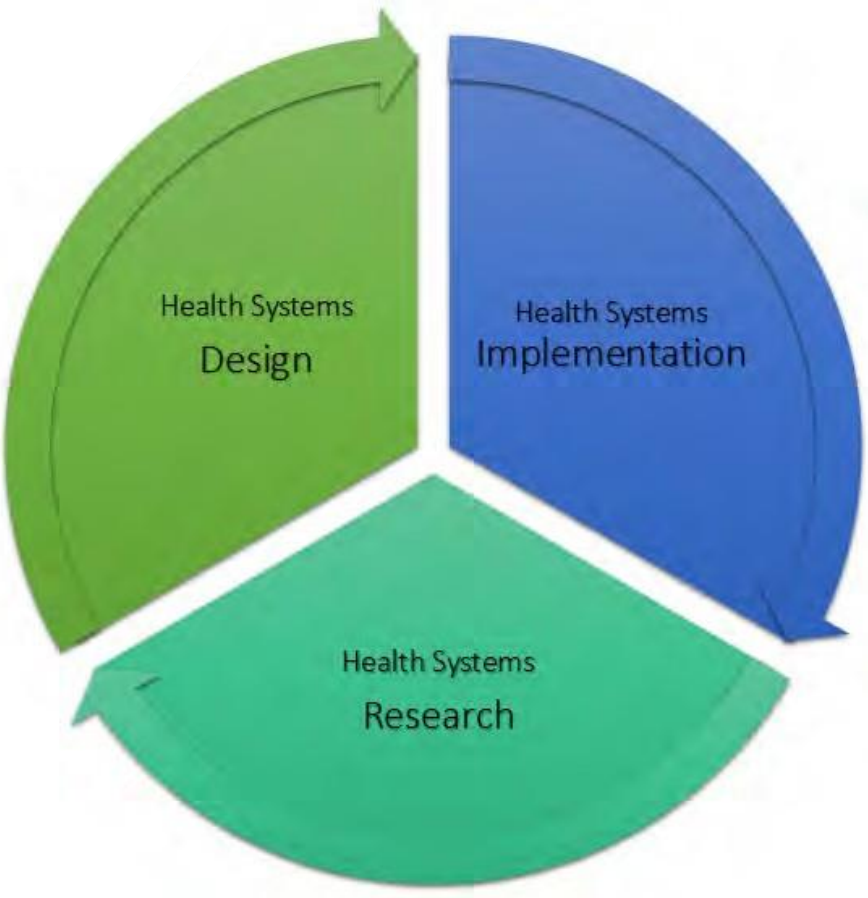
Measurement
Vermont Blueprint for Health

House Committee on Healthcare

February 12, 2016

Transformation Process

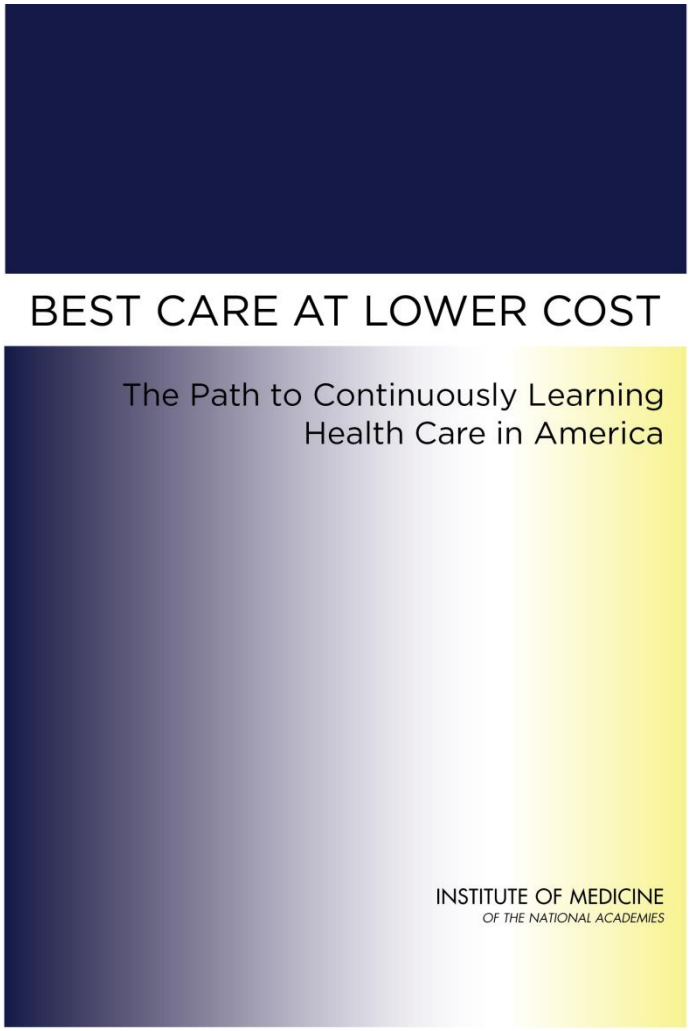


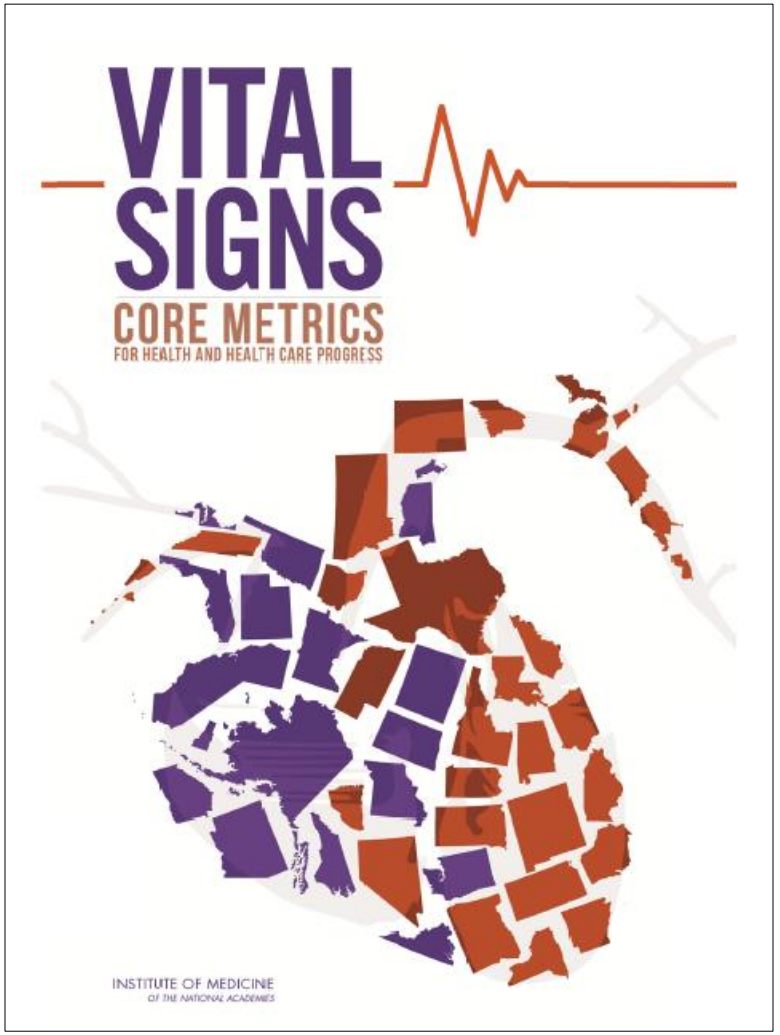
Measures

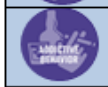
- **Measure Selection Strategy –** Measuring priority outcomes, and drivers of those outcomes, are both important. Need to know if priority outcomes are improving and which strategies are driving the change. Different measures may be most important at different levels within a system or organization. Establishes a measurement framework that can be used for scale, spread, and ongoing improvement in a learning system
- **Outcome Measures** – Select a set of meaningful and evidence based measures that reflect priorities for the health system
- **Driver Measures –** Select key process and quality measures where there is evidence that they drive priority outcomes
- **Measure Review –** Routinely review and refine measure sets based on evidence, priorities, and utility to drive improvement.

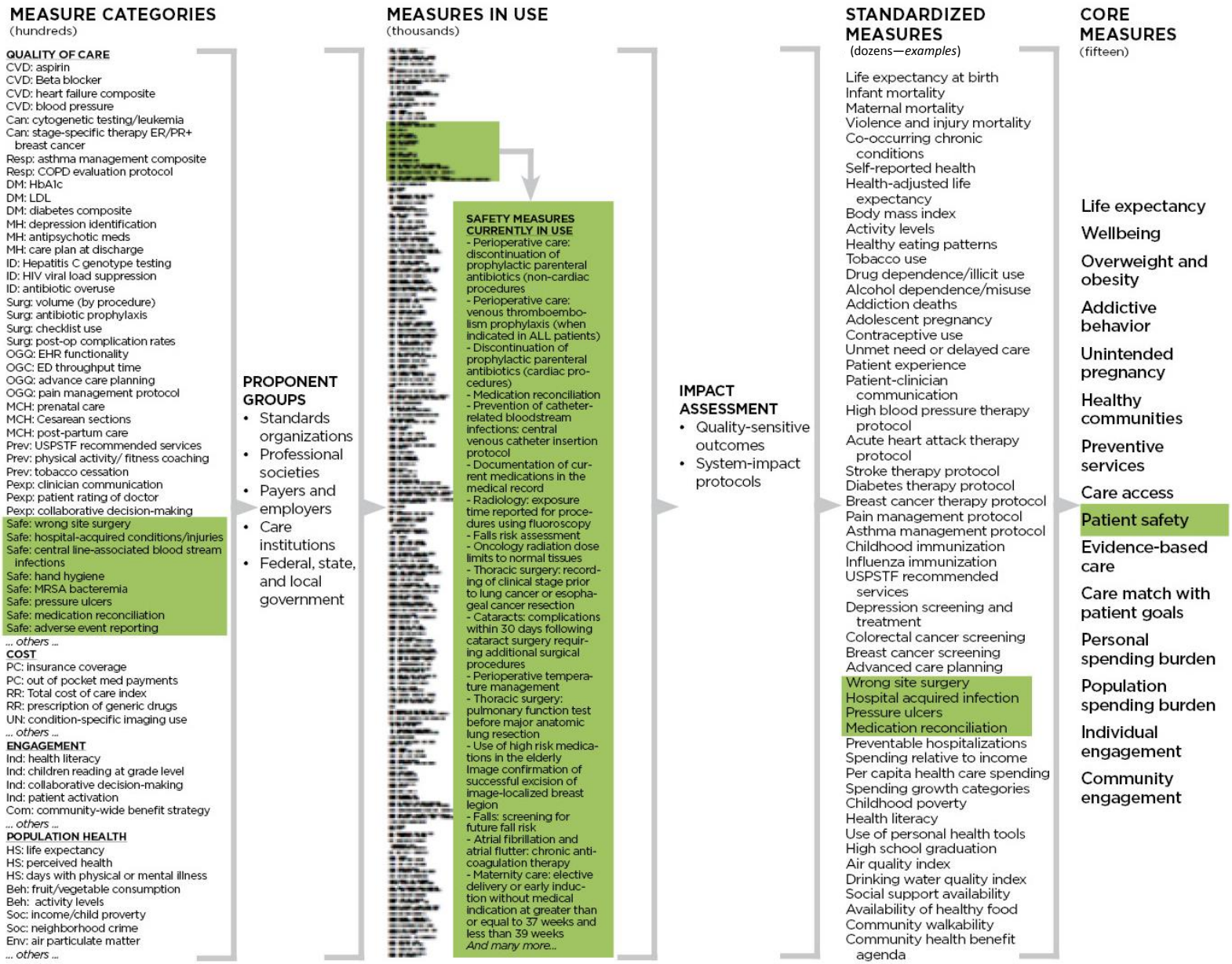
Measurement

- **Data Capture –** Whenever possible, use data elements that are tracked as part of routine daily work.
- **Data Aggregation –** Whenever possible, use central data sources that are populated as part of routine daily work.
- **Data Quality** – systematic approach to assure that consistent and useful data is extracted, aggregated, and useful for measurement across settings
- **Data Use –** Develop effective support strategies so that measure results are effectively used as part of a learning system.
- **Measurement Review–** Evidence of improvement in priority outcomes vs. burden of measurement. Assistance with measurement vs. burden of measurement.


BEST CARE AT LOWER COST
The Path to Continuously Learning Health Care in America
INSTITUTE OF MEDICINE
OF THE NATIONAL ACADEMIES


VITAL SIGNS
CORE METRICS
FOR HEALTH AND HEALTH CARE PROGRESS
INSTITUTE OF MEDICINE
OF THE NATIONAL ACADEMIES

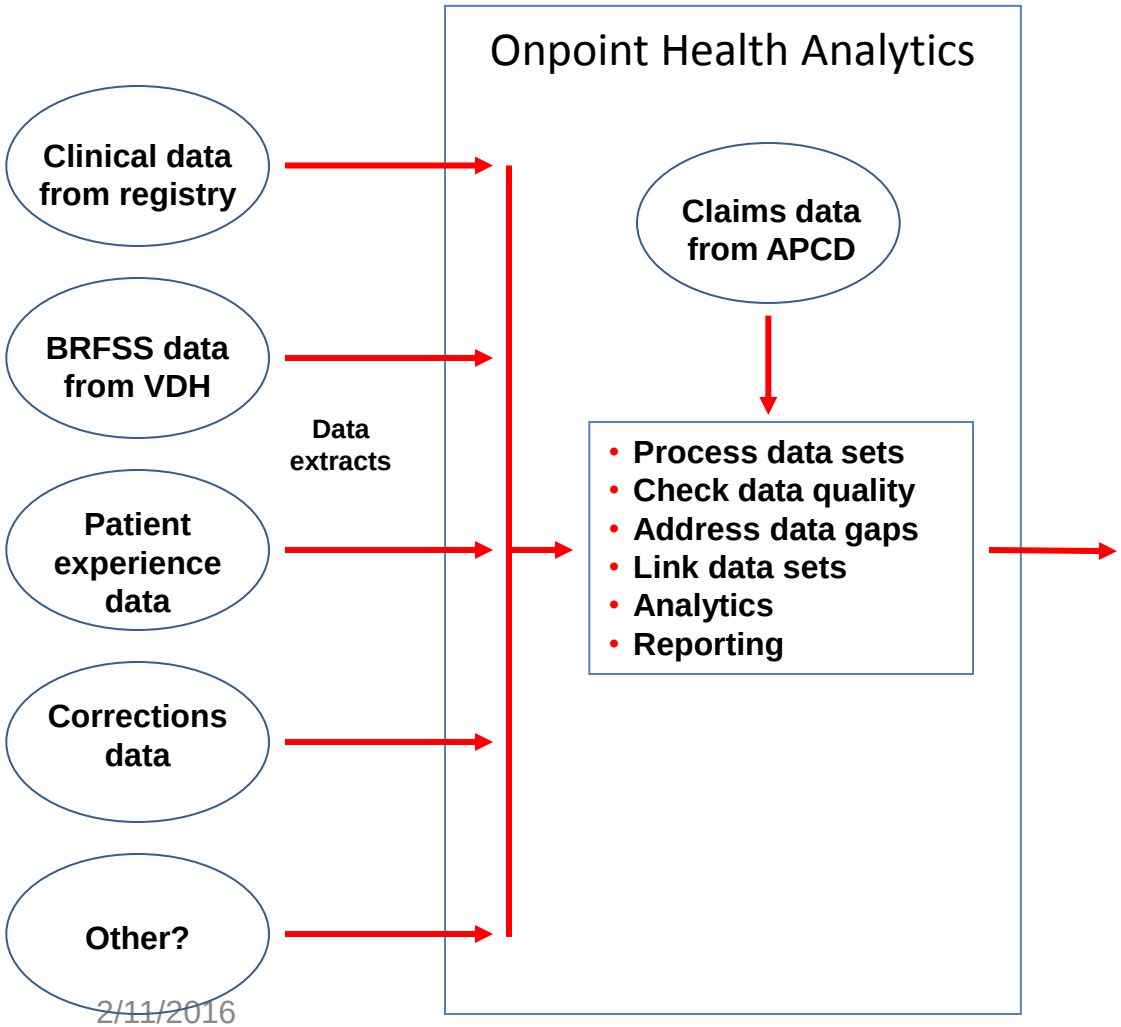
Domain	Key Element	Core Measure Focus	Best Current Measure
Healthy people	Length of life	 Life expectancy	Life expectancy at birth
	Quality of life	 Wellbeing	Self-reported health
	Healthy behaviors	 Overweight and obesity	Body mass index
		 Addictive behavior	Addiction death rate
		 Unintended pregnancy	Teen pregnancy rate
	Healthy social circumstances	 Healthy communities	High school graduation rate
Care quality	Prevention	 Preventive services	Childhood immunization rate
	Access to care	 Care access	Unmet care need
	Safe care	 Patient safety	Hospital acquired infection rate
	Appropriate treatment	 Evidence-based care	Preventable hospitalization rate
	Person-centered care	 Care match with patient goals	Patient-clinician communication satisfaction
Care cost	Affordability	 Personal spending burden	High spending relative to income
	Sustainability	 Population spending burden	Per capita expenditures on health care
Engaged people	Individual engagement	 Individual engagement	Health literacy rate
	Community engagement	 Community engagement	Social support


MEASURE CATEGORIES
(hundreds)
QUALITY OF CARE
CVD: aspirin
CVD: Beta blocker
CVD: heart failure composite
CVD: blood pressure
Can: cytogenetic testing/leukemia
Can: stage-specific therapy ER/PR+ breast cancer
Resp: asthma management composite
Resp: COPD evaluation protocol
DM: HbA1c
DM: LDL
DM: diabetes composite
MH: depression identification
MH: antipsychotic meds
MH: care plan at discharge
ID: Hepatitis C genotype testing
ID: HIV viral load suppression
ID: antibiotic overuse
Surg: volume (by procedure)
Surg: antibiotic prophylaxis
Surg: checklist use
Surg: post-op complication rates
OGQ: EHR functionality
OGC: ED throughput time
OGQ: advance care planning
OGQ: pain management protocol
MCH: prenatal care
MCH: Cesarean sections
MCH: post-partum care
Prev: USPSTF recommended services
Prev: physical activity/ fitness coaching
Prev: tobacco cessation
Pexp: clinician communication
Pexp: patient rating of doctor
Pexp: collaborative decision-making
Safe: wrong site surgery
Safe: hospital-acquired conditions/injuries
Safe: central line-associated blood stream infections
Safe: hand hygiene
Safe: MRSA bacteremia
Safe: pressure ulcers
Safe: medication reconciliation
Safe: adverse event reporting
... others ...
COST
PC: insurance coverage
PC: out of pocket med payments
RR: Total cost of care index
RR: prescription of generic drugs
UN: condition-specific imaging use
... others ...
ENGAGEMENT
Ind: health literacy
Ind: children reading at grade level
Ind: collaborative decision-making
Ind: patient activation
Com: community-wide benefit strategy
... others ...
POPULATION HEALTH
HS: life expectancy
HS: perceived health
HS: days with physical or mental illness
Beh: fruit/vegetable consumption
Beh: activity levels
Soc: income/child proverty
Soc: neighborhood crime
Env: air particulate matter
... others ...
PROPONENT GROUPS
• Standards organizations
• Professional societies
• Payers and employers
• Care institutions
• Federal, state, and local government
MEASURES IN USE
(thousands)
SAFETY MEASURES CURRENTLY IN USE
- Perioperative care: discontinuation of prophylactic parenteral antibiotics (non-cardiac procedures
- Perioperative care: venous thromboembolism prophylaxis (when indicated in ALL patients)
- Discontinuation of prophylactic parenteral antibiotics (cardiac procedures)
- Medication reconciliation
- Prevention of catheter-related bloodstream infections: central venous catheter insertion protocol
- Documentation of current medications in the medical record
- Radiology: exposure time reported for procedures using fluoroscopy
- Falls risk assessment
- Oncology radiation dose limits to normal tissues
- Thoracic surgery: recording of clinical stage prior to lung cancer or esophageal cancer resection
- Cataracts: complications within 30 days following cataract surgery requiring additional surgical procedures
- Perioperative temperature management
- Thoracic surgery: pulmonary function test before major anatomic lung resection
- Use of high risk medications in the elderly
Image confirmation of successful excision of image-localized breast legion
- Falls: screening for future fall risk
- Atrial fibrillation and atrial flutter: chronic anticoagulation therapy
- Maternity care: elective delivery or early induction without medical indication at greater than or equal to 37 weeks and less than 39 weeks
And many more...
IMPACT ASSESSMENT
• Quality-sensitive outcomes
• System-impact protocols
STANDARDIZED MEASURES
(dozens—examples)
Life expectancy at birth
Infant mortality
Maternal mortality
Violence and injury mortality
Co-occurring chronic conditions
Self-reported health
Health-adjusted life expectancy
Body mass index
Activity levels
Healthy eating patterns
Tobacco use
Drug dependence/illicit use
Alcohol dependence/misuse
Addiction deaths
Adolescent pregnancy
Contraceptive use
Unmet need or delayed care
Patient experience
Patient-clinician communication
High blood pressure therapy protocol
Acute heart attack therapy protocol
Stroke therapy protocol
Diabetes therapy protocol
Breast cancer therapy protocol
Pain management protocol
Asthma management protocol
Childhood immunization
Influenza immunization
USPSTF recommended services
Depression screening and treatment
Colorectal cancer screening
Breast cancer screening
Advanced care planning
Wrong site surgery
Hospital acquired infection
Pressure ulcers
Medication reconciliation
Preventable hospitalizations
Spending relative to income
Per capita health care spending
Spending growth categories
Childhood poverty
Health literacy
Use of personal health tools
High school graduation
Air quality index
Drinking water quality index
Social support availability
Availability of healthy food
Community walkability
Community health benefit agenda
CORE MEASURES
(fifteen)
Life expectancy
Wellbeing
Overweight and obesity
Addictive behavior
Unintended pregnancy
Healthy communities
Preventive services
Care access
Patient safety
Evidence-based care
Care match with patient goals
Personal spending burden
Population spending burden
Individual engagement
Community engagement

Blueprint Measurement – Central Data Sources

Measurement Activity	Source	Comments & Considerations
Measurement of expenditures, utilization, quality, health status, pattern drivers, and patient experience.	Central data sources (all-payer claims database, Blueprint clinical registry, VDH registries, CAHPS patient experience survey, other sources)	Used to meet the goal of a statewide evidence guided learning health system. Also used to calculate the performance portion of the PCMH payment. Includes program evaluation, comparative performance and variation, associations and predictive models. Reports generated to assist practices and communities with ongoing improvement including local coordination and quality initiatives designed to improve results of core measures. Does not require additional documentation by primary care practices. Measure generation and reporting are updated routinely to reflect priorities of ACOs and other providers.

Data Use for a Learning Health System



- Utilization Measures
- Expenditure Measures
- Unit Costs
- Quality Measures
- Patient Experience Measures
- Comparative Evaluation
- Practice Profiles
- HSA Profiles
- PCMH + CHT Evaluation
- Hub & Spoke Evaluation
- Associations & Predictive Models
- Planning, Coordination, Quality
- Performance Payments

Blueprint Measurement – Practice Documentation

Measurement Activity	Source	Comments & Considerations
Practices scored based on NCQA PCMH Standards. A passing score makes the practice eligible for PCMH payments and CHT staff.	Practice provides documentation and evidence that is used to populate measures	Used to achieve the goal of high quality primary care across the state. Comprised of process measures that are based on evidence and expertise. Practice facilitators and UVM team are available to assist practices. PCMH payment incentive has shifted from highest score to a qualifying score. Emphasizes must-pass elements and reduces documentation. Payment has increased at the same time that documentation requirements have decreased. NCQA routinely updates standards and requirements based on evidence and experience. NCQA is currently introducing a new process that reduces documentation and emphasizes tracking key measures. No other program in Vermont uses systematic measurement of PCMH standards. NCQA standards are the only Blueprint measurement requirement for primary care practices.

2014 NCQA PCMH Standards

The Standards

The PCMH 2014 program's six standards align with the core components of primary care.

1. PCMH 1: Patient-Centered Access.
2. PCMH 2: Team-Based Care.
3. PCMH 3: Population Health Management.
4. PCMH 4: Care Management and Support.
5. PCMH 5: Care Coordination and Care Transitions.
6. PCMH 6: Performance Measurement and Quality Improvement.

The Must-Pass Elements

Six must-pass elements are considered essential to the patient-centered medical home, and are required for practices at all recognition levels. Practices must achieve a score of 50% or higher on must-pass elements:

1. PCMH 1, Element A: Patient-Centered Appointment Access.
2. PCMH 2, Element D: The Practice Team.
3. PCMH 3, Element D: Use Data for Population Management.
4. PCMH 4, Element B: Care Planning and Self-Care Support.
5. PCMH 5, Element B: Referral Tracking and Follow-Up.
6. PCMH 6, Element D: Implement Continuous Quality Improvement.

PCMH 1: Patient-Centered Access — 10.00 points

The practice provides access to team-based care for both routine and urgent needs of patients/families/caregivers at all times.

Element A: Patient-Centered Appointment Access (MUST-PASS) — 4.50 points

The practice has a written process and defined standards for providing access to appointments, and regularly assesses its performance on:	Yes	No
1. Providing same-day appointments for routine and urgent care. (CRITICAL FACTOR)	☐	☐
2. Providing routine and urgent-care appointments outside regular business hours.	☐	☐
3. Providing alternative types of clinical encounters.	☐	☐
4. Availability of appointments.	☐	☐
5. Monitoring no-show rates.	☐	☐
6. Acting on identified opportunities to improve access.	☐	☐

Scoring

100%	75%	50%	25%	0%
The practice meets 5-6 factors (including factor 1)	The practice meets 3-4 factors (including factor 1)	The practice meets 2 factors (including factor 1)	The practice meets 1 factor (including factor 1)	The practice meets 0 factors

Explanation **MUST-PASS elements are considered the basic building blocks of a patient-centered medical home. Practices must earn a score of 50% or higher. All six must-pass elements are required for recognition.**

2014 NCQA PCMH Standards

Patient-Centered Medical Homes are driving some of the most important reforms in health care delivery today. A growing body of scientific evidence shows that PCMHs are saving money by reducing hospital and emergency department visits, reducing health disparities, and improving patient outcomes. The evidence we present here outlines how the medical home inspires quality in care, cultivates more engaging patient relationships, and captures savings through expanded access and delivery options that align patient preferences with payer and provider capabilities. - See more at: http://www.ncqa.org/Programs/Recognition/Practices/PCMHEvidence.aspx#sthash.XDNJljxX.dpuf

NCQA-Recognized PCMH Studies

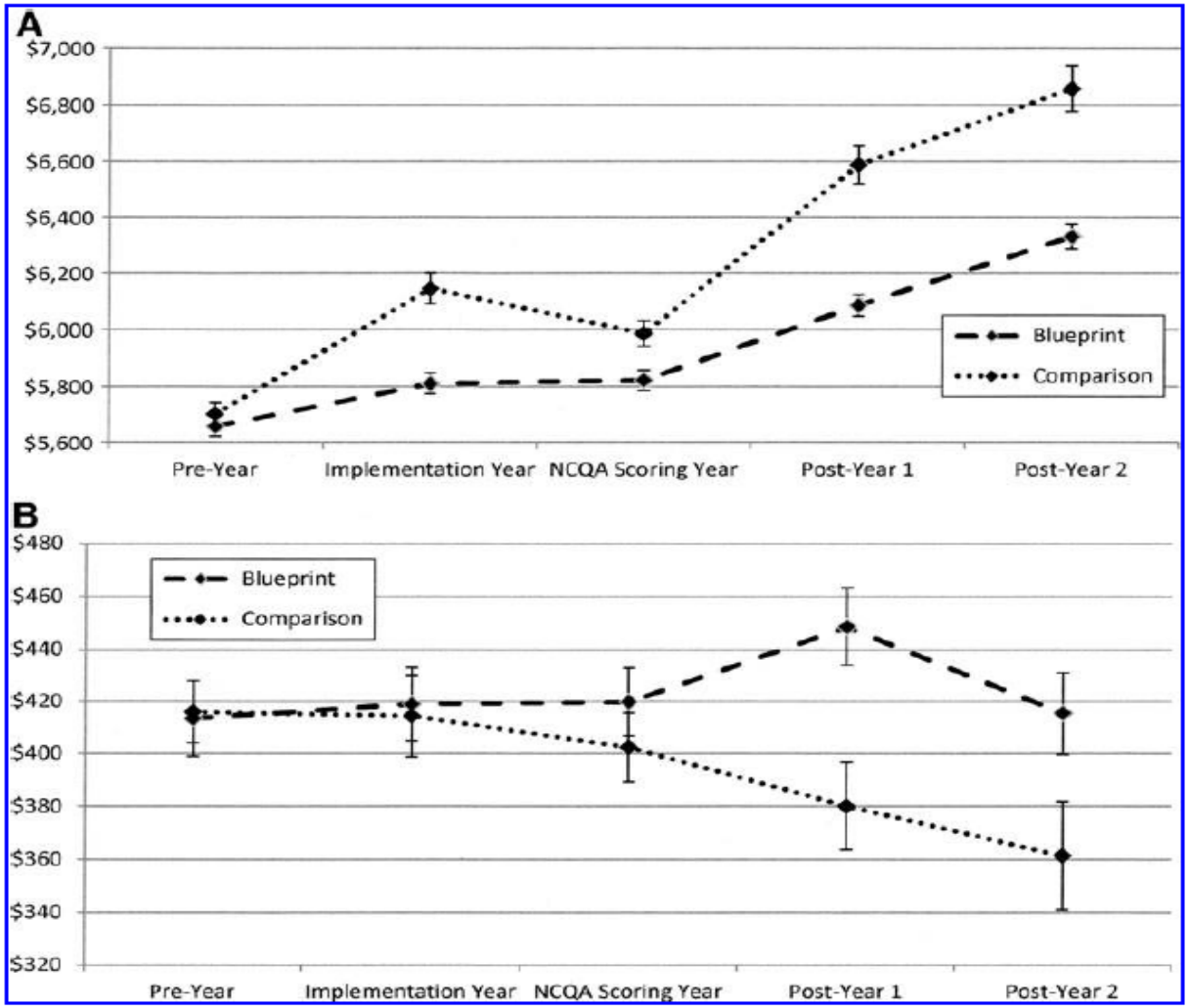
- NCQA Patient-Centered Medical Homes Cut Growth in Medicare Emergency Department Use
- NCQA Patient-Centered Medical Homes Lower Total Cost of Care for Medicare Fee-for-Service Beneficiaries
- NCQA Patient-Centered Medical Homes Lower Costs and Provide a High Return on Investment
- NCQA Patient-Centered Medical Homes Provide More Effective Care Management and Optimize Use of Health Care Services
- NCQA Patient-Centered Medical Homes Lower Medicare Spending
- NCQA Patient-Centered Medical Homes Improve Care Management and Preventative Screenings for Cardiovascular and Diabetes Patients

Additional PCMH Evidence

- Patient-Centered Medical Homes Reduce Socio-economic Disparities in Cancer Screening
- Long-term Patient-Centered Medical Home Implementation Produces Largest Sustainable Cost Savings in Acute Inpatient Care
- Patient-Centered Medical Home Initiatives Expanded Fourfold from 2009–13
- Patient-Centered Medical Homes Produce Lower Overall Health Costs Through Focus on Primary Care Utilization
- Medicare Beneficiaries Have Better Patient Experience in Patient-Centered Medical Homes
- Patient-Centered Medical Homes Produce Most Effective Cost Savings in Highest Risk Patients
- Patient-Centered Medical Homes Increase Rates of Quality Improvement
- Medicaid Patient-Centered Medical Homes Offer Greater Patient Access and Lower Inpatient Admissions and Per Member Per Month Costs
- Multi-payer Patient-Centered Medical Homes Reduce Preventable Emergency Department Visits
- Patient-Centered Medical Home Initiatives Produce 6 to 1 Return on Investment

- See more at: http://www.ncqa.org/Programs/Recognition/Practices/PCMHEvidence.aspx#sthash.zOhpFCPQ.dpuf

Figure 2. Expenditures Per Person



Expenditures on healthcare for the whole population

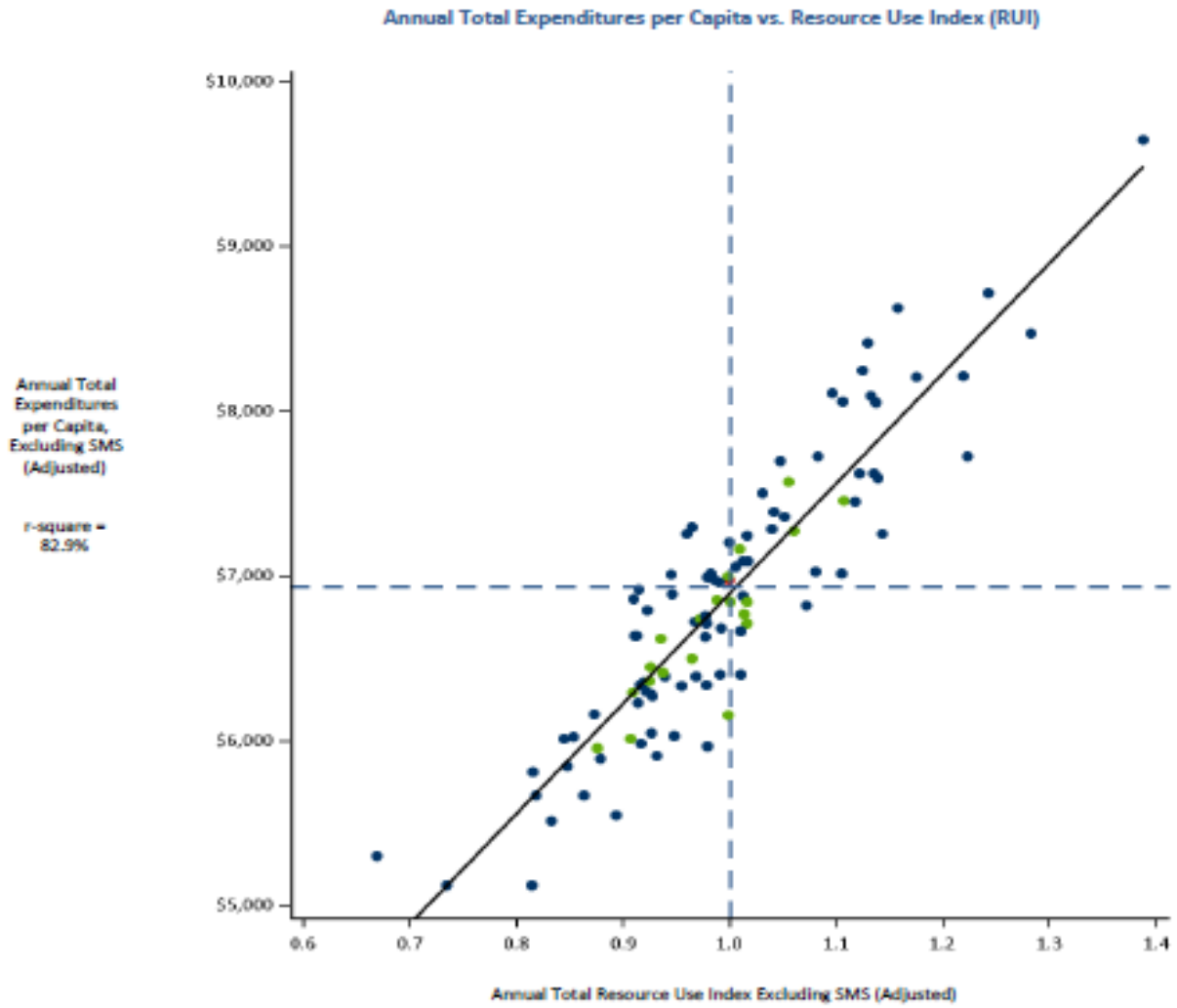
Medicaid expenditures on special services

Population Health Management 2015

Quality Measures Selected for Performance Payment

- Core- 2: Adolescent Well-Care Visit
- Core- 8: Developmental Screening in the First Three Years of Life
- Core- 12: Rate of Hospitalization for ACS Conditions (PQI Chronic Composite)
- Core- 17: Diabetes Mellitus: Hemoglobin A1c Poor Control (>9%)

Utilization Measure Selected for Performance Payment



A 0.01 change in the Resource Use Index is associated with a $66.80 change in expenditures per person per year.

Questions & Discussion