



# Barriers to implementing EHR-integrated social determinants of health screening and referrals

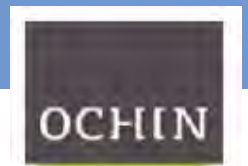
Rachel Gold, PhD, MPH

Senior Investigator: Kaiser Permanente NW Center for Health Research

Lead Research Scientist: OCHIN, Inc.

State of the Science: A National Research Meeting on Medical & Social Care Integration

February 4-5, 2019



# Study Team

**Rachel Gold**, PI, KPCHR; OCHIN, Inc.

**Erika Cottrell**, site PI, OCHIN

**Arwen Bunce**, Qualitative Lead, OCHIN

**David Killaby / Marla Dearing**, Epic Project Managers, OCHIN

**Katie Dambrun**, Research Associate, OCHIN

**Miguel Marino**, Biostatistician, Oregon Health & Science University (OHSU)

**Dagan Wright / Stuart Cowburn**, Biostatisticians, OCHIN

**Mary Middendorf**, Epic Application Specialist, OCHIN

**Ned Mossman**, Program Manager, OCHIN

**Inga Gruss**, Qualitative Research Associate, KPCHR

**Ann Romer**, Practice Coach, OCHIN

**Julianne Bava**, Epic Trainer, OCHIN

**Molly Krancari**, Research Associate, OCHIN

**Christina Sheppler**, Research Associate, KPCHR

**Nadia Yosuf**, Project Manager, KPCHR

**Shiree Dunn**, Epic Application Specialist, OCHIN

**Jorge Kaufmann**, Biostatistician, OHSU

**David Ezekiel**, Biostatistician, OHSU

**Heather Holderness**, Project Manager, OHSU

## Context: OCHIN

[www.ochin.org](http://www.ochin.org)

- A non-profit, full service HIT provider for CHCs
- 1 centrally managed Epic© EHR; NexGen also provided
- Reporting, decision support, practice coaching, workflow design, +!
- >400 Epic© member clinics in 18 states (and growing!)
- >2,500,000 patient visits in last 3 years
  - 51% Medicaid; 10% Medicare; 16% private; 22% uninsured
  - 33% Hispanic; 22% Spanish primary language
  - 1% Am-Ind / AK; 5% Asian / PI; 19% Black; 61% white; 13% unknown
  - 73% <200 FPL
- PBRN-led research using OCHIN data since 2007

# Background

- Widely recommended that providers do standardized screening for social determinants of health (SDH) ...
- This talk covers:
  - **Implementation barriers** associated with using HIT to address SDH
  - **Technical / logistical barriers** associated with using HIT to address SDH

# Act on Social Determinants using EHR tools in Safety Net Settings for Diabetes Outcomes (ASSESS & DO) – Pilot study Aims

1. Learn how to systematically document SDH data & track SDH referrals, in CHCs' EHRs
2. Create 'SDH Data Tools' that integrate SDH data processes into commonly used EHR functions (tools for **documenting, reviewing, acting on** patient-reported SDH)
3. Mixed-methods evaluation of tool uptake - 3 pilot CHCs
  - Activated tools in June 2016 - 489 CHCs
  - Qs based on PRAPARE, IOM report on SDH screening, feedback from CHC staff
  - Used EHR data to track SDH screening **June 2016-May 2018**
  - Interviewed 43 staff from 8 CHC organizations doing SDH screening

**Funding:** National Institutes of Diabetes and Digestive and Kidney Diseases (NIDDK) - R18DK105463

**Study period:** Two year pilot (9/1/15 – 8/31/17)





# Approaches to CHC Implementation of SDH Data Collection and Action (ASCEND): Implementation Trial Study Aims

- **Aim 1.** Mixed methods formative evaluation: SDH data collection, OCHIN CHCs
  - *How have the SDH Data Tools been adopted?*
- **Aim 2.** Pragmatic, stepped-wedge, cluster-randomized trial in 30 CHCs. Tests an intensive, step-by-step implementation support package.
  - Comprehensive technical assistance
  - Tailored implementation support
  - Training materials
  - 5 steps, closely tracked (ASK ME about the 5-step guide!)
- **Aim 3:** Realist evaluation - whether / how this implementation support improves SDH data collection, DM risk management

**Funding:** National Institutes of Diabetes and Digestive and Kidney Diseases (NIDDK)

**Study period:** 9/1/17 – 8/31/22

# Implementation barriers

- **Practice change involving patient-reported data is hard**
  - Workflow / staffing must be developed & tested (for data collection, review, response)
  - Overcome entropy / habits / clinic culture
  - Identify / sustain a clinical champion
  - Have resources to address identified needs?
  - Ensure right staff see needed data at right workflow step, & know how to respond
  - Project overload
  - Staff turnover

# Implementation barriers

- **Starting to collect / act on SDH data can be especially challenging**
  - Re-thinking clinical team responsibilities, role, culture
    - Is there *leadership* support? *Buy-in* from clinic staff?
    - Do staff feel *able to conduct* SDH screening effectively?
  - Clinics must decide who to screen, how often, what for, which tool, which patients, how to act ... *without guidelines or evidence*
    - And decide: *Why* do they want these data? *What* will they use them for?
  - *Why screen* for factors that clinic staff cannot address?
    - Potentially distressing for staff / patients, but ... can yield information critical to care decisions, advocacy, resourcing



# Implementation barriers

- **Starting to collect / act on SDH data can be *especially* challenging**
  - Consider staff roles / staffing needs
    - Ideally, PCPs should *not* collect SDH data themselves
    - Support staff – who? Are they always available?
  - Consider best workflows, *e.g.*:
    - If SDH data collected on paper, who enters it & when impacts use options
    - Warm hand-offs / 1-on-1 may be essential; feasible?
  - Ensure the right staff can access needed tools (security clearance, training)
  - Are there payment structures to support SDH work?
  - Decision support related to SDH, other than referral-making?

# Implementation barriers

- **SDH referrals - *more* challenging than documenting SDH?**
  - SDH referrals ≠ clinical referrals
    - What *is* an SDH referral? What is appropriate / likely impactful?
    - Cannot be closed the same way
    - How to 'close the loop'?
    - Best workflows?
  - Resource lists must be located or created / updated – how?
    - Diverse strategies / resources now offered; which is best for a given clinic?
    - Ideally, location- and need-specific
    - Ideally, tied to partnerships with local agencies
    - What if there are no local resources?



# Technical / logistical barriers

- Setting up EHR tools for SDH (or adapting out-of-the-box tools to local needs) is resource-intensive
- No clear guidelines / standards for how to document SDH in EHRs
- **Do the EHR tools for SDH documentation / review ....**
  - Document if patient WANTS help with SDH needs? Patient priorities?
  - Enable review of past SDH screenings / if screening was declined?
  - Use EHR interfaces staff are *used to using*?
  - Facilitate “SDH-Informed Care” (per Gottlieb)?
  - Facilitate internal / external referrals?
  - Enable documenting SDH *without staff data entry*?
  - Put SDH needs in problem list? (Which codes – for SDH, SDH referrals?)

# Technical / logistical barriers

- **Do EHR tools for SDH referral-making work as needed / at all?**
  - Do they support tracking:
    - Where the patient was referred?
    - Whether the patient received resources as intended?
  - When making SDH referrals, does the technology also enable ....
    - Labeling referrals 'no follow-up needed'?
    - Tracking these referrals?
  - “Closing the loop”: Do local services have the technology / motivation? Capacity to serve referred patients?
  - How to *establish, maintain* community partnerships?
  - Need HIT to support local partnerships / data exchange
  - Data sharing barriers – IT infrastructure, HIPAA, privacy



# Thank you! Questions?

Rachel Gold, PhD, MPH

[rachel.gold@kpchr.org](mailto:rachel.gold@kpchr.org)

