Challenges of Putting Evidence to Practice on SDH Interventions

Rachel Gold, PhD, MPH
Senior Investigator: Kaiser Permanente NW Center for Health Research
Lead Research Scientist: OCHIN, Inc.

Root Cause Coalition Meeting
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Context: OCHIN 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 & more
- >500 Epic© member clinics in 18 states (and growing!); based in Portland

- >2,500,000 patients seen 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; 17% Black; 66% white; 9% unknown
  - 70% <200 FPL
- PBRN-led research using OCHIN data since 2007

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Act on Social Determinants using EHR tools in Safety Net Settings for Diabetes Outcomes (ASSESS & DO)

- 2-year pilot study (NIDDK): 9/2015-9/2017 (Gold – PI)
- Asked how to collect / document SDH data, & track SDH referrals, in CHCs' EHRs
- Created 'SDH Data Tools' that integrate SDH data processes into commonly used EHR functions
- Mixed methods evaluation of tool uptake in 3 pilot CHCs

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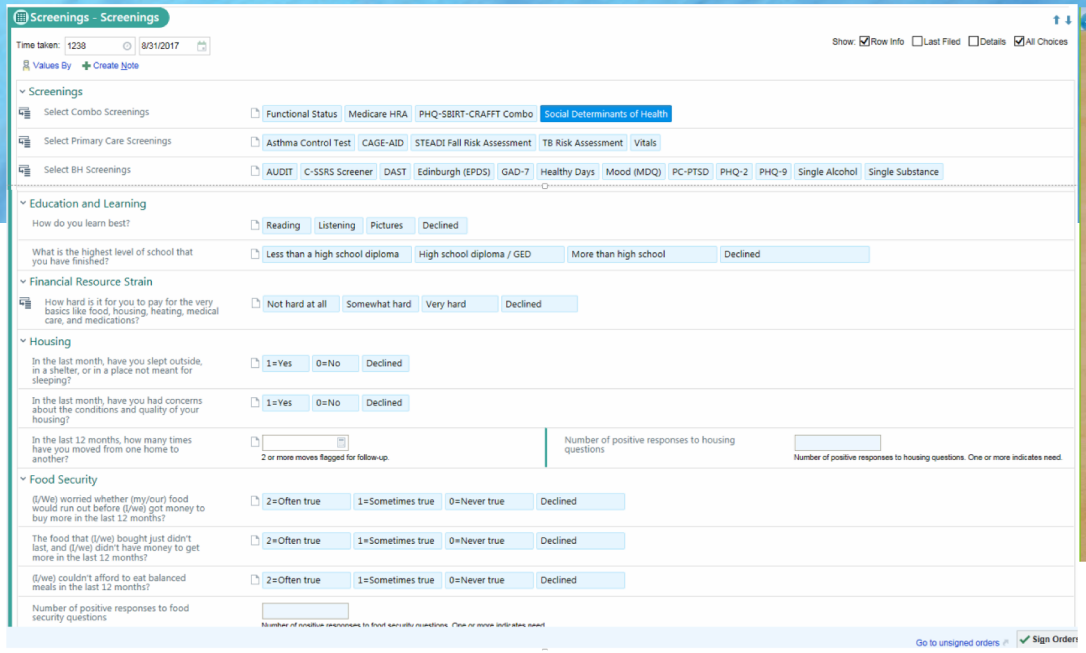
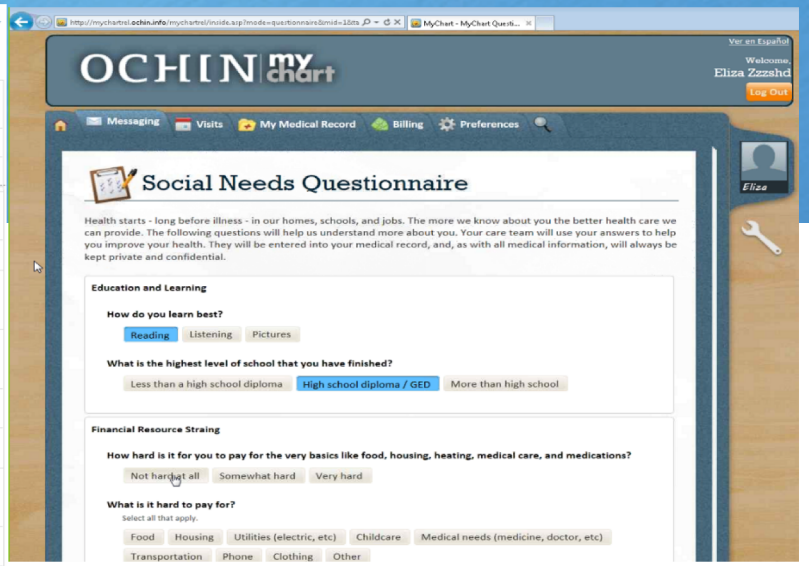
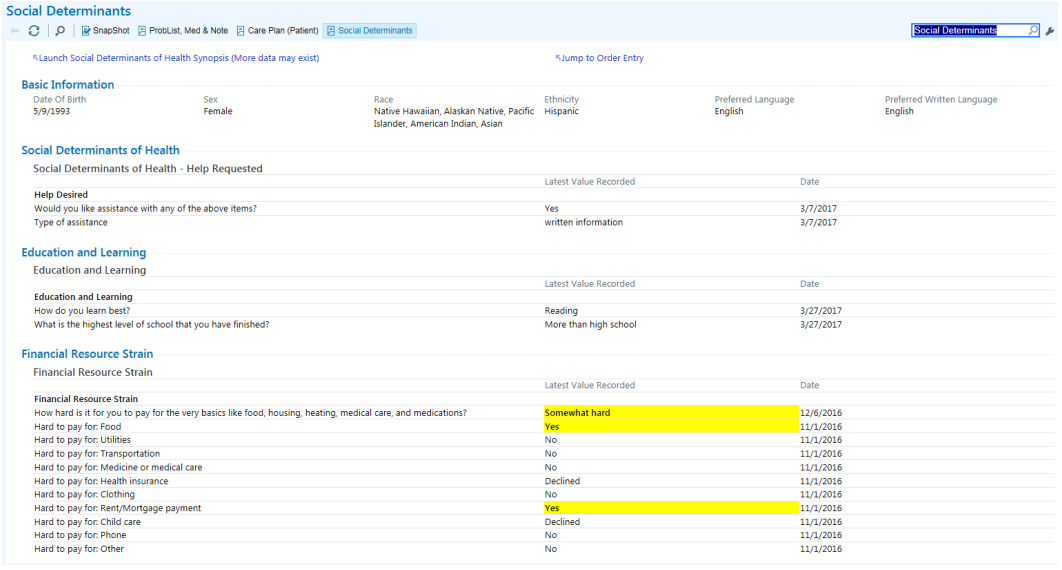
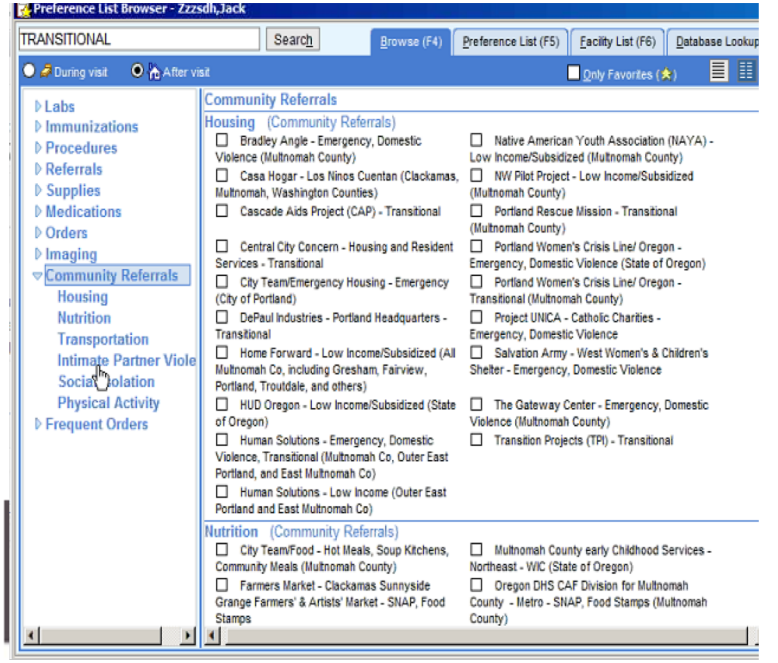
SDH EHR Tools









For more on the tool development process:

Gold et al, JABFM 2017

ORIGINAL RESEARCH

Developing Electronic Health Record (EHR) Strategies Related to Health Center Patients' Social Determinants of Health

Rachel Gold, PhD, MPH, Erika Cottrell, PhD, MPP, Arwen Bunce, MA, Mary Middendorf, BS, Celine Hollombe, MPH, Stuart Cowburn, MPH, Peter Mahr, MD, and Gerardo Melgar, MD

Background: "Social determinants of heath" (SDHs) are nonclinical factors that profoundly affect health. Helping community health centers (CHCs) document patients' SDH data in electronic health records (EHRs) could yield substantial health benefits, but little has been reported about CHCs' development of EHR-based tools for SDH data collection and presentation.

Methods: We worked with 27 diverse CHC stakeholders to develop strategies for optimizing SDH data collection and presentation in their EHR, and approaches for integrating SDH data collection and the use of those data (eg, through referrals to community resources) into CHC workflows.

Results: We iteratively developed a set of EHR-based SDH data collection, summary, and referral tools for CHCs. We describe considerations that arose while developing the tools and present some preliminary lessons learned.

Conclusion: Standardizing SDH data collection and presentation in EHRs could lead to improved patient and population health outcomes in CHCs and other care settings. We know of no previous reports of processes used to develop similar tools. This article provides an example of 1 such process. Lessons from our process may be useful to health care organizations interested in using EHRs to collect and act on SDH data. Research is needed to empirically test the generalizability of these lessons. (J Am Board Fam Med 2017;30:428–447.)

Keywords: Community Health Centers, Data Collection, Electronic Health Records, Primary Health Care, Referral and Consultation, Social Determinants of Health

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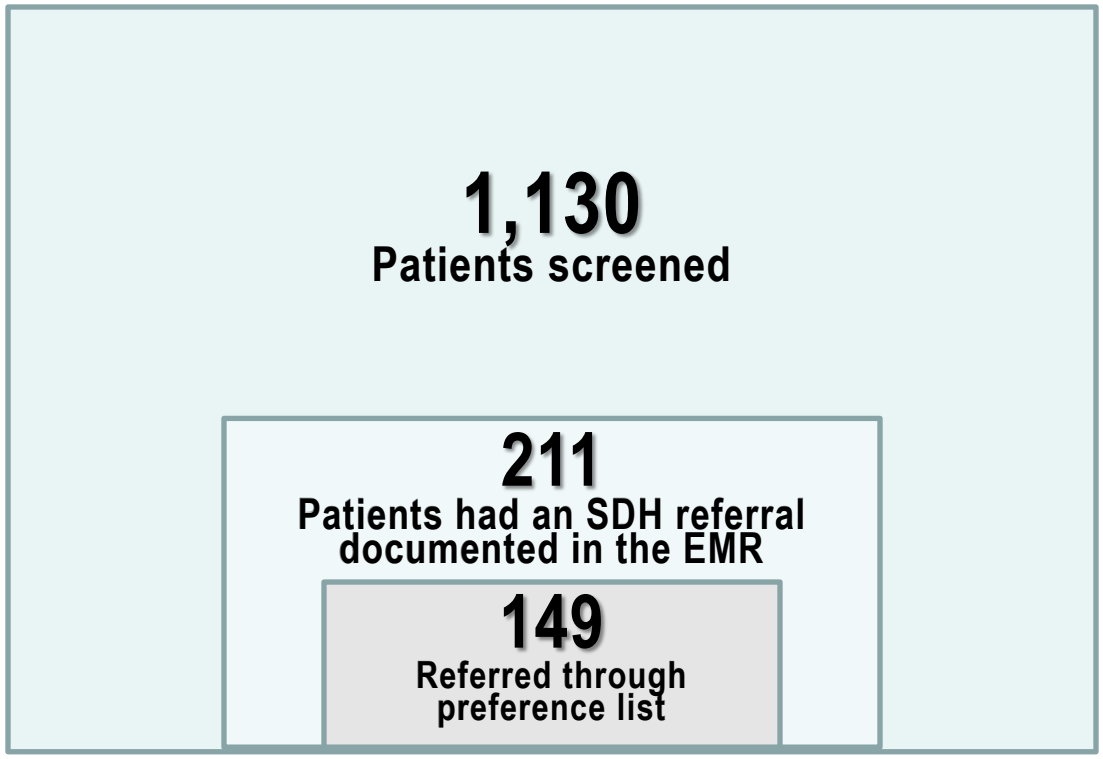
Referrals in EHR: Three pilot clinics, 7/16-7/17



Gold et al, Annals of Family Medicine, 2018

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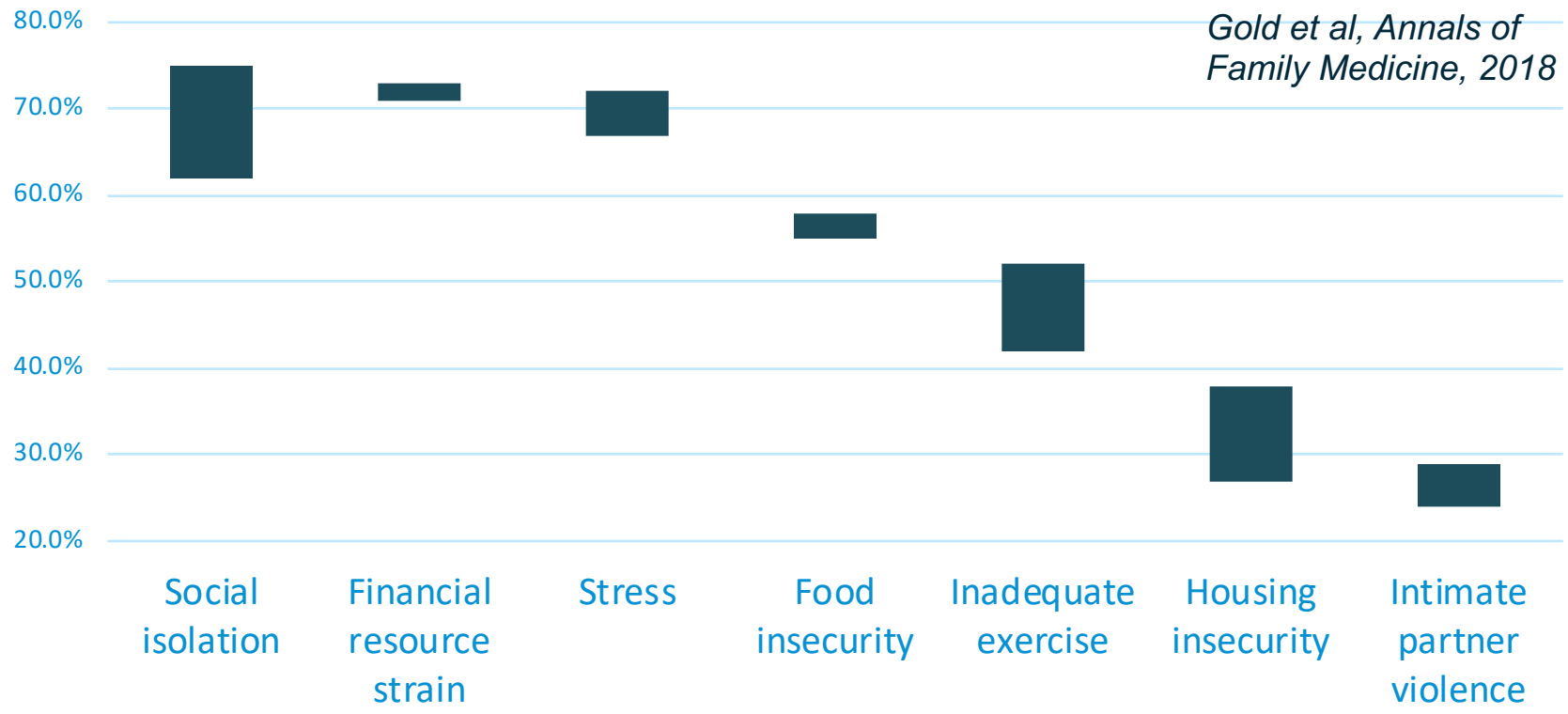
Range of SDH Domains Across the 3 Pilot CHCs



Gold et al, Annals of Family Medicine, 2018

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For more on the ASSESS study results:

Gold et al, AFM 2018

Adoption of Social Determinants of Health EHR Tools by Community Health Centers

Rachel Gold, PbD, MPH[1,2]
Arwen Bunce, MA[1]
Stuart Cowburn, MPH[2]
Katie Dambrun, MPH[2]
Marla Dearing[2]
Mary Middendorf[2]
Ned Mossman, MPH[2]
Celine Hollombe, MPH[1]
Peter Mabr, MD[3]
Gerardo Melgar, MD[4]
James Davis[4]
Laura Gottlieb, MD, MPH[5]
Erika Cottrell, PbD, MPP[2]

[1]Kaiser Permanente Center for Health Research, Portland, Oregon

[2]OCHIN, Inc, Portland, Oregon

[3]Multnomah County Health Department, Portland, Oregon

[4]Cowlitz Family Health Center, Longview, Washington

[5]University of California, San Francisco, California

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Conflicts of interest: authors report none.

CORRESPONDING AUTHOR

Rachel Gold, PhD, MPH
Kaiser Permanente Center for Health Research
3800 N Interstate Ave
Portland, OR 97227
Rachel.Gold@kpchr.org

ABSTRACT

PURPOSE This pilot study assessed the feasibility of implementing electronic health record (EHR) tools for collecting, reviewing, and acting on patient-reported social determinants of health (SDH) data in community health centers (CHCs). We believe it is the first such US study.

METHODS We implemented a suite of SDH data tools in 3 Pacific Northwest CHCs in June 2016, and used mixed methods to assess their adoption through July 2017. We modified the tools at clinic request; for example, we added questions that ask if the patient wanted assistance with SDH needs.

RESULTS Social determinants of health data were collected on 1,130 patients during the study period; 97% to 99% of screened patients (n = 1,098) had ≥1 SDH need documented in the EHR, of whom 211 (19%) had an EHR-documented SDH referral. Only 15% to 21% of patients with a documented SDH need indicated wanting help. Examples of lessons learned on adoption of EHR SDH tools indicate that clinics should: consider how to best integrate tools into existing workflow processes; ensure that staff tasked with SDH efforts receive adequate tool training and access; and consider that timing of data entry impacts how and when SDH data can be used.

CONCLUSIONS Our results indicate that adoption of systematic EHR-based SDH documentation may be feasible, but substantial barriers to adoption exist. Lessons from this study may inform primary care providers seeking to implement SDH-related efforts, and related health policies. Far more research is needed to address implementation barriers related to SDH documentation in EHRs.

Ann Fam Med 2018;16:399-407. https://doi.org/10.1370/afm.2275.

INTRODUCTION

Numerous health care systems are exploring how to incorporate social needs documentation and intervention into routine care.[1-4] These efforts are based on strong evidence that patients' social and economic contexts (their social determinants of health [SDH]) shape health,[5-15] and on nascent evidence that clinic-based SDH screening and intervention can improve health.[2,16-20]

Standardized SDH screening documentation in electronic health records (EHRs) is endorsed by the National Academy of Medicine, the Medicare Access and Children's Health Information Program Reauthorization Act of 2015, the 2016 Centers for Medicare and Medicaid Services' Quality Strategy, and other professional organizations.[21-25] Such documentation is especially relevant to community health centers (CHCs), whose vulnerable patients are likely to experience social and economic risks associated with poor health.[26-36] Community health centers' past efforts to integrate social and medical needs[37] were typically ad hoc and rarely documented in EHRs.[3,4,38] Little is known about how to capture and present SDH information in CHCs' EHRs, or how to integrate EHR-based SDH documentation into CHC workflows.[19,39]

We conducted a pilot study to develop EHR-based SDH data tools for documenting and summarizing SDH screening results and making

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ASCEND study

- 5-year study (NIDDK): 9/2017-9/2022 (Gold – PI)
- Formative: **measured** SDH data collection in OCHIN CHCs in the 2 years after 6/2016 when 'SDH Data Tools' went live; **interviewed** CHC staff at clinics with high adoption
- **Pragmatic trial**: intensive implementation support intervention package:
  - 6 months: 'SDH Implementation Team' tailors support to each CHC's needs
  - Provide tailored technical assistance & training in planning for & implementing SDH data collection / action;
  - Walks clinics through 5 implementation steps .....
    1. Select SDH team
    2. Identify SDH data goals
    3. Identify SDH workflow plan
    4. Train clinic staff in goals, plan
    5. Test, iterate workflows until successful

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SDH screening adoption step	Tasks needed for this step	Date completed / support needed
Step 1. Create a 'SDH Team.'	Obtain leadership support for SDH screening.	
	Identify a clinician champion (CC) for SDH screening adoption.	
	Identify a project champion (PC); this may be the CC if desired.	
	Give the champion(s) dedicated time for SDH efforts, including contact with study team.	
Step 2. Identify clinic goals	Identify your clinic's goals for SDH screening, and which patients you want to screen	
Step 3. Create a 'SDH Plan.	Create a workflow plan for SDH data collection and review, and (if desired) SDH action.	
	Create a rollout plan and a plan for tracking your clinic's SDH screening adoption.	
Step 4. Train clinic staff in the 'SDH Plan.'	Orient clinic staff (e.g., at a staff meeting, via email, etc.).	
	If changes are made to the plan, orient staff to the changes.	
	Train new staff as needed.	
Step 5. Roll out, then iteratively revise the 'SDH Plan'	Start rollout.	
	Review your clinic's SDH screening rates on a regular basis. Use this information to improve adoption of your SDH Plan.	

a. **Why do you want to screen your patients?**

Review these potential uses for SDH data; check those that apply to your clinic's goals at this time. *If your goals for SDH screening change, consider whether / how that affects which patients you screen, how often, and for which SDH.*

	1. To provide contextual information that could impact individual patients' treatment plan	***Prioritize*** **the uses of SDH data for your clinic, if desired:**
☐	**Inform treatment, care planning; know what is affecting patients** *E.g.: Change homeless patient's rx to one that doesn't require refrigeration*	
☐	**Identify & make needed social service intervention referrals** *E.g.: Refer patient with diabetes, who lacks healthy food, to food bank*	
	2. To understand areas of need in our clinic / community	
☐	**Support *organizational* changes - Identify needed staff, allocate resources** *E.g.: Ensure that a social worker is available to address patients' experience of relationship violence; use SDH data to decide where to locate a new Community Health Worker staff position*	
☐	**Support *community* changes - Provide data for advocacy** *E.g.: Inform local government about need for housing resources*	
☐	**Creating new partnerships with new / other community agencies** *E.g.: Data on patients' legal needs drives creation of medical-legal partnership*	
	3. To conduct targeted outreach ("Segmentation" of your patient population)	
☐	**Enable targeted outreach to vulnerable patients** *E.g.: Identify patients with transportation barriers (e.g., those in communities with little public transportation), and refer them to transportation assistance*	
☐	**Prioritize management of complex patients** *E.g.: Community Health Worker identifies patients with social needs for care management program*	
	4. Respond to external requirements	
☐	**Conduct screening as required by our health system, state, ACO, etc.** *E.g.: Our CCO requires screening for housing needs.*	

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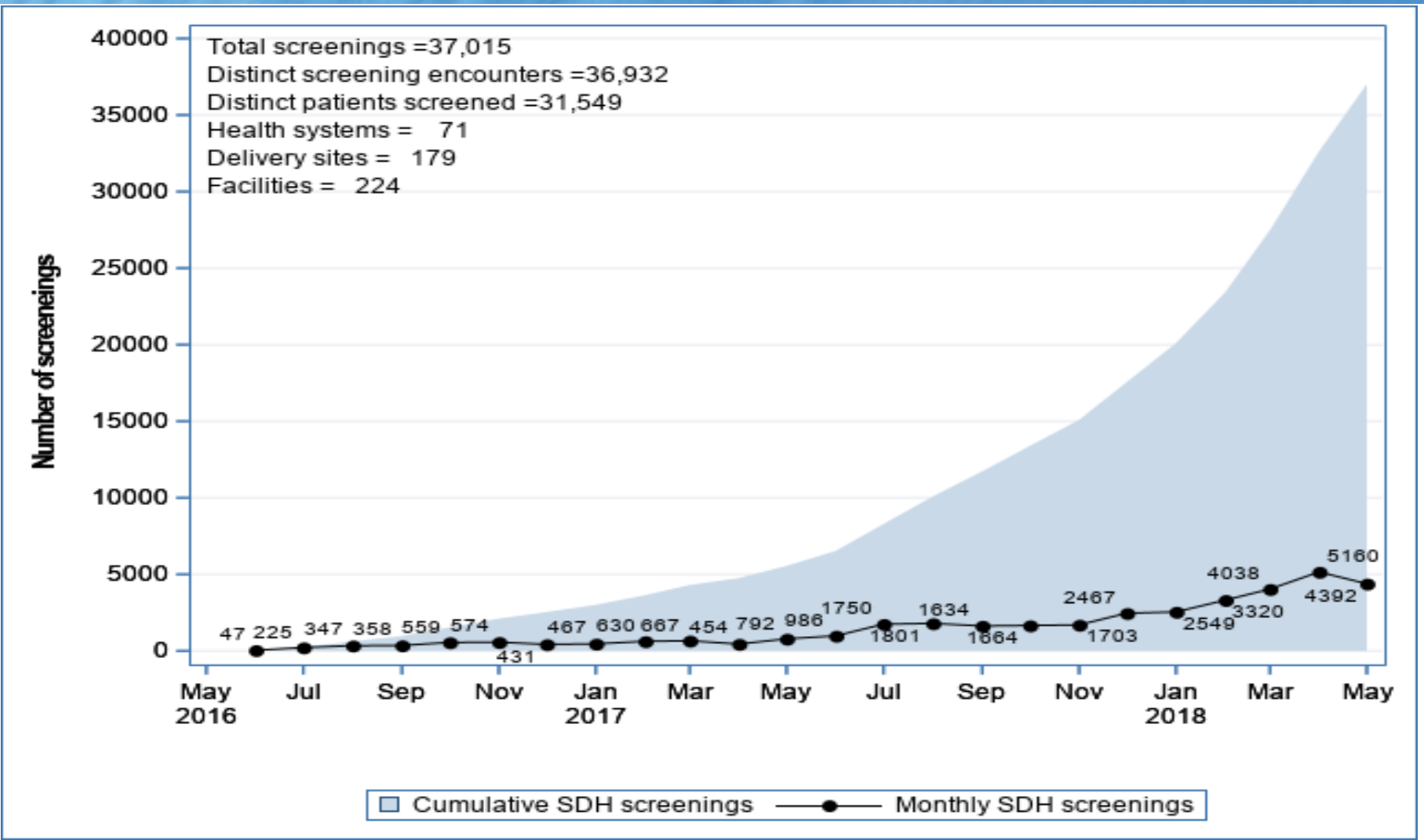
Adoption of SDH documentation tools in OCHIN CHCs, 6/1/16-5/30/18

(more info - poster session 10/8/2018, 6 pm)



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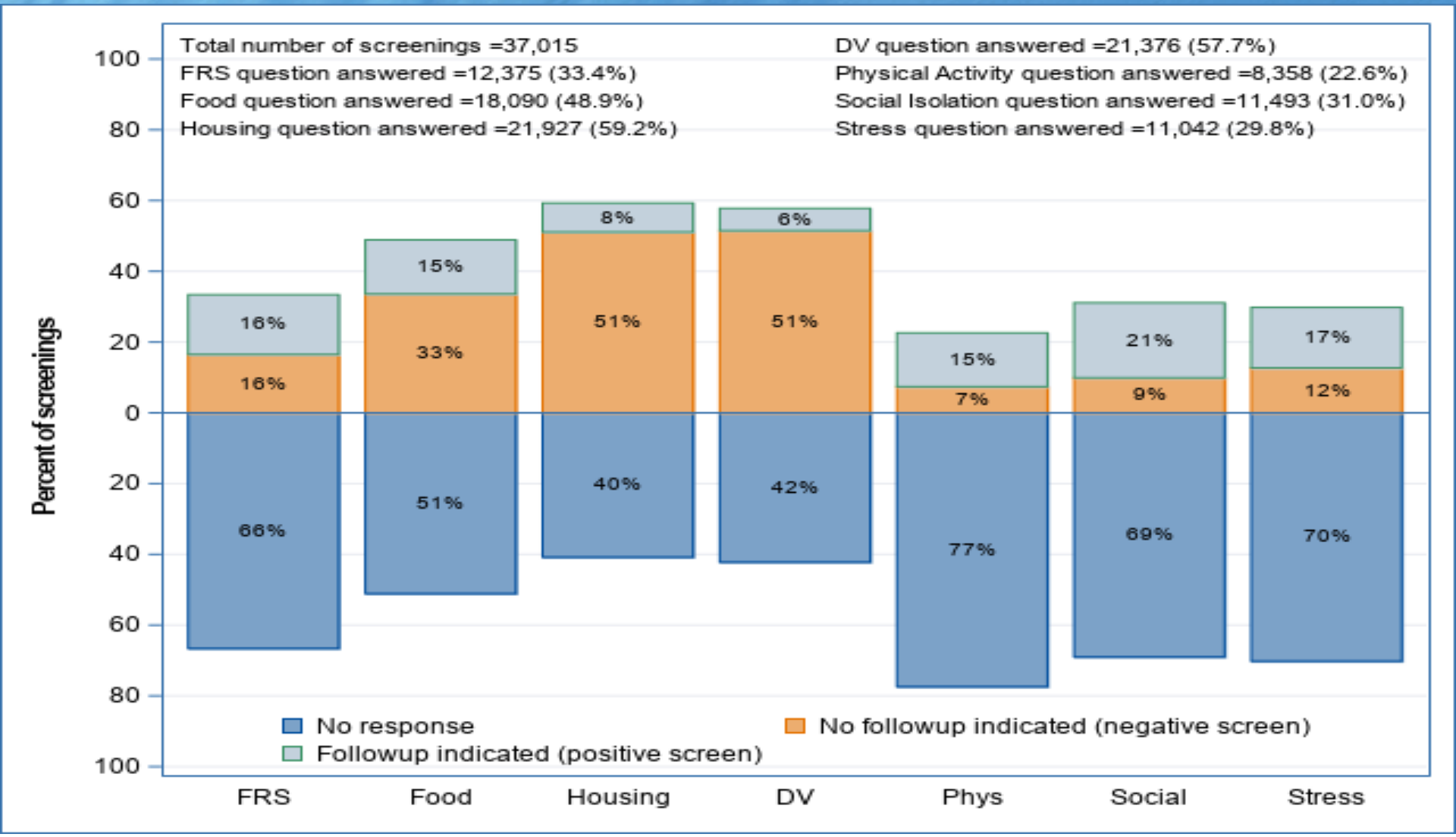

Barriers to adoption of EHR-based SDH documentation / action – implementation (data from both studies)

- ***Any* practice change involving patient-reported data collection may encounter barriers**
- **Collecting / acting on SDH data *especially* challenging; requires clinics to:**
  - Re-think clinical team responsibilities, role, culture
  - Decide who to screen, how often, what for, how to identify at-risk patients, how to act ... *without guidelines or evidence*
  - Decide: Why do they want these data? What will they use them for?
  - Decide: *Why screen* for factors that clinic staff cannot address?
  - Consider staff roles, best workflows
  - Ensure that correct staff have access to correct tools
  - Make SDH referrals ≠ clinical referrals
  - Locate / create / update community resource lists
  - Code without adequate coding standards
  - Etc.!

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Complexities of doing this research

- Appropriate study design? E.g., stepped-wedge:
  - Evaluates implementation support
  - Ensures that all study clinics receive the intervention
- Engage providers / clinic staff from the start – how?
- Use implementation team interactions as primary qualitative data, to not tax the clinics with additional data collection; TBD: Will we get enough / the right kind of data to identify causal mechanisms?
- Landscape evolving rapidly – likely different SDH needs 9/2018 than 9/2020!
- Concurrent initiatives (AHC!)
  - We dealt with this by partnering with local AHC, but still expect potential study impact

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Complexities of doing this research

- Sharing results / disseminating / getting results into practice
  - Build trust with clinics, implementation and research – ripples outward
- How to adapt existing implementation efforts to incorporate new findings
  - Build interventions to be flexible
  - When possible collect qualitative data to support mid-stream adjustment as needed (ex: formative clinic summaries informed implementation tools, trainings)
- Designing research that is both pragmatic and generalizable
  - Mixed methods
  - Natural experiments
  - Policy relevance
  - Focus on causal mechanisms - collect the type of data that will have most impact

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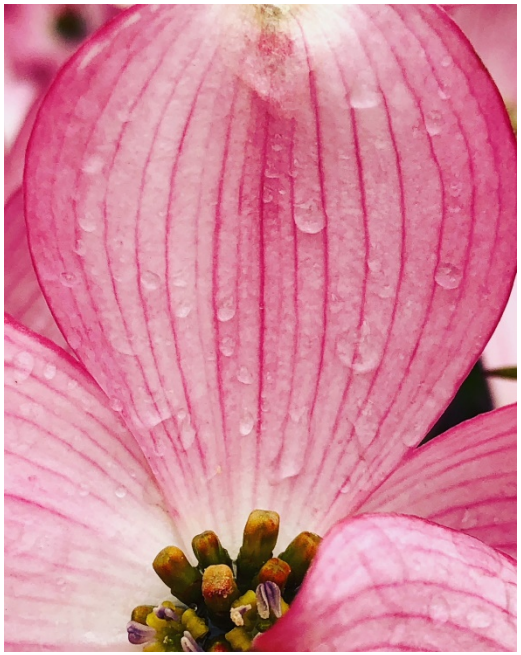
Thank you! Questions?

Rachel Gold, PhD, MPH

rachel.gold@kpchr.org



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