PHHS BLOCK GRANT SUCCESS STORY 2016

CALIFORNIA WELLNESS PLAN IMPLEMENTATION-B

EVALUATING THE COST OF PUBLIC HEALTH.

Issue: (1) The California Department of Public Health (CDPH) lacks capacity for economic evaluation. The Department needs to identify a <u>cross-Center</u> approach and develop the appropriate tools and resources to show the value of public health, prevention, and addressing the social determinants of health, beyond just providing cost savings to the health care system. (A) Applied economic studies that are combined with epidemiology are useful at various levels of decision-making to evaluate public health programs, policies, and practices. (B) Economic evaluation has also proven influential at the public health-practice level when faced with alternative means for achieving a specific health goal. (C) Economic tools have been used to examine and determine the best use of resources when reviewing therapies, populations, and interventions.

Intervention:

Increase the capacity for economic assessment of public health systems across and within programs at CDPH. The CDPH Fusion Center team, after a year of searching, hired a data scientist to expand on health economic and epidemiological frameworks, such as:

- 1. Quality Adjusted Life Years (QALYs),
- 2. Disability Adjusted Life Years (DALYs),
- 3. Years of Life Lost (YLL), and
- 4. Years of Life Lived with Disability (YLD)

to make recommendations for policy and program decision-making. The data scientist has been collaboratively building the California Community Burden of Disease and Cost Engine platform. The goal of the Engine is to explore the relationship between resources spent on public health interventions and the value gained in improved health. Although still under conceptual development, the goal includes (1) deploying a product to visualize and explore a range of data related to mortality and morbidity, underlying up- and down-stream factors, and associated community-level costs; and (2) curating the range of mortality/morbidity and cost data to explore more complex and dynamic models, including models with user inputs.

Impact: The first milestone achieved is pulling together a Health Economics Think Tank, a group of 20 subject-matter experts from 12 <u>cross-Department</u> programs (1) required to economically analyze their grants, (2) have conducted or been involved with economic analyses for their interventions, or (3) are interested in economic analyses of public health interventions. The team met twice to discuss past and current efforts, as well as Fusion Center public health economics goals and how the team can meet the needs of the Department's programs.

The health-data scientist has (1) developed one annotated bibliography of academic articles pertaining to the economic analyses of public health interventions and services that will continue to be added to as a resource for the Think Tank and Department; (2) conducted three in-depth informational interviews with Think Tank members to identify gaps and assets in economic analyses capacity in CDPH; (3) developed and given a presentation for the departmental leadership team about the theory and approach that the Fusion Center team is taking to address public health economics capacity in the department.