



## Out of Care HIV/HCV Co-Infected Persons into HCV Treatment

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# This Data to Care approach

# successfully identified coinfectd

# out of care patients, provided them

# education, and directed them back

# to clinical care.



Project App for Android Phones



Project App for iPhones

### BACKGROUND:

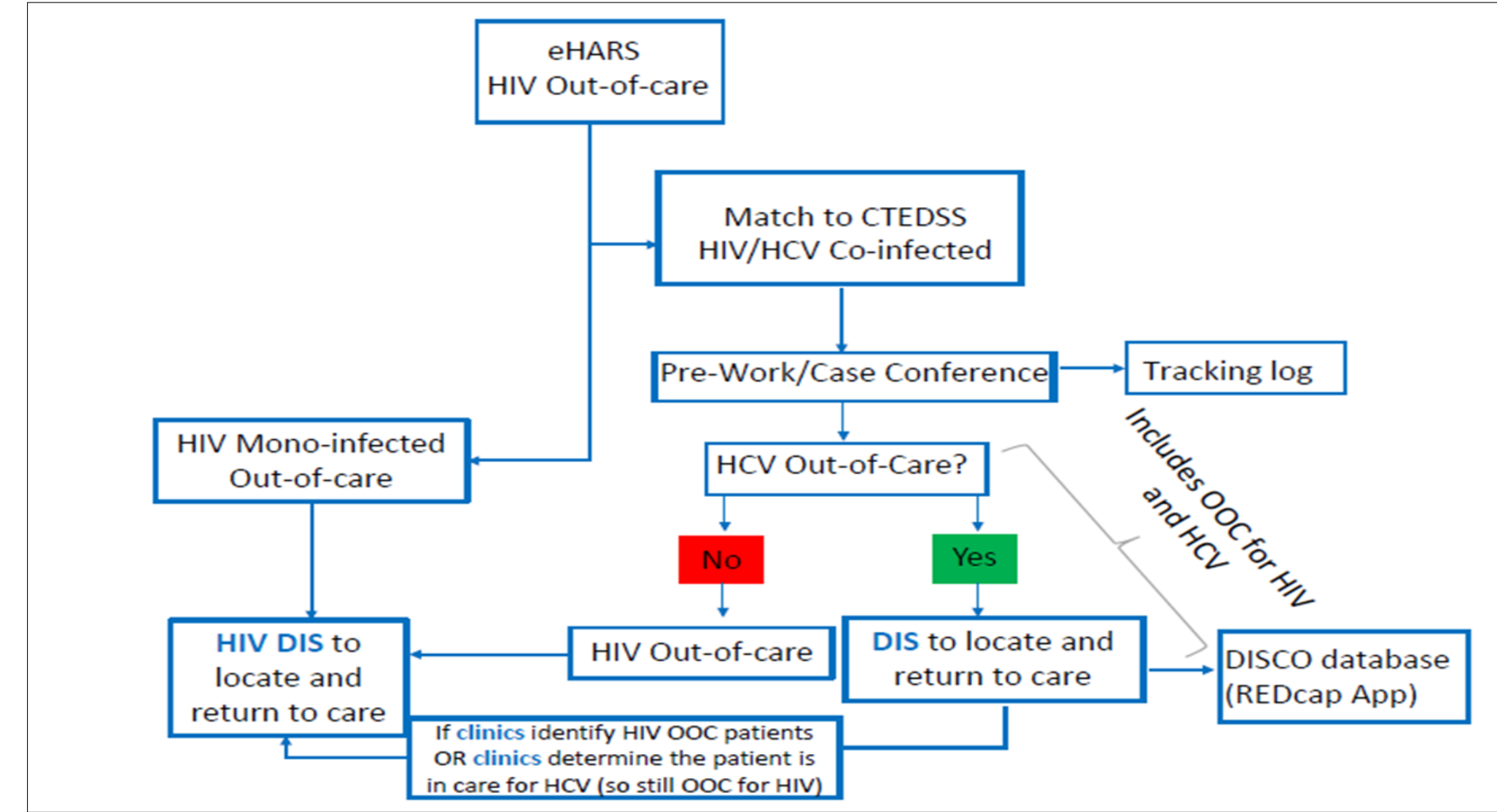
- The WHO has set an HCV elimination goal of curing 80% of chronically infected persons
- Persons with HIV/HCV coinfections are a target population for HCV elimination
- Patients who are out of care (OOC) prevent achievement of this goal
- Data to Care methodology using a health department partnership is an important tool to promote reengagement

**METHODS:** OOC Lists (based on HIV OOC) are generated using data from two CT surveillance databases, eHARS (HIV) and CTESS (HCV). Two OOC cohorts were studied for 3 CT counties (New Haven, Hartford, and Fairfield):

Table 1: Out of care (OOC) case definition criteria

Criteria	12 Month OOC	18 Month OOC
Alive	✓	✓
CT Resident	✓	✓
HIV Dx Prior to 2018	✓	✓
Lab results in eHARS from 2015-2019	✓	✓
Lab results in eHARS from 2009-2019	✓	✓
No HIV labs between October 2018 and October 2019	✓	✓
No HIV labs between December 2017 and June 2019	✓	✓

Figure 1: Project data flow



- DIS were used to reengage eligible patients as outlined above - Key outcomes include:
  - Number successfully contacted by DIS
  - Number successfully reengaged (made/kept appointment)

Figure 2: Reengagement results for 12 month and 18 month OOC

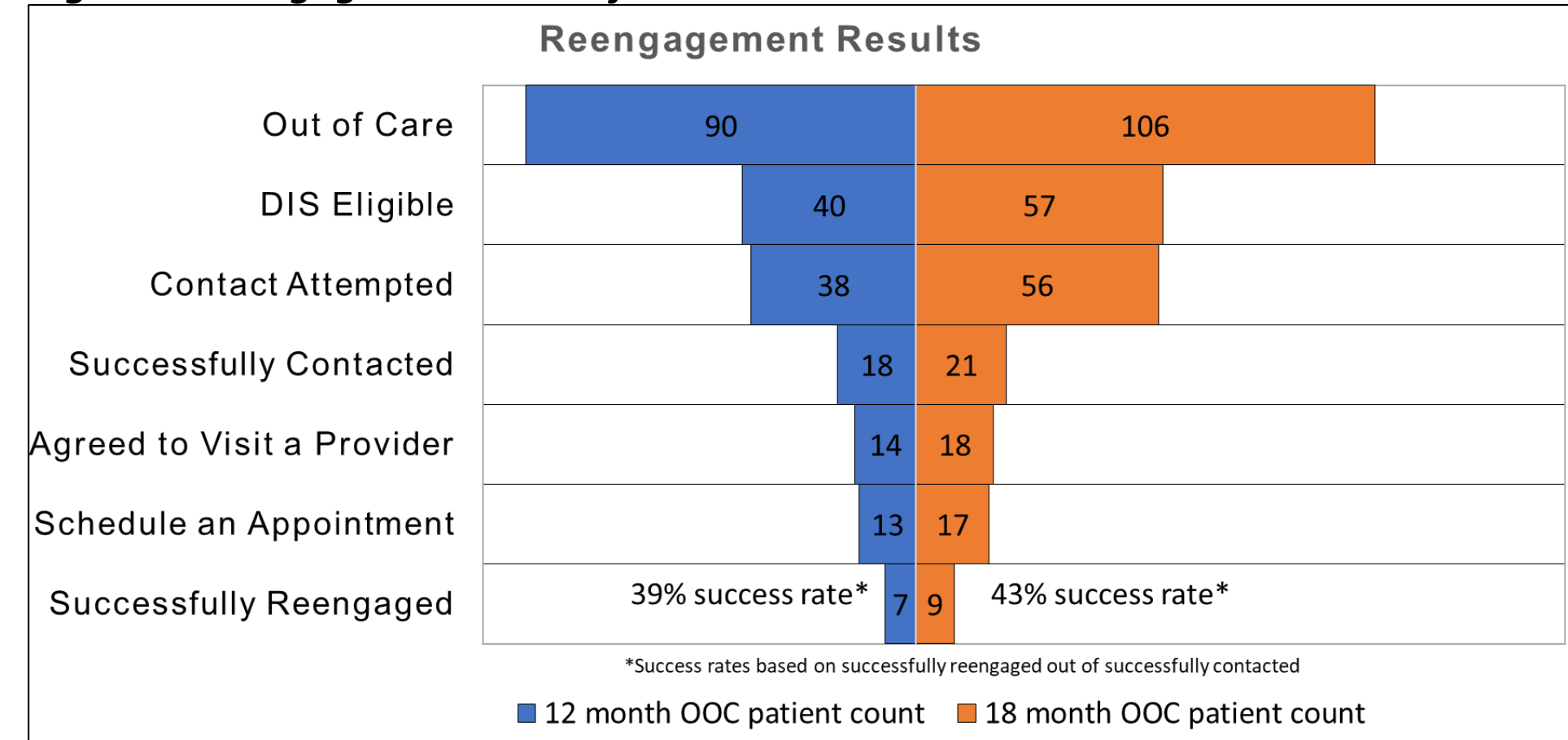


Table 2: Out of care assessment and workload analysis results by study group

Result Types	Variables	12 month OOC	18 month OOC
Who is most likely to be OOC	Non-Baby Boomers	X	X
	Detectable HIV VLs	X	X
	Hispanic and Black		X
Workload for Successful Contact	Average days (range)	7 (4-11)	12 (8-18)
	Total Phone Calls	75	74
	Total Field Visits	31	36

### SUMMARY:

- A Data to Care approach was successfully used to identify, characterize, and contact HIV/HCV coinfectd patients who are HIV OOC
- Reengagement success rates by DIS were small and efforts were labor intensive
- Those most likely to be OOC for HIV were non-baby boomers, persons of color, and those with detectable HIV VLs
- Timeframes used to define HIV OOC provided groups of individuals that are no longer active in the health care system (deceased, lost to clinic, out of state, etc.)
- Innovative reengagement approaches should be developed for these target populations

Figure 3: 12 month OOC study population flow

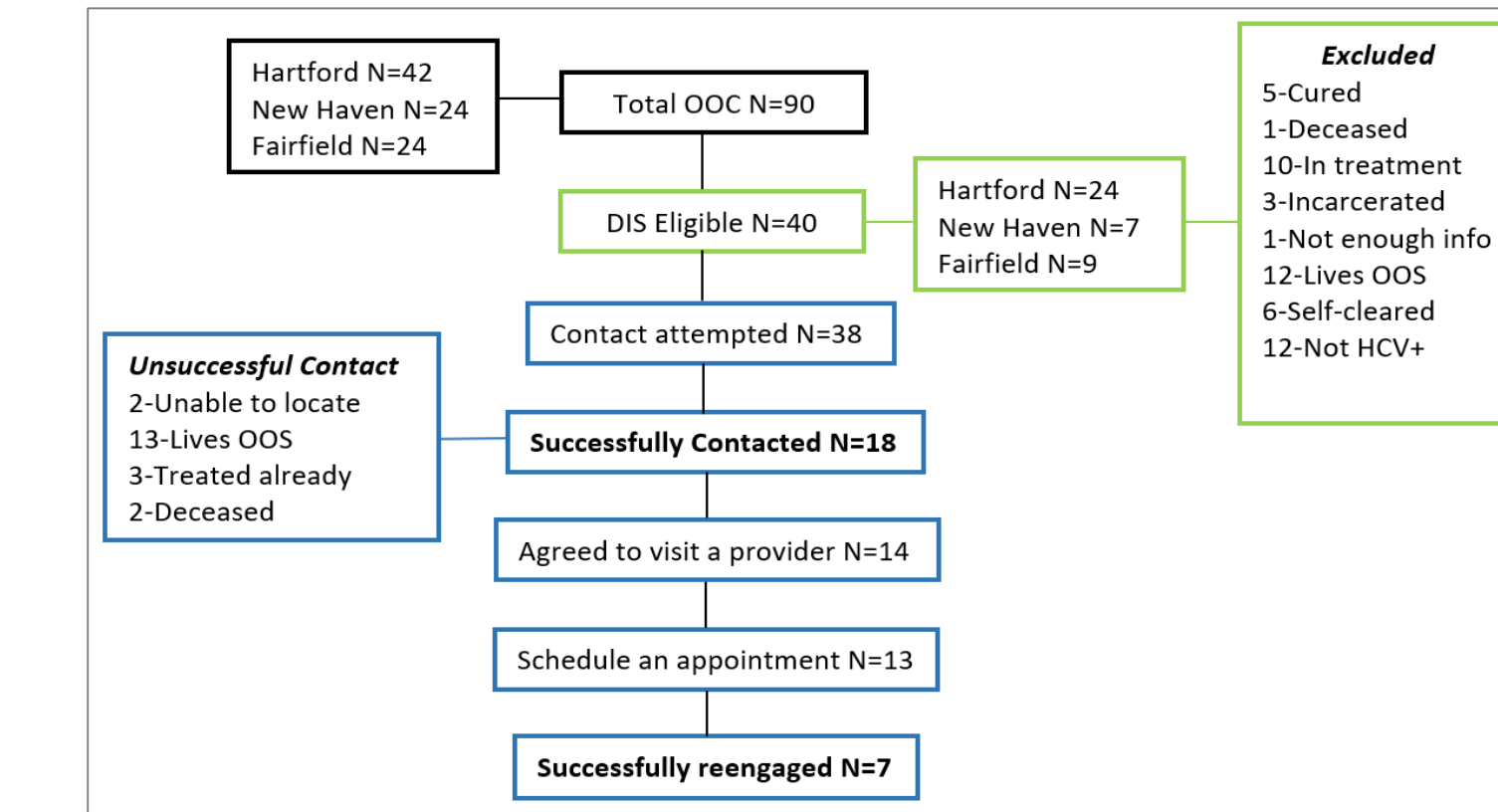


Table 3: 12 month group OOC vs Not OOC along with Demographics

Variable	Categories	12 Mo. OOC (N=90)	Not OOC (N=3608)	X <sup>2</sup> p-value	Odds Ratio (95% CI)
Birth Cohort	Baby Boomer	56 (62%)	2,586 (72%)	0.05	0.65 (0.42-1.00)
	Not Baby Boomer	34 (38%)	1,022 (28%)		Ref
Gender	Male	59 (66%)	2,537 (70%)	0.33	*
	Female	31 (34%)	1,071 (30%)		
Race/Ethnicity	White	25 (28%)	983 (27%)	0.84	*
	Black	25 (28%)	1,116 (31%)		
	Hispanic	38 (42%)	1,460 (41%)		
	Other	2 (2%)	49 (1%)		
	Other/Unknown	4 (4%)	174 (5%)		
HIV Transmission Mode	Heterosexual Contact	11 (12%)	392 (11%)	0.97	*
	MSM	9 (11%)	319 (9%)		
	MSM and PWID	2 (2%)	156 (4%)		
	PWID	64 (71%)	2,567 (71%)		
HIV Viral Load Level	High (>10,000)	10 (11%)	335 (10%)	0.04	1.26 (0.64-2.47)
	Low (200-10,000)	14 (16%)	282 (8%)		2.1 (1.16-3.78)
	Undetectable (<200)	65 (73%)	2,411 (67%)		Ref

Table 4: 12 month OOC Workload analysis

Communication method	Breakdown of Communication Methods for Those who Were Contacted Successfully		
	Hartford	New Haven	Fairfield
Phone (Total)	45	13	17
Range	2-6	3-6	3-8
Mean	4	4	4.24
Mode	5	N/A	N/A
Median	4	4	3
SD	1.24	1.25	2.17
Field Visits (Total)	15	4	12
Range	0-5	0-4	1-9
Mean	1	1.7	3
Mode	0	N/A	1
Median	1	1	1
SD	1.49	1.70	3.46

County	Time Difference Between DIS Initiation and Successful Contact				
	Range	Mean	Mode	Median	SD
Hartford	0-21 days	7 days	5 days	5 days	5.8 days
New Haven	2-21 days	11 days	N/A	10 days	7.8 days
Fairfield	0-7 days	4 days	N/A	5 days	2.7 days
Counties Combined	0-21 days	7 days	0 days	6 days	6.1 days

Figure 4: 18 month OOC study population flow

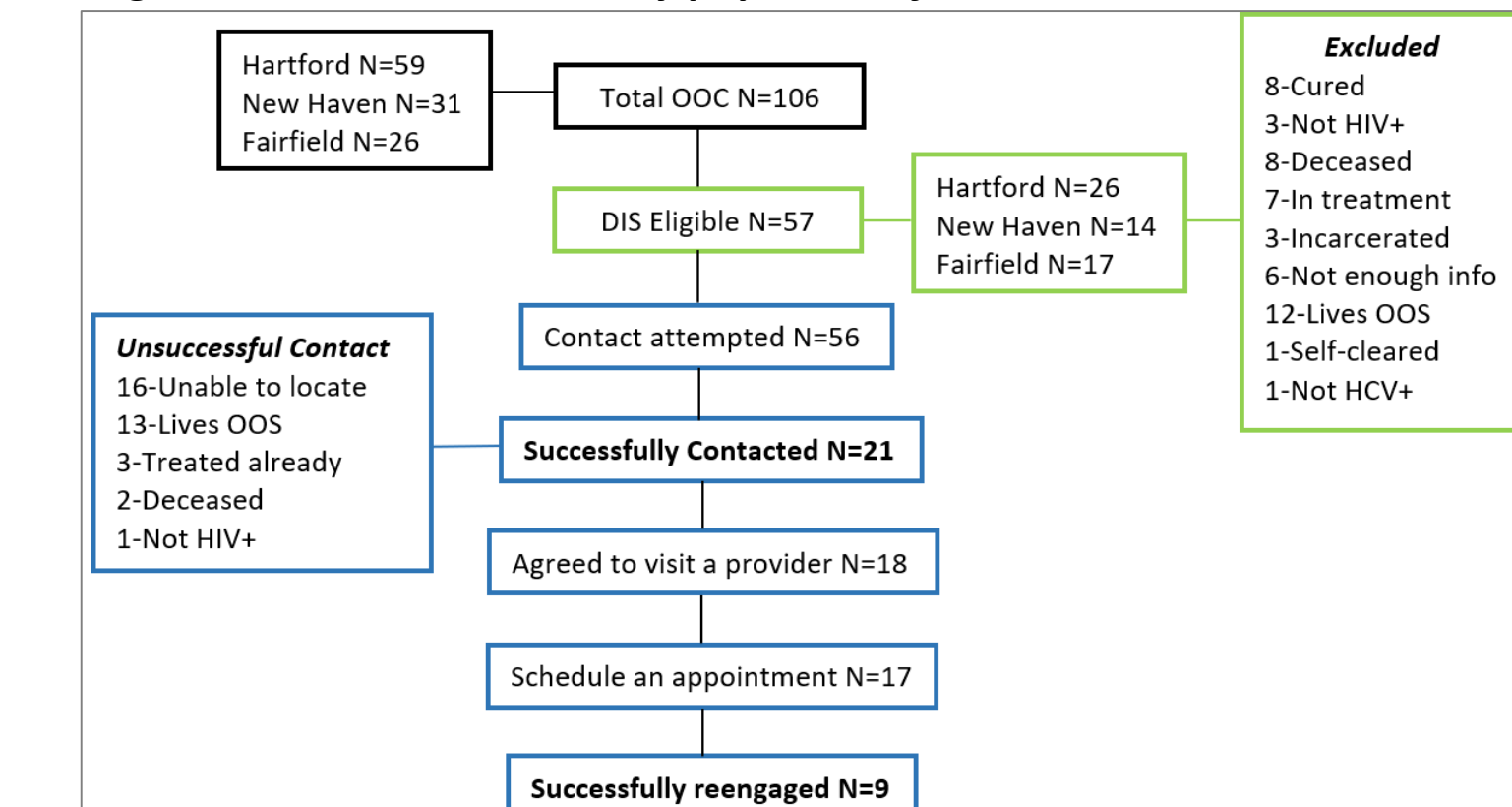


Table 5: 18 month group OOC vs Not OOC along with Demographics

Variable	Categories	OOC (N=106)	Not OOC (N=3,434)	X <sup>2</sup> p-value	Odds Ratio (95% CI)
Cohort	Baby Boomer	66 (62%)	2,502 (73%)	0.017	0.62 (0.41-0.92)
	Not Baby Boomer	40 (38%)	932 (27%)		Ref
Gender	Male	73 (69%)	2,420 (70%)	0.72	*
	Female	33 (31%)	1,014 (30%)		
Race/Ethnicity	White	20 (19%)	943 (28%)	0.043	1.23 (0.69-1.19)
	Black	28 (26%)	1,077 (31%)		1.93 (1.15-3.24)
	Hispanic	56 (53%)	1,365 (40%)		1.97 (0.45-8.65)
	Other	2 (2%)	48 (1%)		
	Other/Unknown	5 (5%)	159 (5%)		
HIV Transmission Mode	Heterosexual Contact	15 (14%)	357 (10%)	0.75	*
	MSM	9 (8%)	271 (8%)		
	MSM and PWID	4 (4%)	145 (4%)		
	PWID	73 (69%)	2,502 (73%)		
HIV Viral Load Level	High (>10,000)	16 (15%)	308 (9%)	0.002	1.92 (1.11-3.34)
	Low (200-10,000)	16 (15%)	271 (8%)		2.27 (1.36-3.95)
	Undetectable (<200)	70 (70%)	2,843 (83%)		Ref

Table 6: 18 month OOC Workload analysis

Communication method	Breakdown of Communication Methods for Those who Were Contacted Successfully		
	Hartford	New Haven	Fairfield
Phone (Total)	21	24	29
Range	1-6	2-6	2-9
Mean	3.5	4	4.8
Mode	3	2	3
Median	3	4.5	3.5
SD	1.46	1.5	2.7
Field Visits (Total)	19	10	7
Range	1-6	0-5	1-2
Mean	3.8	1.7	1.17
Mode	6	0	1
Median	3	1	1
SD	1.9	1.8	0.4

County	Time Difference Between DIS Initiation and Successful Contact				
	Range	Mean	Mode	Median	SD
Hartford	0-21 days	11 days	6 days	3 days	6.5 days
New Haven	2-81 days	18 days	2 days	7 days	28.3 days
Fairfield	2-28 days	8 days	N/A	5 days	9 days
Counties Combined	0-81 days	12.4 days	6 days	7 days	16.9 days

## 18 month Out of Care Tables and Flow Chart

(No HIV lab results between December 2017 and June 2019)

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