Rethinking workforce models to ensure equity, quality and sustainability for addressing unmet social needs

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Session Goals

- Summarize findings from a scoping review on workforce models to identify and address patients' social needs

- Compare different workforce models and the pros and cons from our US experience

- Discuss opportunities to advance workforce development and deployment for social care integration through policy, research, and practice efforts to achieve equity, quality and sustainability

US Context
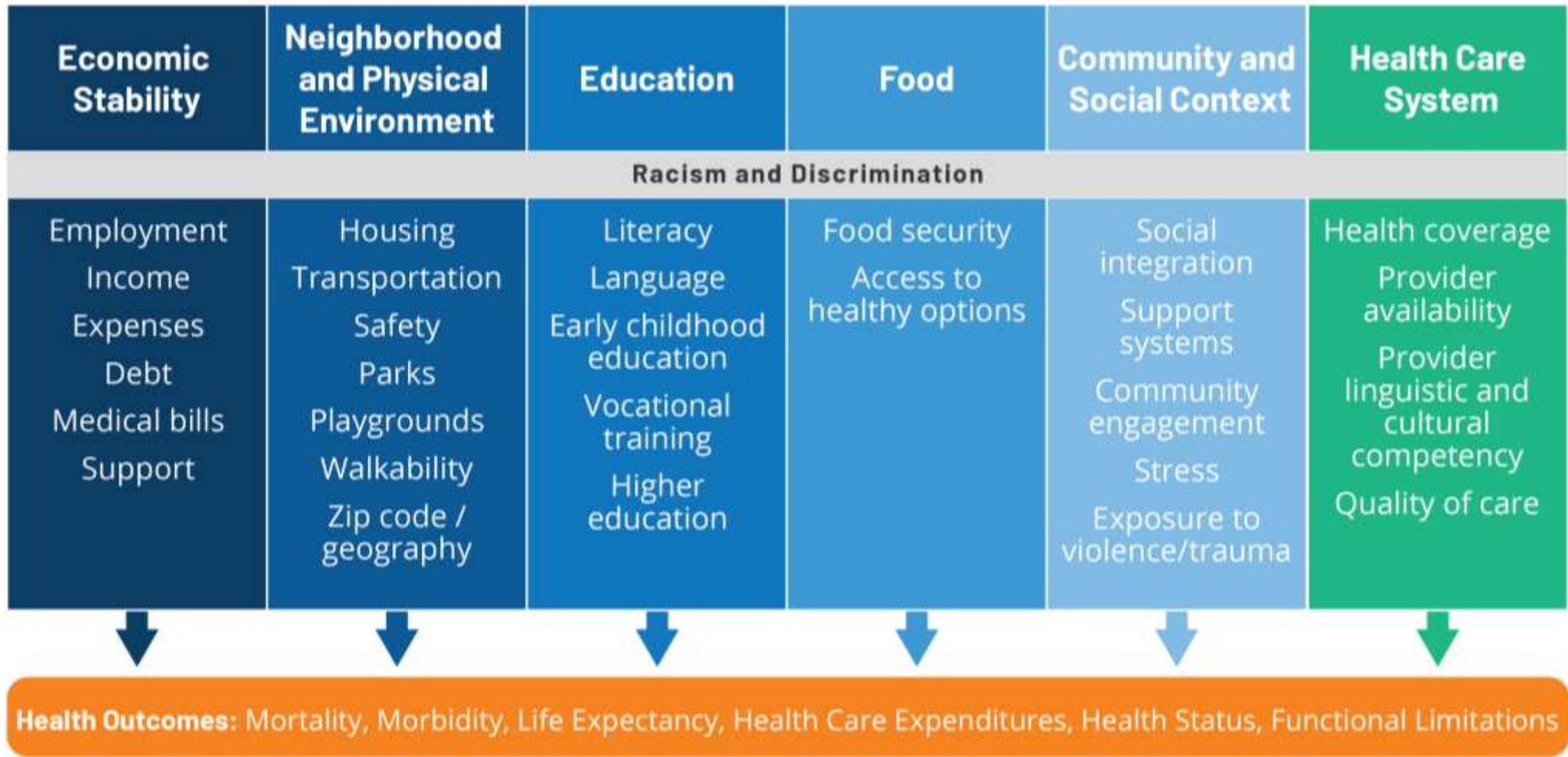
Source: Kaiser Family Foundation

National Academies of Sciences, Engineering, and Medicine Consensus Report (2019)

Figure 1. Activities to integrate social care into health care delivery

Adjustment refers to activities where social risk information is used to inform and/or alter care.

Assistance refers to activities that connect patients experiencing social risks with community and other social care resources.

Awareness refers to activities to identify the presence of social risks within defined patients and populations.

Alignment refers to activities to understand the existing social care resources in the community and deploys them to meet patient social risks and improve health outcomes.

Advocacy refers to activities between health care and community partners that promote policies to improve the availability and distribution of resources for patients experiencing social risks.

Adapted from NASEM (2019) *Integrating Social Care into the Delivery of Health Care: Moving Upstream to Improve the Nation's Health.*

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Who is Best Equipped to Conduct these Activities?

- Chapter 3 in the NASEM report focused on workforce

- Little evidence on workforce models:
  - Which types of workers are used most frequently and in which settings
  - What are core training and certification components for each workforce model
  - Which implementation strategies health systems use for workforce deployment

- Unlike Link Workers, no specified role in the US

Scoping Review

(thru 2021)

Workforce Models to Screen for and Address Patients' Unmet Social Needs in the Clinic Setting: A Scoping Review

Sahil Sandhu[1,2], Jacqueline Xu[1,2],
Howard Eisenson[3], and Janet Prvu Bettger[2,4]

- To characterize the workforce models in outpatient settings that identify and respond to patient's unmet social needs.
  - types of staff, combinations of staff, relevant activities conducted, and staff training provided to support workers in their role

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Results:
PRISMA
Flow Diagram

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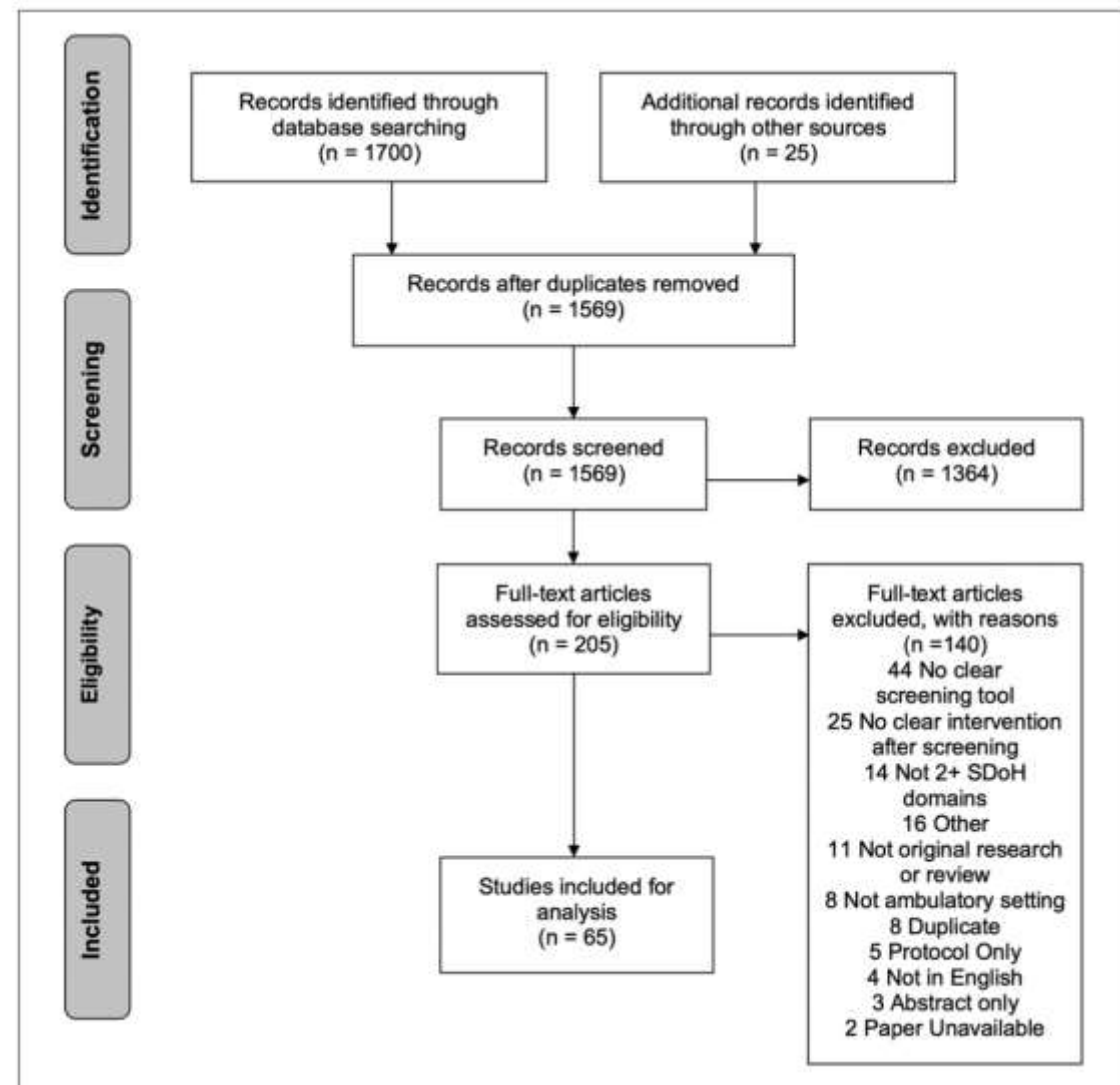
58 of 65 studies were conducted with patients in primary care patients

40 included academic sites

48 included urban sites

40 included pediatric and adolescent populations

Few RCTs

Table 1. Article Characteristics.

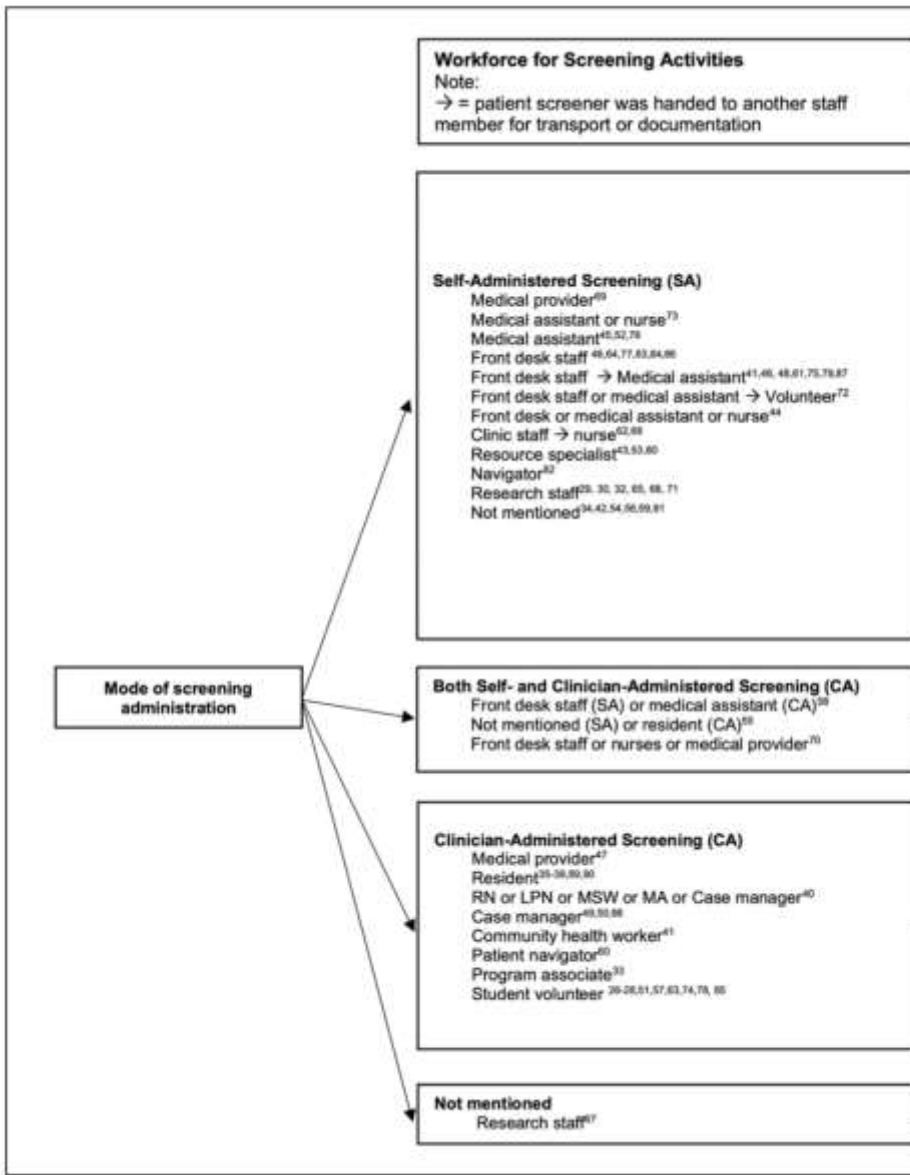| Study design	Geographic setting	Institutional setting	Patient population
Randomized control trial	Urban[26-30,32] Not mentioned[31]	Academic primary care clinic[29] Safety-net urgent care clinic[27] Community health center[30,31] Women's health clinic[32] Multi-setting[26,28]	Pediatrics[26-30] Adults with depression[31] Women with depression[32]
Difference-in-difference/quasi-experimental	Urban[34] Not mentioned[33]	Academic primary care clinic[34] Integrated health system[33]	Adults[34] Adults with predicted high utilization[33]
Pre-post with control	Urban[35-37]	Academic primary care clinic[35-37]	Pediatrics[35-37]
Observational studies (eg, pre-post, feasibility studies, pilots)	Urban[38-56,62,63,65-68,71] Multi-setting[61] Not mentioned[57-60,64,69,70]	Academic primary care clinic[38,41-44,47,48,51-54,56,59,63,65] Academic women's health clinic[71] Private primary care clinic[70] Integrated health system[60] Community health center/ federally qualified health center[40,45,46,61,68,69] Academic-federally qualified health center[39,57,62,66] Unspecified primary care clinic[64,67] Multi-primary care setting[49,50,55,58]	Pediatrics[38,39,44,47,51,52,56,59,61,62,64,66,68-70] Adolescents[43,53] Adults[42,46,48,54,58,65,67] Elderly Hispanic adults[57] Pregnant women[40] Black women[49,50] Women with depression[71] Multiple populations[45,55] Not mentioned[41,60,63]
Quality improvement	Urban[72,75,77,79] Suburban[76] Rural[73] Not mentioned[74,78]	Student-run free clinic[78] Federally qualified health center[74] Rural health clinic[73] Academic primary care clinic[79] Academic-community health center[72] Academic specialty clinic[75,77] Integrated health system primary care clinic[76]	Pediatrics[72-74] Children with sickle cell disease[75] Adults[78] Adult women[77] Multiple populations[76,79]
Qualitative	Urban[80,81,83,87] Not mentioned[82,84-86]	Academic primary care clinic[80,82,84,85] Public primary care clinic[83] Community health center[81,86] Integrated healthcare system[87]	Pediatrics[80,81] Adolescents[80] Adults[84] Multiple populations[83,85] Not mentioned[86,87]
Case study	Urban[88,89] Multi-setting[90]	Academic primary care clinic[89] Federally qualified health center[88] Multi-setting[90]	Pediatrics[89] Adults[88] Multiple populations[90]

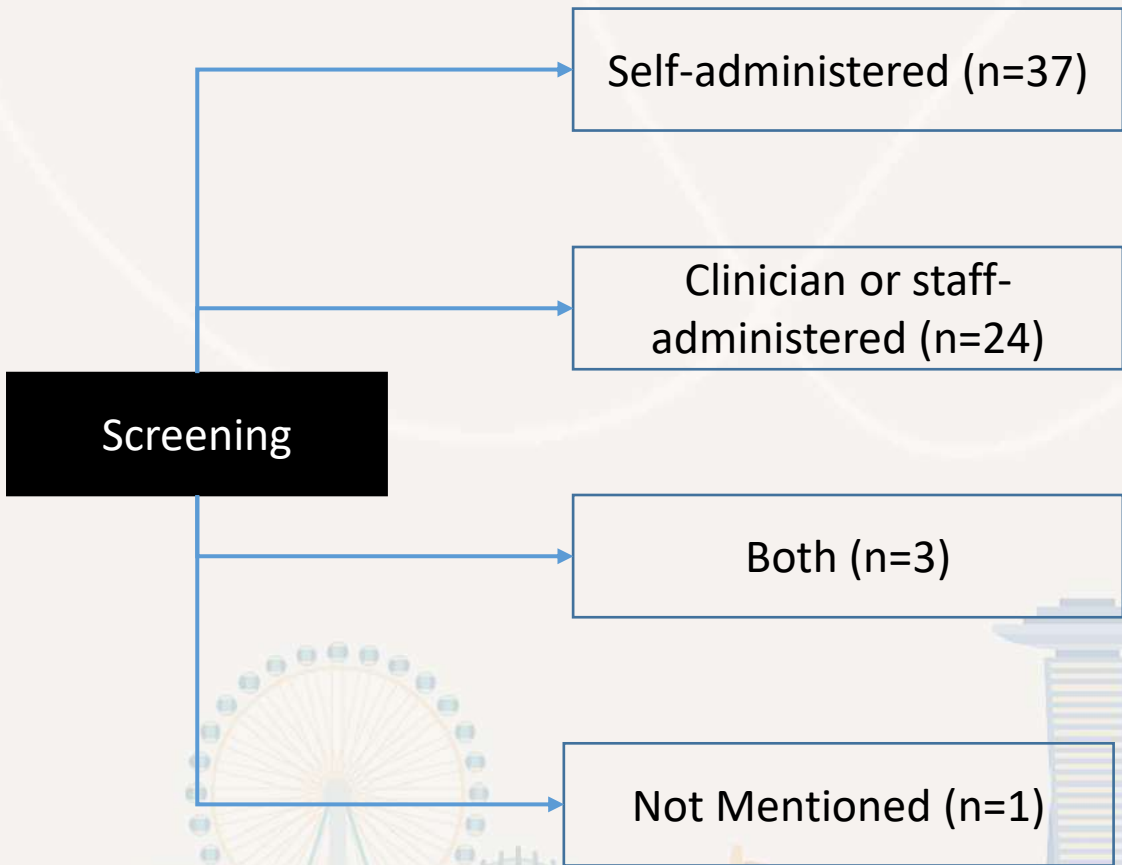# Types of Workers

The traditional healthcare workforce

- Doctors, advanced practice providers, and nurses
- Clinic front desk staff and medical assistants

The social care workforce

- Social workers, case managers, care coordinators, patient navigators, patient advocates, community resource specialists, community health workers, outreach workers, wellness coaches, and volunteers

Who did what part of the Intervention?

Screening

→ **Self-administered (n=37)** →

- **21** used **front desk staff** or **medical assistants** to give patients a paper form or tablet to complete the screening questions at check-in or during registration, or had **medical assistants** distribute the screen while rooming a patient

- **2** included **nurses** in distributing self-administrated screening survey

- **3** had **resource specialists** use a web-based platform on laptops to administer a social needs screen that allowed patients to choose problems for assistance and referral agencies

- **1** used **navigators**

- **6** used **research assistants**

- **6** articles **did not report** workforce deployed

→ **Clinician or staff-administered (n=24)**

→ **Both (n=3)**

→ **Not Mentioned (n=1)**

In **27** models, the workforce that distributed the screen to the patient differed from the workforce that reviewed the screen and responded to the patient's need

Screening

Self-administered (n=37)

Clinician or staff-administered* (n=24)

Both (n=3)

Not Mentioned (n=1)
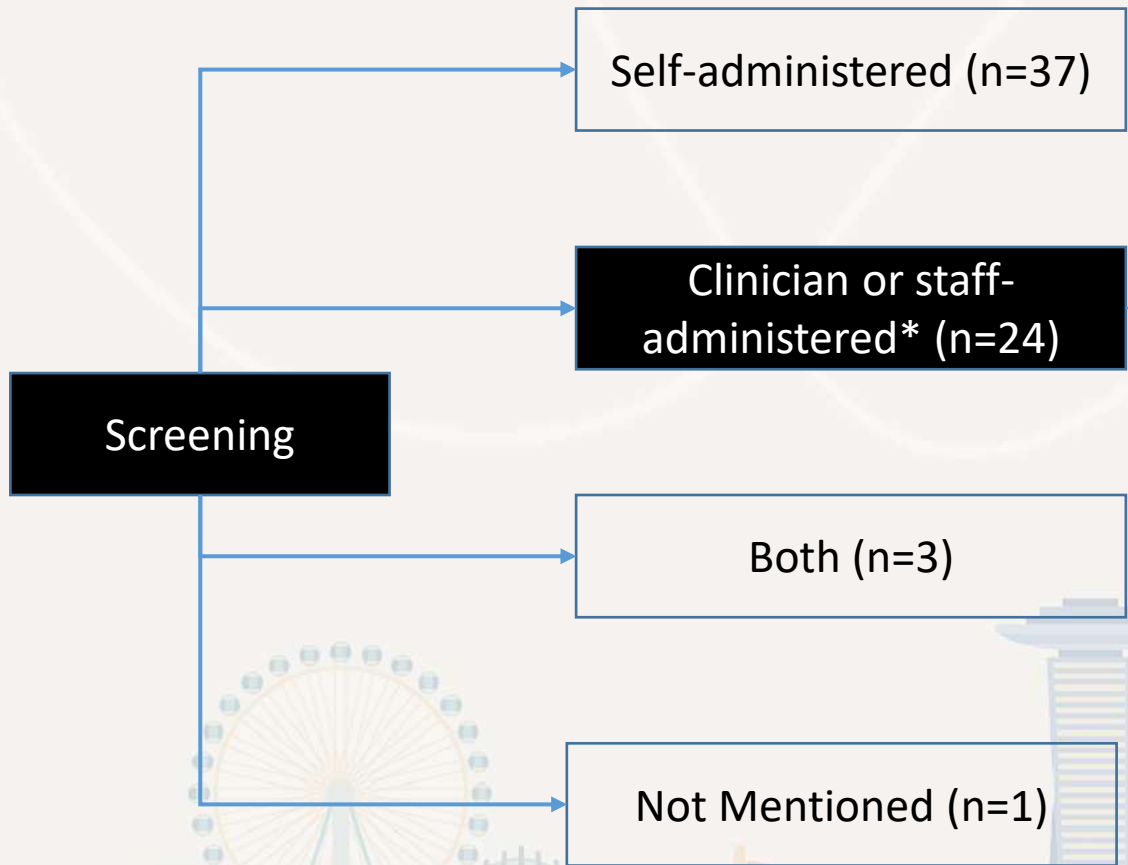
1 used **medical providers** to screen patients

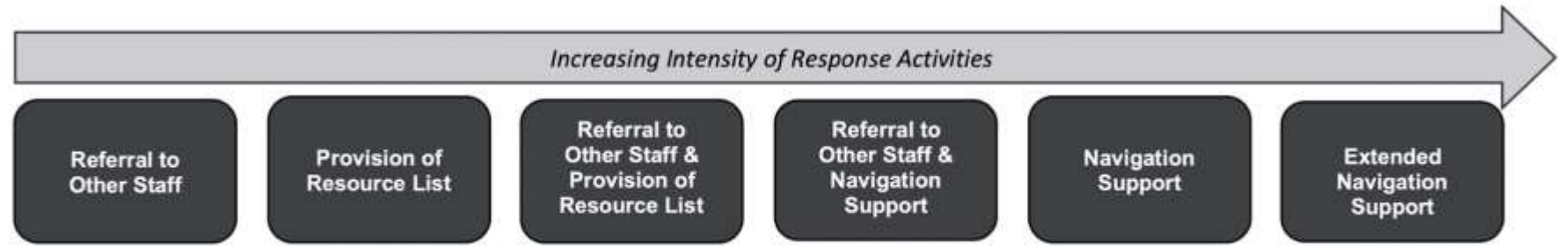**7** used **medical residents**

1 used a **combination of traditional health care and social care staff** (eg, nurse, social worker, medical assistant)

15 used **paid social care staff** (eg, case managers, community health workers, navigators) or **volunteers**

In the **15 models** that used social care staff or non-physician clinical staff to administer screenings, the same worker who conducted the screening was the **same worker** to provide initial assistance to patients, with **2 studies** allowing for **additional follow-up** from separate student volunteers.

*Clinician-administered screening to include verbally asking questions from standardized paper forms, electronic-health record flowsheets, and through screening mnemonics

Significant variation in the response activities, who responded, and intensity of response

Increasing Intensity of Response Activities

| Referral to Other Staff | Provision of Resource List | Referral to Other Staff & Provision of Resource List | Referral to Other Staff & Navigation Support | Navigation Support | Extended Navigation Support |

Modes of Training Provided to Workers

- Study descriptions of training were summarized into four categories:
  - in-person didactic training
  - online-training/video-based training
  - skills-based training
  - experiential-learning
- Training modes were either reported single component (N=11, e.g. only in-person training) or multi-components (N=17, e.g. in-person training and skill-based training)
- 37 studies did not explicitly report how staff were trained to implement the program

Summary from the Literature

For screening-related activities
• **33 studies included the traditional healthcare workforce, such as clinical and front-desk staff** • 21 included the social care workforce, including paid and volunteer staff • 7 included research staff • 6 did not mention the specific type of worker

For response-related activities
• 39 studies included the traditional healthcare workforce • **57 included the social care workforce** • 4 included research staff

46 (71%) used interprofessional teams for screening and response-related activities

Our US Experience

Lincoln + "Help Desk"
Student Community Resource Navigators
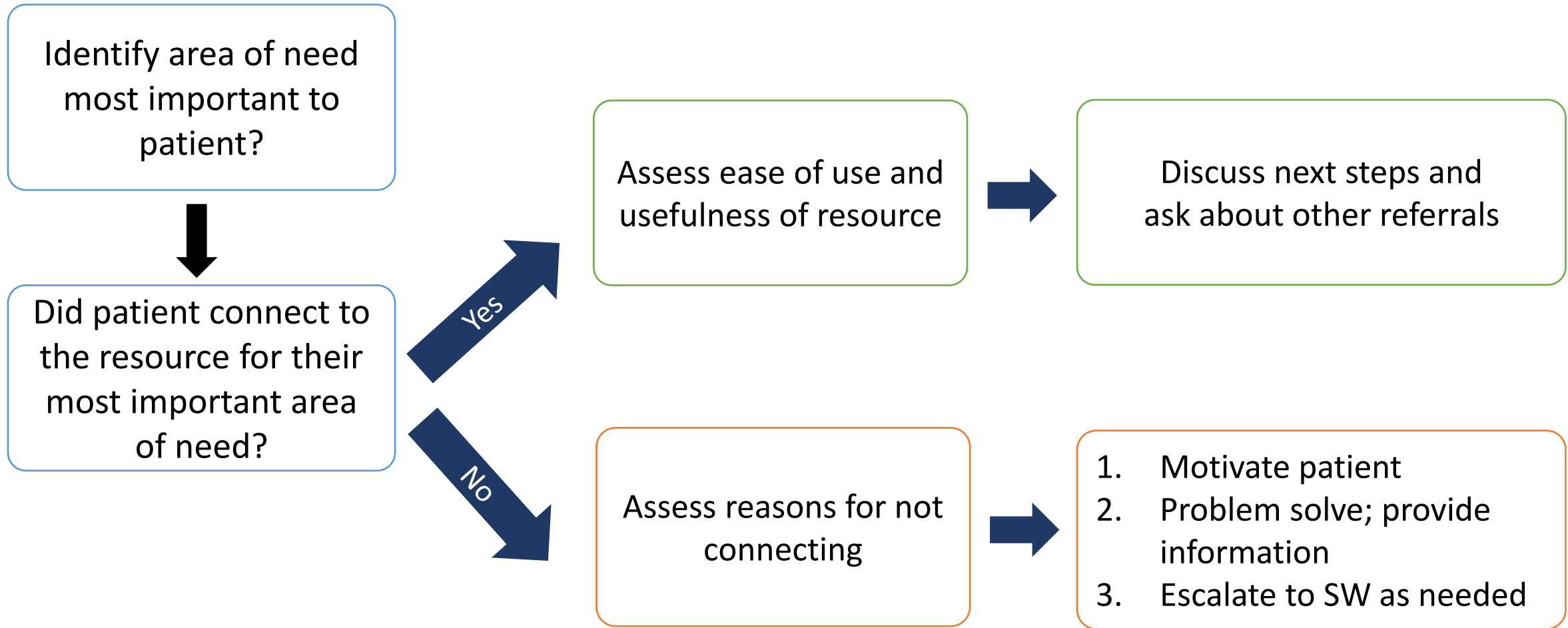**Standard of Care**

For SDOH Screening, Referral and Follow-up

Social Care Workforce for Screening with Follow Up Support of Patients Through the Student Help Desk Volunteers

Lincoln behavioral health team **screens** patients for unmet social needs in clinic

Lincoln behavioral health team **refers** patients to community resources

Volunteers make **follow-up** calls to problem solve & evaluate connection to these resources

help desk

Launched Feb 2019

Student Help Desk Phone Call*

Identify area of need most important to patient?

↓

Did patient connect to the resource for their most important area of need?

Yes →

Assess ease of use and usefulness of resource → Discuss next steps and ask about other referrals

No →

Assess reasons for not connecting →
1. Motivate patient
2. Problem solve; provide information
3. Escalate to SW as needed

*Student volunteers complete 20 hrs of training + weekly case review: Guatum et al., Frontiers in Public Health 2022

Other Models Had to be Evaluated In Order to Expand Reach, Capacity and Support for Providers and Patients

1 help desk

| Lincoln behavioral health team **screens** patients for unmet social needs **in clinic** | → | Lincoln behavioral health team **refers** patients to community resources | → | Volunteers make **follow-up calls** to problem solve & evaluate connection to these resources | → | Volunteer-led phone reassurance **calls** to **rescreen** during COVID, **refer**, and problem solve access to resources |

6 SMS Text → AI generated SMS text message ↑

4

2 Self-initiated Universal Screening Pilot

| Lincoln patients complete **screen** at clinic registration | → | Patients meet with Lincoln Social Worker to receive **referrals** to community resources | → | Volunteers make **follow-up calls** to problem solve & evaluate connection to these resources |

3 Fill the Gap (focus on immigrant & refugee families)

| Lincoln Social Worker **calls** immigrant & refugee patients to **screen** unmet social needs | → | Lincoln Social Worker **refers** patients to community resources | → | Volunteers make **follow-up calls** to problem solve & evaluate connection to these resources |

5 Navigator Initiated Screening

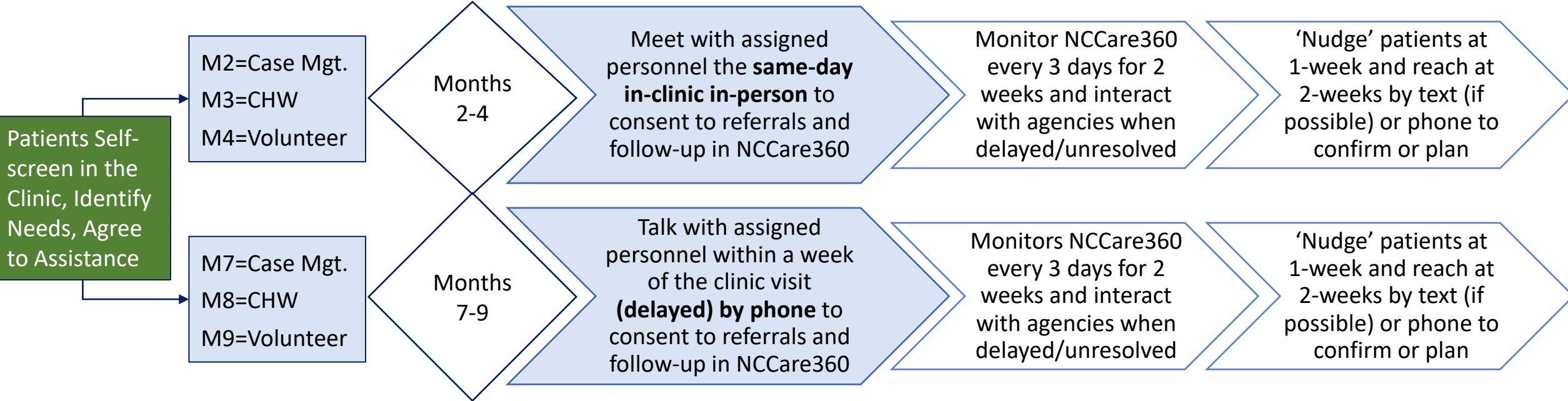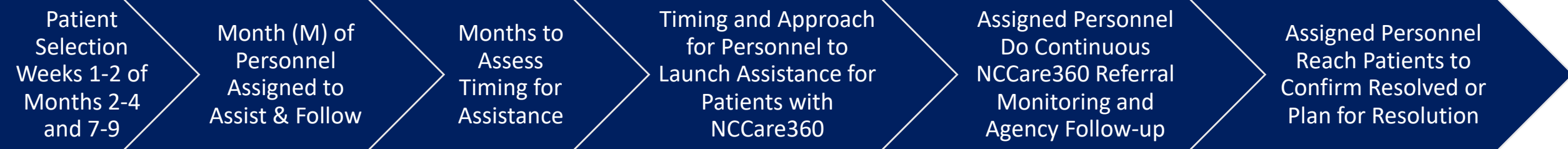| Volunteer **calls** patients to **screen** unmet social needs | → | Volunteer **refers** patients to resources while on the phone | → | Volunteers **follow-up** by phone… | → | Volunteers make **follow-up calls** to problem solve & evaluate connection to these resources |
| | | | → | Lincoln Social Worker **follows up by phone** | → | |

Newest NIH/CTSI Funded Study: Factorial Design to Evaluate Provider Type & Timing of Intervention

| Patient Selection Weeks 1-2 of Months 2-4 and 7-9 | Month (M) of Personnel Assigned to Assist & Follow | Months to Assess Timing for Assistance | Timing and Approach for Personnel to Launch Assistance for Patients with NCCare360 | Assigned Personnel Do Continuous NCCare360 Referral Monitoring and Agency Follow-up | Assigned Personnel Reach Patients to Confirm Resolved or Plan for Resolution |

Patients Self-screen in the Clinic, Identify Needs, Agree to Assistance

M2=Case Mgt.
M3=CHW
M4=Volunteer

Months 2-4

Meet with assigned personnel the **same-day in-clinic in-person** to consent to referrals and follow-up in NCCare360

Monitor NCCare360 every 3 days for 2 weeks and interact with agencies when delayed/unresolved

'Nudge' patients at 1-week and reach at 2-weeks by text (if possible) or phone to confirm or plan

M7=Case Mgt.
M8=CHW
M9=Volunteer

Months 7-9

Talk with assigned personnel within a week of the clinic visit **(delayed) by phone** to consent to referrals and follow-up in NCCare360

Monitors NCCare360 every 3 days for 2 weeks and interact with agencies when delayed/unresolved

'Nudge' patients at 1-week and reach at 2-weeks by text (if possible) or phone to confirm or plan

63%

of patients reached after the initial encounter were in the process of connecting to a service or connected to a service

Barriers to Connecting with Resources
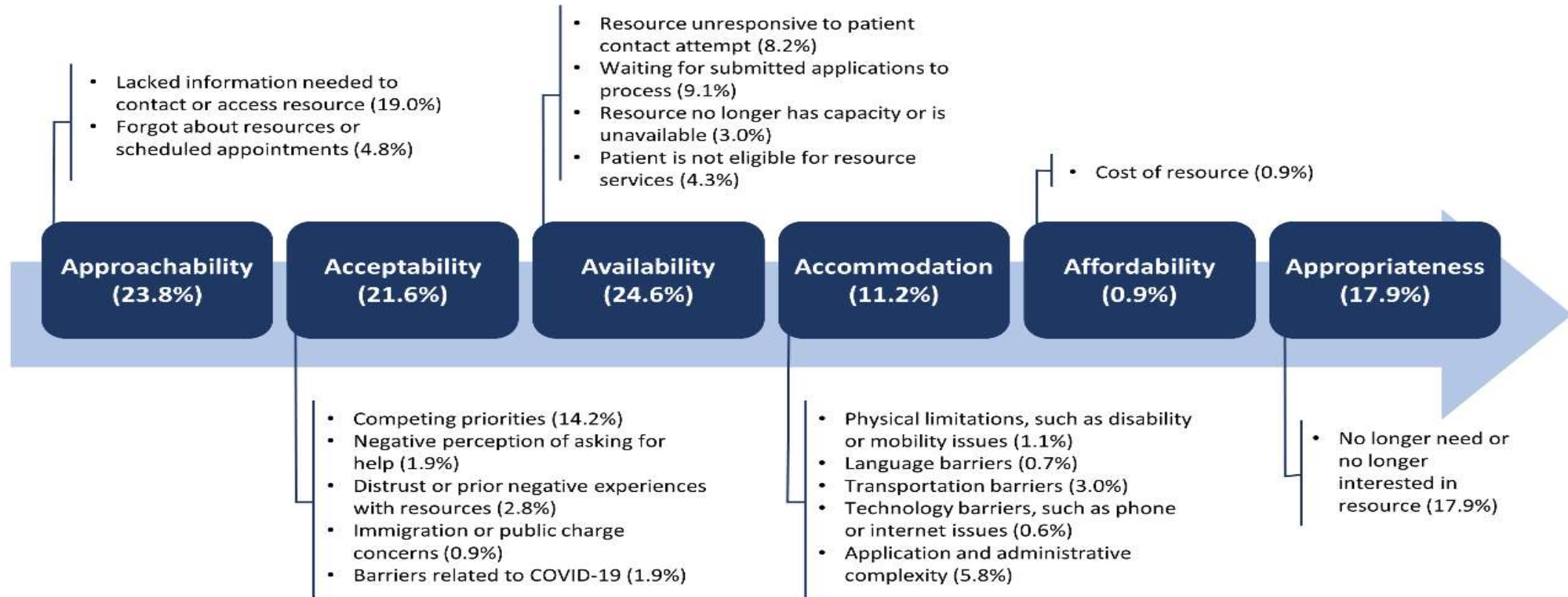
Patient Vignette

"Looking forward to receiving your phone call!"

"Thank you for your time as a volunteer. This has never happened before."

"The information you provided help me to connect with 2 nearby Durham pantries."

"I'm having a difficult time speaking to an agent about my application status."

"Please remove me from this call list."

Student Navigator Experience

Provider Perspective and Influence of Care

Patient centered care involves:
- Respect for patients' preferences
- Coordination of care
- Information, communication and education
- Emotional support
- Involvement of family and friends
- Continuity and transition
- Access to care

Some of our Manuscripts

- Sandhu S, Xu J, Eisenson H, Prvu Bettger J. Workforce models to identify and respond to patients' unmet social needs: a scoping review. Journal of Primary Care. Jan-Dec 2021;12:21501327211021021. doi: 10.1177/21501327211021021. PMID: 34053370

- Lian T, Kutzer K, Gautam D, Eisen H, Crowder JC, Esmaili E, Sandhu S, Trachtman L, Prvu Bettger J, Drake C. Factors associated with patients' connection to referred social needs resources at a federally qualified health center. Journal of Primary Care and Community Health. Jan-Dec 2021;12:21501327211024390. doi: 10.1177/21501327211024390. PMID: 34120507 PMCID: PMC8202269

- Sandhu S, Xu J, Blanchard L, Eisenson H, Crowder C, Sotelo Munoz V, Drake C, Prvu Bettger J. A community resource navigator model: utilizing student volunteers to integrate health and social care in a community health center setting. International Journal of Integrated Care. 2021 Feb 5;21(1):2. doi: 10.5334/ijic.5501. PMID: 33597833 PMCID: PMC7863845

- Sandhu S, Lemmon M, Eisonson H, Crowder CJ, Prvu Bettger J. Addressing the social determinants of health during the COVID-19 pandemic: ensuring equity, quality and sustainability. Family and Community Health. 2021 Apr-Jun 01;44(2):78-80. doi: 10.1097/FCH.0000000000000290. PMID: 33351516

- Sandhu S, Sharma A, Cholera R, Prvu Bettger J. Integrated health and social care in the United States: a decade of policy progress. International Journal of Integrated Care, in press.

- Hallur S, Sandhu S, Herold E, Trejo A, Rasmussen D, Riggs N, Ali HM, Prvu Bettger J. Embedding student volunteer Affordable Care Act navigators in a primary care clinic. Annals of Family Medicine, in press

- Smeltz L, Hock Lee K, Prvu Bettger J. Integrating comprehensive social needs screening and referral into the delivery of rehabilitation care: a systematic review and recommendations. Archives of Physical Medicine and Rehabilitation. 2022;103(9):1886-1890.

- Sandhu S, Lian T, Smeltz L, Drake C, Eisenson H, Prvu Bettger J. Patient barriers to accessing referred resources for unmet social needs. Journal of the American Board of Family Medicine. 2022 July/August;35(4):793-802. https://doi.org/10.3122/jabfm.2022.04.210462

- Lian T, Reid H, Rader A, Dewitt-Feldman S, Hezarkhani E, Gu E, Scott M, Kutzer K, Sandhu S, Crowder C, Ito K, Eisenson H, Prvu Bettger J, Shaw RJ, Lewinski A, Ming DY, Bosworth HB, Zullig LL, Batch BC, Drake C. A tailored SMS text message based intervention to facilitate patient access to referred community-based social needs resources: protocol for a feasibility and acceptability pilot. JMIR In Press, Preprints. 21/03/2022:37316

- Gautam D, Kutzer K, Sandhu S, Blanchard L, Xu J, Sotelo Munoz V, Dennis E, Drake C, Crowder C, Eisenson H, Prvu Bettger J. Community resource navigator: virtual curriculum for pre-health and health professional students to address the social determinants of health. Frontiers in Public Health.

- Li J, Thomas J, Sandhu S, Whitehead L, Prvu Bettger J. Leveraging volunteers to develop and maintain directory of health and social care resources during the COVID-19 pandemic. Under Review.

- Smeltz L, Rancu A, Lian T, Wen E, Shuffer H, Sandhu S, Eisenson, Crowder JC, Prvu Bettger J. Identifying community-based service needs for people of working age who are unemployed due to disability. Under review

Where and when should social risks be addressed?
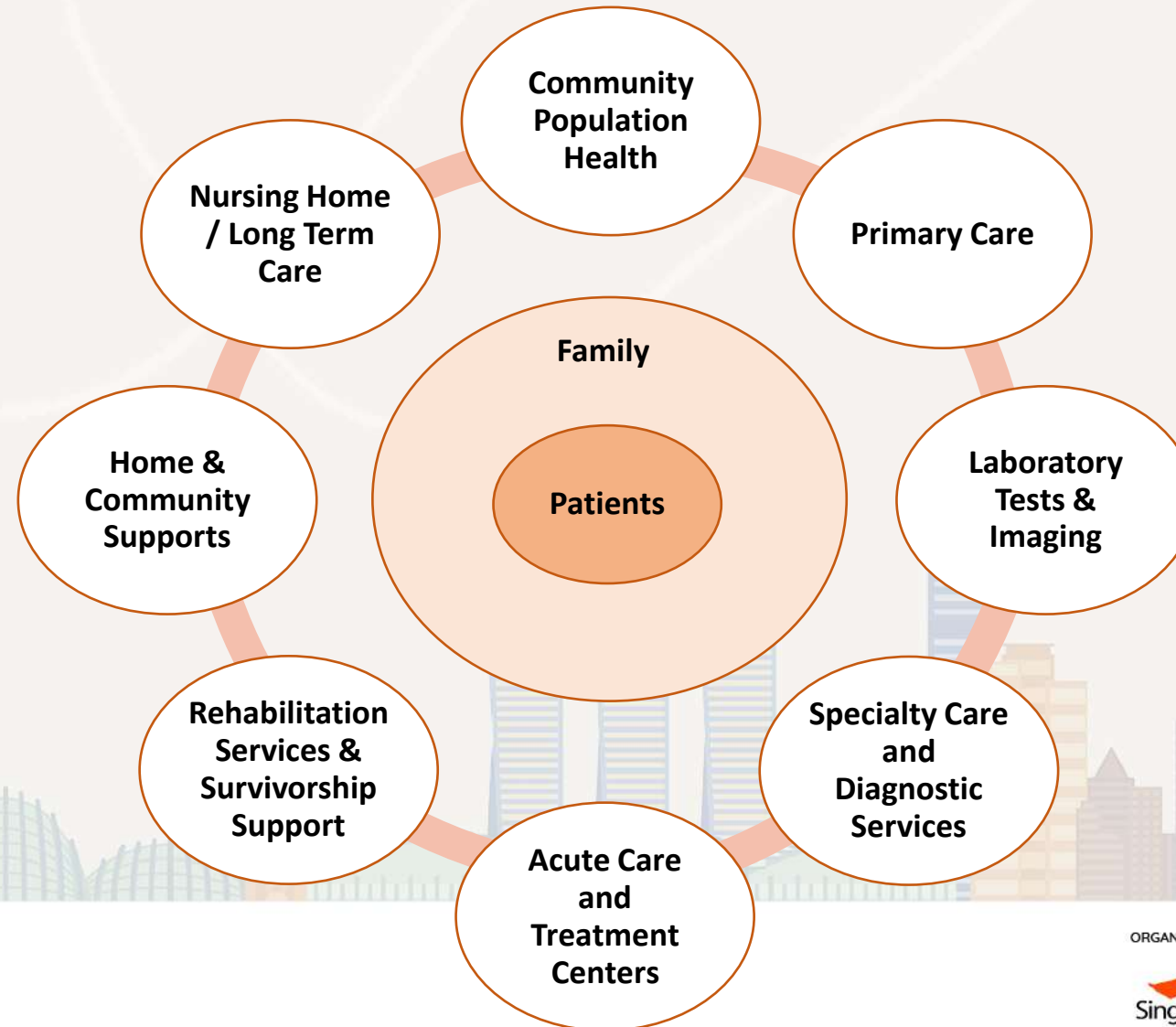
What type of research is needed?
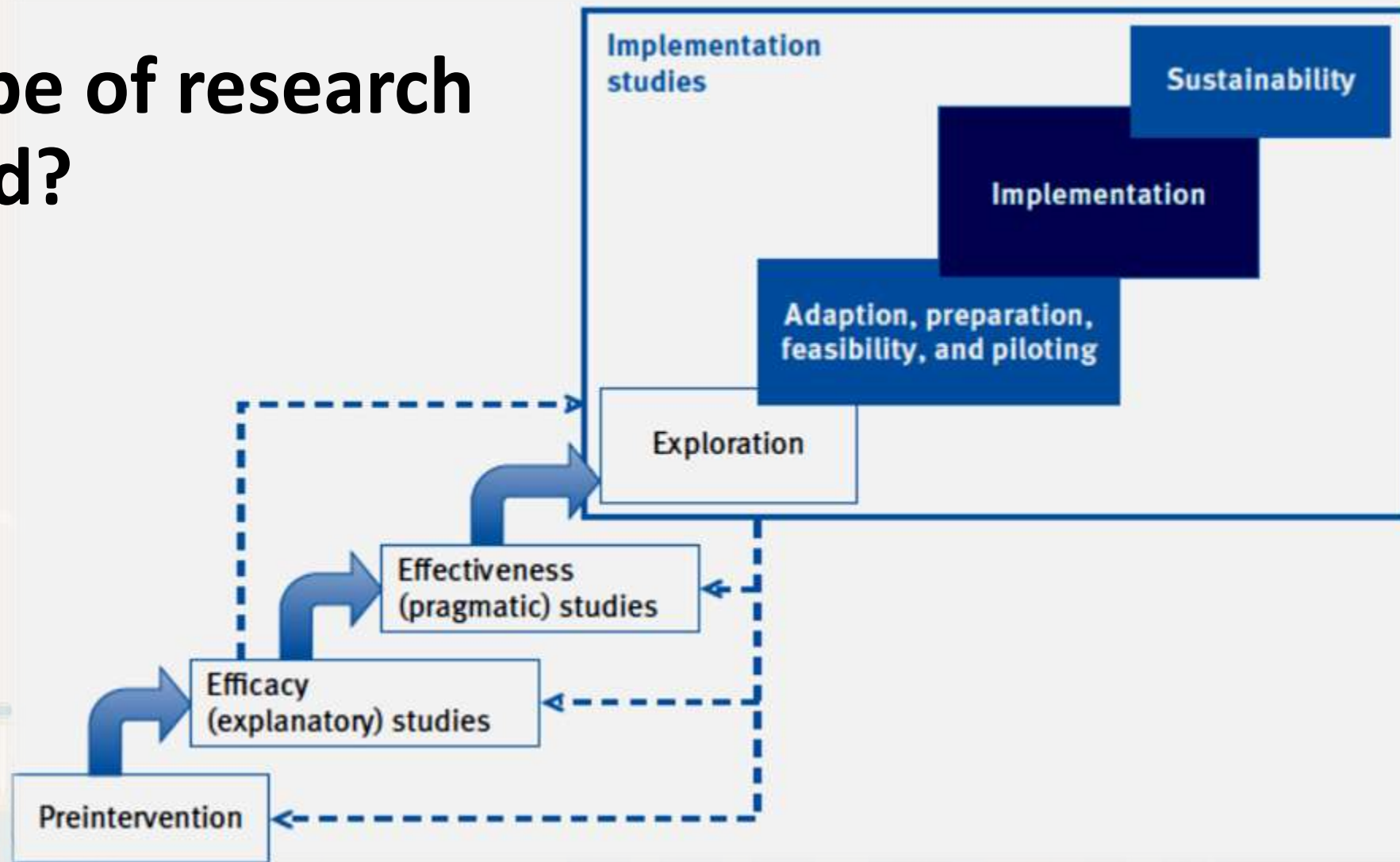
Adapted from Figure 11.1 Implementation and Dissemination of Prevention Programs (2009)

Value for both Implementation & Improvement Science

	Implementation Science	(Shared)	Improvement Science
Definition	Promote systematic uptake of evidence-based interventions into practice and policy		Systems-level work to improve the quality, safety, and value of health care
Problem	Slow, variable evidence uptake	System-level; Context is critical	Healthcare system dysfunction
Principles	Behavior change; Generalizable mechanisms of change	Processes; People; Data; Measurement	Improving reliability Location specific
Foundation	Theory, framework, model to guide the process		Theory or models to explain the problem or expected findings
Strategies / Interventions	Evaluative, iterative; Assistance, coaching, facilitation; Adaptation and tailoring; Education, training; Supporting clinicians; Changing infrastructure; $ consequences	Improve workflow; Audit and feedback; Stakeholder engagement	Business process re-engineering; Co-design; Lean methodologies; PDSA continuous improvement; Statistical process control; Checklists; Standardization;

Koczwara et al. Journal of Oncology Practice 2018

What are the measures of "effectiveness" and for whom?

Intervention or Implementation Strategy
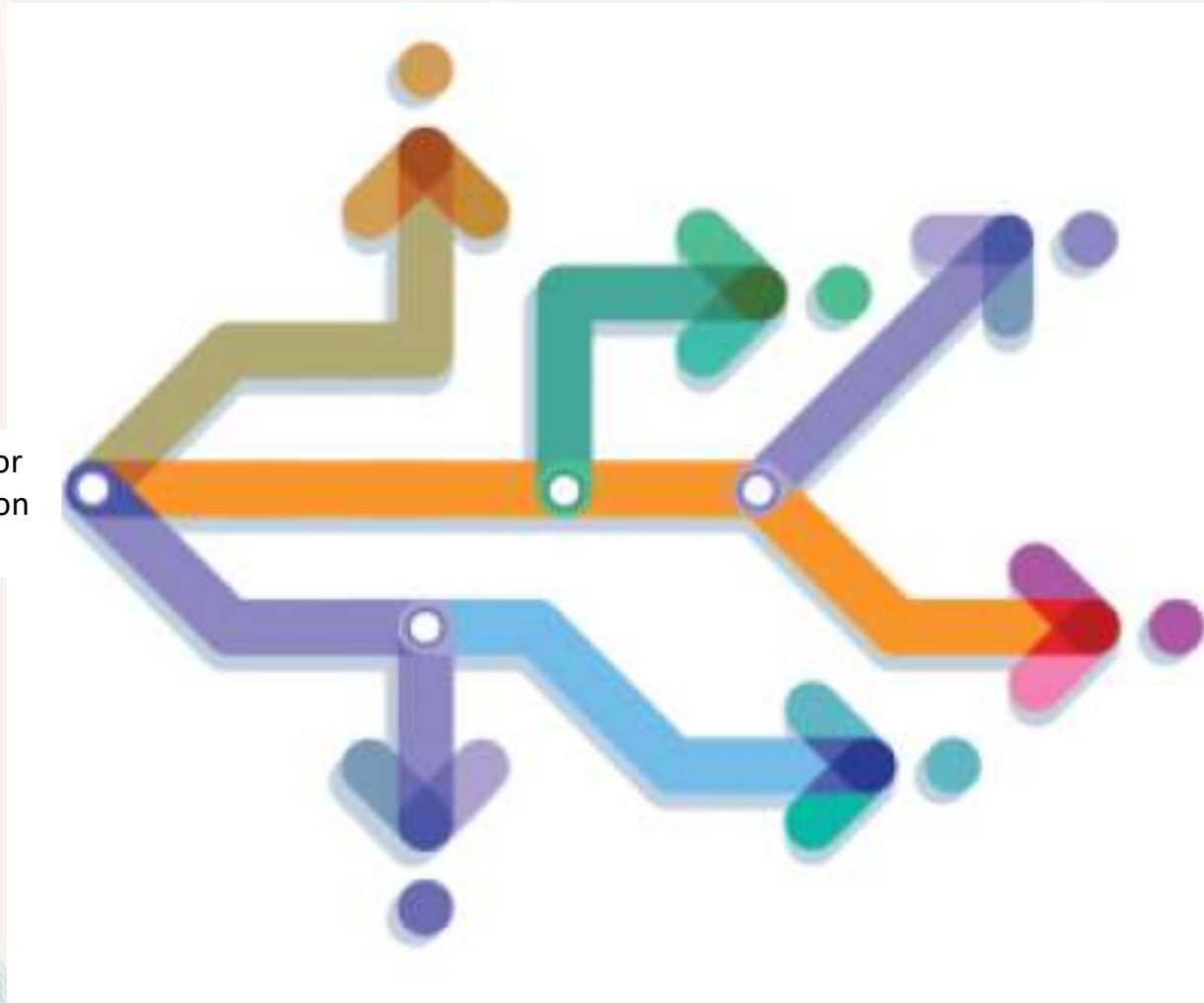
Paradigm Shift in How We Discuss Social Risks

From Health Disparities to Health Equity

Health Disparities:

"...**preventable** differences in the burden of disease, injury, violence, or opportunities to achieve optimal health that are experienced by socially disadvantaged populations"[1]

Health Equity:

"When **every person has the opportunity to 'attain his or her full health potential'** and no one is 'disadvantaged from achieving this potential because of social position or other socially determined circumstances"[2]

1. Community Health and Program Services (CHAPS): Health Disparities Among Racial/Ethnic Populations. U.S. Department of Health and Human Services; 2008.
2. Whitehead M, Dahlgren G. Levelling Up (Part 1): A Discussion Paper on Concepts and Principles for Tackling Social Inequities in Health. World Health Organization. Available at http://www.euro.who.int/document/ e89383.pdf.

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Sustainability Needs to be Planned Nationally Acted on Locally

Thank You

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Abstract

Healthcare organizations increasingly aim to address the social drivers of health, yet there is little guidance on which staff are best equipped to assume this role. This presentation reviews evidence on workforce models to integrate health and social care and discusses the need for rigorous research to ensure equity, quality and sustainability for addressing unmet social needs.