventions for HIV-positive persons and HIV-discordant couples at risk of transmitting HIV.

Condom distribution
For targeted condom distribution activities, the Section is partnering with agencies that provides services to HIV positive persons and their partners to distribute condoms. While the condom distribution is a component of every contract with the community, the Section emphasizes a coordinated distribution through venues that are frequented by HIV positive persons and those who are at highest risk of HIV.

Policy initiative for youth
In 2010, the Colorado HIV Prevention Advisory Committee (HPAC) revised the chapter of the Comprehensive HIV Prevention Plan that prioritizes interventions for priority populations. Youth aged 12-24 years old was the main target population prioritized for enhanced HIV prevention services. The HPAC advices were based on recommendations from two workgroups, the Urban and Rural workgroups, which researched appropriate interventions for urban and rural populations.

In 2012 the STI/HIV Section is partnering with the Child, School, and Adolescent Health Program (CASH) within CDPHE and the Colorado Department of Education (CDE) to identify at least one alternative high school that does not currently use a comprehensive sexual health education curriculum and/or strategy to support the adoption, implementation and ongoing support of a comprehensive sexual health curricula that complies with both the Colorado Healthy Youth Act of 2007 and with the applicable Colorado Department of Education standards. The Section, CASH and CDE staffs have begun the review of epidemiologic data and school readiness to identify the most appropriate school with which to partner in 2012. Two potential schools have been contacted to determine their level of interest and capacity to work with this partnership to implement a policy that will provide the intended protective factors. Both potential partner schools are within the Denver metropolitan area which accounts for the majority of HIV in the state of Colorado. Successful implementation of this initiative will have a short term and long term policy impact. The short term policy impact is the implementation of a comprehensive sexual health education curricula in one school serving a population at increased risk of multiple negative health outcomes related to sexual behaviors. The long term outcome is the establishment of a process that will benefit other schools in Colorado in the adoption and support of an intervention that will provide immediate protective factors and the potential of lifelong protective factors.

Targeted communities
The primary targets of the HIV prevention efforts are high risk HIV negative persons who do not know their status and/or engage in high risk behaviors with HIV positive individuals in the community. The prevention activities for high risk persons are mainly funded with the Colorado HIV/AIDS Prevention Program (CHAPP) allocated by the state tobacco settlement funds. Through the CDC grants, CDPHE's prevention strategy aims specifically at the HIV positive population, the community in which they reside, the venues in which they socialize and the networks/virtual channels through which they meet partners.

Due to the unique geographical make up of the Colorado Front Range, the proximity of these adjacent counties make up a continuously urbanized corridor within the Denver metro area where the largest proportion of people living with HIV reside and socialize. MSM remains the predominant risk group of PLWH, accounting for 72 percent of PLWH in Colorado and representing over 75 percent of HIV cases in the referenced counties. Additionally, an analysis of newly diagnosed HIV cases over the past five years indicates an increasing percentage of persons residing in Adams, Arapahoe, and Jefferson counties, account for nearly 34 percent of new diagnoses, compared to 21.5 percent of PLWH.

Expanding programmatic and financial resources outside of Denver County is warranted in Colorado in order to target a greater majority of PLWH and those at highest risk for acquiring HIV. CDPHE will continue to evaluate the yield of HIV testing efforts in identifying newly diagnosed HIV cases to refine the testing efforts in targeted areas accordingly.

Although Colorado is a state with moderate morbidity, the epidemiologic characteristics of the populations at risk mirror that of the nation with respect to HIV disease burden. The determination of at risk population is informed by the Colorado surveillance data. Thus, the subpopulations of interest for the prevention program are: Men who have sex with men (including White MSM, Black MSM, Hispanic MSM, Transgender); African American women; Hispanics; and IDU.

Evidence of prevention needs (met and unmet)
As summarized above, the HIV positive populations that drive the transmission of HIV are by in large socio economically disadvantaged and are most likely to be unemployed, lacking health insurance and out of care. While these characteristics are common across risk groups, there are important differences that distinguish the risk/ethnic groups identified that will inform the HIV prevention strategies. The CDC funded projects were prioritized based on grant requirements and the feedback provided by the community. The state funded prevention projects were prioritized by the CHAPP Advisory Committee.

G. Barriers to care

1. Routine HIV testing

The laws and regulations of Colorado do not pose a significant barrier to routine HIV testing. While informed consent is required, it does not have to be written or in a prescribed format. HIV testing is not considered a medical procedure requiring any specific type of licensure. Counseling

is only legally required for people testing positive, but the contents of such counseling is not prescribed. Opt-out testing is required for pregnant women.

Cost is the greatest barrier to routine HIV testing in Colorado. Both Medicaid and Medicare will reimburse for HIV testing done on a screening basis, but reimbursement rates are low and few Medicaid or Medicare providers have implemented it. Private health plans vary in their policies about reimbursement for routine HIV testing, and providers are not certain about their ability to be reimbursed.

2. Program related barriers

Data collection and reporting requirements discourage some providers from pursuing or accepting Ryan White funding. This is particularly true of large clinical providers, who must absorb significant costs to make changes to their electronic medical record in order to collect required data and generate the required reports.

An increasing proportion of provider time and resources is devoted to six month recertification, for both ADAP and for other core and support services. Clients who are unable or unwilling to recertify eligibility for services are experiencing suspension of services.

The publication of the Universal, Fiscal, and Program Monitoring Standards have resulted in a tightening of contract provisions and an increased effort toward standardization across providers and geographic areas. While Part B believes this has resulted in a net increase in quality, it has been perceived by many providers and some clients as onerous.

3. Provider related barriers

Fourteen percent of the entire client survey sample reported not receiving medical or related services for at least one of the following reasons: because the provider did not speak their same language; because of the attitude expressed by the provider, or because of a disability. Overall, 11 percent of the entire sample of survey respondents (10 percent of the Denver sample and 16 percent of the non-Denver sample) cited provider attitude and disrespectful treatment as a reason for not receiving services at some time, compared to two percent because of language differences, and three percent due to a disability (**Table 1.28**). A total of 25 people reported being denied some type of related services in the past or receiving highly substandard services from providers because of their HIV status.

Table 1.28 - Survey respondents not receiving care due to language differences, provider attitude, or disability

Reasons for not receiving care	Denver		Non-Denver		All	
	N	%	N	%	N	%
Total	**595**		**267**		**862**	
Ever unable to get services due to one of the following three reasons	70	12	47	18	117	14
Never been unable to get services due to one of the following three reasons	490	82	206	77	696	81
No Response	35	6	14	5	49	6

	N	% of 70	N	% of 47	N	% of 117
Provider not speaking language	**9**	13	**9**	19	18	15
No	48	69	31	66	79	68
No Response	13	19	7	15	20	17
Attitude expressed by provider	**58**	**83**	**40**	**85**	**98**	**84**
No	5	7	4	9	9	8
No Response	7	10	3	6	10	9
Because of a disability	**19**	**27**	**9**	**19**	**28**	**24**
No	38	54	28	60	66	56
No Response	13	19	10	21	23	20

As mentioned, 15 people who had spent substantial time out of care since their initial HIV diagnosis participated in one-on-one interviews in which they described their experiences and needs concerning care. One interviewee refused to seek care because of how he had been treated by providers at a particular clinic. He had a history of substance abuse and was denied pain medications at the clinic, and he felt highly disrespected during the process.

a. Client related barriers

Several questions included on the 2011 Needs Assessment survey asked respondents about barriers they experiences that resulted in them being out of care since their initial HIV diagnosis. Of the 862 survey respondents from throughout the state, 17 percent reported that they went more than a year without receiving medical care after their HIV diagnosis or that they had never received medical services, 18 percent among Denver area residents and 14 percent of the non-Denver area respondents. When asked if they had ever gone without care for more than 12 months and why, 21 percent indicated that they had at some time been out of care; a reason was provided by 22 percent of Denver area residents and 19 percent of non-Denver area residents. Forty percent of all respondents stated that they had never gone without care for more than 12 months, and another 39 percent did not respond. Groups of survey respondents that were somewhat overrepresented among those having been out of care include: heterosexuals living in the Denver area at 26 percent; women at 24 percent; and people with AIDS at 24 percent. As would be expected, the longer the time period since a person's diagnosis the more likely that he/she would have spent some time out of care. Among this survey sample, 27 percent of those diagnosed with HIV before 2001 had spent more than a year out of care, whereas only 12 percent of those diagnosed since then had been out of care in the past. The majority of the survey respondents are currently receiving HIV care and do not represent all of those living with HIV in Colorado.

Forty percent of all respondents who were ever out of care said it was because they could not afford it. A somewhat higher percentage of respondents from outside of Denver (47 percent) reported this as their reason compared to those living in Denver (36 percent). The next most common response offered by 27 percent of those spending time out of care (29 percent from Denver and 24 percent from out of Denver) was due to insufficient insurance. Table 9 shows the frequency with which each reason was chosen by respondents in Denver and outside of Denver. A higher percentage of respondents from outside of Denver (20 percent versus 11 percent) cited a lack of transportation as a reason for being out of care, and 22 percent of those out of Denver

cited poor personal treatment by a provider as their reason compared to only eight percent of the Denver-based respondents (**Table 1.29**).

Table 1.29 - Survey respondents' reasons for ever spending more than 12 months out of care. Red indicates high frequency response while green indicates low frequency response.

Reason Out of Care	Denver area N=129		Non-Denver area N=50		Total N=179	
	N	%	N	%	N	%
Could not afford it	47	36	23	47	71	40
Insufficient insurance	37	29	12	24	49	27
Too many requirements/too much paperwork	20	16	5	10	25	14
Lack of transportation	14	11	10	20	24	13
Did not qualify for services	13	10	6	12	19	11
Did not think I needed care because I wasn't sick	27	21	9	18	36	20
Did not want anyone to find out I had HIV	25	19	9	18	34	19
Did not think medical care would do me any good	19	15	5	10	24	13
Did not know where to go for medical care	13	10	6	12	19	11
There was no one to help me figure out how to access care	13	10	10	20	23	13
Poor personal treatment by a provider	10	8	11	22	21	12

Survey options that were chosen by less than 10 percent of respondents included: "I did not want services," "Long wait times for appointments," "A doctor or nurse told me I didn't need medical care," and "No one told me that I needed to get medical care for HIV."

Survey respondents who had spent time out of care also offered their perspectives on what might have helped them to access care at the time. Among the out of Denver survey respondents who provided their perspectives on this, the most common response was financial assistance and the second most common response was insurance. Emotional or mental health support, better information as to how and where to access services, and better access to transportation were also reported as important needs for accessing care. Having services be more accessible with fewer enrollment requirements was also reported by several survey respondents.

When asked for their suggestions on how to make it easier for PLWH/A to get and stay in medical and related services, non-Denver survey respondents offered many ideas. **Table 1.30** shows that most commonly, respondents thought that accessing services should be easier. This included: easing the restrictions on who qualifies for services; simplifying the enrollment processes, especially by cutting down on the required paperwork, making the applications easier to understand and complete, offering more enrollment assistance, and having more services available in more places around the state. Secondly, PLWH/A needed to have good information about what services are available, how to access them, and any changes that may affect their health care. They also mentioned that people needed more information about HIV and about their own personal health. The third most common set of ideas concerned making sure that PLWH/A had access to affordable health care and medications, including affordable health insurance. Several suggested instituting universal health care as a way of ensuring this access. Fourthly, respondents encouraged PLWH/A to be more proactive in ensuring that their needs are

met. This included ideas such as: educating oneself as to what services are available; fulfilling the requirements to access those services; being honest and following rules; complying with all doctors' directives, including making all appointments and being compliant with medications; keeping providers informed; taking responsibility for one's own health; and advocating for oneself when necessary. The fifth most common suggestion was for PLWH/A to have access to case management to help them sort out what they need and help them with accessing services. Another common set of suggestions for ensuring access to care concerned providers and staff treating people respectfully. Other suggestions included: ensuring that people had adequate income to meet their needs, providing quality care, providing mental health services; and better access to transportation.

Table 1.30 - Suggestions from Non-Denver survey respondents as to how to make it easier for PLWH/A to get and stay in medical and related services

Suggestions (N=142)	Number	Percent
Ensure easier access to services and increase availability	49	35%
Provide information on HIV and available services	30	21%
Ensure that heath care is affordable	21	15%
PLWH/A should comply with medical directives and take charge of their health	19	13%
Ensure PLWH/A have access to case management	18	13%
Providers/staff should treat PLWH/A respectfully	11	8%
Ensure adequate income to meet needs	9	6%
Provide quality care	7	5%

As mentioned, 15 people who had spent substantial time out of care since their initial HIV diagnosis participated in one-on-one interviews in which they described their experiences and needs concerning care. The length of time out of care for these participants ranged from five months to approximately 20 years, with the median time out of care at seven years. Many of them had been in and out of care several times since their HIV diagnoses. About half of these participants reported not getting into care when they first found out they had HIV. The reasons for this varied. Three of the participants said that they did not know where to go or how to go about getting into medical care. Two said that they were reluctant to go on HIV medications. One person referred to his substance abuse problems, one indicated that s/he was running from the law, and two said they were too depressed and in denial to seek medical care. One person cited the cost of care as a reason for not pursuing it right away, and another said it was due to shock and embarrassment.

When asked about reasons they had been out of care at other times since their diagnosis, poverty related issues topped the list. Homelessness and lack of transportation were the most common reasons, as participants spoke of how the overwhelming life issues associated with homelessness, including the time it takes just to meet basic needs, having no place to keep one's drugs, and their inability to get to appointments at scheduled times became major deterrents. Others mentioned that they did not have medical insurance and therefore could not afford care. For some of the participants, mental health issues acted as deterrents to accessing care. These included serious depression, low self-worth, shame, denial, and fear. Several mentioned having had suicidal thoughts. Substance abuse problems were also cited by some as reasons for not being in care at various times since their diagnoses. Almost half of these interview participants

indicated they spent some time out of care because they did not feel sick, and therefore did not see any urgency to access care. Others made reference to the amount of "red tape" involved in accessing medical services, which could prove especially problematic for those that had no identification. Additional reasons given by participants for being out of care included: legal problems, difficulties with drug side effects, and not knowing where to access services after moving to another area.

Interview participants were also asked a general question about the main reasons some PLWH/A are not getting the medical and related services that they need. Most commonly respondents cited the stigma that still surrounds HIV, keeping people from accessing care because they are afraid that others will find out about their status. Others responded that a lack of resources keeps some people out of care due to the costs of care, medications, and transportation. Also cited were mental health problems such as depression, which can cause people to not care about their own wellbeing and just give up. Other reasons included: addiction; denial about the severity of HIV; poor accessibility of services, especially outside of Denver; lack of knowledge about what to do or where to go to get services; legal problems; the large amounts of "red tape" involved in accessing care; and disillusionment with providers.

Interview respondents most often cited both better knowledge and support as the main things that would help people access care. The knowledge needed included information about where and how to access care as well as more knowledge about HIV itself. Some suggested how important it would have been to have someone talk to them when they were first diagnosed to offer them support and to ensure that they knew what to expect from the disease and how to access care and related services. The types of support mentioned included having someone to talk to that would be encouraging and who would let them know that HIV was not the "death sentence" it once was. Several people thought it would be especially important to talk to and get encouragement from others living with HIV. Others mentioned the importance of getting emotional support from counselors and doctors. Additional responses to the question about what would help PLWH/A to access care included: 1) Improved access to services in terms of both closer locations and easier enrollment processes, 2) More life stability including access to housing and transportation, 3) Stronger will on the part of individuals, 4) Treatments that had fewer side-effects, 5) Better access to health insurance, 6) Having HIV stigma addressed so that people were less ashamed to seek care, 7) Getting sick, and 8) Incentives.

A principal recommendation arising from the needs assessment for assuring that more PLWH/A access HIV care and related services involves people being provided several types of assistance, especially when they are first diagnosed, utilizing a comprehensive approach. These types of assistance include: 1) Providing emotional and social support, including counseling and the opportunity to meet with a peer or peers who are also living with HIV; 2) Providing information about HIV and how it is likely to affect them as well as better information about HIV treatment so that PLWH/A can better understand the importance of treatment for their own health and that of their partners; 3) Conducting an assessment of care and treatment needs and needs for related services such as help accessing basic needs, mental health support, or substance abuse treatment; 4) Providing active linkage to care including access to affordable and quality care, better information as to how and where to access care, and assistance with enrollment processes; 5) Expanding the availability of quality HIV medical care and other services in more parts of the

state and more transportation assistance for accessing services that are far away from where clients live; and 6) Providing active linkage to other needed services based on the assessment, including expanded assistance for accessing housing and other basic needs.

H. Evaluation of the 2009 Comprehensive Plan

The 2009 Comprehensive Plan included the following overall goal:

By March 31, 2012, the network of funded agencies will document improvements in the following four areas:

1) Access to HIV-related medical care, medications, and behavioral health services
2) Retention in or adherence to HIV-related medical care, medication regimens, and behavioral health services
3) Access to other HIV-related support services
4) Quality of all funded services, including improvements in planning and evaluation

The 2009 Comprehensive Plan also included six annual goals:

Goal 1 – By March 31, 2012, increase the number of PLWH/A in Colorado who are actively engaged in high quality HIV outpatient/ambulatory care.

Goal 2 – By March 31, 2012, improve adherence rates among Colorado's PLWH/A who have been prescribed an HIV-related medication regimen through a combination of individual counseling, groups, education, and other strategies.

Goal 3 – By March 31, 2012, increase the number of PLWH/A in Colorado who receive comprehensive, coordinated case management services.

Goal 4 – By March 31, 2012, increase the percentage of case-managed PLWH/A who access at least one of the following high priority services: outpatient/ambulatory health care, oral health, assistance acquiring medications, assistance with insurance costs, early intervention services, medical nutrition therapy, food bank/home-delivered meals, medical transportation, or emergency financial assistance.

Goal 5 – By March 31, 2012, increase the number of PLWH/A in Colorado who are actively screened for mental health and/or substance use issues and, when indicated, are given access to behavioral health services that meet their needs.

Goal 6 – By March 31, 2012, 75 percent of agencies funded to serve clients living with HIV or AIDS will have a Quality Committee and a written Quality Plan.

1. Successes

Overall, Colorado was very successful in achieving its three year goal as well as the annual goals. Notable successes are summarized in **Table 1.31**.

Table 1.31 – Progress Made on the 2009 Comprehensive Plan (through October 31, 2011)

Goals	Objectives	Progress
Goal 1: Increase the number of PLWH/A in Colorado who are actively engaged in high quality HIV outpatient/ambulatory care.	A) Support client access to outpatient/ ambulatory care.	406 clients served
	B) Provide HIV testing in areas of the state where existing HIV testing resources are insufficient, and actively link people to HIV care when they test positive.	146 tests
	C) Utilize state health department staff to identify clients who are not in care and actively link them to care.	50 clients
	D) Provide other early intervention services through regional contracts.	554 clients served
Goal 2: Improve adherence rates among Colorado's PLWH/A who have been prescribed an HIV-related medication regimen through a combination of individual counseling, groups, education, and other strategies.	A) Provide access to at least 22 Antiretroviral and at least 34 Non-antiretroviral HIV therapeutic treatments to eligible persons during the fiscal year through the ADAP.	An average of 1,256 clients per month
	B) Utilize federal funding to provide Medicare Part D Prescription Drug Plan premium assistance to ADAP eligible persons.	333 unduplicated clients
	C) Utilize the Colorado State Pharmaceutical Assistance Program to assist clients with Medicare Part D "wrap around" (deductible, cost sharing, coverage gap, and catastrophic level assistance) utilizing State funding.	602 unduplicated clients
	D) Maximize the utilization of ADAP funds and the benefits to clients through longer term Health Insurance Premium and Cost Sharing Assistance. Provide financial assistance for eligible PLWH to maintain a continuity of health insurance or to receive medical benefits under a health insurance program.	389 unduplicated clients
	E) Ensure that all medically case managed clients receive adherence counseling tailored to their needs and health situation.	192 clients
Goal 3: Increase the number of PLWH/A in Colorado who receive comprehensive, coordinated case	A) Provide medical case management at or through regional service providers outside the Denver TGA.	192 clients received at least one session

Goals	Objectives	Progress
management services.	B) Provide nonmedical case management at or through regional services providers outside the Denver TGA.	801 clients received at least one session
Goal 4: Increase the percentage of case-managed PLWH/A who access at least one high priority service.	A) Support client access to one or more of the following services: home health, oral health, or medical nutrition	178 clients received at least one session of one of the listed services
	B) Support client access to one or more of the following services: nonmedical case management, child care, direct emergency financial assistance, food bank, health education/risk reduction, housing, linguistic services, medical transportation, outreach, psychosocial support, adherence counseling, medical transportation, or referral.	801 clients received at least one session of one of the listed services
Goal 5: Increase the number of PLWH/A in Colorado who are actively screened for mental health and/or substance use issues and, when indicated, are given access to behavioral health services that meet their needs.	A) Support client access to specialized mental health services.	174 clients received at least one session
	B) Support client access to substance abuse services, including screening, brief intervention, brief therapy, and formal drug treatment.	1,227 clients were screened and linked to further services as needed
Goal 6: Increase the number of funded agencies with a Quality Committee and a written Quality Plan.	**Clinical Quality Management Activities**	
	A) Continued implementation of the Statewide Quality Plan, to include providing technical assistance to all funded contractors to undertake local quality improvement activities.	
	B) Finalized the standards for all funded services, based on a broad based process, and utilizing recent data on evidence-based practices.	
	C) Ensured that funded contractors were showing good faith progress implementing the quality expectations written into their 2011 contracts.	
	D) By year-end, evaluated the implementation of the Statewide Quality Plan and made any necessary adjustments for the future.	

Goals	Objectives	Progress
	ADAP Clinical Quality Management Activities	
	A) Reviewed and assessed the current list of medications on the ADAP formulary regarding appropriateness and potential drug interactions or complications.	
	B) Assessed other available medications not currently on Colorado's formulary and new medications as they receive Food and Drug Administration approval for inclusion on Colorado's ADAP formulary.	
	C) Prioritized changes, reductions, or additions to the formulary.	

2. Challenges

The greatest challenges in meeting the 2009 Comprehensive Plan goals and objectives involved meeting increasing demand for ADAP and implementing data system improvements.

Colorado ADAP has experienced continual increases in demand for the entire period of the previous Comprehensive Plan. Colorado avoided a waiting list due to increases in federal funds and implementation of a program to collect rebate revenue on insured ADAP enrollees where ADAP paid any portion of a claim. These steps required significant investments of staff time and resources to accomplish.

Implementing data system improvements encountered both technological and provider/consumer acceptance barriers. In terms of technology, Colorado attempted to install the AIDS Regional Information and Evaluation System (ARIES) at a time when the state was consolidating all information technology services, across all state departments. This created insurmountable issues around procuring sufficient server capacity as well as becoming a priority for overtaxed information technology staff. In terms of provider/consumer acceptance, implementation of ARIES became associated with a larger conversation about data privacy, allowable uses of client level data, willingness of providers to team with CDPHE on highest risk clients, and the use of data to monitor the quality of funded services.

Chapter II – Where We Need to Go: Vision for an Ideal System

A. Meeting the challenges from the 2009 Comprehensive Plan analysis

Based on current projections of both revenue and demand, and with early expansion of Medicaid for adults without dependents in the state, Colorado should be able to meet demand for ADAP, at least until the full implementation of health care reform in 2014.

Technological barriers preventing implementation of ARIES have been overcome. The system has been installed on CDPHE servers and final procedures are in place to allow for full implementation by October 1, 2012. Provider and client barriers are being addressed through a "Data Sharing and Privacy Task Force" that is sponsoring community forums to voice concerns and propose mutually acceptable solutions. Providers have been given the option to upload de-identified data, overcoming most provider concerns while still allowing for state wide monitoring of quality and other performance indicators.

B. Overall care and treatment goals

By March 31, 2015, the network of funded agencies will document improvements in the following four areas:

1) Access to HIV-related medical care, medications, and behavioral health services
2) Retention in or adherence to HIV-related medical care, medication regimens, and behavioral health services
3) Assistance with meeting other basic needs, while supporting movement toward self-empowerment
4) Quality of all funded services, including improvements in planning and evaluation

C. Specific goals for people who are aware of their HIV positive serostatus but are not in care

By March 31, 2015, the network of funded agencies will document improvements in the following four areas:

1) Implementing evidence-based practices known to improve retention in HIV care
2) Identifying individuals who have never accessed care or who have lapsed in care and making active attempts to contact them
3) Providing linkage to care services for all those who request and qualify for such services
4) Providing short term emergency financial assistance to address financial barriers preventing linkage to care

D. Specific goals for people who are unaware of their HIV positive serostatus

By March 31, 2015, the network of funded agencies will document improvements in the following four areas:

1) Coordinating with or supporting HIV testing in a variety of settings;
2) Assuring that all people newly testing positive for HIV are offered linkage to care services;
3) Providing linkage to care services for all those who request and qualify for such services.

4) Providing short term emergency financial assistance to address financial barriers preventing linkage to care.

E. Proposed solutions for closing gaps in care

By March 31, 2015 improve access to affordable oral health care and integrate it into HIV primary care.

By March 31, 2015 screen all funded case management and outpatient/ambulatory care clients for mental health issues, and make active referrals as needed. Such screening shall be at intake and annually thereafter.

By March 31, 2015 screen all funded case management and outpatient/ambulatory care clients for substance use issues, and provide brief intervention, brief therapy, or referral to treatment, as needed. Such screening shall be at intake and annually thereafter.

F. Proposed solutions for addressing overlaps in care

As part of the needs assessment process, information about potential overlaps in care was gathered and analyzed. There were no overlaps in care identified. However, as health care reform proceeds, there will be a need to carefully monitor changing eligibility criteria to ensure that Ryan White funding is reserved for clients with no viable, alternative source of care and other services.

G. Coordinating efforts

CDPHE has implemented numerous efforts to coordinate with other providers of services for PLWH/A. These efforts will continue in future years, expanding when warranted.

In terms of the other Ryan White grantees in Colorado, representatives from Part B participate on multiple committee and collaborations at which coordination of effort is a central topic. Specifically, the Part B manager serves on the Denver TGA Planning Council and the Part A Leadership Committee and has actively participated in the Part A prioritization and allocation processes. Part B convenes a monthly HIV Care Advisory Committee which includes representation from Part A, Part C, Part D, and Part F grantees. There is also a HIV Collaborative Committee, convened by CDPHE at least six times per year, for the purpose of coordinating plans and needs assessment activities.

The monthly meetings of the HIV Care Advisory Committee are also an opportunity for other providers, including private providers, to coordinate efforts with Part B. In addition, CDPHE convenes a Medical Advisory Committee that meets at least twice per year and whose membership includes physicians in private practice. While the focus of the Medical Advisory Committee has been on ADAP, it does include broader topics on which coordination is needed, such as adherence and retention in HIV care.

The HIV Care and Treatment Program, which administers the Part B grant, is an integral part of the STI/HIV Section at CDPHE. The Section includes programs that administer partner notification, prevention with positives, and STD programming for the state. Therefore, joint planning on these issues is the norm, and there monthly program manager meeting at which coordination is the key topic.

Care and Treatment Program staff is highly coordinated with the state Medicaid authority, the Department of Health Care Policy and Finance (HCPF). The manager of the Care and Treatment program serves as a voting member of the HCPF Advisory Committee on the Buy In Plan for the Disabled. He also regularly attends, and is the CDPHE alternative voting member, for the HCPF Advisory Committee for Adults without Dependents.

In terms of substance abuse treatment programming, the manager of the Care and Treatment program is a voting member of the Steering Committee for Screening, Brief Intervention, and Referral to Treatment (SBIRT). This committee includes representation from the Department of Human Services (the SAMHSA block grant administrator) as well as representatives from public and private treatment facilitates. This has resulted in significant coordination of efforts to integrate substance abuse screening and treatment into HIV care and support service providers.

Coordination with the community health centers has improved, partly in preparation for health care reform. The program has provided Part B funding to five community health centers, three of which are federally qualified health centers. This has enabled the health centers to expand services in areas that other funding cannot cover, such as substance abuse screening and enhanced access to HIV-related specialty care. This funding has also strengthened the health center connections to Part B, resulting in better coordination. The Care and Treatment Manager and STI/HIV Section Chief have also made presentations to the Colorado Community Health Center Network, to better coordinate ongoing efforts overall.

The program executed a CMS Data Sharing Agreement which provides an ability to screen members for eligibility in Medicare. In addition, Colorado ADAP has improved interactions with Medicare in several other ways. ADAP staff has provided training at the local offices of CMS to assure that they are aware of the HIV Specific SPAP operating through ADAP. CMS has provided special access for ADAP staff to request information regarding its members in the federal data system. Colorado ADAP staff has attended three days of training provided by the State of Colorado Department of Regulatory Agencies (DORA) and are now registered agents of the State Health Insurance Assistance Program (SHIP), trained in Medicare enrollment, and able to call for restricted information through the State of Colorado's benefit management system**.**

Chapter III – How We Will Get There: Strategies, Plans, Activities, and Timeline

A. Overall strategy, plan, activities, and timeline

This section of Chapter III includes the overall strategy, plan, activities, and timeline for Colorado, including special populations, people who are aware of their HIV positive serostatus, and people who are unaware of their HIV positive serostatus. Sections B, C, and D of this chapter focus on more specific target populations.

Strategy Statement: Colorado will utilize staff and a network of community based clinics and other providers to implement and coordinate four priority service areas:

1) Increase the number of PLWH/A who are actively engaged in high quality HIV outpatient/ ambulatory care
2) Improve adherence rates among PLWH/A who have been prescribed an HIV-related medication regimen
3) Provide assistance with meeting other basic needs, while supporting movement toward self-empowerment
4) Increase the number of PLWH/A in Colorado who are actively screened for mental health and/or substance use issues and, when indicated, facilitate access to behavioral health services that meet their needs

Plan Components	Activities	Timeline
Plan Component 1: Increase the number of PLWH/A who are actively engaged in high quality HIV outpatient/ ambulatory care.	1A) Support client access to outpatient/ ambulatory care by contracting with clinical providers.	Contracts in place by April 1 each year.
	1B) Provide HIV testing in areas of the state where existing HIV testing resources are insufficient, and actively link people to HIV care when they test positive.	Contracts in place by April 1 each year.
	1C) Utilize state health department staff and contractors to identify clients who are not in care and actively link them to care.	Linkage to care duties assigned to at least 2 staff
	1D) Conduct a study of counties where the rates of concurrent HIV and AIDS diagnosis exceed the statewide average. This study will result in funding recommendations, including possible funding for expanded HIV testing.	Study completed by 3/31/13
	1E) Provide other early intervention services through regional contracts.	Contracts in place by April 1 each year.
	1F) Screen people for potential eligibility for Medicaid, Medicare, and other sources of third party payment and actively facilitate enrollment as appropriate.	Train case managers at least once per year. Contract with specialized enrollment providers by April 1 each year.

Plan Components	Activities	Timeline
	1G) Provide retention counseling in the context of outpatient ambulatory care, based on evidence-based practice.	Contracts in place by April 1 each year.
	1H) Develop and implement an online resource to assist PLWH/A to make informed choices about the care that best meets their needs.	Resource developed by 3/31/13 as part of larger CDPHE efforts to improve care for LGBT people.
Plan Component 2: Improve adherence rates among PLWH/A who have been prescribed an HIV-related medication regimen.	2A) Provide access to at least 22 Antiretroviral and at least 34 Non-antiretroviral HIV therapeutic treatments to eligible persons during the fiscal year through ADAP.	Continually review the formulary and revise as needed. Recertify clients every 6 months.
	2B) Utilize federal funding to provide Medicare Part D Prescription Drug Plan premium assistance to ADAP eligible persons.	On an ongoing basis, screen clients for potential Medicare eligibility and facilitate enrollment.
	2C) Utilize the Colorado State Pharmaceutical Assistance Program to assist clients with Medicare Part D "wrap around" (deductible, cost sharing, coverage gap, and catastrophic level assistance) utilizing State funding.	On an ongoing basis, enroll clients in the SPAP. Recertify clients every 6 months.
	2D) Maximize the utilization of ADAP funds and the benefits to clients through longer term Health Insurance Assistance. Provide financial assistance for eligible PLWH to maintain a continuity of health insurance or to receive medical benefits under a health insurance program.	On an ongoing basis, screen clients for potential private insurance eligibility and facilitate enrollment. Recertify clients every 6 months.
	2E) Provide adherence counseling, both in the context of other services and as a standalone service, based on evidence based practice.	Effective April 1 as part of contractual responsibilities.

Plan Component 3: Provide assistance with meeting other basic needs, while supporting movement toward self-empowerment.	3A) Provide a continuum of case management services at or through regional service providers outside the Denver TGA. This continuum includes medical case management, nonmedical case management, brief contact management, and maintenance outreach.	Contracts in place by April 1 each year.
	3B) Demonstrate that clients are receiving the appropriate type of case management, based on assessed acuity, with support for moving toward self-empowerment.	Effective April 1 as part of contractual responsibilities.
	3C) Support client access to oral health services, integrated with HIV primary care.	Contracts in place by April 1 each year.
	3D) Support client access to medical nutrition services, integrated with HIV primary care.	Contracts in place by April 1 each year.
	3E) Support client access to housing, food bank, transportation, and emergency financial assistance, with support for moving toward self-empowerment.	Contracts in place by April 1 each year.
	3F) Support client access to other support services, including linguistic services, referrals, legal services, health education/ risk reduction, and psychosocial support.	Contracts in place by April 1 each year.
	3G) Conduct a study on client self-empowerment, including factors that support self-empowerment. This study will include recommendations about standards of care, funding allocation, and other activities that could promote self-empowerment.	Study completed by December 31, 2012.
Plan Component 4: Increase the number of PLWH/A in Colorado who are actively screened for mental health and/or substance use issues and, when indicated, facilitate access to behavioral health services that meet their needs.	4A) Integrate screening and referral for substance use and mental health issues into case management, adherence counseling, outpatient/ambulatory care and other funded services consistent with the standards of care.	Contracts in place by April 1 each year.
	4B) Support client access to specialized mental health services.	Contracts in place by April 1 each year.
	4C) Support client access to substance abuse services, including brief intervention, brief therapy, and formal drug treatment.	Contracts in place by April 1 each year.

Plan Component 5: Improve the quality of funded services	**Clinical Quality Management Activities**	
	5A) Continue implementation of the Statewide Quality Plan, to include providing technical assistance to all funded contractors to undertake local quality improvement activities.	At least one instance of technical assistance per funded contractor per year.
	5B) Build the capacity of providers to improve retention in care and adherence rates.	At least one training offered per year.
	5C) At least annually, review and revise the standards for all funded services, utilizing recent data on evidence-based practices.	At least one open meeting and revision process per year.
	5D) Ensure that funded contractors are showing good faith progress implementing the quality expectations written into their contracts.	All contractors assessed annually.
	5E) Evaluate the implementation of the Statewide Quality Plan and make any necessary adjustments for the future.	At least one statewide meeting per year.
	ADAP Clinical Quality Management Activities	
	5F) Review and assess the current list of medications on the ADAP formulary regarding appropriateness and potential drug interactions or complications.	At least one review by the Medical Advisory Committee per year.
	5G) Review other available medications not currently on Colorado's formulary and new medications as they receive Food and Drug Administration approval for inclusion on Colorado's ADAP formulary.	At least one review by the Medical Advisory Committee per year.
	5H) At least annually, prioritize changes, reductions, or additions to the formulary, with advice from the Medical Advisory Committee and the HIV Care Advisory Committee.	At least one public meeting per year.
Plan Component 6: Provide enhanced services for special populations, including adolescents,	6A) Contract with at least one provider that targets services for adolescents.	Contracts in place by April 1 each year.
	6B) Evaluate the extent to which adolescents are reflected in care service data at the same proportion as they are represented in the Colorado epidemic.	Evaluation completed each year as part of the HRSA WICY report.

injection drug users, homeless people, transgender people, aging PLWH/A, people with a history of incarceration, and foreign-born PLWH/A	6C) As part of general substance use screening (Activity 4A), screen for recent or concurrent injection drug use, ensure that drug treatment referrals are appropriate for IDU at various levels of treatment readiness, and track follow up.	Contract requirements in place by April 1 each year.
	6D) Explore ways to integrate drug treatment for IDU in the context of other services, such as providing buprenorphine in outpatient/ambulatory care.	At least one meeting with the Medical Advisory Committee on this topic by March 31, 2013.
	6E) Evaluate the extent to which IDU are reflected in care service data at the same proportion as they are represented in the Colorado epidemic.	Evaluation completed each year as part of the RSR submission.
	6F) Evaluate intake, certification, and recertification processes do not pose additional barriers to homeless PLWH/A. Make adjustments where needed, as allowed by HRSA.	At least one meeting of the ADAP Work Group and the HIV Care Advisory Committee on this topic by March 31, 2014.
	6G) Support client access to housing, food bank, transportation, and emergency financial assistance, with support for moving toward self-empowerment. (See Activity 3E, above)	Contracts in place by April 1 each year.
	6H) Promote Colorado and national guidelines regarding appropriate health care for transgender PLWH/A.[13]	Incorporate this discussion in the annual review of the Standards of Care.
	6I) Evaluate the extent to which people age 45 and older are reflected in care service data at the same proportion as they are represented in the Colorado epidemic.	Evaluation completed each year as part of the RSR submission process.
	6J) At least annually, evaluate whether the ADAP formulary should be expanded to include medications needed by aging PLWH/A.	At least one annual meeting of the Medical Advisory Committee on this topic.
	6K) Evaluate intake, certification, and recertification processes do not pose additional barriers to PLWH/A with a history of incarceration	At least one meeting of the ADAP Work Group and the HIV Care Advisory Committee on this topic by March 31, 2014.

[13] National guidelines are at http://www.hivguidelines.org/clinical-guidelines/transgender/care-of-the-hiv-infected-transgender-patient/ Colorado is also developing guidelines as part of the LBGT Health Outcomes Planning Project (HOPP).

	6L) Contract with at least one provider that targets PLWH/A with a history of incarceration.	Contracts in place by April 1 each year.
	6M) Evaluate intake, certification, and recertification processes do not pose additional barriers to foreign-born PLWH/A	At least one meeting of the ADAP Work Group and the HIV Care Advisory Committee on this topic by March 31, 2014.
	6N) Conduct a study of delayed testing among foreign-born PLWH/A. This study will include recommendations about strategies that could improve or encourage earlier testing and linkage to care.	Study completed by March 31, 2014.

B. Specific strategy, plan, activities, and timeline for people who are <u>aware</u> of their HIV positive serostatus but are not in care

Strategy Statement: To meet the needs of people who are aware of their HIV positive serostatus but are not in care, Colorado will utilize staff and a network of community based clinics and other providers to implement and coordinate four priority service areas:

1) Increase the number of PLWH/A who are actively engaged in high quality HIV outpatient/ ambulatory care
2) Improve adherence rates among PLWH/A who have been prescribed an HIV-related medication regimen
3) Provide assistance with meeting other basic needs, while supporting movement toward self-empowerment
4) Increase the number of PLWH/A in Colorado who are actively screened for mental health and/or substance use issues and, when indicated, facilitate access to behavioral health services that meet their needs

Plan Components	**Activities**	**Timeline**
Plan Component 1: Increase the number of PLWH/A in Colorado who are actively engaged in high quality HIV outpatient/ ambulatory care.	1A) Support client access to outpatient/ ambulatory care by contracting with clinical providers.	Contracts in place by April 1 each year.
	1C) Utilize state health department staff and contractors to identify clients who are not in care and actively link them to care.	Linkage to care duties assigned to at least 2 staff
	1D) Provide other early intervention services through regional contracts.	Contracts in place by April 1 each year.
	1F) Screen people for potential eligibility for Medicaid, Medicare, and other sources of third party payment and actively facilitate enrollment as appropriate.	Train case managers at least once per year. Contract with specialized enrollment providers by April 1 each year.

Plan Components	Activities	Timeline
	1G) Provide retention counseling in the context of outpatient ambulatory care, based on evidence-based practice.	Contracts in place by April 1 each year.
	1H) Develop and implement an online resource to assist PLWH/A to make informed choices about the care that best meets their needs.	Resource developed by 3/31/13 as part of larger CDPHE efforts to improve care for LGBT people.
Plan Component 2: Improve adherence rates among Colorado's PLWH/A who have been prescribed an HIV-related medication regimen.	2A) Provide access to at least 22 Antiretroviral and at least 34 Non-antiretroviral HIV therapeutic treatments to eligible persons during the fiscal year through ADAP.	Continually review the formulary and revise as needed. Recertify clients every 6 months.
	2B) Utilize federal funding to provide Medicare Part D Prescription Drug Plan premium assistance to ADAP eligible persons.	On an ongoing basis, screen clients for potential Medicare eligibility and facilitate enrollment.
	2C) Utilize the Colorado State Pharmaceutical Assistance Program to assist clients with Medicare Part D "wrap around" (deductible, cost sharing, coverage gap, and catastrophic level assistance) utilizing state funding.	On an ongoing basis, enroll clients in the SPAP. Recertify clients every six months.
	2D) Maximize the utilization of ADAP funds and the benefits to clients through longer term Health Insurance Assistance. Provide financial assistance for eligible PLWH to maintain a continuity of health insurance or to receive medical benefits under a health insurance program.	On an ongoing basis, screen clients for potential private insurance eligibility and facilitate enrollment. Recertify clients every six months.
	2E) Provide adherence counseling, both in the context of other services and as a standalone service, based on evidence based practice.	Effective April 1 as part of contractual responsibilities.
Plan Component 3: Provide assistance with meeting other basic needs, while supporting movement toward self-empowerment.	3A) Provide a continuum of case management services at or through regional service providers outside the Denver TGA. This continuum includes medical case management, nonmedical case management, brief contact management, and maintenance outreach.	Contracts in place by April 1 each year.

Plan Components	Activities	Timeline
	3B) Demonstrate that clients are receiving the appropriate type of case management, based on assessed acuity, with support for moving toward self-empowerment.	Effective April 1 as part of contractual responsibilities.
Plan Component 4: Increase the number of PLWH/A who are actively screened for mental health and/or substance use issues and, when indicated, facilitate access to behavioral health services that meet their needs.	4A) Integrate screening and referral for substance use and mental health issues into case management, adherence counseling, outpatient/ambulatory care and other funded services consistent with the standards of care.	Contracts in place by April 1 each year.
	4B) Support client access to specialized mental health services.	Contracts in place by April 1 each year.
	4C) Support client access to substance abuse services, including brief intervention, brief therapy, and formal drug treatment.	Contracts in place by April 1 each year.
Plan Component 5: Improve the quality of funded services.	5B) Build the capacity of providers to improve retention in care and adherence rates.	Provide at least one training per year.

C. Specific strategy, plan, activities, and timeline for people who are <u>unaware</u> of their HIV positive serostatus

Strategy Statement: To meet the needs of people who are unaware of their HIV positive serostatus but are not in care, Colorado will utilize staff and a network of community based clinics and other providers to implement and coordinate HIV testing, linkage to care, and other early intervention services.

Plan Components	Activities	Timeline
Plan Component 1: Increase the number of PLWH/A who are actively engaged in high quality HIV outpatient/ ambulatory care.	1B) Provide HIV testing in areas of the state where existing HIV testing resources are insufficient, and actively link people to HIV care when they test positive.	Contracts in place by April 1 each year.
	1C) Utilize state health department staff and contractors to identify clients who are not in care and actively link them to care.	Linkage to care duties assigned to at least 2 staff
	1D) Conduct a study of counties where the rates of concurrent HIV and AIDS diagnosis exceed the statewide average. This study will result in funding recommendations, including possible funding for expanded HIV testing.	Study completed by 3/31/13

Plan Components	Activities	Timeline
	1D) Provide other early intervention services through regional contracts.	Contracts in place by April 1 each year.

D. Specific strategy, plan, activities, and timeline for special populations

1. Adolescents

Strategy Statement: To meet the needs of adolescents, CDPHE will contract for services from an agency with specific expertise, evaluate whether adolescents are receiving services in proportion to their representation in epidemiologic data, and adjust targets when needed.

Plan Components	Activities	Timeline
Provide enhanced services for adolescents.	6A) Contract with at least one provider that targets services for adolescents.	Contracts in place by April 1 each year.
	6B) Evaluate the extent to which adolescents are reflected in care service data at the same proportion as they are represented in the Colorado epidemic.	Evaluation completed each year as part of the HRSA WICY report.

2. Injection drug users

Strategy Statement: To meet the needs of IDU, CDPHE will provide appropriate screening and referrals, evaluate whether IDU are receiving services in proportion to their representation in epidemiologic data, and explore ways to better integrate drug treatment for IDU into outpatient/ambulatory care.

Plan Components	Activities	Timeline
Provide enhanced services for injection drug users.	6C) As part of general substance use screening (Activity 4A), screen for recent or concurrent injection drug use, ensure that drug treatment referrals are appropriate for IDU at various levels of treatment readiness, and track follow up.	Contract requirements in place by April 1 each year.
	6D) Explore ways to integrate drug treatment for IDU in the context of other services, such as providing buprenorphine in outpatient/ambulatory care.	At least one meeting with the Medical Advisory Committee on this topic by March 31, 2013.

Plan Components	Activities	Timeline
	6E) Evaluate the extent to which IDU are reflected in care service data at the same proportion as they are represented in the Colorado epidemic.	Evaluation completed each year as part of the RSR submission.

3. Homeless people

Strategy Statement: To meet the needs of homeless PLWH/A, CDPHE will provide access to services that address basic needs (particularly housing) and will evaluate whether intake, certification, and recertification processes pose additional barriers to homeless PLWH/A, , making adjustments as needed and allowed.

Plan Components	Activities	Timeline
Provide enhanced services for homeless people.	6F) Evaluate intake, certification, and recertification processes do not pose additional barriers to homeless PLWH/A. Make adjustments where needed, as allowed by HRSA.	At least one meeting of the ADAP Work Group and the HIV Care Advisory Committee on this topic by March 31, 2014.
	6G) Support client access to housing, food bank, transportation, and emergency financial assistance, with support for moving toward self-empowerment.	Contracts in place by April 1 each year.

4. Transgender people

Strategy Statement: To meet the needs of transgender PLWH/A, CDPHE will promote Colorado and guidelines regarding appropriate healthcare.

Plan Components	Activities	Timeline
Provide enhanced services for transgender people.	6H) Promote Colorado and national guidelines regarding appropriate health care for transgender PLWH/A.[14]	Incorporate this discussion in the annual review of the Standards of Care.

5. People with substance use (non-injection) and mental health issues

[14] National guidelines are at http://www.hivguidelines.org/clinical-guidelines/transgender/care-of-the-hiv-infected-transgender-patient/ Colorado is also developing guidelines as part of the LBGT Health Outcomes Planning Project (HOPP).

Strategy Statement: To meet the needs of PLWH/A with substance use and mental health issues, CDPHE will integrate screening, brief intervention, brief therapy, and active referral to formal treatment/counseling into standards of care for multiple services.

Plan Components	Activities	Timeline
Plan Component 4: Increase the number of PLWH/A who are actively screened for mental health and/or substance use issues and, when indicated, facilitate access to behavioral health services that meet their needs.	4A) Integrate screening and referral for substance use and mental health issues into case management, adherence counseling, outpatient/ambulatory care and other funded services consistent with the standards of care.	Contracts in place by April 1 each year.
	4B) Support client access to specialized mental health services.	Contracts in place by April 1 each year.
	4C) Support client access to substance abuse services, including brief intervention, brief therapy, and formal drug treatment.	Contracts in place by April 1 each year.

6. Aging people with HIV or AIDS

Strategy Statement: To meet the needs of aging PLWH/A, CDPHE will evaluate whether adolescents are receiving services in proportion to their representation in epidemiologic data (adjusting targets when needed) and will also evaluate whether the existing ADAP formulary adequately addresses the needs of this population.

Plan Components	Activities	Timeline
Provide enhanced services for aging PLWH/A.	6I) Evaluate the extent to which people age 45 and older are reflected in care service data at the same proportion as they are represented in the Colorado epidemic.	Evaluation completed each year as part of the RSR submission process.
	6J) At least annually, evaluate whether the ADAP formulary should be expanded to include medications needed by aging PLWH/A.	At least one annual meeting of the Medical Advisory Committee on this topic.

7. People with a history of incarceration

Strategy Statement: To meet the needs of PLWH/A with a history of incarceration, CDPHE will contract with a provider that demonstrates special expertise and will evaluate whether intake, certification, and recertification processes pose additional barriers to this population, making adjustments as needed and allowed.

Plan Components	Activities	Timeline
Provide enhanced services for people with a history of incarceration	6K) Evaluate intake, certification, and recertification processes do not pose additional barriers to PLWH/A with a history of incarceration	At least one meeting of the ADAP Work Group and the HIV Care Advisory Committee on this topic by March 31, 2014.
	6L) Contract with at least one provider that targets PLWH/A with a history of incarceration.	Contracts in place by April 1 each year.

8. Foreign-born PLWH/A

Strategy Statement: To meet the needs of foreign born PLWH/A, CDPHE will conduct a study to better understand factors that lead to delays in HIV testing and will allocate HIV testing resources, as appropriate.

Plan Components	Activities	Timeline
Provide enhanced services for foreign-born PLWH/A.	6M) Evaluate intake, certification, and recertification processes do not pose additional barriers to foreign-born PLWH/A	At least one meeting of the ADAP Work Group and the HIV Care Advisory Committee on this topic by March 31, 2014.
	6N) Conduct a study of delayed testing among foreign-born PLWH/A. This study will include recommendations about strategies that could improve or encourage earlier testing and linkage to care.	Study completed by March 31, 2014.

E. Activities to implement coordinating efforts with key programs

1) The Part B manager will continue to serve on the Denver TGA Planning Council and the Part A Leadership Committee and will participate in the Part A prioritization and allocation processes.
2) Part B will convene a monthly HIV Care Advisory Committee and will specifically encourage representation from Part A, Part C, Part D, and Part F grantees as well as physicians in private practice and community health center staff.
3) CDPHE will convene an HIV Collaborative Committee at least six times per year, for the purpose of coordinating plans and needs assessment activities.
4) CDPHE will convene a Medical Advisory Committee at least twice per year , with membership including physicians in private practice.
5) The HIV Care and Treatment Program will continue to meet at least monthly with CDPHE programs that administer partner notification, prevention with positives, and STD programming for the state.

6) Care and Treatment Program staff will serve on relevant committees regarding Medicaid, including the HCPF Advisory Committee on the Buy In Plan for the Disabled and the HCPF Advisory Committee for Adults without Dependents.
7) Care and Treatment program staff will serve on the Steering Committee for Screening, Brief Intervention, and Referral to Treatment (SBIRT) to better coordinate efforts to integrate substance abuse screening and treatment into HIV care and support service providers.
8) The Care and Treatment Program will continue to offer and provide funding to community health centers in order to expand services in areas that other funding cannot cover and to promote coordination.
9) The Care and Treatment Program will will maintain a CMS Data Sharing Agreement which provides an ability to screen members for eligibility in Medicare will continue to attend and offer training and maintain an ongoing relationship with the State Health Insurance Assistance Program (SHIP).

F. Healthy People 2020 objectives

Healthy People 2020 Chapter/Objective	**Comprehensive Plan provision**
HIV-4: Reduce the number of new AIDS cases among adolescents and adults.	Plan components to support earlier access to HIV care.
HIV–5: Reduce the number of new AIDS cases among adolescent and adult heterosexuals.	Plan components to support earlier access to HIV care.
HIV–6: Reduce the number of new AIDS cases among adolescent and adult men who have sex with men.	Plan components to support earlier access to HIV care.
HIV–7: Reduce the number of new AIDS cases among adolescents and adults who inject drugs.	Plan components to support earlier access to HIV care.
HIV–8: Reduce the number of perinatally acquired HIV and AIDS cases.	Plan components to support earlier access to HIV care.
HIV–9: (Developmental) Increase the proportion of new HIV infections diagnosed before progression to AIDS.	Programs to encourage early initiation of care, retention in care, and HAART through the ADAP.
HIV–10: (Developmental) Increase the proportion of HIV-infected adolescents and adults who receive HIV care and treatment consistent with current standards.	Plan components for ADAP, early intervention services, and outpatient/ambulatory care.
HIV–11 Increase the proportion of persons surviving more than 3 years after a diagnosis with AIDS.	Plan components for ADAP, case management, retention in care, and outpatient/ambulatory care.
HIV–12: Reduce deaths from HIV infection.	Plan components for ADAP, case management, retention in care, and outpatient/ambulatory care.

G. Statewide Coordinated Statement of Need

This Comprehensive Plan is fully consistent with the Statewide Coordinated Statement of Need. **Table x.x** summarizes the cross-cutting goals and priorities from the SCSN and the corresponding response in this Comprehensive Plan.

SCSN Provision	**Comprehensive Plan Reference**
Identify people who living with HIV and link them into care.	Plan Component 1
Bring into care those who know their status but are not receiving primary care or treatment.	Plan Component 1
Increase the proportion of people living with HIV or AIDS that become eligible for Medicare, Medicaid, or private health insurance.	Plan Component 1
Improve retention in medical care and adherence to medication regimens.	Plan Component 1
Screen more clients for mental health and substance use issues and provide or actively link clients to appropriate, client-centered behavioral health services.	Plan Component 4
Improve access to support services for people living with HIV or AIDS.	Plan Component 3
Assist and support people living with HIV or AIDS to enhance quality of life.	Plan Component 3
Address HIV stigma through enhanced peer-based services and outreach.	Plan Component 3
Promote quality improvement.	Plan Component 5
Promote cultural competence among service providers.	Plan Component 5
Address disparities in HIV care (including access to medications) through outreach and education.	Plan Component 3
Increase access to affordable oral health care and integrate it with HIV primary care.	Plan Component 3
Rethink housing resources for PLWH/A, including transition to self-sufficiency	Plan Component 3
Prepare for the impact of health care reform and ease the transition of clients to alternative sources of third-party payment as they become available	Plan Component 1

H. Adaptation to changes that will occur with the implementation of the Affordable Care Act (ACA)

The Care and Treatment Program will focus on three key areas as the ACA is implemented: benefit design; access, enrollment, and utilization; and monitoring of ongoing impact on PLWH/A.

Benefit design
As noted in this Plan, access to the full range of health care services is critical to the lives and well being of PLWH/A. As a result, there is new public health urgency to the expansion of Medicaid and the inclusion of specific health benefits, but the adequacy of Medicaid benefit packages is not a given. For example, behavioral health is currently considered an "optional service" for Medicaid, but many of the prioritized CDPHE health concerns are linked to, or exacerbated by, concurrent mental illness or substance abuse. A full pharmacy benefit is also considered "optional" under Medicaid, although public health recognizes the critical importance of full medication adherence, particularly for communicable diseases like HIV. These types of services will no longer be optional due to ACA, but the adequacy of coverage is not assured, particularly for services such as case management that are often very "watered down" for people covered by Medicaid or private insurance.

Access, enrollment, and utilization
Although access is being expanded, the expansion strategies may not be informed by public health priorities. For example, as a cost saving strategy, Medicaid expansion to adults without dependents is being delayed for persons residing in households above 10 percent of the federal poverty level. Similarly, Medicaid expansion to people with disabilities is being delayed by a very strict definition of a qualifying disability. By examining our own data, CDPHE may be able to make a public health case that restricted access will result in much more costly complications and hospitalizations for CDPHE-prioritized populations.

If enrollment processes are time-consuming and complicated, populations experiencing significant health disparities will not benefit from health care reform. CDPHE has learned that outreach and enrollment must be culturally competent and performed in collaboration with well respected and trusted organizations at the local and community level.

PLWH/A may be given access, be fully enrolled, and still not experience the benefit of health care if they do not utilize the benefits available to them. This will require the dissemination of evidence-based models to enhance early intervention in disease process and earlier help-seeking, such as screening, brief intervention and referral to treatment for substance use disorders.

Ongoing monitoring
As health care reform is implemented, positive impacts should begin to accrue for PLWH/A. The Care and Treatment Program will select evidence-based indicators of these public health impacts, collect data, monitor progress, and report results. This should both inform and build accountability for efforts in the other two health care reform strategic areas (i.e., benefit design and access, enrollment, and utilization).

I. National HIV/AIDS Strategy (NHAS) and addressing NHAS goals

This Comprehensive Plan is fully consistent with the National HIV/AIDS strategy and goals. **Table x.x** summarizes NHAS provisions from the chapter "Increasing Access to Care and Improving Health Outcomes for People Living with HIV" and the corresponding response in this Comprehensive Plan.

NHAS Provision	**Comprehensive Plan Reference**
Establish a seamless system to immediately link people to continuous and coordinated quality care when they are diagnosed with HIV.	Plan Component 1
Take deliberate steps to increase the number and diversity of available providers of clinical care and related services for people living with HIV.	Plan Component 1
Support people living with HIV with co-occurring health conditions and those who have challenges meeting their basic needs, such as housing.	Plan Component 3 and Plan Component 4

J. Strategy to respond to changes in the continuum of care due to state or local budget cuts

At present, Colorado does not foresee state or local budget cuts that would impact the goals in this Comprehensive Plan. If there are unforeseen budget cuts, Colorado would make strategic cuts in services in accordance with the priorities outlined in Chapter I, Section D of this Plan (Priorities for allocation of Ryan White Part B funds).

Chapter IV – How We Will Monitor Our Progress

A. Assessing the impact of the Early Identification of Individuals with HIV/AIDS initiative

Colorado Department of Public Health and Environment (CDPHE) will implement the ARIES data system for all providers of linkage to care services, including both contractors and state-delivered linkage to care. ARIES will allow CDPHE to evaluate the extent to which people are accessing HIV care initially, continuing in care, being offered voluntary linkage services, adhering to treatments, and ultimately accessing care on a regular basis.

B. Improving use of client level data

CDPHE will utilize ARIES as the central data system for all care and treatment services, except for ADAP (which uses a separate pharmacy benefit management system). Some providers will use ARIES directly; other providers will upload de-identified data into ARIES on a regular basis. Through ARIES, CDPHE will be able to track quality indicators across providers, continually gauging progress toward the objectives in the Statewide Quality Plan. When data includes client identifiers, ARIES will also facilitate cross agency "case review" on clients that appear to have dropped out of services.

C. Using data to monitor service utilization

Through ARIES, CDPHE will have sufficient access to client level data to monitor service utilization across the entire funded system as well as at the individual provider level.

D. Measuring clinical outcomes

CDPHE will provide funding and other resources to clinical providers to adopt systems such as Lab Tracker (AVIGA) that directly interfaces with electronic medical records. These systems, in turn, will export data into ARIES, which will allow CDPHE to measure clinical outcomes across clinical and nonclinical providers.