

2022 Spectrum Pilot Grants in Population Health Sciences

CENTER FOR POPULATION HEALTH SCIENCES
INFORMATION SESSION

February 28, 2022



Agenda

1. Introduction to PHS
2. Overview of the 2022 Request for Proposals
3. Break for Questions
4. Requirements & Eligibility
5. PHS Data & Research Resources
6. Application Timeline
7. 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 five core pillars:

- Data
- Research
- Education
- Community
- Translation

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)}

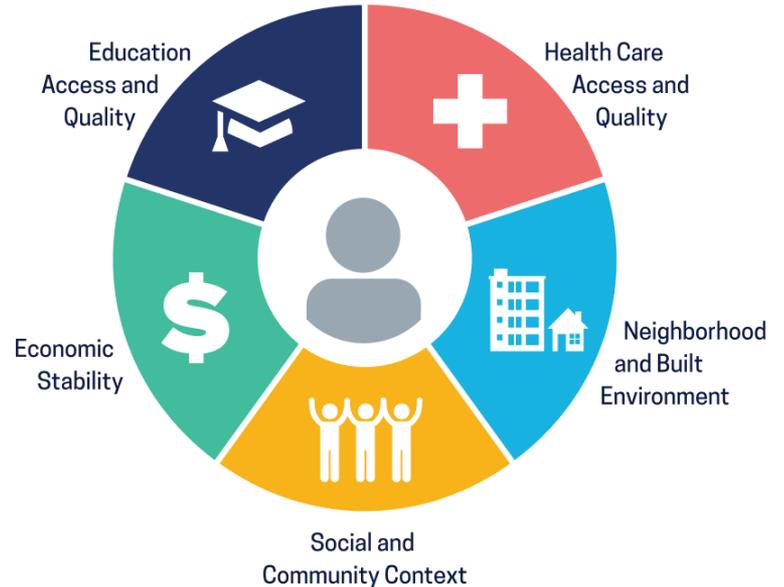
March 2003, Vol 93, No. 3 | American Journal of Public Health

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*](#)



2022 Spectrum PHS Pilot Grants

New to the 2022 funding cycle are three tracks to which applicants can apply:

- ❖ Track 1 – General Population Health Research
- ❖ Track 2 – Medi-Cal Focused Research
- ❖ Track 3 – Community-Driven Research Examining Structural Racism in Solano County

Projects involving multidisciplinary teams, particularly those that span the seven Stanford schools, are highly encouraged across all three tracks.

Track 1 – General Population Health Research

Proposals submitted under Track 1 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 under Track 1.

Track 2 –Medi-Cal Focused Research

Proposals submitted under Track 2 should utilize Medi-Cal data made available through PHS' pilot program with Mathematica.

- Medi-Cal, California's Medicaid program, is the state's health insurance program providing coverage for over 13 million Californians with low income.
- Mathematica has access to (and can link) Medicaid claims, encounter, pharmacy, enrollment, and assessment data.

Note: Applicants interested in Track 2 should 1) review the [Medicaid website](#) to find out what Medi-Cal data is available and 2) contact PHS directly to discuss data access arrangements prior to submitting their proposal.

Data Made Available through Mathematica

Access to Linkable Data

- ✓ Using a unique patient identifier, we can link Medicaid to Medicare Parts A/B/C/D data for dual-eligible beneficiaries.
- ✓ We can also link at the provider, facility, and/or geographic level to external data.
- ✓ The data account for individual patients as they transition between programs or gain/lose eligibility between programs. By examining Medicaid and Medicare records together, we provide a full-spectrum analysis of cost, quality, and outcomes.

Medicaid Data	Medicare Data
Enrollment and Claims Files <ul style="list-style-type: none">• T-MSIS Analytic Files (TAF): Demographic and Eligibility (DE), Inpatient, Long-Term Care, Other Services, and Pharmacy files (2014-2020)• Medicaid Analytic eXtract Files: Person Summary (MAX PS), Inpatient, Long-Term Care, Other Services, and Prescription Drug files (2012-2015)• TAF Annual Managed Care Plan and Annual Provider files (2014-2020)	Enrollment, Claims, and Provider Files <ul style="list-style-type: none">• MBSF Base, CC, Cost and Utilization, and Other Conditions files (2012-2020)• Medicare Carrier, DME, HHA, Hospice, IP, OP, and SNF FFS claims (2012-2021) and encounter (2015-2019) files• Medicare Part D Event, Drug, Plan, Provider, and Formulary files (2012-2020)• MD-PPAS (2012-2019), Medicare Shared Savings Program (2013-2021), and Pioneer ACO (2012-2014) files

Track 3 – Community-Driven Research Examining Structural Racism in Solano County

Proposals submitted under Track 3 should address questions that fall into two broad categories:

- **Operationalizing & Measuring Structural Racism:** How can local health and community-based organizations measure reductions in structural racism over time?
- **Assessing the Impact of Discriminatory Policies:** What impact have discriminatory policies (i.e. policies that exacerbate racial inequalities intentionally or unintentionally) had on Solano County? For example, what social, economic, and health impacts have redlining, urban planning, and mortgage lending policies and practices had on Solano County communities?

Note: Track 3 awardees would work closely with PHS and Solano County throughout the duration of the grant to ensure research outputs meet the needs of Solano County.

Break for Questions

More information, please visit:

seedfunding.stanford.edu/opportunities/2022-spectrum-phs-pilot-grants

Requirements & Eligibility

- ✓ All tracks in the RFP are open to faculty and early career applicants (PhD students, postdoctoral scholars)
- ✓ 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

*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](#)

Requirements Continued & Funding Amount

- ✓ Projects must be completed within the grant timeline:
July 1, 2022 - June 30, 2023 (no extensions)
- ✓ Multidisciplinary; spanning across Stanford schools
- ✓ Maximum funding amount will be \$40,000 for proposals submitted under all three tracks, *regardless* of faculty or early career status
- ✓ Applicants encouraged to apply for less than the maximum amount

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
- ✓ *Applications under **Track 3** will also be evaluated based on how well the proposed research meets the needs and interests of Solano County*

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	<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 months	2010-Present	Stanford PHS
All Payer Claims	States	Varies	Claims	Varies	2 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 - 2017	Stanford PHS
Medi-Cal	National (low income)	73 M	Claims	Census tract	3 months	2010 - 2021	Mathematica
Medicare 20%	National (65+)	11 M	Claims	Census tract	3 months	2006 - 2018	Stanford PHS

For More Information on PHS Datasets

- [Detailed description of other PHS Datasets](#)
- [Apply for PHS Data](#)
- [PHS Data Portal](#)
- [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: **March 31, 2022 | 11:59pm PDT**
- Award Notifications: **May 6, 2022**
- Pilot Awards Office Hours Session*: **May 11, 2022 | 11:00am -12:00pm PDT**
- Grants Awarded: **July 1, 2022**
- Funding Period: **July 1, 2022 - June 30, 2023**

* Required attendance for all final grantees. Additional materials will need to be submitted in May in order to receive the awarded funds in July 2022.

Questions?

Eileen Bernabe, PHS Operations Manager

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 | THURSDAY, MARCH 31, 2022

Link to apply

seedfunding.stanford.edu/opportunities/2022-spectrum-phs-pilot-grants

More information, visit spectrum-phs.stanford.edu