Elizabeth Palena Hall, ONC

Bonnie Young, GA Department of Community Health
Conflict of Interest

Elizabeth Palena Hall, ONC

• Has no real or apparent conflicts of interest to report.

Bonnie Young, GA Department of Community Health

• Has no real or apparent conflicts of interest to report.
Agenda

• Long Term Services and Supports Need for Health Information Sharing to Support Coordinated Care
• eLTSS Project Overview, Key Accomplishments, Vision and Use Cases
• eLTSS Roadmap for 2019 and Work with HL7
• eLTSS Community Engagement Opportunities
Objectives

• Describe an overview of the eLTSS Initiative, a joint CMS and ONC project, focused on the identification of national standards to support interoperable LTSS service plan exchange, sponsored through a Medicaid Demonstration Grant.

• Analyze the value proposition for standardizing person-centered eLTSS data elements in support of interoperable data exchange across the continuum of care and service delivery.

• Describe the process for engaging diverse stakeholder groups to include clinical and non-clinical providers, federal and state partners, individuals and advocates, system implementers and standards development organizations (SDOs) in the identification of interoperable standards for eLTSS plans.

• Explain how the standardized eLTSS plan can be used to support the capture and exchange of social determinants of health (SDOH) data such as housing, education and transportation which influence individuals' ability to maintain their health.
Percentage Increase in the Number of Older Adults Age 60 or above from 2006 to 2016

Increasing Prevalence and Incidence of Disability Also Driving State Policy Decisions

Disability Prevalence in USA

Sources: https://disabilitycompendium.org & http://www.disabilitystatistics.org
The Intersection of Health and Social Services

• Especially for older adults, there is a significant overlap between primary/acute care and LTSS:
  – Hospitalization (example: broken hip) -> post-acute rehabilitation -> personal care and chore services

• Fractured eligibility & payment systems, particularly Medicare and Medicaid, can lead to disconnects between settings of care, treatment goals, and desired health/social outcomes
  – However, eligibility, payment, and quality management can be fractured inside of Medicaid too

• Interoperable systems have the promise of improving coordination and keeping LTSS person-centered
What is Community-Based Long-Term Services and Supports (CB-LTSS) or Home and Community-Based Services (HCBS)?

- The National Quality Forum refers to the term “home and community-based services” as an “…array of services and supports delivered in the home or other integrated community setting that promote the independence, health and well-being, self-determination, and community inclusion of a person of any age who has significant, long-term physical, cognitive, sensory, and/or behavioral health needs”.

- HCBS services are often delivered by providers funded by state Medicaid programs through an HCBS waiver program, authorized under section 1915(c) of the Social Security Act.

- Standard services include but are not limited to: case management (i.e. supports and service coordination), homemaker, home health aide, personal care, adult day health services, habilitation (both day and residential), and respite care.

- In the United States, Medicaid is significant source of reimbursement to states for HCBS
LTSS Beneficiaries are Driving Medicaid Spending

Figure 1

Nearly two-thirds of Medicaid spending is for the elderly and people with disabilities, FY 2014.

Enrollees
Total = 80.7 Million

Expenditures
Total = $462.8 Billion

NOTE: Totals may not sum to 100% due to rounding.
SOURCE: KFF estimates based on analysis of data from the FFY2014 Medicaid Statistical Information System (MSIS) and CMS-64 reports. Because FFY2014 data was missing some or all quarters for some states, we adjusted the data using secondary data to represent a full fiscal year of enrollment.
Changing Delivery Systems Impacting Services – MLTSS Programs 2017

Source: NASUAD survey; CMS data
States Collecting Data on Medicaid Consumer Satisfaction, Quality of Life, and Quality of Care by Service

Source: NASUAD 2016 Survey of State Agencies on Outcomes and Data (n=42)
Consumer Surveys: Non-Medicaid LTSS

States Collecting Data on Non-Medicaid LTSS Consumer Satisfaction, Quality of Life, and Quality of Care by Service

Source: NASUAD 2016 Survey of State Agencies on Outcomes and Data (n=42)
State Aging/Disability Information Sharing

Does your information system share data with other HHS data systems?

- Yes: 7
- No: 22
- Other: 13

Source: NASUAD 2016 Survey of State Agencies on Outcomes and Data (n=42)
The Goal: LTSS Integrated System

- Statewide database of services for use for all entry points regardless of payer
- Easy to use data collection system
- Multiple entry points, but built on the same foundation
- Measuring quality and improving performance
- One common identifier for consumer throughout his/her LTSS experience

Integrated Person-centered LTSS System

- AAAs/ADRCs
- Eligibility Sites
- MCOs
- CILs
- LTSS Providers
- Primary/Acute Providers

#HIMSS19
Person centered thinking, planning, and practice is the foundation of Home and Community Based Services for people with disabilities across the lifespan.
eLTSS Background and Project Overview
eLTSS Project Background

• The eLTSS Initiative is a joint project between CMS and ONC, made possible by CMS funding. Established to advance data-level interoperability for the home and community-based services (HCBS) community
  – The initiative focuses on the identification and harmonization of electronic standards that can enable the creation, exchange and re-use of interoperable person-centered service plans for use by health care and home and community based service providers, payers and the individuals they serve.
  – These plans can help to improve the coordination of health and social services that support an individual’s mental and physical health.

• Driven by the requirements of the CMS Testing Experience and Functional Tools (TEFT) in Medicaid Planning and Demonstration Grant Program
  • Introduced in Affordable Care Act (ACA) Section 2701
  • March 2014: CMS awarded Demonstration Grants to 9 states: AZ, CO, CT, GA, KY, LA, MD, MN, NH
  • 6 of these 9 states participated in the eLTSS component of TEFT: CO, CT, GA, KY, MD, MN

https://www.medicaid.gov/medicaid-chip-program-information/by-topics/delivery-systems/grant-programs/teft-program.html
eLTSS Initiative Kick-off Nov ‘14

2015

Use Case Complete

Round 1 Pilots

2016

eLTSS Dataset Harmonization

2017

eLTSS Final Dataset Published

Round 2 Pilots

2018

eLTSS Dataset to HL7 Mapping Complete

eLTSS Whitepaper Balloted through HL7

2019

eLTSS Supplemental Begins (eLTSSv2)
eLTSS Ballot Reconciliation Complete, Changes Made, Negative Votes Withdrawn

eLTSS Informative Document (Whitepaper) Published via HL7

eLTSS FHIR IG Balloted through HL7

eLTSS FHIR IG Published via HL7

2020

eLTSS Ballot Reconciliation Complete, Changes Made, Negative Votes Withdrawn

* Italics text = future proposed dates (subject to change)
Review of the eLTSS Project

• Phase 1:
  – Identified and harmonized a core set of data items commonly found on LTSS Service Plans to facilitate the capture and exchange of person-centered LTSS service plan data.

• Phase 2:
  – Piloted identified and harmonized core data items with TEFT grantee states and vendors to validate the dataset

• Phase 3:
  – Continuation of Phase 1 & Phase 2 broken into 2 Tracks
    • Track 1: Balloted the eLTSS Informative Document at HL7 in the September 2018 ballot cycle outlining how the harmonized and identified data items could be mapped using HL7 FHIR and C-CDA
    • Track 2: Leverage the published eLTSS Informative Document to create an HL7 FHIR Implementation Guide (IG). The FHIR IG is scheduled for the May 2019 HL7 Ballot Cycle.

To track and review eLTSS Artifacts including the published dataset please see the eLTSS wiki: https://oncprojecttracking.healthit.gov/wiki/display/TechLabSC/eLTSS+Home
# eLTSS Final Dataset

- **Total Number of Elements:** 56

<table>
<thead>
<tr>
<th>Beneficiary Demographics: 10 Elements</th>
<th>Person Centered Planning: 11 Elements</th>
<th>Plan Information: 1 Element</th>
<th>Risks: 2 Elements</th>
<th>Service Provider Information: 5 Elements</th>
</tr>
</thead>
<tbody>
<tr>
<td>Person Name</td>
<td>Person Name</td>
<td>Person Signature</td>
<td>Identified Risk</td>
<td>Support Planner Name</td>
</tr>
<tr>
<td>Person Identifier</td>
<td>Person Identifier</td>
<td>Person Printed Name</td>
<td>Person Printed Name</td>
<td></td>
</tr>
<tr>
<td>Person Identifier Type</td>
<td>Person Setting Choice Indicator</td>
<td>Person Signature Date</td>
<td>Person Signature Date</td>
<td></td>
</tr>
<tr>
<td>Person Date of Birth</td>
<td>Person Setting Choice Options</td>
<td>Guardian/Legal Representative Signature</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Person Phone Number</td>
<td>Service Options Given Indicator</td>
<td>Guardian/Legal Representative Printed Name</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Person Address</td>
<td>Service Selection Indicator</td>
<td>Support Planner Signature</td>
<td>Support Planner Phone Number</td>
<td></td>
</tr>
<tr>
<td>Emergency Contact Name</td>
<td>Service Provider Options Given Indicator</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Emergency Contact Relationship</td>
<td>Service Provider Selection Agreement Indicator</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Emergency Contact Phone Number</td>
<td>Service Plan Agreement Indicator</td>
<td>Support Planner Printed Name</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Emergency Backup Plan</td>
<td>Plan Monitor Name</td>
<td>Service Provider Signature</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Plan Monitor Phone Number</td>
<td>Service Provider Signature Date</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Service Provider Printed Name</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Service Provider Signature Date</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Final dataset and information on HL7 engagement available at: <a href="https://oncprojecttracking.healthit.gov/wiki/display/TechLabSC/eLTSSHome">https://oncprojecttracking.healthit.gov/wiki/display/TechLabSC/eLTSSHome</a></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Vision for eLTSS Dataset Integration

The eLTSS dataset can be incorporated into various programs and health/wellness IT systems:

- Wearables
- Transport Systems
- Education Programs
- Housing Systems
- Mobile Health Systems
- Clinical and non-clinical IT Systems

Wearables
- Nutrition Programs
- Wellness Programs
- Education Programs

For interoperability, the eLTSS dataset needs to be represented using nationally recognized vocabularies and content standards.
eLTSS Use Case Examples

Use Case Examples

1. Care Coordinator sends the LTSS Service Plan Data to a beneficiary Clinical Provider, such as a PCP.

2. Care Coordinator sends the LTSS Service Plan Data to an LTSS Provider, so that LTSS Provider may begin services.

3. Care Coordinator sends the LTSS Service Plan Data to the beneficiary Personal Health Record, so that Beneficiary has a copy of the plan data and can share it with family members.

4. Clinical Provider sends updates so LTSS Provider is aware of recent hospital/doctor visit.
eLTSS Timeline:

• **September – December 2018**
  - Conducted ballot disposition on all ballot comments collected during ballot comment period
  - Updated the eLTSS Informative document to reflect comment dispositions

• **January – September 2019**
  - **January**: Submitted revised Informative Document to HL7 for publication
  - **January – May**: Develop the eLTSS FHIR Implementation Guide to be included in the May 2019 HL7 ballot.
    • This IG provides robust formal guidance on how to leverage FHIR to exchange eLTSS Dataset data. It will also be able to support continued piloting efforts by implementers.
  - **June – September**: Disposition and reconcile eLTSS FHIR IG ballot comments
    • This process includes reviewing and responding to comments as well as updating and publishing the final IG based on comment resolution.
Working with a Standards Development Organization – HL7
eLTSS Engagement with HL7

- Working with an SDO such as HL7 provides a way to integrate our efforts to enable interoperability for Home and community based services (HCBS) and supports into the broader healthcare interoperability landscape bridging the gap to the larger clinical ecosystem. Being able to leverage an industry recognized standard gives implementers the framework necessary to create interoperability between and across different healthcare entities.

- Within HL7, our work is being conducted under the guidance of the following workgroups:
  - Community Based Care and Privacy (CBCP)
  - Patient Care (PC)
  - Structured Documents (SD)
  - FHIR Management Group (FMG)
  - Financial Management (FM)
  - Orders and Observations (O&O)
eLTSS Informative Document Contents

- Informative Document: Provides the HL7 Community with context and narrative around how two national recognized standards, FHIR and C-CDA, can be used to represent and exchange the eLTSS Dataset

  - Introduction, Objectives and Background
  - LTSS Ecosystem Overview and Information Sharing Use Cases
  - FHIR and C-CDA for LTSS Service Plan Information Exchange
    - Approach for Selecting Standards
    - Overview of Selected Standards and Mapping Results
    - Exchanging LTSS Service Plans Using FHIR
    - Exchanging LTSS Service Plans Using C-CDA

  - Considerations for Future Work
  - Appendices:
    - eLTSS Dataset
    - FHIR and C-CDA Mappings
    - FHIR and C-CDA sample instances
    - C-CDA rendered sample
    - Quality of Mapping Legend
eLTSS Informative Document Publication

- Internal team and government reviews were conducted December 2018 and January 2019
- Our sponsoring workgroup, HL7’s Community-Based Care and Privacy (CBCP), voted on and approved the submission of publication request pending withdrawal of final negative vote for the Informative Document on 1/8/19
- A formal request for publication was submitted to HL7 on 1/10/19
eLTSS FHIR IG Development

• Based on the scenarios articulated in the eLTSS use cases, the FHIR framework is a great fit for enabling eLTSS exchanges due to its focus on streamlined API-based interoperability, flexible and modular approach and comprehensive focus aimed at supporting clinical, administrative and social services workflow needs.

• The eLTSS FHIR Implementation Guide (IG) will provide implementers with online guidance (e.g., API specifications, capability statements, and resource profiles) on how to use FHIR to exchange eLTSS data.

• The eLTSS FHIR IG will align with FHIR R4.

• The FHIR IG development process is strict and relies heavily on prescriptive deadlines with each step being dependent on previous steps and outside resources (artifact approvals, tooling modifications/versioning, etc.).

• The goal of this next phase of the eLTSS project is to mature and formalize the details published in the eLTSS Informative Document into the eLTSS FHIR IG which will be balloted as a Standard for Trial Use (STU). An STU balloted IG at provides implementers with comprehensive guidance on how to use FHIR to enable electronic exchange of the eLTSS Dataset data items.
eLTSS Community Engagement
eLTSS Community Engagement

• Join the HL7 CBCP WG weekly calls to engage in ballot reconciliation review
  – Tuesdays 12:00 – 1:00pm ET
  – http://join.freeconferencecall.com/cbhs
  – Conference Audio: (515) 604-9861 / Access Code: 429554

• Visit the eLTSS HL7 GForge Site for ballot-related artifacts:

• Visit the eLTSS Confluence Page for meeting information and relevant artifacts:
  – https://oncprojecttracking.healthit.gov/wiki/display/TechLabSC/eLTSS+Home
eLTSS Initiative: Project Team Leads

• ONC Leadership
  – Stacy Perchem (Anastasia.perchem@hhs.gov)
  – Elizabeth Palena Hall (elizabeth.palenahall@hhs.gov)

• CMS Leadership
  – Kerry Lida (Kerry.Lida@cms.hhs.gov)

• State of Georgia, Department of Community Health Leadership
  – Bonnie Young (bonnie.young@dch.ga.gov)

• Program Manager
  – Johnathan Coleman (jc@securityrs.com)

• Project Management
  – Amber Patel (ayp@securityrs.com)

• Subject Matter Expert
  – Jamie Parker (jamie.parker@carradora.com)

• Harmonization Lead
  – Becky Angeles (becky.angeles@carradora.com)
Questions

Speaker Contact Information:
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Bonnie Young (bonnie.young@dch.ga.gov)
Appendix: Additional Resources
# HL7 FHIR Balloting Timeline and Artifacts (1/2)

<table>
<thead>
<tr>
<th>What Needs Done</th>
<th>How Do We Get It Done?</th>
<th>Why Do It?</th>
<th>When is it Due?</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Introduce Upcoming Ballot to HL7</strong></td>
<td>• Contact FHIR FMG of our upcoming plans and get insight from them on action needed</td>
<td>HL7 recommends that prior to officially compiling a ballot that a project considering developing a ballot circulate and introduce the idea of the work to the appropriate HL7 work groups. This allows the work groups to provide guidance and feedback before the formal ballot process begins.</td>
<td>1/18/19</td>
</tr>
<tr>
<td></td>
<td>• Attend Jan 2019 HL7 WGM to present our upcoming plans to FHIR, CBCP, and Other Interested WGs (O&amp;O, FM, PC)</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Project Scope Statement (PSS)</strong></td>
<td>• Modify the existing PSS for the eLTSS Informative Document for the FHIR IG</td>
<td>This form is the formal introduction of our work to HL7 WGs. This form outlines the sponsoring WGs, project team, project scope and need, and any external drivers and dependencies.</td>
<td>1/27/19</td>
</tr>
<tr>
<td></td>
<td>• Need approval from: CBCP WG, FHIR Management Group (FMG), US Realm Steering Committee, Steering Division, Architectural Review Board, and Technical Steering Committee.</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>FHIR IG Proposal</strong></td>
<td>• Complete and submit to FHIR Management Group (FMG)</td>
<td>Acceptance of proposal will result in the creation of the eLTSS project within the HL7 framework.</td>
<td>TBD</td>
</tr>
<tr>
<td><strong>Notification of Intent to Ballot (NIB)</strong></td>
<td>• Work with CBCP WG to complete and submit form to HL7</td>
<td>This officially notifies HL7 of our projects intent to move forward with a ballot for the May 2019 cycle.</td>
<td>2/17/19</td>
</tr>
<tr>
<td><strong>Functionally Complete IG</strong></td>
<td>• Work with CBCP FHIR Liaison (John Moehrke)</td>
<td>To validate and prioritize ballots and to develop the framework to support the ballots, HL7 is requiring a Functionally Complete IG as part of the NIB package.</td>
<td>2/17/19</td>
</tr>
<tr>
<td></td>
<td>• Download and install appropriate HL7 FHIR IG Tooling</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Develop Profiles</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Develop FHIR Sample Files</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Populate required IG sections with Content</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Final Content</strong></td>
<td>• Submit Complete FHIR IG to HL7 for QA</td>
<td>HL7 requires a new QA period for all FHIR ballots to ensure ballots are well developed prior to the ballot period.</td>
<td>3/3/19</td>
</tr>
<tr>
<td><strong>Final Freeze</strong></td>
<td>• Complete and submit FINAL FHIR IG Content (all text, profiles, sample files, etc.) to HL7</td>
<td>Required by HL7 – ensures the ballot content and structure is ready for ballot opening.</td>
<td>3/24/19</td>
</tr>
</tbody>
</table>
## HL7 FHIR Balloting Timeline and Artifacts (2/2)

<table>
<thead>
<tr>
<th>What Needs Done</th>
<th>How Do We Get It Done?</th>
<th>Why Do It?</th>
<th>When is it Due?</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Ballot Consensus Pool</strong></td>
<td>Sign up for the eLTSS FHIR IG ballot pool on the HL7 Ballot Desktop</td>
<td>To vote on an HL7 ballot a voter must sign up to be part of the ballot pool. This is similar to voter registration.</td>
<td>3/1 – 3/28/19</td>
</tr>
<tr>
<td><strong>Ballot Period</strong></td>
<td>Submit and monitor vote / comments</td>
<td>This is when the formal voting takes place. Anyone signed up for the ballot pool is able to vote.</td>
<td>3/29 – 4/29/19</td>
</tr>
<tr>
<td><strong>May 2019 WGM</strong></td>
<td>Held in Montreal (Quebec) Canada</td>
<td>HL7 requires that ballot results are shared at the working group meeting associated with the ballot. Ballot reconciliation will often begin at the working group meeting.</td>
<td>5/4 – 5/10/19</td>
</tr>
<tr>
<td><strong>Ballot Comment Reconciliation</strong></td>
<td>Work with ballot voters and CBCP WG to dispose all ballot comments</td>
<td>Required by HL7 as part of the ballot process.</td>
<td>5/4/2019</td>
</tr>
<tr>
<td><strong>Modify IG</strong></td>
<td>Make modifications to eLTSS FHIR IG based on comments</td>
<td>Enhance the specification based on comment feedback.</td>
<td>TBD (based on # of comments)</td>
</tr>
<tr>
<td><strong>Publish IG</strong></td>
<td>Publish eLTSS FHIR IG using HL7 tooling</td>
<td>Standard is available for implementation and use.</td>
<td>TBD (dependent on comments)</td>
</tr>
</tbody>
</table>
States, tribes, and territories can apply for technical assistance online: [https://ncapps.acl.gov/](https://ncapps.acl.gov/).

Deadline for technical assistance applications is **February 12, 2019**.