



MDH Interoperability Webinar Series: Electronic Case Reporting (eCR)

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PROTECTING, MAINTAINING AND IMPROVING THE HEALTH OF ALL MINNESOTANS

MDH Overall Data Strategy

Join any or all MDH Interoperability Webinars in this Series:

Date	Public Health Reporting Use Case
January 20	Electronic Case Reporting (eCR) *
January 27	Laboratory Orders/Results – Infectious Disease Lab (IDL)
February 3	Laboratory Orders/Results – Newborn Screening Blood Spot (NBS)

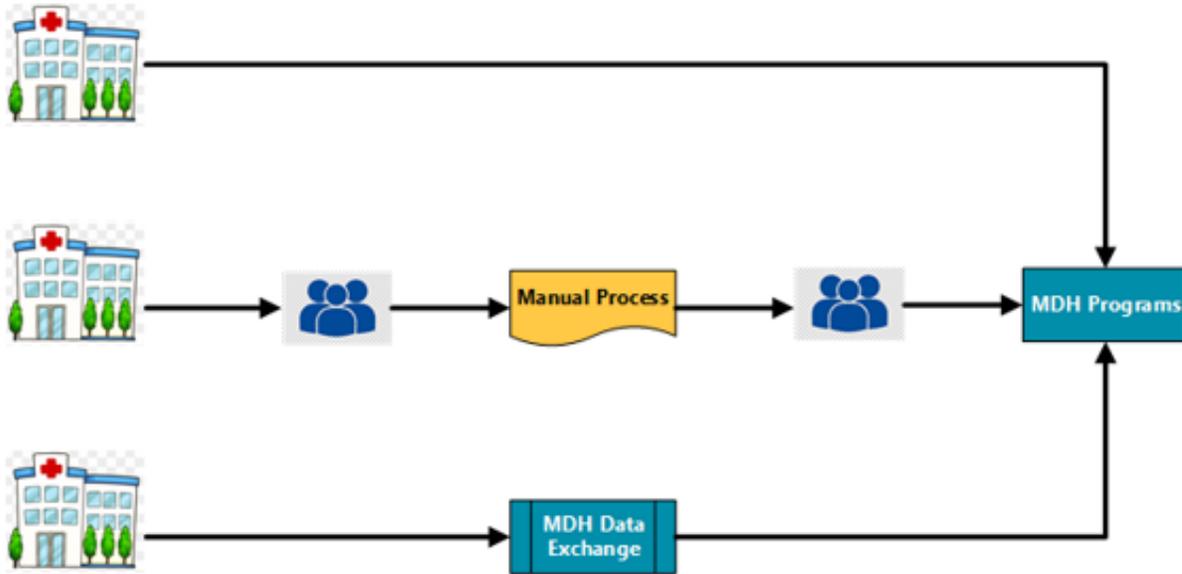
- For past Webinar materials, including recordings:
[DSI website \(https://www.health.state.mn.us/data/interoperability/webinar.html\)](https://www.health.state.mn.us/data/interoperability/webinar.html)
- Further questions: health.dsi@state.mn.us

Webinar providing information towards:

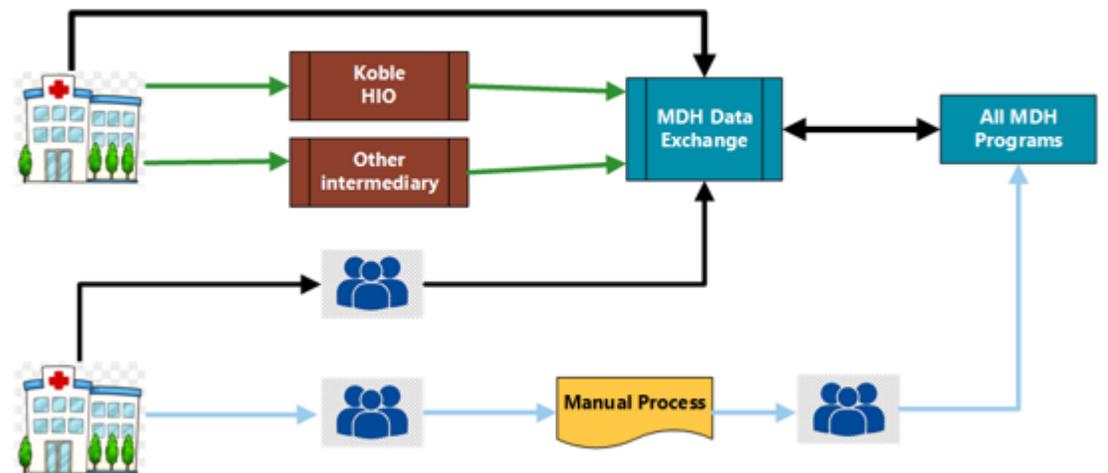
- ✓ Reducing your reporting administrative burden
- ✓ Meeting the CMS public health reporting requirements
- ✓ Improving data quality so information shared with MDH can better address future emerging threats and address population health issues
- ✓ Learning how you, your organization, and your patients benefit from improved public health reporting

MDH Interoperability Strategy: Overall

Current MDH Data Exchange



Planned MDH Data Exchange



Legend



MDH Request of External Partners

- ✓ **Schedule meeting with DSI** to discuss more details related to health system needs
 - Determine your organizations' public health reporting priorities for implementation and share with DSI (checklist)
 - Discuss any barriers or opportunities for electronic implementation with MDH
- [Consider Participation Agreement with Koble \(https://3b54d489-fb07-4eda-b01d-8169cc695bc4.filesusr.com/ugd/64a972_dddbba6a5436949e5952abe8094b9c778.pdf\)](https://3b54d489-fb07-4eda-b01d-8169cc695bc4.filesusr.com/ugd/64a972_dddbba6a5436949e5952abe8094b9c778.pdf)
- Plan and coordinate MDH public health reporting improvements through DSI and provide feedback to processes

Electronic Case Reporting (eCR)

Electronic case reporting (eCR)

is the automated, real-time exchange of case report information between electronic health records (EHRs) and public health agencies

eCR aims to eliminate the burden of manual reporting for health care providers

Current State of Disease Reporting

DISEASE REPORT CARD

Fax completed form to: 651-201-5743

Cases may also be reported by phone: 651-201-5414, 1-877-676-5414

PATIENT DEMOGRAPHIC INFORMATION

Medical Record Number: _____

Patient name: _____

Address: _____

City: _____ State: _____ Zip: _____ County: _____

Phone (home): _____ Phone (other): _____ Mobile/cell Work

Date of birth: ____/____/____

Sex: Male Female
 Unknown Other: _____

Pregnant? Yes No Unknown

Due date: ____/____/____

Delivery hospital: _____

Occupation: _____

Place of work, school, or child care: _____

Foodhandler?
 Yes No Unknown

Contact with children in child care?
 Yes No Unknown

Patient status at time of reporting:
 Alive Dead Unknown

Date of death: ____/____/____

Death location: _____

Race (check all that apply):

American Indian or Alaska Native

Asian

Black

Native Hawaiian or Pacific Islander

White

Other: _____ Unknown

Ethnicity:

Hispanic or Latino Non-Hispanic Unknown

Hospitalized?

Yes No Unknown

Hospital name: _____

Admit date: ____/____/____

Discharge date: ____/____/____

Discharged to:

Long-term Care/Skilled Nursing Facility

Long-term Acute Care Hospital

Home Other: _____

DISEASE AND LABORATORY INFORMATION

Disease: _____

Case Suspected case Asymptomatic carrier

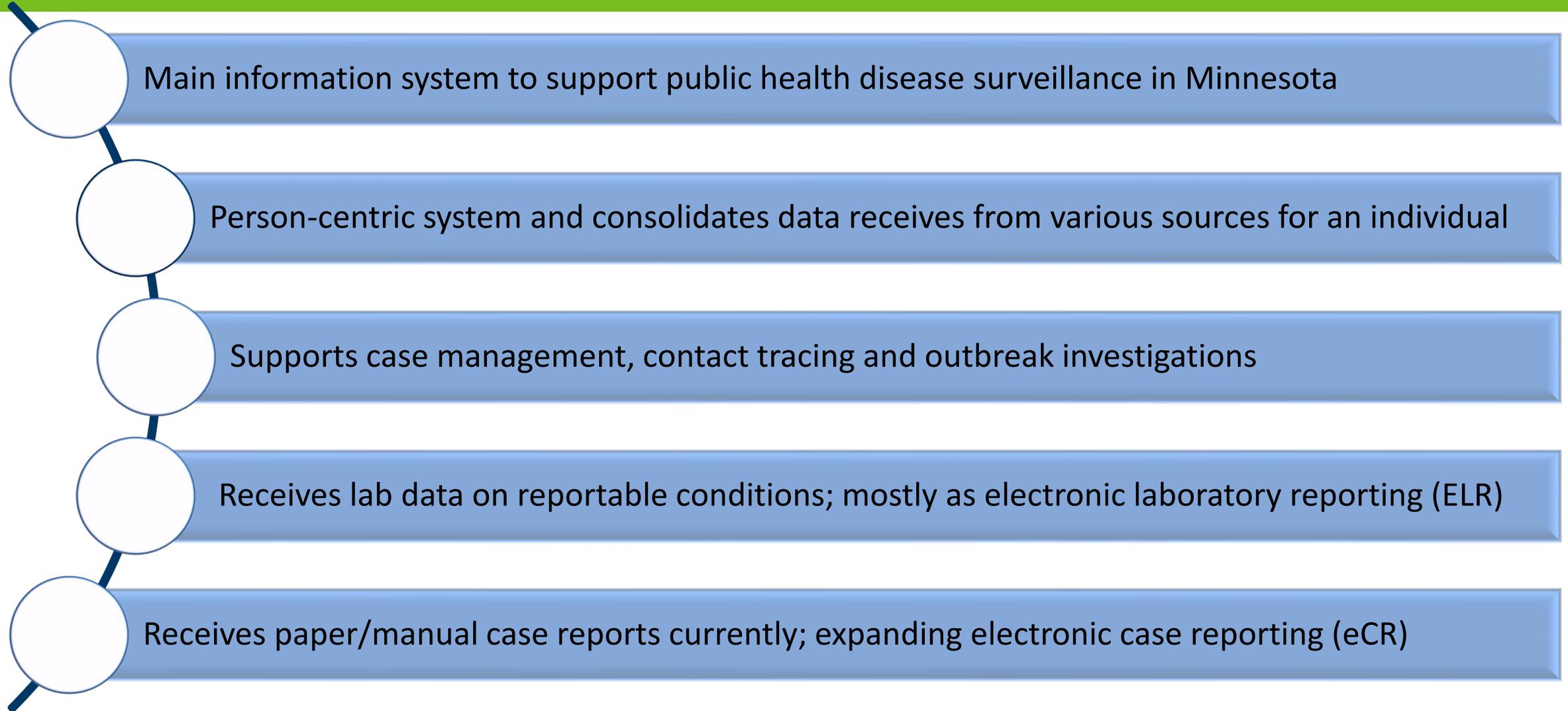
Person reporting: _____

Institution/clinic: _____

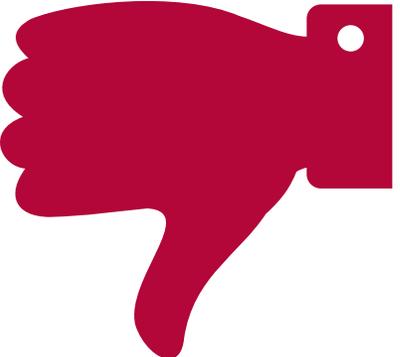
Many infectious diseases are required to be reported to the Minnesota Department of Health [MN Rules 4605.7000 to 4605.7900]

Disease report card (yellow card) is used for most reportable infectious diseases; some diseases require separate form with additional details

Minnesota Electronic Disease Surveillance System (MEDSS)



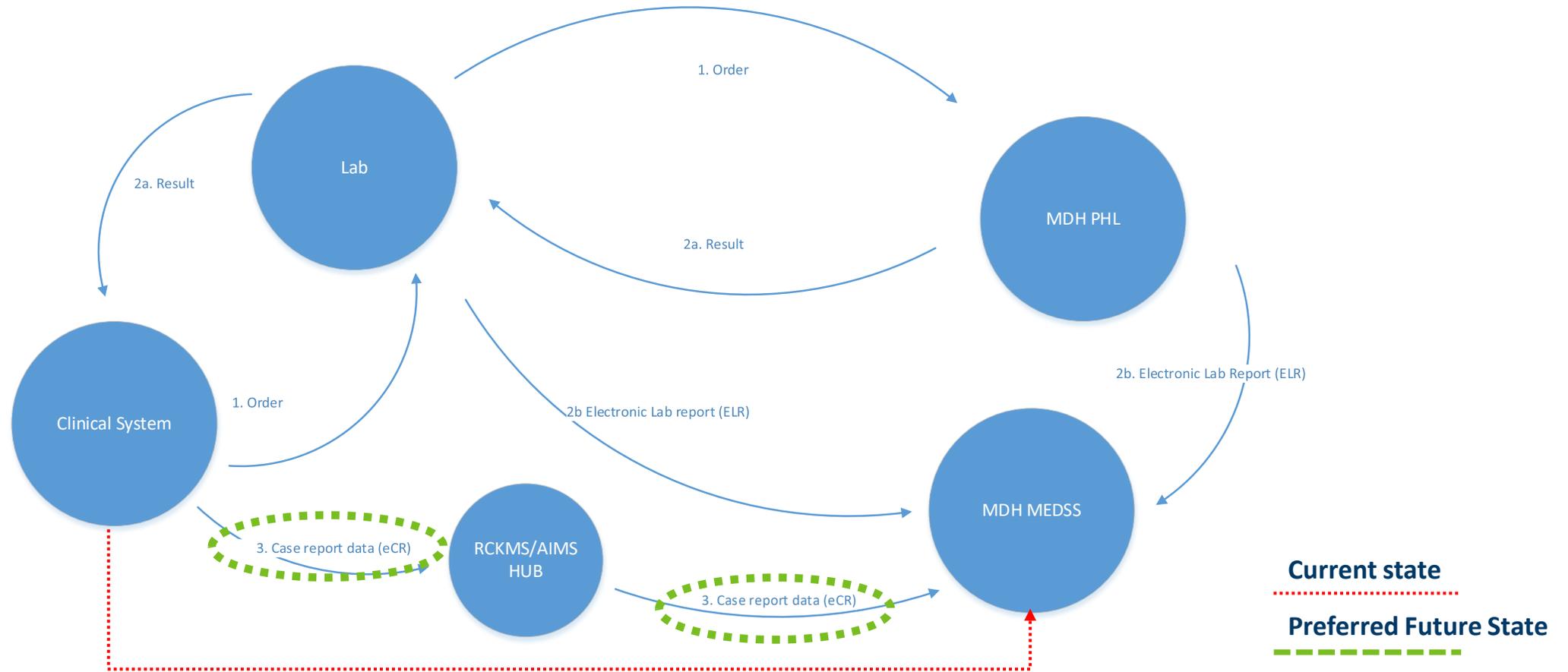
Current Data Flow from Provider to Public Health Programs for Infectious Disease Surveillance

- 
- Case reports are paper/phone/fax/manual web entry – lag in reporting and timeliness issue
 - ELRs considered an initial feed and public health requires case report for surveillance needs
 - ELRs can be delayed with reporting lag (some are daily feeds & not real-time): timeliness issue
ELRs from some reference labs have minimal info & lack key data elements: completeness issue
 - Public Health perspective
Significant resources are spent to track down additional needed information
 - Provider and Health systems perspective
Significant resources are spent to track down additional needed information to report to public health + possibility of under-reporting due to manual process

Promise of Electronic Case Reporting (eCR)

- 
- Critical need of timely & complete data has been brought to forefront in context of COVID-19
 - ELRs a success (thanks to Meaningful Use) and is an essential notification for public health action and much needed lab confirmation of infectious pathogens
 - eCR from electronic health records provides critical clinical and demographic data not included in lab report
 - eCR will provide contextual information on cases and the value-proposition extends well beyond COVID-19 to all reportable conditions
 - Resources can be reallocated to other essential services by both public health and the providers/health systems

Disease Reporting Data Flow



- eCR is a national initiative and collaborative effort of
 - Centers for Disease Control and Prevention (CDC)
 - Association of Public Health Laboratories (APHL)
 - Council of State and Territorial Epidemiologists (CSTE)
- All healthcare providers are required to report certain infectious diseases to the public health agency responsible for their jurisdiction
- Currently the reporting occurs in various formats
 - phone, fax, web-data entry and non-standard electronic flat files
- eCR supports data delivery to public health in real time
 - uses standard codes to automatically trigger the eCR
 - transfers relevant, clinical data to a shared services platform for reporting
- These transactions are standards-based
 - major step towards interoperability in healthcare ecosystem

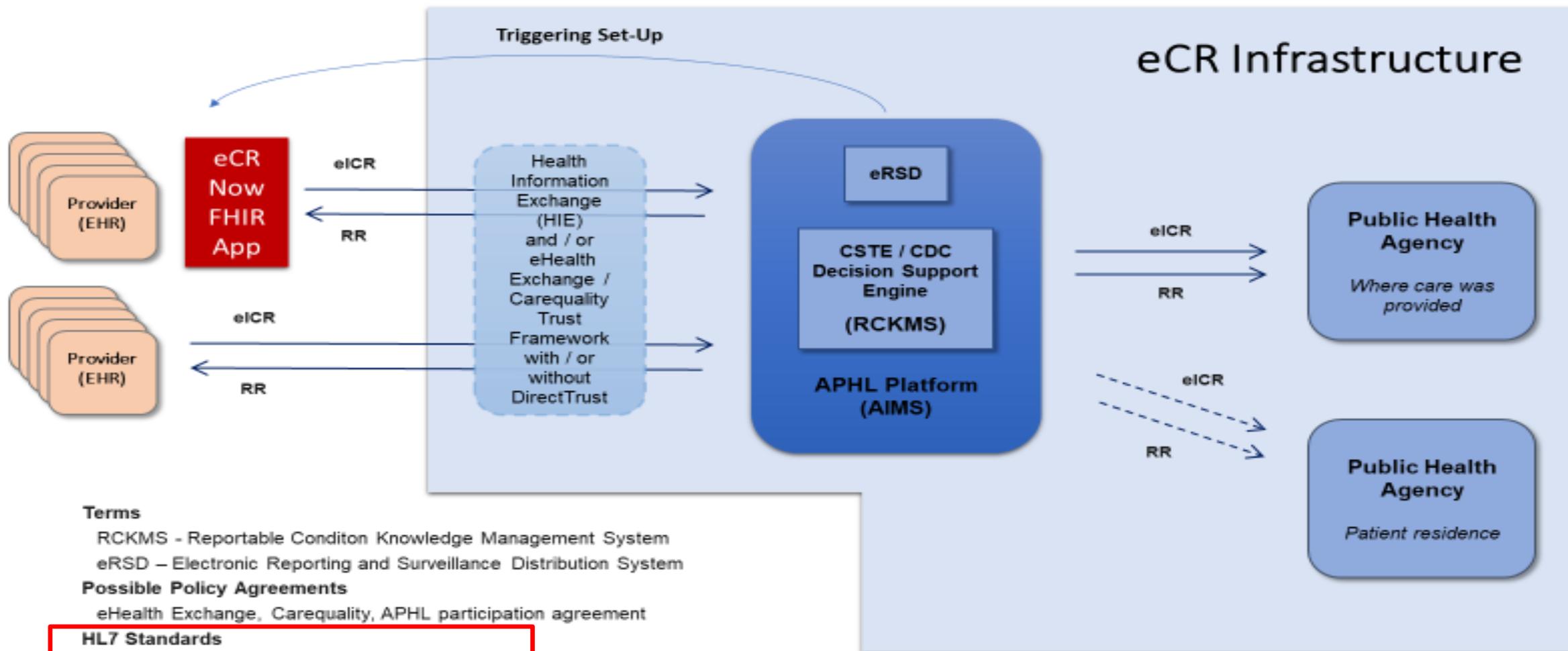
Acronyms / Alphabet Soup

- CDC – Centers for Disease Control and Prevention
- APHL – Association of Public Health Laboratories
- CSTE – Council of State and Territorial Epidemiologists
- MDH – Minnesota Department of Health
- EHRs – Electronic Health Records
- AIMS – APHL Informatics Messaging Services
- RCKMS – Reportable Condition Knowledge Management System
- MEDSS – Minnesota Electronic Disease Surveillance System
- eRSD – Electronic Reporting and Surveillance Distribution System
- eCR – Electronic Case Reporting
- RCTC – Reportable Condition Trigger Codes
- eICR – Electronic Initial Case Report
- RR – Reportability Response



eCR Infrastructure

Source: eCR Team at CDC and AIMS



Terms

RCKMS - Reportable Condition Knowledge Management System
 eRSD - Electronic Reporting and Surveillance Distribution System

Possible Policy Agreements

eHealth Exchange, Carequality, APHL participation agreement

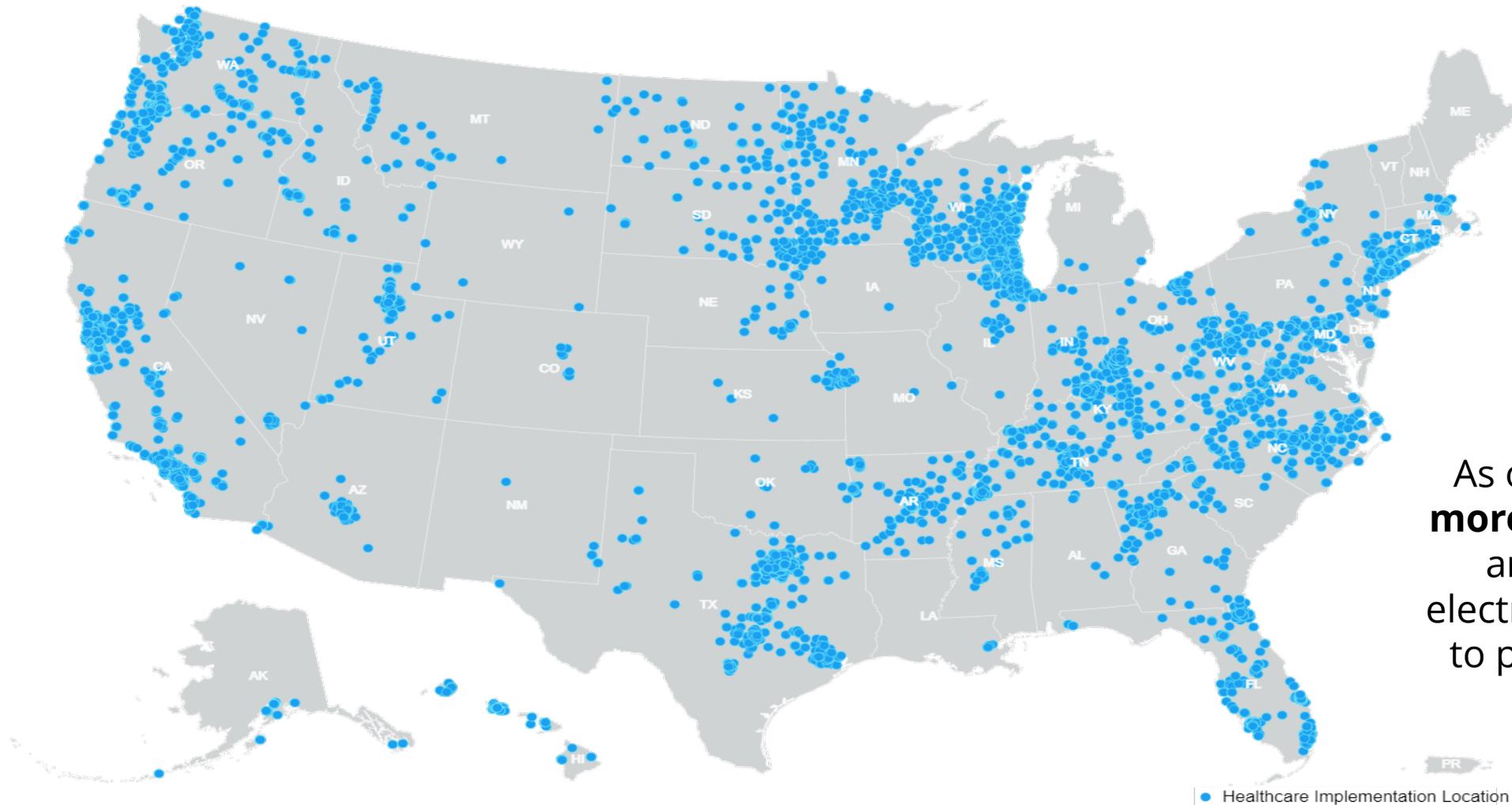
HL7 Standards

eICR - Electronic Initial Case Report CDA v1.1
 RR - Reportability Response CDA v1.0

- **Exchange standard**
 - HL7 document
 - HL7 CDA® R2 Implementation Guide: Public Health Case Report, Release 2 - US Realm - the Electronic Initial Case Report (eICR)
- **Vocabulary standards**
 - Diagnosis (SNOMED, ICD-10 CM)
 - Lab Orders (LOINC)
 - Lab Results (SNOMED)
 - Lab Result Test Name (LOINC)
 - Medication (CVX, RXNORM, SNOMED)

eCR COVID-19: Location of Reporting Facilities

Source: eCR Team at CDC and AIMS



As of December 10, 2021,
more than 10,100 facilities
are sending COVID-19
electronic initial case reports
to public health using eCR

eCR @ MDH – Current Status

As of
Jan 2022

Connected to AIMS platform and have been receiving COVID-19 data daily

Receive data from other states connected to eCR-AIMS for COVID-19 cases who are MN residents

Incoming electronic eCR data, followed by automatic upload of file into surveillance system since Aug 2020; working on parsing of priority eCR data

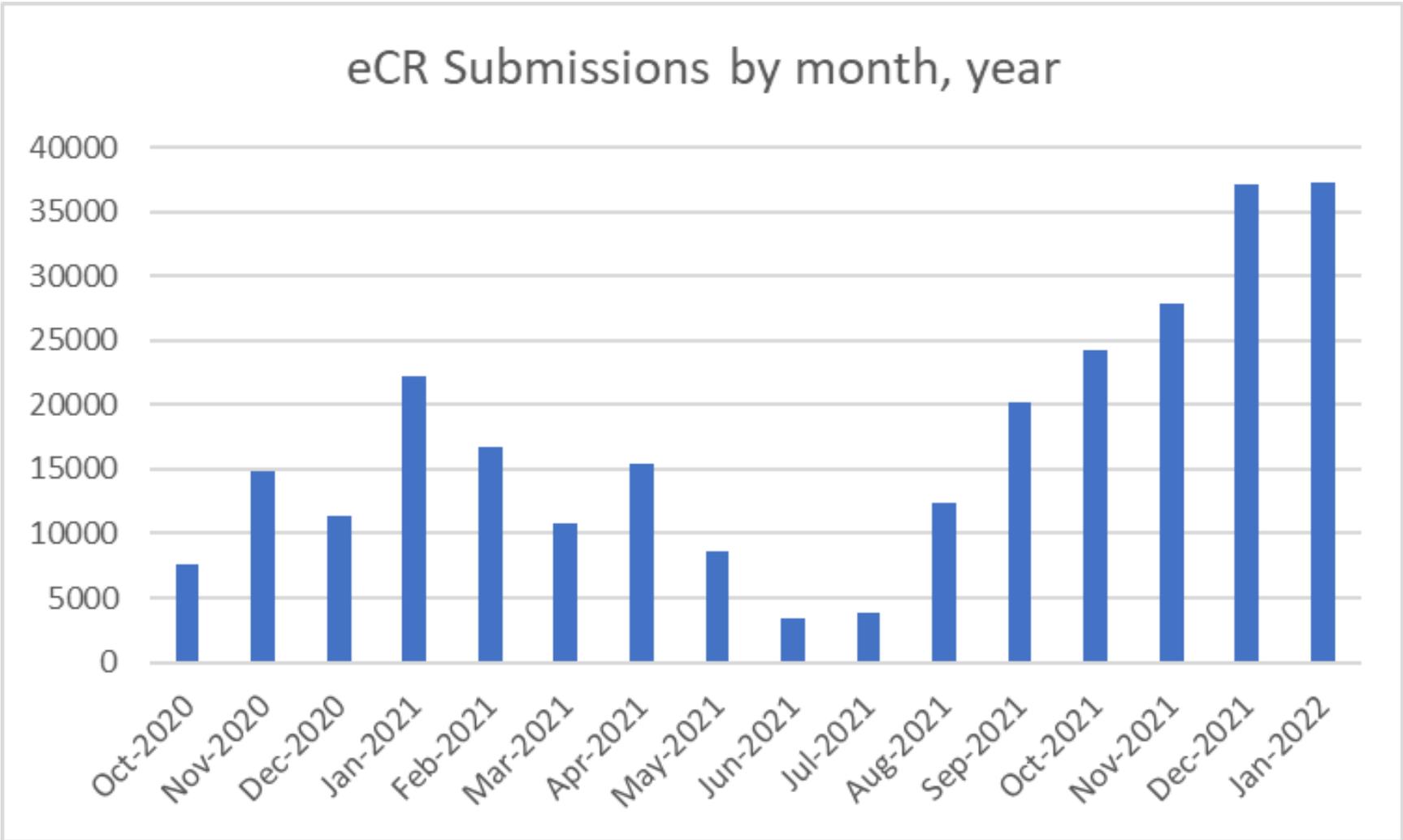
eCR thru AIMS is currently the only option supported by MDH to streamline data input

Currently doing outreach to health systems in MN to facilitate eCR on-boarding

Declared readiness for eCRs for all reportable conditions

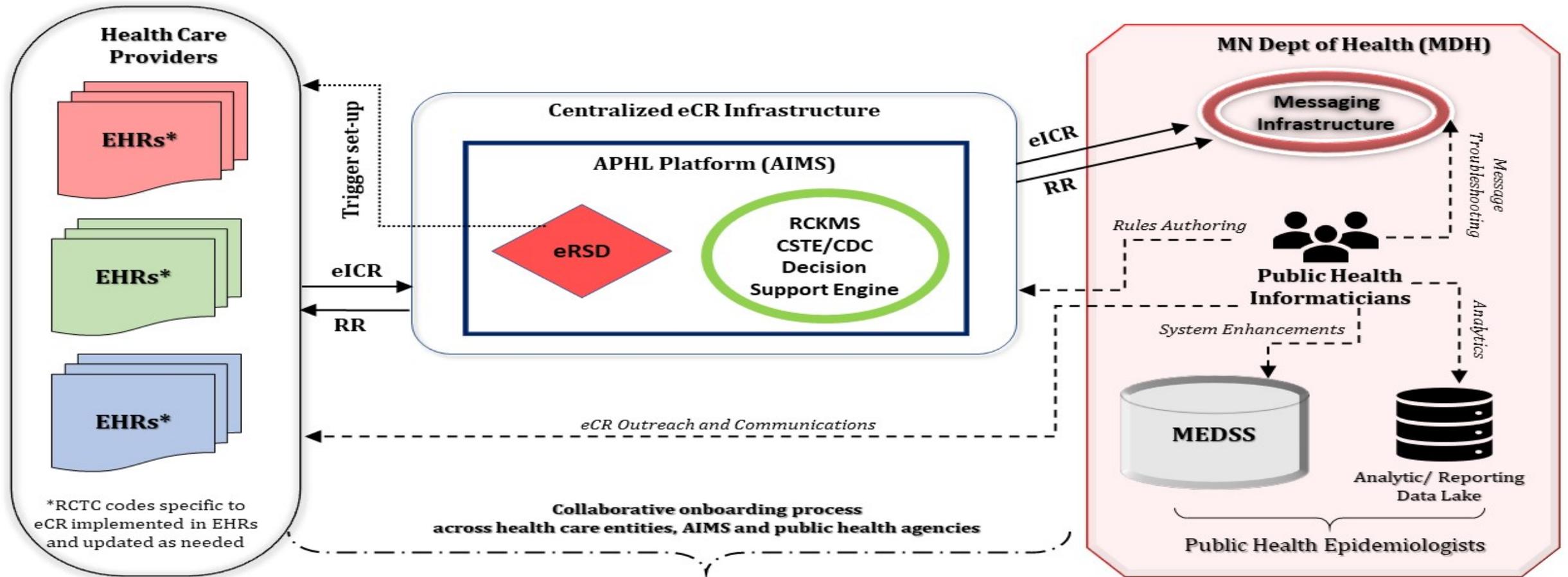
Receiving daily eCR data from 3 FQHCs and 4 major health systems (for COVID-19)
3 more health systems have expressed interest

eCR Reports @ MDH for COVID-19



*Additional MN submitters added:
-Jan, 2021 and Dec, 2021*

eCR Data Flow Minnesota Department of Health (MDH)



Key Clarifications to Get from your EHR Vendor

- EHR ability to implement trigger codes for COVID and all reportable conditions
- Cost and timeline for implementation
- Ability to receive and review RR in a meaningful way
 - When eCR goes out, an RR is always returned whether it was sent to MDH or no report was required
 - May have additional follow-up information – send specimen to MDH
 - Identify a process to know which patients to still report manually

eCR Onboarding Process with AIMS

- **MEDSS eCR team** works with health systems and providers in MN along with CDC/AIMS colleagues to elicit interest
- **CDC/AIMS eCR Onboarding Team** will guide the implementation process
- Cohort-based implementation for Epic EHRs
 - Legal/Policy – 3 approaches for healthcare sites to engage the Association of Public Health Laboratories (APHL) with an appropriate HIPAA legal agreement
 - Technical process:
 - Establish AIMS Connectivity for Testing
 - Testing
 - Production go-live process
 - MDH eCR team will be involved all along for support as needed

APHL Expectations for eCR Onboarding*

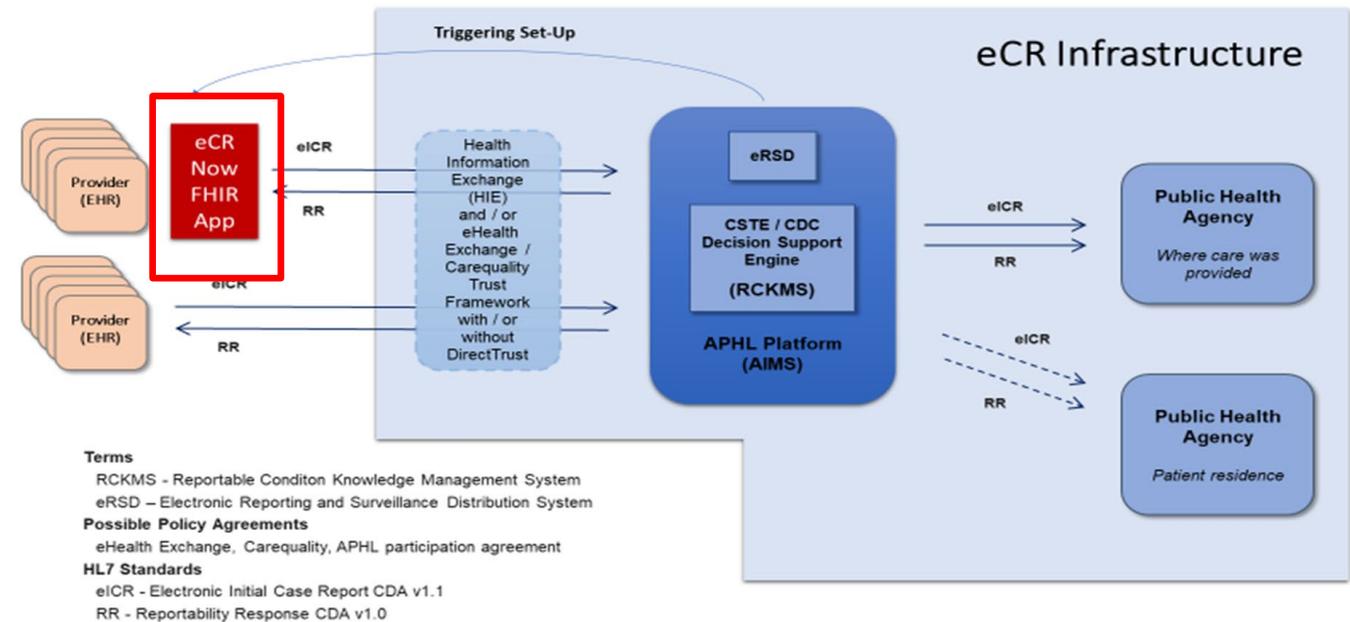
- 1) Technical Requirement: a technical connection to AIMS platform: A or B below**
 - A. Direct Secure Messaging (DSM) through a Health Information Service Provider (HISP)
 - B. XDR transaction push through eHealth Exchange Hub to AIMS.

- 2) Policy Requirement: one method for documenting participation agreement: A, B or C below**
 - A. Member of Carequality or be associated with as client of 'EHR' vendor in Carequality
 - B. Member of eHealth Exchange path (requires DURSA)
 - C. Sign Business Agreement with APHL for eCR (eCR Participation Agreement)

**National eCR onboarding team will provide guidance during initial call and regular on-boarding calls once an entity expresses interest in eCR*

eCR Readiness

- MDH has declared readiness to receive all reportable diseases
 - COVID only receiving presently
- Epic EHRs have FastTrack process as part of national onboarding strategy
 - Other EHRs are under consideration as well
- Providers can consider using eCR Now FHIR App for EHRs that are not eCR enabled
 - For more info: <https://ecr.aimsplatform.org/general/ecr-now-fhir-app>



Next Steps

Fast track interest in eCR

- Email ecr@cdc.gov with interest to onboard eCR for your organization
 - Include the MDH eCR team in CC field:
 - Ann Kayser, Ann.Kayser@state.mn.us
 - Jacqueline Cassman, Jacqueline.Cassman@state.mn.us
 - Priya Rajamani, Priya.Rajamani@state.mn.us
 - Melinda Hanson, Melinda.Hanson@state.mn.us
- Connect with EHR Vendor on eCR capabilities – plan to start implement with COVID eCR and then move to all reportables
- Use the [DSI checklist](#) to continue to determine your organizations' public health reporting priorities for implementation and share with DSI (<https://www.health.state.mn.us/data/interoperability/docs/checklist.pdf>)
 - Discuss any barriers or opportunities for electronic implementation with MDH
 - Plan and coordinate MDH public health reporting improvements through DSI and provide feedback to processes

Additional Information: eCR Use Case

- [Electronic Case Reporting \(eCR\) \(https://www.cdc.gov/ecr/index.html\)](https://www.cdc.gov/ecr/index.html)
- [COVID-19 Electronic Case Reporting for Public Health Agencies \(https://www.cdc.gov/coronavirus/2019-ncov/php/electronic-case-reporting.html\)](https://www.cdc.gov/coronavirus/2019-ncov/php/electronic-case-reporting.html)
- [What is eCR? \(https://ecr.aimsplatform.org/\)](https://ecr.aimsplatform.org/)
- [eCR Now for COVID-19 \(https://ecr.aimsplatform.org/ecr-for-covid-19-reporting/\)](https://ecr.aimsplatform.org/ecr-for-covid-19-reporting/)
- [MDH Electronic Case Reporting \(eCR\) \(https://www.health.state.mn.us/diseases/reportable/medss/ecr.html\)](https://www.health.state.mn.us/diseases/reportable/medss/ecr.html)

Q & A

Thank you.

Webinar materials: [DSI website](https://www.health.state.mn.us/data/interoperability/webinar.html)
(<https://www.health.state.mn.us/data/interoperability/webinar.html>)

Further questions: health.dsi@state.mn.us

eCR specific questions: Health.ElectronicDiseaseReporting@state.mn.us