



IMPLEMENTING SCALABLE,
PATIENT-CENTERED TEAM-
BASED CARE FOR ADULTS
WITH TYPE 2 DIABETES
AND HEALTH DISPARITIES
(iPATH)

**EAST:
HARVARD**



Michaela Kerrissey

**SOUTH:
IMPACTIVO**



Maria Levis-Peralta

**MIDWEST:
OHIO STATE**



Ann McAlearney

**WEST:
STANFORD**



Sara Singer



Daniel Walker

Lead/administrative site

Stanford
(Lead PI: Singer)



Suzanne Tamang



Meg Nikolov



Esther Olsen



Kate Watkins

Regional study teams

East Study Team
(Co-I: Kerrissey)

Midwest Study Team
(Co-Is: McAlearney and Walker)

West Study Team
(PI: Singer)

South Study Team
(Co-I: Levis-Peralta)



Emmilie Aveling



Amanda Gusovsky



Lindsey Sova



Latha Palaniappan



Alan Glaseroff



Karleen Giannitrapani



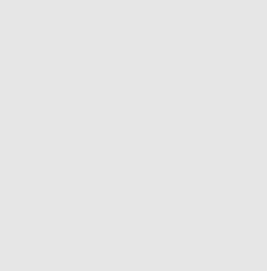
Ivette Fuentes



Wiljeana Glover



Olivia Pardi



Sadie Chen (not pictured)



Emmilie Aveling



Laura Vaughan

BACKGROUND / MOTIVATION

OVER 37 MILLION AMERICANS HAVE TYPE 2 DIABETES,¹ AND SIGNIFICANT RACIAL AND SOCIOECONOMIC DISPARITIES PERSIST...

Low SES is associated with twice the risk of diabetes-related mortality²

- Particularly among patients diagnosed with type 2 diabetes

Diabetes risk (compared to non-Hispanic White adults) is:

- 77% higher among African Americans
- 66% higher among Hispanics
- 18% higher among Asian Americans³

OBJECTIVE

FEDERALLY QUALIFIED HEALTH CENTERS (FQHCs) PROVIDE DIABETES CARE TO A DIVERSE COMMUNITY

By providing **team-based, technology-enabled, person-centered** care that adheres to nationally recognized standards (ADA, NCQA, and PCMH), FQHCs can improve outcomes for patients with type 2 diabetes from health disparity populations⁴

iPATH WILL:

REFINE & TEST

AN INNOVATIVE PRACTICE TRANSFORMATION STRATEGY

TO IMPROVE TYPE 2 DIABETES CARE AT FQHCs FOR NIH-DESIGNATED PRIORITY POPULATIONS

iPATH STUDY AIMS

AIM 1

Identify organizational conditions and processes at FQHCs that promote or impede the effectiveness of type 2 diabetes care for NIH-designated U.S. health disparity populations and refine the “iPATH implementation approach”

AIM 2

Implement a multi-level, multi-component, technology-enabled practice transformation strategy (the iPATH implementation approach) to improve type 2 diabetes for patients at 8 multi-clinic FQHCs

AIM 3

Comprehensively evaluate the iPATH implementation approach with a hybrid type 2 study, including a stepped wedge cluster randomized trial



COMPARATIVE CASE STUDIES IN 4 REGIONS, 12 FQHCS

- 3 diverse FQHCs in each region
- Goal: Identify promising organizational approaches (structures, processes, tools, technologies) to caring for patients with type 2 diabetes



DATA COLLECTION

- Qualitative interviews with ~15 clinic leaders and patients at each site (~180 interviews total)
- Compare characteristics using publicly available data from the 2019-2022 HRSA Health Center Uniform Data System (UDS)

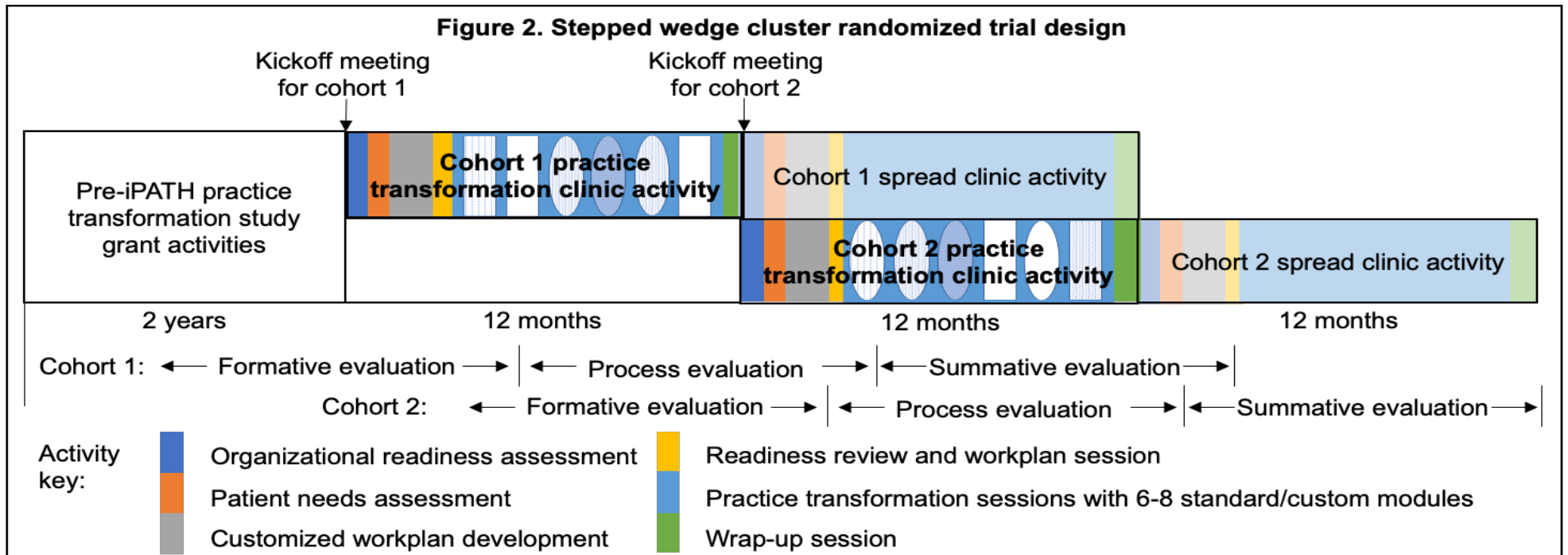


DATA ANALYSIS

- Regional teams will synthesize each FQHC's data into a deidentified and aggregated case report
- Study team will analyze case report data using natural language processing and standard qualitative methods

REFINE, CUSTOMIZE, & IMPLEMENT iPATH IMPLEMENTATION APPROACH

- Build on successful Puerto Rico pilot
- Refine based on insights from prior practice transformation implementation and evaluation studies and multiple comparative case study
- Customize according to formative needs assessments of patient population and clinics
- Implement a modularized, customized practice transformation in 2 clinics in each region (8 total) in 2 waves



FORMATIVE, PROCESS, AND SUMMATIVE EVALUATIONS

- Interviews with clinic leaders before, during, and end of intervention
- iPATH facilitators will register practice transformation activity, including the number, type, and sequence of activities and modules implemented, numbers of participants, and facilitators and barriers identified
- Patient-level EHR data for primary analyses and clinic-level data for secondary analyses

HYPOTHESES

H1: There will be a greater reduction in the percent of patients with poorly controlled diabetes (e.g., A1c>9%) in the practice transformation arm compared to the control arm.

H2: The difference in reduction of percent of patients with A1c>9% in the practice transformation compared to the control arm will be greater for NIH-designated health disparity populations compared to other patients.

CURRENT STATUS AND TWO-YEAR PLAN

PROJECT WORKPLAN AND TIMELINE	Year 1				Year 2				Year 3				Year 4				Year 5			
Conduct a Multiple Comparative Case Study (Aim 1, Study 1)																				
Receive approval from Institutional Review Board																				
Recruit FQHCs for multiple comparison case study		*																		
Complete MOUs with selected FQHCs																				
Finalize interview protocol and reporting template																				
Schedule and conduct site visits/interviews, transcribe interviews							*													
Complete standardized site visit reports and enter into shared database																				
Synthesize findings using natural language processing and related tools																				
Synthesize findings using qualitative methods																				
Produce comparative reports												*								
<i>*indicates benchmark</i>																				

BARRIER SCORECARD

Barrier

Level of Difficulty

1 2 3 4 5

Notes

Enrollment and engagement of subjects (FQHC clinicians, staff, and patients)

x

Anticipating relative ease once health systems agree to participation.

Engagement of health systems

x

May be problematic given competing priorities and needs. Working with state associations of community health centers to facilitate engagement.

Data collection and merging datasets

x

Four study sites will be involved in data collection, merging only deidentified, aggregated qualitative data. Pursuing quantitative data from HRSA and Census beyond what is publicly available.

Regulatory issues (IRBs and consent)

x

Relying on a commercial sIRB, while also maintaining approval from 3 host institutions' IRBs.

Stability of control intervention

Not applicable for first two years.

Implementing/delivering intervention across healthcare organizations

Not applicable for first two years.

SOURCES

1. CDC. The facts, stats, and impacts of diabetes [Internet]. Centers for Disease Control and Prevention. 2022 [cited 2022 Jun 27]. Available from: <https://www.cdc.gov/diabetes/library/spotlights/diabetes-facts-stats.html>
2. **Levis-Peralta M**, González M del R, Stalmeijer R, Dolmans D, de Nooijer J. Organizational conditions that impact the implementation of effective team-based models for the treatment of diabetes for low income patients—a scoping review. *Frontiers in Endocrinology*. 2020;11:352. PMID: 32760344 PMCID: PMC7375199
3. Meng YY, Diamant A, Jones J, Lin W, Chen X, Wu SH, Pourat N, Roby D, Kominski GF. Racial and ethnic disparities in diabetes care and impact of vendor-based disease management programs. *Dia Care*. 2016 May;39(5):743–749. Available from: <https://care.diabetesjournals.org/content/39/5/743>
4. American Diabetes Association Professional Practice Committee. 1. Improving care and promoting health in populations: standards of medical care in diabetes—2022. *Diabetes Care*. 2022 Jan 1;45(Supplement_1):S8–S16. Available from: https://diabetesjournals.org/care/article/45/Supplement_1/S8/138915/1-Improving-Care-and-Promoting-Health-in

QUESTIONS AND DISCUSSION

1. What are other studies doing for their data sharing plan?
2. What are best practices for recruiting sites?
3. What have the other studies found most useful for engaging with the Collaboratory?
4. We are considering drafting a protocol paper for our study. Is there any value/interest among the Collaboratory members in doing a comparative protocol paper?