

CRISP Annual Summit

Partnership of Innovation to Improve the Health of Maryland

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Agenda

- Introduction
- History of the Partnership of MD & CRISP
- Maryland Department of Health & CRISP Collaborations (COVID-19)
- Maryland Department of Health & CRISP Collaborations (non COVID-19)
- What's Next Challenges and Opportunities?





Key Partnership Inflection Points

- Recognized need for free flow of medical records.
- Officially names CRISP Maryland's designated statewide HIE

- Mandates
 Prescription
 Drug Monitoring
 Program
- Grants CRISP funding to develop Reporting & Analytic tools to support Quality Programs.
- Funds ICN project for infrastructure to support care management
- Finalizes & Implements MD Total Cost of Care Model
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- State of Emergency due to COVID-19
- Regulation requires CRISP to operate as a Health Data Utility (HDU)

2006-09

2010-13

2014-16

2017-19

2020-21

2022



- Partners with MDH to plan an HIE for Maryland
- Connects with All MD Hospitals & most Providers to receive Patient Data
- Providers & Hospital start using Point of Care Tools (Query Portal & ENS)
- Grows Reporting Service monthly hospital reports from 2 to 17, including interactive tableau reporting
- Develops
 PDMP tools
 and assists with
 onboarding
 providers in
 compliance with
 the PDMP
 mandate
- InContext, CRISPs embedded EHR application launches
- Launches a new reporting and analytics leveraging Medicare & Medicaid claims.
- Increases
 utilization &
 feature of Core
 Essential
 Infrastructure &
 Applications

- Pivots development tools & resources to help in the pandemic response
- Increased volumes of clinical data move through national network integrations.

 Key infrastructure built to support the pandemic response is becoming part of long-term public health efforts.

Getting Started - 2006-2010

- Gaining Funding & Regulatory Support for CRISP's Mission and Vision
- Connecting Hospitals & Providers to Receiving Patient Data
- Matching Patient Data from desperate and disconnected sources
- Assisting HSCRC program with reporting on readmissions 7 quality metrics
- Developing or licensing Point of Care tools to present matched patient Data



Getting Connected & Expansion of Services 2011-2015

- First Providers and Hospitals start to use Query Portal to view patient data from CRISP
- Encounter Notification Service starts to send ADT alerts
- CRISP Reporting Services produces Claims-based reports
- Prescription Drug Monitoring Program and Health Benefits
 Exchange provider directory go live
- CRISP begins routing CCDAs at hospital discharge



Essential Infrastructure 2016 - 2019

- InContext, CRISPs embedded EHR application launches
- CRISP launches a new reporting and analytics platform leveraging comprehensive, Maryland-wide Parts A, B, and D Medicare claim.
- Scales up PDMP functionality to support State Mandate
- CRISP products designed to support the region are released as open-source
- Increased volumes of clinical data move through national network integrations

Core Services from CRISP to MDH

- Reporting and Analytics: CRISP provides secure access to Maryland health care data and related analytics tools to assist health care organizations and state agencies in improving patient care throughout the state.
- Demographic Information Enrichment: Enhance data sources with race/ethnicity from other data sources in CRISP to support Health Equity efforts
- Patient Consent: Patient ability to register consent to share data with providers that would otherwise be restricted due to state or federal law.



MDH & CRISP during COVID-19



CRISP

- CRISP pivots resources to help in the pandemic response, expanding the partnership into data collection, patient/provider connections, data analysis
- Key infrastructure built to support the pandemic response is becoming part of long-term public health efforts.



MDH COVID-19 Data Projects

- Patient Referrals to treatment
- Demographic data enrichment for case reporting & vaccinations
- COVID Hospital Bed Capacity
- Reporting Tool for providers:
 - Point of Care COVID Test
 - Skilled Nursing Facility
 - Usage of Monoclonal Therapies



MDH & CRISP Projects (Non- COVID-19)



Medicaid

- Critical Supportive Infrastructure: Master Patient Index (MPI); Portals and Underlying Infrastructure; Master Provider Registry (MPR); and the CRISP Data Lake.
- Care Coordination Efforts
 - Event Notification
 - Social Determinants of Health eReferral Tool
 - Prediabetes Flag (including MD PCP Smart Alert)
 - Image Exchange
 - MOM Program
- Medicaid CHIP/HSI SPA Lead/Asthma Home Visiting Program
- Skilled Nursing Facility (SNF) / Nursing Facility (NF) Expansion



Behavioral Health Administration

Overdose Related Data Support:

- Overdose Alerts and Fatality Review Dashboard
- Data-Informed Overdose Risk Mitigation (DORM) project
- CRISP behavioral health indicator data provides primary resources that support the Administration's data driven policy making decision process.



Public Health Services

Prescription Drug Monitoring Program

- PDMP data available to providers and dispensers along side clinical data
- Close partnership with Behavioral Health Administration to support the continued development of the program and services
- Maryland Mandatory Registration and Use

Population Health Reports

Geographic mapping for public health officials of hospital encounters, and when married to HSCRC claims data, specific conditions

Meaningful Use

CRISP facilitates public health reporting and attestation for hospitals and providers

Support of State Medical Examiner and Fatality Review Teams

CRISP serves as a source of clinical information in death investigations

Disease Investigation

- Public Health Investigators utilize CRISP for Reportable Disease Investigation
 - Demonstrably more efficient and richer data source for hospitalreported conditions than previous methodology
- HIV Care Reengagement
 - Alert DHMH when HIV positive individuals encounter health system
 - Reconnect individuals to treatment and individuals who never learned status

Oz System

Newborn alerting, to facilitate mandatory hearing screening

CAliPR

Clinical Quality Measure calculation tool for Medicaid Eligible Professionals and Hospitals, using EMR data to automate selected CQMs

ImmuNet Registry

MDH ImmuNet registry data available in CRISP Clinical Portal

DEPARTMENT OF HEALTH

Other Public Health Services Projects

- Immunization:
 - Immutrack
 - Immunization Compliance Tracking with Schools
- Infectious Disease:
 - Candida auris Encounter Notification Service (ENS)
 Notifications (antimicrobial resistance)
- ESSENCE (Electronic Surveillance System for the Early Notification of Community-Based Epidemics) data exchange
- Referrals to Local Health services for mothers and infants

What's Next- Challenges & Opportunities



State Health Data Utility

New regulations require the State-Designated HIE (CRISP) to operate as a Health Data Utility (HDU) for the State.

Purposes include:

- The collection, aggregation, and analysis of clinical information, public health data, and health administrative and operations data to assist the Department, local health departments, the Commission, and the Health Services Cost Review Commission in the evaluation of public health interventions and health equity;
- The communication of data between public health officials and health care providers to advance disease control and health equity; and
- The enhancement and acceleration of the interoperability of the tryland information throughout the State.

Key Pillars of a State Health Data Utility

Services

- Enrich Data
 - Link disparate data sets
 - Use multiple sources to fill gaps
 - Improve data feeds
 - Surface key insights
- Distribute Information
 - Create visualizations
 - Control access levels
 - Push individual clinical records
 - Share analytic files
- Enable Interventions
 - Flag patients at the point of care
 - Notify appropriate end users
 - Share relationships between organizations

Value



All data becomes more useful when it is linked, normalized, deduplicated, and cleansed within a single analytics engine



User experience is enhanced and usage increases when a single entity is responsible for governance and distribution



Alignment between population level reports and actionable individual experiences is more likely to result in positive change



Challenges of data utility with MDH data

- Public Health data is dirty
- Need for common data dictionaries with matching data elements
- Much of the data MDH is de-identified- how can that be used to inform data utility?



Why is interoperability important?



- Automation
- Increases communication on care
- Needs to include public health
 & social drivers



Modernizing Public Health Data Systems

Existing public health technology systems must be updated to:

- Flow public health-relevant data quickly and automatically between clinical and public health entities
- Align policy and transparency around privacy, data use, and consent
- Promote health equity
- Facilitate collaboration across industries and stakeholders

What does the future of this partnership look like?

- Predictive Analytics
 - Programmatic development
 - Intentional deployment of resources
- Policy development including planning initiatives
- Al

