



Improving Healthcare Access for All Texans During and After COVID-19

DATE: November 10, 2020 PRESENTED BY: JENNIFER DEVOE, MD, DPHIL; SAULTZ PROFESSOR AND CHAIR, OHSU FAMILY MEDICINE

Greater primary care supply is associated with lower population mortality.

JAMA Internal Medicine | Original Investigation

Association of Primary Care Physician Supply With Population Mortality in the United States, 2005-2015

Sanjay Basu, MD, PhD; Seth A. Berkowitz, MD, MPH; Robert L. Phillips, MD, MSPH; Asaf Bitton, MD, MPH; Bruce E. Landon, MD, MBA; Russell S. Phillips, MD

Accessible, affordable, continuous primary care is foundational.

The National Academy of Science, Engineering, and Medicine has launched a consensus study on Implementing High-Quality Primary Care.

IMPORTANCE Recent US health care reforms incentivize improved population health outcomes and primary care functions. It remains unclear how much improving primary care physician supply can improve population health, independent of other health care and socioeconomic factors.

OBJECTIVES To identify primary care physician supply changes across US counties from 2005-2015 and associations between such changes and population mortality.

DESIGN, SETTING, AND PARTICIPANTS This epidemiological study evaluated US population data and individual-level claims data linked to mortality from 2005 to 2015 against changes in primary care and specialist physician supply from 2005 to 2015. Data from 3142 US counties, 7144 primary care service areas, and 306 hospital referral regions were used to investigate the association of primary care physician supply with changes in life expectancy and cause-specific mortality after adjustment for health care, demographic, socioeconomic, and behavioral covariates. Analysis was performed from March to July 2018.

MAIN OUTCOMES AND MEASURES Age-standardized life expectancy, cause-specific mortality, and restricted mean survival time.

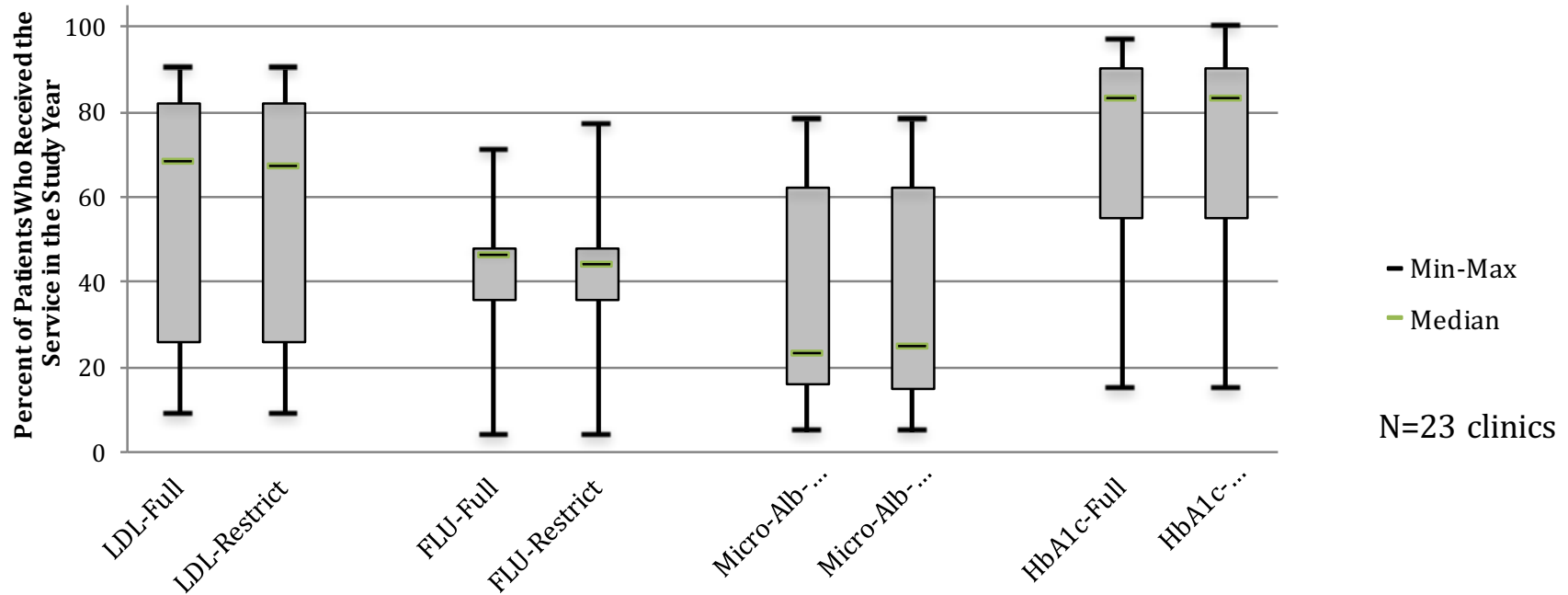
RESULTS Primary care physician supply increased from 196 014 physicians in 2005 to 204 419 in 2015. Owing to disproportionate losses of primary care physicians in some counties and population increases, the mean (SD) density of primary care physicians relative to population size decreased from 46.6 per 100 000 population (95% CI, 0.0-114.6 per 100 000 population) to 41.4 per 100 000 population (95% CI, 0.0-108.6 per 100 000 population), with greater losses in rural areas. In adjusted mixed-effects regressions, every 10 additional primary care physicians per 100 000 population was associated with a 51.5-day

[+ Invited Commentary](#)

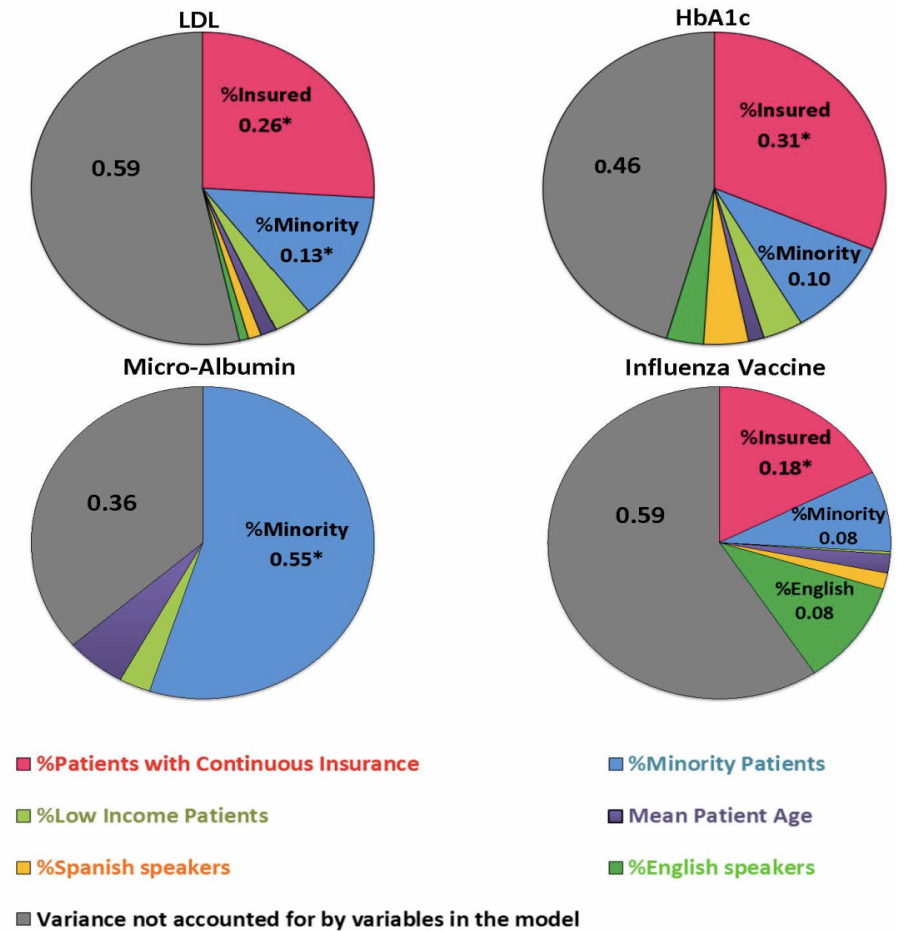
[+ Supplemental content](#)

Basu S, Berkowitz SA, Phillips RL, et al. Association of primary care physician supply with population mortality in the United States 2005-2015. *JAMA Internal Medicine* 2019;179(4):506-514.

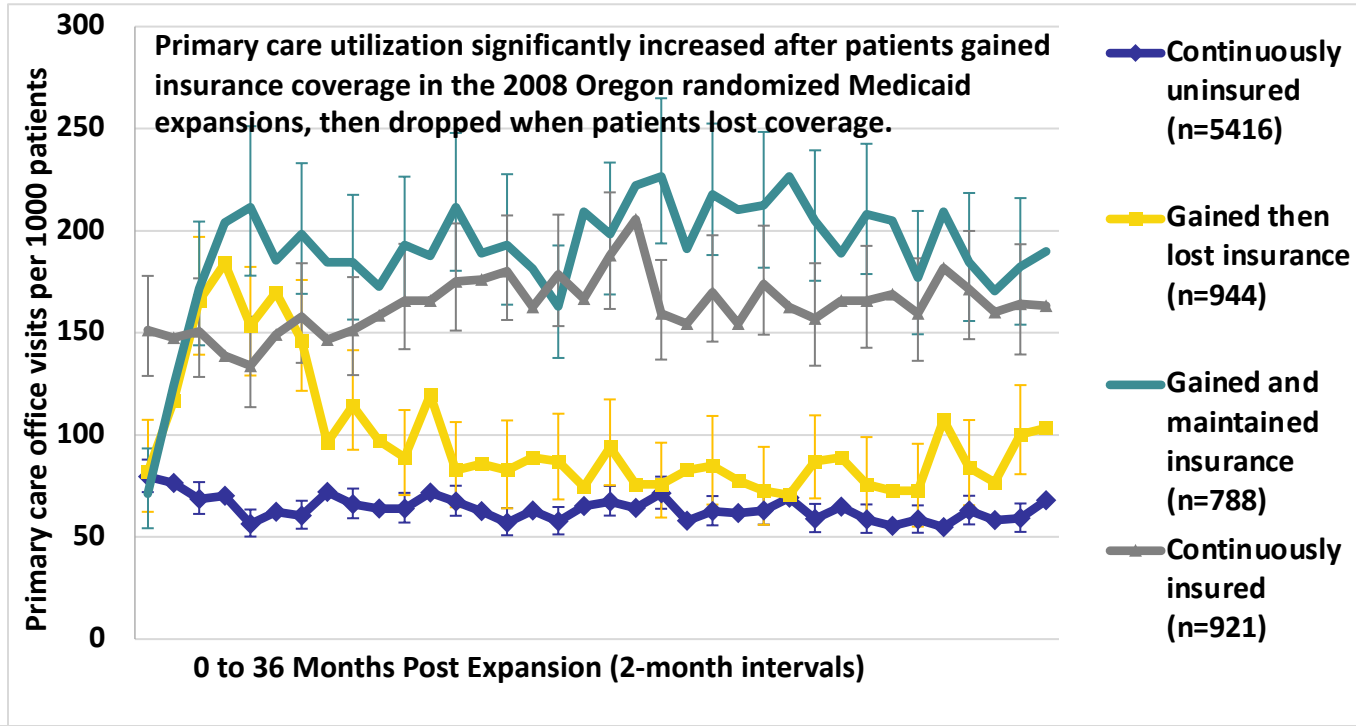
In the OCHIN network of community health centers, we identified wide variability in the quality of diabetes care being provided.



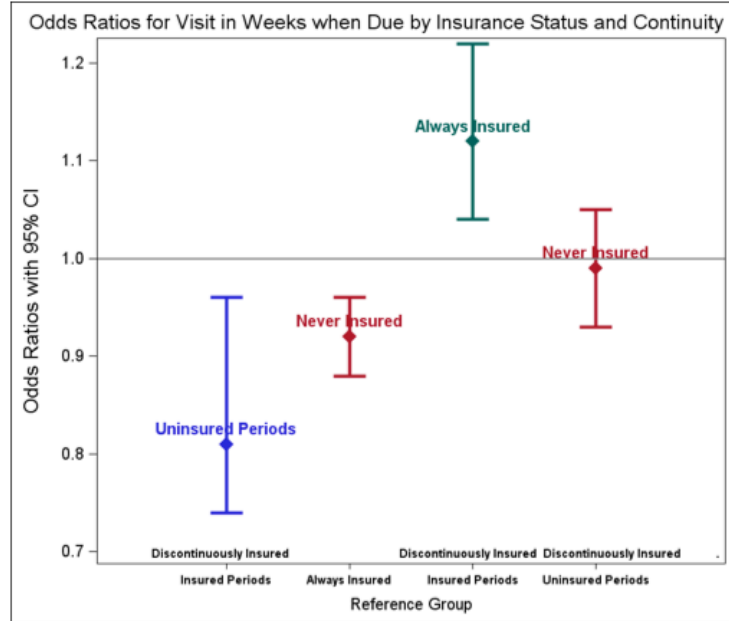
We discovered that variability in the quality of diabetes care was highly correlated with a clinic's patient panel, including the percent of patients without continuous health insurance and other characteristics in the clinic population.



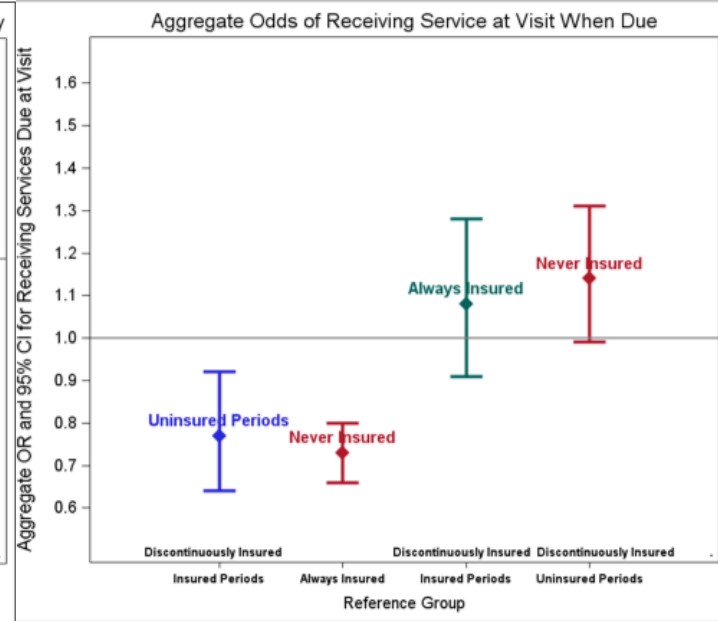
What happens when patients gain and lose health insurance coverage?



Hatch B, Bailey SR, Cowburn S, Marino M, Angier H, DeVoe JE. (2016) Community Health Center Utilization Following the 2008 Medicaid Expansion in Oregon: Implications for the Affordable Care Act. *American Journal of Public Health*, April 2016, Vol. 106, No. 4: 645–650.

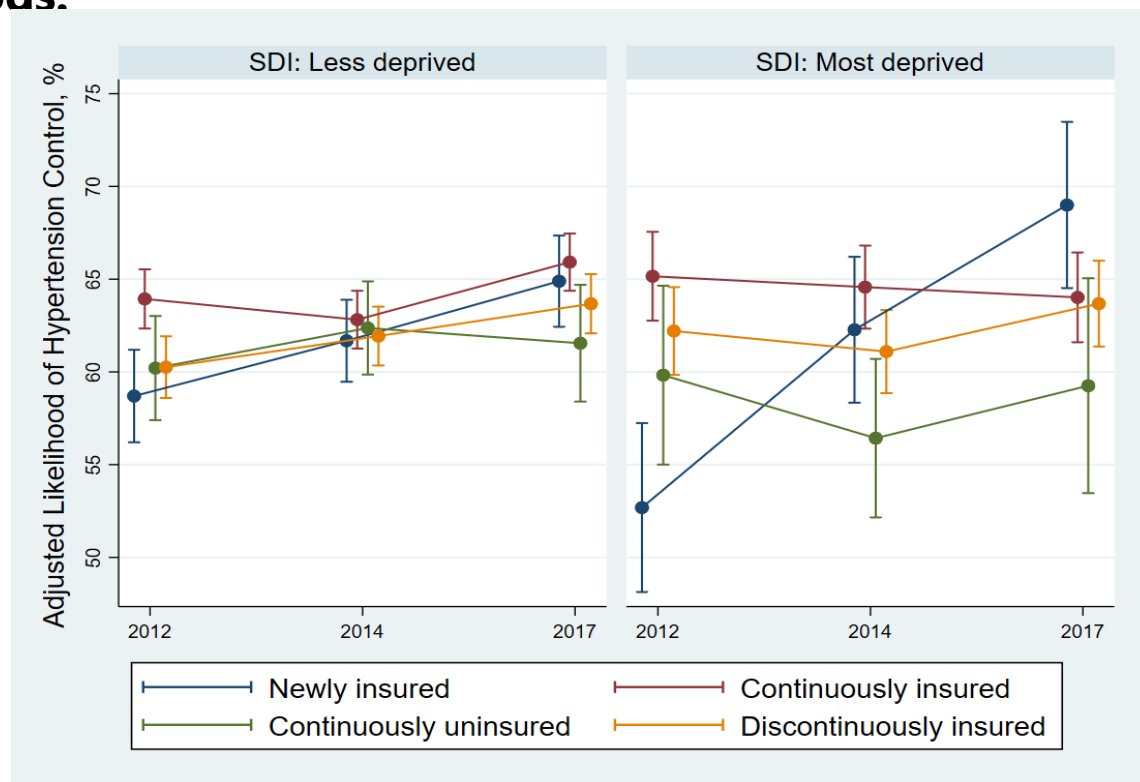


Lack of insurance was associated with ***fewer primary care visits***, resulting in ***lower odds of a clinic visit when a service was due*** (Figure 1).



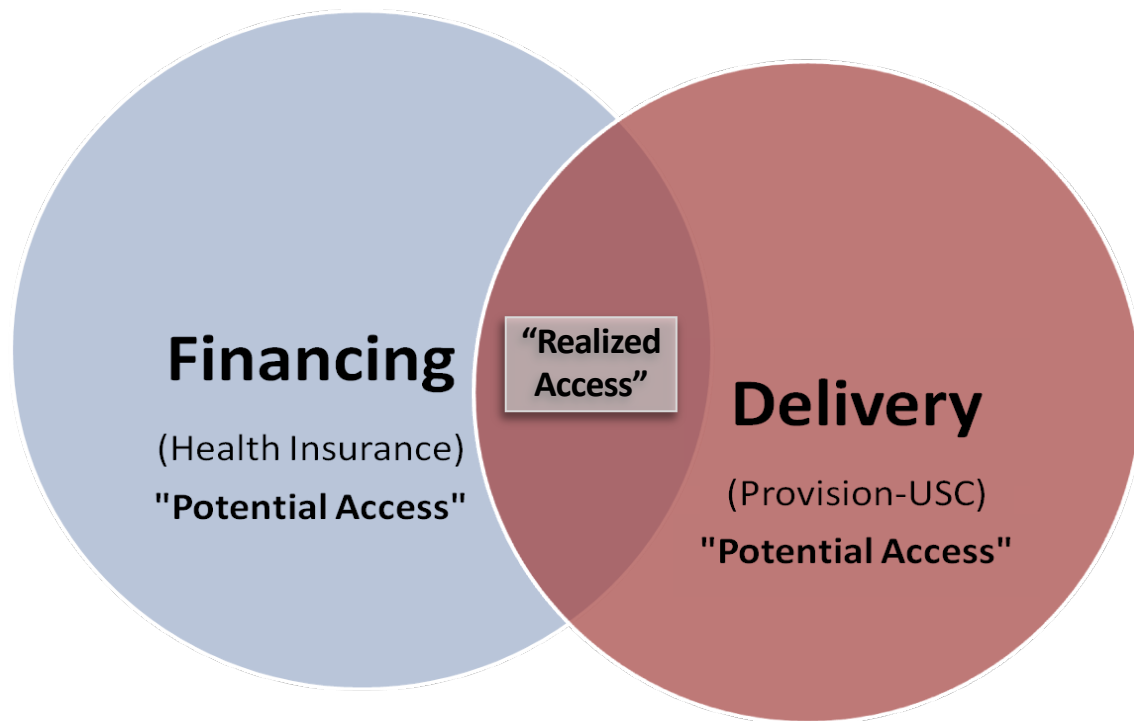
When patients did come in for an office visit in periods when services were due, lack of insurance was also associated with ***lower odds of receiving services due at the visit*** (Figure 2).

Among adults, gaining insurance was associated with a 16% improvement in hypertension control among patients living in the most deprived neighborhoods.



Angier H, Green B, Fankhauser K, Marino M, Huguet N, Larson A, DeVoe JE. Role of health insurance and neighborhood-level social deprivation on hypertension control following the Affordable Care Act. *Social Science & Medicine* 2020. Early release, on-line at <https://doi.org/10.1016/j.socscimed.2020.113439>

Having both health insurance and a usual source of care (USC) is associated with the lowest percentage of unmet needs.



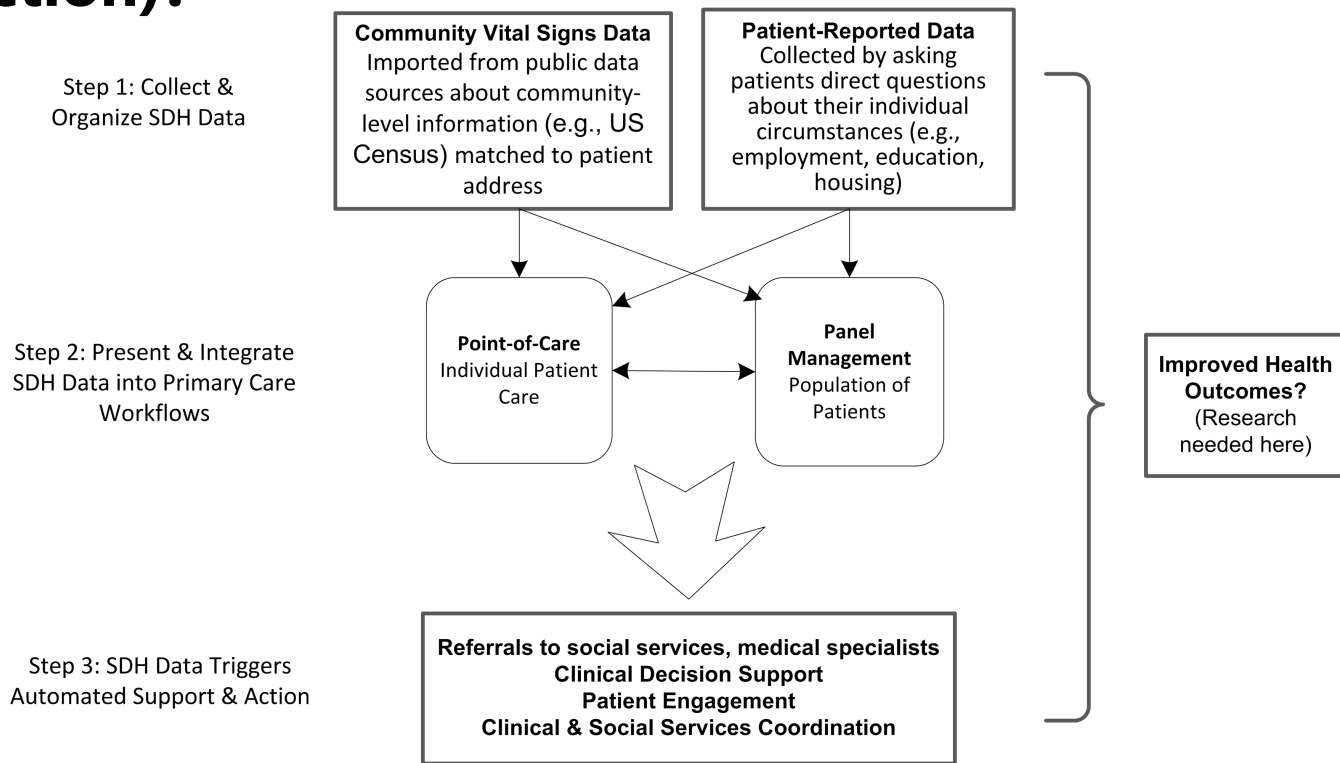
“Bridging the gap between where the quality metric ends and real life begins...”

A few weeks ago, I was pouring over the latest evidence-based guidelines for treating hypertension... On the surface, the guidelines seemed straight forward. We should add a third medication...

When we looked for evidence to assure us that this recommendation was the best one for a patient with co-morbid obesity, asthma, generalized anxiety disorder, depression, and polycystic ovary disease, we found very little. Further, we reviewed quality metric parameters for how primary care physicians are assessed in adequately lowering a patient’s cardiovascular disease risk and found no guidance in how to factor in her history of adverse childhood experiences (ACEs), unstable housing, unemployment, and food insecurity in assessing how much the addition of a new anti-hypertensive medication might lower her risk for cardiac disease...

It reminds me of the famous phrase in the poem “Where the Sidewalk Ends” by Shel Silverstein: “There is a place where the sidewalk ends and before the street begins...” In my primary care practice, I often feel like I am in that place where the quality metric ends and real life begins.

How can we use new IT and data infrastructure to integrate SDH data into the healthcare settings (AND take action)?



How can we most effectively collect and use individual-level social determinants of health information in actionable ways?

This Visit | Sign Visit

Visit Snapshot | **Social Determinants** | Last Visit with Me | Care Plan (Medical)

Current as of: Thu 6/8 2:48 PM. Click to refresh.

Question	Answer	Date
Hard to pay for: Food	Yes	6/9/2016
Hard to pay for: Utilities	No	6/9/2016
Hard to pay for: Transportation	No	6/9/2016
Hard to pay for: Medicine or medical care	No	6/9/2016
Hard to pay for: Health insurance	Yes	6/9/2016
Hard to pay for: Clothing	No	6/9/2016
Hard to pay for: Rent/Mortgage payment	No	6/9/2016
Hard to pay for: Child care	No	6/9/2016
Hard to pay for: Phone	No	6/9/2016
Hard to pay for: Other	No	6/9/2016

Federal Poverty Level
No account selected for this visit

Housing Lack

Housing

Question	Latest Value Recorded	Date
In the last month, have you slept outside, in a shelter, or in a place not meant for sleeping?	Yes	6/9/2016
In the last month, have you had concerns about the conditions and quality of your housing?	Yes	6/9/2016
In the last 12 months, how many times have you moved from one home to another?	5	6/9/2016
Housing Insecurity Score	3	6/9/2016

Food Insecurity

USDA Household Food Security Module

Question	Latest Value Recorded	Date
Food Security “(I/we) worried whether (my/our) food would run out before (I/we) got money to buy more.” Was that often true, sometimes true, or never true for (you/your household) in the last 12 months?	Often true	6/9/2016
“The food that (I/we) bought just didn’t last, and (I/we) didn’t have money to get more.” Was that often, sometimes, or never true for (you/your household) in the last 12 months?	Never true	6/9/2016
“(I/we) couldn’t afford to eat balanced meals.” Was that often, sometimes, or never true for (you/your household) in the last 12 months?	Don’t know or Refused	6/9/2016
USDA 2Q Score	1	6/9/2016

Intimate Partner Violence

Preference List Browser - Zzzsdh,Jack

TRANSITIONAL | Search | Browse (F4) | Preference List (F5) | Facility List (F6) | Database Lookup (F7)

☐ During visit ☒ After visit ☐ Only Favorites (★)

Community Referrals

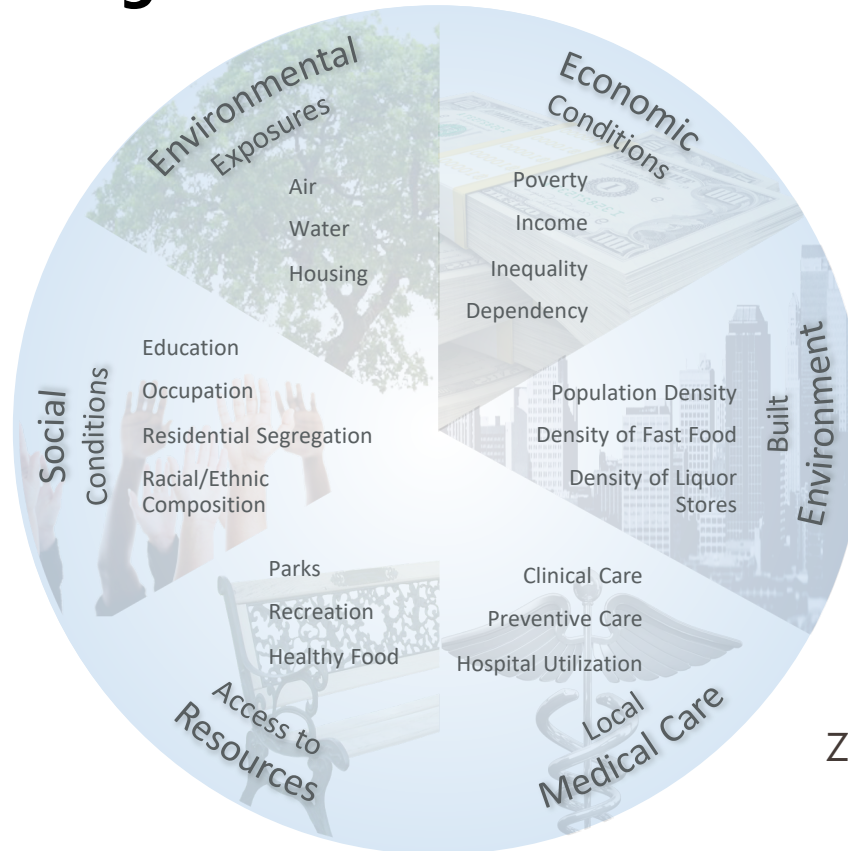
Housing (Community Referrals)

- ☐ Bradley Angle - Emergency, Domestic Violence (Multnomah County)
- ☐ Casa Hogar - Los Ninos Cuentan (Clackamas, Multnomah, Washington Counties)
- ☐ Cascade Aids Project (CAP) - Transitional
- ☐ Central City Concern - Housing and Resident Services - Transitional
- ☐ City Team/Emergency Housing - Emergency (City of Portland)
- ☐ DePaul Industries - Portland Headquarters - Transitional
- ☐ Home Forward - Low Income/Subsidized (All Multnomah Co, including Gresham, Fairview, Portland, Troutdale, and others)
- ☐ HUD Oregon - Low Income/Subsidized (State of Oregon)
- ☐ Human Solutions - Emergency, Domestic Violence, Transitional (Multnomah Co, Outer East Portland, and East Multnomah Co)
- ☐ Human Solutions - Low Income (Outer East Portland and East Multnomah Co)
- ☐ Native American Youth Association (NAYA) - Low Income/Subsidized (Multnomah County)
- ☐ NW Pilot Project - Low Income/Subsidized (Multnomah County)
- ☐ Portland Rescue Mission - Transitional (Multnomah County)
- ☐ Portland Women's Crisis Line/ Oregon - Emergency, Domestic Violence (State of Oregon)
- ☐ Portland Women's Crisis Line/ Oregon - Transitional (Multnomah County)
- ☐ Project UNICA - Catholic Charities - Emergency, Domestic Violence
- ☐ Salvation Army - West Women's & Children's Shelter - Emergency, Domestic Violence
- ☐ The Gateway Center - Emergency, Domestic Violence (Multnomah County)
- ☐ Transition Projects (TPI) - Transitional

Nutrition (Community Referrals)

- ☐ City Team/Food - Hot Meals, Soup Kitchens, Community Meals (Multnomah County)
- ☐ Farmers Market - Clackamas Sunnyside Grange Farmers' & Artists' Market - SNAP, Food Stamps
- ☐ Multnomah County early Childhood Services - Northeast - WIC (State of Oregon)
- ☐ Oregon DHS CAF Division for Multnomah County - Metro - SNAP, Food Stamps (Multnomah County)

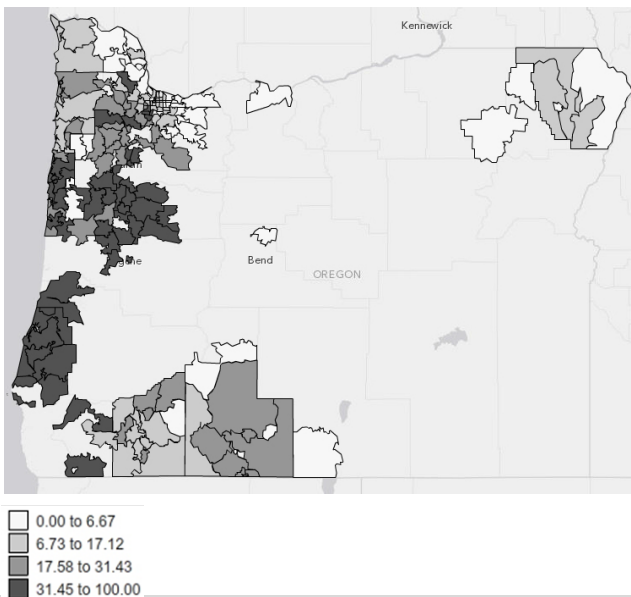
How can we integrate neighborhood level clinical and social data? Does adjusting for these factors matter?



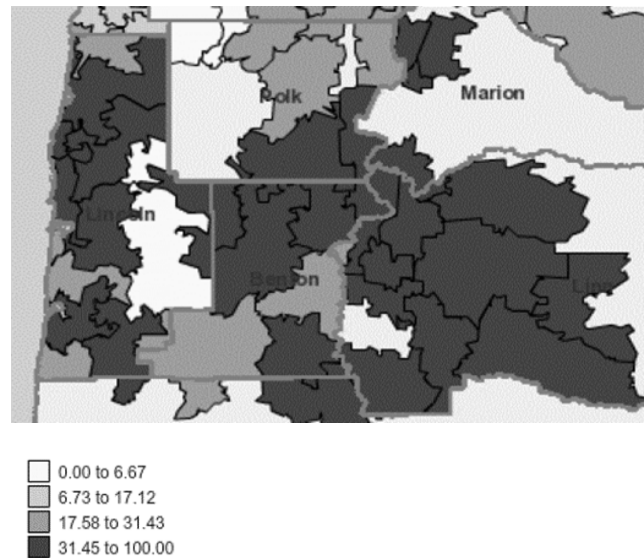
Available by either
County, Census Tract, or
Zip Code Tabulation Area

It is not just about bringing the data into the electronic health record. How can we use geospatial tools aggregating clinical and community data to inform partnerships with community organizations?

Percent of children without insurance: 0-18 years of age with at least one visit to an OCHIN PBRN clinic in 2011



Areas with High Rates of Children without Insurance in OCHIN and Median Household Income Rates by Oregon County (Lincoln, Polk, Benton, Marion)



Angier H, Likumahuwa S, Finnegan S, Vakarcs T, Bazemore A, Carrozza M, DeVoe JE. (2014) Using Geographic Information Systems to Identify Communities in Need of Health Insurance Outreach within the OCHIN Practice-based Research Network. J Am Board Fam Med. 2014 Nov-Dec;27(6):804-10.

“The incompatibility of patient-centered care with fee-for-service payment”

As the primary care team entrusted with the care of this patient...Our team’s efforts to address her social and emotional needs improved her health and enabled her to be more safe and comfortable while continuing to live independently at home...

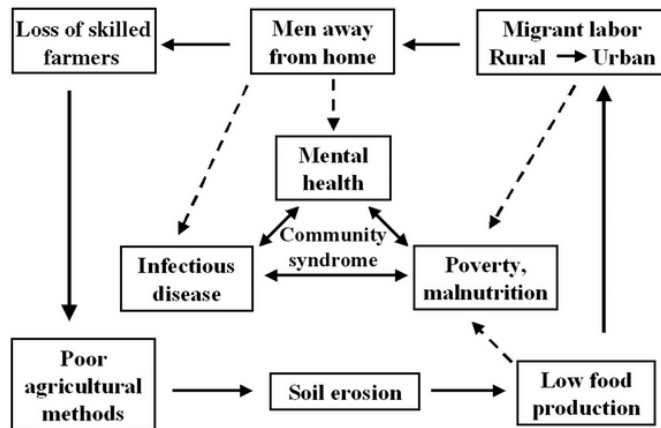
She needed us to do more in areas where there were few (if any) healthcare resources available. There was no easy way to receive payment for our team’s work to address her social determinants of health - the paperwork and extra bureaucratic hurdles were barriers too large to surmount...

Given that most primary care practices are still reimbursed fee-for-service, choosing to provide patient-centered care in this way often comes with significant financial losses. The heroic work being done by primary care teams to keep patients and communities safe during the COVID-19 pandemic, while jeopardizing the financial survival of their practices, is shining a bright spotlight on this perverse dichotomy. These teams should be trusted with a predictable, prospective budget... Increasing flexibility to allow teams to deliver needed services might just improve the quality of the care provided and the population’s health outcomes, while also decreasing the downstream costs.

What policy and payment changes are needed to implement community-oriented primary care (COPC)? How can we translate what the Karks learned in S. Africa in the 1940s and what Geiger, Gibson, et al. learned in the US in the 1960s?



South African Medical Journal
Suid-Afrikaanse Tydskrif vir Geneeskunde
P.O. Box 643, Cape Town
Vol. 26, No. 6
Cape Town, 9 February 1952
Posbus 643, Kaapstad
Weekly 2s 6d



South African Medical Journal, 1952

THE PHOLELA HEALTH CENTRE
A PROGRESS REPORT*
SIDNEY L. KARK, M.B., B.Ch.
Institute of Family and Community Health, Durban
and
JOHN CASSEL, B.Sc., M.B., B.Ch.
Pholela Health Centre, Bulwer, Natal

The origin and early development of this Centre, which was the first Health Centre to be established by the Union Health Department, has been described by Kark and Kark¹ and by Kark.^{2,3,4,5} Following the report of the National Health Services Commission in 1944, the government decided to establish Health Centres in various parts of South Africa. Pholela was considered a useful pilot project in this new service. Medical Officers and other staff appointed to the various newly created Health Centres were first sent to Pholela to gain experience in there. At the same time it was realized that Pholela could not remain the only teaching and investigation base in a service to be provided for various types of community in South Africa. As a result the Pholela Health Centre practice and an Institute of Family and Community Health which was established with headquarters in Durban.^{1,2,3} Established in April 1940, it is the oldest section of the Institute. After 11 years of work a further report of progress will be of interest.

THE NATURE AND EXTENT OF THE SERVICE
The essential features which have developed include care of the sick and prevention of illness by the doctor and nurse, associated with a programme of health education carried out by specially trained 'health' workers under the direction of the doctor.

The Health Centre's practice consists of a general service and a more defined family health and medical care programme.

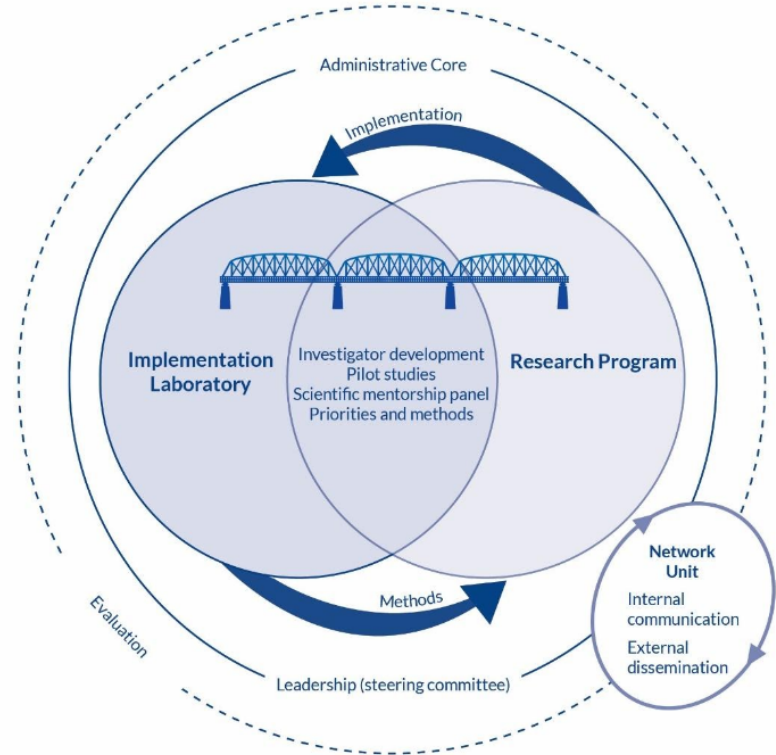
1. The General Service. This is available to all who wish to use it regardless of their domicile. It includes out-patient treatment of the sick and special sessions for the care of the expectant mother and the mother with her baby. However, many patients who come to the Health Centre from neighbouring magisterial districts are encouraged to see the district surgeons and other medical practitioners in their immediate neighbourhood. In addition, Health Centre staff are often asked to assist in the control of outbreaks of epidemic diseases in neighbouring districts.

2. The Family Health and Medical Care Programme. This relatively intensive service was started in 1942, including 130 families with a total population of about 500 persons. By gradually extending the area of this service the Centre now provides a family health and medical care programme for a population of 8,500 people in the district of Pholela.

THE RESPONSIBILITY

“Community-oriented primary health care brings together elements of individual, family, and community health care: It involves integration of health education, prevention and promotive health care, early detection, treatment, alleviation and rehabilitation. **It focuses on the local community in partnership between the health services and the communities served, and may involve interagency cooperation.** Clinical and epidemiological skills are brought together as complementary functions, together with other important skills. The community-oriented primary care practice team, in partnership with the community, assumes the initiatives in health promotion and care, thus widening the functions of practitioners in the community. **A central principle is that health care should be provided ‘in communities, for communities, and with communities.’**”

Once we make a new discovery, how can we scale it up? Dissemination and Implementation (D&I) Research is key to our success



<https://bridgetoinnovation.org/our-initiatives/bridge-c2-center/>

Acknowledgements:

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A special thank you to all of the primary care clinics and patients who are participating in this research.

And, thank you for listening!
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OCHIN

