Meaningful Use as the Foundation of the Medical Home

Thomas Novak
Director of Delivery System Reform
Office of the National Coordinator for Health IT
Use computerized provider order entry (CPOE) for medication, laboratory and radiology orders directly entered by any licensed healthcare professional who can enter orders into the medical record per state, local and professional guidelines.

Record and chart changes in the following vital signs: height/length and weight (no age limit); blood pressure (ages 3 and over); calculate and display body mass index (BMI); and plot and display growth charts for patients 0-20 years, including BMI.

Protect electronic health information created or maintained by the Certified EHR Technology through the implementation of appropriate technical capabilities.

Generate and transmit permissible prescriptions electronically (eRx).

Record the following demographics: preferred language, sex, race, ethnicity, date of birth.

Use clinically relevant information to identify patients who should receive reminders for preventive/follow-up care and send these patients the reminders, per patient preference.

Record smoking status for patients 13 years old or older.

Incorporate clinical lab-test results into Certified EHR Technology as structured data.

Use electronic notes in patient records.

Use clinical decision support to improve performance on high-priority health conditions.

Provide patients the ability to view online, download and transmit (VDT) their health information within four business days of the information being available to the EP.

Provide clinical summaries for patients for each office visit.

Meaningful Use Stage 2

Clinical Quality Indicators

<table>
<thead>
<tr>
<th>Description</th>
<th>Stage 2 Requirements</th>
</tr>
</thead>
<tbody>
<tr>
<td>Generate lists of patients by specific conditions to use for quality improvement, reduction of disparities, research, or outreach</td>
<td>Provide cases to a specialized registry (other than a cancer registry), except where prohibited, and in accordance with applicable law and practice</td>
</tr>
<tr>
<td>Imaging results consisting of the image itself and any explanation or other accompanying information are accessible through CEHRT</td>
<td>Capability to identify and report cancer cases to a public health central cancer registry, except where prohibited, and in accordance with applicable law and practice</td>
</tr>
</tbody>
</table>

The EP who receives a patient from another setting of care or provider of care or believes an encounter is relevant should perform medication reconciliation.

The EP who transitions their patient to another setting of care or provider of care or refers their patient to another provider of care should provide a summary care record for each transition of care or referral.

Use clinically relevant information from Certified EHR Technology to identify patient-specific education resources and provide those resources to the patient.

Capability to submit electronic syndromic surveillance data to public health agencies except where prohibited, and in accordance with applicable law and practice.
Meaningful Use Stage 2

- Computerized provider order entry (CPOE)
- E-prescribe (eRx)
- Vital signs
- Lab tests
- Clinical decision support
- Education resources
- Syndromic surveillance
- Imaging results
- Clinical Quality Indicators
- Patient reminders
- Medical Home (best practices for many)
- Smoking status
- Demographics
- View online, download and transmit (VDT)
- Quality improvement
- Specialized registry
- Protect electronic health information
- Medical Home (required for most)
- Family health history
- Medication reconciliation
- Summary care record
- Cancer registry
- Medical Home (best practices for many)
Where We Began: HITECH: Catalyst for Transformation

Better Healthcare ★ ★ ★ Better Health ★ ★ ★ Reduced Costs

HITECH Act
2009
Gives ONC authority to launch REC, HIE, Beacon & Workforce programs

EHRs & HIE
2014
Widespread adoption & meaningful use of EHRs

Payment Reform
2014+
Health IT Enabled Reform Models
Meaningful Use Stage 2: Foundational

- Accountable Care Organization
- Payer/IDN Exchange
- Medical Home
- MU2
- MU1
Meaningful Use as a Building Block

Office of the National Coordinator for Health Information Technology

Use information to transform
- Enhanced access and continuity
- Data utilized to improve delivery and outcomes
- Patient self management
- Patient engaged, community resources
- Patient centered care coordination
- Team based care, case management
- Registries to manage patient populations
- Privacy & security protections
- Privacy & security protections
- Structured data utilized for Quality Improvement
- Connect to Public Health
- Connect to Public Health
- Connect to Public Health

Utilize technology to gather information
- Basic EHR functionality, structured data
- Privacy & security protections
- Connect to Public Health
- Care coordination
- Patient engaged
- Privacy & security protections
- Structured data utilized for Quality Improvement

Improve access to information
- Data utilized to improve delivery and outcomes
- Care coordination
- Evidenced based medicine
- Registries for disease management
- Privacy & security protections
- Connect to Public Health

Stage 1 MU
- Use information to transform
- Meaningful Use
- Basic EHR functionality, structured data
- Privacy & security protections
- Connect to Public Health
- Care coordination
- Patient engaged
- Privacy & security protections
- Structured data utilized for Quality Improvement

Stage 2 MU
- Use information to transform
- Meaningful Use
- Basic EHR functionality, structured data
- Privacy & security protections
- Connect to Public Health
- Care coordination
- Evidenced based medicine
- Registries for disease management
- Privacy & security protections
- Connect to Public Health

PCMHs 3-Part Aim
- Use information to transform
- Meaningful Use
- Basic EHR functionality, structured data
- Privacy & security protections
- Connect to Public Health
- Care coordination
- Evidenced based medicine
- Registries for disease management
- Privacy & security protections
- Connect to Public Health

ACOs Stage 3 MU
- Use information to transform
- Meaningful Use
- Basic EHR functionality, structured data
- Privacy & security protections
- Connect to Public Health
- Care coordination
- Evidenced based medicine
- Registries for disease management
- Privacy & security protections
- Connect to Public Health
Meaningful Use 2: Return on Investment

- MU1 & MU2 ➔ Incentive Payments & Avoidance of Penalties
- Medical Home ➔ Payer programs, Health system programs, Medicaid & Medicaid Managed Care programs
- Health Information Exchange ➔ PQRS, Pay for Performance, HEDIS efficiencies, etc.
- Accountable Care Organizations ➔ Payer led ACOs, provider led ACOs, Medicare ACOs, Medicaid ACOs
# Meaningful Use: ROI Medical Homes

## Figure 1. Analysis of Seven PCMH Pilot Programs

<table>
<thead>
<tr>
<th>Pilot</th>
<th># of Patients</th>
<th>Population</th>
<th>Incentives</th>
<th>Results</th>
<th>Total savings per patient</th>
</tr>
</thead>
<tbody>
<tr>
<td>Colorado Medical Homes for Children</td>
<td>10,781</td>
<td>Medicaid CHP+</td>
<td>Pay for Performance (P4P)</td>
<td>18%</td>
<td>$169–530</td>
</tr>
<tr>
<td>Community Care of North Carolina</td>
<td>&gt; 1 million</td>
<td>Medicaid</td>
<td>Per Member Per Month (PMPM) payment</td>
<td>40% 16%</td>
<td>$516</td>
</tr>
<tr>
<td>Geisinger (ProvenHealthNavigator)</td>
<td>TBD</td>
<td>Medicare Advantage</td>
<td>P4P; PMPM payment; shared savings</td>
<td>15% NA</td>
<td>NA</td>
</tr>
<tr>
<td>Group Health Cooperative</td>
<td>9,200</td>
<td>All</td>
<td>TBD</td>
<td>11% 29%</td>
<td>$71</td>
</tr>
<tr>
<td>Intermountain Health Care (Care Management Plus)</td>
<td>4,700</td>
<td>Chronic disease</td>
<td>P4P</td>
<td>4.8–19.2% 0–7.3%</td>
<td>$640</td>
</tr>
<tr>
<td>MeritCare Health System and Blue Cross Blue Shield of North Dakota</td>
<td>192</td>
<td>Diabetes</td>
<td>PMPM payment; shared savings</td>
<td>6% 24%</td>
<td>$530</td>
</tr>
<tr>
<td>Vermont BluePrint for Health</td>
<td>60,000</td>
<td>All</td>
<td>PMPM payment</td>
<td>11% 12%</td>
<td>$215</td>
</tr>
</tbody>
</table>

PCMHs lower costs for patients needing chronic care

Publish date: AUG 05, 2013
By: Jeffrey Bendix, MA

Since the idea was first conceived, backers of the Patient-Centered Medical Home (PCMH) have claimed that the model can reduce costs while improving health outcomes for certain patient populations. Now additional evidence has emerged to support that claim.

A series of 3-year studies of PCMHs in Pennsylvania conducted by Independence Blue Cross (IBC) found “significant reductions in medical costs for patients with chronic conditions treated in primary care practices that have transformed into medical homes,” according to an IBC news release.

The results were especially striking among patients with diabetes, which is one of the nation’s most prevalent and costly chronic diseases. These patients saw a 44% reduction in hospital costs and a 21% reduction in overall medical costs. Diabetic patients treated in the studied PCMHs also saw a 60% improvement in getting their low-density lipoprotein levels under adequate control. Overall, the number of patients with poorly controlled diabetes declined by 45%, according to IBC.

**Case Study #1: Success and Savings at Hill Air Force Base – Improving Quality While Reducing Costs**

Beginning in 2009, the U.S. Air Force, Army, and Navy began working together to implement a Tri-Service Patient-Centered Medical Home project to transform care at all primary care practices throughout the Department of Defense (DOD). Among the DOD project sites that demonstrated positive results is Hill Air Force Base in Utah. Since the implementation of PCMH at Hill, the Air Force has saved money and improved the quality of care. By offering team-based care with individualized care plans for patients, encouraging continuity of care, and providing care management and rapid access to care, the project has improved blood sugar control for 77 percent of the diabetic population and stayed at or above 98 percent symptom control for patients with asthma. The Air Force estimates that the project has saved $300,000 per year just by improving their diabetes care. According to Col. Donald Hickman, “Health care costs go up 8 to 15 percent per year nationwide and we have managed to drive down our network care costs about 4.5 percent over the last two fiscal years.” Additionally, patients were extremely satisfied with the program, reporting 95 percent satisfaction.

http://www.rwjf.org/content/dam/farm/reports/issue_briefs/2013/rwjf404563/subassets/rwjf404563_3
CareFirst PCMH program yields $98M in savings

June 11, 2013

By: Frank Irving

CareFirst BlueCross BlueShield reported on June 6 that the second year (2012) of its patient-centered medical home (PCMH) program yielded cost savings of $98 million for 1 million members covered by the effort.

CareFirst, which covers 3.4 million individuals and groups in Maryland, the District of Columbia and Northern Virginia, said the results represent a savings of 2.7 percent on the total projected 2012 healthcare costs for PCMH-covered members and improve upon the 1.5 percent savings against projected costs registered by the program in 2011.

Approximately 66 percent of participating primary care panels -- groups of physicians that join together to participate in the PCMH program -- earned increased reimbursements for their 2012 performance in the program, according to CareFirst. Increased reimbursement levels -- or Outcome Incentive Awards (OIAs) -- are based on a combination of savings achieved by a particular panel against projected 2012 total care costs for CareFirst members and performance on quality measures related to the provision of care to the panel's patients, the not-for-profit company said.

http://www.healthcarepayernews.com/content/carefirst-pcmh-program-yields-98m-savings
Meaningful Use: ROI Medical Homes

MEDICAL HOMES: A SOLUTION?

By Robert J. Reid, Katie Coleman, Eric A. Johnson, Paul A. Fishman, Clarissa Hsu, Michael P. Soman, Claire E. Trescott, Michael Erikson, and Eric B. Larson

The Group Health Medical Home At Year Two: Cost Savings, Higher Patient Satisfaction, And Less Burnout For Providers

ABSTRACT As the patient-centered medical home model emerges as a key vehicle to improve the quality of health care and to control costs, the experience of Seattle-based Group Health Cooperative with its medical home pilot takes on added importance. This paper examines the effects of the medical home prototype on patients’ experiences, quality, burnout of clinicians, and total costs at twenty-one to twenty-four months after implementation. The results show improvements in patients’ experiences, quality, and clinician burnout through two years. Compared to other Group Health clinics, patients in the medical home experienced 29 percent fewer emergency visits and 6 percent fewer hospitalizations. We estimate total savings of $10.3 per patient per month twenty-one months into the pilot. We offer an operational blueprint and policy recommendations for adoption in other health care settings.

Regional Extension Centers: RECs – How we have grown...

Cumulative Number and Proportion of REC Primary Care Providers Enrolled, Live on an EHR, and Demonstrating Meaningful Use (MU) through 1/21/14

SOURCE: Customer Relationship Management (CRM) Tool, maintained by Health and Human Services, Office of the National Coordinator for Health IT, data as of January 21, 2014.
The national network of RECs are currently working on over 300 different programs to help providers transform their practices and demonstrate meet Three-Part Aim goals.

* As reported by 56 out of 62 RECs. Many REC are working on several initiatives within each category.
Based on ONC CRM data as of March 19, 2013, merged by provider NPI to NCQA PCMH data as of February 28, 2013.
Proportion of Certified REC Providers by Practice Setting

Within Setting, Proportion of PCMH Certified Providers

Across Settings, Prevalence of Providers

Based on ONC CRM data as of March 19, 2013, merged by provider NPI to NCQA PCMH data as of February 28, 2013.
PCMH Certification, REC-Enrollment, and CMS Registration

Based on ONC CRM data as of March 19, 2013, merged by provider NPI to NCQA PCMH data as of February 28, 2013 and CMS EHR Incentive data through January 31, 2013.
Medicaid Registered Providers and AIU Payment

Relative Risk (RR) compares the likelihood of being paid for AIU when compared to the non-PCMH/non-REC enrolled providers.

Among REC-enrolled providers, those that are PCMH-certified are 55%* more likely to be paid for AIU than those not certified. Among PCMH-certified providers, those enrolled with an REC are 17%* more likely to be paid for AIU than those not enrolled with an REC. There is no significant difference in the likelihood of AIU payment between PCMH-certified providers not in an REC and REC providers not certified for PCMH. *p-value <0.0001

Based on ONC CRM data as of March 19, 2013, merged by provider NPI to NCQA PCMH data as of February 28, 2013 and CMS EHR Incentive data through January 31, 2013.
Regional Extension Centers: REC-enrolled PCPs Live on an EHR

Source: Customer Relationship Management (CRM) Tool, maintained by Health and Human Services, Office of the National Coordinator for Health IT, data as of December 31, 2013.
Regional Extension Centers: Where Medical Home assistance is...

46 RECs currently offer Medical Home Coaching and Facilitation assistance in 42 DC/States/Territories.

21 Federal / State / Payor
- State / Medicaid: CO, CT, IA, LA, NY, MI, MN, OH, OR
- Payor: NH, NV, PR, SC, WI
- Customized: AR, AZ, IN, KY, MO, MT, NC, NE, NV, OH, SD, TX, WA, WI

22 Recognition and Accreditation Programs
- NCQA: AHIT/Central/South FL, GA, IA, KS, LA, MN, NJ, NYC REACH, PA, RI, Central/Gulf Coast Texas
- All: AK, DE, IN, FL, ME, MN, OH, TN, VA

6 Innovating around new models of patient-centered care
- Behavioral Health: NY
- Comprehensive Primary Care: CO, OH, NJ
- State Innovation Models: ME, MN

9 Specialist PCMH
- Rural PCMH
- HCCN PCMH
- Rural & Critical Access Hospitals: DE, CO, OH, WY
- HCCN: CA, MT, TX
- Specialist: Central FL, MI

RED RECs did not include known PCMH work in Q15.
Six to Verify: Arkansas, FL AHIT, Missouri, NC, NYCe, Oregon,
These states are included in 46 RECs and 42 #s above.
Regional Extension Centers: FY 14: ~4,000 Provider touch-points

Medical Home Providers to be reached by REC practice coaching and facilitation
Regional Extension Centers:
FY 14: ~1,600 Practice touch-points

Practices to be reached by REC Medical Home services
Regional Extension Centers:
FY 14: ~4.86M Patients impacted

Estimated Patients to be reached by REC Medical Home partnerships

<table>
<thead>
<tr>
<th>Regional Extension Center</th>
<th>Estimated Patients</th>
</tr>
</thead>
<tbody>
<tr>
<td>CT / eHealthConnecticut Regional Extension Center</td>
<td>2,500</td>
</tr>
<tr>
<td>FL / South Florida Regional Extension Center</td>
<td>5,000</td>
</tr>
<tr>
<td>Indiana Health Information Technology Extension Center (I-HITEC)</td>
<td>15,000</td>
</tr>
<tr>
<td>Kansas Foundation for Medical Care</td>
<td>18,759</td>
</tr>
<tr>
<td>NJ Healthcare Information Technology Extension Center</td>
<td>20,000</td>
</tr>
<tr>
<td>DE / Quality Insights of Delaware, Inc.</td>
<td>24,000</td>
</tr>
<tr>
<td>Wisconsin Health Information Technology Extension Center</td>
<td>32,000</td>
</tr>
<tr>
<td>South Carolina Regional Extension Center</td>
<td>50,000</td>
</tr>
<tr>
<td>Iowa / IFMC</td>
<td>50,000</td>
</tr>
<tr>
<td>Virginia HITREC/VHQ</td>
<td>120,000</td>
</tr>
<tr>
<td>South Dakota/healthPOINT</td>
<td>200,000</td>
</tr>
<tr>
<td>Ohio / Greater Cincinnati Health Bridge Inc.</td>
<td>300,000</td>
</tr>
<tr>
<td>Michigan Center for Effective IT Adoption (M-CEITA)</td>
<td>312,000</td>
</tr>
<tr>
<td>Nevada-Utah / HealthInsight</td>
<td>360,000</td>
</tr>
<tr>
<td>Texas / North Texas REC</td>
<td>450,000</td>
</tr>
<tr>
<td>Louisiana Health Care Quality Forum</td>
<td>450,000</td>
</tr>
<tr>
<td>Kentucky Regional Extension Center</td>
<td>500,000</td>
</tr>
<tr>
<td>PA REACH WEST</td>
<td>625,000</td>
</tr>
<tr>
<td>PA REACH EAST</td>
<td>625,000</td>
</tr>
<tr>
<td>CA / HITEC-LA</td>
<td>700,000</td>
</tr>
</tbody>
</table>
Tell Me More!

www.healthit.gov
Meaningful Use Stage 2

- Vital signs
- E-prescribe (eRx)
- Computerized provider order entry (CPOE)
- Lab-tests
- Electronic notes
- Clinical decision support
- Education resources
- Quality improvement
- Specialized registry
- Syndromic surveillance
- Imaging results
- Patient reminders
- Smoking status
- Family health history
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- View online, download and transmit (VDT)
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- Summary care record
- Summary care record
- Clinical summaries
- Protect electronic health information
- Cancer registry