CRISP: A Regional Health Information Exchange Serving Maryland and D.C.

LHD Presentation
CRISP is a non-profit health information exchange, or HIE, organization serving Maryland and the District of Columbia.

**Health Information Exchange** allows clinical information to move electronically among disparate health information systems. The goal of HIE is to deliver the right health information to the right place at the right time—providing safer, more timely, efficient, effective, equitable, patient-centered care.

**CRISP’s Mission:** To advance the health and wellness of our patients by deploying health information technology solutions adopted through cooperation and collaboration.
CRISP receives inbound data feeds from many provider organizations across the region, including all hospitals in Maryland and most in D.C. This powers CRISP services, putting clinical information in the hands of those with treatment and care coordination responsibilities. Below are details on the CRISP information available to Local Health Departments.

<table>
<thead>
<tr>
<th>Data source or attribute</th>
<th>#</th>
</tr>
</thead>
<tbody>
<tr>
<td>Live hospitals</td>
<td>56</td>
</tr>
<tr>
<td>Live hospital clinical data feeds</td>
<td>213 (lab, rad, clinical document feeds, CCD)</td>
</tr>
<tr>
<td>Long-term and post-acute care facilities</td>
<td>41</td>
</tr>
<tr>
<td>Standalone labs and radiology centers</td>
<td>15</td>
</tr>
<tr>
<td>Unique patients in our index</td>
<td>+10 million</td>
</tr>
<tr>
<td>Patient searches</td>
<td>+114,000/month</td>
</tr>
<tr>
<td>Encounter alerts sent</td>
<td>+590,000/month</td>
</tr>
</tbody>
</table>
CRISP Core Services
Prescription Drug Monitoring Program

The PDMP program is overseen by the Department of Health and Mental Hygiene, Alcohol and Drug Abuse Administration

The program aims to:
- Monitor the prescribing/dispensing of controlled dangerous substances
- Assist healthcare providers, public health and safety authorities with reducing the non-medical use, abuse and diversion of prescription drugs

The PDMP data is:
- Reported by CDS dispensers, including pharmacies and healthcare practitioners
- Securely stored
- Disclosed only to persons authorized by state law

CRISP serves as the access point for clinical licensed providers.

- All other uses, such as investigators from law enforcement, health professional licensing boards or DHMH agencies, will register with and submit data requests to Health Information Designs (HID) via http://www.hidinc.com/mdpdpmp.
CRISP currently receives Admission Discharge Transfer messages in real-time from:

- All Maryland Acute Care Hospitals
- 6 of 8 D.C. Hospitals
- All Delaware Hospitals

Through ENS, CRISP generates **real-time hospitalization notifications** to PCPs, care coordinators, and others responsible for patient care. Local Health Departments who coordinate care or care programs can receive these notifications.

**Important Current Capabilities**

- Full Continuity of Care Documents (CCDs) are also routed through ENS to subscribing providers, who elect to receive them to support transitions of care.
  - 10 Hospitals currently send CCDs to CRISP

- Hospitals can “auto-subscribe” so they can be alerted when one of their past discharges is being readmitted within 30 days. This same capability allows the receiving hospital to be notified, when a patient arriving at their facility had been discharged from another facility, within the past 30 days.
  - 34 hospitals currently auto-subscribe to receive readmission notifications

- ENS was recently enhanced to include the ER and IP visits for a given patient with the past 6 months.
The query portal allows credentialed users to search the HIE for clinical data.

Users can search for patients using last name/DOB or the medical record number from your practice or a hospital.

Information is presented in a “what’s available and from where” view.

Users can drill down to see more detailed information, such as individual lab results.

Information obtained through the portal can be printed or downloaded for incorporation into the local medical records.

Types of data available:
- Patient demographics
- Lab results
- Radiology reports
- Prescription Drug Monitoring
- Discharge summaries
- History and physicals
- Operative notes
- Consults
View of Clinical Query Portal
Viewing Patient Information: Laboratory Results

Laboratories

Rollins, Jenny K 12/20/1978 Female

Flag: General, Low, High | Abnormal: ! ↑ ↓ Critical: ● ○ ○ Severe: ●

Order Info
Order Type: Laboratory
Collected On: Jun 11, 2014 12:01:00 PM
Status: Final
Filler Order Id: 0620.BS00124R

Providers On Order
Ordering Provider: Ahmed, Zareen A

Source Information
Source: CRISP General Hospital
Received On: Jun 20, 2014 4:24:20 PM

Encounter
Admission Type: Emergency
Source: CRISP General Hospital
Class: Inpatient
Attending Providers: Lopez, Eugene
Admission Date: Jun 11, 2014 3:28:00 PM
Discharge Date: View Encounter Details

A1C
Status: F
Placer Field 1: 0620.BS00124R
Placer Field 2: 
Filler Field 1: 
Filler Field 2: 
Reported On: Jun 19, 2014 1:23:09 PM

Observations
Flag: A1C
Name: %
Value: 9.2
Units: Above high normal
Interpretation: 4.0-6.0
Status: F
Reported On: Jun 11, 2014 1:24:00 PM
Source: POINT OF CARE TESTING

TOTAL CHOLESTEROL

Jimcough@gmail.com requested A1C labs result of 9.2 on June 11, 2014
Manually Created.
BFS @CRISP, 2014-06-10 13:136

results
CRISP Reporting Services (CRS)

- Reports generated from a collection of data sources to support quality improvement, strategic planning, financial modeling, and other activities.
- CRS originally focused on reports for hospitals, we are now expanding to develop reports for other organizations to include public health departments.
- Allowable data use varies based on the amount of detail included; patient-level detail in Tableau is only permitted to be used for care coordination activities.
INTEGRATED CARE NETWORK
CRISP’s role in pursuing ICN infrastructure and services is rooted on identifying and deploying those services that can and should be offered as common state-level infrastructure and are best pursued cooperatively.

We are in part translating (and in some cases further defining) the Care Coordination Workgroup report into a set of work activities building towards agreed upon common infrastructure and services.

CRISP’s new tools should complement the ongoing and significant investments health systems, hospitals and ambulatory providers have already made.

For some providers, CRISP will offer new solutions and tools. For other providers, CRISP will provide new data, make connections among different health system providers, and facilitate a shared understanding of the needs of shared patients.

Consistent with CRISP’s history and mission, we will be thoughtful about maintaining an incremental approach defined by CRISP users’ needs.
ICN Infrastructure

**Shared Infrastructure – Separate Systems**

**Routing – Data Normalization – Patient Consent – Patient Relationship Determination**

- **Administrative Networks**
- **Statewide Ambulatory CDR**
  - Data in HIE to support individual encounters
  - Common Need Analytics & Reporting

**Shared Tools**
- Risk Stratification
- Care Gap Analysis
- Analytics

If shared or regional tools are pursued, they could exist outside of CRISP.
Community Care Team
Using CRISP for Care Coordination

Presenters:
Elizabeth Menachery, MD
Medical Director, Howard County Health Department
Kate Harton, MPA, RN
Program Manager, Community Care Team Healthy Howard
Presentation Outline

• Overview of Program
• Relationship with the Howard County Health Department
• Target Population and Care Team Model
• Community Partnerships
• Current use of CRISP
• Future plans for Expansion
Community Care Team Program Overview

• Utilizes population health strategies to decrease preventable hospital readmissions and empower Howard County residents to better manage their chronic health conditions

• Program development began in 2013
  • Referrals accepted January 2014

• CCT was the brainchild of the Howard County Health Department and the Horizon Foundation
  • Continue to provide consultation, oversight and funding

• Healthy Howard, Inc. implements the program
Community Care Team

• Target population:
  • Residents with multiple comorbidities and high hospital utilization

• Intervention Model:
  • Based on highly successful Camden Coalition of Healthcare Providers – Dr. Jeffrey Brenner
  • Home-based care coordination after hospital discharge:
    • Team of Community Health Workers, Nurses and LCSW
    • Connect clients with primary and other health care providers
    • Coordinate care with healthcare team
    • Focus on reducing barriers caused by social determinants of health
CCT Partnerships

• Primary Care Practices
  • Work collaboratively on CCT clients
  • Participation in the Advanced Primary Care Collaborative
  • Business Associate Agreement
  • Embedded Care Coordinator

• Howard County General Hospital
  • Largest source of CCT referrals
  • Memorandum of Understanding
  • Embedded Community Health Nurse
Current Use of CRISP

- Real-time ENS alerts for enrolled clients
  - Directly to team working with the client
  - Helps with timely intervention and scheduling
- Daily ENS alerts for tracking utilization of graduated clients
  - Notifies us of a need to check-in
- Identifying potential clients
  - Nurse or Care Coordinator reviews ENS list for 2 primary care practices
    - BAA/MOU allows us to act as an extension of the practice
  - RN/CC screens for multiple hospital encounters on ENS report
  - Uses Query Portal to determine if they meet clinical eligibility
Benefits of CRISP to CCT

• More accurate data tracking

• Customization of ENS alerts

• Real-time alerts convenient for staff in the field

• Systematic screening of ENS list has led to increased referrals from Primary care practices
Future Plans for CCT and CRISP

• Howard County Regional Partnership for Health System Transformation
  • CCT as Care Coordination Model

• Expanding use of CRISP for identifying high utilizers
  • More Primary care offices using ENS
  • CRISP can generate reports for Howard County General Hospital

• CRISP integration with CCT database system- important as our program grows

• Shared Care Profile
  • CCT Care Plan uploaded to the profile
  • CCT identified as a member of the patient’s care team
Questions and Comments

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