MN POLST Registry Study Advisory Committee

October 6, 2023

Land Acknowledgement

Every community owes its existence and vitality to generations from around the world who contributed their hopes, dreams, and energy to making the history that led to this moment. Some were brought here against their will, some were drawn to leave their distant homes in hope of a better life, and some have lived on this land for more generations than can be counted. Truth and acknowledgment are critical to building mutual respect and connection across all barriers of heritage and difference.

We begin this effort to acknowledge what has been buried by honoring the truth. We are standing on the ancestral lands of the Dakota people. We want to acknowledge the Dakota, the Ojibwe, the Ho Chunk, and the other nations of people who also called this place home. We pay respects to their elders past and present. Please take a moment to consider the treaties made by the Tribal nations that entitle non-Native people to live and work on traditional Native lands. Consider the many legacies of violence, displacement, migration, and settlement that bring us together here today. Please join us in uncovering such truths at any and all public events.*

*This is the acknowledgment given in the USDAC Honor Native Land Guide – edited to reflect this space by Shannon Geshick, MTAG, Executive Director Minnesota Indian Affairs Council

Welcome

Agenda

1:00 – 1:05 p.m.	Welcome
1:05 – 1:20 p.m.	Scenario & Recommendation Process
1:20 – 1:45	HIE Primer
1:45 – 2:50 p.m.	EMS Scenario & Discussion
2:50 – 2:55 p.m.	Identify SMEs For Scenarios
2:55 – 3:00 p.m.	Closing

Getting Started

- **Advisory Committee Input**
  - Raise your hand
  - Add comments/thoughts in the chat
  - Share thoughts/comment via post meeting link
  - Turn on camera when speaking (if prefer)
- **Public**
  - Listen to conversation
  - Share thoughts/comment via post meeting link found on POLST page: https://www.health.state.mn.us/facilities/ehealth/polst/index.html

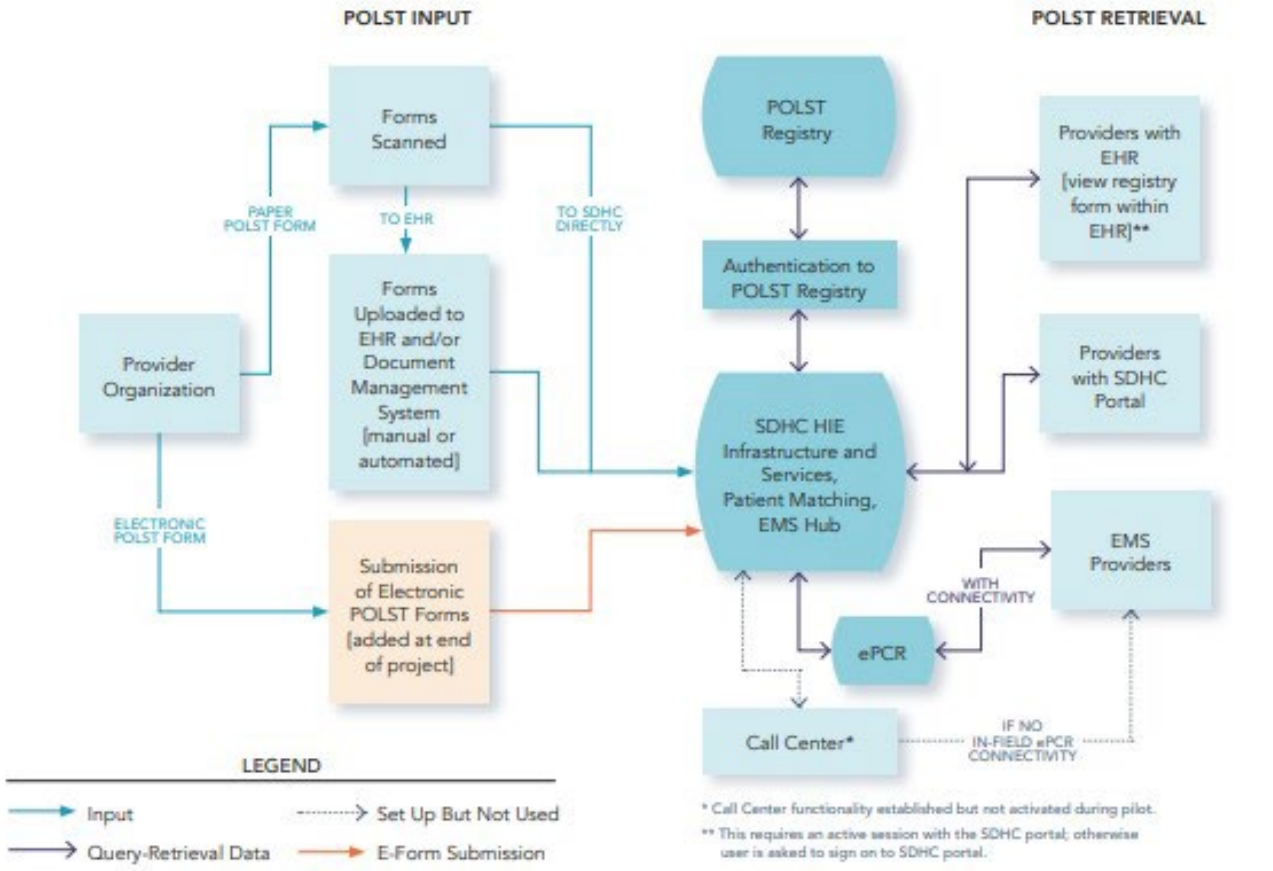
Scenario & Recommendation Process

Proposed Scenarios
High Level Uses for the Registry

- EMS Retrieval (emergency)
- ED Retrieval (emergency)
- Provider Retrieval (non-emergency)
- Provider Input, Update, & Removal
- POLST Admin Functions
- Other Scenarios

San Diego Health Connect High-Level Flow View Example of Structure & Flow

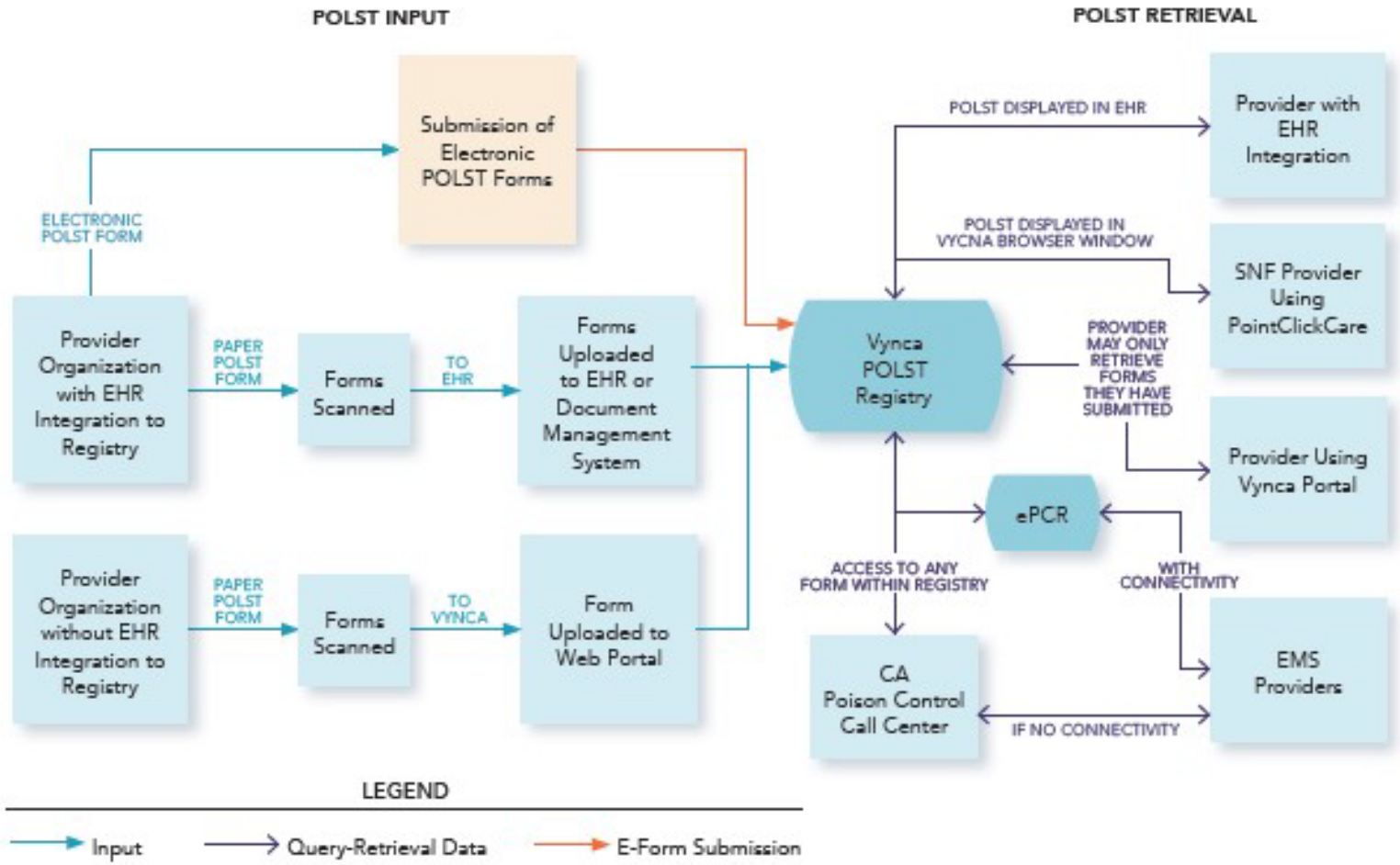
Figure 1. SDHC High-Level Flow View



San Diego Health Connect (https://www.chcf.org/wp-content/uploads/2019/09/CaliforniasPOLSTElectronicRegistryPilot.pdf)

Contra Costa County High-Level Flow View Example of Structure & Flow

Figure 2. Contra Costa County High-Level Flow View



Contra Costa County (https://www.chcf.org/wp-content/uploads/2019/09/CaliforniasPOLSTElectronicRegistryPilot.pdf)

Considerations, Implications, and Opportunities

- Electronic capture, storage, and access of information in the registry
- Procedures to protect the accuracy, security, and confidentiality of registry information
- Limits as to who can access the registry and when
- Individual-centered or family-centered
- Equity (infrastructure, access, accessibility, training, education, or communication)
- Any other action needed to ensure that patients' rights are protected and that their health care decisions are followed (policy, technical, or best practice)

Discussing Scenarios

- SME led discussion at each meeting
  - Complete list at end of presentation
  - Looking for SME/volunteers for scenarios, email kari.guida@state.mn.us by 10/10
- Learn from SME expertise and advisory committee questions and comments
- Identify areas for recommendations
- Project staff will craft more detailed recommendations for review by advisory committee

Governance, Funding, Structure, & More

- Project staff will be looking at other states for governance, funding, and structure options with pros and cons.
- These will be discussed with the advisory committee to identify recommendations in these areas.
- Project staff are looking at statutes/having others do a legal analysis
  - Example MN Health Records Act

Health Information Exchange (HIE) Primer

HIE Definitions

HIE can mean both the verb and the noun

The verb – a lot of HIE is happening in MN under this definition

- **Health information exchange (HIE)** means the electronic transmission of health-related information between organizations according to nationally recognized standards. *Minn. Stat. 62J.498, Subd. 1, paragraph (g).*

The noun – when people say "HIE" they often mean the noun. In MN, that is a Health Information Organization.

- **Health information organization (HIO)** means an organization that oversees, governs, and facilitates health information exchange among health care providers that are not related health care entities as defined in section 144.291, subdivision 2, paragraph (k), to improve coordination of patient care and the efficiency of health care delivery. **Koble-MN is the only state-certified HIO in MN currently.**

HIO Requirements in Minnesota

HIOs are required to be certified by MDH under Minnesota's Health Information Exchange Oversight Law (Minn. Stat. 62J.498-4982). HIOs must meet the following requirements.

Organizational requirements

- Be a legally established organization
- Maintain appropriate insurance
- Have a board of directors or equivalent governing body
- Use financial policies and procedures consistent with generally accepted accounting principles

HIE-related requirements

- Have strategic and operational plans that address governance, technical infrastructure, legal and policy issues, finance, and business operations regarding how they will expand to support providers in achieving HIE goals over time
- Be compliant with national certification and accreditation programs
- Maintain the capability to query for patient information based on national standards
- Demonstrate interoperability with all other state-certified HIOs using national standards
- Demonstrate compliance with all privacy and security requirements required by state and federal law (e.g., HIPAA, MN Health Records Act)
- Connect to the national eHealth Exchange network

For more information, see: Minnesota HIE Oversight Program - MN Dept. of Health (state.mn.us)

Types of HIE / HIE Ecosystem Alignment

TABLE 1. Types and Illustrative Description of Health Information Exchanges (HIEs)

State-designated HIE or Health Data Utility	Community, Regional, or Statewide HIE	Enterprise/Private HIE	Vendor-mediated HIE	National-level Health Information Networks
State agencies or quasi/non-governmental organizations granted authority by legislation, regulation, executive order, or contract to provide statewide technical infrastructure, interoperability services, and develop data exchange policies.	Organizations that provide infrastructure to connect (often unaffiliated) healthcare organizations within a specific geographic area and with shared patients. These organizations may be designated by states for Medicaid or public health uses through various mechanisms. **E.g., Koble-MN**	Supported by a health system or integrated delivery network to facilitate exchange among affiliate provider organizations. May use community or state HIEs to connect to other enterprise networks. **E.g., Private health system HIE**	Supported by an electronic health record (EHR) vendor, whereby the vendor offers the technical infrastructure to facilitate data exchange between their customers. **E.g., Epic EHR Network**	Network of organizations exchanging health data at a national level, with coordinated oversight and governance. **E.g., National eHealth Exchange, TEFCA QHINs**

Sources: Information provided by Civitas Networks for Health. [unpublished].
Dixon B. Health Information Exchange: Navigating and Managing a Network of Health Information Systems. 1st ed. (2016)
Everson J. "The implications and impact of 3 approaches to health information exchange: community, enterprise, and vendor-mediated health information exchange." Learning Health Systems. (2017)
ONC. The Draft Trusted Exchange Framework: Q&A Session.

Definitions:
EHR: electronic health record

TEFCA: Trusted Exchange Framework and Common Agreement

QHIN: Qualified Health Information Network (approved to participate in TEFCA)

Minnesota e-Health Initiative

Vision: *All communities and individuals benefit from and are empowered by information and technology that advances health equity and supports health and wellbeing.*

- A public-private collaboration established in 2004
- Legislatively chartered, appointed 25-member Advisory Committee
- Coordinates and recommends statewide policy on e-health
- Reflects the health community's strong commitment to act in a coordinated, systematic and focused way

Recent MN Historical Information

- 2018 Minnesota HIE Study: Minnesota HIE Study - MN Dept. of Health (state.mn.us)
  - Recommendations to move MN in the direction of a connected networks model, including modifying MN Health Records Act, establish a Task Force, and MN legislature act on the recommendations of the Task Force
- 2018-2019 Minnesota HIE Task Force: Minnesota e-Health HIE Task Force - MN Dept. of Health (state.mn.us)
  - Provided input for governance, authority, and financing of a connected networks approach to HIE
  - Identified **critical success factors** for HIE

Critical Success Factors for HIE (identified by HIE Task Force, aligns with POLST environment)

- Full participation is needed to achieve the most value for all
- At least one HIO is needed in MN to fill HIE connectivity gaps
- Financial commitment is needed from participants, the state and all other stakeholders that participate to ensure long-term sustainability
- **Alignment** with other national, federal and state HIE activities in order to be efficient and effective is needed, and it should depend on a flexible governance process that can meet evolving HIE needs

Where are we now? (2023)

- MN HIE planning went on hiatus during COVID-19 pandemic
- Many recent national developments to create a national connected networks for HIE evolved - TEFCA
- Minnesota has one state-certified HIO, Koble-MN, with capabilities to connect providers in MN and participate in national HIE efforts, will be able to exchange data with organizations participating in TEFCA
- Minnesota HIO is primarily currently focused on implementing **public health** transactions between hospitals and MDH, due to recent **funding** to public health

HIE Considerations for POLST Registry

- POLST Registry meets definition of HIE (the verb) in statute and is a likely candidate for an HIO (the noun) to implement
- Need to consider how to obtain full participation and connections to all organizations who need to input and receive access to POLST forms (i.e., legal agreements, fees, governance, policy development)
- Large vendor-mediated HIE (e.g., Epic) may have some capabilities to contribute for Epic organizations with an HIO capabilities and would not be a statewide solution
- Will need to monitor developments at national level on HIE and align accordingly
- MDH may not be ideal candidate to “house” a POLST registry due to MDH HIE Oversight responsibilities

EMS Scenario Discussion

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POLST Considerations for EMS

Dylan Ferguson | Executive Director

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What Makes up Minnesota's EMS System?

Emergency Medical Responder (EMR)

- 144E.27 Subd. 2
- 40 hours of training
- Often work for fire departments or law enforcement agencies, which may or may not be MRU’s
- Bleeding control
- CPR/AED
- Vital signs
- 16,058 certified EMR’s in Minnesota

Emergency Medical Technician (EMT)

- 144E.28
- 180 – 200 hours of initial training
- Written and practical examinations required
- Often employed by organizations who provide ambulance service (hospitals, fire departments, municipalities, non-profits. However also work in other roles
- All the capabilities of an EMR
  - Limited medication administration
  - Ability to establish IV lines (fluid only)
- 10,395 certified EMT's in Minnesota

Paramedic

- 144E.28
- 1,000 – 2,000 hours of training and clinical internship from an accredited program
- Written and practical examinations required
- Often employed by organizations who provide ambulance service (hospitals, fire departments, municipalities, non-profits. However also work in other roles
- All the capabilities of an EMT
  - Advanced airway management (Intubation)
  - Broad medication administration
  - Cardiac monitoring, electrical therapy
  - Scope of what is and is not permissible is set by the EMS agency medical director that the paramedic works for
- 3,758 Paramedics in Minnesota

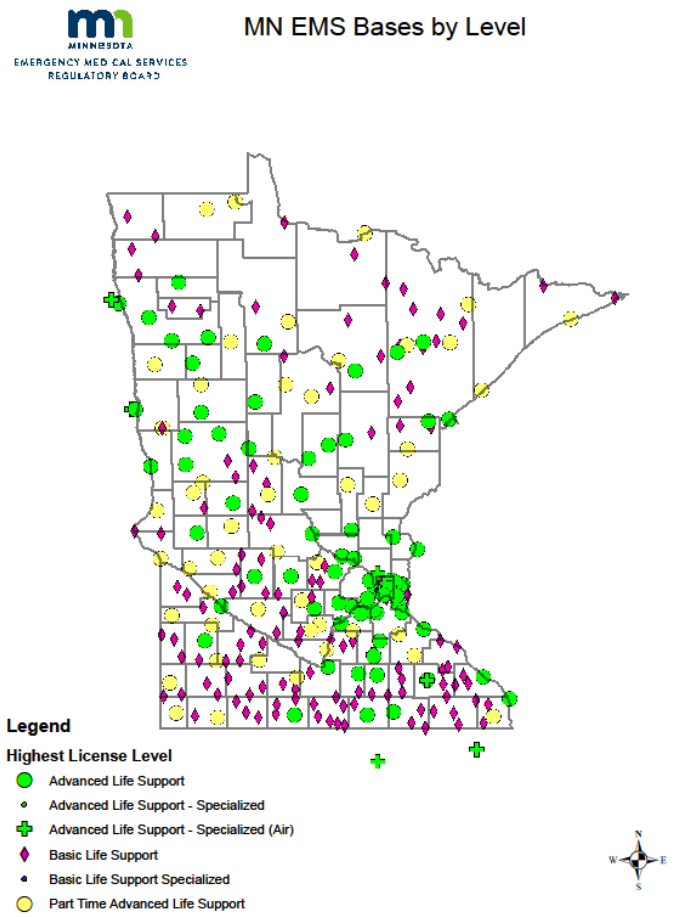
Types of EMS Organizations

- 3 Pertinent license and registration types for EMS organizations
  - Advanced Life Support 144E.101 Subd. 7
    - At least 1 paramedic and 1 EMT on each ambulance
  - Basic Life Support 144E.101 Subd. 6
    - At least 1 EMT and 1 EMR on each ambulance
  - Medical Response Unit 144E.275
    - At least 1 EMR or EMT
    - Voluntary registration
  - Other Fire Departments and Law Enforcement agencies who provide first response services
  - Unrecognized and unregulated first responder groups

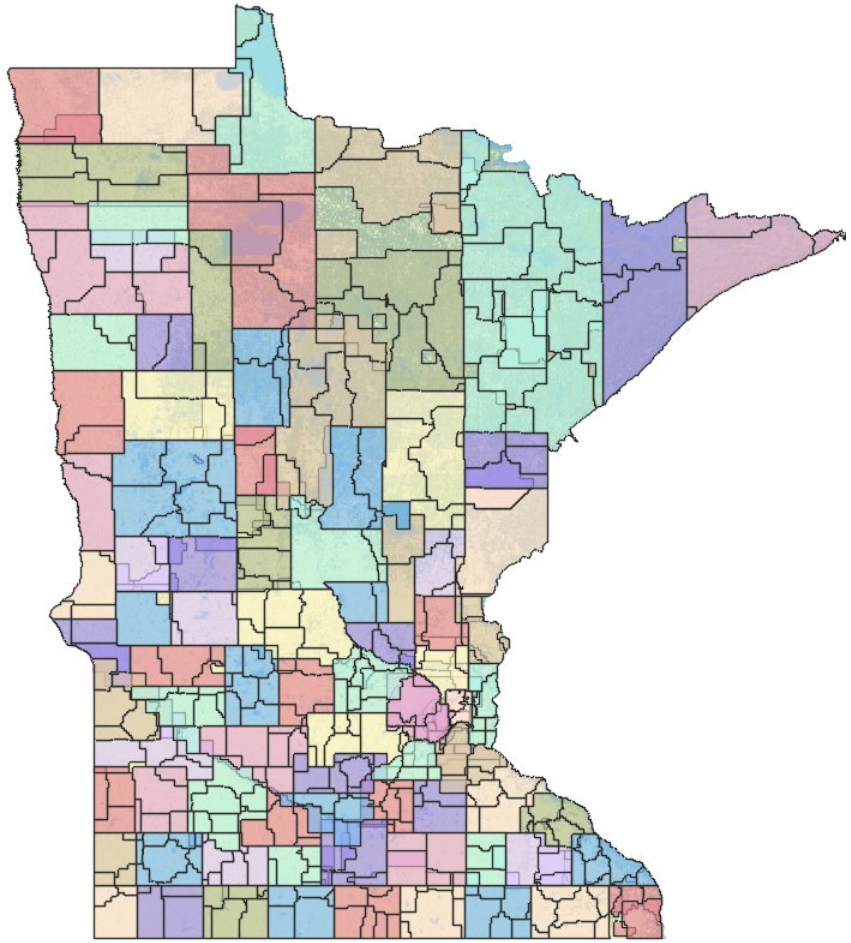
256 Ambulance Licenses

74 Registered MRU's

Ambulance Bases by Level



Service Boundaries



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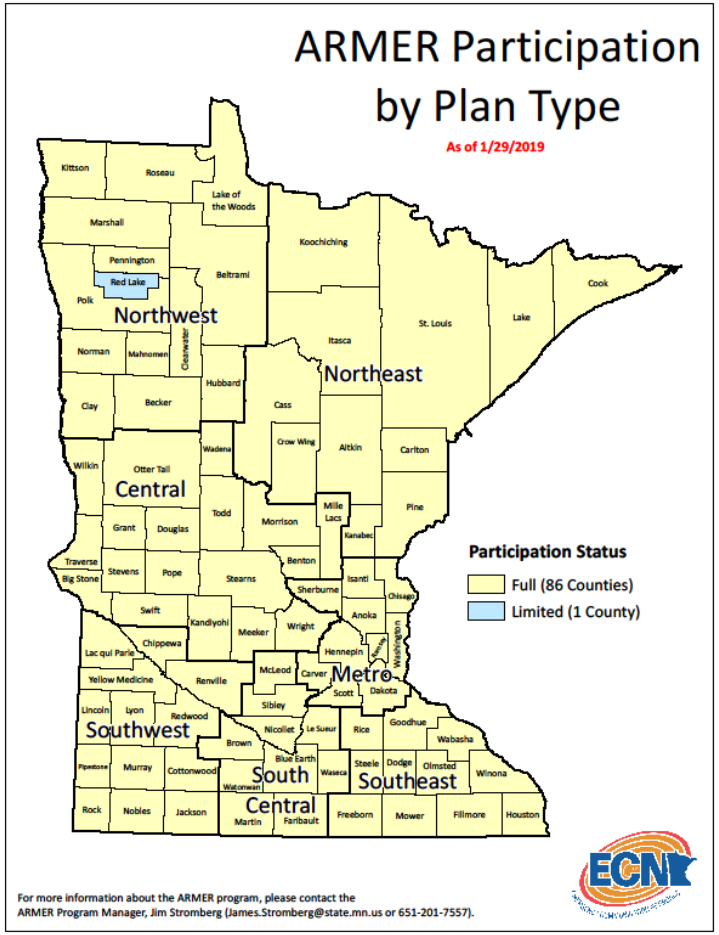
EMS Communication Systems

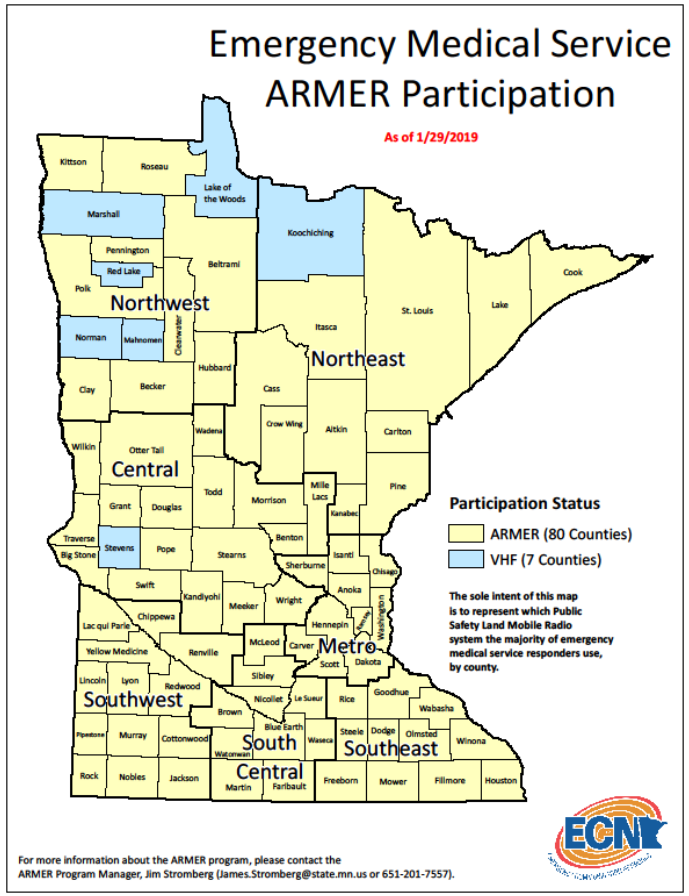
Communication Systems

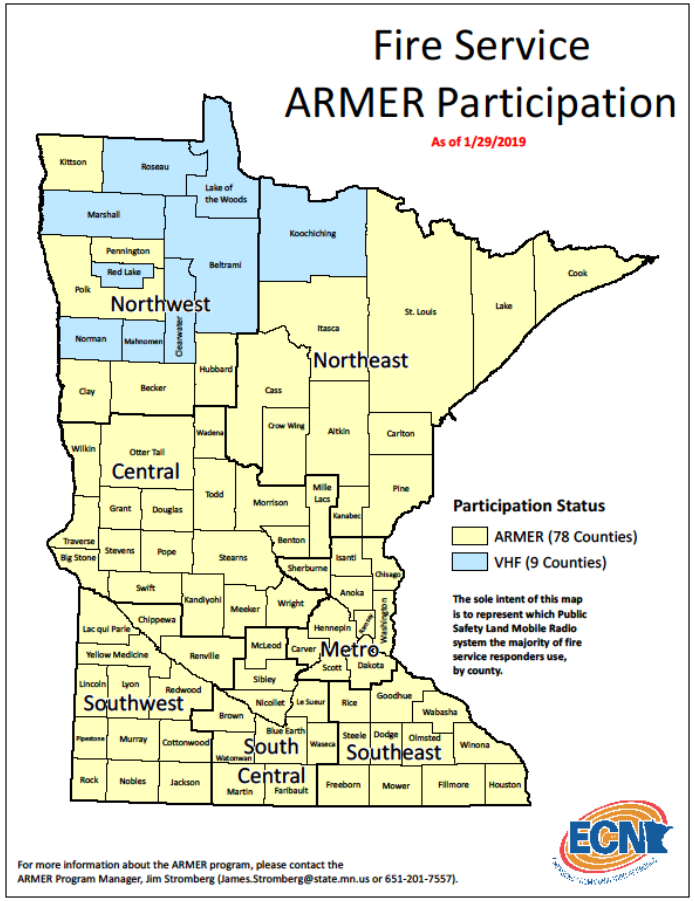
- No two EMS operations will communicate the same way, there are a lot of small variations amongst policies and procedures
- Cell Phones
  - Used in many areas
  - Lots of different policies on the use of personal devices
  - HIPAA (Health Insurance Portability and Accountability Act) considerations
- ARMER (Allied Radio Matrix for Emergency Response) Radio System
  - 700-800 MHz Digital Radio System
  - Dedicated to Public Safety
  - Has encryption capabilities, but comes with an additional cost for those types of radios

ARMER Overall County Participation



ARMER Fire/EMS Usage





Communication Systems Used

- VHF radio system
  - Legacy radio system
  - Unencrypted
  - Relies on a network of towers and repeaters
- Other platforms
  - Twiage/Pulsara
  - Limited usage
  - Relies on cellular data

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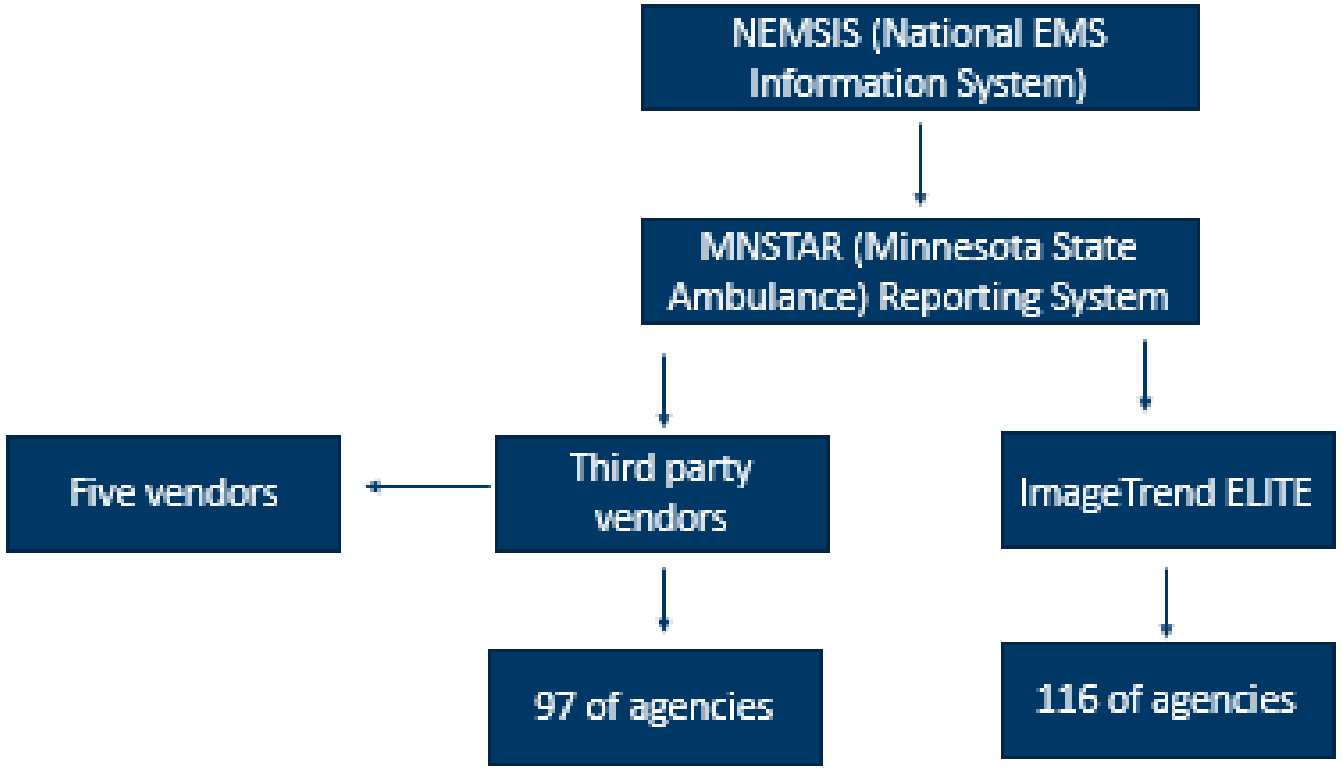
Patient Care Reporting Data

PCR Submission

- PCR stands for patient care report
  - For those in the hospital world when you hear PCR think generally electronic medical record.
  - Typically, one way data flow, field EMS providers can enter data, but typically cannot reference historical information while in the field.
- Per 144E.123 only licensed ambulance services are required to submit PCR data to the State of Minnesota
- An ambulance is required to file a PCR anytime that an ambulance responds to an emergency or nonemergency response
- Additionally, licensed ambulance services are required to give a copy of the report to the receiving hospital if the patient is transported to a hospital
- Medical Response Units are not required to submit data, although if they wanted to provide it, we would take it.

PCR Hierarchy



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POLST Registry Considerations for EMS

Access Limits

- Primary decision point related to EMS
  - Access to organizations vs access to credentialed individuals
    - Amount of accounts vs level of audit/monitoring
  - If individual account for all credentialed providers, could have difficulties getting adoption and people to set them up.
  - Large number of credentialed individuals who are not practicing EMS could result in unneeded access
  - If an organization access, or the organizations controlling access point
    - Where is the line drawn ambulance services and MRU's
    - What about completely unrecognized first responder groups and/or law enforcement
  - Can information be accessed from personal devices would be another decision point

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Pathway Considerations

Direct Retrieval via PCR

- Possible but challenges getting to scale
- Multiple software vendors
- Not all vendors would be able to accommodate such a connection
- Each agency with their own system would have to establish their own connection to a registry
  - Financial implications from an EMS agency perspective

EMS Retrieval via Portal (Demographics)

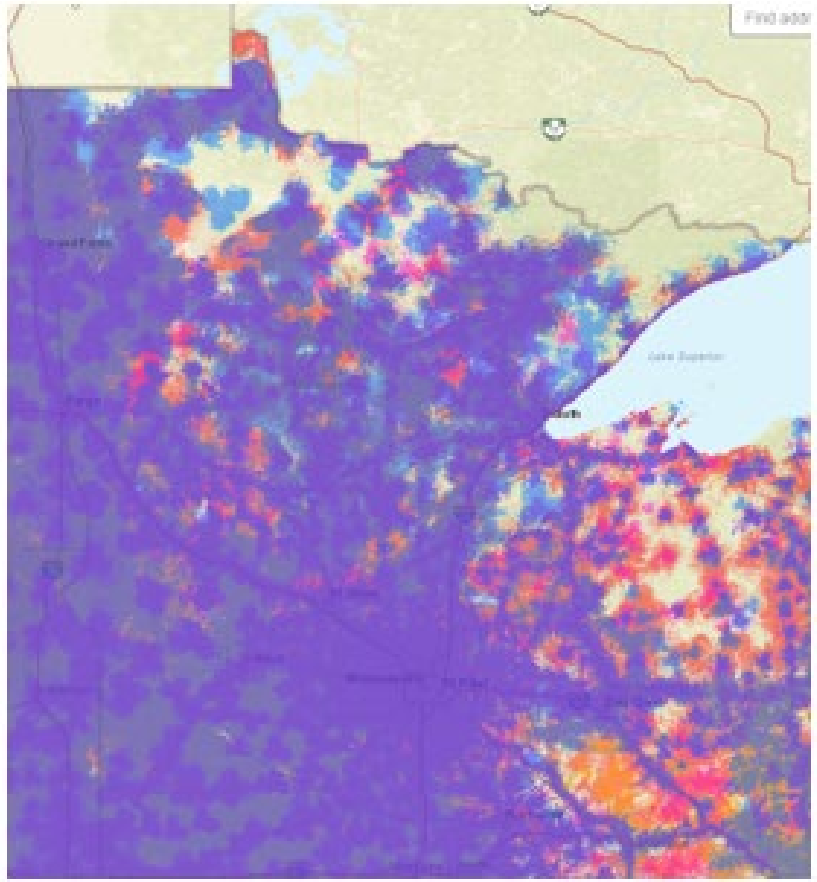
- Depending on some of the previous decision points that we discussed, this could be simple or complex
  - Device ownership
  - Cellular data connection
  - How many and which identifiers required to search?
    - Not all information may be available at the onset of an EMS response
  - Potential perception of public/family of playing on phone, but was really just accessing information

EMS Retrieval via Portal (Bar Code)

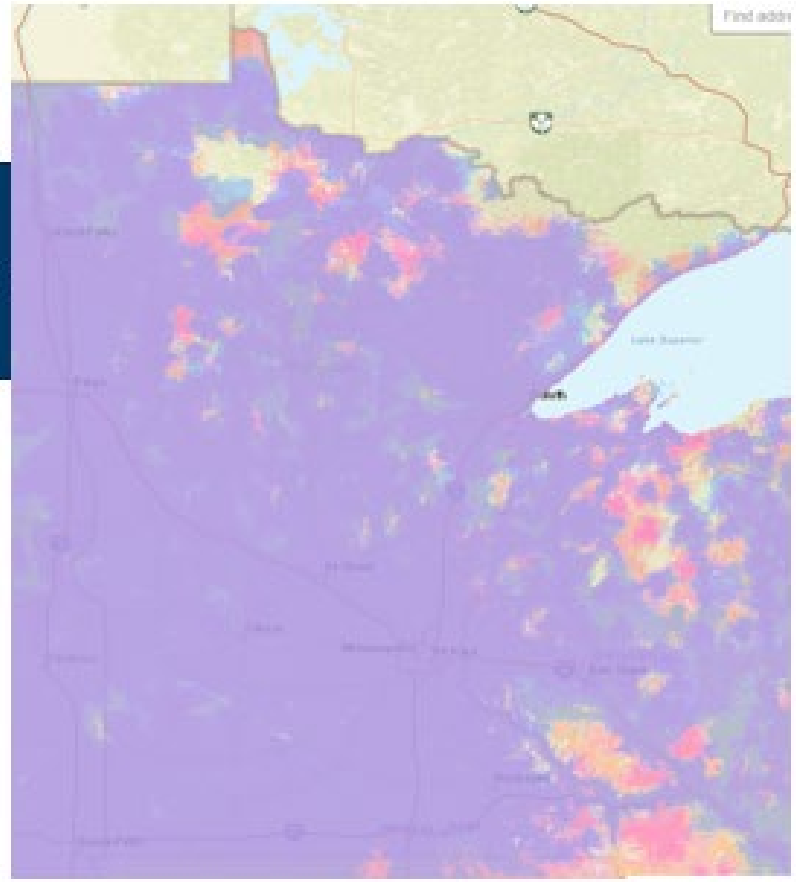
- Where would the bar code be coming from and originating from?
- In the EMS environment a bar code being present would not likely be routine
- Most useful situation would be a bar code that could be read by a cell phone, perhaps a QR readers
- Ambulances do not routinely have traditional bar code scanners as hospitals and other care environments do.

Cellular Data and Voice Coverage

LTE Data

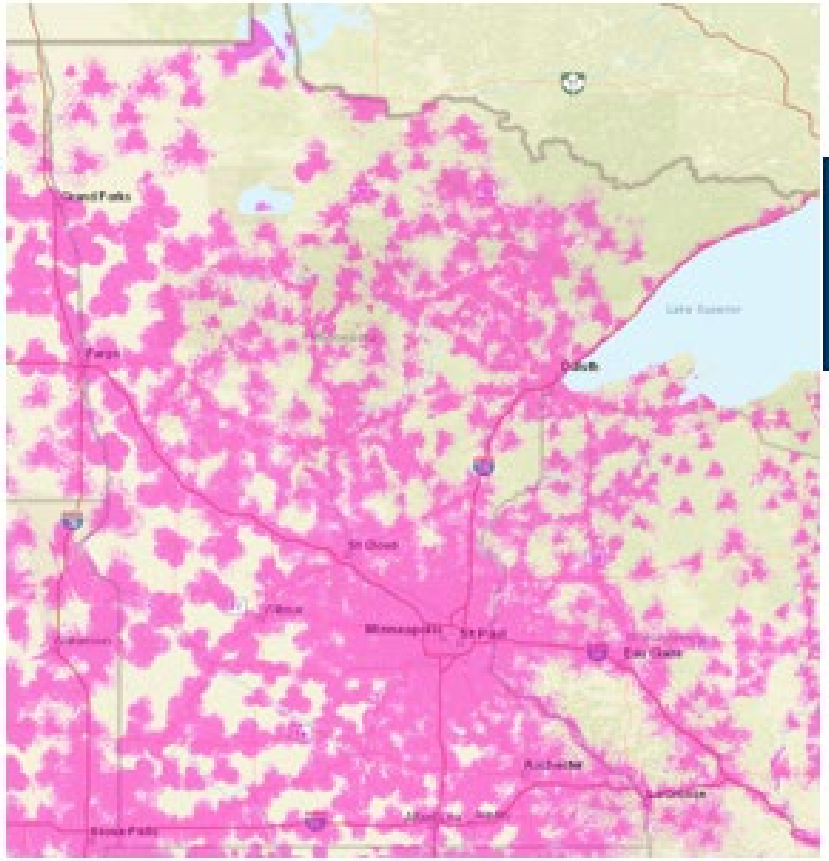


LTE Voice

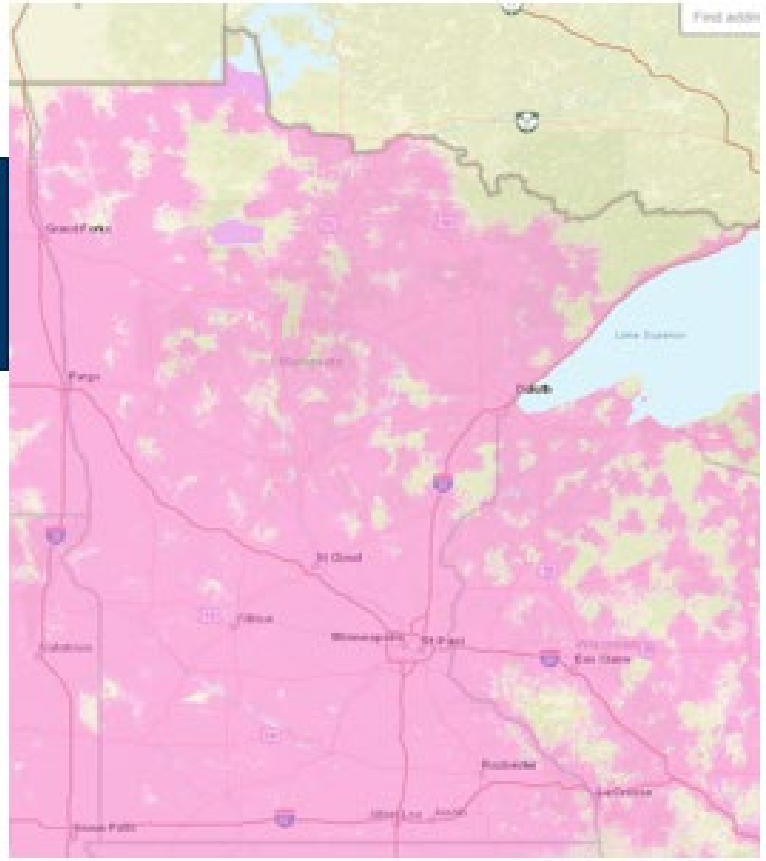


Single Carrier Coverage

T-Mobile LTE Data



T-Mobile LTE Voice



Call Center (Phone)

- In many areas, would be a great way to access
- EMS providers often use cell phones to call for medical direction
- Cellular coverage issues in some areas
- Not all ambulances equipped with dedicated cell phones
- Liability concerns of not being able to physically view the document independently (out of scope)

Call Center (Radio)

- Could utilize ARMER radio system to call for information over digital radio
- Not all communications are encrypted although some are
- Costs of encrypted radios
- HIPAA not likely an issue, 45 C.F.R 164.501 allows for information to be shared for treating patients or for operational purposes. Any scanner intercept would likely be considered an incidental disclosure
- However, additional work would have to be done to evaluate against the Minnesota Government Data Practices Act and/or the Minnesota Health Records Act Minn Stat. 144.291 – 144.298
- Easier to manage and communicate in chaos of a scene environment
- Liability concerns of not being able to physically view the document independently (out of scope)

Resources

- https://fcc.maps.arcgis.com/apps/webappviewer/index.html?id=6c1b2e73d9d749cdb7bc88a0d1bdd25b
- https://dps.mn.gov/divisions/ecn/programs/armer/Pages/default.aspx

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Thank You!

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651-2018-2806

Identify SME for Scenarios

SME/Volunteers

- A few volunteers needed for each scenario and related pathways
- SMEs for:
  - ED retrieval
  - LTC & Provider retrieval (non emergency)
  - LTC & Provider input, update, and removal
- If time allows
  - Academic research (outside of continuous quality improvement)
  - Individual/patient access to the registry
- Email kari.guida@state.mn.us your interest by Tuesday 10/10

EMS & ED Retrieval

- EMS Retrieval via ePCR
- EMS Retrieval via Portal (demographics)
- EMS Retrieval via Portal (bar code)
- EMS Retrieval via Call Center with phone
- EMS Retrieval via Call center with Radio / no cell or connectivity
- Others

- ED Retrieval with EHR
- ED Retrieval via Portal (demographics)
- ED Retrieval via Portal (bar code)
- ED Retrieval via Call Center with phone
- ED Retrieval via call center with radio/ no cell connectivity
- Others

Input, Update, and Removal

- Provider Inputs POLST via scanned form
- Provider Inputs POLST via EHR
- Provider Inputs POLST via ePOLST
- Provider Updates POLST (this could be a remove old + input new)
- Provider removes POLST (death, patient/individual changes mind)
- Others

Retrieval (non-emergent)

- Provider Retrieval individual POLST via EHR
- Provider Retrieval via Portal (demographics)
- Provider Retrieval via Portal (bar code)
- Provider prints POLST for patient/family
- Provider runs list of POLST with signature of provider (EHR or POLST report)
- Others

Other Scenarios

- Admin runs and provides data for academic research
- Individual can access/view only their POLST
- Individual can request removal/void POLST
- Individual can call service center
- Other

POLST Administration

- Admin validates POLST information/individual POLST when inputted
- Admin runs patient matching
- Admin runs CQI reports for registry
- Admin runs CQI reports for POLST program
- Admin run report against death records (MN OVR)
- Admin run report against death records (other states)
- Admin approve users/user access/credentials

Closing

Reminders

- Next meeting: October 27 from 1:00 p.m. to 3:00 p.m.
- Appointment has link for post-meeting comments due before 10/11.
- Meeting materials will be emailed by Monday morning.

Thank You!!