



**Public Health Davies Award Executive Summaries:  
New York City Department of Health and Mental Hygiene Primary Care Information Project**

The [Primary Care Information Project \(PCIP\)](#) is a Bureau of the New York City Department of Health and Mental Hygiene that seeks to improve the quality of care in underserved communities through health IT. PCIP has extended prevention-oriented EHRs to over 2,500 NYC primary care providers working in underserved settings. This virtually integrated healthcare system includes 471 independent small practices, 34 community health centers, and 4 hospitals. These practices serve nearly 2 million patients in NYC. These practices all have access to shared resources such as clinical quality and technical staff, a unified public health hub, quality dashboards and group trainings.

**Impact on Population Health and Public Health Practice:**

The PCIP implementation resulted in data driven improvements in population health resulted in an increase in the delivery of recommended clinical preventative services, reductions in adverse drug events, monitoring of syndromic surveillance data in primary care settings, and increasing access to clinical preventative services.

- Annual reviews of the EHRs across 56 independent small practices showed significant increases of five percentage points or more for six quality of care measures: A1c screening for patients with diabetes, antithrombotic therapy for patients with diabetes or ischemic vascular disease, blood pressure control for patients with hypertension, breast cancer screening for women ages 40 years or older, body mass index recorded in patients ages 18 years and older, and smoking status recorded for all patients 18 years or older.
- Reduction in adverse drug events through increasing electronic prescriptions: Rates of electronic prescribing have increased from 10.08% (January 2009) to 41.95% (March 2011.)
- Monitoring of syndromic surveillance data in care settings other than emergency departments: Reporting by 49 practices during the initial 2010 H1N1 outbreak in NYC enabled DOHMH to examine for differences in health-seeking behavior across different settings.
- The PCIP data warehouse has data that tracks approximately a) 350,000 patient encounters per month; b) over 500,000 prescriptions per month; c) 400 independent primary care practices representing 1,500 primary care providers. PCIP estimates the system potentially averts 30 deaths per year for every 10% increase in delivery of clinical preventive services across eight quality measure indicators. Full compliance across eight quality measures will avert approximately 300 deaths.

Improving quality care measures, reducing adverse drug events and increased screening for chronic diseases demonstrates improved patient care and outcomes. Increasing the communication between patient and providers improves the patients' opportunities for education and understanding of their medical issues. Providers show them (on the computer screen) trends in their A1C levels, blood pressure etc. to engage them in their health plan.

**Financial Return on Investment:**

PCIP received over \$85 million in local, state, and federal funding. While NYC DOHMH has not conducted a formal ROI analysis, PCIP results in the following cost savings and efficiencies while improving the overall population health of their patients:

- For every patient seen by a provider using e-Prescribing, a net savings of \$39 per patient per year is achieved through the use of the PCIP formulary decision support system that helps providers select an equivalent generic drug.
- For every patient seen by a provider using e-Prescribing, a net savings of \$6.62 per patient per year is achieved by avoiding adverse drug events.
- A savings of \$2.43 per patient per year through a reduction in duplicate lab tests thanks to electronic interfaces for ordering and receiving lab results.
- Use of CDS to control hypertension patients blood pressure through medication results in reduced costs of \$17.16 per year.