Public Health and the Integration of Care

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Public Health

Public Health Mission

"Fulfill society's interest in assuring conditions in which people can be healthy." *(IOM, 1998)*

Public Health Core Functions *(IOM, 1998)*

- Assessment
- Policy Development
- Assurance

Public Health
10 Essential Services

1. **Monitoring health status** to identify community health problems including health disparities.
2. **Detecting and investigating** health problems and health hazards in the community.
3. **Informing, educating, and empowering** people and organizations to adopt healthy behaviors to enhance health status.
4. Partnering with communities and organizations to **identify and solve health problems** and to **respond to public health emergencies**.
5. Developing and implementing **public health interventions** and best practices that support individual and community health efforts and increase healthy outcomes.
6. **Enforcing laws and regulations** that protect health and ensure safety.
7. **Linking** people to needed personal health services and ensuring the provision of population-based health services.
8. Assuring a competent **public health workforce** and effective public health leadership.
9. **Evaluating effectiveness, accessibility, and quality** of public health services, strategies, and programs.
10. **Research**ing for insights and innovative solutions to public health problems.

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Public Health and Integration of Care

The business case for health information exchange:

- ***Epidemiology*** – understanding incidence and prevalence of unhealthy conditions
- ***Investigation and Treatment*** – controlling outbreaks and responding to emergencies
- ***Linking Services*** – may be provided by public health or other organizations
- ***Quality Assurance*** – enforce regulations and ensure quality of care

New Opportunities for Integration

- Health Information Exchange has new focus with HITECH bill and funding
- EHR Incentive program brings potential data sources within view
- Transformative thinking is needed
- Workforce to support the new model will be essential

Draft Meaningful Use Regs

There are two sets of draft regulations out for public comment until **March 15, 2010**:

- CMS Notice of Proposed Rule Making (NPRM) for EHR Incentive Program – This is the Meaningful Use Regulations which will place requirements on eligible providers and hospitals to receive funding through the EHR Incentive Program.
- ONC Interim Final Rule (IFR) on Standards and Certification Criteria – This is the EHR Certification Requirements and is very closely linked to the Meaningful Use Regulations.
- http://healthit.hhs.gov/portal/server.pt?open=512&objID=1153&mode=2

What is Meaningful Use?

- Collect information in an EHR
- Decision support integration with EHR
- Use EHR information for
  - Improved quality at the point of care
  - Improved population and public health

Why Meaningful Use?

- **$$$** to Eligible Providers and Eligible Hospitals *(more than $17 billion)*
- Eligible means a specified % of the patient panel is Medicare and/or Medicaid
- If Eligible,
  - Must use Certified EHR
  - Must meet Meaningful Use Requirements

Stages to Meaningful Use

- Everyone starts in Stage 1,
  which may begin between 2011 and 2015
- Stage 3 ends in 2015 for everyone
- Incentives for Stages 1-3,

… then penalties

Stage 1

- Electronically capture health information in a coded format
- Use that information to track key clinical conditions and communicate that information for care coordination purposes
- Implement clinical decision support tools to facilitate disease and medication management
- Report clinical quality measures and public health information

Stage 2

- Encourage the use of health IT for
  - continuous quality improvement at the point of care
  - exchange of information in the most structured format possible
- May apply criteria more broadly to both the inpatient and outpatient hospital settings.

Stage 3

- Focus on promoting improvements in quality, safety and efficiency
- Focusing on decision support for national high priority conditions
- Patient access to self management tools
- Access to comprehensive patient data
- Improving population health

Health Outcome Policy Priorities

1. Improving quality, safety, efficiency and reducing health disparities.
2. Engage patients and families in their healthcare.
3. Improve care coordination.
4. Improving population and public health.
5. Ensure adequate privacy and security protections for personal health information.

Improving quality, safety, efficiency and reducing health disparities

- 5 distinct Care Goals
- 16 distinct Objectives
- Most do not require health information exchange in Stage 1
- Potential for public health impact in Stages 2 and 3

Improving quality, safety, efficiency and reducing health disparities

Objective for Stage 1:

- Maintain an up-to-date problem list of current and active diagnoses based on ICD–9–CM or SNOMED CT®.

Measure for Stage 1:

- At least 80% of all unique patients seen by the EP or admitted to the eligible hospital have at least one entry or an indication of none recorded as structured data.

EHR Certification:

- Patient Summary Record –
  Content Exchange – HL7 CDA R2 CCD Level 2 or ASTM CCR
- Problem List – Vocabulary –
  Stage 1 Applicable HIPAA code set required by law (i.e., ICD–9–CM); or SNOMED CT®; Stage 2 Applicable HIPAA code set required by law (e.g., ICD–10–CM) or SNOMED CT®.

Improving quality, safety, efficiency and reducing health disparities

Objective for Stage 1:

- Record and chart changes in vital signs:
  - Height
  - Weight
  - Blood pressure
- Calculate and display: BMI.
- Plot and display growth charts for children 2–20 years, including BMI.

Measure for Stage 1:

- For at least 80% of all unique patients age 2 and over seen by the EP or admitted to eligible hospital, record blood pressure and BMI; additionally plot growth chart for children age 2–20.

EHR Certification:

- Patient Summary Record –
  Content Exchange – HL7 CDA R2 CCD Level 2 or ASTM CCR
- Vital Signs – Vocabulary –
  Stage 1 No standard adopted at this time; Stage 2 CDA template

Improving quality, safety, efficiency and reducing health disparities

Objective for Stage 1:

- Record the following demographics: preferred language, insurance type, gender, race and ethnicity, date of birth, and date and cause of death in the event of mortality.
- Comments requested about how states and hospitals could work together to facilitate linkage between the EHR and the full birth and death certificate.
- ***Note*** - California race and ethnicity meet, but go beyond current OMB standards due to the need for more statistical sensitivity required by California statute.

Measure for Stage 1:

- At least 80% of all unique patients seen by the EP or admitted to the eligible hospital have demographics recorded as structured data.

EHR Certification:

- Patient Summary Record –
  Content Exchange – HL7 CDA R2 CCD Level 2 or ASTM CCR

Engage patients and families in their healthcare

- **Care Goal** – Provide patients and families with timely access to data, knowledge, and tools to make informed decisions and to manage their health.
- **Stage 1 Measure** – At least 80% of all patients who request an electronic copy of their health information are provided it within 48 hours.
- **Potential** – mechanism to link patients to community services in Stages 2 or 3?

Improve Care Coordination

- **Care Goal** – Exchange meaningful clinical information among professional health care team.
- **Stage 1 Objectives** –
  - Exchange key clinical information among providers of care and patient authorized entities electronically
  - Provide summary care record for each transition of care or referral
    (comments requested about the specificity)
- **Stage 1 Measure** –

  Provide summary of care record for at least 80% of transitions of care and referrals.

Improving population and public health

Stage 1 Objectives –

- Capability to submit electronic data to **immunization registries** and actual submission where required and accepted.
- Capability to provide electronic **syndromic surveillance** data to public health agencies and actual transmission according to applicable law and practice.
- Capability to provide electronic submission of **reportable** (as required by state or local law) **lab results** to public health agencies and actual submission where it can be received. (Hospitals) (This may include communicable diseases, lead, genetic testing, and others if required by state statute.)

Improving population and public health

Stage 1 Measures –

- Performed at least one test of the EHR system's capacity to provide electronic submission of
  - electronic data to immunization registries
  - reportable lab results to public health agencies
  - electronic syndromic surveillance

(unless none of the public health agencies to which eligible provider/hospital submits such information have the capacity to receive the information electronically)

Improving population and public health

Submission to **Immunization Registries**

- Content Exchange
  - Stage 1 - HL7 2.5.1
  - Stage 2 - Potentially newer version(s) or standards based on HIT Standards Committee Recommendations
- Vocabulary
  - Stage 1 - CVX
  - Stage 2 - CVX

Improving population and public health

Submission for **Surveillance or Reporting** (excluding adverse event reporting) to Public Health Agencies

- Content Exchange
  - Stage 1 - HL7 2.3.1 or HL7 2.5.1
  - Stage 2 - Potentially newer version(s) or standards based on HIT Standards Committee Input.
- Vocabulary
  - Stage 1 - According to Applicable Public Health Agency Requirements.
  - Stage 2 – GIPSE (Geocoded Interoperable Population Summary Exchange) or ***Applicable Public Health Agency Requirements.***

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Submission of **Lab Results** to Public Health Agencies (Hospitals)

Note – California State Law requires "Commencing July 1, 2009, or within one year of the establishment of a state electronic laboratory reporting system, whichever is later, a report generated pursuant to this section by a laboratory shall be submitted electronically in a manner specified by the department."

- Content Exchange
  - Stage 1 - HL7 2.5.1
  - Stage 2 - Potentially newer version(s) or standards based on HIT Standards Committee Recommendations.
- Vocabulary
  - Stage 1 - LOINC® when LOINC® codes have been received from a laboratory.
  - Stage 2 - LOINC®, UCUM, and SNOMED CT® or ***Applicable Public Health Agency Requirements.***

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Resources

- CDPH Informatics Presentations: http://www.cdph.ca.gov/data/informatics/resource
- Dr. Scott's Presentations: http://www.cdph.ca.gov/programs/HISP/Pages/AboutLinetteScott.aspx
- California eHealth (aka HIE) Initiatives: http://www.eHealth.ca.gov
- National Health Information Exchange (HIE) and Health Information Technology (HIT): http://healthit.hhs.gov

Thank you!