Horizon Healthcare Innovations
a new shade of Blue

Measuring the Impact of Health Management Programs

Elizabeth Rubin
Director of Informatics
Horizon Healthcare Innovations
Population Health & Care Coordination Colloquium
Tuesday, February 28, 2012

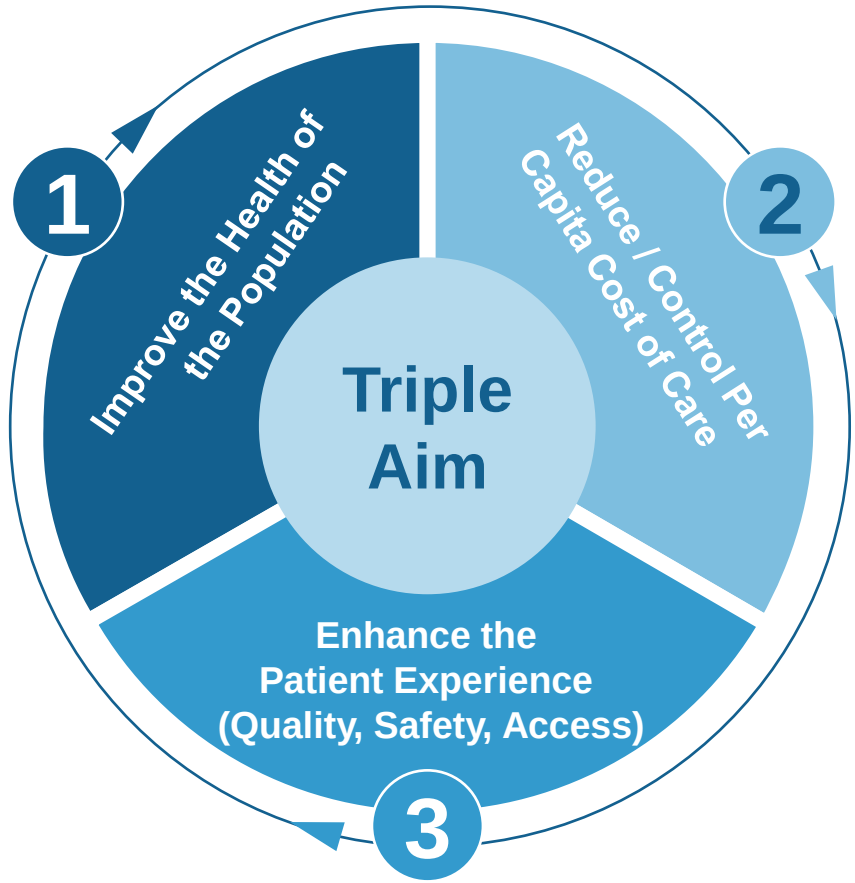
Horizon Healthcare Innovations is a subsidiary of Horizon Blue Cross Blue Shield of New Jersey.
Horizon Blue Cross Blue Shield of New Jersey is an independent licensee of the Blue Cross and Blue Shield Association.
CONFIDENTIAL AND PROPRIETARY - Any use of this material without specific permission of Horizon BCBSNJ is strictly prohibited

HHI Mission / Achieving the Triple Aim

- **Horizon Healthcare Innovations -** Through **collaboration**, we are helping to create an **effective, efficient and affordable** health care system

- Subsidiary of Horizon Blue Cross Blue Shield of New Jersey

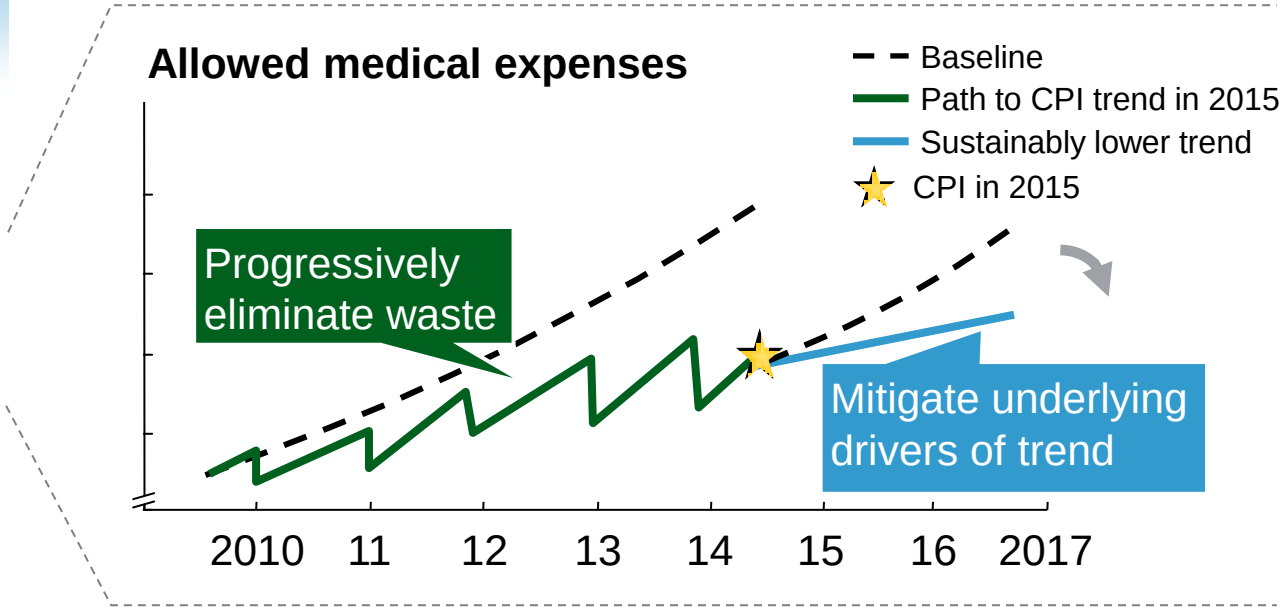
- Achieving the **Triple Aim**



We are committed to improving quality and affordability while driving trend down to sustainable levels

Strategic goals

- Improve quality through adherence to evidence-based medicine
- Improve affordability by driving down medical cost trend to general inflation
- Create more collaborative partnerships with providers and employers



Despite prior aggressive efforts to improve quality, remove waste/ inefficiency and lower trend, the overall picture is unchanged requiring a bold approach ⏩ Horizon Healthcare Innovations, LLC

Transforming the health care system

- Hospitals, physicians and health plans have to be collaborative to transform the health care system.
- Reimbursement has to reward value rather than volume.
- Providers have to embrace movement to population based care.
- Reformed health care system has to focus on primary care and primary care practice transformation.

The PCMH model is the building block of the accountable care health system.

Horizon Healthcare Innovations themes

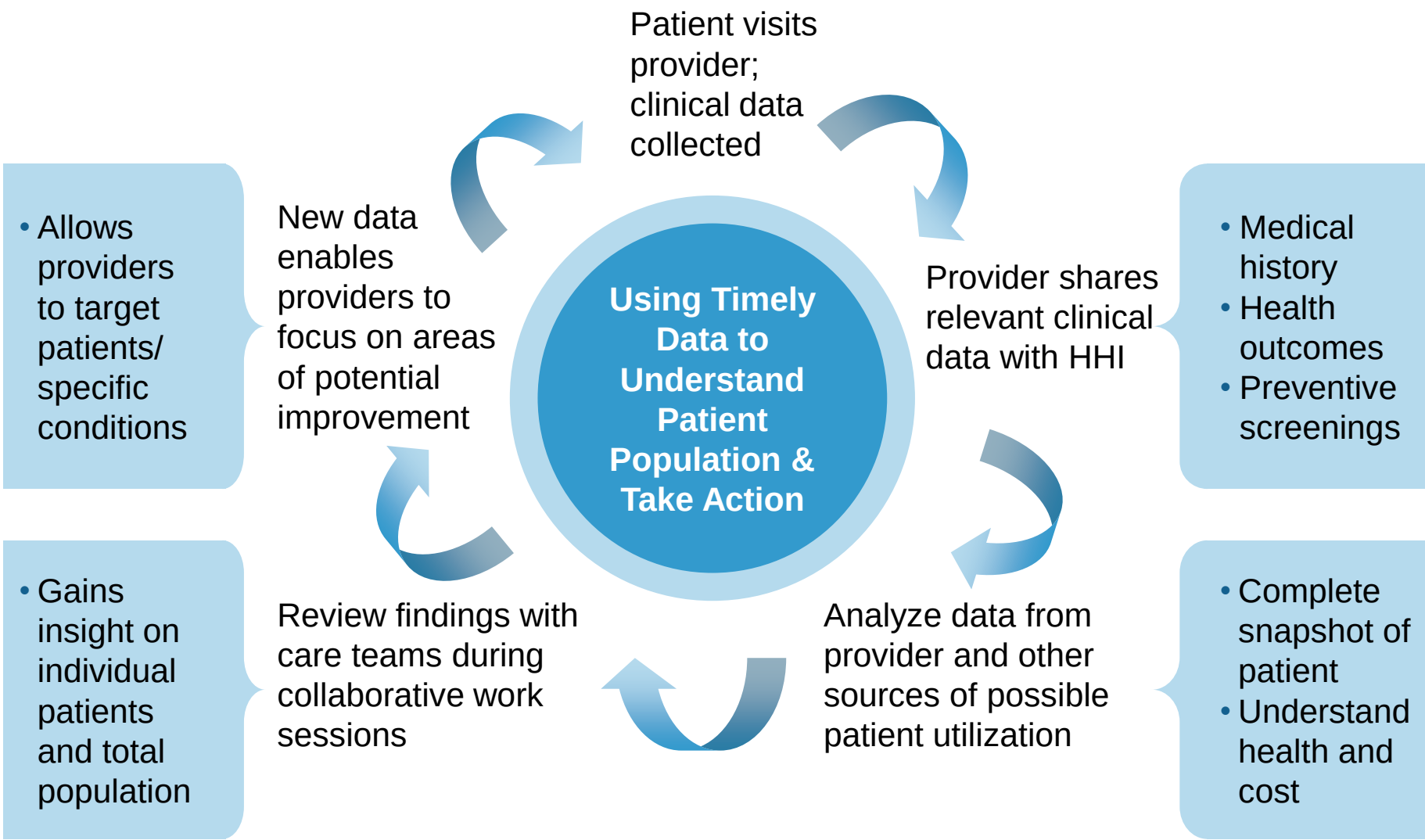
Horizon Healthcare Innovations themes

- Redefining care delivery and health management
- Creating accountable consumers and purchasers
- Building information exchange and clinical quality standards
- Matching capacity with demand and enhancing regulatory support
- Building support among community stakeholders

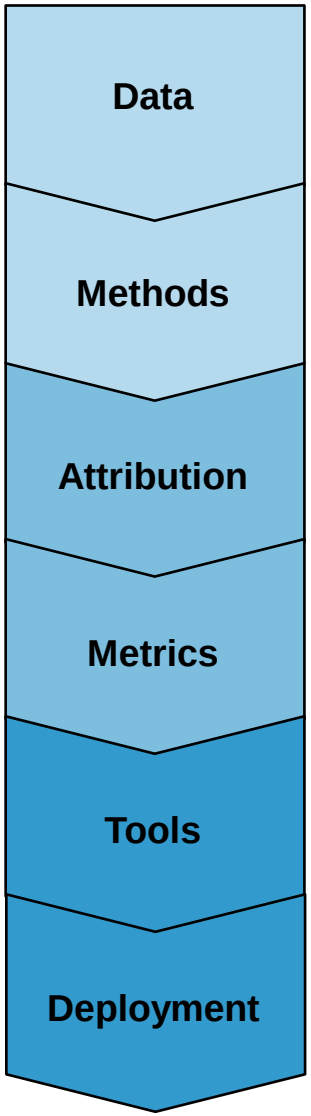
Current Programs

1. Patient-Centered Medical Homes
2. Episodes of Care
3. Accountable Care Organizations
4. Consumer Engagement

Sharing Data to Improve Quality, Lower Costs



HHI Informatics Approach:
Leverage the best techniques and data sources available



Data

- Horizon BCBSNJ's claims
- Clinical data shared by partners through a web-portal (ex, patient's BMI) incorporated or care plan tool
- Attribution data from web-portal is matched against Horizon BCBSNJ eligibility
- Third-party data from vendors of partners (ex, EMR and Disease Registry vendors) is leveraged
- Survey results are starting to be used in measuring patient satisfaction

Methods

- Apply diagnostic-based risk adjustment to reflect the age, gender and disease burden of each patient; as well as to predict future cost (
- For acute Episodes of Care, employ a procedural episodic grouper
- Statistical methods like setting confidence intervals, hypothesis testing, t-tests, etc.

Attribution

- Prospective attribution is driven by web-portal
- Retrospective attribution uses business rules relevant to claims experience (ex, member/patient who went to ACO for X% of office visits during Y timeframe)

Metrics

- Clinical Quality: Evidence Based Measures; "HEDIS-like"
- Cost: Total cost of care (risk-adjusted); cost trend
- Utilization: Inpatient days/1000, ER visits, etc.
- Number of patients participating in program
- Patient satisfaction (surveys)
- Baselines and norms for all metrics

Tools

- SAS for data crunching and analysis
- Population-based analytics and predictive modeling

Deployment

- .pdf reports on web interface and secure file transfer locations
- Data exchange back to third party vendors
- Dashboarding for internal and external audiences

How do we measure results?

Methodology

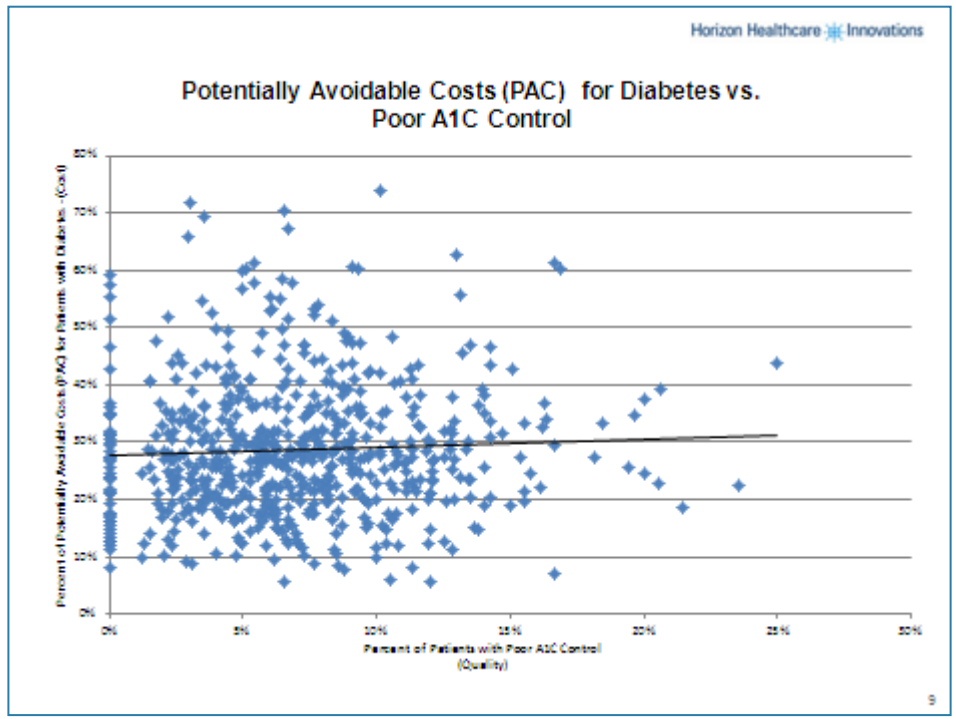
- Cross-sectional comparison between Horizon BCBSNJ members who were, and were not, attributed to PCMH practices
- Pre-post comparison in which pre-post changes over time among populations attributed to PCMH practices are compared with similar changes among populations who were not attributed to PCMH
- Compare actual results in the initiative against the budget for the intended population and timeperiod

  - **Statistical**
  - **Econometric**

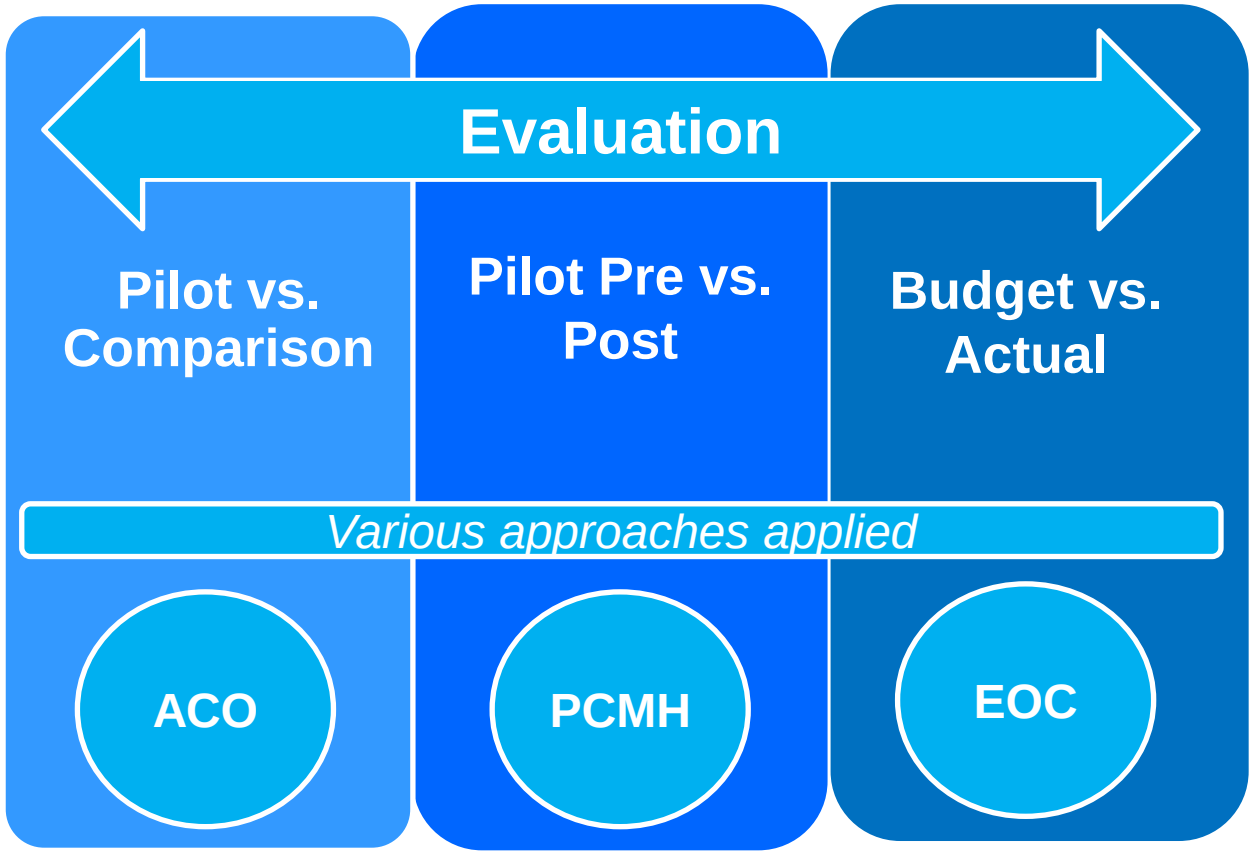
Proprietary & Confidential

Statistical Measurement

- **Methodology Details**
  - We can evaluate our programs using a regression framework (which allows us to add regression controls, as needed)
  - We can also use a “difference-in-difference” framework. The coefficient on the interaction term gives us the difference-in-differences estimate of the effect



Evaluation Techniques are Panoramic



HHI Academic Research Consortium

Academic Consortium:

- Composed of the University of Pennsylvania, Rutgers University, Harvard School of Public Health and Carnegie Mellon University
- Independently evaluate the programs and publish results
- Advise HHI on program designs and necessary adjustments of current and future programs

Status:

- Five studies underway with the Consortium and UMDNJ
- Four quarterly meetings scheduled for 2012

Proprietary & Confidential

Our Philosophy on Measurement

- Now is the time to measure such varied health management programs
- Transparency and collaboration on definitions and methods
- Adopt a measurement approach suitable for the program
- Deep dive into the analysis
- Tailor presentation of data to each audience
- Prove results to the marketplace

Questions?

Thank You

www.HorizonHealthcareInnovations.com