#### P. MICHAEL STURLA, CHAIRMAN

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#### HOUSE DEMOCRATIC POLICY COMMITTEE

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EMAIL: policy@pahouse.net

[ ] [ ] [ ] @PADemPolicy

#### House of Representatives COMMONWEALTH OF PENNSYLVANIA

## HOUSE DEMOCRATIC POLICY COMMITTEE ROUNDTABLE <u>Topic: Social Determinants of Health</u> Schuylkill Center for Environmental Education—Philadelphia, PA January 8, 2020

#### **AGENDA**

2:00 p.m. Welcome and Opening Remarks

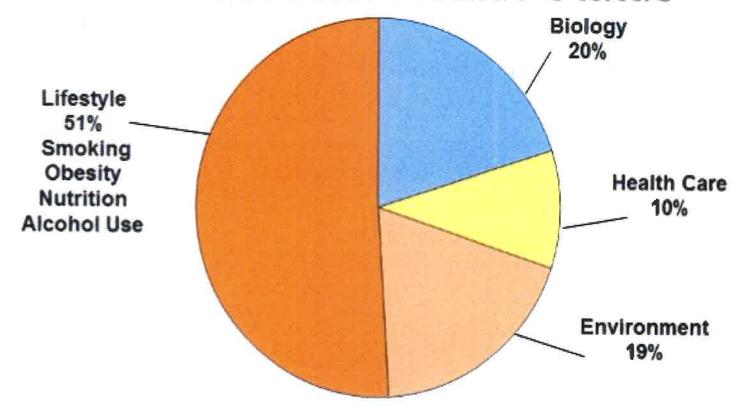
2:10 p.m. Discussion with Panelists:

<u>Terri Lipman, PhD, CRNP, FAAN</u>
 Assistant Dean for Community Engagement University of Pennsylvania School of Nursing

<u>Tarik Khan, MSN</u>
 Family Nurse Practitioner-Board Certified

3:50 p.m. Closing Remarks

## Factors Commonly Understood to Influence Modern Health Status



Source: McGinnis, J.M and Foege, W.H. (1993). "Actual Causes of Death in the United States," Journal of the American Medical Association.





#### **Social Determinants of Health**

Terri Lipman, PhD, CRNP, FAAN
University of Pennsylvania, School of Nursing
Children's Hospital of Philadelphia





Health Equity
Population Health

PrimaryHealthcare

SocialDeterminants

CulturalCompetency

GlobalHealth CulturalHumility
HealthPolicy
PublicHealth

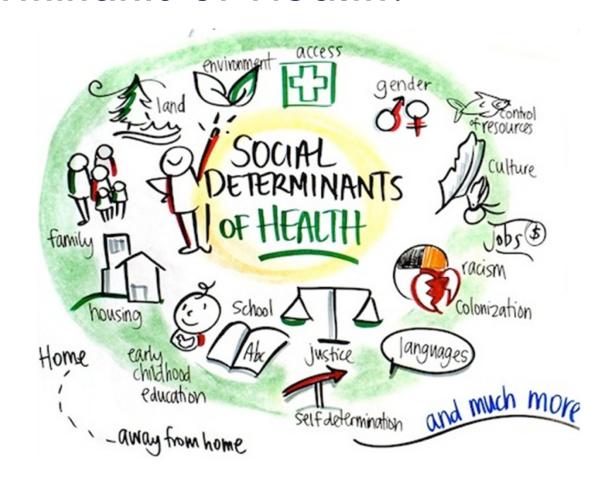




#### What are Social Determinants of Health?

The social determinants of health are the conditions in which people are born, grow, live, work and age.

These circumstances are shaped by the distribution of money, power and resources at global, national and local levels.







# Why should Social Determinants of Health be Addressed by Health Professionals?

Without addressing the underlying causes of disease and ill health, the risk of perpetuating a cycle of *inequity*, *disparity*, *and inequality* will remain for generations to come.









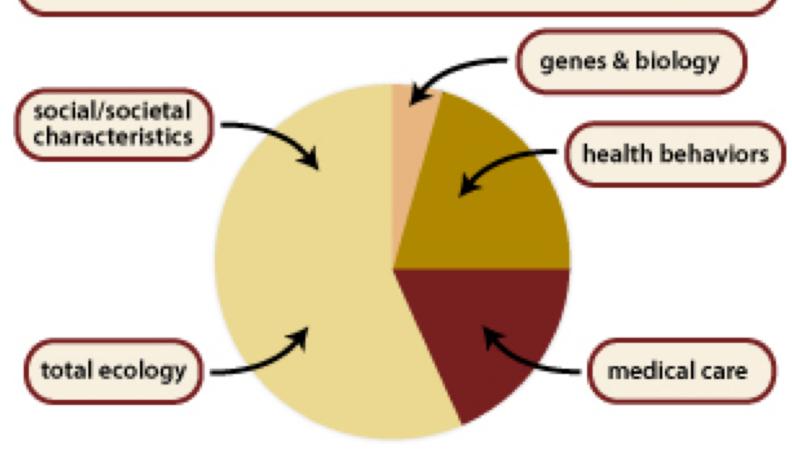
## What are determinants of health and how are they related to social determinants of health?

Determinants of health are factors that contribute to a person's current state of health. These factors may be biological, socioeconomic, psychosocial, behavioral, or social in nature. Scientists generally recognize five determinants of health of a population:

- Genes / biology:- For example- family history of disease
- Health behaviors: For example- alcohol use, recreational drug use, excess caloric intake, unprotected sex, and smoking
- Social environment or social characteristics: for example, discrimination, income, and gender
- Physical environment or total ecology: for example, where a person lives and crowding conditions
- Health services or medical care: for example, access to quality health care and having or not having insurance



#### DETERMINANTS OF POPULATION HEALTH





## "Your longevity and health are more determined by your ZIP code than they are by your genetic code"

Tom Frieden, the director of the Centers for Disease Control and Prevention 2014

STOCKTON 95202 Life Expectancy



IRVINE
92606
Life Expectancy

Your **ZIP Code** shouldn't predict **how long you'll live**, but it does.











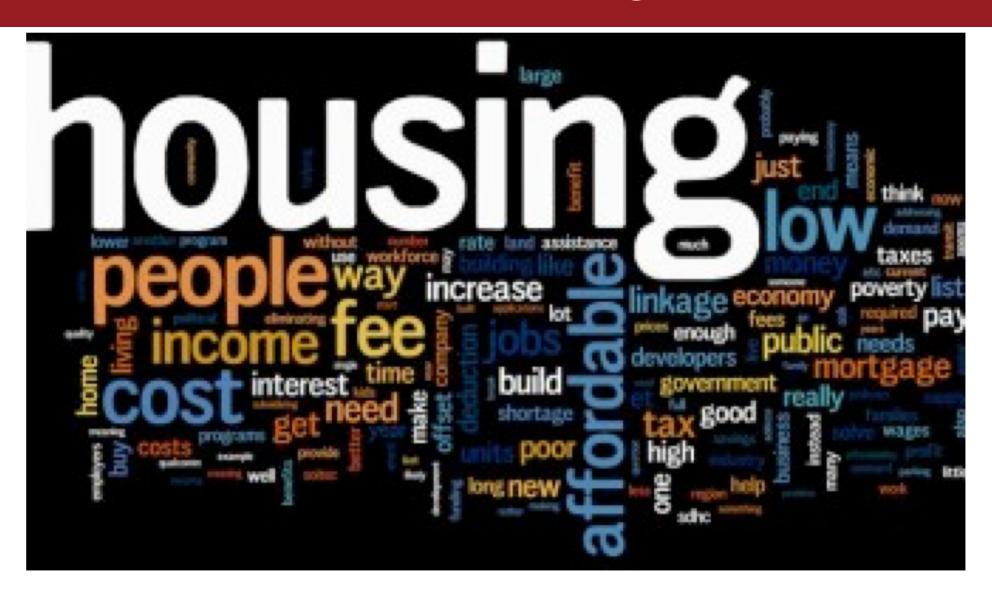
## Life expectancy West Philadelphia (men)

|                      | County | Philadelphia |
|----------------------|--------|--------------|
| University City      | 76.5   | 72.3         |
| Cobbs Creek          | 64.9   | 72.3         |
| Paschall-Kingsessing | 67.4   | 72.3         |
| Mill Creek- Parkside | 67.7   | 72.3         |

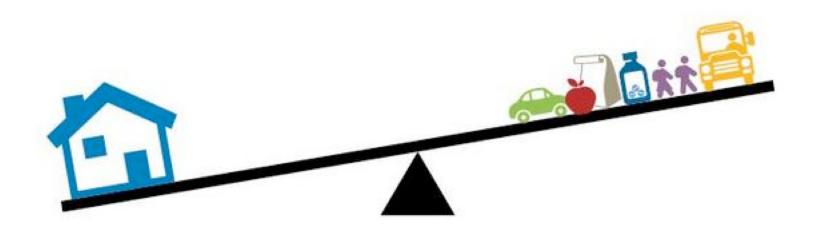


# How do social determinants impact health?







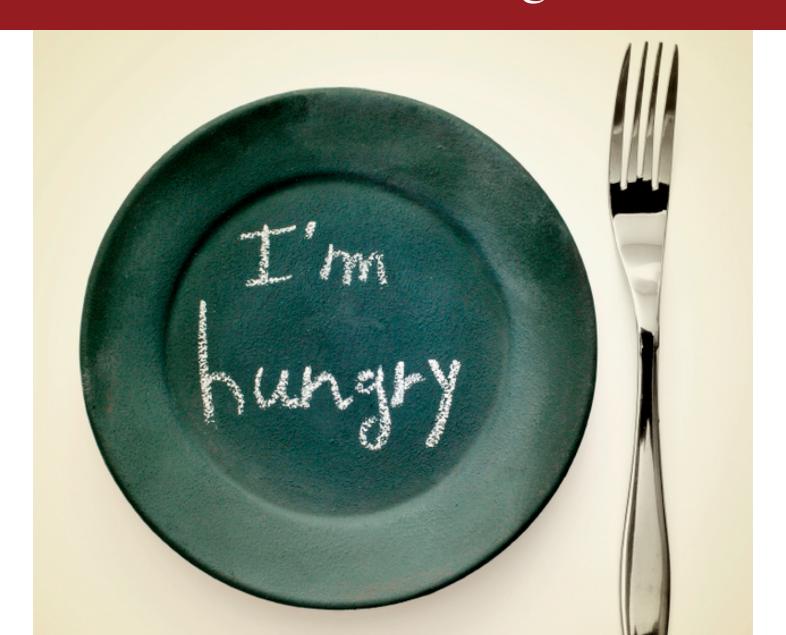


One in four renters pay more than 50% of their income on rent, leaving less money for other important expenses like transportation, food, health care or education.



## Housing Insecurity

- Nearly 19 million low-income U.S. households pay over half of their income on housing, and more than 600,000 people have no home at all.
- housing insecurity make it difficult for these families to move out of poverty, but its side effects ripple through other aspect of their lives and communities.





## Food Insecurity

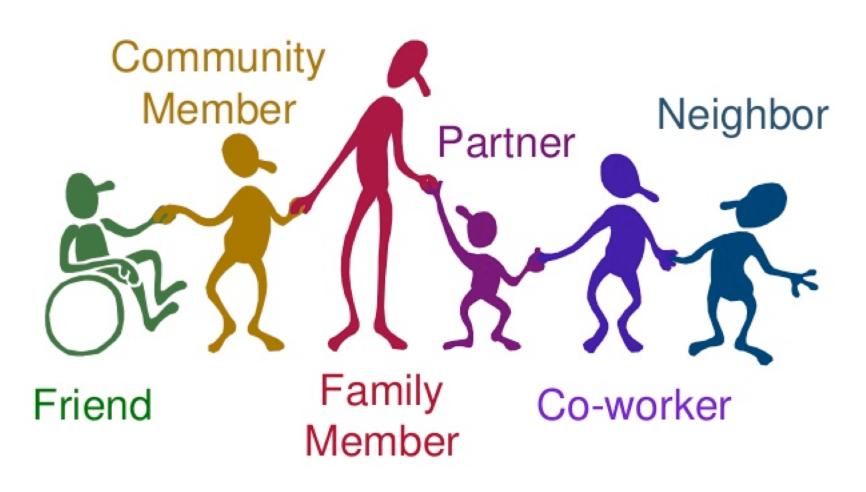
- In 2015: 42.2 million Americans lived in **food insecure** households, including 29.1 million adults and 13.1 million children
- 13% of households (15.8 million households) were food insecure
- 5% of households (6.3 million households) experienced very low food security







#### **Social Support Network**

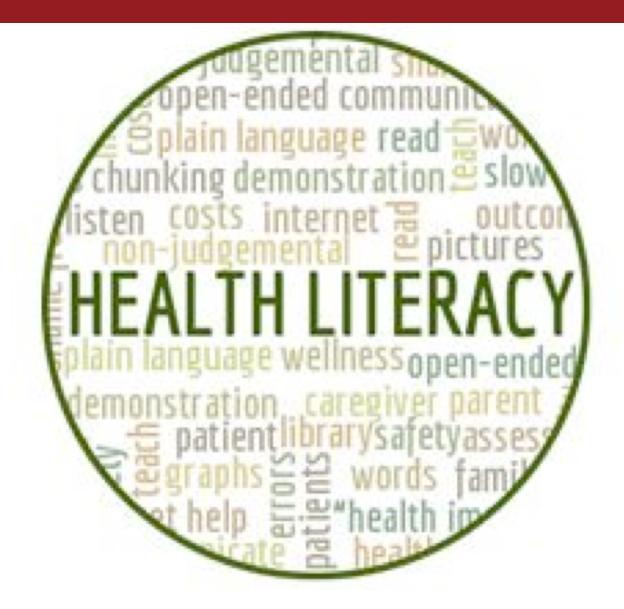




### Social Support

- Social support is an important factor in immune, endocrine, and cardiovascular functioning; recovery from illness and injury; and health maintenance
- The precise means by which social support contributes to health and the factors that moderate and mediate this relationship are not completely understood
- (Uchino, Cacioppo, & Kiecolt-Glaser, 1996; Wallston, Alagna, DeVellis, & DeVellis, 1983, Stone et al., 1999; Vitaliano et al., 2001).







# patients with low HEALTH LITERACY...









www.cdc.gov/phpr





# State of Health in Philadelphia



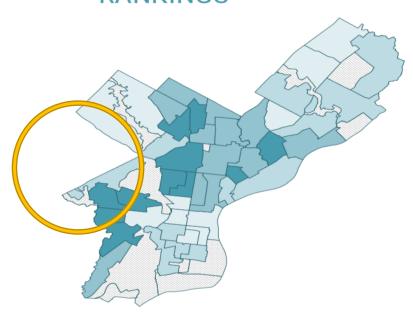
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**CLOSE TO HOME:** 

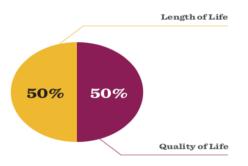
The Health of Philadelphia's Neighborhoods



#### **HEALTH OUTCOMES** RANKINGS



Health Outcomes ranking is based on two factors:



#### **QUARTILES**

Rank 1-11

- Center City East
- Center City West
- Roxborough-Manayunk
- University City
- Pennsport-Queen Village
- Southwark-Bella Vista
- **Bustleton**
- Chestnut Hill-West Mount Airy
- Fairmount-Spring Garden
- 10. Somerton
- 11. Oxford Circle

2 Rank 12-23

- 12. Rhawnhurst-Fox Chase
- 13. South Broad-Girard Estates
- 14. Lower Kensington
- 15. Torresdale South-Pennypack Park
- 16. Torresdale North
- 17. East Falls-Westside
- 18. Schuylkill-Point Breeze
- 19. Mayfair-Holmesburg
- 20. Overbrook Park-Wynnefield Heights
- 21. Richmond-Bridesburg
- 22. Grays Ferry-Passyunk
- 23. Snyder-Whitman

3

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Rank 24-35

- 24. East Mount Airy
- 25. Oak Lane-Fernrock
- 26. Northern Liberties-West Kensington
- 27. Wissinoming-Tacony
- 28. Eastwick-Elmwood
- 29. Olney-Feltonville
- 30. West Oak Lane-Cedarbrook
- 31. Lawndale-Crescentville
- 32. Juniata Park-Harrowgate
- 33. Poplar-Temple
- 34. Hunting Park-Fairhill
- 35. Logan

Rank 36-46

- 36. Germantown
- 37. Cobbs Creek 太
- 38. Haddington-Overbrook
- 39. Paschall-Kingsessing
- 40. Sharswood-Stanton
- 41. Ogontz
- 42. Frankford
- 43. Mill Creek-Parkside
- 44. Strawberry Mansion
- 45. Nicetown-Tioga
- 46. Upper Kensington



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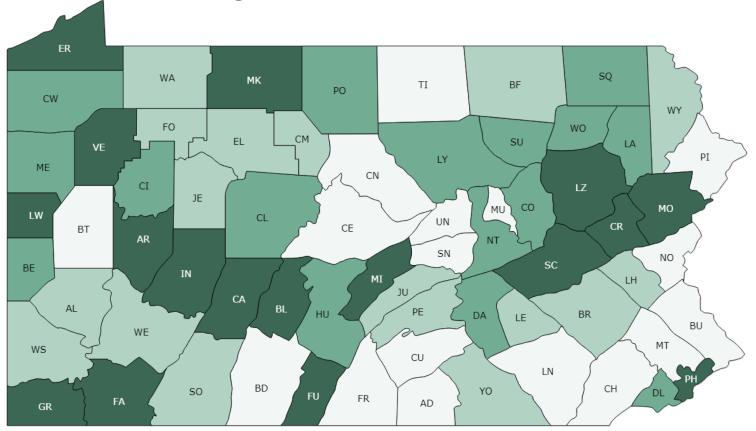


# State of Health in Pennsylvania



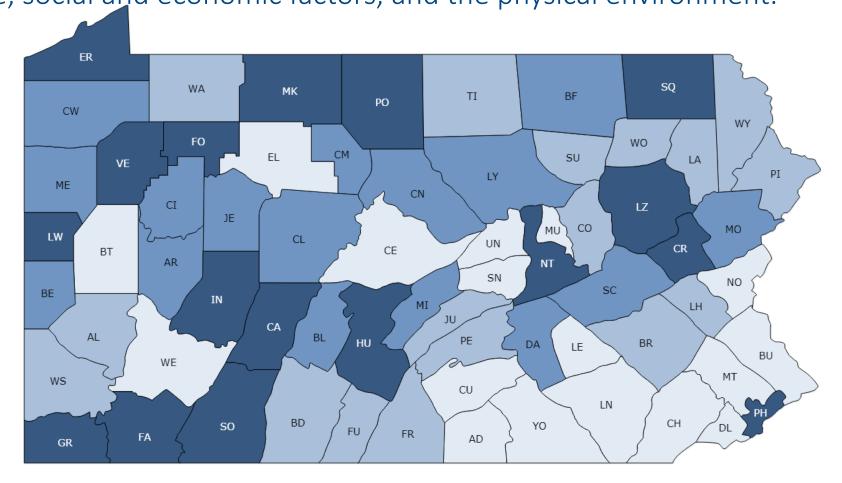
Rankings represent measures of how long people live and how healthy people feel. Length of life is measured by premature death (<75) and quality of life is measured by self-reported

health status and the % of low birth weight newborns.





The distribution of health factors based on weighted scores for health behaviors, clinical care, social and economic factors, and the physical environment.





#### **Selected Social Determinants of Health for Rural Pennsylvania**

- 6% of Pennsylvania residents lack health insurance
- Average per capita income for Pennsylvania residents in 2017 was \$53,300
  - Rural per capita income lagged at \$39,895
- Poverty rate in rural Pennsylvania is 13.5%, compared with 12.4% in urban areas of the state.
- 11.9% of the rural population has not completed high school, while 9.9% of the urban population
- 2015 unemployment rate in rural Pennsylvania is 4.8%, while in urban Pennsylvania it is 4.2%



# How can health in Pennsylvania be improved?



## Health care and social care spending are both related to health outcomes.

- Countries that spend a higher proportion of their GDP on social services than on health care have better health outcomes
- Among industrialized countries, the United States has the lowest ration of social-to-health spending:
  - In the US- for every \$1 spent on health care, about \$0.90 is spent on social services
  - Countries with better health outcomes- every \$1 spent on health care, an average of \$2
    is spent on social services
- US states with higher ratios of social-to-health spending to have better health outcomes than those with lower ratios (Bradley et al., 2016).



#### Health in All Policies- CDC

 Health in All Policies is a collaborative approach to improving the health of all people by incorporating health considerations into decision-making across sectors and policy areas

#### Penn Nursing





### **Upstream Interventions**

• **Upstream** interventions and strategies focus on improving fundamental social and economic structures in order to decrease barriers and improve supports that allow people to achieve their full health potential. (National Collaborating Centre for Determinants of Health)





# Community Health Worker (CHW) Initiative: Enhanced Care Management for Complex Patients

Colin Hawkes, MD; Terri Lipman, PhD CRNP; Rachel Biblow, MSW; Kim Smith-Whitley, MD; Sophia Jan, MD, MSHP; Symme Trachtenberg, MSW; Leigh Wilson, MSW

Funded by the Chair's Initiative, Children's Hospital of Philadelphia

# Integrating Community Health Workers into the Care of Children With Type 1 Diabetes

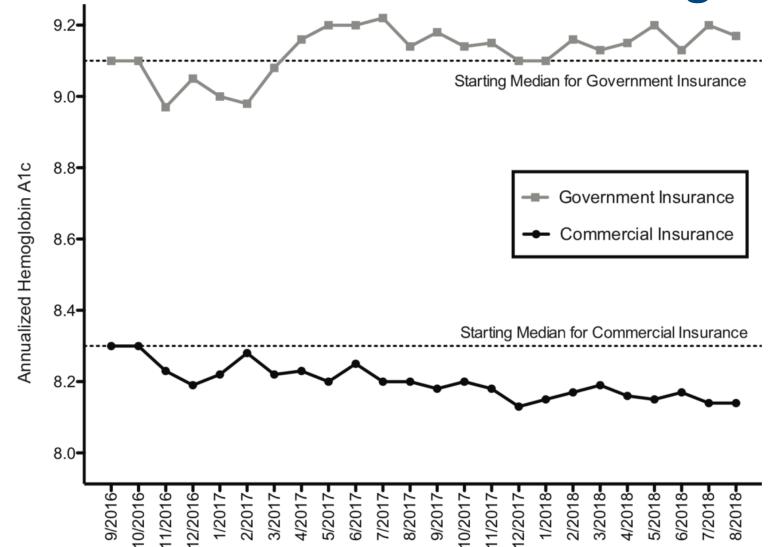
Terri Lipman, PhD CRNP FAAN; Colin Hawkes, MD; Jennifer Morone, BS-RN, MA-ATR Funded by the Office of Nursing Research, University of Pennsylvania School of Nursing

J. Smith, MPH, G Hedler, MSW, T. Casey, K Huskey, A. Tuttle, MSW





## Role of Socioeconomic Status: Team Program





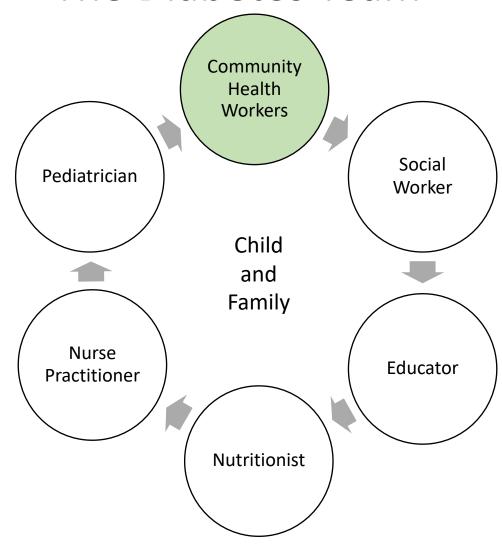
#### CONCLUSIONS

- Current hospital-based interventions for socially complex children with chronic illnesses
  - Have not been effective in improving the health outcomes
  - Are reliant on health professionals addressing needs they are ill prepared to address





#### The Diabetes Team







#### **Community Health Workers**

- Historically used to provide culturally-relevant services that address health disparities and families' social determinants of health critical to managing their child's chronic condition.
- Existing studies on CHW interventions for pediatric chronic disease show promising results on
  - reducing hospitalizations and length of stay
  - reducing emergency department visits
  - increasing parental confidence
  - cost savings

Palfrey, J.S. et al2014. National Center on Ease of Use of Community Based Services for CHCN & The HSC Foundation.

Raphael JL, et al Acad Pediatr. 2013;13(5):408-420

Bryant-Stephens T, et al J Public Health. 2009;99 Suppl 3:S657-665.





#### SPECIFIC AIMS

- 1. The **primary aim** of this study is to determine if the integration of Community Health Workers (CHW), for one year, into the care of patients with poorly controlled type 1 diabetes (T1D) or high healthcare utilization, is associated with an improvement in diabetes control as defined by a reduction in glycosylated hemoglobin (HbA1c).
- 2. The **secondary aims** are to determine if if the integration of CHW is also associated with:
  - More effective healthcare utilization as measured by, 1) reduced hospital admissions, 2) reduced Emergency Department (ED) visits, 3) increased attendance at scheduled outpatient diabetes appointments.
  - Improved self-reported psychosocial outcomes by primary caregiver as measured by, 1) quality of life, 2) self efficacy, and 3) satisfaction with healthcare team





#### **Preliminary Results: Demographics**

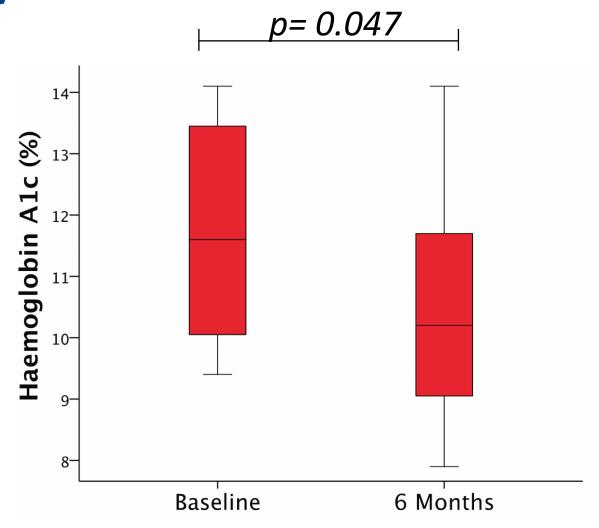
N = 21

- 9 male
- Median age of 13.7 (12.2, 15.9) years
- Median T1D duration of 6.2 (4.9, 8.2) years
- Median of 7 (5, 10) home visits completed





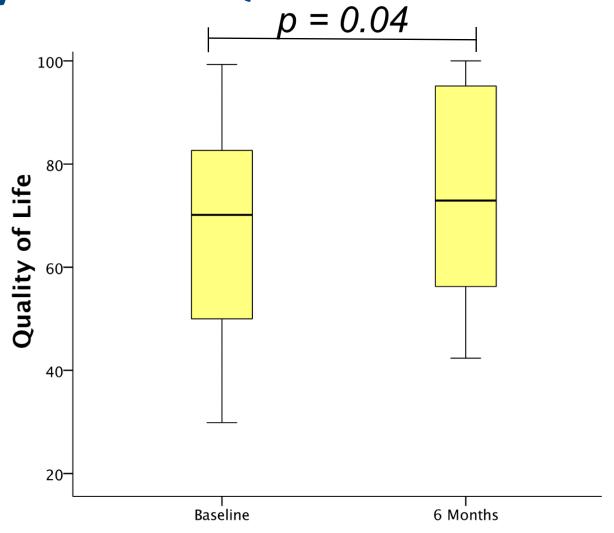
## **Preliminary Results: HbA1c**







**Preliminary Results: QOL** 







## **Preliminary Results: SDOH**

|                    | Baseline | 6 month | p       |
|--------------------|----------|---------|---------|
| Food insecurity    | 43%      | 29%     | p=0.002 |
| Utility bills      | 38%      | 24%     | p=0.047 |
| Housing insecurity | 29%      | 19%     | p=0.05  |





## Impact on Social Determinants of Health

- Grant for 60 winter coats
- Funding for a new roof
- Decreased monthly student loan payments
- Teaching a patient to read
- Patient receiving BH support tailored to LGBTQ teens
- Coordinated BH appointments for several parents
- Advocated on behalf of patients to set up 504 plans
- Encouraged and empowered 4 parents to find work in full-time positions





#### **Feedback**

"The community health worker visit was the best thing the Diabetes Center has ever done for my child in the 10 years they have been followed." - Parent

"I love Tawana. It is great that she comes to my house — that is what I have always needed." - Parent

"Our community health worker has been able to help us with better diagnostic insight, and in some cases serves as a therapeutic agent in ways that have convinced me that such a person can be as useful a part of the diabetes team as the dietician or physician." — Provider

"...they keep their pulse on the community. They are aware of what challenges are impacting our families and do their best to bring these challenges to light for the other members of the diabetes care teams...we are lucky to have Karen and Tawana" – Social Worker



Bustleton Center City East Center City West Chestnut Hill-West Mt Airy Cobbs Creek East Falls-West Side East Mt. Airy Eastwick-Elmwood Fairmount-Spring Garden Frankford Germantown Grays Ferry-Passyunk Haddington-Overbrook Hunting Park-Fairhill Juniata Park-Harrowgate Lawndale-Crescentville Logan Lower Kensington Mayfair-Holmesburg Mill Creek-Parkside Nicetown-Tioga Northern Liberties-West Kensington Oak Lane-Fernrock Ogontz Olney-Feltonville Overbrook Park-Wynnefield Heights Oxford Circle Paschall-Kingsessing Pennsport-Queen Village Poplar-Temple Rhawnhurst-Fox Chase Richmond-Bridesburg Roxborough-Manayunk Schuylkill-Point Breeze Sharswood-Stanton Snyder-Whitman Somerton South Broad-Circle Stanton Fresd North Torresdale Sout Research Falls Falls

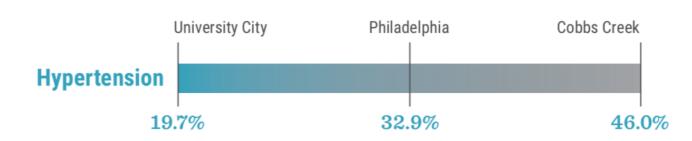
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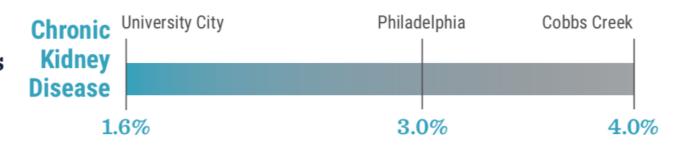
The Health of Philadelphia's Neighborhoods

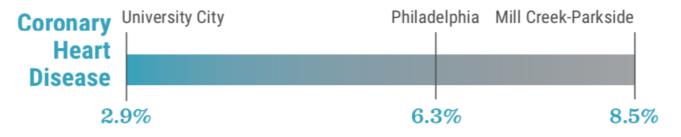


# Overview

Our overview of health outcomes and health factors in Philadelphia shows the city average against the best and worst neighborhood statistics, and underscores the impact of location on health.











Neighbor is not a geographic term. It is a moral concept. It means our collective responsibility for the preservation of man's dignity and integrity.

Dr. Joachim Prinz

August 28, 1963, Washington, DC





