Unmet Need

Receiving regular medical care and adherence to treatment are key to successfully managing HIV disease (see section, "HIV Care Continuum"). Monitoring of HIV viral load (VL) and CD4 cell counts are part of routine medical care for persons living with HIV disease (PLWHA). VL should be measured at least every 3-4 months. For patients whose VL has been suppressed for >2–3 years and whose clinical and immunologic status is stable, this can be reduced to every six months (Aberg et al., 2013). CD4 cell counts should be monitored every 3–4 months. For patients on antiretroviral treatment (ART) whose CD4 counts have increased above the threshold for opportunistic infection risk, the counts can be monitored every 6–12 months (Aberg et al., 2013).

PLWHA are considered to have an unmet need for HIVrelated care (or, to be out of care) when there is no evidence of receiving regular HIV primary health care (Kahn, Janney, & Franks, 2003). To estimate receipt of primary health care, data indicating provision of any of the following three components of HIV primary care during a defined 12-month period are used: VL testing, a CD4 cell count, or ART prescription.

Illinois requires reporting of all VLs – both detectable and undetectable, all CD4 test results, and all subtype and sequence data from antiviral drug resistance testing. These data are reported to IDPH and maintained in eHARS (see section, "Data Sources"). Because a significant proportion of PLWHA receive antiretroviral medications through the state's AIDS Drug Assistance Program (ADAP), the ADAP database is used to provide data on persons receiving ART, as well as information on VLs and CD4 counts (see section, "AIDS Drug Assistance Program").

To estimate unmet need in Illinois in 2014, eHARS data for individuals who were diagnosed with HIV disease through December 31, 2013 and alive as of December 31, 2014 were utilized. Persons diagnosed in 2014 were excluded from this analysis because there are a significant number of newly diagnosed cases for which the defined 12-month period to obtain HIV primary medical care had not lapsed. As of Dec 31, 2014, there were 36,731persons diagnosed with HIV/AIDS in Illinois through December 31, 2013 and living as of December 31, 2014 (19,331 people living with AIDS (PLWA) and 17,400 people living with HIV (PLWH)). Calculation for estimates of unmet need are described in Table 1.

Unmet Need Estimation

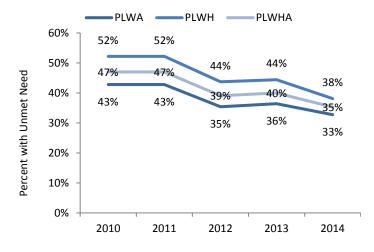
In 2014, approximately 12,963 of 36,731 PLWHA in Illinois or 35.3% had unmet need for care and treatment. Unmet need differs by disease status since care patterns vary based on illness severity (Kahn et al., 2003). Among persons living with HIV who had not progressed to AIDS (PLWH), this percentage was 38.1% while among PLWA it was 32.8%.

Table 1.	Unmet Need	Estimate Anal	vsis	. Illinois	2014
	onnet need	Estimate Ana	y 313	,	, 2014

	Number/ Percent	Data Source
Population Sizes		
A. Number of persons living with AIDS (PLWA), 2014	19,331	2014 eHARS
B. Number of persons living with HIV (PLWH non- AIDS/diagnosed), 2014	17,400	2014 eHARS
Care Patterns		•
C. Number/percent of PLWA received specified primary medical care services in 12-month period	13,000/ 67.3%	2014 VL or CD4 Lab Reports or Linked Service Providers
D. Number/percent of PLWH diagnosed, non- AIDS) received specified primary medical care services in 12-month period	10,768/ 61.9%	2014 VL or CD4 Lab Reports or Linked Service Providers
Calculated Results		
E. Number of PLWA did not receive primary medical services	6,331	
F. Number of PLWH (diagnosed, non-AIDS,) did not receive primary medical services.	6,632	
G. Total HIV+/diagnosed not receiving specified primary medical care services (estimate of unmet need)	12,963	

Rates of unmet need in Illinois declined among both PLWA and PLWH from 2010–2014, even as the statewide total of PLWHA increased.

Figure 1. Estimated Unmet Need among Persons Living with HIV Disease by Disease Progression and Year, Illinois, 2010–2014*

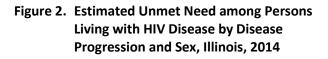


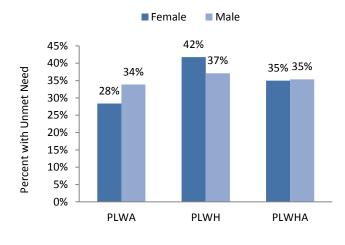
*Reporting sources varied over time, which may affect comparability of estimates across years

Source: Illinois Department of Public Health, 2015

Sex

Among PLWHA, unmet need was similar among males compared to females (35%). Among PLWH, unmet need was lower among males (37%) compared to females (42%). However, among PLWA, men were more likely than women to have unmet need (34% compared to 28%).



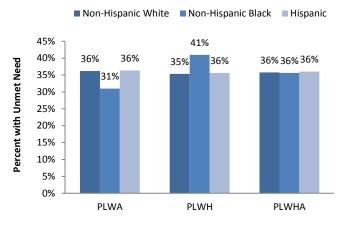


Source: Illinois Department of Public Health, 2015

Race/Ethnicity

Overall rates of unmet need for PLWHA were similar among non-Hispanic (NH) whites, NH blacks and Hispanic individuals. Among PLWA, NH blacks had lower rates of estimated unmet need compared to NH whites and Hispanics. However, among PLWH, NH blacks had higher estimated unmet need.

Figure 3. Estimated Unmet Need among Persons Living with HIV Disease by Disease Progression and Race/Ethnicity, Illinois, 2014

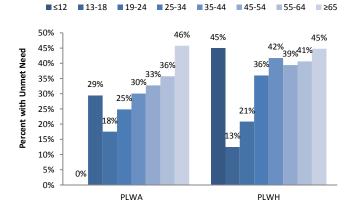


Source: Illinois Department of Public Health, 2015

Age

Among PLHA, unmet need generally increased with increasing age with adults ≥65 years having the highest unmet need (46%). However, youth 13–18 years had a higher rate of unmet need compared with young adults. Among PLWH, children ≤12 years and adults ≥65 years had the highest rates of unmet need (45%).

Figure 4. Estimated Unmet Need among Persons Living with HIV Disease by Disease Progression and Age, Illinois, 2014



Transmission Risk Category

The largest number of persons living with HIV disease in Illinois are MSM and this risk group makes up the largest number of persons with unmet need among both PLWA and PLWH. In 2014, there were 6,112 MSM with unmet need in Illinois. The risk group with the highest proportion of unmet need in 2014 were individuals whose risk factor for HIV infection was not reported or unknown. Among PLWHA in this transmission risk category, almost 70% had unmet need. The reasons for this higher level of unmet need are not clearly understood. PLWHA who were IDUs had the second highest rate of unmet need (44.1%).

Table 2. Estimated Unmet Need among Persons Living with HIV Disease by Disease Progression and Transmission Risk Category, Illinois, 2014

	Risk	Unmet Need	Met Need	Total	Percent Unmet Need
PLWA	MSM	3,146	6,544	9,690	32.5%
	Injection Drug Use (IDU)	1,042	1,571	2,613	39.9%
	MSM+IDU	376	827	1,203	31.3%
	Heterosexual	903	2,243	3,146	28.7%
	Transfusion/Hemophilia	25	67	92	27.2%
	Mother with, or at risk for HIV infection	49	105	154	31.8%
	Other	504	1,483	1,987	25.4%
	Risk not reported/Unknown	286	160	446	64.1%
	Total	6,331	13,000	19,331	32.8%
PLWH	MSM	2,966	6,553	9,519	31.2%
	Injection Drug Use	688	623	1,311	52.5%
	MSM+IDU	184	349	533	34.5%
	Heterosexual	908	1,521	2,429	37.4%
	Transfusion/Hemophilia	10	15	25	40.0%
	Mother with, or at risk for HIV infection	77	146	223	34.5%
	Other	1,112	1,281	2,393	46.5%
	Risk not reported/Unknown	687	280	967	71.04%
	Total	6,632	10,768	17,400	38.1%
PLWHA	MSM	6,112	13,097	19,209	31.8%
	Injection Drug Use	1,730	2,194	3,924	44.1%
	MSM+IDU	560	1,176	1,736	32.3%
	Heterosexual	1,811	3,764	5,575	32.5%
	Transfusion/Hemophilia	35	82	117	29.9%
	Mother with, or at risk for HIV infection	126	251	377	33.4%
	Other	1,616	2,764	4,380	36.9%
	Risk not reported/Unknown	973	440	1,413	68.9%
	Total	12,963	23,768	36,731	35.3%

Geography

The Chicago Region has the highest number of PLWHA though, the proportion with unmet need was almost same as the overall state average (35.4% vs. 35.3%).

The Jackson Region had the highest proportion of PLWHA with unmet need (40.9%).

Table 3.	Estimated Unmet Need among Persons Living with HIV Disease by Disease Progression and Region, Illinois,
	2014

	Region	Unmet Need	Met Need	Total	Percent Unmet Need
PLWA	Winnebago Region	179	327	506	35.4%
	Peoria Region	150	293	443	33.9%
	Sangamon Region	141	295	436	32.3%
	St. Clair Region	208	443	651	32.0%
	Jackson Region	69	122	191	36.1%
	Champaign Region	182	340	522	34.9%
	Collar Region	543	1,134	1,677	32.4%
	Suburban Cook Region	810	1,903	2,713	29.9%
	Chicago Region	4,049	8,143	12,192	33.2%
	Total	6,331	13,000	19,331	32.8%
PLWH	Winnebago Region	152	294	446	34.1%
	Peoria Region	163	225	388	42.0%
	Sangamon Region	168	251	419	40.1%
	St. Clair Region	282	422	704	40.1%
	Jackson Region	108	134	242	44.6%
	Champaign Region	198	253	451	43.9%
	Collar Region	535	938	1,473	36.3%
	Suburban Cook Region	760	1,238	1,998	38.0%
	Chicago Region	4,266	7,013	11,279	37.8%
	Total	6,632	10,768	17,400	38.1%
PLWHA	Winnebago Region	331	621	952	34.8%
	Peoria Region	313	518	831	37.7%
	Sangamon Region	309	546	855	36.1%
	St. Clair Region	490	865	1,355	36.2%
	Jackson Region	177	256	433	40.9%
	Champaign Region	380	593	973	39.1%
	Collar Region	1,078	2072	3,150	34.2%
	Suburban Cook Region	1,570	3141	4,711	33.3%
	Chicago Region	8,315	15,156	23,471	35.4%
	Total	12,963	23,768	36,731	35.3%

REFERENCES

- Aberg, J. A., Gallant, J. E., Ghanem, K. G., Emmanuel, P., Zingman, B. S., & Horberg, M. A. (2013).
 Primary Care Guidelines for the Management of Persons Infected With HIV: 2013 Update by the HIV Medicine Association of the Infectious Diseases Society of America. *Clinical Infectious Diseases*.
- Illinois Department of Public Health. (2015). Unpublished Data Analysis.
- Kahn, J. G., Janney, J., & Franks, P. E. (2003). A
 Practical Guide to Measuring Unmet Need for HIV-Related Primary Medical Care: Using the Unmet Need Framework. San Francisco, California: Institute for Health Policy Studies, University of California, San Francisco.