Strategies for Applying SDH Research Findings to Practice and Service Delivery

Arvin Garg, MD, MPH
Associate Professor of Pediatrics
Boston University School of Medicine/
Boston Medical Center

November 3, 2017

- In the U.S., children are the **poorest** segment of the population.

Denavas-Walt, C, et al. US Census Bureau. 2012.

Child Poverty is Everywhere.

Poor children experience **worse** health across their life course.

Aber JL, et al. *Annu Rev Public Health*. 1997.
Larson K, Halfon N. *Matern Child Health J*. 2010.
Poulton R, et al. *Lancet*. 2002.

Poverty is one of the most significant non-communicable diseases children are suffering from today.

Courtesy of Dr. Benard Dreyer

Abraham Jacobi (1830-1919)

- Father of Pediatrics
- Motivated by issues of social justice
- Fought to ensure clean water and decent housing for poor urban children

"It is not enough to work at the individual bedside at the hospital."

Bright Futures

- *Guidelines for Health Supervision* (1994): importance of viewing the child in the context of the family & community
- *Children's Health Charter*: guiding principles
  - "Every child and adolescent deserves satisfactory housing, good nutrition, a quality education, an adequate family income, a supportive social network, and access to community resources.
- "The charter states unequivocally the explicit connection between a wide range of **social determinants** and the health of children and youth"

AAP Recommendations on SDH Screening

POLICY STATEMENT

Organizational Principles to Guide and Define the Child Health Care System and/or Improve the Health of all Children

American Academy of Pediatrics

DEDICATED TO THE HEALTH OF ALL CHILDREN™

Poverty and Child Health in the United States

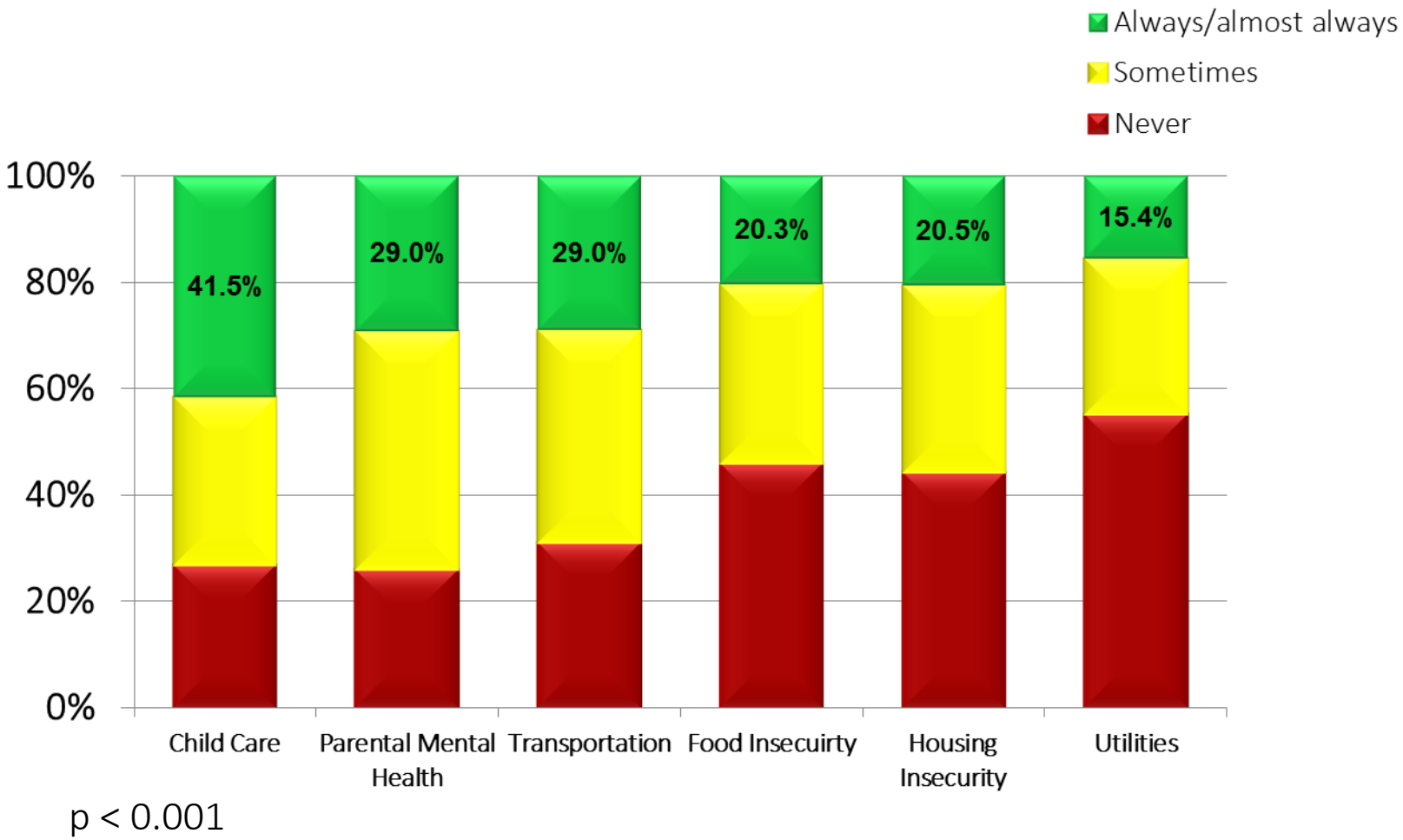
COUNCIL ON COMMUNITY PEDIATRICS

AAP Recommendations

- Screen for risk factors within **social determinants of health** during patient encounters.
- Either brief written screener or verbally ask family member questions about basic needs.
- As patient-centered medical homes develop, care coordinators may connect families in poverty with resources.

Poverty and Child Health in the United States. Council on Community Pediatrics. *Pediatrics*. 2016.

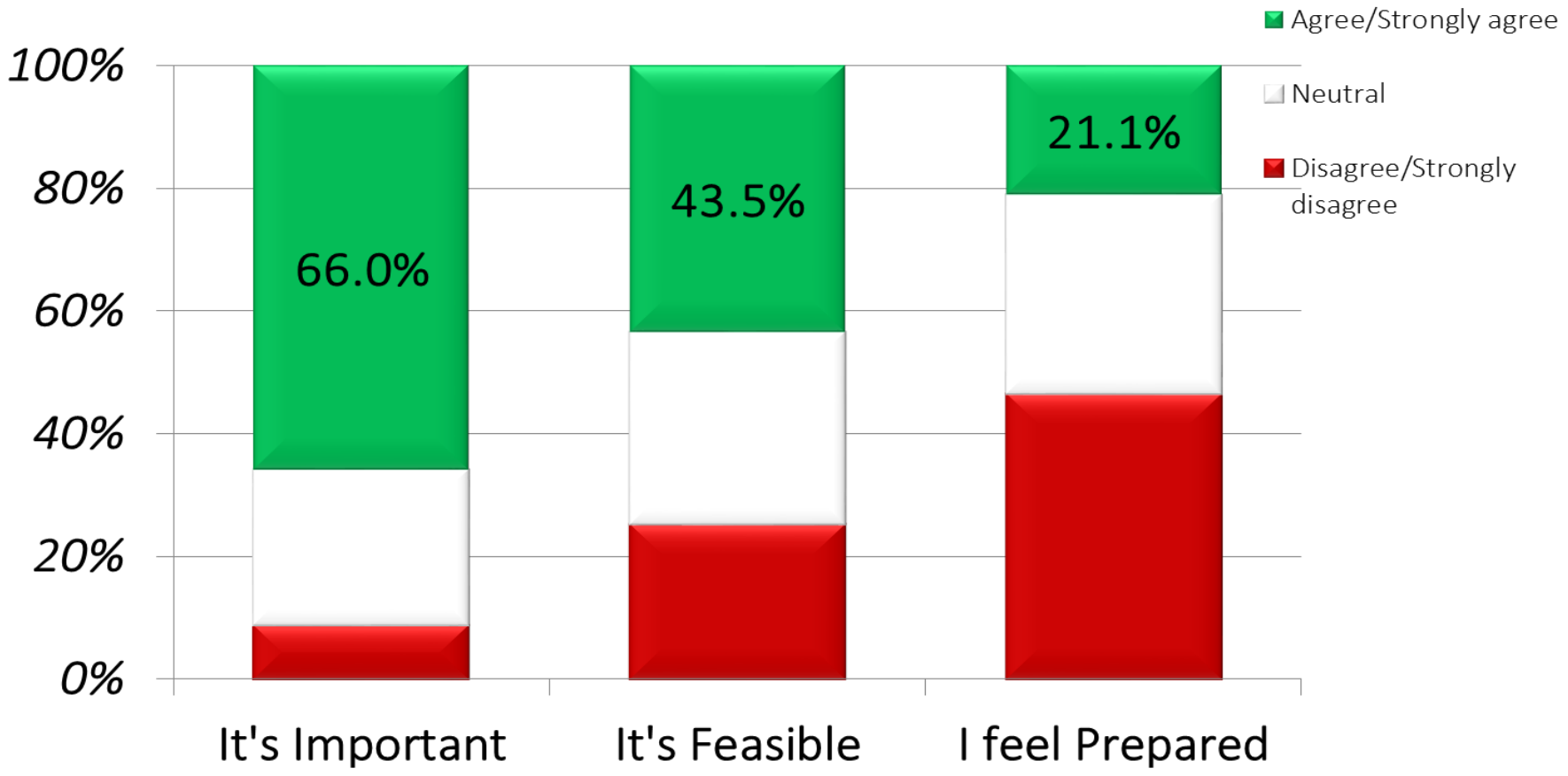
Percent of Pediatricians Who Routinely Screen



$p < 0.001$

Racine et al, *Caring for Low Income Children: Geographic Variation Across U.S. Pediatricians*. PAS 2017.

Readiness for Screening



p <0.001

Racine et al, *Caring for Low Income Children: Geographic Variation Across U.S. Pediatricians*. PAS 2017.

Barriers for Pediatricians

Barriers for Pediatricians

- Time
- Lack of professional training
- Unsure of effectiveness
- Negatively impact therapeutic alliance
- Lack of knowledge of community resources
- Reimbursement

WE CARE Project

Funded by: The Commonwealth Fund

Methods

- **Study Design**: Cluster randomized controlled trial (RCT)
- **Setting**: 8 health centers (CHCs) in Boston
- **Randomization Unit** = CHCs

Participants

- Mothers of infants between ages of birth and 6 months presented for WCC visit

Intervention: WE CARE 2.0

- **4 Components**:
  1) Survey Instrument
  2) Family Resource Book
  3) Provider Training
  4) Follow-up

Component 1: WE CARE Survey

- Completed prior to WCC visits
- Self-report
- Screened for 6 basic needs

Six Basic Needs

- Childcare
- Education (< high school)
- Employment
- Food security
- Household heat
- Housing

Component 2: Family Resource Book

- Contained 1 page tear-out information sheets for each basic need
- Lists 2-4 community resources and contact information
- Available in all exam rooms

Control Conditions

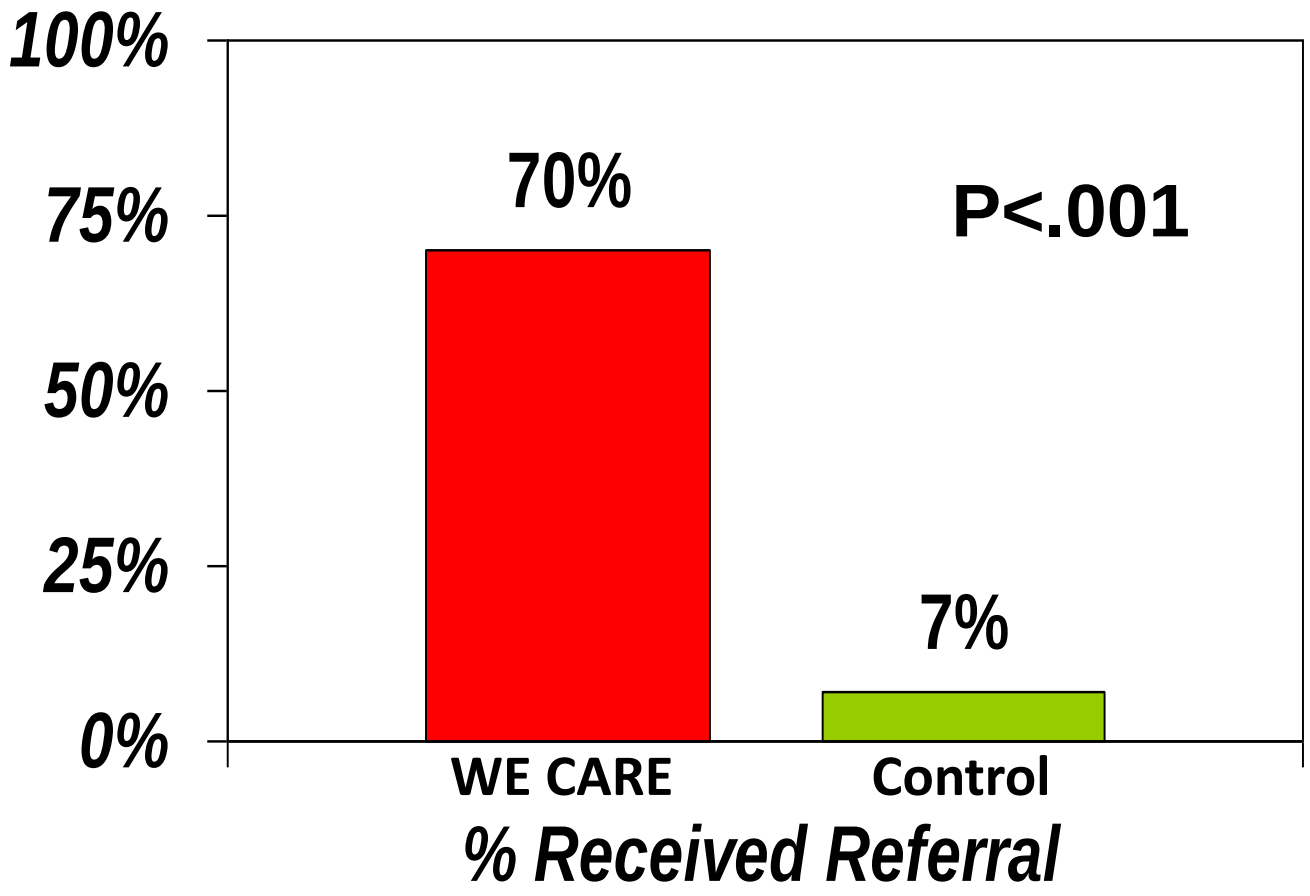
- Standard of Care at 4 CHCs

Unmet Basic Needs at Baseline

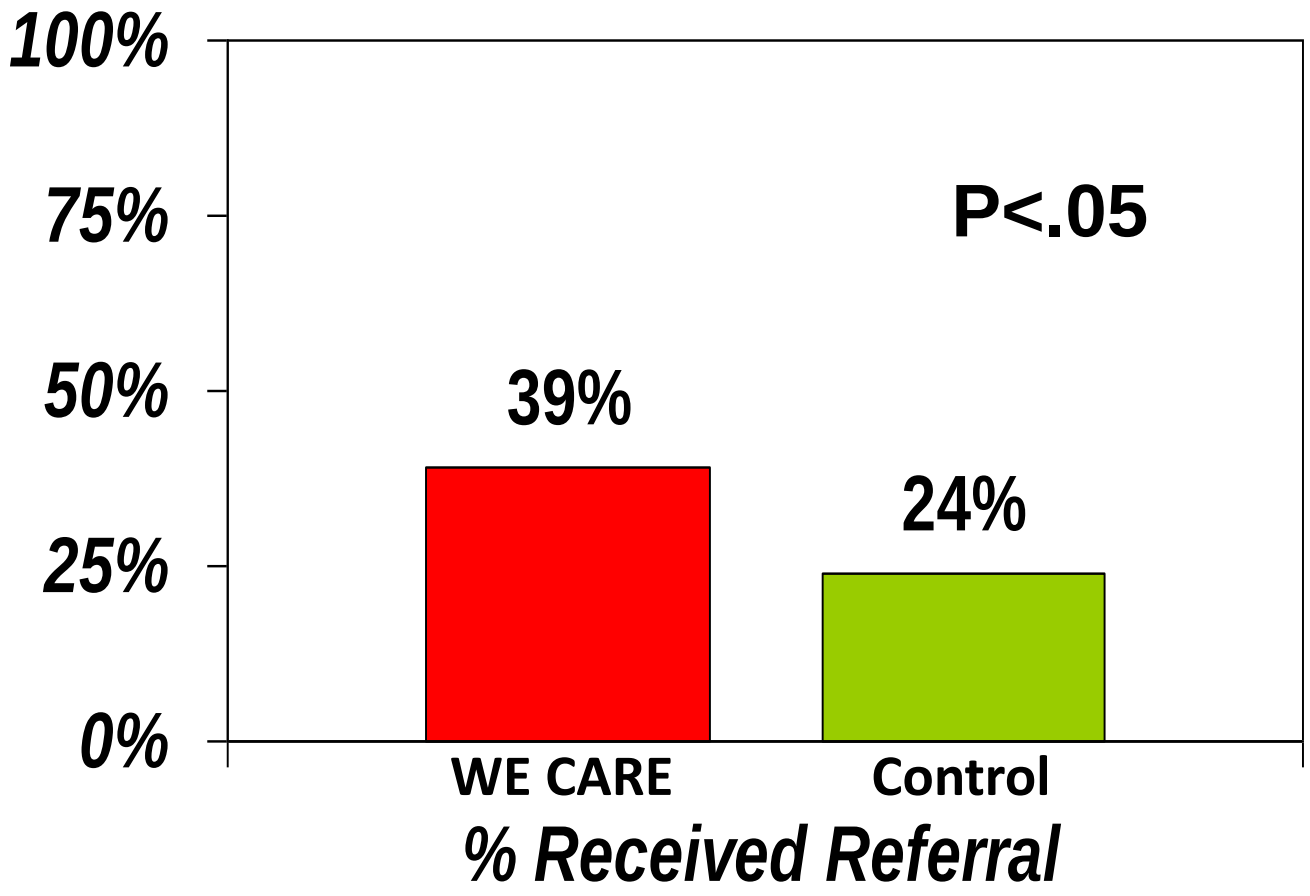
Of all mothers (n=336):

- **90%** ≥ 1 need
- **68%** ≥ 2 needs
- **39%** ≥ 3 needs

Referrals Received at WCC Visit



Enrollment in Resources at f/u



Enrollment in Resources

Resources	WE CARE (n=136)	Control (n=135)	aOR (95% CI)
Any new resource	39%	24%	1.6 (1.1-2.5)
Childcare	15%	7%	3.3 (1.1-9.3)
Food assistance	11%	9%	0.8 (0.4-1.7)
GED degree	2%	1%	2.0 (0.5-8.8)
Employment/job training	8%	2%	7.9 (1.3-49.7)
Fuel assistance	7%	1%	11.1 (1.6-75.4)
Homeless shelter	2%	5%	0.3 (0.1-0.7)
Rental assistance	4%	7%	0.7 (0.3-1.3)

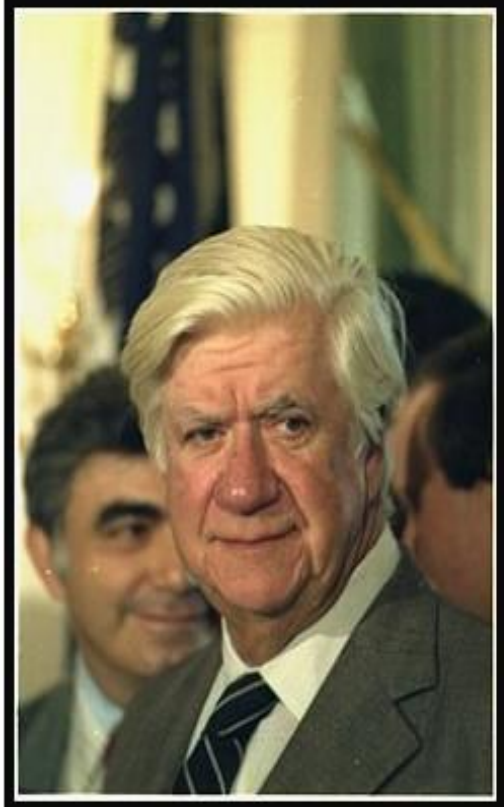
Adjusted for race, marital status, and maternal employment

Adjusted ICC $\leq$0.001

Translating Research into Practice

- Estimated **17 years** to incorporate research findings into practice
- **"Research-practice" gap**
- Often, interventions are not replicated in the *real world* setting
- But **WE CARE** is different (right?)….

Implement WE CARE in 3 health centers



All politics is local.

(Tip O'Neill)

izquotes.com

"Translating research into practice is local."

- Clinic culture
- **Buy in** from clinic leadership and staff
- Health policy issues:
  - MA Medicaid value-based payment system in 2018
  - BMC now an ACO- mandated to screen for homelessness and SDH as a quality measure
- SDH remedies are **outside of medicine** and rely on a fragile safety net system that varies by community

How Much Adaptation is Okay?

- **Adaptation is necessary** to meet the local needs of the patients and fit within the clinical care model
- But **how much is too much**?

WE CARE Core Components (we think?)

- Self-report screener **readable**- 3rd grade level
- **Screening questions focused on specific needs** – e.g., GED vs higher education
- **One screening question** for each social need
- Capturing patients' desire for help via **Stages of Change** (do you want help with this? Yes, no, maybe later)
- An **actionable step** for providing parents with need with community resource information sheets

Guiding Principles for SDH Screening

- Ensure screening is **Family-Centered**
- **Integrate** Screening with Referrals and Linkage to Community-based Resources
- **Shared Decision Making**
- Use a **Strength-based Approach**
- Do **not** Limit Screening Practices on Apparent Social Status

Garg A et al. *JAMA*. 2016.