HealthBridge

HealthBridge is one of the nation's largest and most successful health information exchange organizations.

EHRs Are Not Enough:
Why HIE Connectivity Matters for PMCH

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“To get someone's attention break a pattern of thinking.”
— Chip Heath

Illustration: Providence, RI

Our Story

A Tale of a City and a Region

Who is HealthBridge

- One of the nation's largest, most advanced and successful health information exchanges (HIE)
- 501c3 Not for Profit in operation since 1997
- Serves a total of 50+ hospitals, 7500 physicians
- Delivers more than 3 million clinical messages per month; more than 35 million per year
- One of only a handful of HIE/RHIOs nationwide with a sustainable business model
  - (Pre ARRA) 97% of revenue from fees; <3% grants
  - 5-12% annual return for last eight years

Early IT - Quality Efforts – Pt 1

- 2000-2006 – Rapid growth of HIE in Cincinnati; Practices eager for low cost technology and connectivity
- 2006 – Greater Cincinnati awarded a RWJF Aligning Forces for Quality (AF4Q) Grant
- **Phs1**: HealthBridge subcontracts with Health Collaborative to deploy a diabetes registry for diabetes disease collaborative
  - Practices have trouble producing consistent panel of patients
  - Practices have trouble producing consistent monthly report on set of diabetes measures

Early Lessons

- As part of these 2 pilots, HealthBridge realized:
  - Most EHRs could not produce data easily for quality reporting
  - Most EHRs are not designed to manage a full patient population with a chronic disease
  - Multiple ways to enter the same information in an EHR
  - Free text data hard to capture and report on
  - Registries are better tools for reporting and patient management BUT dual data entry a huge barrier
  - Registries need to be connected to existing data sources (e.g., EHRs, practice management systems [PMS], HIE, etc.)

Early IT - Quality Efforts – Pt 2

- 2009 – Cincinnati YourHealthMatters performance measurement and public reporting initiative launched by Health Collaborative with plan to collect **clinical** data (not claims) funded by RWJF AF4Q
- In Cincinnati, 400+ primary care physicians and all hospitals report quality data
- **Phs 2**: HB undertakes pilot to extract data from the HIE and practice EHRs support public reporting process
- **Phs 3:** HB undertakes a pilot to integrate EHR, PMS and HIE data with a new customized disease registry support public reporting process and ongoing improvement

Providers' Experiences with Quality Reporting using Clinical Data

- Providers all thought they scored higher
  - Sure there was a problem with the report
  - Review of data against chart (EHR or paper) – can't argue with your own data (at least not as much)
  - Wanted to score better next year
- Beneficial for staff members to review the data before submission
  - Especially true when one staff member assigned to provider
  - Blanks make a great visual
  - Awareness of data needed for quality reporting
  - Realized they played a role in quality improvement
- All providers saw that an **EHR is good but not enough.**
  - wanted a better way to track their patients with chronic conditions
  - wanted tools for more frequent reporting and data for improvement

Meaningful Use & Medical Home

"The key to Meaningful Use is to know how to measure performance and give feedback to providers."

Dr. David Blumenthal, Former National Coordinator for Health IT

- HealthBridge is also the lead organization in the Tri-State Regional Extension Center and Greater Cincinnati Beacon Collaboration
- Quality reporting is needed for Meaningful Use
  - Attestation process requires documentation to meet the thresholds (ex. 40% eRx)
  - Providers experiencing the same problems attesting to meaningful use
  - Certified EHRs still struggle producing documentation
  - Minimalist approach to quality reporting
- ***HealthBridge is developing suite of tools and methods through REC and Beacon programs to help practices manage reporting and PCMH transformation.***

Quality Improvement & Reporting Work Flow *within* a Practice

Data Capture

HIE

Reference Lab

Other Data

External Data Sources ***Connected*** *with EHR or Registry*

Physician Office A
Registry User

Physician Office B
EHR user

Practice Staff Trained to Capture Data ***Consistently*** *and in* ***Codified*** *Fields*

EHR or Registry Set up to Provide Periodic and Ongoing Reporting

Practice Quality Reporting

Reports and Dashboards by Provider

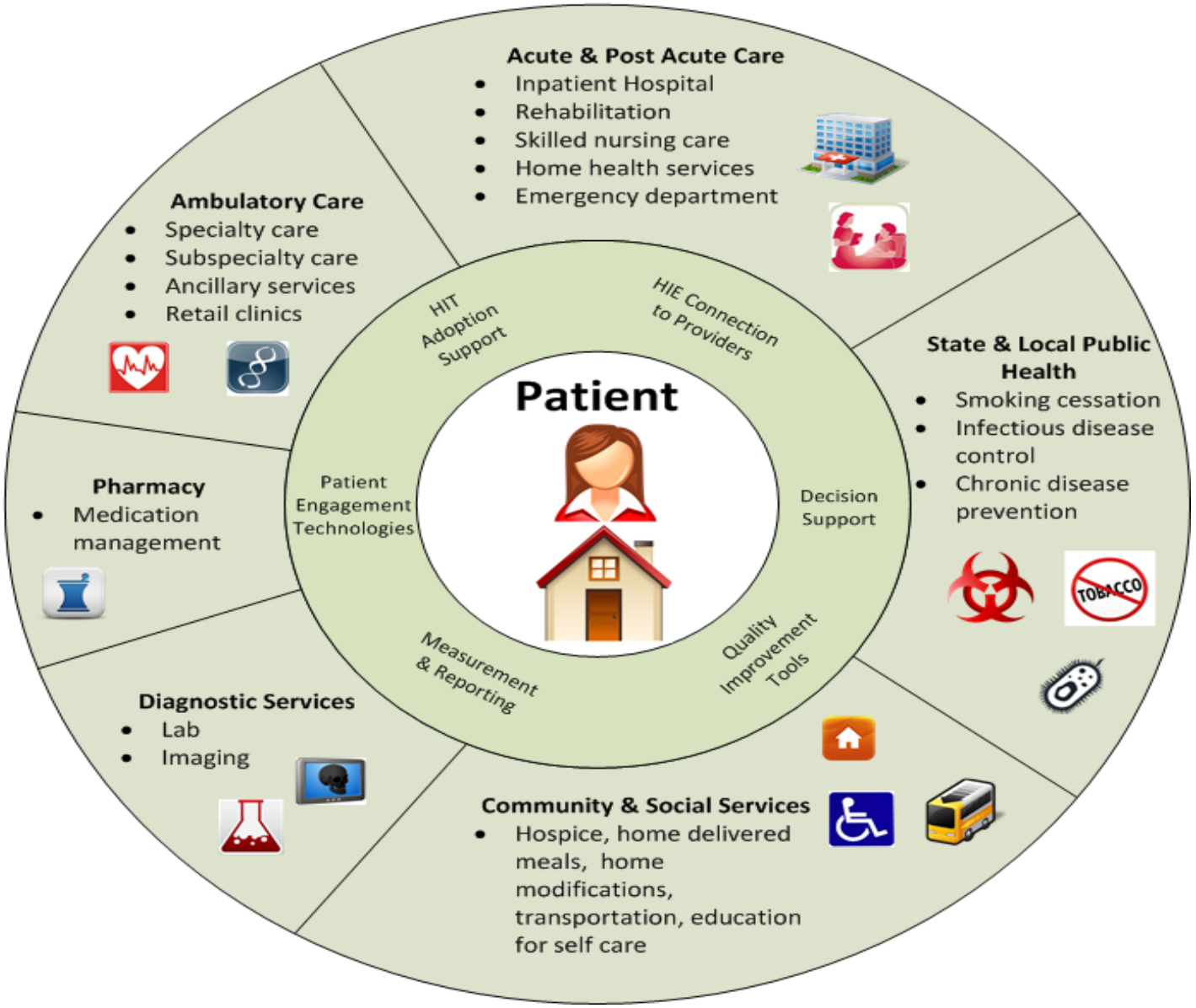
Practice engages in cycle of learning to improve data capture, patient care in targeted area

Reports for Patient Identification & Outreach

Practice sends letter or makes phone call to remind patients about needed care

Periodic Quality Reports – MU, BTE, NCQA, etc.

Patient Centered Medical Neighborhood



Beacon HIT & HIE Enhancements

HIT/HIE Improvement	Description	Aim
Electronic Health Record Adoption and Meaningful Use	Support for all participating practices with adopting an EHR and meeting meaningful use, provided in coordination with the Tri-State Regional Extension Center	60% Meaningful Use achievement across community
Shared Core IT Infrastructure	A powerful, new set of technologies including a master patient index, data warehouse, mapping, business intelligence and analytics tools that will provide the community with unprecedented data reporting, quality improvement and analytics capabilities needed for meaningful use and payment reform	Community level data for reducing unnecessary ED visits and hospital readmissions, improving rates of optimal care
ED-Admit Alerts	Electronic notices delivered to primary care teams in real-time when patients with chronic conditions are admitted for emergency room, urgent or and inpatient care	Reduce unnecessary ED visits and hospital readmissions

Beacon HIT & HIE Enhancements

Integrated Disease Registry	Technology application that is integrated with existing EHRs and practice managements systems to provide practices with customized quality reporting, patient self-management and decision support tools for improving care for a population of patients with diabetes or asthma	Increase optimal care and preventive care; Reductions in unnecessary ED visits, hospitals readmissions
Direct Email	Specialized secure email communications among hospital and post-acute providers using national "Direct" protocols aimed improving the flow of information during transitions of care	Reduce hospital readmissions
Txt4Health	Mobile technology initiative to help people at risk for diabetes to be healthier through evidence-based text messages	Improve outcomes
Race, Ethnicity And Language (REL) Data Collection	Standardization of data collection and special training for hospital and practice staff on collecting REL data	Reduce documented health disparities

Where to Start

Weaving the pieces together

Key Lessons Learned - The 3 C's

- **Codified**
  - Data in codified fields can be queried
  - Provider must work with their EHR vendor to build as many reportable fields as possible
    - ✓templates
    - ✓flow charts
    - ✓medication lists - NDC codes, RxNorm codes
    - ✓examples of how data entered:

Medication List		
Aspirin	81mg	Once a day
ASA	81	Daily
Aspirn		

Key Lessons Learned - The 3 C's

- **Consistent**
  - Train staff and providers to enter data in reportable fields
    - ✓ if implementing a new EHR, the time to start is NOW
    - ✓ have provider and staff review progress
    - ✓ correct bad data - give credit where credit is due
    - ✓ examples of how data entered:

Height	Weight
6 ft 3 in	175.25
75 inches	175 ¼ lbs.
6' 3"	175..25

Diabetic Foot Exam Date	Diabetic Foot Exam Value
05-01-2010	normal
05-07-2010	nl
05-10-2010	.

Key Lessons Learned - The 3 C's

- **Connected**
  - Interface with your HIE (Health Information Exchange)
    - ✓ one connection to receive community results
    - ✓ data placed in discrete fields
    - ✓ PDF or scanned results cannot be captured easily for quality reporting
    - ✓ gateway for your EHR to securely send and receive data

Hemoglobin A1C	Value	Reference Range
HbA1c	6.5 %	
A1C	8.2	
hb	7.2	Normal Range 12.0-15.5 G/DL

Key Capabilities: Registry + Connectivity

- Need to have comprehensive preventive care, chronic disease management tracking capabilities
- Need the system to connect to existing data sources on an ongoing basis – HealthBridge HIE (labs, inpatient data, etc.) EHR, PMS, etc.
- Core Improvement Capabilities:
  - Comprehensive and versatile reporting for whole patient populations
  - Customizable alerts and decision support
  - Real-time graphical clinical dashboard
  - Patient Portal
  - Patient report card
  - Patient reminders
  - Patient outreach
  - Integrated PQRS module
  - Perform granular quality reporting: PQRS, meaningful use, NCQA Certification, public reporting, etc.

Ways to Start Right Now

- Know what you want to measure and improve
- Figure out what data is easily available – what is electronic and discrete today?
- Develop good processes for capturing data consistently
- Educate team that HIE connectivity is crucial for reporting!
  - If no HIE, work to connect to highest volume external data source to your EHR
- Build reports in a way you can repeat them as needed
- Develop dashboard and monitor goals and guidelines regularly to see how you are doing
- Work with your vendor for reporting or find another tool (i.e., registry) to help
- Identify and reach out to patients who need recommended care

Thank you

Questions?

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