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Background

- In New York City, Ryan White Part A (RWPA) clients in care are less likely to have virally suppression (VS) compared to other people with HIV (PWH) who are in care
- Housing and behavioral health programs are well-positioned to target major, upstream barriers to ART adherence and VS, but may lack access to clients' laboratory data and VS status
- The New York City Department of Health and Mental Hygiene (NYC Health Department, HD) and partners at the City University of New York (CUNY) launched a "Data-to-Suppression" (D2S) initiative to enhance these programs' capacity to support VS
- D2S provides housing and behavioral health programs with actionable reports that facilitate client outreach and follow up, and can be used to identify systemic barriers to VS
- Guided by the RE-AIM and CFIR implementation frameworks, our evaluation seeks to identify strategies to sustain D2S using RWPA quality improvement (QI) resources and identify areas for improvement and potential further expansion

Learning Objectives

- Describe at least two ways in which client-level, surveillance-based reports may be used to promote viral suppression in Ryan White programs
- Identify characteristics of Ryan White service models and/or staffing structures that can maximize the potential impact of a data-to-care or data-to-suppression type of intervention
- Define at least two measures of intervention implementation and discuss how they might be used to inform refinements to a new intervention for use in the longer term

D2S Report Workflow



Step 1: Generate reports

- NYC HD matches and merges Ryan White Part A program data with surveillance data
- Reports contain all PWH who have fallen out of care/treatment or who have died in the past 12 months
- Generated every 6 months, about 2 months after the end of the reporting period



Step 2: Download and review reports

- Programs download reports using Health Commerce
- Program staff review report internally and can review with NYC HD quality management specialists
- Program staff document actions taken in a companion report



Step 3: Follow up on reports

- Programs set care plan based on client status: in care and virally unsuppressed, out of care and unsuppressed, deceased
- Programs may choose to prioritize using other report data (e.g., HCV coinfection, facility of last VL)



Additional Support from NYC HD

- Technical assistance check-ins to review D2S reports, facilitate root cause analyses, and outline quality improvement (QI) plans
- D2S QI project plan refinement with quality committees, co-creation of final plans, and summary reports, and facilitated discussion of QI projects in peer-learning groups
- Webinar on patient navigation for PWH with mental health issues

No.	Client ID	Agency	Contract of Last Service	Last Service Date in Contract	Programs with Activity		Facility of Last VL	Month & Year of Last VL	HCV	Client Status
					Mental Health	Housing				
1	AAAAA	Agency X	00-MHV-000	6/30/2021	Yes	No	Hospital A	5/2021		Needs follow-up for viral suppression
2	BBBBB	Agency X	00-MHV-000	5/29/2021	Yes	Yes	Clinic W	Unknown	Yes	Needs follow up for care and viral suppression
3	CCCCC	Agency X	00-HPA-000	3/13/2021	No	Yes	Clinic Y	4/2021		Needs follow-up for viral suppression
4	DDDDD	Agency X	00-MHV-000	4/25/2021	Yes	No	Clinic Z	9/2021		Should be closed due to death

Figure 1: Mock D2S report

- Programs with Activity columns shows where client has been seen within the agency
- Client status is based on latest available data in NYC HIV surveillance

No.	Client ID	Contract of Last Service	D2S Report Period	Verification Findings	Primary Source Used for Verification	Action Taken	Date Action Taken
1	AAAAA	00-MHV-000	4/2021 - 3/2022	Verified client status	EMR/EHR	Initiated outreach to client	06/10/2022
2	BBBBB	00-MHV-000	4/2021 - 3/2022	Found different current client status through other data source	DOHMH CSR System	Updated service plan to address linkage or adherence support need	07/07/2022
3	CCCCC	00-HPA-000	4/2021 - 3/2022	Verified client status	Program/Service records	Initiated outreach to client	06/28/2022
4	DDDDD	00-MHV-000	4/2021 - 3/2022	Did not cross-reference with other data	Other	Closed client out of program	08/15/2022

Figure 2: Mock D2S Companion report

- Agencies complete companion reports to NYC HD to document follow-up efforts
- Columns to be completed by agencies are Verification Findings; Primary Source Used for Verification; Action Taken; Date Action Taken

Stepped-Wedge Analysis

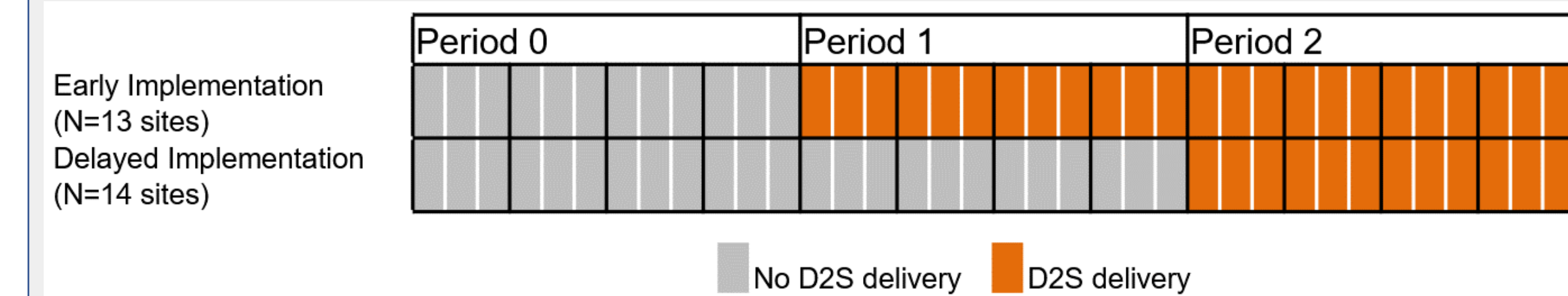


Figure 3: Stepped-wedge design

- We randomized sites within matched pairs to early implementation or delayed implementation
 - Early implementation:** begin receiving reports in Period 1
 - Delayed implementation:** do NOT receive reports in Period 1; begin receiving reports in Period 2
 - Neither group receives reports in Period 0
- We will estimate the intervention effect (D2S delivery vs. no D2S delivery) on timely VS and time to VS, conditioning out site and period effects

Next Steps, 2022-2026

- Analyze D2S effectiveness data from stepped-wedge trial and data on modifiable determinants of D2S effects on timely VS among clients in the stepped-wedge trial
- Assess D2S acceptability, participant preferences, and priorities for its long-term implementation
- Convene provider learning session to present on QI project work
- Develop an informed consent process for long-term implementation and expansion

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Implementation Measurement

RE-AIM

To measure relationships between RWPA programs' D2S engagement and outcomes and assess implementation of D2S (e.g., under what conditions, and in combination with which other strategies do reports successfully advance VS)

Consolidated Framework for Implementation Research (CFIR)

Explore broad constructs shaping agencies' D2S adoption, delivery, reach to unsuppressed clients, and achievement of VS with D2S

Evaluation Activity	RE-AIM Constructs	CFIR Constructs
Stepped-wedge randomized control trial	Effectiveness	--
Program staff interviews	Adoption, implementation, maintenance	Inner and outer setting, source, relative advantage, complexity, adaptability, costs, packaging
Routine, client-level data analysis	Reach, implementation, adoption, maintenance	--
Secondary analysis of modifiable factors for VS	Adoption, implementation	Outer setting (client needs and resources), inner setting (agency characteristics and resources)
Program staff and client focus groups	Reach, implementation, adoption, maintenance	Benefits, required resources, inner/outer setting, acceptability
Program staff discrete choice experiments	Adoption, implementation, maintenance	Valued features, ideal packaging, desired adaptations, roles engaged, process, costs/willingness to pay