HealthInfoNet

Maine's Health Information Exchange

Overview & Update on HealthInfoNet & the Statewide Health Information Exchange

Dedicated to helping our communities create lasting system-wide improvements in the value of patient care.

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Executive Director and CEO
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Our Company

About HealthInfoNet and the State of Maine's Health Information Exchange.

WHAT WE DO

- Designated in law as operator of Maine's statewide Health Information Exchange (HIE)

- Maine law governs patient informed consent requirements for HIE participation (i.e., opt-out for general medical information and opt-in for mental health and HIV information)

WHO WE ARE

- Independent nonprofit governed by a voluntary, community-based board of directors and advisory committees

- Board members represent medical providers, public health organizations, patients, government agencies, and businesses throughout the state

HOW WE DO IT

- Provide a number of services to our participating provider organizations

- Examples: comprehensive electronic medical record systems, real-time event notifications, public health reporting, predictive analytics and measures, and much more

About Health Information Exchange

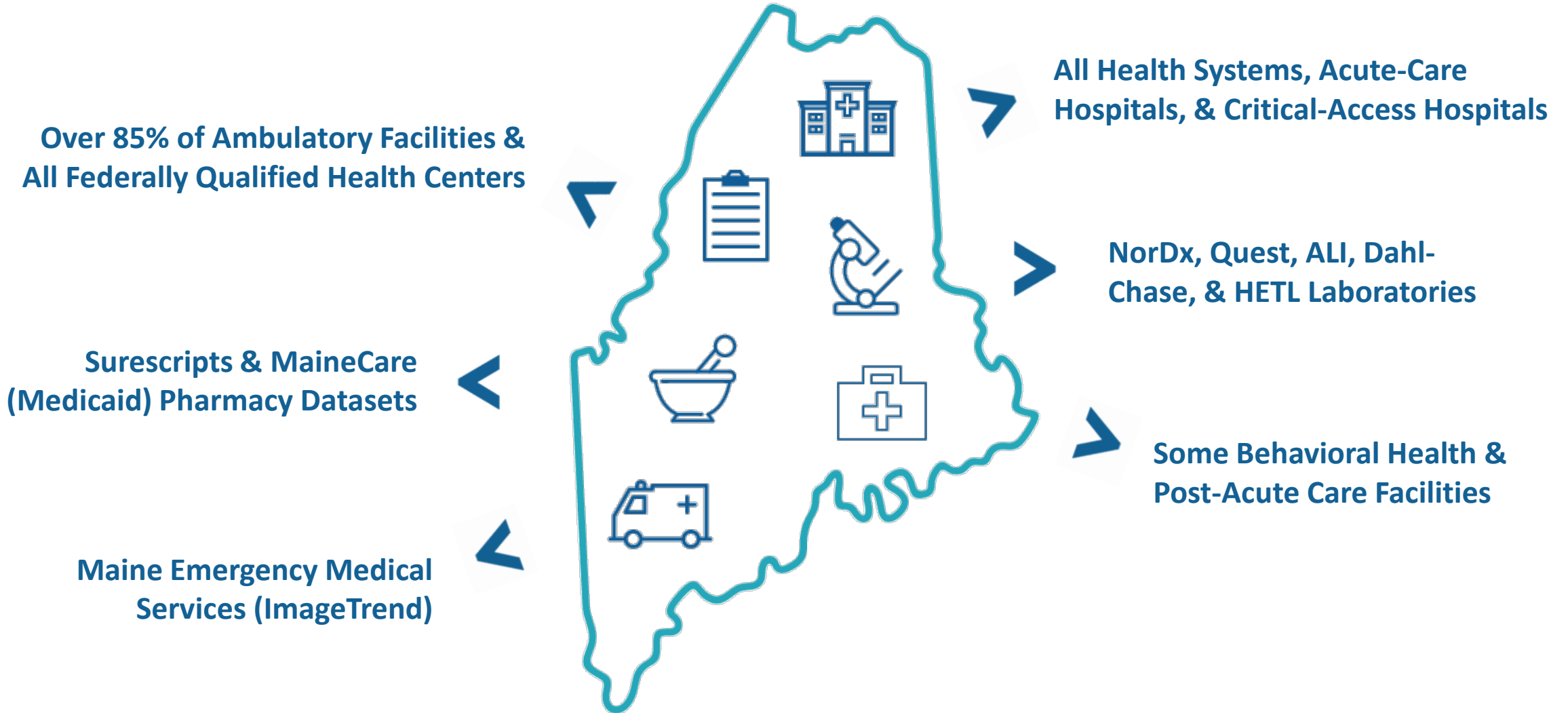The benefits of using HIEs in clinical workflows.

- HIEs are systems that combine information from separate health and medical record systems (e.g., EMRs) to create comprehensive electronic health records for patients; benefits include:

    – Informed decision-making

    – Efficient care coordination

    – Fewer medical errors

    – Improved patient safety

    – Fewer repeat tests and procedures

    – Less paperwork and less waiting

    – Efficient discharge and referral management

Better Care

Safer Care

Easier Care

Our Connections

Connected to more than 820 healthcare locations throughout the state.

All Health Systems, Acute-Care Hospitals, & Critical-Access Hospitals

Over 85% of Ambulatory Facilities & All Federally Qualified Health Centers

NorDx, Quest, ALI, Dahl-Chase, & HETL Laboratories

Surescripts & MaineCare (Medicaid) Pharmacy Datasets

Some Behavioral Health & Post-Acute Care Facilities

Maine Emergency Medical Services (ImageTrend)

Our Clinical End-User Community

Helping Doctors, Nurses, Care Managers, and others make informed decision-making.

- **Registered Nurses**
- **Medical Assistants**
- **Medical Records & Referral Specialists**

- **Physicians**
- **Behavioral Health Clinicians**
- **Pharmacists**

- **Care Managers & Case Managers**
- **ED Staff**
- **LTC/SNF Staff**

- **Epidemiologists**
- **Infection Prevention Staff**
- **Quality Analysts**

Our Numbers

At a Glance (December 2020)

1,730,598	Number of Patients Included in the HIE
1.41%	General Medical Opt-Out Rate
24,684	Mental Health Opt-In Count
61%	HIE Organization Crossover Rate

Crossover: The percentage of patients who visited unaligned treating facilities in the last 12 months.

Top 3 HIE Crossover Organizations:

- Northern Light Health (65%)
- MaineGeneral Health (64%)
- Central Maine Health Care (64%)

	December 2019		December 2020	
HIE Participants	826		839	↑13
Patients Accessed	124,482		151,513*	↑22%
Unique Users	5,296		6,345*	↑20%
Public Health Reporting (messages)	962,449		1,152,668*	↑20%
Real-Time Notifications	50,936		47,347	↓7%

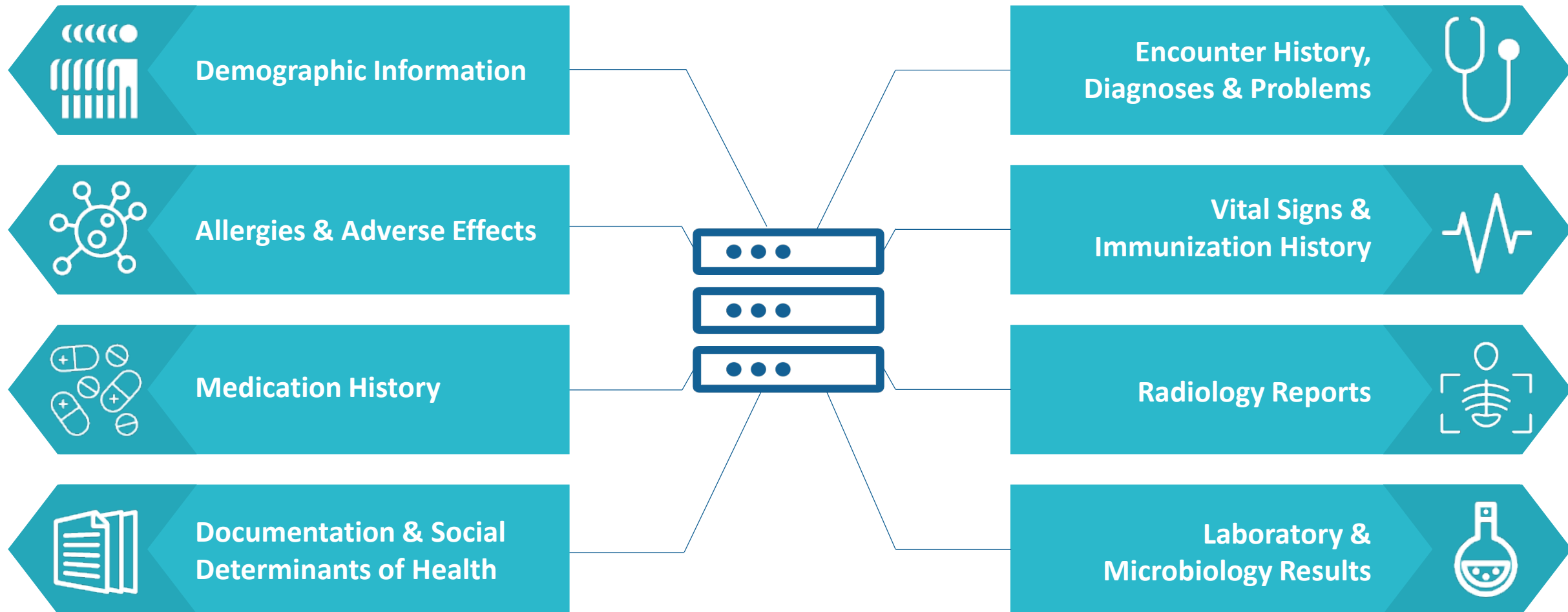** Denotes all-time HIE record*

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HIE Services

Overview of Services Available from the Health Information Exchange

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Data Collection

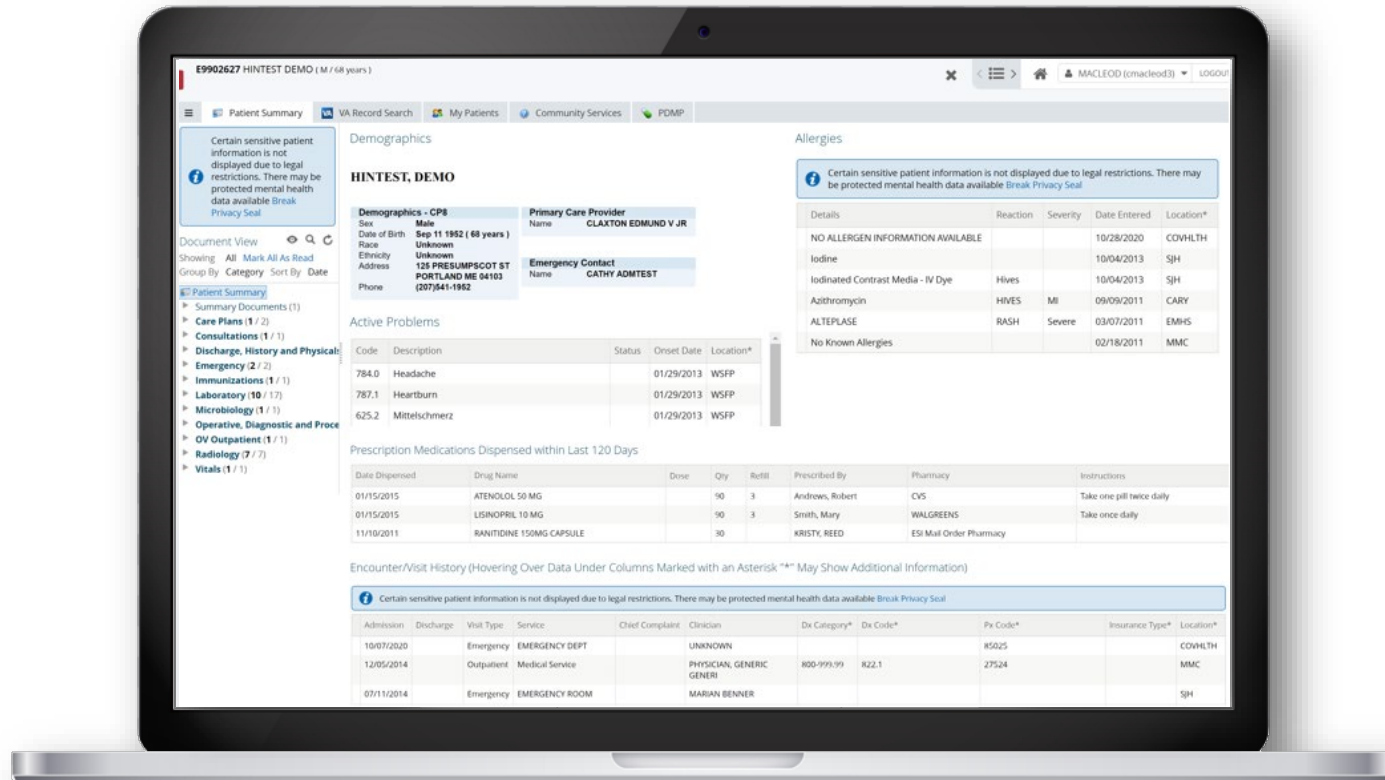Incorporating diverse data sources as new use cases emerge.

Demographic Information

Allergies & Adverse Effects

Medication History

Documentation & Social Determinants of Health

Encounter History, Diagnoses & Problems

Vital Signs & Immunization History

Radiology Reports

Laboratory & Microbiology Results

Clinical Portal

Comprehensive HIE electronic patient health record system.

CLINICAL PORTAL – A web-based application enabling the secure look-up and retrieval of real-time patient health record information. Key features include:

Clinician/IS Support

- Patient Lookup Services
- Patient Health Record Services
- Community Services Information
- Notification Services

Help Desk
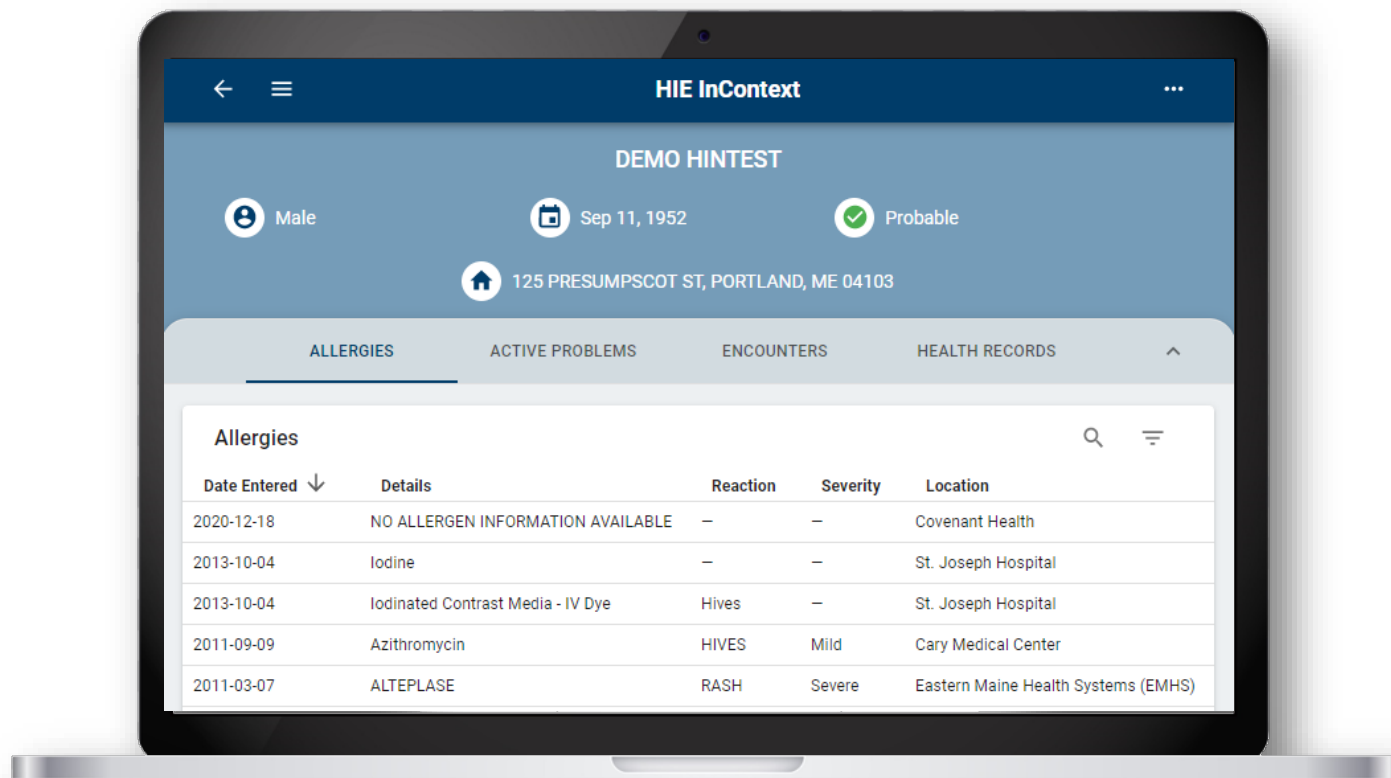
- User Lookup Services
- New User Request Function

Auditor

- Privacy Log Function
- Mental Health Access Audit Function

HINcontext Application

EHR-embedded HIE application available at the point of care.

HINCONTEXT APPLICATION – A SMART on FHIR EHR-certified application embedded within clinicians' existing workflows to return and display HIE data most conveniently. Key features include:

- Flexible configuration within EHR systems

- Concise data presentations and intuitive system navigation

- User-friendly and clinical workflow-minded design

Designed in partnership with **CRISP**

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Our entire team uses HealthInfoNet on a daily basis. Their services help us address **scheduling challenges**, facilitate **referral evaluations**, and prepare for **upcoming consultations and procedures**.
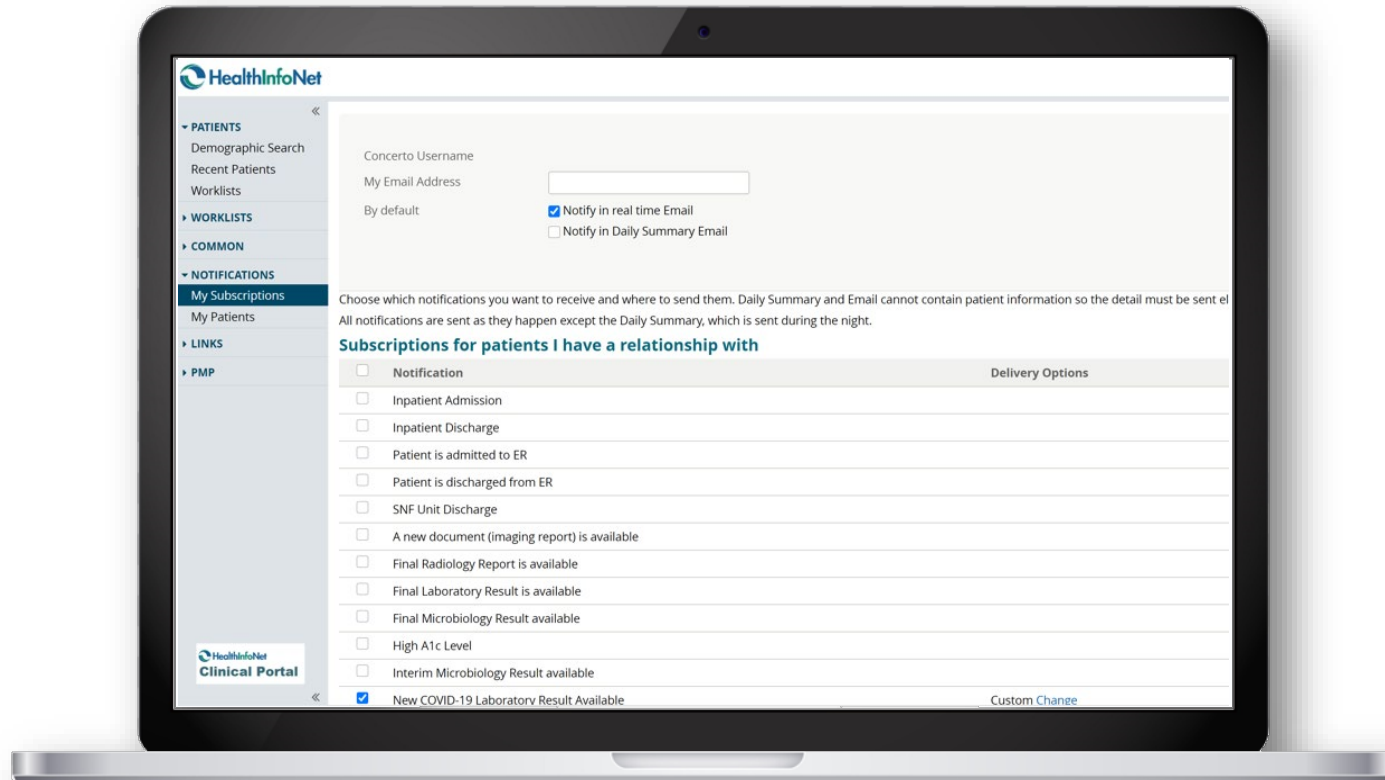
**Nancy Austin-Stacey, CMA (AAMA),
St. Joseph Gastroenterology**

HealthInfoNet End-User Testimonials

Notification Services

Real-time and daily summary event-based alerting.

NOTIFICATION SERVICES – Real-time alerting of time-sensitive events that make it possible for clinicians to establish the right care plan at the right time. Key features include:

My Patients
Manual or automated creation of user-specific patient panels for monitoring specific medical events
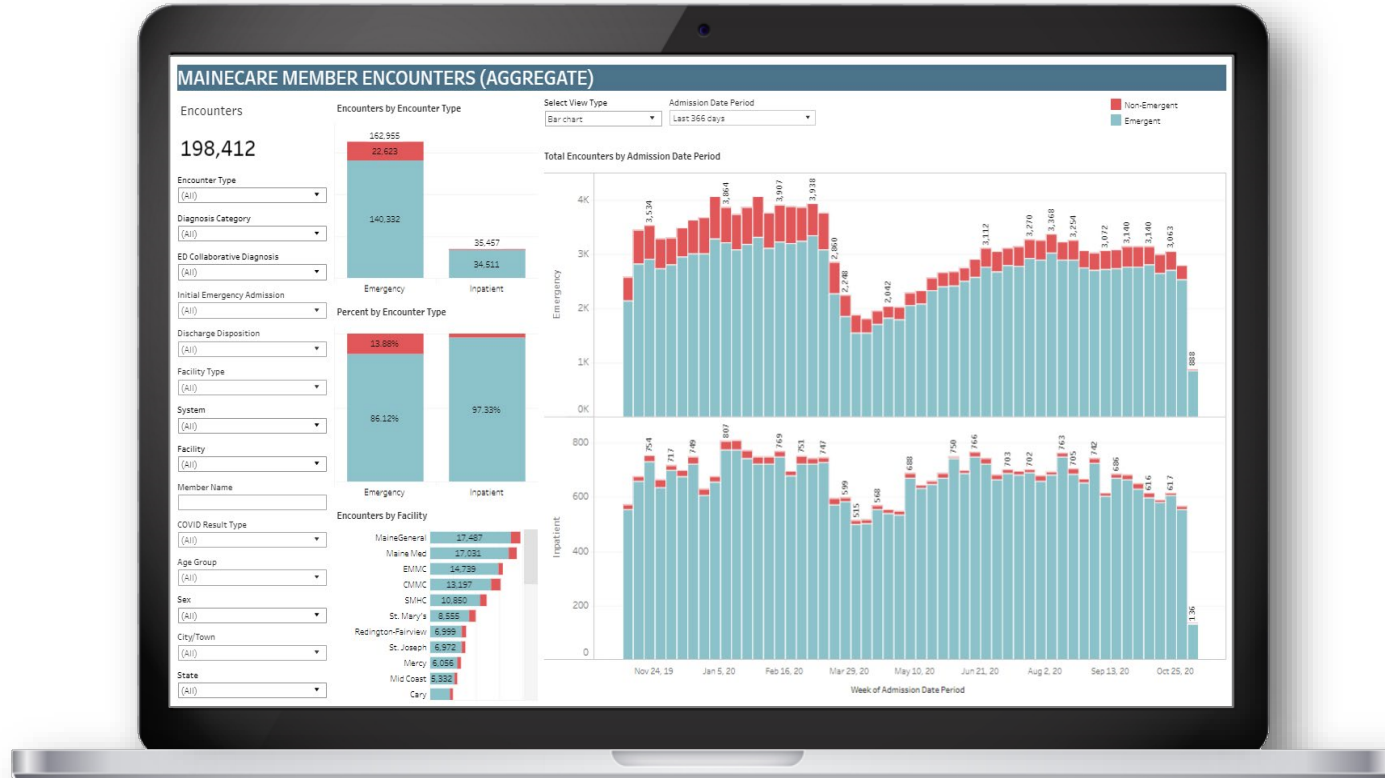
My Subscriptions
Medical events, such as inpatient/ED admissions/discharges, laboratory results, etc. that clinicians can receive notifications on for their defined patient panels in real-time or in a daily-summary report.

Analytic & Reporting Platform

Real-time, dynamic reporting to inform operational decision-making.

ANALYTIC & REPORTING PLATFORM –
Leveraging real-time clinical data across the care continuum to help clinicians drive quality improvements and manage risk and population health. Key features include:

Organizational Performance
Compare actual-to-target performance for key performance indicators (KPIs) using case-mix and severity-adjusted targets

Population Risk
Identify populations and individuals most at risk for future high costs, inpatient admissions, and emergency room visits

30-Day Readmission Risk
Identify inpatient encounters most at risk for 30-day readmissions

Data Transmission Services

Custom and standard options for delivering underlying data sources.

Real-Time ADT Transaction

- Customer-specific patient attribution drives ADT message retrieval queries

- Selected ADT messages sent in real-time to customer via established VPN tunnel

Enriched Data Extracts

- Standard and custom data extract file formats (.txt, .csv), sent daily, monthly, or quarterly

- Customer-specific patient attribution drives extract retrieval queries

- Patient demographics, encounter/visit, and value-added/ analytic information

Public Health Reporting

Automated delivery of real-time notifications to the Maine CDC.

Syndromic Surveillance

Reporting events of care with chief complaints that indicate possible disease or condition that require review/intervention by the Maine CDC for public safety and health

E-Laboratory Reporting

Reporting laboratory results that indicate existence of any of the seventy-two diseases that require review/intervention by the Maine CDC for public safety and health
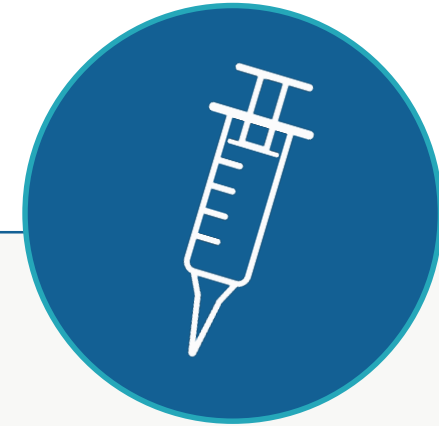
Immunization Reporting

Reporting all state-supplied vaccine administration data to the Maine Immunization Information System (ImmPact), as required by the Maine CDC for record keeping

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Data on population health is essential for public health. **Accurate reporting** of health data is at the core of successful public health programs. Without the data, public health will not succeed. HealthInfoNet supports that mission through their **automated reporting efforts**.

Stephen Sears, MD, Chief of Staff VA Maine; former Maine State Epidemiologist

HealthInfoNet End-User Testimonials

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HIE Consent Choices

Patient Choices for Participation in the Health Information Exchange

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Maine HIE Consent Roles/Responsibilities

Ensuring clear functions for HIE consent relationships.

HealthInfoNet ⟷ **Patient** ⟷ **Participating Organization**

- HealthInfoNet is responsible for **managing HIE consent options** – <u>not</u> participating organizations

- The **consent relationship** is between the individual (i.e., the patient) and HealthInfoNet

- Participating organizations **are required to educate** patients about HIE consent options at least once in their interactions (and subsequently should patients change their choices)

- Consent choices are **universal** – patients cannot make participant-/provider-specific choices

Maine HIE Consent Choices

Managing patient consent choices for HIE data sharing.

General Medical Opt-Out	Sensitive Information Opt-In

• Maine law requires HealthInfoNet and all HIE participants to follow an **opt-out** consent policy for sharing general medical information
 	
• Patients can opt-out **on paper** or **over the phone**
 	
• When patients choose to opt-out, they opt-out once for **all care locations**, at which point their clinical data is completely removed from the HIE
 	
• Patients can always choose to **opt back in**; however, their records will only be available in the HIE from that point going forward
	• Maine law allows HIE participants to send **mental health information** (not yet SUD information) if HealthInfoNet:
	
	  1. Maintains an **opt-in** consent policy for sharing the information with (A) all HIE-participating providers ongoing or (B) only treating providers at the point of care/admission (i.e., one-time verbal authorization)
	
	  2. Enforces protections on viewing the information by requiring HIE-participating providers to **unlock the data** in an individual patient's record and log their reason for doing so, including an "emergency" access option

Maine HIE Education & Training

Informing participants and patients on HIE consent choices.

- Per Maine law, **all HIE-participating organizations** must:

Give an **opt-out form** to each of their patients at least one (1) time at the point of "initial contact" following connection to HealthInfoNet

Send any **signed opt-out forms** to HealthInfoNet within 2 business days (fax is the most common delivery method)

Provide a way for patients to **opt-out at no cost** to the patient

- Prior to going "live" with HealthInfoNet, participating providers must be active with patient education at the point of care

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HIE Updates

An Update on Recent Activities at HealthInfoNet

Dedicated to helping our communities create lasting system-wide improvements in the value of patient care.

COVID-19 Reporting Efforts

Developing solutions to support statewide COVID-19 efforts.

- Access to COVID-19 laboratory test results in Clinical Portal and HINcontext Application document trees

  - Added connection to the State Health and Environmental Testing Laboratory HETL

  - Adding (in Feb 2021) State Immunization Data to the HIE

- Creation of COVID-19 laboratory result subscription in Notification Services to alert users when a new laboratory results is available for users' patient panels

  - Users can receive the notification via email either in real-time or on a daily basis

  - End users can then hyperlink from the email to the patient's HIE record to learn more about their laboratory test results for follow-on action

| Notification |
|---|
| Inpatient Admission |
| Inpatient Discharge |
| Patient is admitted to ER |
| Patient is discharged from ER |
| SNF Unit Discharge |
| A new document (imaging report) is available |
| Final Radiology Report is available |
| Final Laboratory Result is available |
| Final Microbiology Result available |
| Interim Microbiology Result available |
| New COVID-19 Laboratory Result Available |
| Patient Deceased |
| A new document is available |

COVID-19 Reporting Efforts (cont.)

Developing solutions to support statewide COVID-19 efforts.

- Developed Tableau® reporting dashboards with support from HIE participants and Maine DHHS

- Data sourced from HIE-participating providers and state and local laboratories

- Report on patient populations tested for or diagnosed with COVID-19 in a laboratory site located in Maine

- Primary audiences include Maine DHHS, Maine CDC, and authorized HIE participants
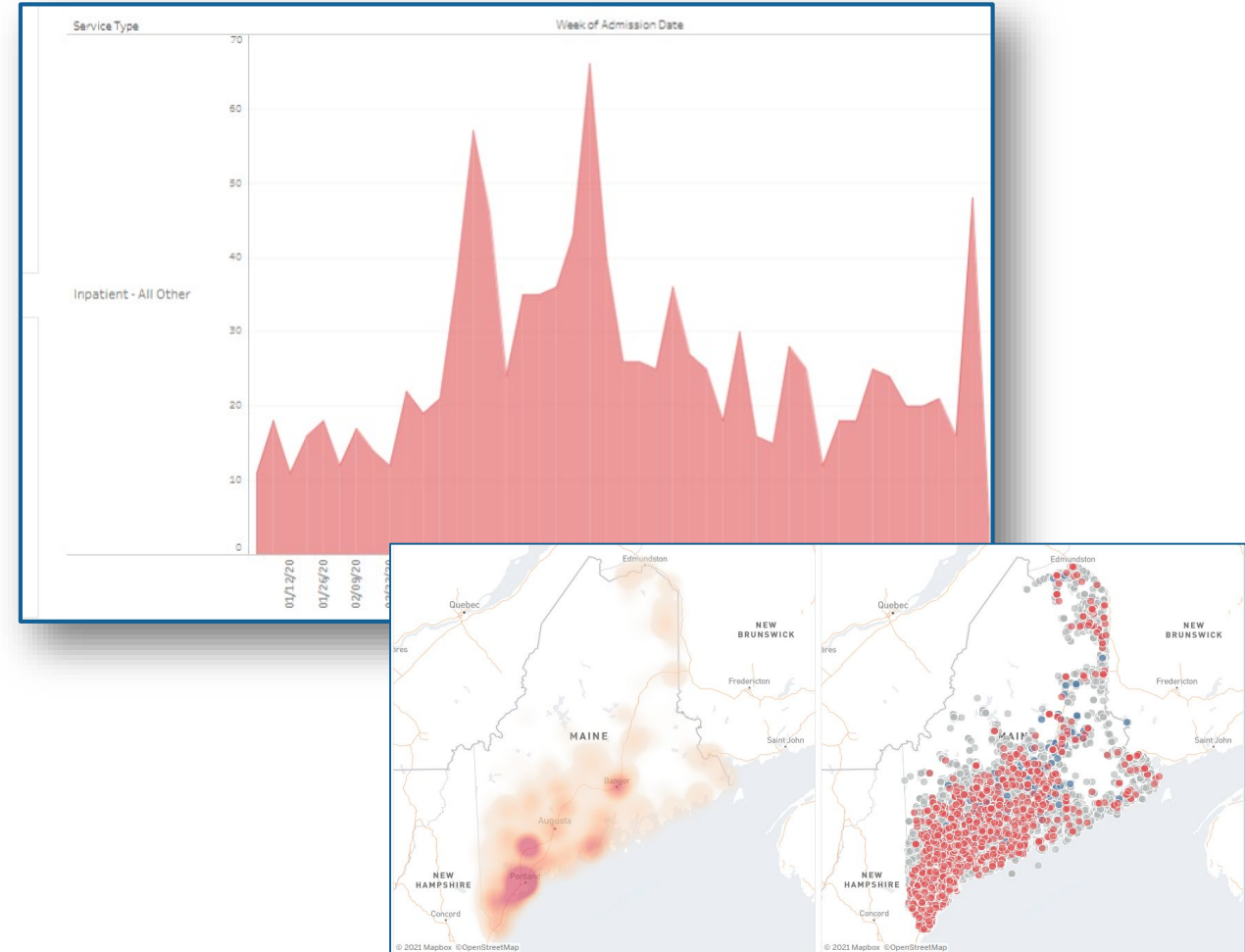
2021 Priority Areas

Looking ahead to our company's key priority areas in 2021.

Analytic & Reporting — Develop internal and partner capacities to expand the HIE's analytic and reporting capacities, functions, and value statewide

SDOH Functionality — Build out the technical capabilities to support the acceptance, saving, and sharing of Social Determinant of Health (SDOH) data in the HIE

Infrastructure Efficiencies — Make necessary updates to critical internal infrastructure and databases to align with contemporary technologies and services

External Data Sources & Networks — Expand our networks to additional data sources including SUD due to changes to the federal law under the CARES Act

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