GRAPH’s multidisciplinary team of researchers at Columbia University Mailman School of Public Health is dedicated to helping organizations and communities identify cost-effective levers to promote health and prevent disease.

Preventive Health ROI

Heart disease, cancer, and other chronic diseases are on the rise, and with them the cost of medical care, which may run into the millions, even for a single individual. For an entire population, the financial and social burdens are vast—but so are the opportunities to improve health.

In the face of this reality, communities and organizations are increasingly investing in preventive health interventions, from safe bicycle lanes to incentives to quit smoking. While prevention is understood to be substantially more cost-effective than paying for the consequences of poor health, data and analysis are required to differentiate among interventions in terms of return on investment and improved quality of life overall and for specific communities and regions.

GRAPH provides the health sector, businesses, nonprofits, governments, and others with the analysis and insights to guide preventive health decisions and measure their effectiveness.

APPROACH

GRAPH asks four questions each time it approaches a project:
1. How can we prevent illness and maximize health?
2. What are the relative costs of preventive health measures?
3. Which efforts yield the greatest ROI for sustainable health?
4. How can analytics guide health system redesign?

PARTNERS

- Hospitals and health systems
- Corporations and large organizations
- Foundations
- Insurance companies
- International agencies and NGOs
- Local, state, and national governments and health agencies

EXPERTISE

GRAPH is directed by academic researchers in epidemiology, biostatistics, and health policy at Columbia University Mailman School of Public Health who have complementary insight into critical opportunities to improve health.

- States invest in prevention to differing degrees, from less than $15 (gray) to greater than $50 per person (dark purple). GRAPH scholars partner with key stakeholders to analyze investments in specific programs and identify those that provide the best return on investment for health.

“Public health officials have argued for years that if we engage in prevention, we can save money. But that’s not even half of the picture. How do we know which interventions are most effective for specific populations, what ROI to expect, and how we should implement them to optimize health?”

—Michael S. Sparer, PhD, JD, Chair, Health Policy and Management, Columbia Mailman School of Public Health

Sample Projects

Since its launch in 2013, GRAPH researchers have been engaged with business, healthcare and foundation partners to measure the relative effectiveness of preventive health interventions on population health.

Preventive Health for Global Populations
In 2012, the United Nations General Assembly passed a resolution calling for countries to take actions towards universal health coverage. However, there has been scant information about how preventive measures can play a role in improving population health. As part of a two-year project supported by the Rockefeller Foundation, the GRAPH team is evaluating the full public health armamentarium of interventions, from HIV prevention to alcohol-related regulations, in order to measure the relative costs and benefits of each. From there, the researchers will identify packages of interventions attuned to the specific health needs of countries and global regions.

Community Diagnosis
The Affordable Care Act has formalized the responsibility of hospitals to promote the health of their local communities. In keeping with that charge, GRAPH researchers are working in partnership with NewYork-Presbyterian Hospital on an initiative designed to deliver the greatest ROI to substantially improve health in the surrounding community. This two-year project will identify the specific health needs of the community and ways they can be addressed to deliver the greatest return on health for every dollar spent. As part of this process, the GRAPH team is developing a methodology for community diagnosis applicable to other communities and cities.

The Public Health Preventable Deaths Project
The goal of this project is to quantify the number of deaths that can be prevented through public health interventions, enabling policymakers and funders to more effectively and efficiently direct future public health resources, both locally and globally.

Partnership Opportunities
Debbie Rosenberg Bush
Director of Institutional Partnerships
drb2163@columbia.edu
212-305-7716
cugraph.org
msph-graph@cumc.columbia.edu