The U.S. Department of Health and Humans Services’ Office of the National Coordinator for Health Information Technology (ONC)

electronic Long-Term Services and Supports (eLTSS)

Initiative Summary—September 2017
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Executive Summary

Challenge
The adoption and use of Health Information Technology (health IT) and quality measurement for community-based long-term services and supports (CB-LTSS) is limited. Limitations include insufficient business and/or financial incentives for service providers to acquire and use health IT to support coordination of services; minimal national standards for quality measurement in LTSS outcomes; lack of uniformity in the terminology and definitions of data elements, including those important to the beneficiary, needed for assessments and service plans used across and between community-based information systems, clinical care systems and personal health record systems; lack of consensus on the interrelationships between a beneficiary’s plans across care, services and supports; and lack of evidence and understanding of how health IT may benefit the beneficiary and encourage their adoption and use of technology.

In addition, CB-LTSS provider service planning is expected to be in alignment with the CMS Home and Community-Based Services (HCBS) Waiver Rule, which encourages states that participate in Medicaid programs to develop service plan alternatives for individuals who would otherwise require care in a clinical setting, such as a nursing facility or hospital. The final rule amends the regulations for the 1915(c) HCBS waiver program, authorized under section 1915(c) of the Social Security Act (the Act), in several ways that are intended to improve the quality of services for individuals receiving HCBS.

To address these challenges and to expand on opportunities, the Centers for Medicare and Medicaid (CMS) in partnership with the Office of the National Coordinator for Health Information Technology (ONC) launched the electronic Long-Term Services and Supports (eLTSS) Initiative. The eLTSS initiative focused specifically on non-clinical CB-LTSS and HCBS service planning with the following goals:

- Identifying an agreed upon set of data elements for the capture and sharing of eLTSS plan information
- Improving provider workflows by enabling secure, single-point data entry for eLTSS plan development and exchange including authentication and tracking of changes and approvals
- Integrating beneficiary priorities, preferences and goals identified in the CB-LTSS setting with those goals and outcomes included in the beneficiary care plan generated in a clinical/institutional setting
- Improving timeliness for collecting and sharing LTSS information between provider types, between providers and beneficiaries, and between providers and State Medicaid Agencies and/or payers, and other entities
- Reducing data collection burden processes (e.g. paper based, manual and/or other electronic) placed on providers/beneficiaries/payers by enabling the reuse of previously collected data
- Supporting the timely transition of relevant eLTSS plan information at the start of care and service delivery and as the beneficiary's preferences and goals change
- Enabling sending and receiving provider types to initiate changes for beneficiary interventions more promptly
- Enabling beneficiaries to lead decision making regarding appropriate care and services to be received
- Increasing beneficiary engagement in preventative services and wellness activities
- Identifying critical gaps and unnecessary overlaps in the care and services needed and delivered to a beneficiary
• Enabling beneficiaries to exchange important care and service plan information across provider groups and with accountable entities and other parties

**Methodology**

To achieve the goals above, the eLTSS initiative used the following methodologies in a phased approach:

- **Development of Use Case**: The initiative engaged with the eLTSS community in identifying and documenting key assessment domains, service plan workflows and actors involved in the capture and exchange of Community-Based Long-Term Services and Supports (CB-LTSS) and Home and Community Based Service (HCBS) data through the development of User Stories and a Use Case.

- **Concert Series Presentations**: The initiative invited organizations that had incorporated existing or emerging standards and/or other relevant guidance that was related to the eLTSS scope of work or could inform eLTSS target outcomes and deliverables to present their solutions to the community during public meetings.

- **Development of Pilot Guidance**: The initiative provided step-by-step information on how pilot participants could execute the pilot process, including a tiered approach each pilot site used to identify specific objectives and goals. Each pilot site was assisted in the completion of a Requirements Traceability Matrix (RTM) based on its current service plan(s) to identify key domains that should be included in an eLTSS plan. Guidance included further aggregation and harmonization of those domains identified in pilot RTMs.

- **Round 1 Pilot Activities**: The initiative established pilot site readiness and worked with pilot organizations to identify a working draft dataset that can be used to capture data and create service plans. Each pilot submitted its current service plan(s), which were aggregated and subsequently harmonized with other pilot and community input to be in alignment with the domains that were identified as part of the Pilot Guidance activities.

- **Round 1 Pilot Evaluation**: Pilots shared findings and lessons learned with the community; these findings were used to update the working draft dataset and Pilot Guidance.

- **Round 2 Pilot Activities**: Pilots tested and validated the Round 1 working draft dataset and User Story (as identified in their pilot tier) in partnership with service providers, case managers and beneficiaries within their regional or local areas.

- **Round 2 Pilot Evaluation**: Pilots shared findings and lessons learned with the community. Round 2 pilot RTM results were aggregated and harmonized with input from other pilots and the eLTSS community resulting in a final eLTSS dataset that was published and ready for use.

**eLTSS Community**

The eLTSS initiative was driven by the requirements of the CMS Testing Experience and Functional Tools (TEFT) in community-based long-term services and supports (CB-LTSS) Planning and Demonstration Grant Program. This initiative formed a community of participants who represented a wide array of industry stakeholders to identify, test and validate a working dataset to be used for electronic capture and exchange of non-clinical CB-LTSS and HCBS data. Prior to the kickoff of the eLTSS initiative, a public Call for Participation was distributed to generate broad stakeholder interest and invite both individuals and organizations (in addition to the TEFT Grant recipients) to join the initiative. Interested parties identified themselves through the eLTSS “Join the Initiative” wiki page or joined meetings for which the participation information was available on a public-facing website.
All eLTSS community activities were facilitated using a public facing, transparent platform. Community meetings were convened as open teleconference webinars accessible to any individual or group interested in participating in the initiative. Initiative information, meeting schedules and updates, deliverables and artifacts were all published on the eLTSS wiki, a public-facing website, as well as distributed through community emails that could be forwarded and shared by anyone who received them.

The eLTSS stakeholder community consisted of over 300 participants, including TEFT Grantees, health professionals and advocates, associations, government agencies, contractors, IT vendors, CB-LTSS and HCBS service providers and other organizations. Refer to the figure below for a stakeholder breakdown by industry segment.

At the heart of the eLTSS community are the beneficiaries or individuals (adults, children, and seniors) who receive services and supports in their community so they can maintain a healthy, safe, and independent life. These services can include daily living assistance due to physical, cognitive, or chronic health conditions. In addition to the beneficiary and their advocates, eLTSS includes participation from broad stakeholder groups active in the development, implementation and oversight of an LTSS plan. eLTSS stakeholders use information captured in LTSS plans to support non-clinical service delivery, and most rely on paper-based or non-integrated...
IT systems to generate, review and share the plans. The eLTSS Initiative has afforded the eLTSS community a framework to support the transition towards electronic and standardized LTSS plan creation and exchange.

**eLTSS Artifacts**

The work of the eLTSS team and its community members ultimately led to the development of the following artifacts:

1. **eLTSS Project Charter**: A document that describes the overall eLTSS project, including the challenge statement, scope, deliverables and timelines
2. **eLTSS Use Case and User Stories**: A document developed to capture the functional and/or business requirements of an eLTSS system; this information was subsequently used to inform technical specifications and workflows for the capture and exchange of eLTSS data
3. **eLTSS Environmental Scan**: A document consisting of exemplar technical solutions and frameworks, including their associated exemplar standards and technologies, that were identified through eLTSS Concert Series Presentations, independent research, and/or vendor engagement through outreach at industry conferences or other forums
4. **eLTSS Glossary**: A list of terms and definitions that were developed during Round 1 of eLTSS; final updates were made August 2015
5. **Tiered Approach for Piloting**: A document that provides a detailed description of the three incremental tiers for eLTSS pilot implementation
6. **Functional Requirements Matrix**: A document intended to capture and report the functional requirements for creating, sharing and administering an eLTSS Plan as defined as part of the eLTSS Use Case
7. **eLTSS Requirements Traceability Matrix**: A document used to capture and document all Round 2 pilot activities
8. **eLTSS Dataset Summary**: A document that provides an overview of how the eLTSS Dataset was created and how it is intended to be used; includes the final dataset
9. **eLTSS Briefing**: A synopsis of the technical background of the eLTSS initiative work and vision for next steps with Standards Developing Organization (SDO)

**Pilots and Lessons Learned**

The eLTSS Pilot Program was guided by the functional requirements defined in the eLTSS Use Case. eLTSS pilot activities consisted of two rounds, the first of which focused on identifying the appropriate domains and data elements necessary for inclusion in an eLTSS Plan. Because many of the participating TEFT Grantees did not have the data infrastructure in place to support electronic information exchange, the pilot approach needed to be modified in order to accommodate the grantees’ current environments. That modification was a tiered approach to piloting that enabled the support teams to work with grantees on identifying “human readable” data elements first (those that can be understood between individuals) before trying to define machine or electronic system data.

Six state TEFT Grantees (Colorado, Connecticut, Georgia, Kentucky, Maryland and Minnesota) and four non-TEFT organizations (Therap, FEi, Netsmart and Medical Micrographics) participated in Round 1 pilots by submitting their current service plans and datasets. These materials were aggregated, reviewed and harmonized with participation from pilots and other stakeholders during weekly public community All-Hands calls. At the end of Round 1, the community provided feedback and reached consensus on the Round 1 working draft dataset after a public comment period.
In order to provide real-world experience and feedback from multiple CB-LTSS stakeholders, including case managers, providers and beneficiaries, the Round 1 working draft eLTSS dataset was tested and validated during Round 2 Pilots by multiple pilot organizations, including six state TEFT Grantees (Colorado, Connecticut, Georgia, Kentucky, Maryland and Minnesota), a technology vendor (FEi Systems) and a service provider (Meals on Wheels). Each pilot organization used the eLTSS Requirements Traceability Matrix (RTM) to capture and report pilot results. In addition, the eLTSS dataset was mapped to the CMS HCBS Waiver Rule requirements for person-centered planning. This activity identified an additional eleven person-centered planning data elements that needed to be added to the dataset to support compliance with the rule requirements. As with Round 1, the Round 2 dataset went through a comment and consensus period prior to being published as a final version.

Pilot lessons learned included but were not limited to the following:

- CB-LTSS providers have varying levels of technological readiness and still used systems that are not standards-based.
- While some CB-LTSS providers have electronic systems, those technologies are not interoperable with other systems (e.g. waiver management systems or portals, other provider systems, PHR/EHR).
- Procurement processes and contract negotiations for new technologies need to start as early as possible.
- County and state agencies differ greatly from private providers in their priorities and operations.
- Use and adapt existing protocols and technologies whenever possible; do not invent what already exists.
- Selecting a group of committed providers that have a reason and the motivation to work together is critical to a cohesive, long-term pilot.
- Pilot participants should be given clear and consistent messaging, regular in-person contact, concise assignments and deadlines, and a reasonable amount of time to complete assigned activities.
- Pilot teams should be well-prepared to facilitate discussions and leverage strong opinions provided by diverse participants.
- Government agencies and vendors often have resource limitations that should be accounted for early in the project.
- EHR vendors may not have the resources or willingness to make changes to core products for a pilot or technology demonstration.
- CB-LTSS providers, case managers and beneficiaries see the benefits of having increased information exchange capabilities.

**Conclusion**

Through the development of the aforementioned artifacts and pilot activities, eLTSS successfully identified a valid dataset that can be used to support the electronic capture and exchange of non-clinical data related to the services provided to Medicaid beneficiaries.

As LTSS providers continue to invest in and modernize their existing IT infrastructures, it is imperative that they be able capture and exchange information in a standardized manner so they can more effectively support the longitudinal care and service needs of the beneficiary. The adoption and use of a standardized eLTSS dataset will enable diverse and disparate IT systems to capture and share person-centered LTSS plan information in a seamless and secure manner. The published eLTSS dataset will ultimately allow service providers to support...
person-centered planning through the assembly and sharing of a beneficiary’s complete service plan in alignment with the CMS HCBS waiver rule requirements.

The following portion of this document provides details about all the aspects and efforts of the eLTSS initiative.

**Background**

**Overview**

In November 2014, the electronic Long-Term Services and Supports (eLTSS) initiative was launched to identify and harmonize electronic standards that can enable the creation, exchange and reuse of interoperable service plans for use by health care and CB-LTSS providers, payers and the individuals they serve. These plans are intended to help improve the coordination of health and social services that support an individual’s mental and physical health.

eLTSS was a joint Office of the National Coordinator (ONC) and Centers for Medicare and Medicaid (CMS) Project. It was driven by the requirements of the CMS Medicaid Testing Experience and Functional Tools (TEFT) Planning and Demonstration Grant—a program designed to test quality measurement tools and demonstrate e-health in Medicaid Long-Term Services and Support (LTSS). TEFT provided a significant opportunity to leverage health IT to help bridge gaps specific to the experience and outcomes of care for individuals receiving community-based long-term services and supports (CB-LTSS). Over the course of the demonstration, the eLTSS Initiative engaged TEFT grantees and other stakeholder groups to achieve two key objectives: 1) identify components or data elements needed for the electronic creation, sharing, and exchange of person-centered services plans by health care and community-based social service providers, payers, and the individuals they serve; and 2) field test these data elements within participating organizations systems.

Information captured using the eLTSS dataset incorporated many of the person-centered planning requirements outlined in the CMS Home and Community-Based Services (HCBS) 1915 (c) Waiver Final Rule (requirements for Medicaid authorities who provide HCBS). The eLTSS dataset was developed with broad public and private stakeholder engagement so that it could subsequently be used to support consistent data collection and exchange with various information systems to include community-based systems, clinical information systems, State Medicaid and Health Information Exchange (HIE) systems, Personal Health Record (PHR) systems and associated mobile technologies, and other information management systems (e.g. case management, legal).

On a broader scale, the eLTSS Initiative, as driven by the requirements of the CMS TEFT Program and other HHS Initiatives (e.g. National Quality Forum HCBS Quality Measures), provided an opportunity for states to leverage and integrate initiatives available under the Affordable Care Act, the Health Information Technology for Economic and Clinical Health Act of 2009 (HITECH), the Social Security Act1 and the Improving Post-Acute Care Transformation Act of 2014 (IMPACT). The Affordable Care Act Balancing Incentive Program, in particular, includes requirements for the development of a Core Standardized Assessment (CSA) that generates a

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1 The Social Security Act authorized CMS Innovation Center is testing new payment and service delivery models that integrate community resources with the state health system to drive broad health transformation. These models will evaluate the use of health IT to enable delivery systems connectivity and the associated challenges presented by the new data sharing agreements. (Centers for Medicare & Medicaid Services (CMS), 2014)
beneficiary service plan based on assessment data. The required Core Dataset domains for assessments include clinical and non-clinical data. In addition, through the No Wrong Door (NWD) System requirement, participating states must develop a coordinated and streamlined eligibility determination and program enrollment process, where data on functional and financial assessments are shared across participating agencies. The NWD system approach entails engaging the beneficiary and, as appropriate, their caregivers, in facilitating the development of the beneficiary’s person-centered service plan. The CSA and NWD System requirements provide a foundation for how states can access, capture, and share longitudinal LTSS data (institutional and community-based) across provider types and accountable entities. For example, the Administration of Community Living (ACL) investments with ACA funding, in partnership with CMS and the VHA, are building person-centered planning into Aging and Disability Resource Centers (ADRC) that function as a NWD of access to LTSS for all populations and all Payers.

States may maximize the use of health IT by leveraging existing health information exchange (HIE) infrastructure to collect and share eLTSS plan data across CB-LTSS providers—who are not eligible for CMS EHR Incentives or Meaningful Use (MU) incentives—CB-LTSS beneficiaries and other institutional based or clinical provider types (to include those eligible for MU incentives). The eLTSS Initiative was intended not only to enable states to demonstrate how CB-LTSS providers and beneficiaries can benefit from the use of Health IT, but to also ensure that data captured for LTSS can eventually be shared electronically with other clinically and institutionally-based provider types as the beneficiary chooses to share such information.

The capture and flow of this type of information and the actors involved in the process are illustrated in the eLTSS Plan Conceptual Framework graphic as follows:

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2 Centers for Medicare & Medicaid Services (CMS), 2014
3 Mission Analytics Group, 2013. The Core Dataset consists of five domains: activities of daily living (ADLs), instrumental activities of daily living (IADLs), medical conditions/diagnosis, cognitive functioning/memories, and behavior concerns.
Target Outcomes and Expected Deliverables

The eLTSS Initiative was intended to provide a framework (as previously illustrated) to standardize the exchange of the eLTSS plan across and between institutionally-based and community-based information systems. In the short term, the initiative introduced the concept of the eLTSS plan to the public, defined the business case and dataset necessary to support its adoption, and informed future efforts to integrate institutional LTSS data with CB-LTSS data. In the longer term, specification of standards for the eLTSS plan will support and spur development and implementation of software and pilots that will inform refinement of these standards prior to their consideration for inclusion in future Federal regulations, which include Health IT certification requirements. The value of this initiative has been and will continue to be measured through the attainment of the following outcomes:

Immediate Outcomes

- Identification of key assessment domains and associated data elements to include in an eLTSS plan
- Identification of human-readable data elements, data element definitions and value sets
- Execution of six TEFT grantee driven and one or more non-TEFT grantee driven pilots to evaluate the specific use cases for eLTSS plan exchange across provider information systems and with beneficiary PHR systems
This included evaluation of the business case (cost-benefits analysis) for eLTSS plan exchange

- Identification and validation of new national standards for eLTSS plan capture and exchange to include an agreed upon set of data elements that can be accessed in CB and institutional LTSS, and other clinical electronic information systems

**Long-Term Outcomes**

- Identification of functional requirements from Use Cases describing key conditions and business rules to enable eLTSS plan exchange while protecting privacy and confidentiality. These will include at a minimum required components of person-centered plans as defined by CMS (e.g. individual goals, priorities and concerns).
- Development of concise implementation guidance using easy-to-understand documentation, user-friendly tooling and formal models to assist providers, software vendors and others in applying technical requirements for interoperable exchange of eLTSS plan. This will include identification of meta-standards for system capabilities regarding the development and sharing of the eLTSS plan.
- Alignment and integration with other state defined health information systems as applicable
- Maintain alignment with the standards identified for the nationwide Health IT infrastructure as specified in the Health IT Strategic Plan and Interoperability Roadmap
- Engagement of the beneficiary or his/her designee to lead and to make changes whenever possible in decision-making regarding types of care and services needed and received
- Accountability of providers in honoring beneficiary goals and preferences
- Utilization of eLTSS plan data to accelerate quality improvement, population health and research initiatives
- Improvement in provider experience and workflow when using Health IT systems for CB-LTSS
- Improved health and healthcare treatment outcomes relative to beneficiary’s goals, priorities and concerns as identified in their person-centered plan

**Methodology**

**Scope**

This initiative identified key data elements that informed the creation of a structured, longitudinal, person-centered electronic LTSS plan for CB-LTSS beneficiaries. The eLTSS dataset was harmonized in such a way that it could eventually be exchanged electronically across multiple CB-LTSS settings (e.g., adult day services, beneficiary homes, group homes, foster homes, assisted living, supportive housing, home health and hospice), institutional settings (e.g. hospitals, nursing facilities, primary care, post-acute care) and with beneficiaries and payers.

The content or data elements of the eLTSS plan are specific to the types of services rendered and information collected for CB-LTSS, including person-centered quality of life goals, social determinants, and other relevant information essential to person-centered planning and quality CB-LTSS delivery. Beneficiary populations will be able to access the eLTSS plan through a supported PHR system, including the option of a state-identified PHR.
For the purposes of this initiative, the eLTSS plan centered on LTSS information collected for community-based services. The eLTSS plan may also contain relevant clinical data needed to support the continuum of beneficiary care, support and services.

**Use Case**

To fully realize the benefits of health IT for CB-LTSS, ONC and CMS partnered to facilitate the development of a Use Case by the eLTSS community for person-centered service planning. This Use Case defined the functional requirements for high priority LTSS data exchange that would maximize efficiency, encourage rapid learning, and protect beneficiaries’ privacy in an interoperable environment. The eLTSS Use Case addressed the requirements of a broad range of Communities of Interest, including but not limited to beneficiaries, beneficiary advocates/legal representatives, CB-LTSS providers, clinical and institutional-based providers, healthcare payers, accountable entities, vendors, standards organizations, public health organizations, and government agencies.

The eLTSS Use Case described the following:

- The operational context for the sharing and exchange of LTSS data
- The stakeholders with an interest in the Use Case
- The information flows that must be supported by the data exchange
- The types of data and their specifications required in the data exchange

The eLTSS Use Case included two separate User Stories which served as the foundation for identifying and specifying the standards required to support the data exchange and developing reference implementations and tools to ensure consistent and reliable adoption of the data exchange standards.

**Pilot Tiers**

The Pilot Phase of the eLTSS Initiative was executed using a three-tiered approach with each tier building on the previous tier with advancing functionality. Tier activities had some overlap; however, all objectives within Tier I were required to be met prior to completion of Tier II. The three-tiered approach was designed in such a way that any pilot organization could incrementally demonstrate its progress toward achieving the eLTSS Initiative goals, which included creation of an eLTSS Plan along with secure sharing and exchange of the Plan among members of the service team to include the beneficiary, his/her advocate, any others with whom the beneficiary might wish to share the plan.

**Tier I: Basic, Non-Electronic Information Exchange**

Tier I consisted of a lightweight approach focused on establishing an information infrastructure that would support Tiers II and III. This tier targeted change management, workflow redesign and testing to facilitate future electronic information sharing. eLTSS information was to be collected and shared among partners in a simple method designed to evaluate the value of eLTSS data (content) as well as the impact that collecting information in that format would have when compared to legacy systems. Tier I also featured basic use cases designed to accomplish non-electronic information exchange so that advanced functionality could be enabled through Tiers II and III. Information could be exchanged by paper, fax, or other secure method by completing the objectives set forth in this tier.

If an existing electronic system was in place, planning for Tier II could occur simultaneously with Tier I pilot activities.

*eLTSS Initiative Summary September 2017*
**Tier II: Secure Electronic Data Exchange**

Tier II built on objectives from Tier I and incorporated electronic information exchange with readily available services, transport standards, and content standards. This tier targeted use of the data, reports, and files defined in Tier I and the exchange of those artifacts with participating partners (as an object rather than discrete data elements) by means of established secure exchange standards. Pilots were expected to move from basic, non-electronic information exchange to secure, electronic data exchange by executing activities based on the use case identified in Tier I. Completion of the objectives set forth in this tier enabled the exchange of eLTSS data and/or reports as objects using established health IT secure transport standards.

**Tier III: Complete eLTSS Data Model and Exchange**

Tier III was intended to leverage the data model and technologies established in both Tier I and Tier II to implement the complete eLTSS data model with full capture, sharing and exchange of eLTSS data. This tier represented full execution of the functional requirements identified in the eLTSS Use Case. In this tier, data could be imported directly into source systems and exported from source systems into target systems using more robust information exchange standards. This tier introduced integration of the eLTSS Plan into disparate provider systems, consumer systems, and/or HIEs. The use cases in this tier were more robust and represented the complete form of the eLTSS data model and exchange. Meeting the objectives set forth in this tier demonstrated readiness for the implementation and adoption of future information exchange standards and technologies (e.g. C-CDA release 2.1, FHIR-based APIs, etc.).

**eLTSS Dataset Creation**

eLTSS Pilots consisted of two separate rounds. Round 1 pilot activities focused on the identification and harmonization of a working draft dataset for use in capturing and sharing a beneficiary’s service plan. The resulting Round 1 dataset was subsequently tested, validated and finalized as part of Round 2 pilot activities. Details and results of both pilot rounds are described later in this document in the Pilot Activity Results section.

The eLTSS Dataset consists of **core** and **non-core** data elements. Data elements are units of information used to populate fields or forms. The eLTSS data elements are defined in terms of the following:

- **Data Element Name**: The question text that could appear on a service plan
- **Data Element Definition**: The details or description of what the question is requesting and a usage note when applicable
- **Data Element Value**: The expected list of answers for corresponding question (when applicable)
- **Data Element Format**: The suggested display of the corresponding answer(s)

<table>
<thead>
<tr>
<th>Term</th>
<th>Definition</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>Core</td>
<td>Elements the eLTSS community agreed was mandatory to include in a service plan.</td>
<td>Goal</td>
</tr>
<tr>
<td>Non Core</td>
<td>Elements the eLTSS community agreed could be included, but not mandatory to a service plan.</td>
<td>Goal Created Date</td>
</tr>
</tbody>
</table>

The eLTSS Dataset was identified and validated through two rounds of piloting and harmonization activities, as described above. After each round, the dataset went through a public comment and disposition period.
provided an opportunity for the larger eLTSS community to provide thoughts, comments and changes to the dataset (Data Element Name, Definition, Value and Format).

The workflow for the creation of the eLTSS dataset is depicted in the figure below.

![Workflow Diagram]

**Pilot Activity Results**

**Round 1 Pilots**

During Round 1, pilot organizations provided their existing LTSS service plans, which were consolidated and analyzed to identify common question fields and expected answers. Harmonization took place through weekly public Plan Content Sub-Workgroup meetings held with pilots, their plan experts, and the larger eLTSS community. The goal of those meetings was to identify redundant or conflicting information, establish agreed upon data element names, definitions value sets for those elements, and garner feedback on what elements were necessary to include in the dataset. Elements deemed necessary for inclusion in an eLTSS plan were labeled “core” and other elements identified as important, but not standard to all LTSS, were labeled “non-core.” These activities filtered the 692 data elements initially identified by pilots down to 47 core data elements.

The following is a list of committed pilot organizations who submitted service plans and/or datasets during Round 1 to help identify and harmonize a working draft eLTSS Dataset.
Participating Round 1 eLTSS Pilot Organizations | TEFT Grantee / Non-TEFT | Tier Piloted
---|---|---
Colorado Department of Health Care Policy & Financing | TEFT Grantee | Tier I
Connecticut Department of Social Services Division of Health Services | TEFT Grantee | Tier I
Georgia Department of Community Health | TEFT Grantee | Tier I
Kentucky Office of Administrative & Technology Services | TEFT Grantee | Tier I
Maryland Department of Health & Mental Hygiene | TEFT Grantee | Tier I
Minnesota Department of Human Services | TEFT Grantee | Tier I
FEi Systems | Non-TEFT Organization | Tier I
Meals on Wheels (Sheboygan, WI) | Non-TEFT Organization | Tier I
NetSmart | Non-TEFT Organization | Tier I

Round 2 Pilots
Round 2 eLTSS Pilots focused on testing and validating the Round 1 draft dataset with providers, case managers, beneficiaries or other stakeholders. Pilot organizations provided status updates through weekly public All-Hands Workgroup meetings with pilot teams, their plan experts, and the larger eLTSS community. The goal of those meetings was to provide tools, ongoing support and constructive feedback to pilot teams so that they could most effectively and efficiently complete their pilot activities.

The following is a list of committed pilot organizations who participated in the Round 2 validation and testing of the Round 1 eLTSS Dataset.

Participating Round 2 eLTSS Pilot Organizations | TEFT Grantee / Non-TEFT | Tier Piloted
---|---|---
Colorado Department of Health Care Policy & Financing | TEFT Grantee | Tier I
Connecticut Department of Social Services Division of Health Services | TEFT Grantee | Tier II
Georgia Department of Community Health | TEFT Grantee | Tier I
Kentucky Office of Administrative & Technology Services | TEFT Grantee | Tier I-Tier II
Maryland Department of Health & Mental Hygiene | TEFT Grantee | Tier I
Minnesota Department of Human Services | TEFT Grantee | Tier I
Meals on Wheels (Sheboygan, WI) | Non-TEFT Organization | Tier I (dataset validation only)
Therap | Non-TEFT Organization | Tier I (dataset validation only)
FEi Systems | Non-TEFT Organization | Tier I (dataset validation only)
NetSmart | Non-TEFT Organization | Tier I (dataset validation only)
Medical Micrographics | Non-TEFT Organization | Tier I (dataset validation only)

Pilot Lessons Learned and Paths Forward
As part of Round 2, pilot participants were asked to provide report-outs that included challenges, lessons learned and paths forward. These reports were presented to the eLTSS community during the Project In Review meeting that was held as the final public call for the initiative. The following table includes those details as they were presented by each pilot.
<table>
<thead>
<tr>
<th>Pilot Site</th>
<th>Lessons Learned and Paths Forward</th>
</tr>
</thead>
</table>
| **Colorado Department of Health Care Policy & Financing** | • Not all providers are the same even if they do the same thing.  
  o Their ability to participate is based on a variety of things from technology readiness to their level of involvement in the processes TEFT involves.  
  o Counties agencies are different than private providers in what they care about and how they operate. Choose wisely depending on what you are trying to accomplish. Counties for assessments and private organizations for PHR/eLTSS as an example.  
  o Technology standards from HL7 to S&I frameworks are not in play for most.  
  o Initial interviews shouldn’t be a dog and pony show it should be an interview to find people who are willing and able to participate.  
  o Don’t invent things that are already in existence. Adapt.  
  • We approached the problem by stepping back and revisiting the criteria we used in the first place.  
  o Created a subset of providers who we knew had the technological capabilities and time to participate.  
  o Survey a broad spectrum of potential providers to find the group we need to work with.  
  • We are still in the survey process and will take the time we need to ensure we get the right providers on board because we intend to utilize what we have built for the future strategic plan.  
  • Picking appropriate providers because this challenge is greater than implied by the concepts themselves. We cannot do it without active providers.  
  • We want a highly engaged group of people using a person centered approach and this technology to improve the process and especially the satisfaction of beneficiaries and staff involved. It needs to change culture and strategy going forward.  
  • Develop stronger relationships with a core group of providers. Utilize developed technology to integrate into existing systems.  
  o Yes PHR and eLTSS before year end.  
  o Try to find at least one provider who can implement with standards and 5-10 total who can implement via any level of electronics interface.  
 • We have not collected metrics yet.  
 • When we do implement we will look for the following metrics:  
  o Utilization of the PHR/eLTSS in terms of how often it is accessed and if plans are updated.  
  o Track how often changes are requested or additional information is requested on the eLTSS plan/record.  
  o How often is the PHR accessed by the beneficiary or caregivers for the beneficiary. |
| **Connecticut Department of Social Services Division of Health Services** | • Start contract negotiations early  
 • We cross-walked the core elements to C-CDA R2.1: Care Plan document type.  
 • Agile method was a better approach than our previous experience with traditional waterfall  
 • We plan to use the CCDA R2.1 care plan document type as the document that we will use for communicating  
 • Focus moving forward:  
  o Create C-CDA R2.1: Care Plan document type. |
| **Georgia Department of Community Health** | • HCBS Providers / Case Managers / Beneficiaries see the benefits in increased electronic information exchange capabilities  
• Electronic systems are present in HCBS, but are not interoperable (provider systems are not able to connect to waiver management systems/portals, cannot send and receive data. Manual data entry is required to populate data received on paper forms or pdf documents)  
• Scoping a minimal set of HCBS data components needed to provide or coordinate services is challenging  
• Georgia is currently focusing its efforts on the Reference Data Model Project, which is focused on:  
  o Evaluating how the eLTSS Core Dataset can be exchanged using existing content and vocabulary HIT standards  
  o Determining what changes may be needed to either content and vocabulary standards to better support exchange of eLTSS data  
  o Engaging with HL7 to propose and advocate for changes needed to better enable exchange of eLTSS data using HL7 HIT standards |
| **Kentucky Office of Administrative & Technology Services** | • Challenges included the following:  
  o Changes in state government with new leadership and priorities  
  o Processes during MWMA design phase, development and implementation are not reflective of the initial design due to multiple changes without updated information  
  o Medicaid leadership not fully knowledgeable about-involved in the grant  
  o Medicaid only allowing case management agencies access to MWMA rather than all of the providers of the person’s plan  
  o Lack of funding stream for enhancements/maintenance of W-PHR  
  o No established eLTSS standard, adoption of Electronic Medical Record by LTSS community  
• Approach to solving challenges:  
  o Whenever feasible, provide the background/history to hopefully retain some of the progress  
  o Inform those not previously involved in the development of MWMA and service plan  
  o Keep Medicaid informed  
  o Keep advocating for all of a person’s providers to have access  
  o Seek funding stream for enhancements to MWMA and maintenance for the W-PHR  
  o Continue to advocate for electronic solutions in the LTSS community  
• Remaining challenges:  
  o Securing funding stream  
  o Adoption of EMR’s and eLTSS Standard by LTSS community |
| **Maryland Department of Health &** | • Timeline  
  o Account for feedback from in-house stakeholders  
  o Expect persistent follow-up with providers |
### Mental Hygiene

- **Implementation**
  - Make messaging clear and simple
  - Expect providers to have strong opinions on business
  - Different providers have different values and expectations

- **Technology**
  - Providers’ technology may not be prepared to meet data sharing standards
  - Account for state & vendor resource limitations

- **Metrics Collected During eLTSS Initiative**
  - We have been primarily concerned with the ease of exchange, number of beneficiaries involved, and number of providers involved in order to monitor impact of current and future implementation.

- **Immediate next steps**
  - MDH is not immediately implementing changes based on standards identified
  - Will need internal resources and community readiness to proceed
  - We will monitor progress of GA’s efforts and HL7 submission

- **MDH Future Goals**
  - Monitor provider readiness
  - Continue providing opportunities for provider feedback
  - Determine timeline for future enhancements to state LTSS system for data sharing
  - Identify opportunities for MDH Plan of Service enhancements

- **What results would we like to see from eLTSS work?**
  - Community consensus on standard plan & technological standards
  - MDH would like to participate in future community discussions

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### Minnesota Department of Human Services

- **Selecting a group of committed providers that have a reason and motivation to work together is critical to a cohesive, long-term pilot**
  - Selecting a Collaborative that already has experience with health information exchange shortens the learning curve to get to HIE
  - Regular contact with all providers as a collaborative, in person, is critical
  - In addition to meeting as a Collaborative, it’s vital to hold regular, 1:1 provider-specific meetings to ensure understanding and participation
  - Providing clear and specific assignments (supplemented by data collection tools) with unambiguous goals and deadlines facilitates participation
  - Respect the time and resources providers have available to work on the pilot and build your work plan accordingly

- **While many providers want the LTSS data elements identified in this project, those with electronic systems don’t support many of the data elements needed**
  - State systems may also not support sharing these data elements electronically

- **EHR vendors don’t have the time (or motivation) to make changes to their core products during a pilot like this**
  - They may have limited resources to provide access to needed data in their systems
  - Alternate and creative strategies to query and output needed data is required
  - Developing a standard that vendors recognized will help them prioritize building that capability into their HIT/EHR systems
**Minnesota** will continue to support the ONC’s effort in establishing the Core Data Elements as an important contribution to the secure exchange of LTSS data nationally
  - Minnesota hopes to embed these data elements (and others found in FASI) into our core Medicaid enterprise systems
  - The Collaborative is continuing to refine and advance the secure exchange of the OTC eLTSS Data Sheet
    - Minnesota hopes to add additional data elements including those found in FASI, into the OTC eLTSS Data Sheet to enhance the value of LTSS data for beneficiaries and secure provider exchange
  - Lessons from this effort are being incorporated into an additional TEFT Collaborative community in Minnesota
  - Minnesota’s DHS will be an active participant in national standards efforts going forward
    - Minnesota will be working with GTRI as they bring the ONC work product forward to HL7 as a candidate standard

**Meals on Wheels (Sheboygan, WI)**

- Validated the eLTSS Dataset from a service provider’s point of view.
- Identified certain elements missing that were important for service delivery.
- Provided additional insight to the development of a cohesive program.
- As a service provider we discovered that only a portion of elements were relatable, such as beneficiary demographics, assessed needs and service information.
- There is a need for additional service specific elements related to meals as well as emergency contacts and beneficiary background.
- We learned that it would be beneficial to have the ability to share data electronically among all providers and beneficiaries involved.
- It would be of value to all parties to share information in order to insure accuracy of patient/client information and to document outcomes.
- Since participating in the pilot a member of our team had the opportunity to explore the database of one of the country’s best meal delivery programs and have determined that additional shared information would be advantageous including adding: height, weight, blood pressure, malnutrition questionnaire results with dates and prescription/medication information.
- In a perfect world, there would be accessibility to a user-friendly, high-functioning database that has the ability to be shared safely among providers.
- The importance and need of a more comprehensive, yet user-friendly system is made clear, how to get there and who will pay for it are the challenges…in addition to ensuring that confidentiality is maintained at all levels.

*Note: To learn more about the details of pilot activities, review pilot presentations and other deliverables, please see Appendix A of this document.*
Standards Development Support and Standards Development Organization (SDO) Engagement

Vision for eLTSS Dataset Integration
For the eLTSS dataset to be incorporated into any electronic LTSS system and made interoperable and machine-readable with other electronic systems, it needs to be formatted using nationally and internationally recognized health IT standards. The standardization of the eLTSS dataset must be facilitated through a standards development organization (SDO). The SDO will provide guidance on best available standards to support the work and any revisions needed to update the dataset so it can be included in a standard.

HL7 Engagement
HL7 is an international Standards Developing Organization (SDO) that is responsible for curating and publishing clinical and community-based health standards to include C-CDA, FHIR and HL7 v3. HL7 will be providing guidance on best available standards and revisions needed to update the aforementioned standards so they can be used to capture, share and exchange eLTSS information across clinical and HCBS settings.

HL7 Working Group Meetings (WGM) are held multiple times per year at varying locations. The purpose of these meetings is to give the HL7 WG’s a chance to meet face-to-face to work on the standards as well as the opportunity to network with industry leaders from around the world and to provide an invaluable educational resource for the healthcare IT community. eLTSS was presented for the first time on its work efforts and interest in incorporating the dataset into existing content standards (C-CDA and FHIR) by Georgia, a TEFT Grantee and eLTSS pilot, at the Community Based Collaborative Care (CBCC) WG meeting held in September 2017.

The Georgia TEFT team is working on a concept whitepaper and reference data model that will identify existing standards gaps with the eLTSS dataset and describe how the eLTSS dataset can be incorporated into existing content standards. To further these efforts, stakeholders can get involved by participating alongside Georgia and, more importantly, begin building in the eLTSS dataset into their own IT systems for use in CB-LTSS. More information and the opportunity to join the Listserv for automatic updates can be found on the HL7 CBCC WG page: http://www.hl7.org/Special/committees/homehealth/index.cfm

The vision for eLTSS dataset integration is depicted in the following figure.
Summary

Value of eLTSS
Through the community and grantee activities of this initiative, eLTSS has successfully provided a conceptual framework and a working dataset to enable the creation, exchange and reuse of interoperable service plans that support Person-Centered Planning. Having these tools available will allow health care and community-based long-term services and supports providers, payers and the individuals they serve to help improve the coordination of health and social services that support an individual's mental and physical health. It is also important to note that as more and more LTSS providers adopt IT to improve their business operations and coordination with other provider and payer groups, there is a credible business case for the CB-LTSS community to capture structured data that can be easily shared and incorporated across diverse and disparate IT systems.

By using the eLTSS Dataset as an interoperable means of capturing and exchanging CB-LTSS data, the person-centered eLTSS plan can be led by the beneficiary and includes individuals chosen by the beneficiary to participate in his or her services and supports. The eLTSS plan is specific to LTSS information collected for home and community-based services; however the eLTSS plan may also contain relevant clinical data needed to support the full continuum of beneficiary care, supports and services across all provider types and settings of care.
Benefits to CB-LTSS providers, beneficiaries, case managers, payers and other stakeholders include but are not limited to the following:

- Increasing beneficiary engagement in Person-Centered Planning directives and allowing the beneficiary to lead decision making in regard to care and services received
- Integrating and aligning beneficiary priorities, preferences and goals identified in a CB-LTSS setting with goals and outcomes generated in clinical/institutional healthcare plans
- Reducing organizational burden processes of capturing, sharing and reusing data to provide better, more timely care coordination
- Leveraging existing standards-based electronic Health IT exchange protocols
- Bridging future technology with existing non-clinical healthcare systems
- Providing a framework for other non-clinical community-based service data components (e.g. social and behavioral, mental health, housing) to be added in future iterations as deemed appropriate
- Having access to timely and high quality data to accurately access and compare costs of interventions for beneficiaries across different payer and provider groups

**Initiative Lessons Learned**

- There is high interest at the federal, state and community levels to continue working toward the inclusion and interoperability of non-clinical LTSS data in Person-Centered service plans.
- There is interest for the eLTSS Plan dataset to include data elements that support planning for mental, social or behavioral health; the expectation is that the eLTSS dataset will eventually evolve through adoption and use by the LTSS community and be updated to include those types of data elements as they are deemed necessary.
- In most cases, non-grantee eLTSS initiative community participants who expressed interest in piloting lacked the resources to do so.
- Many or most LTSS providers still use paper-based systems, making it difficult for them to capture and exchange data via any electronic means, and there is little incentive for them to do so at this time. Adoption of the eLTSS dataset by these types of providers will most likely be very low early on.
- There was confusion regarding how aspects of the TEFT grant were supposed to work together (PHR with eLTSS) and the timeline as such
- Contracting issues with the states between state and eLTSS vendor systems
- As a demonstration grant it was more difficult for states to determine how much resources to invest as it was unclear what the outcome would be after the demonstration
- Adaptability was key to making the project a success. Where we started and what we thought we would be doing evolved and changed over time. The support team and TEFT grantees were able to adapt to those changes.
- There are exemplar organizations across the country that have successfully adopted health IT to support the capture and exchange of electronic person-centered plans; however, many lack the awareness, resources and incentives to engage in standardization projects (e.g. NY, Indiana, Michigan, OH, PA, CA).

**Recommendations**

- Continue to work and coordinate closely with HL7 to support eLTSS work and any revisions needed to update the dataset so it can be included in a standard
• Participate in the relevant HL7 work-groups as necessary to help amend supportive standards and avoid duplication of effort, especially in the areas of LTSS, Long-Term Post Acute Care (LTPAC) and care planning
• Develop dedicated eLTSS sponsors/participants in ongoing eLTSS dataset support within the SDO(s)
• Establish an outreach and education program to inform relevant stakeholder groups across industry and government on this dataset and the opportunity for further engagement and sponsorship
• Continue coordination efforts with other CMS groups engaged in data element development and publication for assessments and care planning
• Incorporate SDOH concepts and elements into eLTSS dataset by working closely with national groups such as SIREN
## Appendix A: eLTSS Project Deliverables

<table>
<thead>
<tr>
<th>eLTSS General Reference Materials</th>
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<tr>
<td><strong>eLTSS Wikipage</strong></td>
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<tr>
<td><strong>eLTSS Initiative Launch</strong></td>
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<td><strong>eLTSS Project Charter</strong></td>
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<td><strong>eLTSS Environmental Scan</strong></td>
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<td><strong>Q1 2016 Federal Partner Webinar</strong></td>
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<td><strong>Q3 2016 Federal Partner Webinar</strong></td>
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<td><strong>Q4 2016 Federal Partner Webinar</strong></td>
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<td><strong>Q1 2017 Federal Partner Webinar</strong></td>
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<td><strong>Q2 2016 Federal Partner Webinar</strong></td>
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<tr>
<td><strong>Q3 2016 Federal Partner Webinar</strong></td>
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<tr>
<td><strong>eLTSS Project In Review</strong></td>
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### eLTSS Use Case Documents

| **eLTSS Use Case** | This document outlines the scope of the eLTSS Use Case and functional requirements for the sequence of interactions between systems and users in a CB-LTSS planning environment (published November 5, 2015) |
| **Appendix C: Actors and Activities for establishing eLTSS Information Sharing Resource Matrix** | The eLTSS information sharing resource contains a set of Actors and request and response Activities that must be established for the beneficiary/advocate and providers to share eLTSS information. The steps and process on establishing the eLTSS information sharing resource will vary between states and other payers. Some states can and may have multiple information sharing resources. An example set of activities performed to establish the information sharing resource can be found in this matrix. |

### eLTSS Reference Materials

<p>| <strong>Combined ONC Annual Meeting</strong> | 2015 ONC Annual Meeting LTPAC and LTSS Presentation Materials |
| <strong>Money Follows the Person</strong> | The Money Follows the Person (MFP) Rebalancing Demonstration Grant helps states rebalance their Medicaid long-term care systems by increasing the use of home and community-based services (HCBS) and reduce the use of institutionally-based services. This is an ACA Program included in the Deficit Reduction Act (DRA) and Extended through ACA, Section 2403. |
| <strong>Community First Choice</strong> | The “Community First Choice Option” lets States provide home and community-based attendant services to Medicaid enrollees with disabilities under their State Plan (ACA, Section 2401). |</p>
<table>
<thead>
<tr>
<th><strong>Person-Centered Planning and Self-Direction in Home and Community-Based Services</strong></th>
<th>ACA, Section 2402(a) requires the Secretary to ensure all states receiving federal funds develop service systems that are responsive to the needs and choices of beneficiaries receiving home and community-based long-term services (HCBS), maximize independence and self-direction, provide support coordination to assist with a community-supported life, and achieve a more consistent and coordinated approach to the administration of policies and procedures across public programs providing HCBS.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Issue Brief: Opportunities for No Wrong Door/Single Entry Point Systems to Strengthen Home and Community-Based Direct Service Workforce</strong></td>
<td>ACA BIP requirement that establishes a Statewide system to enable consumers to access all long-term services and supports through an agency, organization, coordinated network, or portal, in accordance with such standards as the State shall establish and that shall provide information regarding the availability of such services, how to apply for such services, referral services for services and supports otherwise available in the community, and determinations of financial and functional eligibility for such services and supports, or assistance with assessment processes for financial and functional eligibility.</td>
</tr>
<tr>
<td><strong>Balancing Incentive Program Federal Policy Guidance for the Balancing Incentive Program</strong></td>
<td>The Balancing Incentive Program authorizes grants to States to increase access to non-institutional long-term services and supports (LTSS) as of October 1, 2011. (ACA, Section 10202)</td>
</tr>
<tr>
<td><strong>Risk Management and Quality in HCBS: Individual Risk Planning and Prevention, System-Wide Quality Improvement</strong></td>
<td>This document is a great reference for work relating to identifying and managing risk in HCBS. The document is prepared by Te MEDSTAT Group, Inc and the Human Services Research Institute (February 15, 2005).</td>
</tr>
<tr>
<td><strong>Health Policy Brief: Rebalancing Medicaid Long-Term Services and Supports, //Health Affairs//, September 17, 2015</strong></td>
<td>Expenditures for Medicaid long-term services and supports (LTSS) expenditures are shifting away from primary dependence on institutional care and focusing more on long-term home and community based services. This brief explores the balance between expenditures in home and community versus institutional settings and whether those system expectations should vary by state, by age, or by other population characteristics. It also addresses the discussion of how federal policies influence the use of LTSS by different populations. Health Policy Briefs are produced under a partnership of Health Affairs and the Robert Wood Johnson Foundation.</td>
</tr>
<tr>
<td><strong>Serving Low-Income Seniors Where They Live: Medicaid’s Role in Providing Community-Based Long-Term Services and Supports</strong></td>
<td>To better understand the low-income population with LTSS needs, including those covered by Medicaid and those who are not, this issue brief examines the need for LTSS among seniors who live in the community and need LTSS.</td>
</tr>
<tr>
<td><strong>The HCBS Taxonomy: A New Language for Classifying Home- and Community-Based Services</strong></td>
<td>A description of the HCBS taxonomy, explanation of the construction of a crosswalk to map procedure codes to taxonomy categories, and descriptive statistics on state-, service-, and person-level HCBS expenditures based on 28 states whose 2010 MAX data files had been approved by June 1, 2013.</td>
</tr>
<tr>
<td><strong>Outcome and Assessment Information Set (OASIS) dataset for use in Home Health Agencies (HHAs)</strong></td>
<td>Policy and technical information related to OASIS (the Outcome and Assessment Information Set) data set for use in home health agencies (HHAs), State agencies, software vendors, professional associations and other Federal agencies in implementing and maintaining OASIS.</td>
</tr>
<tr>
<td><strong>Minimum Data Set (MDS) dataset for use in Nursing Homes</strong></td>
<td>The Minimum Data Set (MDS) is part of the federally mandated process for clinical assessment of all residents in Medicare and Medicaid certified nursing homes.</td>
</tr>
<tr>
<td><strong>Continuity Assessment Record and Evaluation (CARE) Item Set</strong></td>
<td>Provided standardized information on patient health and functional status, independent of site of care, and examined resources and outcomes associated with treatment in each type of setting.</td>
</tr>
<tr>
<td><strong>Program for All-Inclusive Care for the Elderly (PACE) Assessment and Care Planning Tools</strong></td>
<td>Regulatory requirements for the Interdisciplinary Team (IDT) as defined by the PACE regulations.</td>
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<tr>
<td><strong>Balancing Incentives Program Tools</strong></td>
<td>BIP Work Plan and Deliverables guidance</td>
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<tr>
<td><strong>Home and Community-Based Services (HCBS) Taxonomy</strong></td>
<td>Describes the HCBS taxonomy and presents findings on HCBS waiver expenditures and users</td>
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<tr>
<td><strong>Standards Catalog</strong></td>
<td>Includes the HL7 Consolidated Clinical Document Architecture (C-CDA) Release 2.0 Implementation Guide, BlueButton Plus, and the emerging HL7 FHIR Profile</td>
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<tr>
<td><strong>Structured Data Capture</strong></td>
<td>HL7 FHIR Profile Implementation Guide for Structured Data Capture (SDC)</td>
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<tr>
<td><strong>Data Access Framework</strong></td>
<td>HL7 FHIR Profile Implementation Guide for Data Access Framework (DAF)</td>
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<tr>
<td><strong>ONC Direct Project</strong></td>
<td>Transport Standard</td>
</tr>
<tr>
<td><strong>Recommended Social and Behavioral Domains and Measures for Electronic Health Records</strong></td>
<td>Institute of Medicine's work to identify domains and measures that capture the social determinants of health to inform the development of recommendations for Stage 3 meaningful use of electronic health records (EHRs)</td>
</tr>
<tr>
<td><strong>National Core Indicators</strong></td>
<td>National Association of State Directors of Developmental Disabilities Services (NASDDDS) and Human Services Research Institute (HSRI) program</td>
</tr>
<tr>
<td><strong>Standards for Social Work Practice</strong></td>
<td>National Association of Social Workers (NASW) Standards</td>
</tr>
<tr>
<td><strong>Standards of Practice for Case Management</strong></td>
<td>Case Management Society of America (CMSA) Standards</td>
</tr>
<tr>
<td><strong>Standardized Data Collection Tools</strong></td>
<td>Administration of Aging (AoA) guidance</td>
</tr>
<tr>
<td><strong>One Care Early Indicators Projects (EIP)</strong></td>
<td>MassHealth, One Care Implementation Council, and UMass Medical School collaboration reports</td>
</tr>
<tr>
<td><strong>National Information Exchange Model (NIEM)</strong></td>
<td>NIEM domains contain mission-specific data components that build upon NIEM core concepts and add additional content specific to the community supporting that mission. A NIEM domain represents both the governance and model content oriented around a community’s business needs. A NIEM domain manages their portion of the NIEM data model and works with other NIEM domains to collaboratively to identify areas of overlapping interest.</td>
</tr>
<tr>
<td><strong>National Association of State Directors of Developmental Disabilities Services (NASDDDS)</strong></td>
<td>NASDDDS represents the nation's agencies in 50 states and the District of Columbia providing services to children and adults with intellectual and developmental disabilities and their families. NASDDDS promotes systems innovation and the development of national policies that support home and community-based services for individuals with disabilities and their families. NASDDS, in collaboration with the Human Services Research Institute (HSRI) has developed National Core Indicators (NCI), a program to support state member agencies to gather a standard set of performance and outcome measures that can be used to track their own performance over time, to compare results across states, and to establish national benchmarks.</td>
</tr>
<tr>
<td><strong>National Quality Forum 2014 Input on Dual Eligible Beneficiaries</strong></td>
<td>Report developed by the Measure Applications Partnership (MAP) for the Department of Health &amp; Human Services (HHS) on the use of performance measures to evaluate and improve care provided to dual eligible beneficiaries. The report includes an updated Family of Measures for Dual Eligible Beneficiaries and outlines a basic rational for engaging stakeholders using measures in learning more about their experience to inform MAP’s future decision making.</td>
</tr>
<tr>
<td><strong>eLTSS Pilot Artifacts</strong></td>
<td></td>
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<tr>
<td><strong>Published Round 2 Dataset</strong></td>
<td>This is the Final Published dataset from Round 2 Pilots. A definition for each data element is included.</td>
</tr>
<tr>
<td><strong>Abridged Round 2 Requirements Traceability Matrix (RTM)</strong></td>
<td>This is the revised version discussed on February 16, 2017 on the eLTSS All-Hands Community Meeting. It includes more streamlined questions as well as the eLTSS Dataset definitions and TEFT Grantee Pilot Mapping.</td>
</tr>
<tr>
<td><strong>Published Round 1 Dataset</strong></td>
<td>This is the Final Published eLTSS dataset from Round 1 Pilots. A definition for each data element is included.</td>
</tr>
<tr>
<td><strong>Round 2 Requirements Traceability Matrix (RTM) - original</strong></td>
<td>The RTM is used to document all Round 2 Pilot activities. This will be a final deliverable at the end of the piloting process.</td>
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### eLTSS Pilot Guidance

| **eLTSS Round 1 Pilot Kickoff Presentation** | Presentation materials and Vimeo recording of Round 1 Pilots kickoff meeting *(08OCT15)* |
| **eLTSS Round 2 Pilot Kickoff Presentation** | Presentation materials and Vimeo recording of Round 2 Pilots kickoff meeting *(22SEP17)* |
| **Final Pilot Report Out Presentation Template** | All TEFT Grantees and other organizational Pilots who participated in Round 2 are asked to present their findings to include methodology, accomplishments, lessons learned, and Ideas for a path forward. |
| **Pilot Plan Presentation Template** | All TEFT Grantees and other organizations participating in the eLTSS Round 2 Pilots are asked to present a Pilot Plan Presentation. Includes an introduction of the pilot team, goals of the pilot, elements tested, ecosystem, workflow, standards and technologies under consideration, and logistics. |
| **Pilot Plan Report Out Template** | This one slide Powerpoint will be used by all participating Pilots to report their findings on our Community All Hands calls throughout this second round of pilots. Ideally each Pilot will have a report out at least twice a month. |
| **Pilot Read Me** | This Readme document serves as a high-level overview of the contents of the eLTSS Pilot Guide, which is comprised of the Three-Tiered Pilot Approach, the Functional Requirements Matrix and information on how to best leverage them to support Pilot success. |
| **Tiered Approach for Pilots** | A document that provides a detailed description of the incremental tiers for eLTSS pilot implementation. |
| **Functional Requirements Matrix** | Functional requirements for creating, sharing and administering an eLTSS plan that have been previously defined as part of the eLTSS Use Case work. |
| **eLTSS Dataset Worksheet** | To further assist the piloting process, this fillable form will help to capture necessary data elements and values. Please be as detailed as possible and feel free to send multiple pages if needed. |
| **Pilot Planning PPT Template** | A PowerPoint template for potential Round 1 pilots to use to present their Pilot Team; Goal of the Pilot; Tier of Interest; Use Case Scenario and Actors/Systems; Minimum Configuration; Timeline; Success Criteria; In Scope/Out of Scope; and Risks & Challenges details of their pilot. |
| **Pilot Word Template** | (An alternative to the Pilot Planning PPT) A word template for potential pilots to use to present their Pilot Team; Goal of the Pilot; Tier of Interest; Use Case Scenario and Actors/Systems; Minimum Configuration; Timeline; Success Criteria; In Scope/Out of Scope; and Risks & Challenges details of their pilot. |
| **eLTSS Round 1 Pilot Artifact Checklist** | A list of items that must be checked to complete the artifact submission phase for Round 1 Pilots. |
### Pilot Overview Document
An overview of the eLTSS Pilots Workgroup including a Value Statement for Participating Entities, Benefits of Participation as an eLTSS Pilot Site and steps for How to Get Started.

### Pilots Overview Presentation
A presentation for potential pilots that provides an overview of the electronic Long-Term Services and Supports Pilot Planning, Activities, Artifacts and Evaluation.

### Institute for Healthcare Improvement: A Guide for Idealized Design
The purpose of this guide is to describe the new Idealized Design process and details around its use. An overall principle used in developing the guide is to better manage the uncertainty that is associated with new ideas for system redesign that are to be developed and tested.

### Domain Harmonization Matrix
eLTSS community defined set of domains/subdomains and exemplar question/answer sets that an eLTSS Plan would need to include.

### eLTSS Concert Series Presentations
- **Right Care Now presentation**
  - Right Care Now materials and meeting recording as presented 25JUN15
- **Harmony Information Systems presentation**
  - Harmony Information Systems materials and meeting recording as presented 21MAY15
- **State of Minnesota presentation**
  - State of Minnesota materials and meeting recording as presented 14MAY15
- **Kno2 (Inofile) presentation**
  - Kno2 (Inofile) materials and meeting recording as presented 7MAY15
- **State of Colorado presentation**
  - State of Colorado materials and meeting recording as presented 30APR15
- **Care at Hand presentation**
  - Care at Hand materials and meeting recording as presented 23APR15
- **PeerPlace presentation**
  - PeerPlace materials and meeting recording as presented 9APR15
- **Person-Centered Planning Tools presentation**
  - Person-Centered Planning Tools materials and meeting recording as presented 2APR15
- **NASDDDS National Core Indicators presentation**
  - NASDDDS National Core Indicators materials and meeting recording as presented 26MAR15
- **State of Maryland TEFT and eLTSS presentation**
  - State of Maryland TEFT and eLTSS materials and meeting recording as presented 12MAR15
- **IMPACT Act of 2014 presentation**
  - IMPACT Act of 2014 materials and meeting recording as presented 19FEB15
- **FEi Systems and Maryland presentation**
  - FEi Systems and Maryland materials and meeting recording as presented 12FEB15
- **Patient Controlled Data in eLTSS presentation**
  - Patient Controlled Data in eLTSS meeting recording as presented 5FEB15
<table>
<thead>
<tr>
<th>eLTSS Pilot Presentations</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Arizona Health Care Cost Containment System</td>
<td>• <strong>Round 1 Pilot Plan Presentation</strong> (03DEC15)</td>
</tr>
</tbody>
</table>
| Colorado Department of Health Care Policy & Financing         | • **Round 1 Pilot Plan Presentation** (05NOV15)  
|                                                               | • **Round 2 Pilot Plan Presentation** (06OCT16)  
|                                                               | • **Round 2 Final Pilot Report Out** (20APR17) |
| Connecticut Department of Social Services Division of Health Services | • **Round 1 Pilot Plan Presentation** (05NOV15)  
|                                                               | • **Round 2 Pilot Plan Presentation** (13OCT16)  
|                                                               | • **Round 2 Final Pilot Report Out** (04MAY17) |
| Georgia Department of Community Health                        | • **Round 1 Pilot Plan Presentation** (29OCT15)  
|                                                               | • **Round 2 Pilot Plan Presentation** (06OCT16)  
|                                                               | • **Round 2 Final Pilot Report Out** (04MAY17) |
| Kentucky Office of Administrative & Technology Services       | • **Round 1 Pilot Plan Presentation** (05NOV15)  
|                                                               | • **Round 2 Pilot Plan Presentation** (13OCT16)  
|                                                               | • **Round 2 Final Pilot Report Out** (04MAY17) |
| Maryland Department of Health & Mental Hygiene                | • **Round 1 Pilot Plan Presentation** (05NOV15)  
|                                                               | • **Round 2 Pilot Plan Presentation** (13OCT16)  
|                                                               | • **Round 2 Final Pilot Report Out** (20APR17) |
| Minnesota Department of Human Services                        | • **Round 1 Pilot Plan Presentation** (29OCT15)  
|                                                               | • **Round 2 Pilot Plan Presentation** (06OCT16)  
|                                                               | • **Round 2 Final Pilot Report Out** (20APR17) |
| Meals on Wheels (Sheboygan, WI)                               | • **Round 1 Pilot Plan Presentation** (29OCT15)  
|                                                               | • **Round 2 Pilot Plan Presentation** (06OCT16)  
|                                                               | • **Round 2 Final Pilot Report Out** (04MAY17) |
| A|D Vault                                                      | • **Round 1 Pilot Plan Presentation** (22OCT15)  |
| Care at Hand                                                  | • **Round 1 Pilot Plan Presentation** (29OCT15)  |
| eCaring                                                       | • **Round 1 Pilot Plan Presentation** (19NOV15)  |
| FEi Systems                                                   | • **Round 1 Pilot Plan Presentation** (22OCT15)  
|                                                               | • **Round 2 Pilot Plan Presentation** (17NOV16) |
| Janie Appleseed                                               | • **Round 1 Pilot Plan Presentation** (15OCT15)  |
| KNO2                                                         | • **Round 1 Pilot Plan Presentation** (22OCT15)  |
| National Disability Institute                                | • **Round 1 Pilot Plan Presentation** (22OCT15)  |
| Peer Place                                                    | • **Round 1 Pilot Plan Presentation** (12NOV15)  |
| Therap Services                                               | • **Round 1 Pilot Plan Presentation** (12NOV15)  
|                                                               | • **Round 2 Pilot Plan Presentation** (17NOV16) |
| Netsmart                                                      | • **Round 2 Pilot Plan Presentation** (08DEC16)  |
| Medical Micrographics                                         | • **Round 2 Pilot Plan Presentation** (08DEC16)  |
## Appendix B: eLTSS Milestones

<table>
<thead>
<tr>
<th>DATES</th>
<th>MILESTONES</th>
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<tbody>
<tr>
<td><strong>2014</strong></td>
<td></td>
</tr>
<tr>
<td>May 14</td>
<td>Developed eLTSS Project Plan and Timeline</td>
</tr>
<tr>
<td>August 1</td>
<td>Developed eLTSS Initiative Roadmap</td>
</tr>
<tr>
<td>September 14</td>
<td>Developed eLTSS Draft Project Charter and Environmental Scan</td>
</tr>
<tr>
<td>October 17</td>
<td>Published eLTSS Initiative Call for Participation</td>
</tr>
<tr>
<td>October 18</td>
<td>Published eLTSS Wiki site</td>
</tr>
<tr>
<td>November 6</td>
<td>Launched eLTSS Initiative</td>
</tr>
<tr>
<td><strong>2015</strong></td>
<td></td>
</tr>
<tr>
<td>January 26</td>
<td>Published eLTSS Project Charter</td>
</tr>
<tr>
<td>June 11</td>
<td>Published eLTSS Use Case</td>
</tr>
<tr>
<td>September 10</td>
<td>Presented identified candidate standards to eLTSS community</td>
</tr>
<tr>
<td>August 31</td>
<td>Published eLTSS Domain Harmonization Matrix</td>
</tr>
<tr>
<td>September 30</td>
<td>Published eLTSS Functional Requirements Matrix (FRM)</td>
</tr>
<tr>
<td>October 8</td>
<td>Kicked off Round 1 eLTSS Pilots</td>
</tr>
<tr>
<td>October 9</td>
<td>Published eLTSS Pilot Guidance</td>
</tr>
<tr>
<td>October 15 – December 3</td>
<td>Round 1 eLTSS Pilot Plan Presentations</td>
</tr>
<tr>
<td><strong>2016</strong></td>
<td></td>
</tr>
<tr>
<td>January</td>
<td>Presented eLTSS work at Federal Health Architecture (FHA) Monthly Meeting</td>
</tr>
<tr>
<td>February</td>
<td>Presented eLTSS work on Q1 Federal Partner Webinar</td>
</tr>
<tr>
<td>March</td>
<td>Presented eLTSS work at State Healthcare IT Connect Summit</td>
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<tr>
<td>April</td>
<td>Presented eLTSS work at Nemours Building Community Resilience Workshop</td>
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<tr>
<td>June</td>
<td>Presented eLTSS work at ONC Annual Meeting</td>
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<tr>
<td>June</td>
<td>Presented eLTSS work at AHIMA LTPAC Summit</td>
</tr>
<tr>
<td>August</td>
<td>Presented eLTSS work at Annual HCBS Conference</td>
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<tr>
<td>August</td>
<td>Presented eLTSS work on Q3 Federal Partner Webinar</td>
</tr>
<tr>
<td>August</td>
<td>Presented eLTSS work at HL7 Working Group Meeting</td>
</tr>
<tr>
<td>September 22</td>
<td>Published Round 1 Pilots eLTSS Draft Dataset</td>
</tr>
<tr>
<td>September 22</td>
<td>Kicked off Round 2 eLTSS Pilots</td>
</tr>
<tr>
<td>September 26</td>
<td>Published eLTSS Requirements Traceability Matrix (RTM)</td>
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<tr>
<td>October</td>
<td>Presented eLTSS work at HIMSS LTPAC Roundtable</td>
</tr>
<tr>
<td>October 6 – December 8</td>
<td>Round 2 eLTSS Pilot Plan Presentations</td>
</tr>
<tr>
<td>November</td>
<td>Presented eLTSS work on Q4 Federal Partner Webinar</td>
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<tr>
<td><strong>2017</strong></td>
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</tr>
<tr>
<td>January</td>
<td>Presented eLTSS work at Categories of Standards to Support HCBS: Overview for CMS meeting</td>
</tr>
<tr>
<td>March</td>
<td>Presented eLTSS work on Q1 Federal Partner Webinar</td>
</tr>
<tr>
<td>March</td>
<td>Presented eLTSS work on TEFT Virtual Meeting</td>
</tr>
<tr>
<td>April 20 – May 4</td>
<td>Round 2 eLTSS Pilot Report-Outs</td>
</tr>
<tr>
<td>Month</td>
<td>Event</td>
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<tr>
<td>April</td>
<td>Presented eLTSS work at Round 2 Pilots Update for CMS Leadership meeting</td>
</tr>
<tr>
<td>June</td>
<td>Presented eLTSS work at Q2 Federal Partner Webinar</td>
</tr>
<tr>
<td>June</td>
<td>Presented eLTSS work at CMS HCBS Affinity Group meeting</td>
</tr>
<tr>
<td>August</td>
<td>Presented eLTSS work as part of Dataset Crosswalk to NY Behavioral Health Dataset</td>
</tr>
<tr>
<td>August</td>
<td>Presented eLTSS work at NASAUD HCBS Annual Conference and eLTSS Intensive</td>
</tr>
<tr>
<td>September 28</td>
<td>Published finalized eLTSS Round 2 Dataset</td>
</tr>
<tr>
<td>September 28</td>
<td>eLTSS Project In Review Meeting</td>
</tr>
<tr>
<td>September</td>
<td>Presented eLTSS work on Q3 Federal Partner Webinar</td>
</tr>
<tr>
<td>September</td>
<td>Presented eLTSS work at HL7 Introduction and Project Scope Statement Presentation</td>
</tr>
<tr>
<td>September</td>
<td>Presented eLTSS Overview for SIREN: Crosswalk of eLTSS Dataset to SDOH</td>
</tr>
<tr>
<td>September</td>
<td>Presented eLTSS work at CMS Leadership Update meeting</td>
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