APPENDIX L. STANDARDS AVAILABLE TO SUPPORT HEALTH INFORMATION EXCHANGE OF LONG-TERM AND POST-ACUTE CARE DATA

TABLE L-1. Standards Available to Support HIE of LTPAC Data		
LTPAC Data Frequently Provided to or Requested by Other Health Care Providers	**Available Standards**	**Included in CCDA Ballot (Fall 2013)***
Demographic information	**In 2014 Edition**: Race & Ethnicity. OMB Standards for Maintaining, Collecting, & Presenting Federal Data on Race & Ethnicity, Statistical Policy Directive No. 15, October 30, 1997. Administrative Gender: HL7 V3. Preferred language: ISO 639-2	**The following refinements to the CCDA were being balloted Fall 2013**: **1.1 US Realm Header (V2)** This template defines constraints that represent common administrative & demographic concepts for US Realm CDA documents. Further specification, such as documentCode, are provided in document templates that conform to this template.
Discharge Summary	**In 2014 Edition**: CCDA & several vocabulary standards. (Note: CCD/C32 & CCR are only referenced for receipt to accommodate legacy systems. CCDA is required for send & receive.)	**The following refinements to the CCDA were being balloted Fall 2013**: **1.1.10 Discharge Summary (V2)** The Discharge Summary is a document that is a synopsis of a patient's admission to a hospital; it provides pertinent information for the continuation of care following discharge. The Joint Commission requires the following information to be included in the Discharge Summary: − The reason for hospitalization. − The procedures performed, as applicable. − The care, treatment, & services provided. − The patient's condition & disposition at discharge. − Information provided to the patient & family. − Provisions for followup care. **1.1.6 Continuity of Care Document (V2)** The CCD represents a core data set of the most relevant administrative, demographic, & clinical information facts about a patient's health care, covering 1 or more health care encounters. It provides a means for 1 health care practitioner, system, or setting to aggregate all of the pertinent data about a patient & forward it to another to support the continuity of care. The primary use case for the CCD is to provide a snapshot in time containing the germane clinical, demographic, & administrative data for a specific patient. More specific use cases, such as a Discharge Summary or Progress Note, are available as alternative documents in this guide.

TABLE L-1 (*continued*)		
LTPAC Data Frequently Provided to or Requested by Other Health Care Providers	**Available Standards**	**Included in CCDA Ballot (Fall 2013)***
Transfer Summary	**In 2014 Edition**: **Patient Summary Record**. CCDA & several vocabulary standards.	**The following refinements to the CCDA were being balloted Fall 2013**: **1.1.22 Transfer Summary (New)** This document describes constraints on the CDA header & body elements for a Transfer Summary. The Transfer summary standardizes critical information for exchange of information between providers of care when a patient moves between health care settings. Standardization of information used in this form will promote interoperability; create information suitable for reuse in quality measurement, public health, research, & for reimbursement.
Consultation Note/Referral Note	**In 2014 Edition**: **Patient Summary Record**. CCDA & several vocabulary standards.	**The following refinements to the CCDA were being balloted Fall 2013**: **1.14 Consultation Note (V2)** Consultation Note is generated as a result of a request from a clinician for an opinion or advice from another clinician. Consultations involve face-to-face time with the patient or may fall under the guidelines for tele-medicine visits. A consultation note includes the reason for the referral, history of present illness, physical examination, & decision-making component (Assessment & Plan). **1.1.6 Continuity of Care Document (V2)** See above. **1.1.20 Referral Note (New)** This clinical document communicates pertinent patient information to the consulting provider from a referring provider. The information in this document would include the reason for the referral & additional medical information that would augment care delivery. Examples of referral situations are when a patient is referred from a family physician to a cardiologist for followup for a cardiac condition or a when patient is sent by a primary care provider to an ED.

TABLE L-1 (*continued*)		
LTPAC Data Frequently Provided to or Requested by Other Health Care Providers	Available Standards	Included in CCDA Ballot (Fall 2013)*
Progress Note	CCDA & several vocabulary standards.	**The following refinements to the CCDA were being balloted Fall 2013**: **1.1.6 Continuity of Care Document (V2)** See above. **1.1.18 Progress Note (V2)** This template represents a patient's clinical status during a hospitalization or outpatient visit; thus, it is associated with an encounter. Taber's medical dictionary defines a Progress Note as "An ongoing record of a patient's illness & treatment. Physicians, nurses, consultants, & therapists record their notes concerning the progress or lack of progress made by the patient between the time of the previous note & the most recent note." Mosby's medical dictionary defines a Progress Note as "Notes made by a nurse, physician, social worker, physical therapist, & other health care professionals that describe the patient's condition & the treatment given or planned." A Progress Note is not a re-evaluation note. A Progress Note is not intended to be a Progress Report for Medicare. Medicare B Section 1833(e) defines the requirements of a Medicare Progress Report.
Care Plan	**In 2014 Edition**: Patient Summary record may include care plan fields, including: goals & instructions. In addition, the 2014 rule requires that the following information be exchanged (if known) as part of transitions & referrals in care: care team, including primary care provider of record & any additional known care team members beyond the referring & transitioning provider.	**The following refinements to the CCDA were being balloted Fall 2013**: **1.1.2 Care Plan (New)** CARE PLAN FRAMEWORK A Care Plan is a consensus-driven dynamic plan that represents all of a patient's & Care Team Members' prioritized concerns, goals, & planned interventions. It serves as a blueprint shared by all Care Team Members, including the patient, to guide the Care Team Members (including Patients, their caregivers, providers & patient's care. A Care Plan integrates multiple interventions proposed by multiple providers & disciplines for multiple conditions. A Care Plan represents 1 or more POC(s) & serves to reconcile & resolve conflicts between the various POCs developed for a specific patient by different providers. While both a POC & a care plan include the patient's life goals & require Care Team Members (including patients) to prioritize goals & interventions, the reconciliation process becomes more complex as the number of POCs increases. The Care Plan also serves to enable LCC. The CDA Care Plan represents an instance of this dynamic Care Plan at a point in time. The CDA document itself is NOT dynamic.

TABLE L-1 (*continued*)		
LTPAC Data Frequently Provided to or Requested by Other Health Care Providers	**Available Standards**	**Included in CCDA Ballot (Fall 2013)***

Care Plan (*continued*)		Key differentiators between a Care Plan CDA & CCD (another "snapshot in time" document):
		− Requires relationships between various acts:
		  - Health Concerns.
		  - Problems.
		  - Interventions.
		  - Goals.
		  - Outcomes.
		− Provides the ability to identify patient & provider priorities with each act.
		− Provides a header participant to indicate occurrences of Care Plan review.
		
		Please see: Appendix E in Volume 1 of this guide to view Care Plan Relationship Diagrams & story board.
		
		Care plan contains:
		− Goals Section (New).
		− Health Concerns Section (New).
		− Health Status Evaluations/Outcomes Section (New).
		− Interventions Section (V2).

Unstructured Document	**NOTE: 2014 Edition**: Certification prohibits use of the "unstructured document" document-level template (in the CCDA).	**The following refinements to the CCDA were being balloted Fall 2013**: **1.1.24 Unstructured Document (V2)** A UD type can: (1) include unstructured content, such as a graphic, directly in a text element with a mediaType attribute; or (2) reference a single document file, such as a word-processing document, using a text/reference element. …
Procedures: Note	**In 2014 Edition**: **Procedures**: **SNOMED-CT** or **Use CPT-4 & HCPS** for physician services & other health care services. These services include, but are not limited to, the following: − Physician services. − PT & OT services. − Radiologic procedures. − Clinical laboratory tests. − Other medical diagnostic procedures. − Hearing & vision services. − Transportation services including ambulance. **Optional CDT** Optional: ICD-10-PCS	**The following refinements to the CCDA were being balloted Fall 2013**: **1.1.16 Procedure Note (V2)** Procedure Note encompasses many types of non-operative procedures including interventional cardiology, gastrointestinal endoscopy, osteopathic manipulation, & many other specialty fields. Procedure Notes are differentiated from Operative Notes because they do not involve incision or excision as the primary act. The Procedure Note is created immediately following a non-operative procedure & records the indications for the procedure &, when applicable, post-procedure diagnosis, pertinent events of the procedure, & the patient's tolerance of the procedure. The document should be sufficiently detailed to justify the procedure, describe the course of the procedure, & provide continuity of care.

TABLE L-1 (*continued*)		
LTPAC Data Frequently Provided to or Requested by Other Health Care Providers	**Available Standards**	**Included in CCDA Ballot (Fall 2013)***
Procedures: Section		**The following refinements to the CCDA were being balloted Fall 2013**: **2.62 Procedures Section (entries optional) (V2)** This section describes all interventional, surgical, diagnostic, or therapeutic procedures or treatments pertinent to the patient historically at the time the document is generated. The section should include notable procedures, but can contain all procedures for the period of time being summarized. The common notion of "procedure" is broader than that specified by the HL7 Version 3 RIM, therefore this section contains procedure templates represented with 3 RIM classes: Act, Observation, & Procedure. Procedure act is for procedures that alter the physical condition of a patient (e.g., splenectomy). Observation act is for procedures that result in new information about a patient but do not cause physical alteration (e.g., EEG). Act is for all other types of procedures (e.g., dressing change). The length of an encounter is documented in the documentationOf/encompassingEncounter/ effectiveTime & length of service in documentationOf/ ServiceEvent/effectiveTime. **2.62 .1 Procedures Section (entries required) (V2)** This section describes all interventional, surgical, diagnostic, or therapeutic procedures or treatments pertinent to the patient historically at the time the document is generated. The section should include notable procedures, but can contain all procedures for the period of time being summarized. The common notion of "procedure" is broader than that specified by the HL7 Version 3 RIM, therefore this section contains procedure templates represented with 3 RIM classes: Act, Observation, & Procedure. Procedure act is for procedures that alter the physical condition of a patient (e.g., splenectomy). Observation act is for procedures that result in new information about a patient but do not cause physical alteration (e.g., EEG). Act is for all other types of procedures (e.g., dressing change).
Results: Lab results; Imaging results; Procedure results	**In 2014 Edition**: Other standards available. LOINC SNOMED-CT CPT-4 DICOM: Imaging Results Applicable HIPAA code set (i.e., ICD-9-CM or CPT 4) (Procedures)	**The following refinements to the CCDA were being balloted Fall 2013**: **2.65 (Results Section (Entries optional))** This section contains the results of observations generated by laboratories, imaging & other procedures. The scope includes observations of hematology, chemistry, serology, virology, toxicology, microbiology, plain x-ray, ultrasound, CT, MRI, angiography, echocardiography, nuclear medicine, pathology, & procedure observations. This section often includes notable results such as abnormal values or relevant trends. It can contain all results for the period of time being documented.

TABLE L-1 (*continued*)		
LTPAC Data Frequently Provided to or Requested by Other Health Care Providers	**Available Standards**	**Included in CCDA Ballot (Fall 2013)***
Results: Lab results; Imaging results; Procedure results (*continued*)		Laboratory results are typically generated by laboratories providing analytic services in areas such as chemistry, hematology, serology, histology, cytology, anatomic pathology, microbiology, and/or virology. These observations are based on analysis of specimens obtained from the patient & submitted to the laboratory. Imaging results are typically generated by a clinician reviewing the output of an imaging procedure, such as where a cardiologist reports the left ventricular ejection fraction based on the review of a cardiac echocardiogram. Procedure results are typically generated by a clinician to provide more granular information about component observations made during a procedure, such as where a gastroenterologist reports the size of a polyp observed during a colonoscopy. **2.65.1 (Results Section (Entries required))** The Results section contains observations of results generated by laboratories, imaging procedures, & other procedures. These coded result observations are contained within a Results Organizer in the Results Section. The scope includes observations such as hematology, chemistry, serology, virology, toxicology, microbiology, plain x-ray, ultrasound, CT, MRI, angiography, echocardiography, nuclear medicine, pathology, & procedure observations. The section often includes notable results such as abnormal values or relevant trends, & could contain all results for the period of time being documented.
Current problems/diagnoses	**In 2014 Edition**: **Problems**. §170.207 (a)(2) SNOMED CT Use SNOMED CT for: − Diseases. − Injuries. − Impairments. − Other health problems & their manifestations. − Causes of injury, disease, impairment, or other health problems.	**The following refinements to the CCDA were being balloted Fall 2013**: **2.19 Health Concerns Section (New)** The Health Concerns section contains data that describes an interest or worry about a health state or process that has the potential to require attention, intervention or management.

TABLE L-1 (*continued*)		
LTPAC Data Frequently Provided to or Requested by Other Health Care Providers	**Available Standards**	**Included in CCDA Ballot (Fall 2013)***
Recent Vital Signs & Trending Reports	LOINC (e.g., body temp, BP, heart rate, height, weight) UCUM (for units of measure) SNOMED-CT Note: The 2014 Edition does not require use of any specific vocabulary set, but ONC has previously considered comments recommending the 3 vocabularies above.	**The following refinements to the CCDA were being balloted Fall 2013**: **2.71 Vital Signs Section (entries optional) (V2)** The Vital Signs section contains relevant vital signs for the context & use case of the document type, such as blood pressure, heart rate, respiratory rate, height, weight, BMI, head circumference, pulse oximetry, temperature, & body surface area. The section should include notable vital signs such as the most recent, maximum and/or minimum, baseline, or relevant trends. Vital signs are represented in the same way as other results, but are aggregated into their own section to follow clinical conventions. **2.71.1 Vital Signs Section (entries required) (V2)** The Vital Signs Section contains relevant vital signs for the context & use case of the document type, such as blood pressure, heart rate, respiratory rate, height, weight, BMI, head circumference, pulse oximetry, temperature, & body surface area. The section should include notable vital signs such as the most recent, maximum and/or minimum, baseline, or relevant trends. Vital signs are represented in the same way as other results, but are aggregated into their own section to follow clinical conventions.
Advanced Directives and/or DNR Order	SNOMED-CT (e.g., Intubation, tube feedings, life support, CPR, antibiotics)	**The following refinements to the CCDA were being balloted Fall 2013**: **2.1 Advance Directives Section (entries optional) (V2)** This section contains data defining the patient's advance directives & any reference to supporting documentation, including living wills, health care proxies, & CPR & resuscitation status. If the referenced documents are available, they can be included in the CCD exchange package. The most recent directives are required, if known, & should be listed in as much detail as possible. This section differentiates between "advance directives" & "advance directive documents". The former is the directions to be followed whereas the latter refers to a legal document containing those directions.

TABLE L-1 (*continued*)		
LTPAC Data Frequently Provided to or Requested by Other Health Care Providers	**Available Standards**	**Included in CCDA Ballot (Fall 2013)***
Advanced Directives and/or DNR Order (*continued*)		**2.1.1 Advance Directives Section (entries required) (V2)** This section contains data defining the patient's advance directives & any reference to supporting documentation. The most recent & up-to-date directives are required, if known, & should be listed in as much detail as possible. This section contains data such as the existence of living wills, health care proxies, & CPR & resuscitation status. If referenced documents are available, they can be included in the CCD exchange package. Structured Advance Directives including but not limited to, Intubation & Ventilation, Medications, Antibiotics treatment are represented using Advance Directive Observation template(s). Advance Directive Organizers are used to group the observations for each type of Advance Directive by type (e.g., 1 Organizer for Medications, & 1 for Resuscitation). NOTE: The descriptions in this section differentiate between "advance directives" & "advance directive documents". The former are the directions whereas the latter are legal documents containing those directions. Thus, an advance directive might be "no cardiopulmonary resuscitation", & this directive might be stated in a legal advance directive document.
Allergies	**In 2014 Edition**: RxNorm for medication allergies. SNOMED CT for Allergy/Adverse Event Type Value Set (e.g., allergies to: substance, drug, food, dander, propensity to adverse reactions).	**The following refinements to the CCDA were being balloted Fall 2013**: **2.2 Allergies Section (entries optional) (V2)** This section lists & describes any medication allergies, adverse reactions, idiosyncratic reactions, anaphylaxis/anaphylactoid reactions to food items, & metabolic variations or adverse reactions/allergies to other substances (such as latex, iodine, tape adhesives). At a minimum, it should list currently active & any relevant historical allergies & adverse reactions. **2.2.1 Allergies Section (Entries required) (V2)** This section lists & describes any medication allergies, adverse reactions, idiosyncratic reactions, anaphylaxis/anaphylactoid reactions to food items, & metabolic variations or adverse reactions/allergies to other substances (such as latex, iodine, tape adhesives). At a minimum, it should list currently active & any relevant historical allergies & adverse reactions. Both Sections 2.2 & 2.2.1 contain "Allergy Concern Act"
Cognitive Status	**In 2014 Edition**: Patient Summary Record to include cognitive status if known. CCDA includes standards to represent cognitive & functional status using LOINC/SNOMED-CT/ICF.	**The following refinements to the CCDA were being balloted Fall 2013**: **2.40 Mental Status Section (New)** The Mental Status Section contains observation & evaluations related to patient's psychological & mental competency & deficits including cognitive functioning (e.g., mood, anxiety, perceptual disturbances) & cognitive ability (e.g., concentration, intellect, visual-spatial perception).

TABLE L-1 (*continued*)		
LTPAC Data Frequently Provided to or Requested by Other Health Care Providers	**Available Standards**	**Included in CCDA Ballot (Fall 2013)***
Functional Status & Assessments Service Utilization; Case Management/Care Coordination Notes	**In 2014 Edition:** Patient Summary Record to include functional status if known. CCDA includes standards to represent cognitive & functional status (ADL & IADL) using LOINC/ SNOMED-CT/ ICF.	**The following refinements to the CCDA were being balloted Fall 2013:** **2.16 Functional Status Section (V2)** The Functional Status Section contains observations & assessments of a patient's physical abilities. A patient's functional status may include information regarding the patient's general function such as ambulation, ability to perform ADLs (e.g., bathing, dressing, feeding, grooming) or IADLs (e.g., shopping, using a telephone, balancing a check book). Problems that impact function (e.g., dyspnea, dysphagia) can be contained in the section.
Recent Medications Administration Records (at transition of care)	**In 2014 Edition:** For meds: use RxNorm [ADDED INFO--RxNorm includes First Databank, Micromedex, MediSpan, Gold Standard Alchemy, & Multum] For immunizations use HL7 Standard Code Set CVX--Vaccines Administered	**The following refinements to the CCDA were being balloted Fall 2013:** **2.39 Medications Section (entries optional) (V2)** The Medications Section contains a patient's current medications & pertinent medication history. At a minimum, the currently active medications are listed. An entire medication history is an option. The section can describe a patient's prescription & dispense history & information about intended drug monitoring. **2.39.1 Medications Section (entries required) (V2)** The Medications Section contains a patient's current medications & pertinent medication history. At a minimum, the currently active medications are listed. An entire medication history is an option. The section can describe a patient's prescription & dispense history & information about intended drug monitoring. This section requires either an entry indicating the subject is not known to be on any medications or entries summarizing the subject's medications.

TABLE L-1 (*continued*)		
LTPAC Data Frequently Provided to or Requested by Other Health Care Providers	**Available Standards**	**Included in CCDA Ballot (Fall 2013)***
Immunization, Syndromic Surveillance, & Cancer Reporting	**In 2014 Edition**: **Electronic submission to immunization registries**. HL7 2.5.1 & HL7 2.5.1 Implementation Guide for Immunization Messaging Release 1.4. **Electronic submission to public health agencies for surveillance or reporting**. HL7 2.5.1 §170.205 (d)(3) PHIN Messaging Guide for Syndromic Surveillance (incorporated by reference in §170.299) & Conformance Clarification for EHR Certification of Electronic Syndromic Surveillance, Addendum to PHIN Messaging Guide for Syndromic Surveillance (incorporated by reference in §170.299). **Electronic submission of lab results to public health agencies**. HL7 2.5.1 Implementation specifications. HL7 Version 2.5.1 Implementation Guide: Electronic Laboratory Reporting to Public Health, Release 1 (US Realm)	**The following refinements to the CCDA were being balloted Fall 2013**: **Public health reporting/surveillance 2.32 Immunizations Section (entries optional) (V2)** The Immunizations section defines a patient's current immunization status & pertinent immunization history. The primary use case for the Immunization section is to enable communication of a patient's immunization status. The section should include current immunization status, & may contain the entire immunization history that is relevant to the period of time being summarized. **2.32.1 Immunizations Section (entries required) (V2)** The Immunizations section defines a patient's current immunization status & pertinent immunization history. The primary use case for the Immunization section is to enable communication of a patient's immunization status. The section should include current immunization status, & may contain the entire immunization history that is relevant to the period of time being summarized.
Medication & Treatment Orders	**In 2014 Edition**: **Electronic prescribing**. NCPDP SCRIPT Standard, Implementation Guide, Version 10.6, & RxNorm. **For meds**: use RxNorm. [**ADDED INFO**--RxNorm includes First Databank, Micromedex, MediSpan, Gold Standard Alchemy, & Multum] **For immunizations use**: HL7 Standard Code Set CVX--Vaccines Administered.	**The following refinements to the CCDA were being balloted Fall 2013**: **3.50 Medication Activity (V2)** A medication activity describes substance administrations that have actually occurred (e.g., pills ingested or injections given) or are intended to occur (e.g., "take 2 tablets twice a day for the next 10 days"). Medication activities in "INT" mood are reflections of what a clinician intends a patient to be taking. For example, a clinician may intend for a patient to be administered Lisinopril 20mg PO for blood pressure control. However, what was actually administered was Lisinopril 10mg. In the latter case, the Medication activities in the "EVN" mood would reflect actual use. **3.51 Medication Dispense (V2)** This template records the act of supplying medications (i.e., dispensing).

TABLE L-1 (*continued*)		
LTPAC Data Frequently Provided to or Requested by Other Health Care Providers	**Available Standards**	**Included in CCDA Ballot (Fall 2013)***
Medication & Treatment Orders (*continued*)		**3.52 Medication Information (V2)** A medication should be recorded as a pre-coordinated ingredient + strength + dose form (e.g., "metoprolol 25mg tablet", "amoxicillin 400mg/ 5mL suspension") where possible. This includes RxNorm codes whose Term Type is SCD, SBD, GPCK, BPCK. NOTE: The dose (doseQuantity) represents how many of the consumables are to be administered at each administration event. As a result, the dose is always relative to the consumable. Thus, a patient consuming a single "metoprolol 25mg tablet" per administration will have a doseQuantity of "1", whereas a patient consuming "metoprolol" will have a dose of "25mg". Value Set: Medication Clinical Drug 2.16.840.1.113762.1.4.1010.4 All prescribable medication formulations represented using either a "generic" or "brand-specific" concept. This includes RxNorm codes whose Term Type is SCD, SBD, GPCK, BPCK, SCDG, SBDG, SCDF, or SBDF. Value set intentionally defined as a GROUPING made up of: Value Set: Medication Clinical General Drug (2.16.840.1.113883.3.88.12.80.17) (RxNorm Generic Drugs); Value Set: Medication Clinical Brand-specific Drug (2.16.840.1.113762.1.4.1010.5) (RxNorm Branded Drugs).
Advance Directive Observation (V2)	SNOMED-CT (e.g., Intubation, tube feedings, life support, CPR, antibiotics.)	**The following refinements to the CCDA were being balloted Fall 2013**: **3.3. Advance Directive Observation (V2)** This clinical statement represents Advance Directive Observation findings (e.g., "resuscitation status is Full Code") rather than orders. It should not be considered a legal document. The related legal documents are referenced using the reference/externalReference element. The Advance Directive Observation describes the patient's directives, including but not limited to: – Medications. – Transfer of Care to Hospital. – Treatment. – Procedures. – Intubation & Ventilation. – Diagnostic Tests. – Tests. The general category of the patient's directive is documented in the observation/code element. The observation/value element contains the detailed patient directive which may be coded or text. For example, a category directive may be antibiotics, & the details would be intravenous antibiotics only.

TABLE L-1 (*continued*)		
LTPAC Data Frequently Provided to or Requested by Other Health Care Providers	**Available Standards**	**Included in CCDA Ballot (Fall 2013)***
Cognitive status & Assessments	**In 2014 Edition**: Patient Summary Record to include cognitive status if known. Other standards: SNOMED-CT.	**The following refinements to the CCDA were being balloted Fall 2013**: **Cognitive Status:** **3.15 Cognitive Abilities Observation (New)** The Cognitive Abilities Observation represents a patient's ability to perform specific cognitive tasks (e.g., ability to plan, logical sequencing ability, ability to think abstractly). **Value Set: Mental & Functional Status Response Value Set** **2.16.840.1.113883.11.20.9.44** A value set containing 2 SNOMED-CT qualifier codes that are common responses to mental & functional ability queries. Specific URL Pending Valueset Source: http://vtsl.vetmed.vt.edu/. **3.16 Cognitive Status Observation (V2)** This template represents a patient's cognitive status (e.g., mood, memory, ability to make decisions) & problems that limit cognition (e.g., amnesia, dementia, aggressive behavior). The template may include assessment scale observations, identify supporting caregivers, & provide information about non-medicinal supplies. **3.17 Cognitive Status Organizer (V2)** This template groups related cognitive status observations into categories. This organizer template may be used to group questions in a PHQ.
Functional Status	SNOMED-CT, ICF, LOINC	**The following refinements to the CCDA were being balloted Fall 2013**: **3.34 Functional Status Observation (V2)** This template represents the patient's physical function (e.g., mobility status, ADLs, self-care status) & problems that limit function (dyspnea, dysphagia). The template may include assessment scale observations, identify supporting caregivers, & provide information about non-medicinal supplies. This template is used to represent physical or developmental function of all patient populations & is not limited to the long-term care population.
Assessment Scale		**The following refinements to the CCDA were being balloted Fall 2013**: **3.8 Assessment Scale Observation** An assessment scale is a collection of observations that together yield a summary evaluation of a particular condition. Examples include the Braden Scale (assesses pressure ulcer risk), APACHE Score (estimates mortality in critically ill patients), Mini-Mental Status Exam (assesses cognitive function), APGAR Score (assesses the health of a newborn), & Glasgow Coma Scale (assesses coma & impaired consciousness).
Assessments Instruments such as MDS, OASIS	CDA (but **Not** included in CCDA)	

TABLE L-1 (*continued*)		
LTPAC Data Frequently Provided to or Requested by Other Health Care Providers	**Available Standards**	**Included in CCDA Ballot (Fall 2013)***
Assessment Summary Documents	Represented using CCD.	**The following refinements to the CCDA were being balloted Fall 2013**: **1.1.6 Continuity of Care Document (V2)** See above.
Other-Privacy/Security	**In 2014 Edition**: (a) Encryption & decryption of electronic health information--(1) General. Any encryption algorithm identified by the NIST as an approved security function in Annex A of the FIPS Publication 140-2, (January 27, 2010) (incorporated by reference in §170.299). (b) Record actions related to electronic health information. The date, time, patient identification, & user identification must be recorded when electronic health information is created, modified, accessed, or deleted; & an indication of which action(s) occurred & by whom must also be recorded. (c) Verification that electronic health information has not been altered in transit. Standard. A hashing algorithm with a security strength equal to or greater than SHA-1 (as specified by the NIST in FIPS PUB 180-4 (March 2012)) must be used to verify that electronic health information has not been altered. (d) Record treatment, payment, & health care operations disclosures. The date, time, patient identification, user identification, & a description of the disclosure must be recorded for disclosures for treatment, payment, & health care operations, as these terms are defined at 45 CFR 164.501. (e) Record actions related to electronic health information, audit log status, & encryption of end-user devices. (1)(i) The audit log must record the information specified in sections 7.2 through 7.4, 7.6, & 7.7 of the standard specified at §170.210(h) when EHR technology is in use. (ii) The date & time must be recorded in accordance with the standard specified at §170.210(g).	

TABLE L-1 (*continued*)		
LTPAC Data Frequently Provided to or Requested by Other Health Care Providers	**Available Standards**	**Included in CCDA Ballot (Fall 2013)***
Other-Privacy/Security (*continued*)	(2)(i) The audit log must record the information specified in sections 7.2 & 7.4 of the standard specified at §170.210(h) when the audit log status is changed. (ii) The date & time each action occurs in accordance with the standard specified at §170.210(g). (3) The audit log must record the information specified in sections 7.2 & 7.4 of the standard specified at §170.210(h) when the encryption status of electronic health information locally stored by EHR technology on end-user devices is changed. The date & time each action occurs in accordance with the standard specified at §170.210(g). (f) Encryption & hashing of electronic health information. Any encryption & hashing algorithm identified by the NIST as an approved security function in Annex A of the FIPS Publication 140-2 (incorporated by reference in §170.299). (g) Synchronized clocks. The date & time recorded utilize a system clock that has been synchronized following (RFC 1305) Network Time Protocol, (incorporated by reference in §170.299) or (RFC 5905) Network Time Protocol Version 4, (incorporated by reference in §170.299). (h) Audit log content. ASTM E2147-01(Reapproved 2009), (incorporated by reference in §170.299). Treatment means the provision, coordination, or management of health care & related services by 1 or more health care providers, including the coordination or management of health care by a health care provider with a third party; consultation between health care providers relating to a patient; or the referral of a patient for health care from 1 health care provider to another. [65 FR 82802, Dec. 28, 2000, as amended at 67 FR 53266, August 14, 2002; 68 FR 8381, February 20, 2003]	
NOTE: Some of the standards described will change as a result of ballot reconciliation.		

LONG-TERM AND POST-ACUTE CARE PROVIDERS ENGAGED IN HEALTH INFORMATION EXCHANGE: Final Report

Files Available for This Report

MAIN REPORT
Executive Summary http://aspe.hhs.gov/daltcp/reports/2013/HIEengagees.shtml
HTML http://aspe.hhs.gov/daltcp/reports/2013/HIEengage.shtml
PDF http://aspe.hhs.gov/daltcp/reports/2013/HIEengage.pdf

APPENDIX A. SELECTED PROGRAMS AND INITIATIVES THAT SUPPORT CARE COORDINATION AND INFORMATION EXCHANGE FOR PERSONS RECEIVING LTPAC/LTSS
HTML http://aspe.hhs.gov/daltcp/reports/2013/HIEengage.shtml#appendA
PDF http://aspe.hhs.gov/daltcp/reports/2013/HIEengageA.pdf

APPENDIX B. FRAMEWORK TO CHARACTERIZE HEALTH INFORMATION EXCHANGE TO SUPPORT CARE COORDINATION FOR PERSONS RECEIVING LTPAC/LTSS
HTML http://aspe.hhs.gov/daltcp/reports/2013/HIEengage.shtml#appendB
PDF http://aspe.hhs.gov/daltcp/reports/2013/HIEengageB.pdf

APPENDIX C. ENVIRONMENTAL SCAN AND LITERATURE REVIEW SOURCES
HTML http://aspe.hhs.gov/daltcp/reports/2013/HIEengage.shtml#appendC
PDF http://aspe.hhs.gov/daltcp/reports/2013/HIEengageC.pdf

APPENDIX D. PROMISING COMPONENTS AND INTERVENTIONS TO REDUCE READMISSIONS
HTML http://aspe.hhs.gov/daltcp/reports/2013/HIEengage.shtml#appendD
PDF http://aspe.hhs.gov/daltcp/reports/2013/HIEengageD.pdf

APPENDIX E. SUMMARY OF LITERATURE ON HEALTH INFORMATION EXCHANGE OUTCOMES AND RELATED MEASURES
HTML http://aspe.hhs.gov/daltcp/reports/2013/HIEengage.shtml#appendE
PDF http://aspe.hhs.gov/daltcp/reports/2013/HIEengageE.pdf

APPENDIX F. EXAMPLES OF COMMUNITY-BASED CARE TRANSITION PROGRAM WITH LTPAC/LTSS PARTICIPATION
      HTML   http://aspe.hhs.gov/daltcp/reports/2013/HIEengage.shtml#appendF
      PDF   http://aspe.hhs.gov/daltcp/reports/2013/HIEengageF.pdf

APPENDIX G. HEALTH INFORMATION EXCHANGE INTERVENTIONS AND ACTIVITIES IDENTIFIED THAT SUPPORT CARE COORDINATION FOR PERSONS RECEIVING LTPAC/LTSS
      HTML   http://aspe.hhs.gov/daltcp/reports/2013/HIEengage.shtml#appendG
      PDF   http://aspe.hhs.gov/daltcp/reports/2013/HIEengageG.pdf

APPENDIX H. SITE VISIT SUMMARY: RUSH UNIVERSITY MEDICAL CENTER, CARE TRANSITIONS PROGRAM, BRIDGE PROGRAM
      HTML   http://aspe.hhs.gov/daltcp/reports/2013/HIEengage.shtml#appendH
      PDF   http://aspe.hhs.gov/daltcp/reports/2013/HIEengageH.pdf

APPENDIX I. SITE VISIT SUMMARY: BEACHWOOD HOMES
      HTML   http://aspe.hhs.gov/daltcp/reports/2013/HIEengage.shtml#appendI
      PDF   http://aspe.hhs.gov/daltcp/reports/2013/HIEengageI.pdf

APPENDIX J. SITE VISIT SUMMARY: EASTERN MAINE HEALTH SYSTEM, EASTERN MAINE HOME CARE
      HTML   http://aspe.hhs.gov/daltcp/reports/2013/HIEengage.shtml#appendJ
      PDF   http://aspe.hhs.gov/daltcp/reports/2013/HIEengageJ.pdf

APPENDIX K. SUMMARY OF INFORMATION ROUTINELY EXCHANGED BY THE THREE SITES VISITED, BY CARE COORDINATION FUNCTION
      HTML   http://aspe.hhs.gov/daltcp/reports/2013/HIEengage.shtml#appendK
      PDF   http://aspe.hhs.gov/daltcp/reports/2013/HIEengageK.pdf

APPENDIX L. STANDARDS AVAILABLE TO SUPPORT HEALTH INFORMATION EXCHANGE OF LONG-TERM AND POST-ACUTE CARE DATA
      HTML   http://aspe.hhs.gov/daltcp/reports/2013/HIEengage.shtml#appendL
      PDF   http://aspe.hhs.gov/daltcp/reports/2013/HIEengageL.pdf

APPENDIX M. GLOSSARY
      HTML   http://aspe.hhs.gov/daltcp/reports/2013/HIEengage.shtml#appendM
      PDF   http://aspe.hhs.gov/daltcp/reports/2013/HIEengageM.pdf