

Assessment of Case Manager Intervention Dosage Impact on Viral Suppression Among MSM: Results from HPTN 078

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HPTN

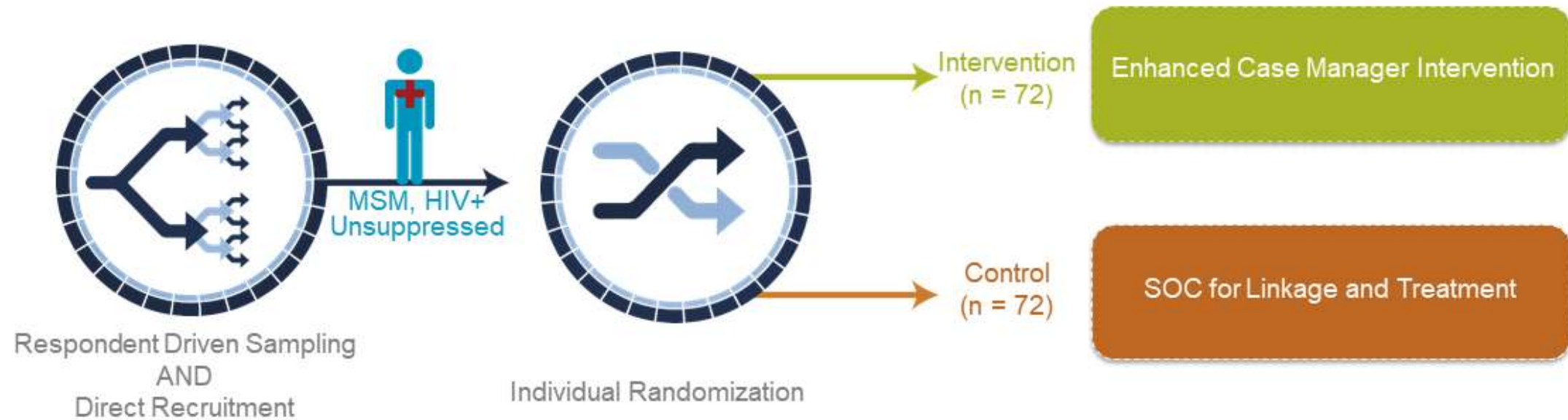
HIV Prevention
Trials Network

ANNUAL MEETING

2022

- New HIV infections among MSM remain high, especially in the South (CDC 2019, 2020)
- Early antiretroviral therapy (ART) initiation, ART adherence, and viral suppression (VS) are important for HIV prevention but remain low among different sub-groups of MSM (CDC 2017, Jeffries WL 2020)
- HPTN 078 study team employed case management (CM) intervention to enhance VS among MSM who were not virally suppressed

HPTN 078 overall study design

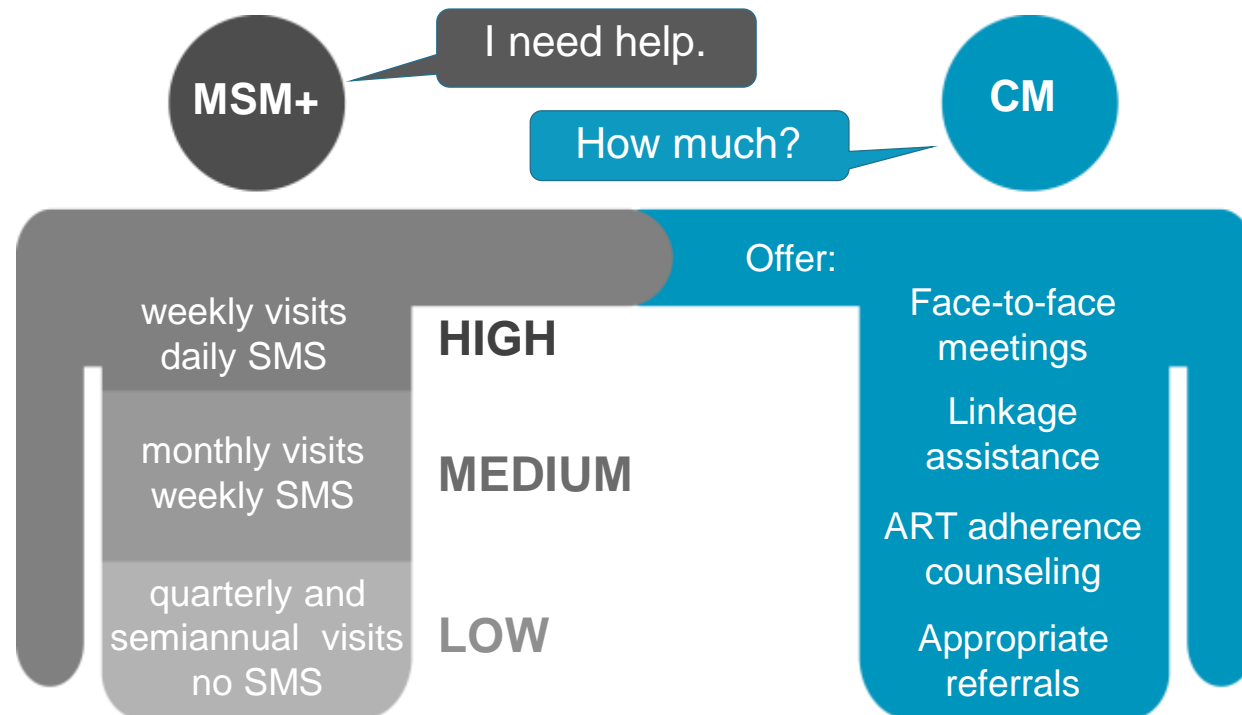


Methods: Case Manager Intervention

- Case managers (CMs) used motivational interviewing, a strength-based, patient-centered counseling approach, to improve participants' motivation for engaging in care and ART adherence
- CMs provided wide range of support/activities (i.e. **education, clinical care coordination, medical adherence support, and social assistance**) and had at least one monthly contact with participant in person, email, text, or phone call
- Participants decided how frequent they interacted with CMs beyond the monthly contact. Interactions/dosage could vary from monthly to daily interactions

- Assess impact of CM intervention **dosage** among enrolled intervention arm participants (n=72) on viral suppression at 12 months (n=62)
 - *Hypothesis: Participants who have more needs will ask for and receive more help (higher CM intervention **dosage**) and thus achieve viral suppression*

Case Manager Intervention Dosage



Encounters are the number of interactions with CM: in-person, by text, or by phone

Activities are the number of services provided by CM: 1) education, 2) clinical care coordination, 3) medical adherence support, 4) and social assistance

- Outcome:
Viral load status at month 12 (suppressed vs. unsuppressed)
- Analysis cohort:
N = 62, participants in the CM arm who had a final VL status (i.e., suppressed or unsuppressed)

N=10 participants were excluded because they did not have a viral load status at month 12
- Descriptive statistics and T-test were used to assess CM dosage impact on viral suppression among participants in intervention group with complete data.

Results

	Overall	Suppressed (<200)	Unsuppressed	Not Collected
Total Participants in CM Arm	72	30	32	10
Total Number of unique Encounters	1168	468	554	146
Types of Encounters				
In-person	347/1168 (30%)	154/468 (33%)	165/554 (30%)	28/146 (19%)
Phone	576/1168 (49%)	187/468 (40%)	285/554 (51%)	104/146 (71%)
Other	12/1168 (1%)	5/468 (1%)	2/554 (<1%)	5/146 (3%)
Text	200/1168 (17%)	109/468 (23%)	86/554 (16%)	5/146 (3%)
E-mail	33/1168 (3%)	13/468 (3%)	16/554 (3%)	4/146 (3%)

Results

	Overall	Suppressed (<200)	Unsuppressed	Not Collected
Total Participants in CM Arm	72	30	32	10
Total Number of Activities	3002	1177	1592	233

Results

Item		VL Suppressed at Month12 (n = 30)	VL Unsuppressed at Month12 (n = 32)	P value (t-test)
Number of encounters per person	Mean (Min, Max)	15.6 (4, 40)	17.3 (3, 36)	0.4298
	Median (Q1, Q3)	16 (12, 18)	16 (13, 21)	
Number of activities per person	Mean (Min, Max)	39.2 (18, 77)	49.8 (17, 89)	0.0160
	Median (Q1, Q3)	39 (25, 44)	51 (34, 61)	

- Frequency of encounters was not associated with VL suppression at month 12 compared to frequency of activities
 - Activities may be a better measurement of intervention dosage
- Higher frequency of activities was not associated with VL suppression in expected direction
 - Many clients who did not achieve VL suppression had the highest frequency of activities. Despite the higher intervention dosage, it was not adequate to address barriers to VL suppression.
- “More comprehensive interventions, such as HPTN 096” are needed for individuals who face more barriers in order to address the social determinants that prevent VL suppression

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- The content is solely the responsibility of the authors and does not necessarily represent the official views of the National Institutes of Health.

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