# Value-Based Care and Pop Health – A Perfect Match?



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>
> -— Adrian Zai
> Research Director
> Partners eCare

**A**mong the healthcare IT trends that have emerged in the last several years, population health may not grab the biggest headlines, but few other initiatives can match its impact on patient outcomes and a hospital's bottom line.

In part, that's because population health has much in common with emerging value-based care models. Both are predicated on risk stratification. And both rely on data aggregated from populations characterized by specific behaviors or conditions – people with diabetes or other chronic illnesses, for instance, or patients who are likely to be readmitted to the hospital.

"Solutions that target population health and precision medicine will have the edge in a value-based care environment," predicted Adrian Zai in a "State of the Industry" panel discussion at October's Big Data and Healthcare Analytics Forum in Boston. "At the end of the day, they will drive solutions to better care and to lower financial costs."

Without the right data, simply defining, identifying and driving change within a target population is impossible. Thus, one key to successful population health projects lies in data availability: how much there is, how good it is, and how fast you can get it. However, the traditional approach – relying only an EHR's hierarchical database – is unlikely to provide the knowledge that successful population health programs demand.

"EHRs are really not designed to be these scientific repositories to optimize better care," Zai, research director at Partners eCare, said. "They are optimized for better billing."

## New data points drive insights

Providers are now looking beyond the EHR for data to help them improve outcomes for specific populations. One provider organization that has done so is the Staten Island Performing Provider System, one of 25 organizations created by New York to transform the state's costly and inefficient Medicaid system.

SI PPS is a partnership of approximately 75 healthcare providers who deliver care to 180,000 Staten Island residents receiving Medicaid benefits. Among other goals, it seeks to reduce preventable readmissions and admissions to area hospitals and achieve a 25 percent reduction in unnecessary emergency room visits.

"We don't need better drugs or more money thrown at failing hospitals," Executive Director Joe Conte said at the Big Data Forum. "We need transformational, data-driven programs that target patient pain points."

That data isn't necessarily "health" data – at least in the strict sense of the term. Conte's work shows that "there is an ROI to quantifying new programs which integrate with clinical care but which are really about social factors", he said.

Conte's organization developed a Big Data project that combined claims data, available medical data and socioeconomic data reflecting the social determinants on health – things like education and literacy levels, income and ethnicity, which can account for more than 40 percent of variation in outcomes. "Social determinants of health data is almost as important a variable as blood pressure," Conte recently told *Healthcare IT News*.

SI PPS then used data visualization such as heat maps to identify the cultural backgrounds of the people it wants to reach – most recently those struggling with obesity and opioid addiction. With focused attention on these communities, the organization addressed gaps in the continuum of care to drive better outcomes.

How much better? Preventable ER visits dropped by 9 percent over the course of a year, while preventable readmissions decreased by 10 percent. Thirty-day ER utilization rates for chronic diseases populations decreased by between 33 percent and 52 percent.

## Tools of the trade

"This can't occur on the fringes," Conte said. "This approach needs to be applied consistently and across the board. In a fee-for-service world, nobody would pay for that. But in a value-based environment, it makes all the sense in the world."

While the IT requirements were not negligible, neither were they extraordinary. Conte's first step was to create a data warehouse and deploy business intelligence analytics for patient-level detail. Next came identifying and ingesting real-time data feeds from provider partners, public data, the New York Department of Health, and other sources of "non-traditional" data. Said Conte, "Really fresh, really actionable data is critical."

The final element was choosing an effective data visualization tool, "which has been incredibly important to us," Conte said. "Sometimes you just really need to see it."

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In a value-based environment, a 360-degree view of the patient is insufficient to drive meaningful change. What you really need, Conte has learned, is a 360-degree view of the entire community.