

2023 Spectrum Pilot Grants in Population Health Sciences

CENTER FOR POPULATION HEALTH SCIENCES
INFORMATION SESSION

January 24, 2023



Agenda

1. Introduction to PHS
2. Overview of the 2023 Request for Proposals
3. Requirements & Eligibility
4. PHS Data & Research Resources
5. Application Timeline
6. Q&A

PHS Mission

To improve the health of populations by bringing together diverse disciplines and data in order to address social determinants of health (SDOH).

Our strategy is built around four core pillars:

- Collaboration and Community
- Research Resources
- Translation
- Education and Training

What Is Population Health?

Population health is a relatively new term that has not yet been precisely defined. Is it a concept of health or a field of study of health determinants?

We propose that the definition be “the health outcomes of a group of individuals, including the distribution of such outcomes within the group,” and we argue that the field of

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David Kindig, MD, PhD, and Greg Stoddart, PhD

ALTHOUGH THE TERM

“population health” has been much more commonly used in Canada than in the United States, a precise definition has not been agreed upon even in Canada, where the concept it denotes has gained some prominence. Proba-

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approach is “an increased focus on health outcomes (as opposed to inputs, processes, and products) and on determining the degree of change that can actually be attributed to our work.”^(p11)

a “conceptual framework for thinking about why some populations are healthier than others as well as the policy development, research agenda, and resource allocation that flow from this framework.”^{3(p4)}

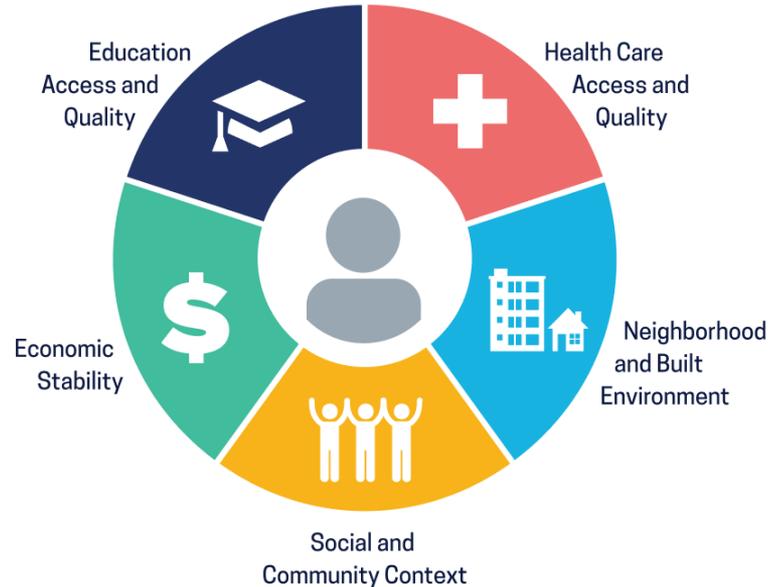
March 2003, Vol 93, No. 3 | American Journal of Public Health

What are social determinants of health?

Social determinants of health (SDOH) are the conditions in the environments where people are born, live, learn, work, play, worship, and age that affect a wide range of health, functioning, and quality-of-life outcomes and risks. SDOH can be grouped into five domains.

Recommended References:

- [*Healthy People 2030*](#), U.S. Department of Health and Human Services, Office of Disease Prevention and Health Promotion.
- [*CDC Overview on Social Determinants of Health*](#)



2023 Spectrum PHS Pilot Grants

Proposals submitted should focus on:

- a social, economic, community, or environmental factor and its influence on health
- have implications for reducing social inequalities in health
- demonstrate a means of translating research into impact

Note: Please review the [previous pilot awards](#) as well as the [CDC's Social Determinants of Health Toolkit](#) to get a sense of the types of research being prioritized.

2023 Spectrum PHS Pilot Grants

Two types of grants

- ❖ Early career (PhD students, postdoctoral scholars) pilot grants up to \$20,000
- ❖ Faculty pilot grants up to \$40,000

Requirements & Eligibility

- ✓ Projects must be completed within the grant timeline: **July 1, 2023 - June 30, 2024** (no extensions)
- ✓ All projects must have a Stanford faculty member (who is PI eligible) listed as the PI. Early career applicants can be listed as Co-PI.*
- ✓ Projects must be US-based (no foreign components)
- ✓ Clinical trials as defined by the NIH are not eligible**
- ✓ Applicants cannot have other current NIH training grants during the award period
- ✓ Applicants encouraged to apply for less than the maximum amount
- ✓ Projects involving multidisciplinary teams; spanning across Stanford schools are highly encouraged

*Clinical Educator (CE) faculty, clinical instructors, graduate students, and postdoctoral scholars (clinical and non-clinical) are encouraged to apply and are required to include a PI eligible faculty member as lead PI on the application. CE faculty can also apply for a [PI waiver](#).

** NIH clinical trials [definition](#)

Evaluation Criteria

- ✓ Potential impact
- ✓ Social inequality focus
- ✓ Methodological rigor
- ✓ Scope & budget
- ✓ Contribution to investigator training in population health research
- ✓ Potential to lead to longer-term projects

Recommend all interested applicants review the past Spectrum PHS Pilot Projects posted on the [PHS website https://spectrum-phs.stanford.edu](https://spectrum-phs.stanford.edu)

Summary of PHS Datasets

Data Source	Strengths	Limitations
American Family Cohort (AFC)	<ul style="list-style-type: none">- Large numbers of electronic medical records (EMRs) from rural, lower income and racial and ethnic minority populations- Rich with good longitudinal data- Linkable by individual to external data	<ul style="list-style-type: none">- May be sparse in some counties- May not capture uninsured or indigent individuals
All Payer Claims (States)	<ul style="list-style-type: none">- Representative of insured populations for the states from which they are derived- Rich, granular and linkable with state permission- Can be linked to other state held data such as vaccination, vital records and social services	<ul style="list-style-type: none">- May not capture uninsured or indigent individuals- Significant administrative burden
California Agency Data Exchange	<ul style="list-style-type: none">- Rich, longitudinal and linkable by individual- Linked to many social services datasets- Includes difficult to reach populations- Includes all of California	<ul style="list-style-type: none">- May be sparse for higher SES populations- Limited to California

Summary of PHS Datasets

Data Source	Strengths	Limitations
MarketScan	<ul style="list-style-type: none">- Well powered for almost all population health questions- Reasonable granular geographic information (3 digit zip)- Some socioeconomic variables available- Large numbers of payers including Medicaid- Family variable enables linkage of families- Dental data	<ul style="list-style-type: none">- De-identification is quite robust meaning that certain geographic or time variables are jittered or aggregated- Cannot report on providers at a granular level
Medicaid 100%	<ul style="list-style-type: none">- Well powered for almost all population health questions- Granular geographic information (5 digit zip)- Fairly representative of the low-income US population, especially pregnant women & children	<ul style="list-style-type: none">- Does not include data from upper and middle income populations- Data limited to qualified individuals which may limit inclusion of men and childless individuals
Medicare 20%	<ul style="list-style-type: none">- Well powered for almost all population health questions- Granular geographic information (5 digit zip)- Very representative of the US population over 65- Physicians can be linked	<ul style="list-style-type: none">- Some data from wealthiest individuals (Medicare Advantage) may be excluded- Data limited to individuals over 65 which includes selection (survival) bias

Summary of PHS Datasets

Data Source	Sampling Frame	~N	Data Type	Smallest Geographic Unit	Access Lead Time	Years	Accessible via PHS or PHS Collaborators
AFC	National, rural	9 M	EMR	Census Block Geocoded	1 month	2010-Present	Stanford PHS
All Payer Claims	States	Varies	Claims	Varies	2 - 6 months	2006 – 2022	Stanford PHS
Ca ADE	California, children	13.7 M	Claims Admin	Census Block	6 months	2010 - 2022	CDN
MarketScan	National commercial claims	153 M	Claims	3 digit zip code	1 week	2007 - 2021	Stanford PHS
Medicaid 100%	National (low income)	73 M	Claims	Census tract	3 months	2010 - 2021	Mathematica
Medicare 20%	National (65+)	11 M	Claims	Census tract	6 months	2006 - 2020	Stanford PHS

For More Information on PHS Datasets

- [Detailed description of other PHS Datasets](#)
- [Apply for PHS Data -phsdocs.stanford.edu](#)
- [PHS Data Portal -phsdata.stanford.edu](#)
- [PHS Data User Slack Channel](#)
- [Nero Computational Environment](#)

Additional PHS Research Resources

- **Data** – facilitate access to large, well-curated population-level datasets
- **Funding** – help identify and secure awards for follow on projects
- **Match-Making** – support the connection of ideas, people, and resources inside and outside of Stanford
- **Community Engagement** – provide technical assistance and online tools for community engaged research
- **Research Management** – spearhead and manage research initiatives
- **Dissemination** – ensure research outputs are tailored for and accessible to target audience

Timeline

- Application Deadline: **February 28, 2023 | 11:59pm PDT**
- Award Notifications: **April 7, 2023**
- Pilot Awards Office Hours Session*: **April 13, 2023 | 11:00am -12:00pm PDT**
- Grants Awarded: **July 1, 2023**
- Funding Period: **July 1, 2023 - June 30, 2024**

* Required attendance for all final grantees. Additional materials will need to be submitted by the end of April in order to receive the awarded funds in July.

Questions?

Eileen Bernabe, PHS Associate Director for Research Programs

stanpophealth@stanford.edu

- *For questions related to project scope, application review process, and award notifications*

Ellen Orasa, KL2 Manager

eorasa@stanford.edu

- *For questions related to eligibility, application documentation, and online application submission*

Q&A

APPLICATION DEADLINE

11:59PM PDT | TUESDAY, FEBRUARY 28, 2023

Link to apply

<https://seedfunding.stanford.edu/opportunities/2023-spectrum-phs-pilot-grants>

More information, visit spectrum-phs.stanford.edu