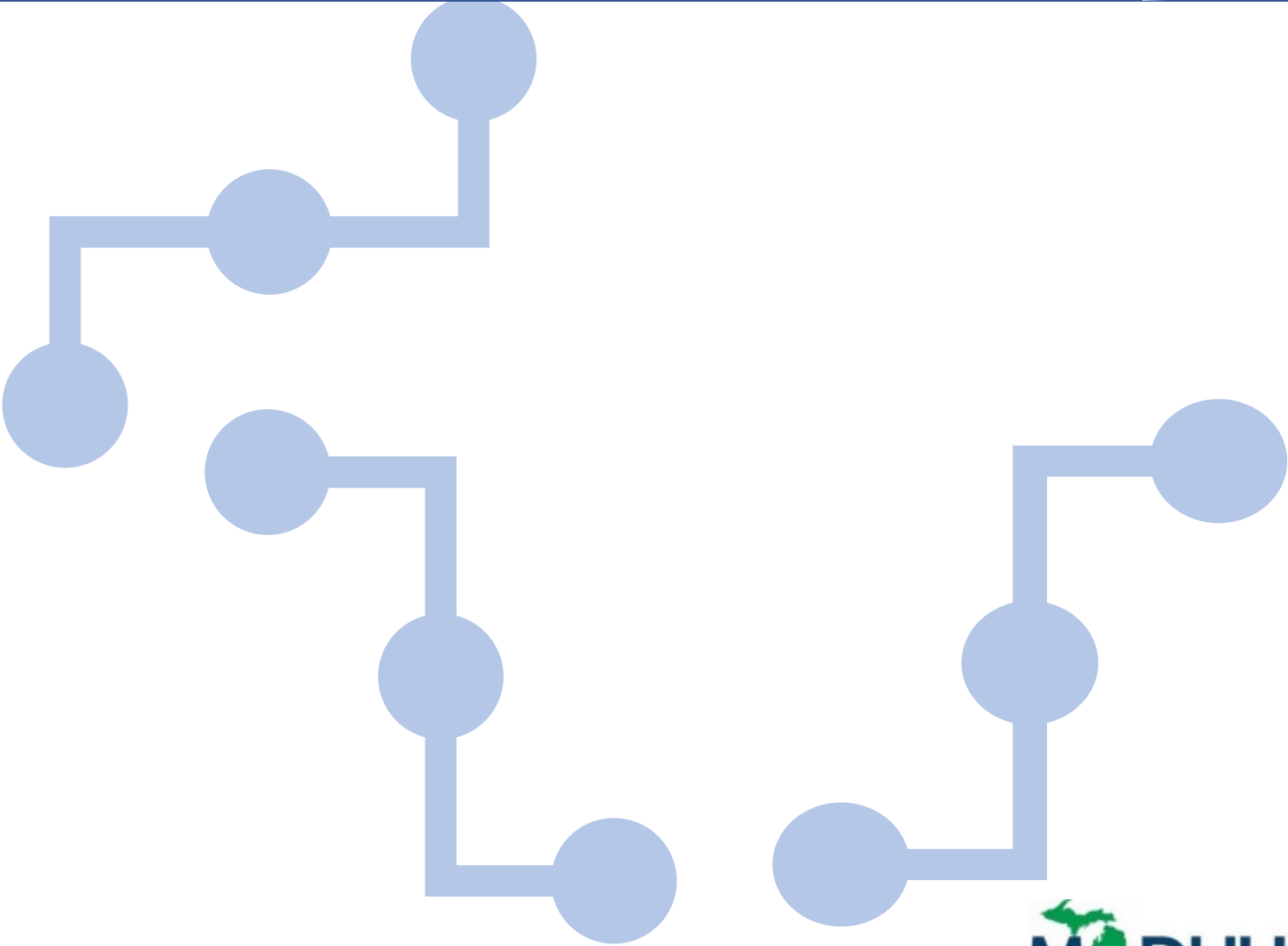


Michigan Department of Health and Human Services  
Bureau of Infectious Disease Prevention  
Division of HIV and STD Programs  
HIV/STD Surveillance and Epidemiology Section

# Link-Up Michigan Outcome Report, 2019

All data as of July 1, 2020



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## Overview

Michigan's Link-up program utilizes existing HIV surveillance data to assess the care status of persons living with HIV (PLWH) in Michigan. If it is determined that a PLWH in Michigan is not in care, Link-up program staff can then link that client to medical care and support services. The goal of Link-up Michigan is to increase viral suppression among PLWH by decreasing the number of interruptions to HIV care. As outlined in CDC's Undetectable=Untransmissible (U=U) guidance, maintaining viral suppression can improve an individual's HIV prognosis and prevent HIV transmission to others.

The Link-up Michigan report contains data for cases closed in 2019. However, certain jurisdictions have been working with the Link-up Michigan program longer than others. This may be reflected in the number of completed investigations for each jurisdiction. As Link-up Michigan continues to expand and improve, the number of completed investigations are expected to rise.

## Key Definitions

### The Basics

**New Diagnoses:** The number of cases newly diagnosed over a given period of time, usually a year. In HIV surveillance new diagnoses do not necessarily represent new infections as newly diagnosed persons may have been infected for many years prior to diagnosis.

**Prevalence:** The total number of persons living with HIV

### The following measures are displayed in this report:

**Count:** The number of persons Not in HIV Care and prevalent cases.

**Rate:** The number of persons that are Not in HIV Care per 1,000 persons living with HIV during the given year (Count / PLWH X 1,000)

### Risk Categories and Hierarchy

**MSM:** Men who have sex with men

**PWID:** Persons who inject drugs

**Heterosexual:** Males: men who are not MSM or PWID and reported sex with an HIV positive female or a female at risk (includes CDC and HRSA definitions)

Females: females who are not a PWID and reported sex with a male

**Perinatal:** The transmission of HIV from mother to child during pregnancy, labor/delivery, or breast feeding.

**Other:** Includes transmission such as blood products or organ transplants

### Link-up Michigan terminology used in this report:

**Not in Care (NIC):** A PLWH who has never received HIV care (Never Linked) or has not received HIV care in the past 15 months (Out of Care)

**Never Linked:** A PLWH who has never received HIV care (an HIV lab) or has only received HIV care within the first 8 days of diagnosis

**Out of Care:** A PLWH who has not received HIV care in the past 15 months

**Linked to Care:** A NIC PLWH who has accepted linkage to HIV care/support services

**In Care:** PLWH who were presumed to be NIC, but after further investigation, were found to have received HIV care in the 15 months prior to being identified as NIC

**Out State:** Includes all Link-up Michigan jurisdictions except the city of Detroit

## Demographic Information for Not in Care Michigan Residents 18 or Older, 2019

Demographic Group	Not in Care*			PLWH in Michigan, 2019	
	Count	%	Rate per 1,000	Count	%
Total	2233	100%	135	16525	100%
<b>Race/Ethnicity</b>					
Black	1434	64%	157	9162	55%
Hispanic	169	8%	170	996	6%
White	557	25%	98	5684	34%
Other	73	3%	107	682	4%
Asian/NH/PI	21	1%	125	168	1%
Am Indian/AN	8	<1%	68	117	1%
Multi/Other	44	2%	111	397	2%
<b>Gender and Race</b>					
Male	1745	78%	135	12897	78%
Black	1079	48%	163	6633	40%
Hispanic	141	6%	176	799	5%
White	468	21%	95	4934	30%
Other	57	3%	107	531	3%
Female	488	22%	135	3627	22%
Black	355	16%	140	2529	15%
Hispanic	28	1%	142	197	1%
White	89	4%	119	750	5%
Other	16	1%	106	151	1%
<b>Risk</b>					
MSM	998	45%	108	9235	56%
PWID	201	9%	209	960	6%
MSM/PWID	73	3%	112	651	4%
Heterosexual	421	19%	132	3191	19%
Males	128	6%	179	717	4%
Females	293	13%	118	2474	15%
Other	8	<1%	154	52	<1%
Perinatal	15	1%	116	129	1%
Undetermined	517	23%	224	2306	14%
<b>Current age</b>					
18-19	5	<1%	67	75	<1%
20-24	76	3%	122	624	4%
25-29	246	11%	149	1649	10%
30-39	479	21%	145	3301	20%
40-49	486	22%	143	3410	21%
50-59	592	27%	126	4703	28%
60+	349	16%	126	2762	17%
<b>NIC Status</b>					
Never Linked	56	3%			
Out of Care	2177	97%			

\*NIC demographics are associated with first NIC list generated that calendar year

Outcomes of Link-up Michigan Investigations by Jurisdiction, 2019

	Count*	%		Count*	%
<b>Statewide Totals</b>			<b>Central Michigan</b>		
Accepted linkage	76	11%	Accepted linkage	0	0%
Deceased	36	5%	Deceased	3	11%
In care	124	18%	In care	6	22%
Institutionalized	4	1%	Institutionalized	0	0%
LDNE	19	3%	LDNE	0	0%
OJ	61	9%	OJ	7	26%
Out of state	82	12%	Out of state	8	30%
Not Positive	10	1%	Not Positive	2	7%
Refused services	50	7%	Refused services	0	0%
Unable to locate	174	25%	Unable to locate	1	4%
Other	47	7%	Other	0	0%
Total	683	100%	Total	27	100%
Total NIC **	2233		Total NIC**	75	
<b>Detroit</b>			<b>Genesee County</b>		
Accepted linkage	31	19%	Accepted linkage	4	20%
Deceased	6	4%	Deceased	3	15%
In care	33	21%	In care	0	0%
Institutionalized	2	1%	Institutionalized	2	10%
LDNE	1	1%	LDNE	2	10%
OJ	1	1%	OJ	1	5%
Out of state	8	5%	Out of state	2	10%
Not Positive	1	1%	Not Positive	1	5%
Refused services	12	8%	Refused services	2	10%
Unable to locate	54	34%	Unable to locate	0	0%
Other	11	7%	Other	3	15%
Total	160	100%	Total	20	100%
Total NIC**	752		Total NIC**	122	
<b>Calhoun County</b>			<b>Ingham County</b>		
Accepted linkage	0	0%	Accepted linkage	0	0%
Deceased	0	0%	Deceased	1	9%
In care	6	43%	In care	4	36%
Institutionalized	0	0%	Institutionalized	0	0%
LDNE	0	0%	LDNE	0	0%
OJ	0	0%	OJ	1	9%
Out of state	0	0%	Out of state	3	27%
Not Positive	0	0%	Not Positive	0	0%
Refused services	1	7%	Refused services	0	0%
Unable to locate	7	50%	Unable to locate	0	0%
Other	0	0%	Other	2	18%
Total	14	100%	Total	11	100%
Total NIC**	25		Total NIC**	51	

Upon closure of a Link-up Michigan investigation each jurisdiction must enter an outcome for that investigation. Below are explanations of each Link-up Michigan outcome:

**Accepted Linkage (to Care):** The client has agreed to be linked back into care.

**Deceased:** Through investigation the client has been determined to be deceased.

**In Care:** Through investigation it has been determined that the client is in care.

**Institutionalized:** Through investigation the client has been determined to currently be incarcerated.

**Likely does not exist (LDNE):** Through investigation it has been determined the client may have tested under a pseudonym or may be a duplicate of an existing case. All LDNE cases are verified by HIV surveillance.

**Outside Jurisdiction (OJ):** Through investigation the client has been determined to reside in another county in Michigan.

**Out of State:** Through investigation the client has been determined to reside outside the state of Michigan.

**Not Positive:** Through investigation it has been determined the client is not HIV positive. All Not Positive individuals are verified by HIV Surveillance.

**Refused Services:** The client has either requested to be contacted later or never be contacted again.

**Other:** The outcome of the investigation does not fit into the previous categories.

\*The specific outcomes noted in the counts for each jurisdiction apply to those clients with closed investigations in 2019

\*\*The number of clients NIC are provided to each jurisdiction twice per year. The report details the first NIC list in April of 2019

## Outcomes of Link-up Michigan Investigations by Jurisdiction, 2019 Continued

	Count*	%		Count*	%		Count*	%
<b>Jackson County</b>			<b>Macomb County</b>			<b>Van Buren-Cass Counties</b>		
Accepted linkage	1	14%	Accepted linkage	2	4%	Accepted linkage	0	0%
Deceased	0	0%	Deceased	3	6%	Deceased	1	17%
In care	6	86%	In care	9	19%	In care	1	17%
Institutionalized	0	0%	Institutionalized	0	0%	Institutionalized	0	0%
LDNE	0	0%	LDNE	1	2%	LDNE	0	0%
OJ	0	0%	OJ	2	4%	OJ	0	0%
Out of state	0	0%	Out of state	2	4%	Out of state	3	50%
Not Positive	0	0%	Not Positive	1	2%	Not Positive	0	0%
Refused services	0	0%	Refused services	11	23%	Refused services	1	17%
Unable to locate	0	0%	Unable to locate	16	34%	Unable to locate	0	0%
Other	0	0%	Other	0	0%	Other	0	0%
Total	7	100%	Total	47	100%	Total	6	100%
Total NIC**	27		Total NIC **	166		Total NIC **	18	
<b>Kent County</b>			<b>Marquette County</b>			<b>Washtenaw County</b>		
Accepted linkage	5	7%	Accepted linkage	0	0%	Accepted linkage	0	0%
Deceased	3	4%	Deceased	0	0%	Deceased	1	4%
In care	15	22%	In care	1	20%	In care	1	4%
Institutionalized	0	0%	Institutionalized	0	0%	Institutionalized	0	0%
LDNE	0	0%	LDNE	0	0%	LDNE	10	37%
OJ	1	1%	OJ	0	0%	OJ	7	26%
Out of state	13	19%	Out of state	4	80%	Out of state	1	4%
Not Positive	1	1%	Not Positive	0	0%	Not Positive	0	0%
Refused services	2	3%	Refused services	0	0%	Refused services	0	0%
Unable to locate	28	41%	Unable to locate	0	0%	Unable to locate	3	11%
Other	0	0%	Other	0	0%	Other	4	15%
Total	68	100%	Total	5	100%	Total	27	100%
Total NIC **	128		Total NIC **	12		Total NIC **	68	
<b>Kalamazoo County</b>			<b>Oakland County</b>			<b>Wayne County</b>		
Accepted linkage	0	0%	Accepted linkage	7	5%	Accepted linkage	26	20%
Deceased	1	6%	Deceased	7	5%	Deceased	7	5%
In care	3	19%	In care	19	13%	In care	20	15%
Institutionalized	0	0%	Institutionalized	0	0%	Institutionalized	0	0%
LDNE	0	0%	LDNE	4	3%	LDNE	1	1%
OJ	1	6%	OJ	18	13%	OJ	22	17%
Out of state	7	44%	Out of state	19	13%	Out of state	12	9%
Not Positive	0	0%	Not Positive	0	0%	Not Positive	4	3%
Refused services	0	0%	Refused services	14	10%	Refused services	7	5%
Unable to locate	3	19%	Unable to locate	41	29%	Unable to locate	21	16%
Other	1	6%	Other	14	10%	Other	12	9%
Total	16	100%	Total	143	100%	Total	132	100%
Total NIC **	53		Total NIC **	225		Total NIC **	296	

There was no available data for the following counties in 2019:Allegan, Muskegon, Saginaw, State managed counties

## Demographic of Link-up Clients Confirmed to have Accepted Care or Confirmed In Care, 2019

	Accepted Linkage to Care				In Care							
	Detroit		Out state		Detroit		Out State					
	Count	%	Count	%	Count	%	Count	%				
Total	18	100%	36	100%	28	100	65	100				
Gender and Race												
Male	13	72%	28	78%	25	89%	47	72%				
Black	13	72%	16	44%	22	79%	25	38%				
Hispanic	0	0%	2	6%	1	4%	2	3%				
White	0	0%	10	28%	2	7%	20	31%				
Other	0	0%	0	0%	0	0%	0	0%				
Female	5	28%	8	22%	3	11%	17	26%				
Black	5	28%	7	19%	1	4%	8	12%				
Hispanic	0	0%	0	0%	1	4%	1	2%				
White	0	0%	1	3%	0	0%	7	11%				
Other	0	0%	0	0%	1	4%	1	2%				
Risk												
MSM	9	50%	19	53%	15	54%	33	51%				
PWID	0	0%	3	8%	3	11%	2	3%				
MSM/PWID	0	0%	1	3%	1	4%	2	3%				
Heterosexual	5	28%	8	22%	2	7%	14	22%				
Males	1	6%	1	3%	1	4%	3	5%				
Females	4	22%	7	19%	1	4%	11	17%				
Other	0	0%	0	0%	0	0%	0	0%				
Perinatal	0	0%	0	0%	0	0%	0	0%				
Undetermined	4	22%	5	14%	7	25%	13	20%				
Current age												
18-19	0	0%	0	0%	0	0%	0	0%				
20-24	2	11%	5	14%	6	21%	0	0%				
25-29	4	22%	3	8%	3	11%	7	11%				
30-39	4	22%	9	25%	7	25%	17	26%				
40-49	5	28%	6	17%	5	18%	17	26%				
50-59	2	11%	7	19%	2	7%	17	26%				
60+	1	6%	6	17%	5	18%	6	9%				
Linkage time												
Labs after linkage	16	89%	8	22%								
<1 Month	4	22%	3	8%								
<3 months	4	22%	1	3%								
3+ months	8	44%	4	11%								
Labs before linkage	2	11%	28	78%								
<1 Month	1	6%	8	22%								
<3 months	0	0%	6	17%								
3+ months	1	6%	14	39%								
Care Status												
Confirmed in care									28	85%	65	71%
*No care labs					5	15%	26	29%				

\*These individuals are not included in the demographics. Despite being dispositioned as in care, no evidence of care is present.

### Care Engagement and Viral Suppression Outcomes for Clients who Accepted Linkage to Care Services by Region

The following charts show outcomes for individuals that accepted linkage to care after Link-up intervention. Some Link-up clients had HIV lab tests performed prior to the date they accepted linkage (Labs before linkage). This could imply the clients were linked to care prior to Link-up intervention. However, outstate Link-up outreach workers were operating under the assumption they needed to wait until labs were present before closing out a client. Statewide Link-up data entry guidelines have since been amended. In addition, all clients who had "labs before linkage" had multiple contacts with local linkage specialists prior to those labs being completed. Additionally, NIC clients who had confirmed labs after their linkage have the 'Linked' prefix in front of their suppression outcome, those with labs before linkage do not have the "Linked" prefix.

Care Engagement and Viral Suppression Outcomes for Clients who Accepted Linkage to Care Services, Detroit, 2019

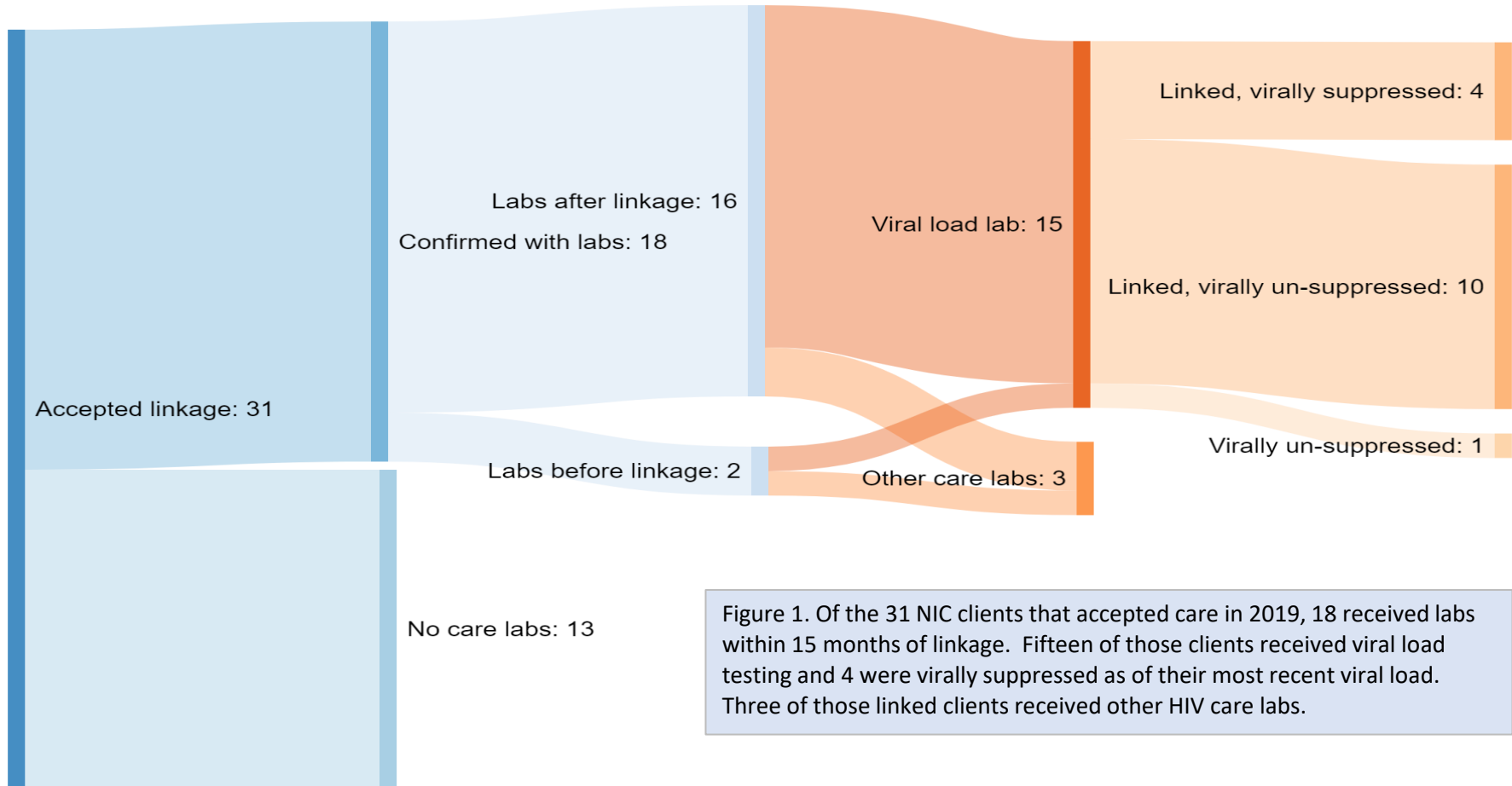


Figure 1. Of the 31 NIC clients that accepted care in 2019, 18 received labs within 15 months of linkage. Fifteen of those clients received viral load testing and 4 were virally suppressed as of their most recent viral load. Three of those linked clients received other HIV care labs.

Care Engagement and Viral Suppression Outcomes for Clients who Accepted Linkage to Care Services, Outstate, 2019

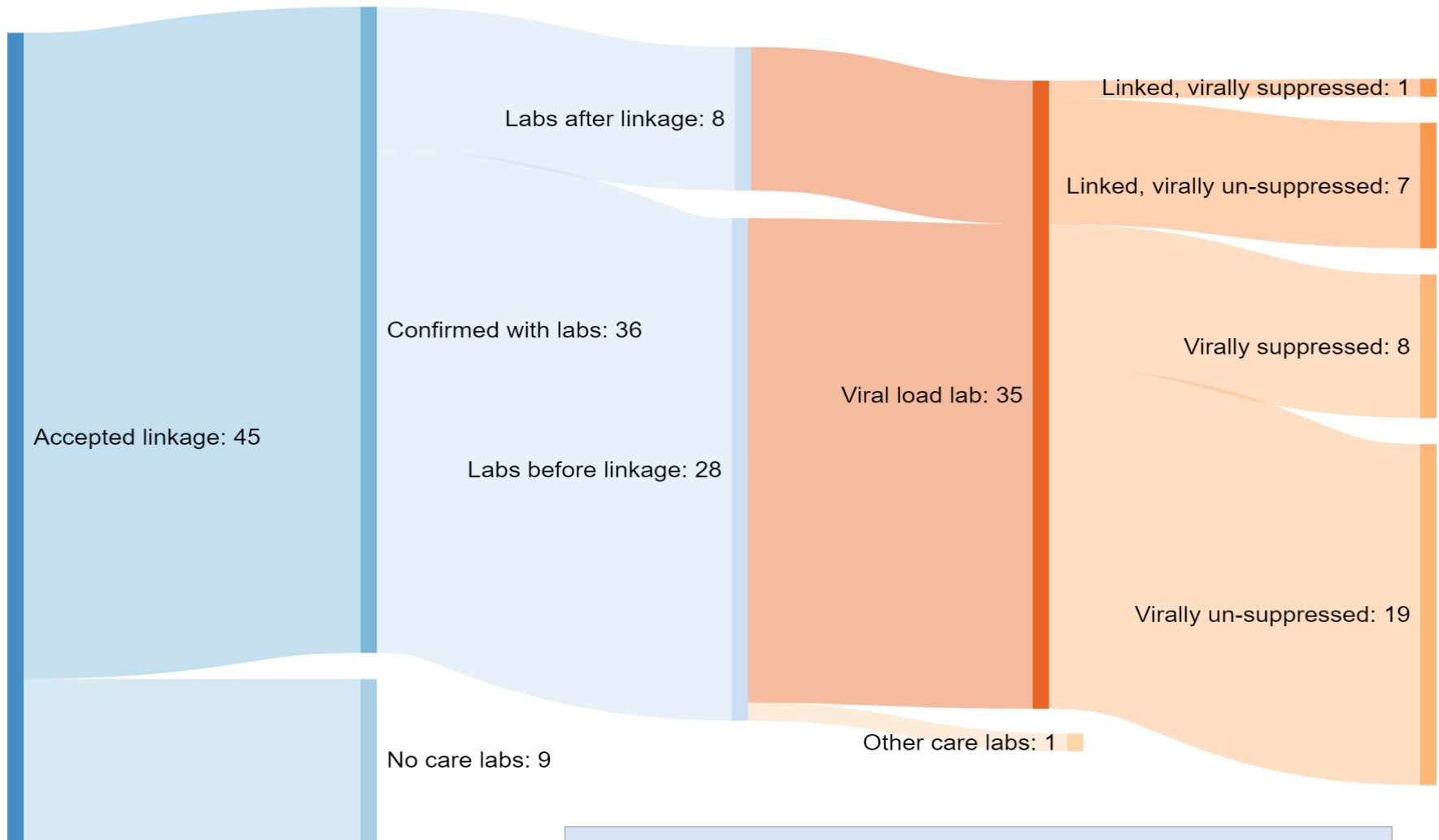


Figure 2. Of the 45 NIC clients that accepted care in 2019, 36 received labs within 15 months of linkage. 35 of those clients received viral load testing and 8 were virally suppressed as of their most recent viral load. One of the linked clients received other HIV care labs.



Phone calls, Voice Messages and Letters Sent to Achieve Linkage for NIC clients in Detroit, 2019

Figure 3: The graph demonstrates the number of voicemails left in order to link NIC clients back into care. The average number of voicemails to link a client was 3. For the purposes of this graph the number of linked clients are not limited to those with confirmed labs after linkage. D2C workers still expended the same amount of investigation and linkage time regardless of laboratory confirmation.

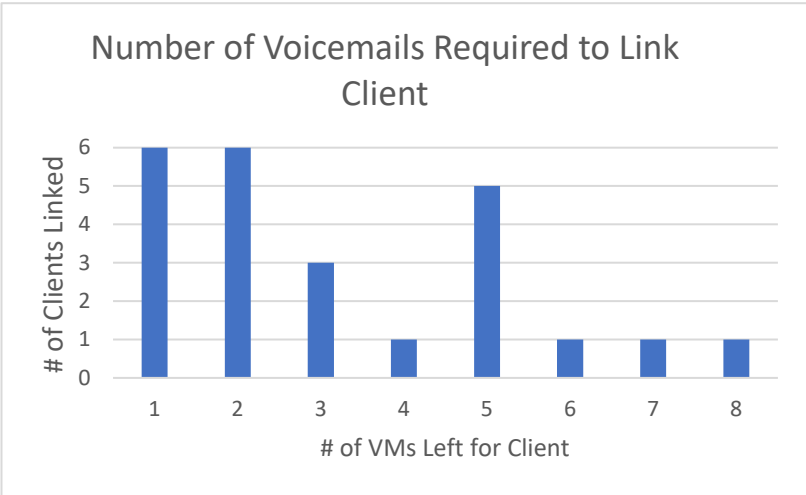


Figure 4: The graph demonstrates the number of phone calls made in order to link NIC clients back into care. The average number of phone calls to link a client was 11. For the purposes of this graph the number of linked clients are not limited to those with confirmed labs after linkage. D2C workers still expended the same amount of investigation and linkage time regardless of laboratory confirmation.

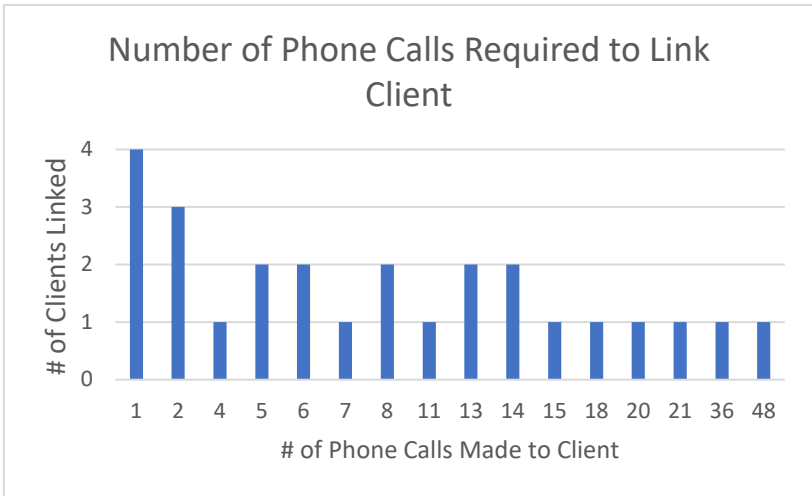
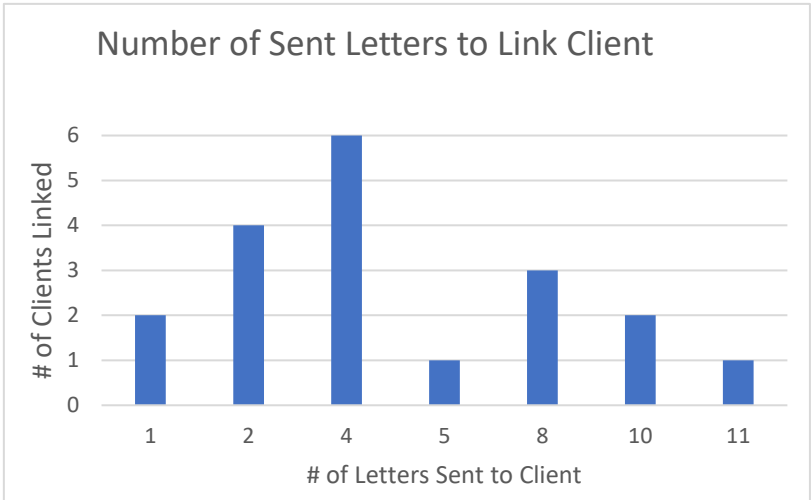


Figure 5: The graph demonstrates the number of letters left in order to link NIC clients back into care. The average number of letters to link a client was 5. For the purposes of this graph the number of linked clients are not limited to those with confirmed labs after linkage. D2C workers still expended the same amount of investigation and linkage time regardless of laboratory confirmation.



Outstate data will be available in the 2020 report

Barriers to Receiving HIV Care In Detroit

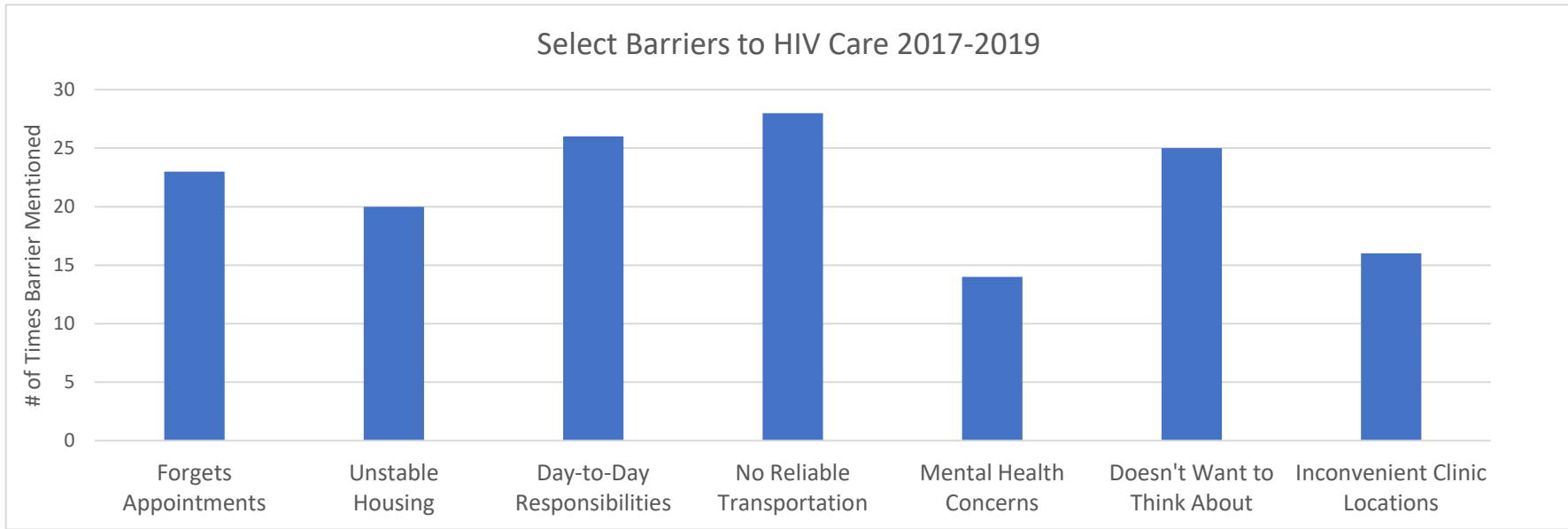
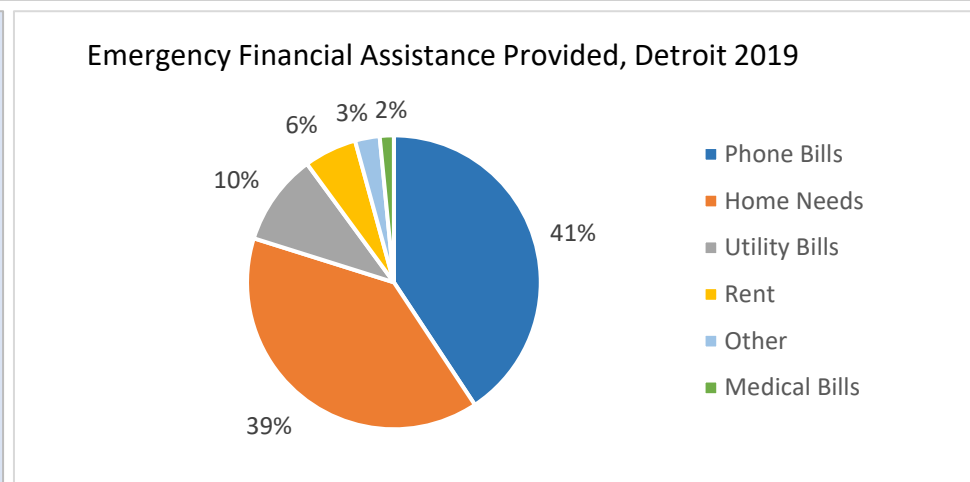


Figure 6: From 2017 to 2019 the Link-up Detroit team discussed barriers to care with 59 out of care individuals. A list of 21 barriers\* were read to the participants. Their answers to each individual barrier were recorded. These 7 barriers to care were named by at least 25% of the 59 not in care clients.

Figure 7: In 2019 the Link-up Detroit team tracked emergency financial services provided to PLWH who needed assistance. In 2019, 258 requests for aid were processed by the Link-up team. These clients were either referred to the Link-up program by other agencies or contacted during routine Link up outreach. While not a direct measure of barriers to care, these data show other needs of PLWH. The Home Needs section, which accounts for 39% of all the financials assistance provided in 2019, includes many requests for mattresses and other basic elements of a home. These financial burdens may contribute to the barriers to care PLWH experience. However, further investigation is needed.



\*Other barriers include: Inconvenient Clinic Hours, Felt Good/No Need for Care, Prefers Alternative Therapy, Language Barrier, Could not Find a Doctor, Incarcerated, Felt too Sick, Faith in God - Doesn't need medication, No Health Insurance, Wait too long/Couldn't get appointment, Insured, but cost too high, Drinking/Drug Use, Not Sure about HIV Positive status, Don't Like/Trust Doctor