Expansion of Electronic Health Records for Long Term Services and Support

Figure 1: Classic EHR

www.onhealthtech.blogspot.com
Table of Contents

Executive Summary ............................................................................................................................................... 3
Assignment ............................................................................................................................................................ 5
I. Problem Statement ....................................................................................................................................... 5
II. Background ................................................................................................................................................... 6
   Federal Electronic Health Records Legislation ............................................................................................. 6
   HITECH Act ........................................................................................................................................................ 7
   Patient Protection and Affordable Care Act (PPACA) .................................................................................... 7
   Electronic Health Records Studies..................................................................................................................... 8
   Rand Corporation Studies .................................................................................................................................. 8
III. Federal EHR Incentives and Grants ................................................................................................................ 9
   Medicare and Medicaid EHR Incentive Program ............................................................................................. 9
   State Innovation Models Initiative ...................................................................................................................... 9
      Minnesota’s SIM Grant .................................................................................................................................... 9
   State Health Information Exchange Cooperative Agreement Program ..................................................... 10
   TEFT Grant ...................................................................................................................................................... 11
IV. Overview of Current EHR Status in Minnesota ............................................................................................ 12
   Minnesota EHR Mandates................................................................................................................................. 12
   Minnesota E-Health Initiative ............................................................................................................................ 13
   Exclusion of Long-Terms Services and Supports ............................................................................................ 14
      EHR Use for LTSS in Other States .................................................................................................................. 14
   Current Minnesota EHR Investments/Projects Underway ............................................................................. 14
      Minnesota’s Medicaid HIT Roadmap/Minnesota’s EHR Incentive Program .............................................. 14
V. CCA’s Vision for Electronic Health Records .................................................................................................. 16
   System-to-System Semantic Interoperability .................................................................................................... 16
   Opportunities to Achieving the Vision ............................................................................................................... 17
      Timing ......................................................................................................................................................... 17
      Existing Minnesota EHR Projects can be Leveraged .................................................................................. 17
      Other DHS Projects can be Leveraged .......................................................................................................... 19
   Challenges to Achieving the Vision .................................................................................................................. 21
      DHS is Not Seen as a Key Stakeholder ........................................................................................................... 21
      LTSS Software Vendors Currently Don’t Have Clear Standards .................................................................. 21
      Personal Health Records Require Broad Interoperability ......................................................................... 21
      Costs for LTSS Providers Prohibitive .......................................................................................................... 22
VI. Summary and Recommendations ................................................................................................................ 22
   Impact of DHS not Implementing a LTCC EHR/HIE ..................................................................................... 23
**Executive Summary**

The current state of electronic health record (EHR) development does not address the needs of persons who use long-term services and supports (LTSS) and their caregivers, providers, or payers. The adoption goal and financial incentives for 2015 are targeted toward hospitals, clinics, clinicians, and pharmacies. The adoption goal for LTSS is 2020.

A Department of Human Services (DHS) Continuing Care Administration (CCA) workgroup was assigned to explore and recommend how CCA can promote the adoption of and expand the utility of EHR for LTSS providers and consumers and their caregivers, in conjunction with Minnesota’s E-Health Initiative (coordinated by the Minnesota Department of Health) and DHS’ on-going work.

To meet this charge, the CCA EHR workgroup identified, reviewed and assessed the current state of the rapidly evolving EHR environment to learn what activities are underway for the federal government, other states, Minnesota Department of Health and DHS and to strategize how CCA can position its efforts.

People receiving LTSS also obtain care from a diverse group of physicians, clinicians, and specialists and experience frequent transitions between health care provider settings. Transitions in care are known to be particularly problematic because relevant information may not be communicated in a timely manner. Health information technology and health information exchange (HIE) have the potential to address the information gap and improve the overall quality and continuity of care of people receiving LTSS, reduce re-hospitalizations, and control health care spending.

The work group proposes a vision for DHS CCA to develop a unified health and LTSS electronic record that is accessible to a person receiving state-funded services and all providers supporting the person, on a need to know basis. Toward that end the CCA EHR workgroup recommends that DHS, working with many other parties:

- *Ensure that providers use certified EHR/HIE products that are consistent with national standards*
- *Develop and set LTSS standards, particularly for assessments and care coordination:*
  - *Continue work with the MDH Adoption and Effective Use Workgroup*
  - *Monitor/Participate in the Office of the National Coordinator for Health Information Technology (ONC) Standards and Interoperability Workgroup*
Establish minimum state LTSS data and exchange requirement

- Require an interoperable Personal Health Record (PHR) function
- Solicit input/provide guidance to current EHR users on LTSS development
- Make available an EHR/HIE option for LTSS providers
- Use existing federal and state grants to providers to test new models and fund adoption
- Participate on the national stage through the Demonstration Grant for Testing Experience and Functional Tools (TEFT) Grant and through DHS’ work with national associations
- Seek funding.

It is clear that DHS will need to develop an EHR for some LTSS providers to use and to function as an interface (HIE) to make some DHS data (assessments, utilization, and quality metrics) exchangeable so that other users (Personal Health Records, lead agencies, and health care providers) can use it. One of the developing, intermediate trends in larger EHR product development is a movement toward certifying the EHR as a Health Information Exchange (HIE) to maintain control of the EHR information space. These other, developing EHR/HIE products would be required to connect to a DHS EHR/HIE as part of the standards for HIE interoperability.

It will also be important that systems CCA has a direct interest in (MnCHOICES, Disability Rate Setting, MMIS, etc.) have the capacity to produce exchangeable data and to interact with this “universe of exchangeable data.” In the long term, we know the answer is a fully interoperable EHR/HIE. In the short-term, CCA will need to proceed incrementally to support expansion of certified EHRs and more limited “point to point” exchange to get CCA to where we want it to be in four to five years.

For the purpose of this report, an electronic health record means a unified health and long-term services and support electronic record. An EHR-Related Acronyms Quick Reference Sheet can be found in Appendix I and a Glossary of EHR Terminology can be found in Appendix II.
Assignment

To explore and recommend how DHS Continuing Care Administration (CCA) can promote the adoption of and expand the utility of electronic health records (EHR) for long-term services and supports (LTSS) providers and consumers and their caregivers, in conjunction with Minnesota’s E-Health Initiative (coordinated by the Minnesota Department of Health) and DHS’ on-going work.

I. Problem Statement

The current state of EHR development does not address the needs of persons who use long-term services and supports (LTSS) and their caregivers, providers, or payers. The EHR adoption goal and financial incentives for 2015 are targeted toward hospitals, clinics, clinicians, and pharmacies. The EHR adoption goal for LTSS is 2020. The existing funding mechanisms provide significant incentives to hospitals, clinics, clinicians, and pharmacies for the adoption of EHRs; similar large-scale incentives are not available for LTSS providers.

The lack of resources for LTSS has created a serious information bottleneck that:

- Limits the achievement of the “meaningful use” goal of system interoperability for clinics, hospitals and pharmacies, and
- Limits projected health care system cost savings that can be achieved by better care transitions, and by funding “single source” EHRs that attempt to provide internal information exchange that limit the appeal of more broadly usable Health Information Exchanges (HIE), which would make interoperability between a variety of EHRs more likely.

According to a December 2012 Report - Opportunities for Engaging Long-Term and Post-Acute Care Providers in Health Information Exchange Activities: Exchanging Interoperable Patient Assessment Information -

“Individuals who receive long-term and post-acute care (LTPAC) services obtain care from a diverse group of physicians, clinicians, and specialists and experience frequent transitions between health care provider settings. The availability of health information to support and coordinate care is crucial for eliminating fragmentation and ensuring high quality, safe and efficient health care. Transitions in care are known to be particularly problematic because
relevant information may not be communicated in a timely manner. Health information technology (HIT) and health information exchange (HIE) have the potential to address the information gap and improve the overall quality and continuity of care of LTPAC patients, reduce re-hospitalizations, and control health care spending.

LTPAC providers generally do not have robust HIT capabilities to support the electronic exchange and use of clinical information. Without these capabilities, LTPAC providers cannot readily access patients’ clinical information from other providers. Conversely, hospitals, primary care professionals, caregivers and others cannot obtain timely and important LTPAC information. Today, electronic health record (EHR) incentive programs, which are not applicable to LTPAC settings, are advancing adoption of interoperable HIE for eligible hospitals and eligible providers. Given the lack of incentives or other requirements for LTPAC providers to use interoperable EHRs, other actions are needed to advance the use of this technology by this sector.”

The challenge of taking advantage of EHRs for LTSS clients and providers that are not nursing facilities or home care agencies is even greater.

II. Background

Federal Electronic Health Records Legislation

In April 2004, President Bush laid out a plan to make healthcare more consumer-centric and improve the quality and efficiency of healthcare. In 2004, President Bush signed two executive orders requiring:

1. The Department of Health and Human Services (HHS) to help advance efforts to achieve the Bush administration’s goal for most Americans to have access to secure electronic health records by 2014, and
2. The Department of Health and Human Services, the Department of Defense, the Department of Veterans Affairs and the Office of Personnel Management to adopt

1 Executive Summary: Dougherty, M and Harvel, J., Opportunities for Engaging Long-Term and Post-Acute Care Providers in Health Information Exchange Activities: Exchanging Interoperable Patient Assessment Information 12/2012
interoperable health information-technology standards, adopt quality-improvement measures and be more transparent regarding healthcare prices.

The Obama administration subsequently signed into law two additional pieces of legislation designed to further these goals:

1. The Health Information Technology for Economic and Clinical Health Act (HITECH) within the larger American Recovery and Reinvestment Act of 2009 (ARRA) and
2. The Patient Protection and Affordable Care Act (PPACA) signed in 2010.

**HITECH Act**

The HITECH Act is intended to promote the adoption and meaningful use of health information technology. Subtitle D of the HITECH Act:

- Addresses the privacy and security concerns associated with the electronic transmission of health information, in part, through several provisions that strengthen the civil and criminal enforcement of the HIPAA rules
- Provides billions of new dollars to clinicians and hospitals for the meaningful use of certified health information technology, as well as for comparative effectiveness research and privacy protections for medical records
- Codifies the [Office of the National Coordinator for Health Information Technology](https://www.HITECH.gov) that provides $2 billion for discretionary spending, and establishes a goal of “utilization of a certified electronic health record for each person in the United States by 2014.”

Beginning in 2015, physicians and hospitals that do not use certified products in a meaningful way will be penalized.

**Patient Protection and Affordable Care Act (PPACA)**

PPACA uses several mechanisms designed to improve medical care and stem rising health care costs by linking quality of care and payment and provides for the eventual linkage of the CMS value-based purchasing program, [Physician Quality Reporting Initiative](https://www.cms.gov) (PQRI) to the [CMS EHR incentive program](https://www.cms.gov) for clinicians hospitals for the meaningful use of electronic health records.
Electronic Health Records Studies

Rand Corporation Studies

A 2005 RAND Corporation Study of the potential benefits of electronic medical records indicated that America’s healthcare system could save more than $81 billion annually and improve the quality of care if it were to adopt broadly computerized medical records. The study found that electronic medical records systems could save money by reducing redundant care, speeding patient treatment, improving safety and keeping patients healthier. The RAND study strongly recommended:

- The government and others who pay for health care to aggressively promote health information technology
- Federal officials accelerate efforts to set universal standards for health information technology, an important step that would foster wider adoption
- The federal government considers financial incentives, including increasing Medicare payments to providers who use approved electronic records systems and providing grants to institutions that embrace the technology.

A later 2012 RAND Cooperation Study noted:

- Despite wide investments in electronic medical records and related tools nationally, the cost-saving promise of health information technology has not been fulfilled because the systems deployed are neither interconnected nor easy to use
- The failure of health information technology to deliver quickly on its promise is not caused by its lack of potential; it is because of the shortcomings in the design of the IT systems that are currently in place.
III. Federal EHR Incentives and Grants

Medicare and Medicaid EHR Incentive Program

The Medicare and Medicaid EHR Incentive Program provide incentive payments to eligible professionals, eligible hospitals and critical access hospitals (CAHs) as they adopt, implement, upgrade or demonstrate meaningful use of certified EHR technology.

- Eligible professionals can receive up to $44,000 through the Medicare EHR Incentive Program and up to $63,750 through the Medicaid EHR Incentive Program
- Medicare eligible professionals must begin participation by 2012 to get the maximum incentive payment
- A goal for the Medicaid EHR Incentive program includes 60% of MHCP providers exchanging information outside their systems by 2016.

State Innovation Models Initiative

The State Innovation Models (SIM) Initiative is a $275 million competitive funding opportunity for states to design and test multi-payer payment and delivery models that deliver high-quality health care and improve health system performance.

Minnesota’s SIM Grant

In February 2013, Minnesota received a three-year $45 million SIMS Grant. As part of the SIMS Grant Minnesota will:

- Expand Medicaid ACO (Accountable Care Organization) models and
- Develop integrated community service delivery models that bring together health care, behavioral health, long-term care, and community prevention services to provide care centered on the needs of individuals and families.

The goals of the Minnesota Accountable Health Model are to:

- Transform care delivery so that every patient receives the option of team-based, patient-centered care, coordinated across behavioral health, long-term care, and other services
- Accelerate adoption of ACO models in Medicaid that are aligned with other payers
- Ensure the majority of providers are able to securely exchange data among care partners, within and outside of the health care system, and
• Create Accountable Communities for Health across the state, in which integrated networks of providers and community organizations are accountable for improved population health.

The Commissioner of Human Services and the Commissioner of Health, in consultation with a Community Advisory Committee and a Multi-payer Alignment Group (including commercial payers and Medicare) will lead implementation of the model. By 2016, the Model will directly impact 190,000 Medicaid enrollees in Medicaid ACOs, while also benefiting Minnesotans statewide through investments in infrastructure, care integration and practice transformation among health care and other providers.

The grant award funds a six-month implementation period followed a three-year testing period with a budget of approximately $45,000,000. The original proposed SIMS budget was allocated roughly as follows:

• 40% invests in health information technology, secure exchange of health information and data analytics
• 5% supports quality and performance measurement
• 11% supports practices to improve care coordination and
• 18% supports up to 15 Accountable Communities for Health to develop models that integrate care across the continuum and share risk/savings in a community.

The additional funds would support advisory groups, evaluation and project management. Providers in smaller practices, rural areas or who serve the health care safety net would be given priority across these activities.

**State Health Information Exchange Cooperative Agreement Program**

The [Office of the National Coordinator for Health Information Technology (ONC)](https://www.hhs.gov/ocr/privacy/hipaa/compliance/index.html) funds the State Health Information Exchange (HIE) Cooperative Agreement Program. MDH State HIE Cooperative Agreement Amount is $9,622,000. The State HIE Program:

• Promotes innovative approaches to the secure exchange of health information within and across states
• Works to ensure that health care providers and hospitals meet national standards and meaningful use requirements.
TEFT Grant

The [Demonstration Grant for Testing Experience and Functional Tools (TEFT) In Community-based Long-Term Services and Supports Grant](#) solicitation was August 2012 with a due date of October 22, 2012. The purpose of this grant was to improve and further quality measurement activities that are required under federal law for community-based LTSS. Up to 10 states would receive grants of up to $4.5 million each over four years. Grant applicants were required to address all of the below-listed key components:

1. Field test survey participants receiving LTSS to determine the quality and effectiveness of the services they receive
2. Use a Personal Health Record containing minimum interoperability requirements
3. Employ and disseminate a personal health record
4. Test an e-LTSS record.

CCA did not respond to the original solicitation. However, due to the limited response by states, DHS anticipates that the TEFT Grant will be re-issued in April, with possible modified requirements for key components.
IV. Overview of Current EHR Status in Minnesota

The diagram in Figure 1 below depicts the current fragmented system with EHR use with Primary and Acute care providers. While the current process for LTSS does include some electronic data entry, many processes still require manual data entry.

Figure 1: DHS EHR Current State

Minnesota EHR Mandates

The Minnesota Legislature enacted several statutory changes in 2007 and 2008 including a mandate that all hospitals and health care providers have an interoperable electronic health record (EHR) system by 2015. Minnesota Statute 62J.495 (The 2015 Interoperable Electronic Health Record Mandate) states:

“By January 1, 2015, all hospitals and health care providers must have in place an interoperable electronic health records system within their hospital system or clinical practice setting. The commissioner of health, in consultation with the e-Health Advisory Committee, shall develop a statewide plan to meet this goal, including uniform standards to be used for the interoperable system for sharing and synchronizing patient data across systems. The standards must be
compatible with federal efforts. The uniform standards must be developed by January 1, 2009, and updated on an ongoing basis. The commissioner shall include an update on standards development as part of an annual report to the legislature."

Minnesota Statutes, section 62J.03, defines “provider” and “health care providers” as “...a person or organization other than a nursing home that provides health care or medical care services within Minnesota for a fee and is eligible for reimbursement under the medical assistance program under chapter 256B.” The inclusion of all providers is intended to ensure that the benefits of e-health apply across the entire continuum of care, from cradle to grave, from primary to specialty care, public to private, and from traditional to alternative practitioners.

**Minnesota E-Health Initiative**

The [Minnesota e-Health Initiative](#) is a public-private collaborative whose vision is to accelerate the adoption and use of health information technology in order to improve health care quality, increase patient safety, reduce health care costs and improve public health. The Minnesota Department of Health (MDH) coordinates e-Health activities.

The [Office of Health Information Technology (OHIT) at MDH](#), along with the [Regional Extension Assistance Center for Health IT (REACH)](#) are responsible to educate and provide technical assistance when appropriate to promote adoption and effective use of EHR systems as well as health information exchange. The [Office of Rural Health and Primary Care](#) at the MDH occasionally administers grants or loan programs to support the implementation or support of interoperable EHR systems.

The 2011 MN e-Health Nursing Facility Survey carried out by a team lead by MDH that included Stratis Health, Care Providers of Minnesota and Aging Services of Minnesota found that:

- 69% of responding nursing homes (217) had an EHR installed and in use; an increase of 123 nursing homes from 2008
- 25% of nursing homes were in the process of getting an EHR with the remaining 6% having no EHR
- 73% of responding nursing homes had products from PointClickCare (43%), MDI Achieve (21%), which was certified as an EHR 12/18/12, and Momentum Healthware (9%)
- Nursing homes, identified as rural, stand-alone, or that had a lower number of beds, were less likely to have an EHR installed and in use
• The largest challenges to EHR adoption included implementation and upgrades, staff education and training, cost to acquire and effects on workflow
• The ability of nursing facilities to use the EHR they currently have beyond documenting care plans, etc. is very limited.

Exclusion of Long-Terms Services and Supports

The current rapid development and implementation of EHRs in clinics, pharmacies, and hospitals, mandated by federal health care reform initiatives and Minnesota Statute, acknowledges the importance of LTSS and consumer control. However, LTSS’ required use/participation is postponed beyond 2015 to at least 2020. Adoption incentives (payments upon a provider’s demonstration of meaningful use of their EHRs) exempt nursing facilities and are silent on the other elements of LTSS except for Medicare home care.

EHR Use for LTSS in Other States

The CCA EHR workgroup arranged for the National Association of State Directors of Developmental Disabilities Services (NASDDDS) and National Association of States United for Aging and Disabilities (NASUAD) to survey their members to assess LTSS EHR adoption in other states. The survey requested a response no later than February 25, 2013. For the list of survey questions, see Appendix III.

Preliminary responses indicate limited actual use of EHR for LTSS by states and their providers but significant interest in being kept informed of Minnesota’s progress.

Current Minnesota EHR Investments/Projects Underway

Minnesota’s Medicaid HIT Roadmap/Minnesota’s EHR Incentive Program

The State Medicaid HIT Plan (SMHP) provides State Medicaid Agencies (SMAs) and CMS with a common understanding of the activities the SMA will be engaged in over the next five years relative to implementing Section 4201 Medicaid provisions of the American Recovery and Reinvestment Act. State Medicaid programs are establishing Electronic Health Records Incentive Programs under the provisions of the HITECH Act. These programs provide for incentive payments to certain health care professionals and hospitals that meet specific eligibility requirements when they adopt, implement, upgrade and meaningfully use certified
EHR technology. The Minnesota EHR Incentive Program (MEIP) builds capacity for greater information awareness and aligns closely with these e-initiatives:

- **Minnesota Health Information Exchange (HIE):** The Minnesota updated Strategic Plan for HIE was approved by Office of the National Coordinator for Health Information Technology (ONC). The plan’s governance, technology, standards and patient rights goals are guiding the state’s HIE development efforts.

- **Minnesota Immunization Information Connection (MIIC):** The statewide immunization information system reported that 87% of Minnesota’s primary care provider sites were enrolled in its voluntary program.

- **HIPAA 5010/D.O:** The Health Insurance Portability and Accountability Act (HIPAA) mandates all health care organizations (payers, providers and vendors) to upgrade their claims systems from existing 4010 versions of health care transaction standards to new X12 transaction standards for HIPAA claims and new National Council for Prescription Drug Program standards for pharmacy and supplier transactions. The State Medicaid Agencies (SMA) has added the 5010/D.0 data elements to its MMIS in preparation.

- **ICD-10:** On October 1, 2014, the ICD-9 code sets to report medical diagnoses and inpatient procedures will be replaced by ICD-10 code sets. The new medical diagnosis and inpatient procedure codes must be used on all HIPAA transactions, including outpatient claims with dates of service and inpatient claims. The SMA has started the awareness phase with a broad stakeholder group and is developing the funding request.

- **Health Care Homes Initiative (HCH):** This new health care approach encourages primary-care providers, families and patients to work in partnership to improve patients’ health outcomes and quality of life. A new payment methodology and process for primary-care providers to coordinate care began July 1, 2010, and 429 HCH clinicians have been certified to work out of 47 primary care clinics as certified health care homes. MHCP enrolled providers who are HCH certified have access to the Tier e-Tool request and report features. The HCH Tier e-Tool allows the clinician to submit a list of ICD-9 Diagnosis codes for patients to assess their individual health complexity Tier level.

- **E-Prescribing:** Any person or organization prescribing, filling prescriptions or paying for prescriptions, including communicating or transmitting formulary or benefit information, must do so electronically using specified standards.
V. CCA’s Vision for Electronic Health Records

The CCA EHR workgroup’s vision is to develop a unified health and long-term services and supports electronic record that is accessible to persons receiving state-funded services and all providers supporting the person, on a need to know basis.

System-to-System Semantic Interoperability

Interoperability has been a basic requirement for modern information system environments for two decades and permits point-to-point information/data exchanges. CCA’s vision of system-to-system semantic interoperability includes:

- Expanding the range of compatible data with unambiguous, shared meaning, to include assessment, care planning and other LTSS information
- Expanding interoperability beyond system-to-system by using HIEs
- Developing a useful, secure PHR that permits consumers to view and interact with their information wherever it resides and to provide convenient, timely and cost efficient consumer quality assurance and utilization review. This functionality will require a true HIE.

Figure 2: DHS EHR for LTSS Future State
Opportunities to Achieving the Vision

Timing

The timing is excellent for CCA involvement; participating now provides CCA a significant opportunity to be part of shaping a system. The Department of Health and Human Service’s Office of the National Coordinator for Health Information Technology (ONC) Standards and Interoperability Group are now focusing on adding LTSS as part of the development of Stage 3 Meaningful Use standards, which includes development of case notes, care plan and assessment.

Developments of EHRs to this point have focused on intra-operability - having as many users as possible within a single EHR - with minimal exchange outside of the EHR “eco-system.” The large EHRs for clinic, hospital and health care provider systems have an interest in maintaining that model as long as possible. However, meeting second and third stage meaningful use standards require multi-system interoperability and the inclusion of some larger portion of LTSS information.

In addition, there is a great deal of interest among:

- LTSS providers in how to get involved with EHRs, especially around how EHRs can help manage costs
- Nursing facility providers and some health care provider networks to develop an ACO-like delivery system.

Existing Minnesota EHR Projects can be Leveraged

There are a number of projects DHS can leverage to develop specifications for exchange and other implementation issues:

Minnesota e-Health HIE Connectivity Grant: Awarded to the Benedictine Health System, MDI Achieve and Allina to develop an executable Continuity of Care Document (CCD)² for a limited, jointly agreed data set as part of a server-to-server solution. The program will begin to define

---

² Continuity of Care Document (CCD): An electronic document exchange standard for sharing patient summary information. Summaries include the most commonly needed pertinent information about current and past health status in a form that can be shared by all computer applications.
the exchangeable data with the possibility of adding data sets after the proof of concept interoperability. Achieving server-to-server interoperability is a necessary but not sufficient condition to get to a HIE that has cross system interoperability.

**Stratis/MDH- Health Information Technology for Post-Acute Care Grant**: This project will assist five nursing facilities and one hospital to improve quality and coordination of care through the effective use of health information technology (HIT) during care transitions, leverage standardized patient assessment content to facilitate health information exchange with hospitals, and reduce medical errors by improving the medication management process. Stratis Health is talking to the Virginia Hospital, a member of a Community Consortium group that also includes three nursing facilities as partners. The nursing homes will collaborate with a referral hospital to exchange standardized patient assessment content, discharge documents and other information. The hospitals will provide updated information to community nursing homes at the transfer of care.

**Community Consortium Grants**: A project that has the potential to involve both exchanging a Continuity of Care Document (CCD) between nursing facilities and Essentia Health but also involving home and community-based providers. The Consortium Care coordinator is currently using EPIC (the hospital EHR) to record information. The Essentia Health Care Home RN works with the community care coordinator using the Return to Community Protocol and tools including Revation for secure communication with HCBS providers. EHRs must be able to generate a PDF CCD that could be exchanged securely with a broader range of providers using Revation.

The Community Consortium’s session law gives the MDH permission to waive rule and statute, provides an e-health grant preference and provides additional opportunities. In addition to developing the minimum CCD data set for nursing facility to hospital/clinic reciprocal exchanges, this project could also begin:

- Discussions of minimum exchange requirements for home and community-based services
  - An additional step might be developing an executable CCD for that exchange

---

3 Mandated by the 2008 Minnesota Legislature, the Community Consortium Grants support community projects that demonstrate models for increasing access to home and community-based services for people age 65 and older.
• Engagement of Point Click Care, the other large “MDS” EHR to develop the capacity to produce and receive a CCD in a point-to-point solution.

**CS/SD 4 Dementia Capable Health Care Homes Grant:** Health Care Homes (HCH) already assumes better communication between and among the acute care system and home and community-based services. Some of the current requirements (HCH need to have a copy of all care plans for all participants) would need a technological solution to be useful. The dementia-capable HCH grantees will be required to participate in a joint evaluation that envisions use of data generated by an EHR. In addition, the conceptual model of the Dementia Capable HCH envisions adding a dementia “smart set” to an EHR to help guide practitioner’s, collect information and initiate referrals to HCBS including caregiver supports and respite and the Family Memory Care counseling intervention. If enacted, the Governor’s budget moves the

**Other DHS Projects can be Leveraged**

**Minnesota’s Demonstration to Integrate Care for Dual Eligibles:** Minnesota Statutes § 256B.021, subdivision 4(i) provides authority to the Commissioner of Human Service to develop Medical Assistance Reform proposals and waivers including those designed to:

- Improve integration of Medicare and Medicaid to reduce fragmentation in the health care delivery system
- Improve care for people eligible for both Medicare and Medicaid, and
- Align fiscal incentives between primary, acute, and long-term care.

DHS will build on current state initiatives to improve performance of primary care and care coordination models for dual eligibles served in integrated Medicare and Medicaid Special Needs Plans and fee-for-service delivery systems. Dual eligibles refer to people who have benefits through Medicare and Medicaid.

**DHS Enterprise Architecture/Technology Infrastructure Projects** are planning for modernization. DHS needs to build a sustainable technical infrastructure for content and exchange standards for assessment information that meets emerging ONC requirements. The scope of the DHS System Modernization Project includes everything except MMIS claims payment, provider management, operations, etc.

---

4 The CS/SD grants promote targeted development to meet the challenges of Aging 2030 and the forecasted pressures on Minnesota’s long-term care system.
All systems being updated because of DHS system modernization efforts, including MnCHOICES and the Disability Waiver Rate Setting System, need to be examined to ensure potential interoperability. This is an opportunity to addresses interoperability early while changes are in development rather than retrofitting solutions. System modernization is also an opportunity to optimize data DHS collects.

The MnCHOICES project creates and implements a single, comprehensive and integrated assessment and support planning application for LTSS in Minnesota. In addition to collecting assessment data to evaluate outcomes and enhance quality assurance functions, MnCHOICES data made available through a DHS EHR portal could be used as part of the person’s Personal Health Record and be shared as appropriate with other providers.

The Disability Waivers Rate System, the product of the Rate Setting Methodologies Initiative, transfers the responsibility of setting rates for services within the four disability waivers from counties and tribes to the state. The Disability Waiver Rate system will house important data about providers that does not exist elsewhere in the system and can be leveraged in the system–to-system sematic interoperable EHR of the future.

Elevated match funding available for health care-related functions and Health Insurance Exchange Plan Management (HIX) with special cost-allocation rules – ends December 31, 2015. Examples of what can be funded through elevated match and modified cost allocation include:

- Automated account creation and case notes
- Business intelligence
- Business rules engine and operating systems
- Client portals
- Customer services technical support
- Community assisters/outreach organizations
- Data warehouse
- Document imaging and digitization of case records
- Exchange infrastructure
- Identity management
- Interfaces to federal & state verification sources
- Master client index
- Notices
- Privacy and security controls
- User interfaces
- Workflow management tools
Challenges to Achieving the Vision

**DHS is Not Seen as a Key Stakeholder**

It is important that stakeholders see DHS as a key player. There is currently a risk for big players to control important decisions that impact persons served by DHS. EHR is experiencing rapid developments and there is a need for DHS to be at the table to stay on top of developments. Ongoing efforts at the national level to standardize data sets for inclusion into agreement on elements of care-coordination, assessment, care transitions, and data exchange remain primarily focused on NFs and Medicare home health agencies.

**LTSS Software Vendors Currently Don’t Have Clear Standards**

The ability of LTSS providers to exchange data is limited to the capabilities of the software. LTSS software vendors have not yet developed exchange capabilities that are explicitly laid out in the meaningful use criteria.

A significant problem for LTSS software vendors is that their customers are LTSS providers and LTSS budgets are largely tied to the Medicare and Medicaid payment streams. LTSS has not been included in Health Care reform legislation and while clear mandates have been or are being developed, regulations about what needs to be done and when it needs to be completed are not enforceable except through reimbursement limitations that have yet to be instituted. Development takes money, resources, and a willingness to pay by the customer for these advanced capabilities. Without a clear direction or additional resources from the federal government or consensus from their customers about what capabilities need to be developed, LTSS software vendors have taken a cautious approach to spending development dollars for data exchange purposes. LTSS software vendors do not want to alienate their customers by increasing their software fees in order to experiment with development efforts around data exchange.

**Personal Health Records Require Broad Interoperability**

Existing EHR providers for the hospital/clinic market are expensive and designed to maximize market share by providing internal interoperability. That is contrary to providing consumer control and choice and only minimally meets evolving minimal use standards. A Personal Health Record (PHR) that does not include provider data directly but requires entry by the record owner is of limited use.
Costs for LTSS Providers Prohibitive

LTSS providers (particularly small, community-based, or volunteer), currently lack the financial and technical resources to acquire, implement and support freestanding, interoperable EHRs. LTSS providers and consumers will not be able to take advantage of the EHR without additional resources in the form of:

- Additional revenue, to purchase complete EHRs or
- Provision of alternative methods such as a state provided data portal or some other LTSS “fractional” EHR or
- Entering into agreements with or being subsumed by large health care systems with EHRs.

Providers will also have additional, on-going training and connectivity costs as well as software/hardware upgrade and maintenance costs.

Federal incentives are largely ending in 2015. There is some question about the sustainability of all the products and processes in the hospital/clinic/physician universe. A certain amount of the current vertical and horizontal integration of those sectors is driven by the opportunity and on-going support costs of the EHR in addition to the various “total cost of care” reimbursement proposals and the change in Medicare reimbursement for hospital re-admission in less than 30 days.

System savings and improved client outcomes created by better care transitions are difficult to quantify, attribute, and assign, even in highly integrated care delivery systems. In addition, the EHR will not fully generate the improvements and savings that have been projected without the inclusion of LTSS in fully integrated care delivery systems.

VI. Summary and Recommendations

The benefits of expansion of EHRs to include LTSS are clear. People receiving LTSS also obtain care from a diverse group of physicians, clinicians, and specialists and experience frequent transitions between health care provider settings. Transitions in care are known to be particularly problematic because relevant information may not be communicated in a timely manner. Health information technology and health information exchange (HIE) have the potential to address the information gap and improve the overall quality and continuity of care of people receiving LTSS, reduce re-hospitalizations and control health care spending.
The current rapid development and implementation of EHRs in primary and acute care, mandated by federal health care reform initiatives and Minnesota Statute, acknowledges the importance of LTSS and consumer control. However, it is clear from the research completed by the CCA EHR workgroup that meeting the 2015 Interoperable Electronic Health Record Mandate work plans will not include LTSS in Minnesota (or other states) at this time. LTSS required use/participation would be postponed to at least 2020.

Outside of healthcare, Electronic Data Interchange (EDI) has successfully grown and perpetuated standardization across other industries. Those industries realize structured data exchange makes sense in providing value to their core business. It also can make good clinical and financial sense for healthcare.

There are three truths of health data exchange:

1. First, standardizing health data, through ASC X12 5010, ICD-10, Meaningful Use and the like, is the building block for transforming the U.S. healthcare system for the better. By handling the transfer of data more efficiently, we can reduce the costs of care and increase our efficiencies.

2. Though healthcare EDI is built around a structured data model, emerging technologies and new ideas are redefining the perimeters of seamless exchange without the traditional structured format while ensuring integrity of the data. In the long run, an industry model with standardized metadata pays off in abundance.

3. There is a cost to achieve this industry-wide initiative – which likely includes increasing the level of standardization and reducing the number of stakeholders implicitly incented to make exchanging healthcare data seem more difficult than it actually is.

Impact of DHS not Implementing a LTCC EHR/HIE

Some of the effects of DHS not implementing a LTSS EHR/HIE include:

- Providers purchasing and supporting EHR products that do not support interoperability as those standards develop
- Failure to optimize the use of data DHS collects as part of the larger Systems Modernization work

---

5  Taken from 3 truths of health data exchange Andrew Fitzpatrick, CEO of WPC July 10, 2012
• LTSS data standards and protocols developed through national processes that do not meet Minnesota’s needs
• Savings from better care transitions and more efficient workflows in Health Care Homes, ACOs and other “care coordination” models would not be realized.

Recommendations

After examining the current state of EHR expansion, the CCA EHR workgroup considered a number of options to include LTSS going forward.

The workgroup evaluated the inherent advantages and disadvantages of each option and their implications. The workgroup arrived at a proposal that it believes would:

• Move DHS closer to its vision to develop a unified health and long-term services and support electronic record, and
• Allow DHS to develop the capacity and expertise needed to lead LTSS/EHR development.

The workgroup felt strongly that by doing nothing Minnesota would lose an important opportunity to be a leader in shaping the national discussion and participation in national standards for LTSS.

The CCA workgroup recommends that:

*DHS, working with many others, makes available an EHR/HIE and set the standards; providers can use other certified EHR/HIE products that are consistent with national standards. DHS would:*

- **Set standards: continue work with the MDH Adoption and Effective Use Workgroup**
  - Monitor/Participate in ONC Standards and Interoperability Workgroup
  - Establish minimum state LTSS exchange requirements
  - Require an interoperable Personal Health Record (PHR) function
- **Solicit input/provide guidance to current EHR users on LTSS development**
- **Make available an EHR/HIE option for LTSS providers**
- **Use existing federal and state grants to providers to test new models and fund adoption**
- **Participate on the national stage through federal grants and through DHS’ work with national associations**
- **Seek funding.**
**Recommendation Analysis**

The workgroup’s recommendation:

1. Uses DHS’ developing information-technology capacity to address potential interoperability issues and solutions for consumer access to Personal Health Records (PHRs)\(^6\).

2. Allows the development of consistent exchange standards and controls diversity of EHR/HIE products, but allows flexibility for providers who have purchased or will purchase products. This builds on the ONC/MDH strategy; it also assumes and encourages EHR interoperability through HIEs.

3. Encourages stakeholder involvement by:
   - Allowing DHS to learn from providers about products they use or have investigated
   - Helping DHS to identify/discuss additional State information exchange requirements
   - Allowing more LTSS stakeholders to begin receiving information about EHRs.

4. Addresses the need to develop a strong health information exchange with the potential to bridge the information gap, improve the overall quality and continuity of care of people receiving long-term services, and support all LTSS providers needed to be a part of the exchange.

5. Addresses the potential cost barrier to some LTCC providers through:
   - Providing EHR access to small LTSS community-based and volunteer providers who currently lack the financial and technical resources to acquire, implement and support freestanding, interoperable EHRs
   - Requiring DHS system architecture to use existing provider/user information for a number of purposes
   - Allowing persons receiving state-funded services to be empowered to be more engaged in their health and healthcare.

---

\(^6\) Existing EHR providers for the hospital/clinic market are expensive and designed to maximize market share by providing internal interoperability. That does not provide consumer control and choice and only minimally meets evolving minimal use standards.
Next Steps

It is clear that DHS will need to develop an EHR for some LTSS providers to use and to function as an interface for exchangeable data (assessments, utilization, and quality metrics) that other users (Personal Health Records, lead agencies, and health care providers) can use. One of the developing, intermediate trends in larger EHR development (i.e., Epic EHR, McKesson, etc.) is moving toward certifying the EHR as a Health Information Exchange (HIE)\(^7\) to maintain control of the EHR information space. These other, developing EHR/HIE products would be required to connect to a DHS EHR/HIE as part of the standards for HIE interoperability.

It will also be important to position systems CCA has a direct interest in (MnCHOICES, Disability Rate Setting, MMIS, etc.) and have the capacity to produce exchangeable data and to interact with this “universe of exchangeable data.” (See Figure 3 – DHS EHR LTSS Future State Diagram.)

In the long term, DHS knows the answer is EHR/HIE. In the short-term, CCA may need to proceed incrementally to support expansion of certified EHRs to get CCA to where we want it to be in four to five years:

- Support point-to-point EHR interoperability to drive broader HIE adoption
- Set the standards so that providers can use other certified EHR/HIE products that are consistent with national standards
- Support two-screen solutions for health care home coordinators to more easily communicate with LTSS system
- Use existing tools and processes (Revation VOIP) to securely communicate between LTSS providers and care coordinators.

Timelines

The CCA EHR workgroup identified a number of next steps that will allow DHS to move toward its vision of developing a unified health and long-term services and support electronic record development for LTCC.

\(^7\) HIEs provide the capability to move clinical information electronically between multiple different health care computer systems while maintaining the integrity, confidentiality, privacy, and security of that information.
Establish DHS as a Key Stakeholder

- Assign CCA FTEs to coordinate EHR Activities and keep current on changes
- Participate in MDH EHR Meetings
- Engage with DHS Enterprise Architecture Board
- Continue EHR discussions with other states
- Meet with LTCC service providers and software vendors to learn what products are being used.

Influence Stage 3 Meaningful Use Standards

- Participate in national standards discussions
- Continue to research where standards are going
- Engage software vendors in standards discussion.

Pursue Solutions/Demonstration Grants

- Obtain DHS leadership to support efforts
- Apply for appropriate federal grants when available
- Leverage other grant funds, e.g. CS/SD
- Engage leads of pilots/projects that should be leveraged
- Identify project DHS would like to lead.

Further Analysis

- Review current data privacy and other relevant laws to identify changes as needed
- Seek legislation to:
  - Address data privacy; need to know, data use, data-sharing, etc. as needed
  - Create/develop LTSS EHR/HIE standards and incorporate into billing/reporting requirements
VII. Conclusion

The CCA work group has concluded that leadership is needed to press for inclusion of LTSS in Minnesota’s EHR system. Without some effort on CCA’s part, we believe EHRs will largely bypass LTSS providers for many years. LTSS are an important part of the care that people receive and impact health care outcomes. Providers must be able to work together to optimize good outcomes for the people they serve and EHRs enable them to do that.

One of CCA’s goals in our strategic plan is to improve the quality of life for people who are elderly and people with disabilities. Strategies include improving the quality of services and providing information and assistance so people can make informed choices. We see EHRs as a tool for service providers to achieve the best outcomes for people, thus improving quality of life, quality of services, and health outcomes.

To move forward with these recommendations will require staff resources (existing and new) to be devoted to the project. Given the state of interoperable EHR adoption in Minnesota and the lack of integration for LTSS, CCA’s commitment to this project would be at least five years.

Work is needed to:

- Build stakeholder involvement and interest to include LTSS in EHR system development
- Gain CCA’s participation in state and national development efforts
- Pursue/create EHR pilots to demonstrate that better health and quality of life outcomes can be achieved for people that receive LTSS if interoperable EHRs are leveraged as a tool for service providers
- Continue to build knowledge about EHR public policy development. Although we’ve learned a lot during this project, there is much we still have to learn.

Appendices
### Appendix I - EHR-Related Acronyms Quick Reference Sheet

<table>
<thead>
<tr>
<th>Acronym</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACA</td>
<td>Patient Protection and Affordable Care Act (or Affordable Care Act)</td>
</tr>
<tr>
<td>ACO</td>
<td>Accountable Care Organization</td>
</tr>
<tr>
<td>CCD</td>
<td>Continuity of Care Document</td>
</tr>
<tr>
<td>CCHIT</td>
<td>Certification Commission for Health IT</td>
</tr>
<tr>
<td>CMI</td>
<td>Center for Medicare and Medicaid Innovation</td>
</tr>
<tr>
<td>EDI</td>
<td>Electronic Data Interchange</td>
</tr>
<tr>
<td>EHR</td>
<td>Electronic Health Record</td>
</tr>
<tr>
<td>HCH</td>
<td>Health Care Homes</td>
</tr>
<tr>
<td>HIE</td>
<td>Health Information Exchange</td>
</tr>
<tr>
<td>HIT (or Health IT)</td>
<td>Health Information</td>
</tr>
<tr>
<td>HITECH Act</td>
<td>Health Information Technology for Economic and Clinical Health Act</td>
</tr>
<tr>
<td>HITSP</td>
<td>Health Information Technology Standards Panel</td>
</tr>
<tr>
<td>LTPAC</td>
<td>Long-term and post-acute care</td>
</tr>
<tr>
<td>LTSS</td>
<td>Long-term Services and Supports</td>
</tr>
<tr>
<td>OASIS</td>
<td>Outcome and Assessment Information Set</td>
</tr>
<tr>
<td>ONC</td>
<td>Office of the National Coordinator for Health Information Technology</td>
</tr>
<tr>
<td>PHR</td>
<td>Personal Health Record</td>
</tr>
<tr>
<td>PPACA</td>
<td>Patient Protection and Affordable Care Act</td>
</tr>
<tr>
<td>REACH</td>
<td>Regional Extension Assistance Center for Health IT</td>
</tr>
<tr>
<td>SMHP</td>
<td>State Medicaid HIT Plan</td>
</tr>
<tr>
<td>TEFT</td>
<td>Testing Experience and Functional Tools</td>
</tr>
</tbody>
</table>
Appendix II – Glossary of EHR Terminology

Certification Commission for Healthcare Information Technology (CCHIT): Recognized certification authority for electronic health records and their networks. CCHIT is an independent, voluntary, private-sector initiative. The Commission has been certifying electronic health record technology since 2006.

Certified Electronic Health Record: The Medicaid EHR Incentive Programs require the use of certified EHR technology. The Secretary of the Department of Health and Human Services has adopted standards, implementation specifications, and certification criteria for EHR technology.

Certified Electronic Health Record Technology: An electronic health record that is certified pursuant to section 3001(c) (5) of the HITECH Act to meet the standards and implementation specifications adopted under section 3004 as applicable.

Community Health Information Collaborative (CHIC): Developed with funding received through a Federal Office of Rural Health Network Development grant in 1997, is a nonprofit 501(c) (3) corporation. Its focus is to initiate projects that promote health information exchange across care settings and to share costs and best practices across the membership.

Continuity of Care Document (CCD): An electronic document exchange standard for sharing patient summary information. Summaries include the most commonly needed pertinent information about current and past health status in a form that can be shared by all computer applications.

Electronic Healthcare Network Accreditation Commission (EHNAC): Federally-recognized standards development organization whose mission is to promote standards-based accreditation within the healthcare data exchange and whose accreditation programs have set benchmarks for assuring security, confidentiality, accountability, and efficiency. The Health Information Exchange Accreditation Program (“HIEAP”) is one of the various accreditation programs offered by EHNAC.

Electronic Health Records (EHR): Patient health records including treatment history, medical test reports, and images stored in an electronic format that healthcare providers can access on a computer network. EHRs imply a level of interoperability beyond the capability of an EMR (Electronic Medical Record), but are similar in terms of the information stored and the purpose for the system. Although technically incorrect, the terms EHR and EMR are often used casually in interchangeable fashion.
**Electronic Medical Records (EMRs):** Digital version of the paper charts in the clinician’s office. An EMR contains the medical and treatment history of the patients in one practice. EMRs are also known as a computer-based patient record (CPR).

**Health Information Exchange (HIE):** HIEs provide the capability to move clinical information electronically between multiple different health care computer systems while maintaining the integrity, confidentiality, privacy, and security of that information.

**HITECH Act:** The Health Information Technology for Economic and Clinical Health Act in division A, title XIII and division B, title IV of the American Recovery and Reinvestment Act of 2009, including federal regulations adopted under that act.

**Interoperability:** The ability of two or more systems or components to exchange information and to use the information that has been exchanged accurately, securely, and verifiably, when and where needed. An interoperable electronic health record is an electronic health record that securely exchanges health information with another electronic health record system that meets requirements specified in subdivision 3, and national requirements for certification under the HITECH Act.

**Meaningful Use:** Set of standards for determining eligibility for Medicare and Medicaid incentive payments. Meaningful use will be the standard by which providers will use EHR technology and build enhancements for future reporting and quality measures to improve patient outcomes. The goal of meaningful use is to promote the spread of electronic health records to improve health care in the United States.

- **Stage 1 Meaningful Use:** Initial Meaningful Use criteria in the phased approach to meaningful use of certified electronic health record technology and which outlines the requirements to obtain incentive payments for eligible professionals and hospitals as established by the Center for Medicare and Medicaid Services (“CMS”).
- **Stage 2 Meaningful Use:** Beginning 2014, meaningful use requirements will focus on health information exchange between providers and promotes patient engagement by giving patients secure online access to their health information.
- **Stage 3 Meaningful Use: 2016** - Currently seeking public comment

**Office of Rural Health and Primary Care at the Minnesota Department of Health:** Organization that promotes access to quality health care for rural and underserved urban Minnesotans and
occasionally administers grants or loan programs to support the implementation or support of interoperable EHR systems.

**Office of the National Coordinator for Health Information Technology (ONC):** The ONC is at the forefront of the administration’s health IT efforts and is a resource to the entire health system to support the adoption of health information technology and the promotion of nationwide health information exchange to improve health care. ONC is organizationally located within the Office of the Secretary for the U.S. Department of Health and Human Services (HHS).

**Pharmaceutical Electronic Data Intermediary:** Entity that provides the infrastructure to connect computer systems or other electronic devices utilized by prescribing practitioners with those used by pharmacies, health plans, third-party administrators, and pharmacy benefit managers in order to facilitate the secure transmission of electronic prescriptions, refill authorization requests, communications, and other prescription-related information between such entities.

**Regional Extension Assistance Center for Health IT (REACH):** Organization that has received funding under the Health Information Technology for Economic and Clinical Health Act (HITECH Act) to educate and provide technical assistance when appropriate to promote adoption and effective use of EHR systems as well as health information exchange.
Appendix III – NASDDS/NASUAD Survey Questions

1. Does your state currently provide an electronic health record (EHR) for long-term services and support (such as nursing homes, assisted living settings, and Home Care agencies, home and community-based services)? If yes:  a. did you develop or purchase? Which one? b. How long has it/they been in use?

2. Does your state currently use information from a provider’s EHR for long-term services and support? If yes:  a. which one? b. How long has it/they been in use?

3. How many long-term services and support providers are connected?

4. Does a Health Information Exchange (HIE) support your provider network? More than one?

5. Has your state used Stage 1 meaningful use standards for your long-term services and support EHR? Stage 2? Candidate measures under consideration for Stage 3? Other?

6. Does your EHR provide a consumer-portal for consumers to access information? Have the capacity to support a consumer-portal?

7. Does the product you or your providers are using for your long-term services and support EHR provide any other functionality, such as case management? If yes, what?

8. What funding did you use to develop/support your long-term services and support EHR?

9. Is there someone we can contact to provide additional information if needed?
Appendix IV – Other References/Resources

1. DHS CCA EHR Project SharePoint Site

2. Opportunities for Engaging Long-Term and Post-Acute Care Providers in Health Information Exchange Activities: Exchanging Interoperable Patient Assessment Information December 2011


4. ONC Standards and Interoperability Framework WIKI - A valuable resource to understand the emerging issues in EHR.

5. Office of Health Information Technology at MDH

6. A Practical Guide to Understanding HIE, Assessing Your Readiness and Selecting HIE Options in Minnesota

7. Minnesota's 2015 Interoperable Electronic Health Record Mandate