mln call

A MEDICARE LEARNING NETWORK® (MLN) EVENT

CMS and ONC: Enabling Data Interoperability Across the Continuum

March 19, 2019

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CMS CENTERS FOR MEDICARE & MEDICAID SERVICES

Medicare Learning Network®

Acronyms in this Presentation

- CMS – Centers for Medicare & Medicaid Services
- CCD – Continuity of Care Document
- C-CDA – HL7 Consolidated Clinical Document Architecture
- CCDS – Common Clinical Data Set
- DCPAC – Division of Chronic and Post-Acute Care
- DEL – Data Element Library
- FHIR – Fast Healthcare Interoperability Resources
- HHA – Home Health Agency
- HIS – Hospice Item Set
- HIT – Health Information Technology
- HL7 – Health Level 7
- IMPACT – Improving Medicare Post-Acute Care Transformation Act
- IRF – Inpatient Rehabilitation Facility
- IRF-PAI – Inpatient Rehabilitation Facility Patient Assessment Instrument

Acronyms in this Presentation (Cont.)

- ISA – ONC Interoperability Standards Advisory
- LCDS – Long-Term Care Hospital (LTCH) Continuity Assessment Record and Evaluation (CARE) Data Set
- LOINC – Logical Observation Identifiers Names and Codes
- LTCH – Long-Term Care Hospital
- MDS – Minimum Data Set
- OASIS – Outcome and Assessment Information Set
- ONC – Office of the National Coordinator for Health IT
- PAC – Post-Acute Care
- RELMA -- Regenstrief LOINC Mapping Assistant
- SNF – Skilled Nursing Facility
- SNOMED-CT – Systematized Nomenclature of Medicine - Clinical Terms
- SPADEs – Standardized Patient Assessment Data Elements
- USCDI -- U.S. Core Data for Interoperability
- VSAC – Value Set Authority Center

Agenda

- The patient story: Use cases for health information exchange and care coordination
- The Improving Medicare Post-Acute Care Transformation Act and the DEL
- Data interoperability: Benefits and challenges
- DEL next steps: FHIR®

Objectives

- Describe the CMS approach for development and implementation of the CMS Data Element Library.
- Describe how various users can utilize the CMS DEL functionality including search and reports.
- Define the goals of standardized CMS assessment content mapped to HIT vocabularies and exchange standards.
- Discuss the strategies and use cases for how assessment content can be re-used to support discharge planning, quality improvement, and reduce burden through interoperable health information exchange.
- Explore how the emerging FHIR standards can be used to enable exchange among providers and with patients and their care givers.

The patient story and value of post-acute care interoperable data exchange across the continuum

Why is Post-Acute Care Important?

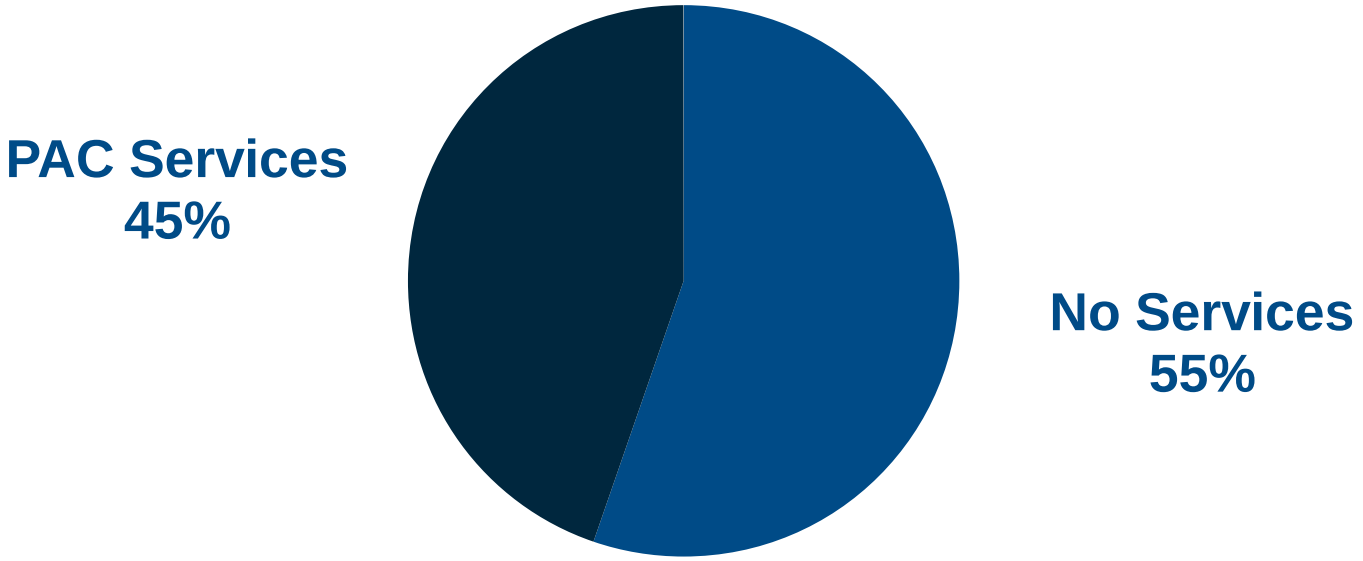
PAC Setting

- Long-Term Care Hospitals (LTCH)
- Skilled Nursing Facilities (SNF)
- Home Health Agencies (HHA)
- Inpatient Rehabilitation Facilities (IRF)
- Hospices

- Approximately 33,000 PAC Providers in the U.S.

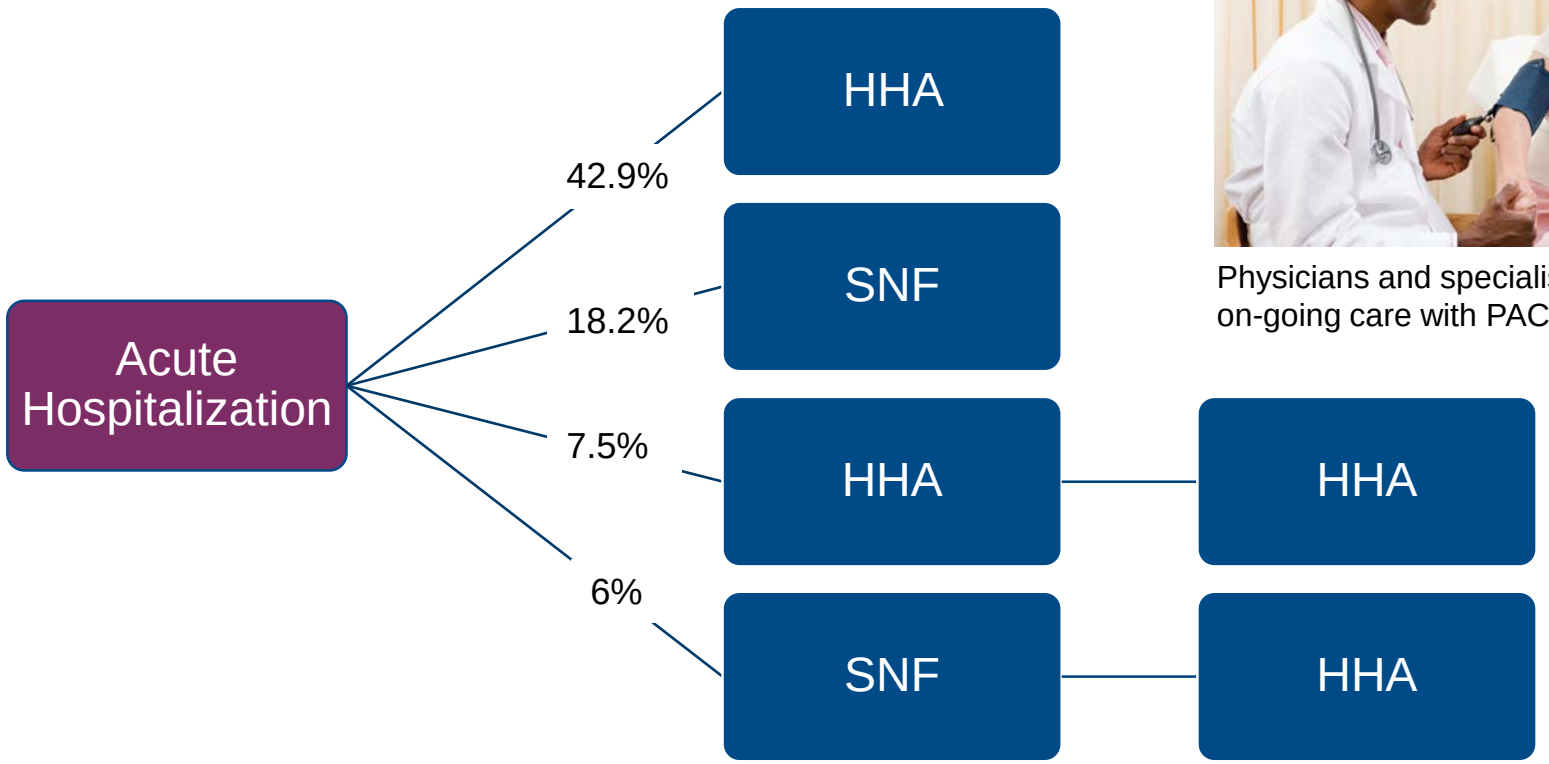
Episodes Requiring PAC Services after an Acute Hospitalization

MEDICARE BENEFICIARIES REQUIRING PAC SERVICES
AFTER AN ACUTE HOSPITALIZATION IN 2014



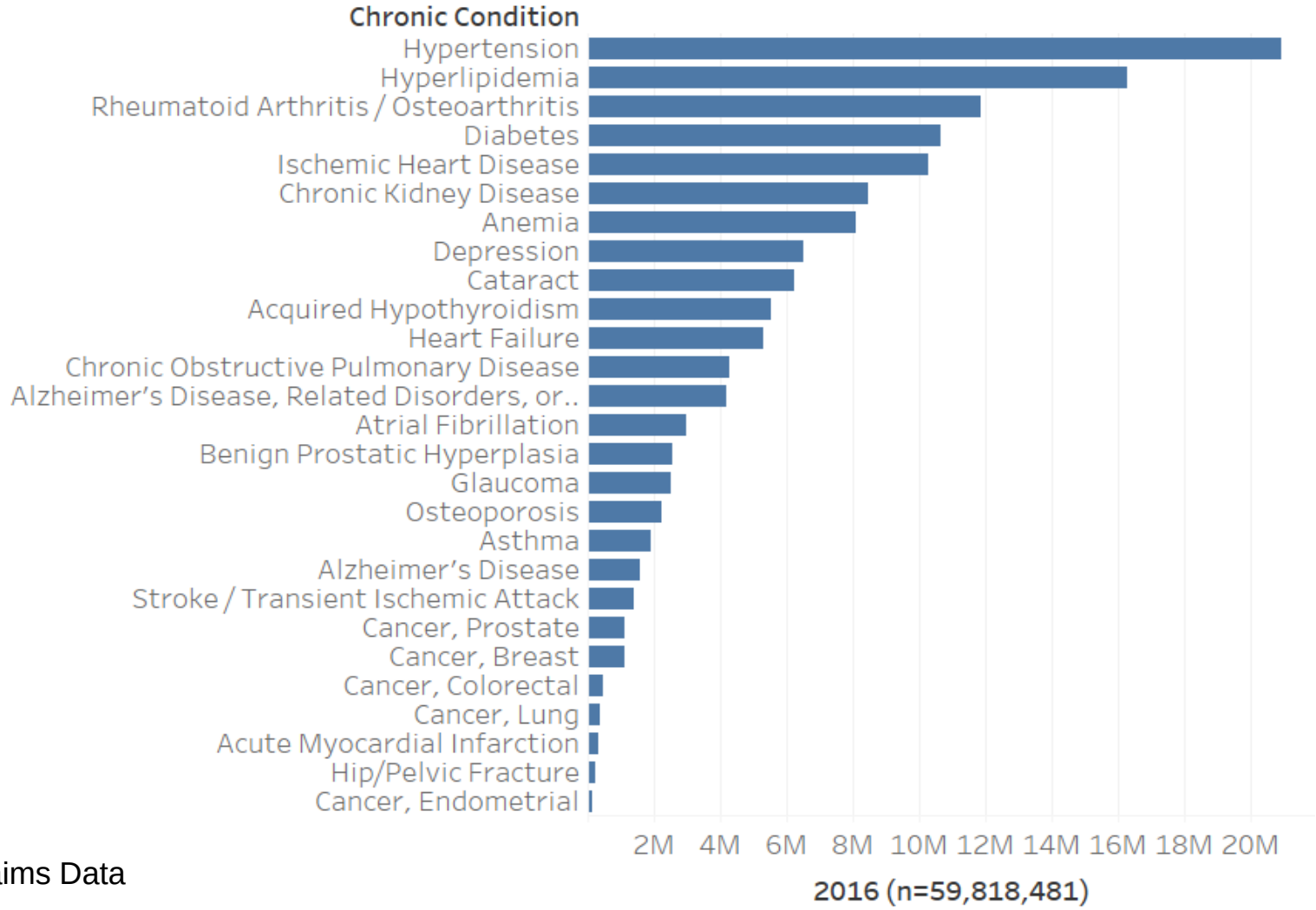
The Most Frequent Sequences of Care

Physicians and specialists also coordinate on-going care with PAC settings.



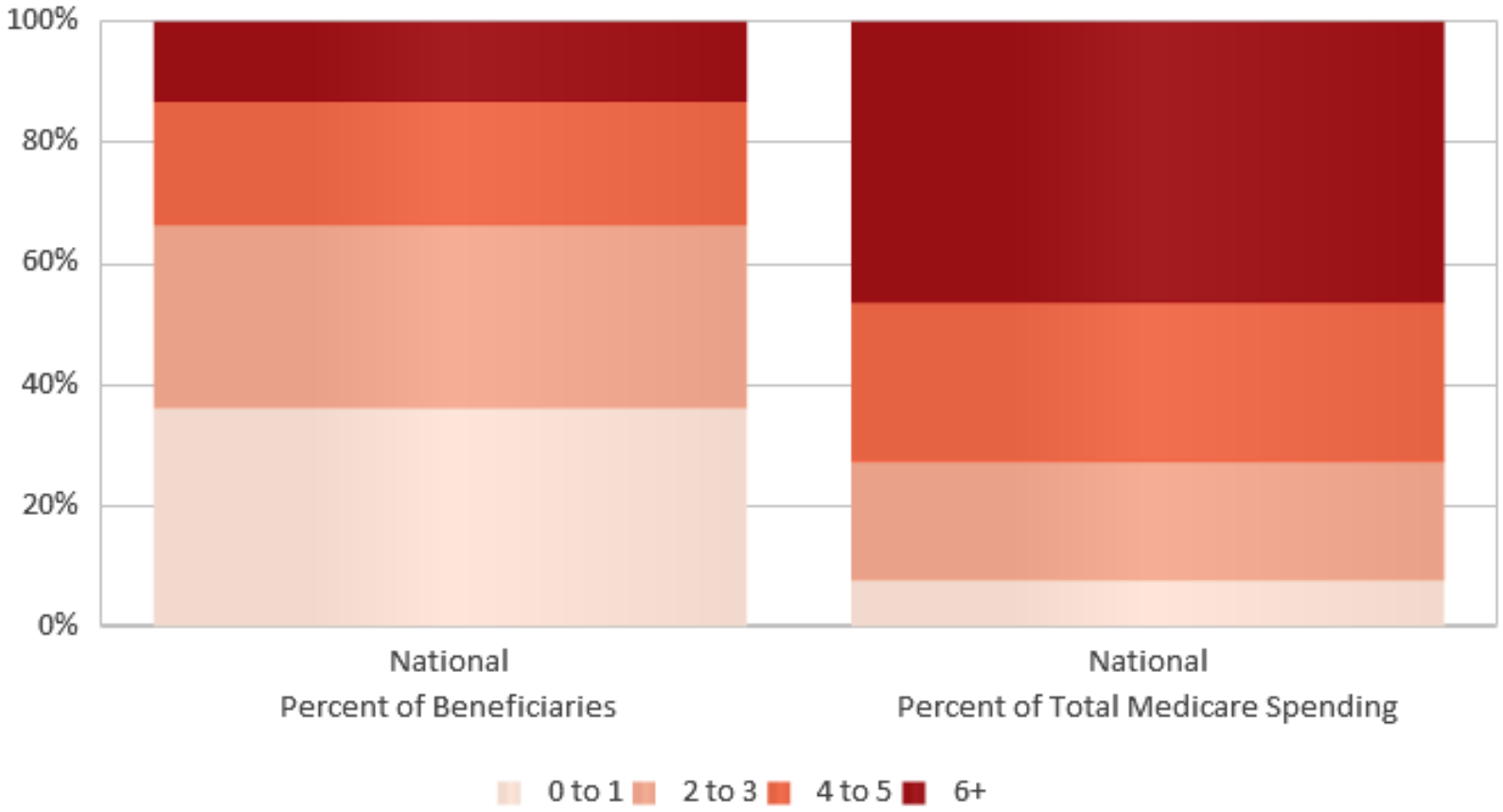
http://www.medpac.gov/docs/default-source/contractor-reports/sept2018_pac_sequence_of_care_w_cov_contractor_sec.pdf?sfvrsn=0

Volume of Claims by Chronic Conditions in 2016



Source: 2016 Medicare Claims Data

Distribution of Beneficiaries by Number of Chronic Conditions & Total Medicare Spending in 2015



Source: https://www.cms.gov/Research-Statistics-Data-and-Systems/Statistics-Trends-and-Reports/Dashboard/chronic-conditions-state/cc_state_dashboard.html

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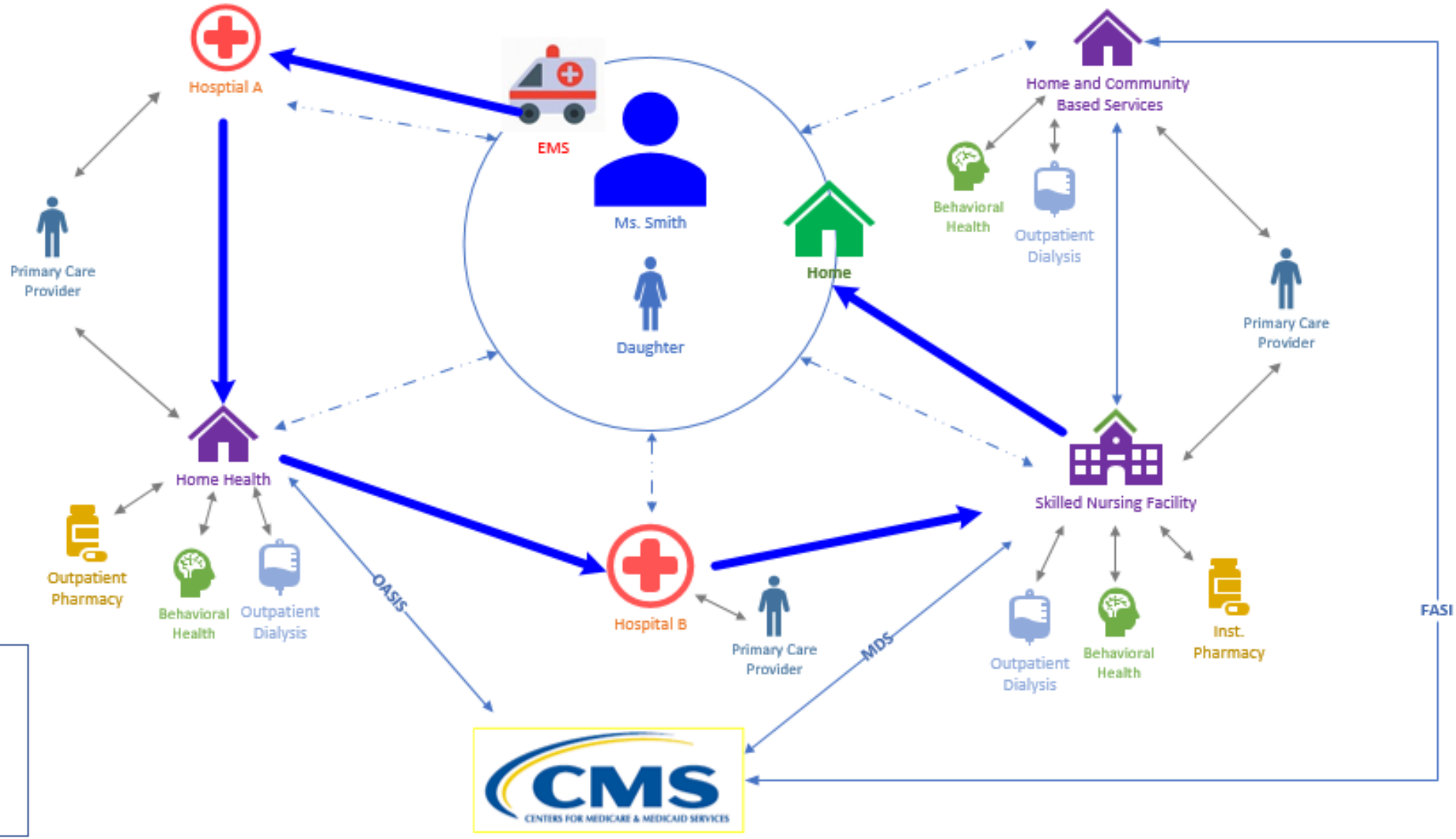


Legend

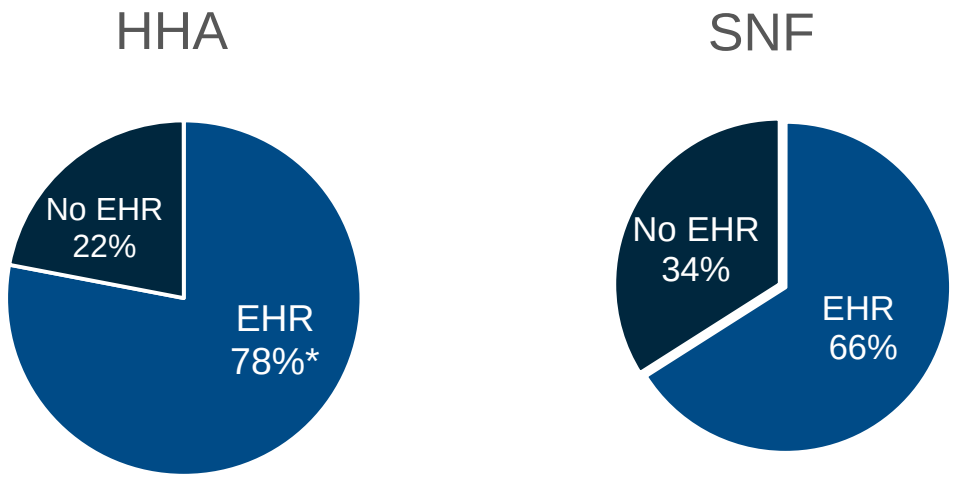
- Provider to Patient Communication
- Patient's Path of Care
- Care Coordination Team Communication

Points of Failure

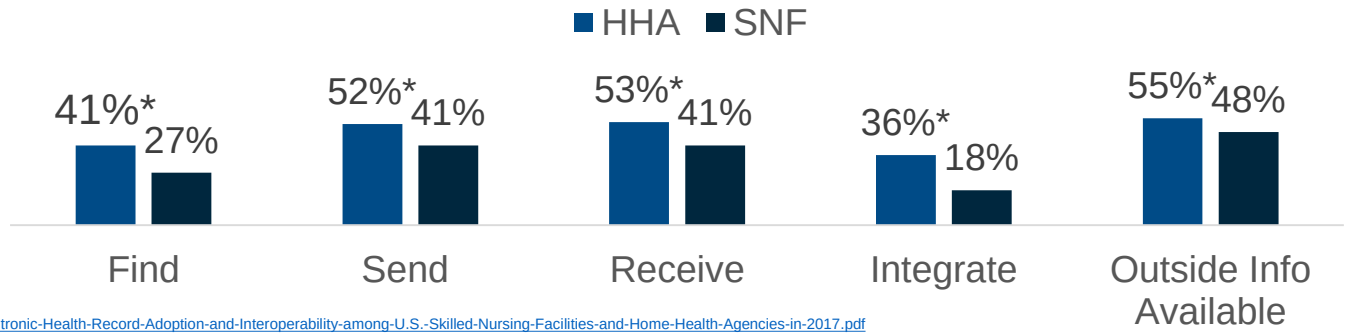
- **Poor communication across care providers, including outpatient**
  - Medication discrepancies such as drug omissions during transitions of care are common
  - Multiple modes of information transmission are often used
  - Delays in PAC services can lead to adverse events and preventable readmissions
  - Redundant information collection creates inefficiencies and burden
- **Reliance on patient recall during periods of high stress**
  - Recall of information can be unreliable
  - Increased patient / family stress
- **Increased Cost and Provider Burden**
  - Additional costs related to hospital stays from adverse events, readmissions
  - Additional administrative costs to locate, reconcile and coordinate information
  - Longer length of stays and higher resource utilization

ONC Data Brief: SNF & HHA EHR Adoption and Interoperability in 2017

- EHR adoption rates were higher among HHAs compared to SNFs in 2017

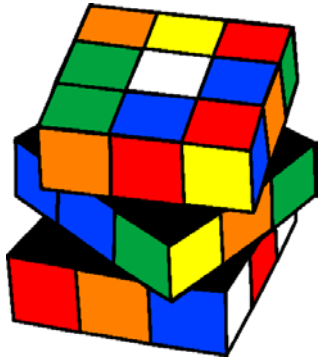


- HHAs are more likely than SNFs to engage in each domain of interoperability.



Source: https://www.healthit.gov/sites/default/files/page/2018-11/Electronic-Health-Record-Adoption-and-Interoperability-among-U.S.-Skilled-Nursing-Facilities-and-Home-Health-Agencies-in-2017.pdf

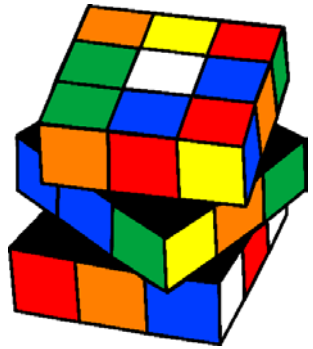
Interoperability Challenges



- Lack of business case
- Lack of standards or consistent use of standards
- Limited understanding of interoperability and its value
- Lack of formalized workflows
- Frequent changes to payment models diverts resources from investment in interoperability
- Meeting CMS regulatory requirements diverts resources from investment in interoperability
- Lack of data transparency
- Data exchange between EHR systems is poor
- Staff recruiting and retention in PAC facilities

Interoperability Challenges (Continued)

- Accessibility is problematic for some patients
- Working physicians are not involved enough in standards development and software design
- Senior housing facilities do not employ any health IT infrastructure
- Assisted living facilities have been slow to adopt EHRs
- Post-acute utilization is high and increasing
- Internet connectivity for some health facilities is poor
- Patient matching is difficult, inaccurate, and hard to automate
- Data provided by ambulatory care are not timely



Potential Cost Savings related to Points of Failures

- Description and Financial Cost
  - Time PCP spends collecting information, faxing and re-faxing or sending information through another mode (1 hour of time): $107*
  - Average cost of adverse event during a hospital stay: $13,745 #
  - Average cost of a Home Health Agency Stay: $3,040 †
  - Average cost of an Inpatient Rehabilitation Facility Stay: #19,714 †
  - Average cost of a Skilled Nursing Facility stay: $18,174 †
  - Average cost of a Long-Term Care Hospital stay: $40,656 †

* https://www.medscape.com/slideshow/2018-compensation-overview-6009667#2

L Levinson DR. Washington, DC: US Department of Health and Human Services, Office of the Inspector General; November 2010. Report No. OEI-06-09-00090

† MedPAC, A Data Book: Health care spending and the Medicare program, June 2018

IMPACT Act and CMS Data Element Library

IMPACT Act of 2014

- Bi-partisan bill passed on September 18, 2014, and signed into law October 6, 2014
- The Act requires *standardized* patient assessment data elements for:
  - Long-term Care Hospitals (LTCHs)
  - Skilled Nursing Facilities (SNFs)
  - Home Health Agencies (HHAs)
  - Inpatient Rehabilitation Facilities (IRFs)
- The Act specifies that data "… be standardized and interoperable so as to allow for the exchange of such data among such post-acute care providers and other providers and the use by such providers of such data that has been so exchanged, including by using common standards and definitions in order to provide access to longitudinal information for such providers to facilitate coordinated care and improved Medicare beneficiary outcomes…".

Improving Medicare Post-Acute Care Transformation (IMPACT) Act of 2014

Data Element Interoperability

- IMPACT Act requires that post-acute care assessment data elements be interoperable to:
  - "**allow for the exchange of data** among PAC providers and other providers **and the use** by such providers **of such data** that has been exchanged, including by using common standards and definitions, in order **to provide access to longitudinal information** for such providers **to facilitate coordinated care and improved** Medicare beneficiary **outcomes**."
- Interoperable data elements facilitate improvements to reduce overall provider burden by allowing the use and reuse of healthcare data
- Supports provider exchange of electronic health information to facilitate care coordination and person-centered care
- Supports real-time, data driven, clinical decision making

IMPACT Act Requirements

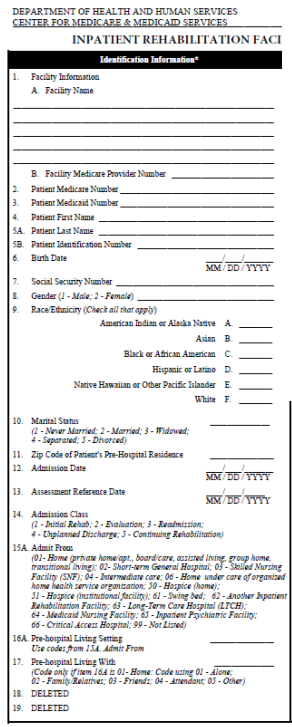
- **Data Must be Interoperable**

- **Quality Measures**
  - Functional Status
  - Skin Integrity
  - Medication Reconciliation
  - Incidence of Major Falls
  - Transfer of Health Information
  - Medicare Spending per Beneficiary
  - Discharge to Community
  - Potentially Preventable Hospital Readmissions

- **Standardized Data Submission**
  - Admission and Discharge
  - Functional status
  - Cognitive function and mental status
  - Special services, treatments, and interventions
  - Medical conditions and co-morbidities
  - Impairments
  - Other categories required by the Secretary

What are Post-Acute Care Assessments?

- CMS PAC Assessments:
- LTCH Continuity Assessment Record & Evaluation (CARE) Data Set (LCDS)
- Resident Assessment Instrument (RAI) Minimum Data Set (MDS)
- Outcome and Assessment Information Set (OASIS)
- IRF Patient Assessment Instrument (IRFPAI)
- Hospice Item Set (HIS)*



DEPARTMENT OF HEALTH AND HUMAN SERVICES
CENTER FOR MEDICARE & MEDICAID SERVICES

INPATIENT REHABILITATION FACI

Identification Information*

1. Facility Information
   A. Facility Name
   B. Facility Medicare Provider Number
2. Patient Medicare Number
3. Patient Medicaid Number
4. Patient First Name
5A. Patient Last Name
5B. Patient Identification Number
6. Birth Date — MM / DD / YYYY
7. Social Security Number
8. Gender (1 - Male; 2 - Female)
9. Race/Ethnicity (Check all that apply)
   American Indian or Alaska Native A.
   Asian B.
   Black or African American C.
   Hispanic or Latino D.
   Native Hawaiian or Other Pacific Islander E.
   White F.
10. Marital Status (1 - Never Married; 2 - Married; 3 - Widowed; 4 - Separated; 5 - Divorced)
11. Zip Code of Patient's Pre-Hospital Residence
12. Admission Date — MM / DD / YYYY
13. Assessment Reference Date — MM / DD / YYYY
14. Admission Class (1 - Initial Rehab; 2 - Evaluation; 3 - Readmission; 4 - Unplanned Discharge; 5 - Continuing Rehabilitation)
15A. Admit From (01- Home (private home/apt., board/care, assisted living, group home, transitional living); 02- Short-term General Hospital; 03 - Skilled Nursing Facility (SNF); 04 - Intermediate care; 05 - Home under care of organized home health service organization; 50 - Hospice (home); 51 - Hospice (institutional facility); 61 - Swing bed; 62 - Another Inpatient Rehabilitation Facility; 63 - Long-Term Care Hospital (LTCH); 64 - Medicaid Nursing Facility; 65 - Inpatient Psychiatric Facility; 66 - Critical Access Hospital; 99 - Not Listed)
16A. Pre-hospital Living Setting (Use codes from 15A. Admit From)
17. Pre-hospital Living With (Code only if item 16A is 01- Home: Code using 01 - Alone; 02 - Family/Relatives; 03 - Friends; 04 - Attendant; 05 - Other)
18. DELETED
19. DELETED

Centers for Medicare & Medicaid Ser

I. _____ R. _____

24A. Are there any arthritis conditions recorded in items #21, #22, or #24 all of the regulatory requirements for IRF classification (in 42 CFR 412.29(b)(2)(x), (xi), and (xii))? (0 - No; 1 - Yes)
25. DELETED
26. DELETED
Height and Weight (While measuring if the number is X.1-X.4 round down, X.5 or grea up)
25A. Height on admission (in inches)
26A. Weight on admission (in pounds) Measure weight consistently, according to standard facility practic a.m. after voiding, with shoes off, etc.)
27. DELETED
28. DELETED

inal IRF-PAI Version 2.0 - Effective October 1, 2018

OASIS C2

LIVING ARRANGEMENTS

(M1100) Patient Living Situation: Which of the following best describes the patient's residential circumstance and availability of assistance? **(Check one box only.)**

Living Arrangement	Availability of Assistance: Around the clock	Regular daytime	Regular nighttime	Occasional / short-term assistance	No assistance available
a. Patient lives alone	☐ 01	☐ 02	☐ 03	☐ 04	☐ 05
b. Patient lives with other person(s) in the home	☐ 06	☐ 07	☐ 08	☐ 09	☐ 10
c. Patient lives in congregate situation (for example, assisted living, residential care home)	☐ 11	☐ 12	☐ 13	☐ 14	☐ 15

SENSORY STATUS

(M1200) Vision (with corrective lenses if the patient usually wears them):

Enter Code ☐

0 Normal vision: sees adequately in most situations; can see medication labels, newsprint.
1 Partially impaired: cannot see medication labels or newsprint, but can see obstacles in path, and the surrounding layout; can count fingers at arm's length.
2 Severely impaired: cannot locate objects without hearing or touching them, or patient nonresponsive.

Patient _____ Identifi

Section B Hearing, Speech, and Vision

B0100. Comatose

Enter Code ☐

Persistent vegetative state/no discernible consciousness
0. **No** → *Continue to BB0700, Expression of Ideas and Wants*
1. **Yes** → *Skip to GG0100, Prior Functioning: Everyday Activities*

BB0700. Expression of Ideas and Wants (3-day assessment period)

Enter Code ☐

Expression of ideas and wants (consider both verbal and non-verbal expression and excluding language barriers)
4. Expresses complex messages **without difficulty** and with speech that is clear and easy to understand
3. Exhibits some **difficulty** with expressing needs and ideas (e.g., some words or finishing thoughts) or speech is not clear
2. **Frequently** exhibits difficulty with expressing needs and ideas
1. **Rarely/Never** expresses self or speech is very difficult to understand

BB0800. Understanding Verbal and Non-Verbal Content (3-day assessment period)

Enter Code ☐

Understanding Verbal and Non-Verbal Content (with hearing aid or device, if used, and excluding language barriers)
4. **Understands:** Clear comprehension without cues or repetitions
3. **Usually Understands:** Understands most conversations, but misses some part/intent of message. Requires cues at times to understand
2. **Sometimes Understands:** Understands only basic conversations or simple, direct phrases. Frequently requires cues to understand
1. **Rarely/Never Understands**

Resident _____ Identifier _____ Date _____

Section H Bladder and Bowel

H0100. Appliances

Check all that apply

- ☐ **A. Indwelling catheter** (including suprapubic catheter and nephrostomy tube)
- ☐ **B. External catheter**
- ☐ **C. Ostomy** (including urostomy, ileostomy, and colostomy)
- ☐ **D. Intermittent catheterization**
- ☐ **Z. None of the above**

H0200. Urinary Toileting Program

Enter Code ☐ **A. Has a trial of a toileting program (e.g., scheduled toileting, prompted voiding, or bladder training)** been attempted on admission/entry or reentry or since urinary incontinence was noted in this facility?
0. **No** → Skip to H0300, Urinary Continence
1. **Yes** → Continue to H0200B, Response
9. **Unable to determine** → Skip to H0200C, Current toileting program or trial

Enter Code ☐ **B. Response** - What was the resident's response to the trial program?
0. **No improvement**
1. **Decreased wetness**
2. **Completely dry** (continent)
9. **Unable to determine** or trial in progress

Enter Code ☐ **C. Current toileting program or trial** - Is a toileting program (e.g., scheduled toileting, prompted voiding, or bladder training) currently being used to manage the resident's urinary continence?
0. **No**
1. **Yes**

H0300. Urinary Continence

Enter Code ☐ **Urinary continence** - Select the one category that best describes the resident
0. **Always continent**
1. **Occasionally incontinent** (less than 7 episodes of incontinence)
2. **Frequently incontinent** (7 or more episodes of urinary incontinence, but at least one episode of continent voiding)
3. **Always incontinent** (no episodes of continent voiding)
9. **Not rated,** resident had a catheter (indwelling, condom), urinary ostomy, or no urine output for the entire 7 days

H0400. Bowel Continence

Enter Code ☐ **Bowel continence** - Select the one category that best describes the resident
0. **Always continent**
1. **Occasionally incontinent** (one episode of bowel incontinence)
2. **Frequently incontinent** (2 or more episodes of bowel incontinence, but at least one continent bowel movement)
3. **Always incontinent** (no episodes of continent bowel movements)
9. **Not rated,** resident had an ostomy or did not have a bowel movement for the entire 7 days

H0500. Bowel Toileting Program

Enter Code ☐ **Is a toileting program currently being used to manage the resident's bowel continence?**
0. **No**
1. **Yes**

H0600. Bowel Patterns

Enter Code ☐ **Constipation present?**
0. **No**
1. **Yes**

MDS 3.0 Nursing Home Comprehensive (NC) Version 1.16.0R Effective 10/01/2018 DRAFT Page 24 of 50

Final LTCH CARE Data Set Version 4.00, Admission - Effective July 1, 2018

PAC Assessment Content

- **Administrative Content**
  - Patient Name
  - Date of Birth
  - Race/Ethnicity
  - Marital status
  - Admission/Discharge dates
  - Admit from/Discharged to locations
  - Reason for admission
  - Provider NPI, CCN, Medicaid Provider #

- **Standardized Patient Assessment Data Elements (SPADEs) across instruments**
  - Function (e.g., self care and mobility)
  - Cognitive function (e.g., express & understand ideas; mental status, such as depression and dementia)
  - Special services, treatments & interventions (e.g., need for ventilator, dialysis, chemotherapy, and total parenteral nutrition)
  - Medical conditions and co-morbidities (e.g., diabetes, heart failure, and pressure ulcers)
  - Impairments (e.g., incontinence; impaired ability to hear, see, or swallow)
  - Other categories

- **Clinical Content**
  - Diagnosis/medical conditions
  - Mental/Cognitive Status (memory, orientation, consciousness, delirium, mood, behavior)
  - Communication (express needs, understanding verbal/non-verbal content, hearing and vision)
  - Functional Status (Self-care/ADLs, Mobility, Use of assistive devices)
  - Bladder and Bowel continence
  - Falls
  - Pressure ulcers and other skin conditions
  - Surgery
  - Nutritional and swallowing status
  - Medication information
  - Special treatments, procedures & programs
  - Height and Weight
  - Patient preferences and goals of treatment
  - Pain
  - Vaccinations
  - Therapy- PT, OT, SLT
  - Living arrangements/support availability
  - Care planning

SPADES: Standardized Assessment: Many Uses

Section GG	Functional Abilities and Goals

GG0170. Mobility (3-day assessment period)

Code the patient's usual performance at admission for each activity using the 6-point scale. If activity was not attempted at admission, code the reason. Code the patient's discharge goal(s) using the 6-point scale. Use of codes 07, 09, 10, or 88 is permissible to code discharge goal(s).

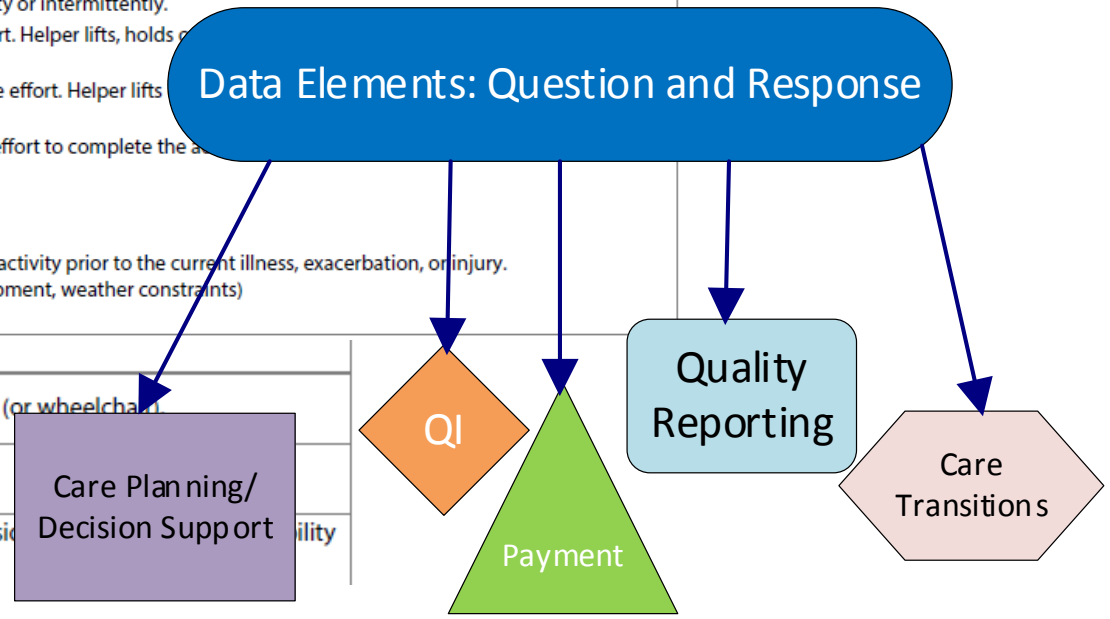
Coding:
Safety and **Quality of Performance** - If helper assistance is required because patient's performance is unsafe or of poor quality, score according to amount of assistance provided.

Activities may be completed with or without assistive devices.

06. **Independent** - Patient completes the activity by him/herself with no assistance from a helper.
05. **Setup or clean-up assistance** - Helper sets up or cleans up; patient completes activity. Helper assists only prior to or following the activity.
04. **Supervision or touching assistance** - Helper provides verbal cues and/or touching/steadying and/or contact guard assistance as patient completes activity. Assistance may be provided throughout the activity or intermittently.
03. **Partial/moderate assistance** - Helper does LESS THAN HALF the effort. Helper lifts, holds
half the effort.
02. **Substantial/maximal assistance** - Helper does MORE THAN HALF the effort. Helper lifts
the effort.
01. **Dependent** - Helper does ALL of the effort. Patient does none of the effort to complete the
required for the patient to complete the activity.

If activity was not attempted, code reason:
07. **Patient refused**
09. **Not applicable** - Not attempted and the patient did not perform this activity prior to the current illness, exacerbation, or injury.
10. **Not attempted due to environmental limitations** (e.g., lack of equipment, weather constraints)
88. **Not attempted due to medical condition or safety concerns**

1. Admission Performance	2. Discharge Goal	
↓ Enter Codes in Boxes ↓		
☐☐	☐☐	A. **Roll left and r** bed.
☐☐	☐☐	B. **Sit to lying:** Tl
☐☐	☐☐	C. **Lying to sittir** feet flat on the
☐☐	☐☐	D. **Sit to stand:** T bed.
☐☐	☐☐	E. **Chair/bed-to-chair transfer:** The ability to transfer to and from a bed to a chair (or wheelchai
☐☐	☐☐	F. **Toilet transfer:** The ability to get on and off a toilet or commode.
☐☐	☐☐	G. **Car transfer:** The ability to transfer in and out of a car or van on the passenger si ility to open/close door or fasten seat belt.



The Data Element Library (DEL)

- The DEL is a centralized resource for CMS assessment data elements (e.g. questions and response options), and their related mappings to nationally accepted health IT standards

- **PAC Settings and Their CMS Assessments:**
  - Long-term Care Hospitals (LTCHs) = LTCH Continuity Assessment Record & Evaluation (CARE) Data Set (LCDS)
  - Skilled Nursing Facilities (SNFs) = Resident Assessment Instrument (RAI) Minimum Data Set (MDS)
  - Home Health Agencies (HHAs) = Outcome and Assessment Information Set (OASIS)
  - Inpatient Rehabilitation Facilities (IRFs) = IRF patient assessment instrument (IRF-PAI)
  - Hospices = Hospice Item Set

DEL Contents

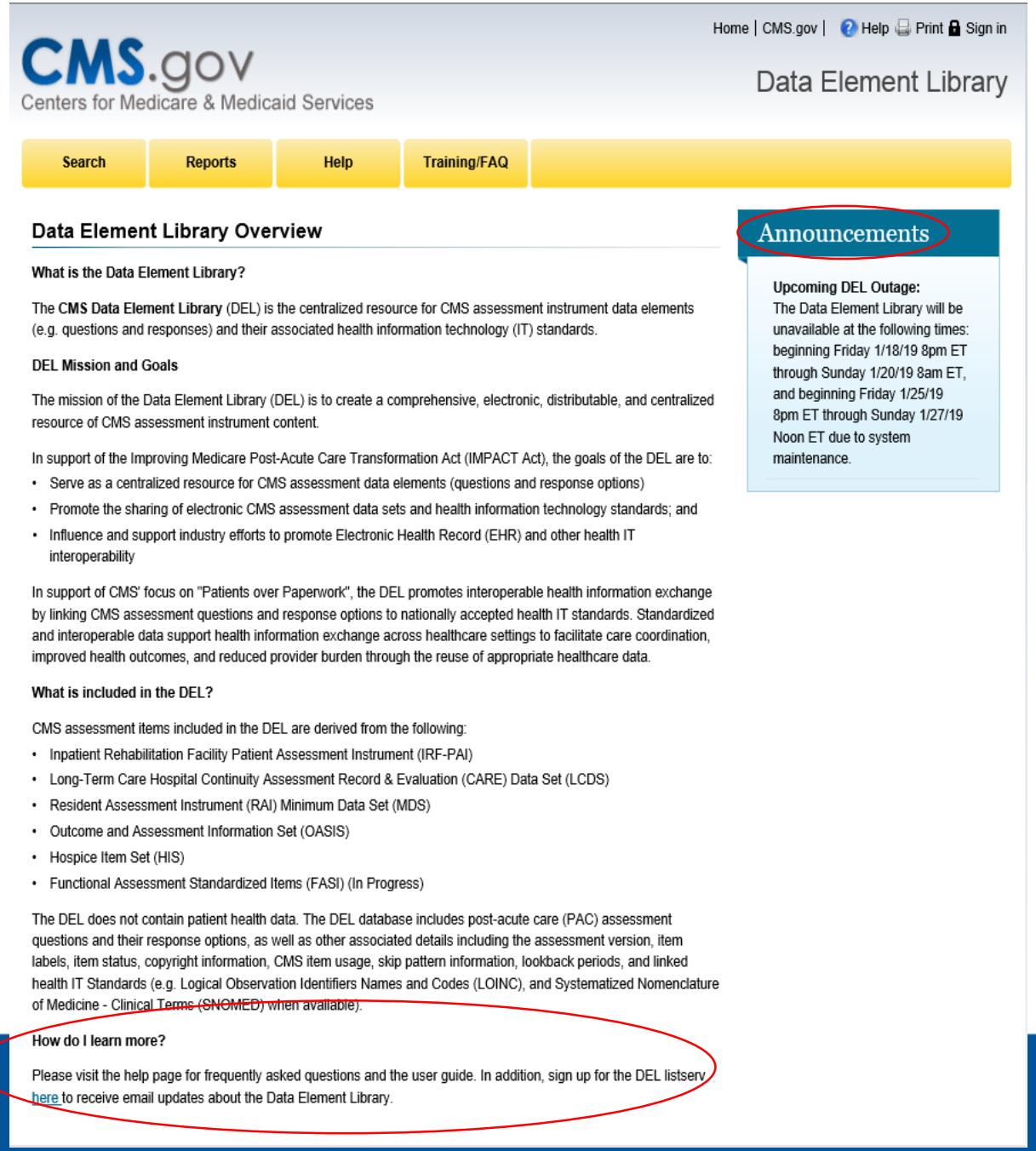
- Assessment and version (e.g., MDS 3.0 v. 1.16)
- Item label (e.g.- GG0170)
- Item status (Published, Active, Inactive)
- Copyright information (if applicable)
- CMS usage (Payment, Quality Measure, Survey and Certification, etc.)
- Identification of skip pattern triggers and lookback periods
- Health IT standards (e.g., LOINC, SNOMED)

Visit the DEL here: https://del.cms.gov

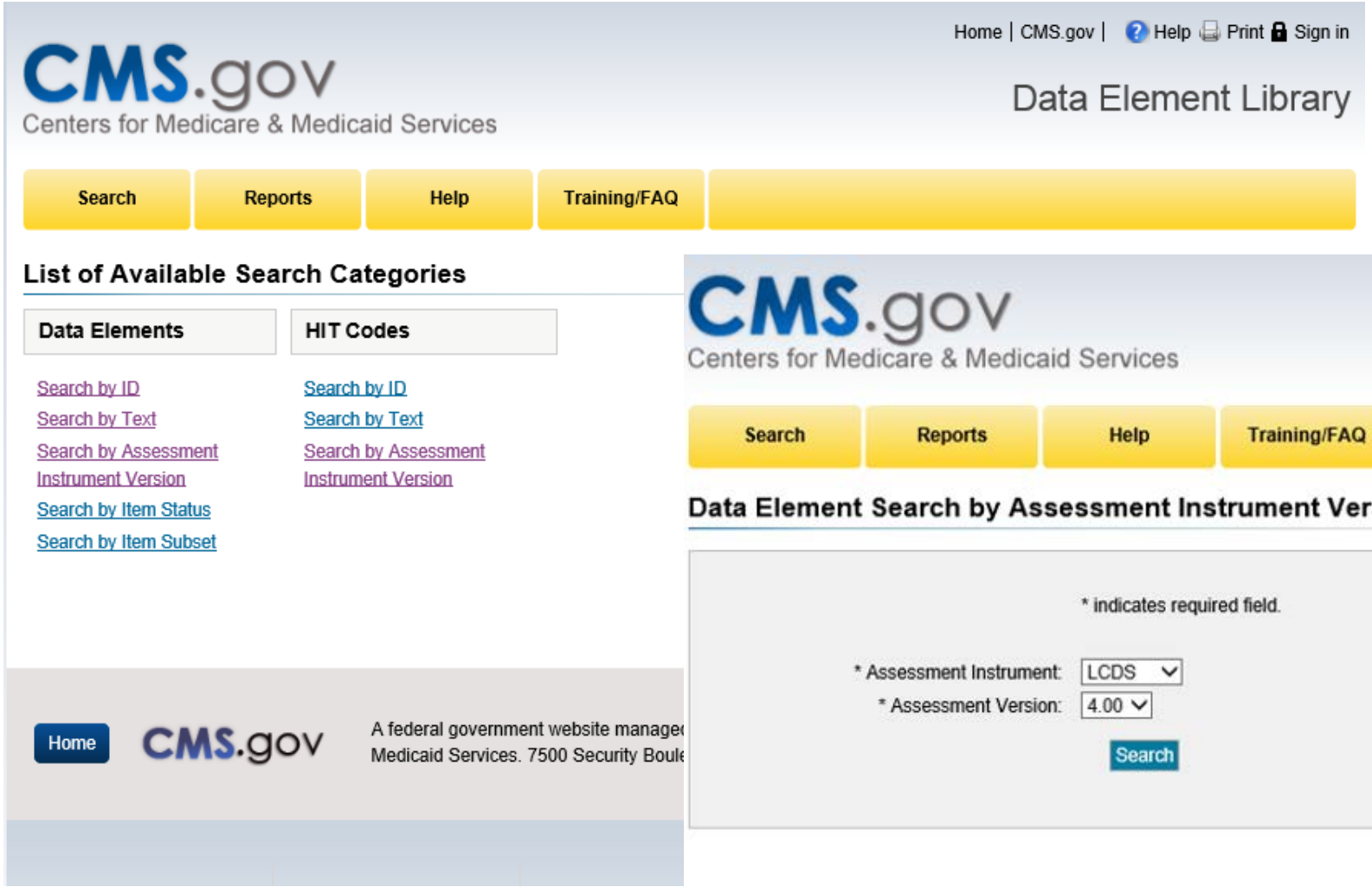
DEL Homepage

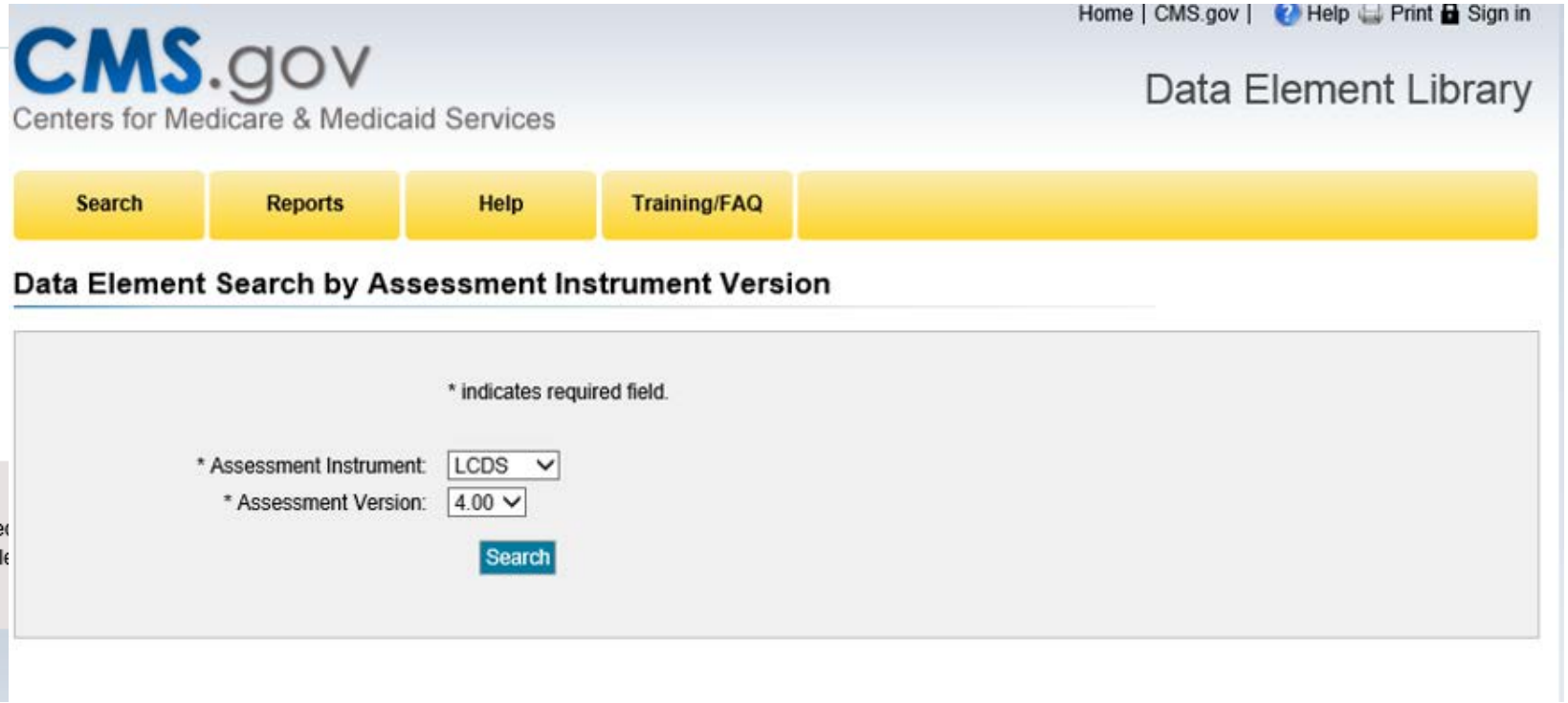
- Overview
- Announcements
- Listserv

Visit the DEL here:
https://del.cms.gov



Search Categories





Search Results List

Data Element Search by Assessment Instrument Version

There are 163 records returned from the search.

* indicates required field.

* Assessment Instrument: LCDS

* Assessment Version: 4.00

Search

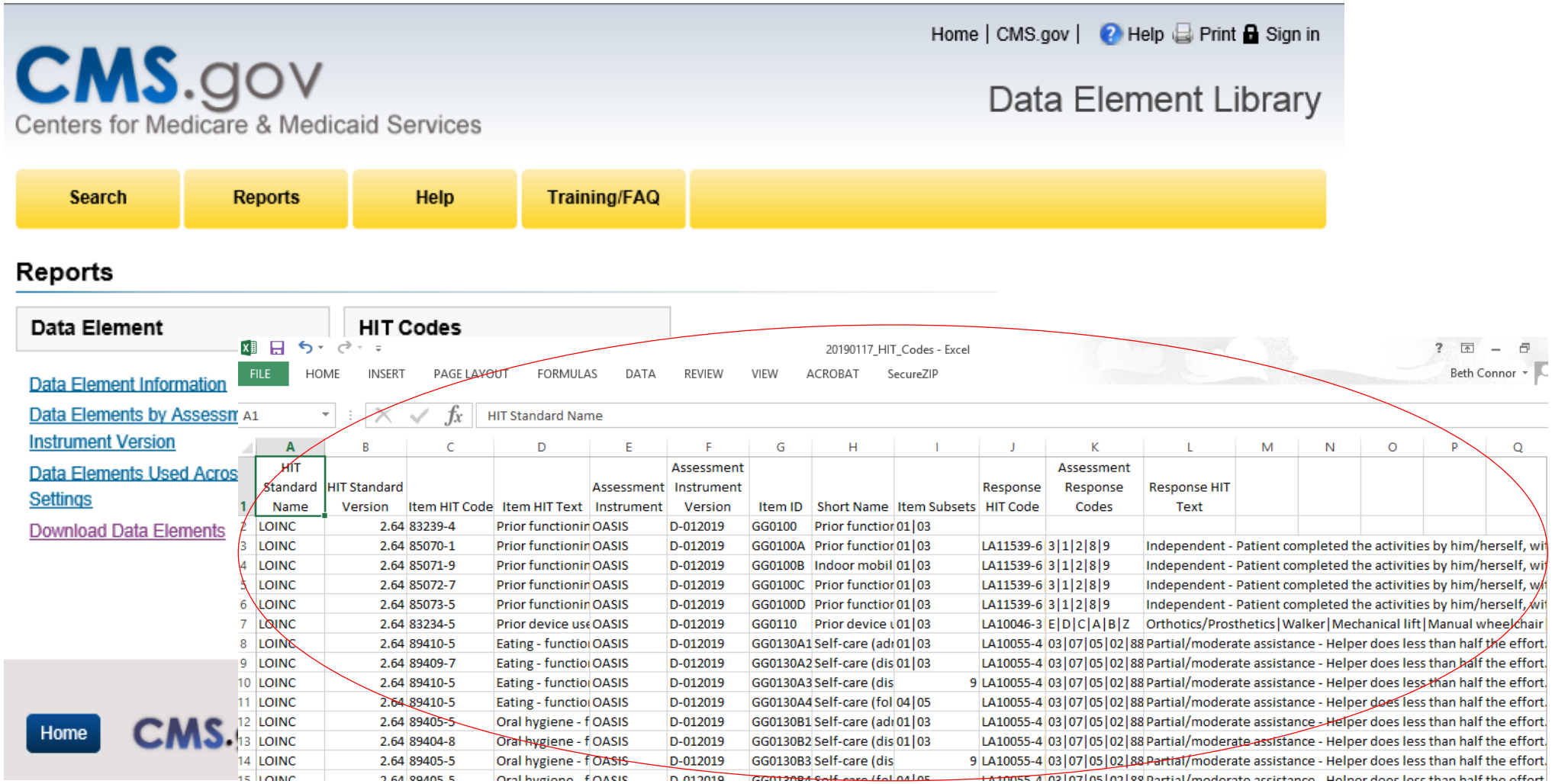
List of Data Element Search Results

Assessment Instrument	Item ID	Section Name	Short Name
LCDS	A0050	Section A: Administrative Information	Type of transaction
LCDS	A0100	Section A: Administrative Information	{Facility/provider} numbers
LCDS	A0100A	Section A: Administrative Information	{Facility/provider} National Provider Identifier (NPI)
LCDS	A0100B	Section A: Administrative Information	{Facility/provider} CMS Certification Number (CCN)
LCDS	A0100C	Section A: Administrative Information	State {facility/provider} Medicaid number
LCDS	A0200	Section A: Administrative Information	Type of {facility/provider}
LCDS	A0210	Section A: Administrative Information	Assessment reference date
LCDS	A0220	Section A: Administrative Information	Admission date
LCDS	A0250	Section A: Administrative Information	Reason for assessment (record)
LCDS	A0270	Section A: Administrative Information	Discharge date
LCDS	A0500	Section A: Administrative Information	Legal name of {patient/resident}
LCDS	A0500A	Section A: Administrative Information	{Patient/resident} first name
LCDS	A0500B	Section A: Administrative Information	{Patient/resident} middle initial
LCDS	A0500C	Section A: Administrative Information	{Patient/resident} last name
LCDS	A0500D	Section A: Administrative Information	{Patient/resident} name suffix

Detailed Data Element Information

Item Name	Item Value
Item ID:	A2110
Assessment Instrument:	LCDS
Assessment Instrument Version(s):	2.01,3.00,4.00
Section Name:	Section A: Administrative Information
Short Name:	Discharge location
Question Text:	Discharge Location
Valid Response Values (Code, Text):	01 Community residential setting (e.g., private home/apt., board/care, assisted living, group home, adult foster care) 02 Long-term care facility (LTC) 03 Skilled Nursing Facility (SNF) 04 Hospital emergency department 05 Short-stay acute hospital (IPPS) 06 Long-term care hospital (LTCH) 07 Inpatient rehabilitation facility or unit (IRF) 08 Psychiatric hospital or unit 09 Intellectually Disabled/Developmentally Disabled (ID/DD) facility 10 Hospice 12 Discharged Against Medical Advice 98 Other = Voluntarily skipped
Skip Pattern Trigger:	N
Lookback Period (days):	0
Status:	Active
Status Date:	10-01-2014
Item Use(s):	*
Collection Time Period/Item Subset(s):	LCDS Planned Discharge; LCDS Unplanned Discharge
Parent Item ID:	*
HIT Information (Standard Name, Version, Code):	LOINC 2.63 85416-6
Copyright Information:	*(Next three entries)*
Owning Organization:	*
License Required Indicator:	*
Owning Organization Weblink:	*

OASIS D Health IT Codes



	A	B	C	D	E	F	G	H	I	J	K	L
1	HIT Standard Name	HIT Standard Version	Item HIT Code	Item HIT Text	Assessment Instrument	Assessment Instrument Version	Item ID	Short Name	Item Subsets	Response HIT Code	Assessment Response Codes	Response HIT Text
2	LOINC	2.64	83239-4	Prior functionin	OASIS	D-012019	GG0100	Prior functior	01|03			
3	LOINC	2.64	85070-1	Prior functionin	OASIS	D-012019	GG0100A	Prior functior	01|03	LA11539-6	3|1|2|8|9	Independent - Patient completed the activities by him/herself, wi
4	LOINC	2.64	85071-9	Prior functionin	OASIS	D-012019	GG0100B	Indoor mobil	01|03	LA11539-6	3|1|2|8|9	Independent - Patient completed the activities by him/herself, wi
5	LOINC	2.64	85072-7	Prior functionin	OASIS	D-012019	GG0100C	Prior functior	01|03	LA11539-6	3|1|2|8|9	Independent - Patient completed the activities by him/herself, wi
6	LOINC	2.64	85073-5	Prior functionin	OASIS	D-012019	GG0100D	Prior functior	01|03	LA11539-6	3|1|2|8|9	Independent - Patient completed the activities by him/herself, wi
7	LOINC	2.64	83234-5	Prior device use	OASIS	D-012019	GG0110	Prior device (	01|03	LA10046-3	E|D|C|A|B|Z	Orthotics/Prosthetics|Walker|Mechanical lift|Manual wheelchair
8	LOINC	2.64	89410-5	Eating - functio	OASIS	D-012019	GG0130A1	Self-care (adı	01|03	LA10055-4	03|07|05|02|88	Partial/moderate assistance - Helper does less than half the effort
9	LOINC	2.64	89409-7	Eating - functio	OASIS	D-012019	GG0130A2	Self-care (dis	01|03	LA10055-4	03|07|05|02|88	Partial/moderate assistance - Helper does less than half the effort
10	LOINC	2.64	89410-5	Eating - functio	OASIS	D-012019	GG0130A3	Self-care (dis	9	LA10055-4	03|07|05|02|88	Partial/moderate assistance - Helper does less than half the effort
11	LOINC	2.64	89410-5	Eating - functio	OASIS	D-012019	GG0130A4	Self-care (fol	04|05	LA10055-4	03|07|05|02|88	Partial/moderate assistance - Helper does less than half the effort
12	LOINC	2.64	89405-5	Oral hygiene - f	OASIS	D-012019	GG0130B1	Self-care (adı	01|03	LA10055-4	03|07|05|02|88	Partial/moderate assistance - Helper does less than half the effort
13	LOINC	2.64	89404-8	Oral hygiene - f	OASIS	D-012019	GG0130B2	Self-care (dis	01|03	LA10055-4	03|07|05|02|88	Partial/moderate assistance - Helper does less than half the effort
14	LOINC	2.64	89405-5	Oral hygiene - f	OASIS	D-012019	GG0130B3	Self-care (dis	9	LA10055-4	03|07|05|02|88	Partial/moderate assistance - Helper does less than half the effort

Training/FAQs

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Data Element Library

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Training/FAQ

Helpful Documents

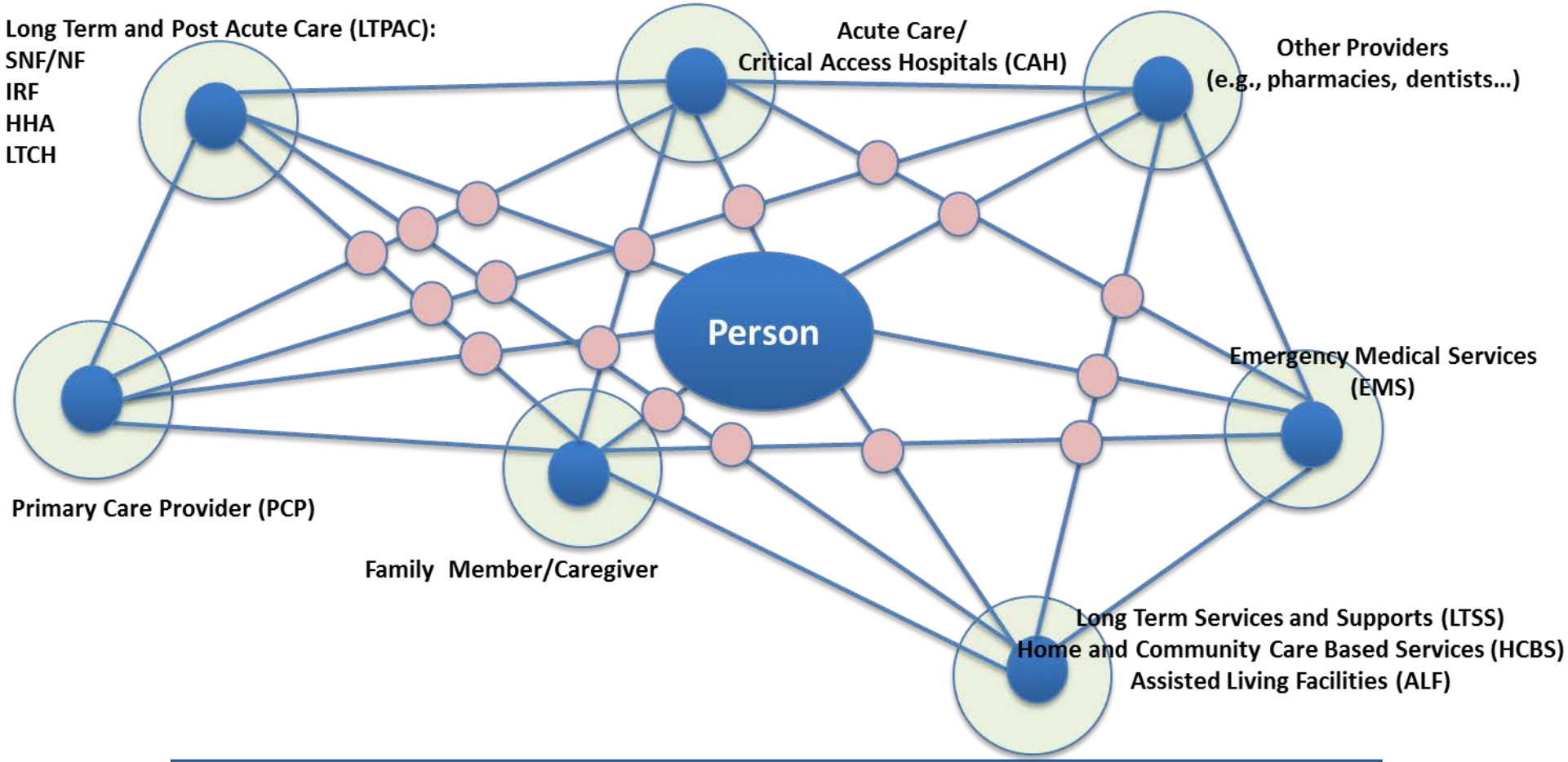
- Introduction to the CMS Data Element Library (DEL) webinar recording, July 11, 2018: Link
- Data Element Library Introductory Webinar - July 11, 2018: Link to PDF
- DEL User Guide: Link to PDF

Frequently Asked Questions

Question	Answer
What is a data element?	In the context of the CMS Data Element Library and post-acute care, data elements are discrete questions and responses that are found in the patient/resident assessment instruments that post-acute care providers use to submit data to CMS.
I am a PAC provider, does the DEL change how I submit data now?	No- the DEL is a repository of CMS assessment data elements (questions and responses). It does not affect provider data submission processes. Providers and vendors must still follow the submission specifications required for submitting data to CMS electronically.
How frequently will the DEL	

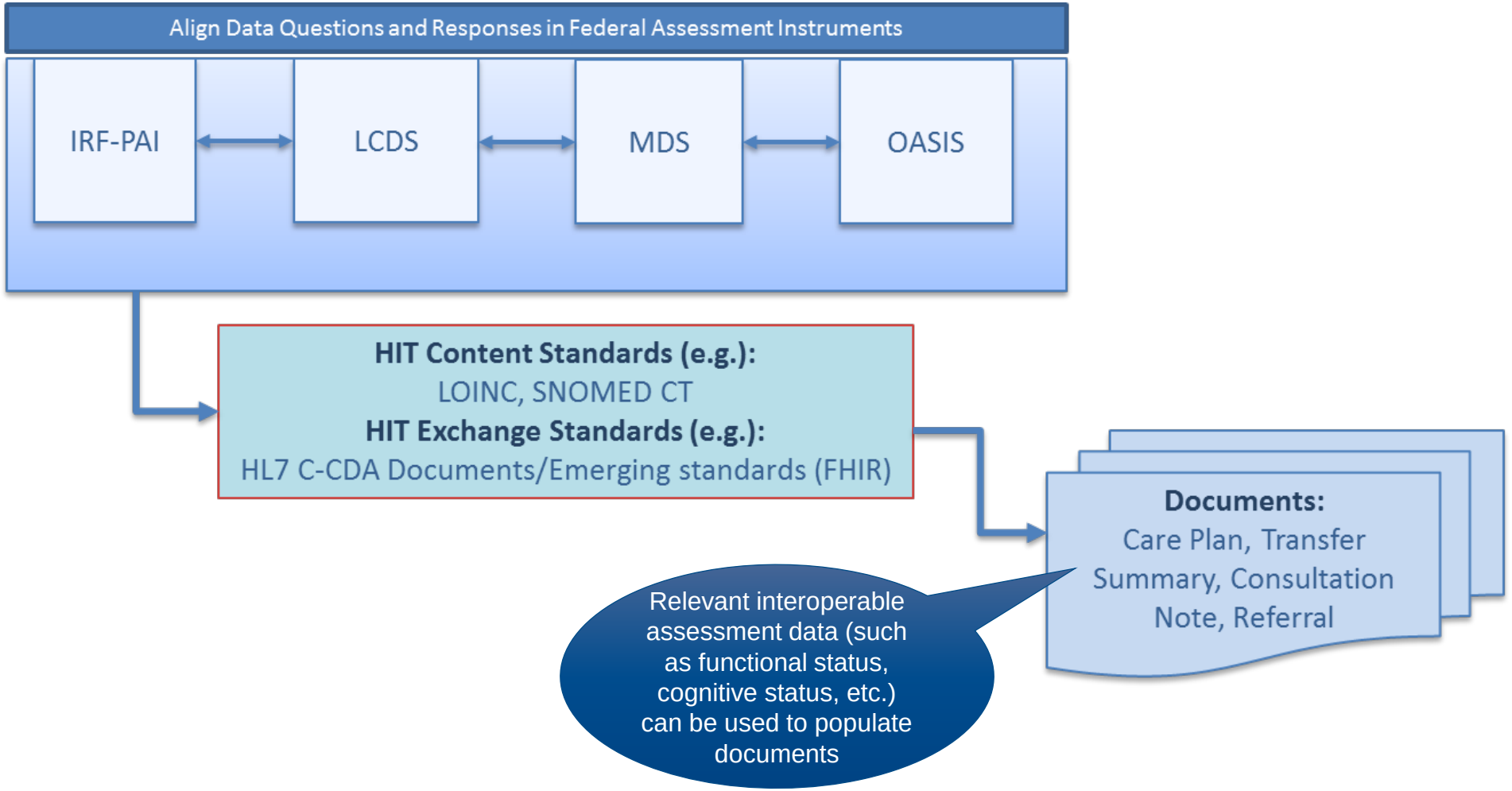
Alignment and Interoperability: Advancing interoperability by aligning assessment content with industry standards and mapping content to vocabularies, terminologies and code sets

Guiding Principle: Data Needs to Follow the Person



Support data availability in real-time. Electronic information is exchanged and used by health IT systems without special effort on the part of the user.

Making PAC Assessment Data Elements Standardized/Aligned and Interoperable



CMS Data Element Library HIT Workgroup Focus

- Vision for Interoperable Assessment Content
- Opportunities for Burden Reduction
- Use Cases for Interoperable Assessment Content
- Aligning with National Standards
- Mapping to Relevant Vocabulary & Terminology Standards
- Use of Interoperable Assessment Content by Implementers

Vision for Interoperable Assessment Content

- Strategy: Leverage standardized data that is collected on almost all PAC patients to advance interoperability, reduce burden, and improve patient care.
- Models:
  - Identify single code to represent the assessment question and response and re-use data in relevant exchange documents (current focus)
  - Identify a value set of codes that could be used to support completion of an assessment item (future)

Opportunities for Burden Reduction and Improved Communication

- Real-time data availability improves patient care
- Machine processable data reduces provider burden:
  - Eliminates duplicative data entry
  - Minimizes searching medical record for relevant content
- Experiences of Early Adopters - Faster Data Entry
  - Valuable to have common data standards across provider types
  - Data from exchange documents (e.g. CCD) populates the patient record

Use Cases for Interoperable Assessment Content

- **Care coordination between multiple providers / proxy / family members**
  - Appointments, readmissions, sharing care plan, chart sharing, transportation
- **Transitions of care referrals**
  - Intake, info queries, transition out, follow-up activity coordination
  - Medication reconciliation
  - Clinical decision support
- **Admission / Discharge information notifications**
  - Helps all parties to track patient status
- **Population Health Management Administration**
  - Quality management, at risk dollars, who is high risk and why
- **Changing relationship between patient and caregivers**
  - Connective devices, patient engagement, monitoring, telehealth
- **Getting providers engaged**
  - Quality compared to peers, financial metrics, cost of care
- **Advanced directives**
  - Sharing and notifications

Aligning With National Standards

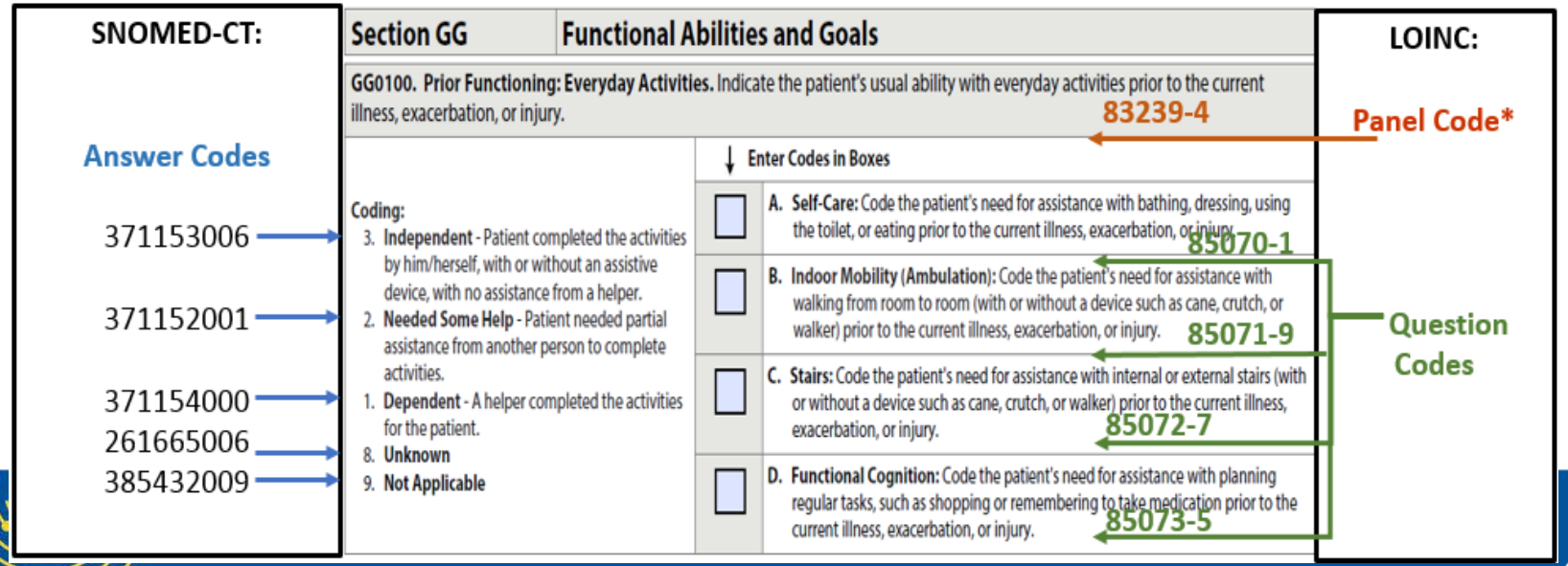
- ONC Interoperability Standards Advisory
  - DEL Health IT standards align with national policy
  - LOINC and SNOMED-CT for assessment content
- Analyzed Common Clinical Data Set/U.S. Core Data for Interoperability (USCDI)
  - Identified opportunities for alignment of assessment content to USCDI
  - Provided comments on future candidate data types important to support PAC for USCDI expansion

- 2019 ONC Interoperability Standards Advisory: https://www.healthit.gov/isa/sites/isa/files/inline-files/2019ISAReferenceEdition.pdf
- ONC Common Clinical Data Set: https://www.healthit.gov/public-course/interoperability-basics-training/lsn1069/010110---a.htm
- Draft USCDI: https://www.healthit.gov/sites/default/files/draft-uscdi.pdf

Mapping to Relevant Vocabulary & Terminology Standards

- Selected codes aligned with national policy and utilized in exchange standards (e.g. C-CDA templates)
- Mapped assessment content to LOINC and SNOMED
  - LOINC codes represent the question and answer
  - SNOMED codes represent the answer meaning
- LOINC codes are available for PAC assessments on the DEL

GG0100 as Shown on IRF-PAI

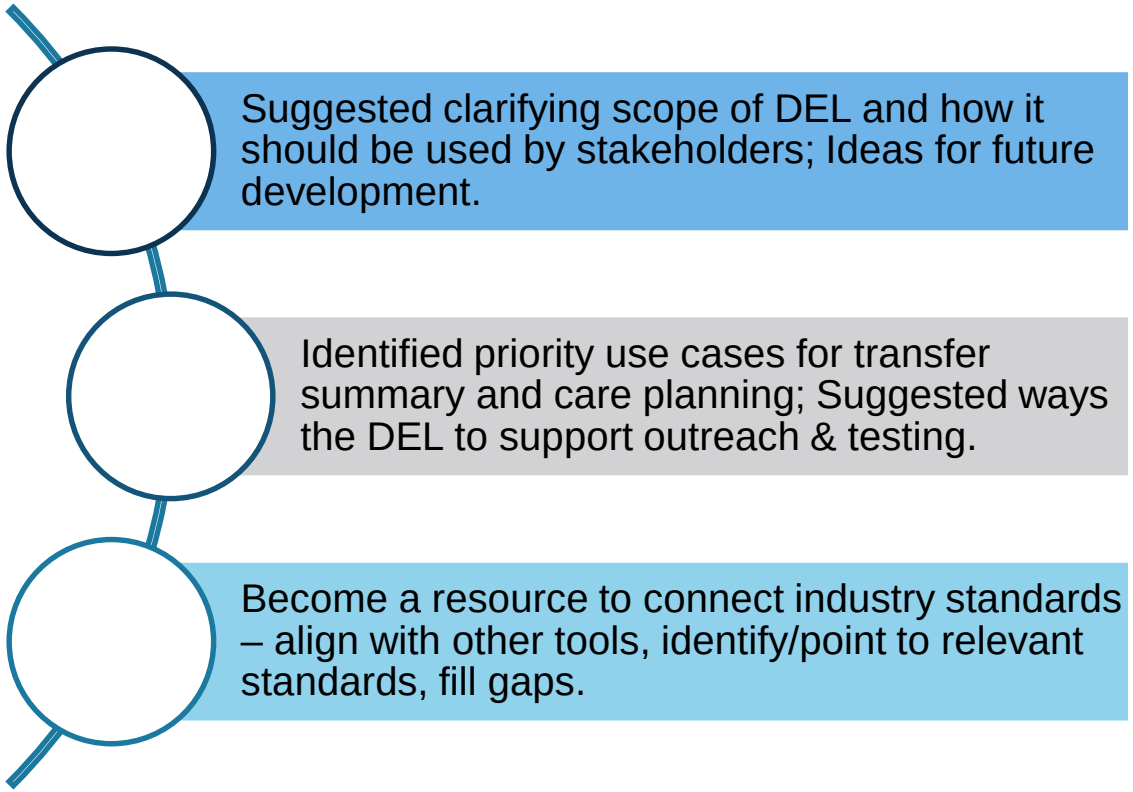


Use of Interoperable Assessment Content by Implementers

- Best practices for data element design to support interoperability
- Ensure health IT content vocabularies Use in HIE standards
- Leverage DEL's content with other industry tools such as:
  - Value Set Authority Center (VSAC)
  - Regenstrief LOINC Mapping Assistant **(**RELMA)
- Convene Advisory Group (industry and HHS)
  - Input on future direction for DEL and health IT priorities
  - Identify priority use cases that leverage existing standards and address gaps. Tailor implementation guides and coordinate testing.

Industry Expert Roundtable on CMS Data Element Library

- Provided feedback on the CMS Data Element Library:
  - Inform healthcare policies Advance
  - interoperability
  - Support transfer of care, coordination of care, quality measurement, and research

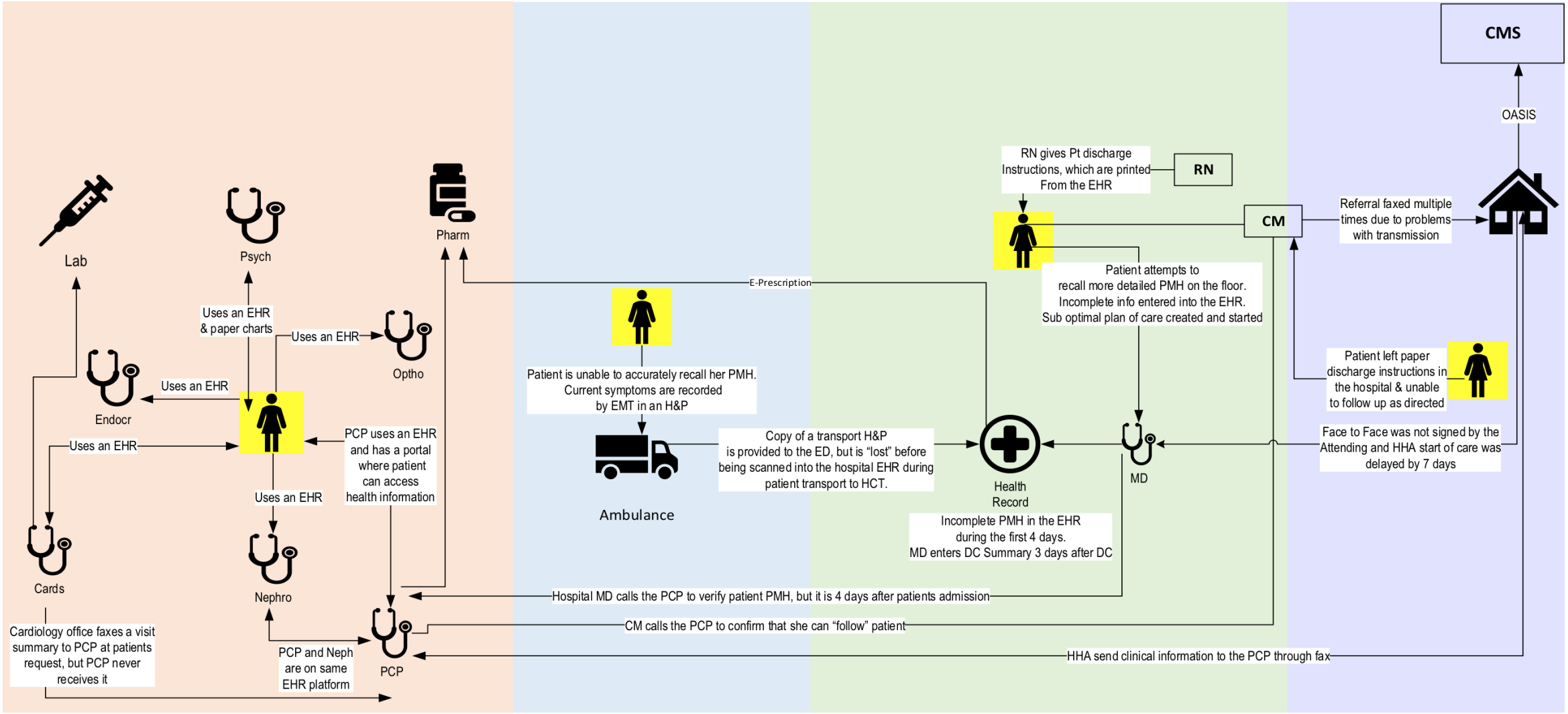


Health Data Exchange Through FHIR

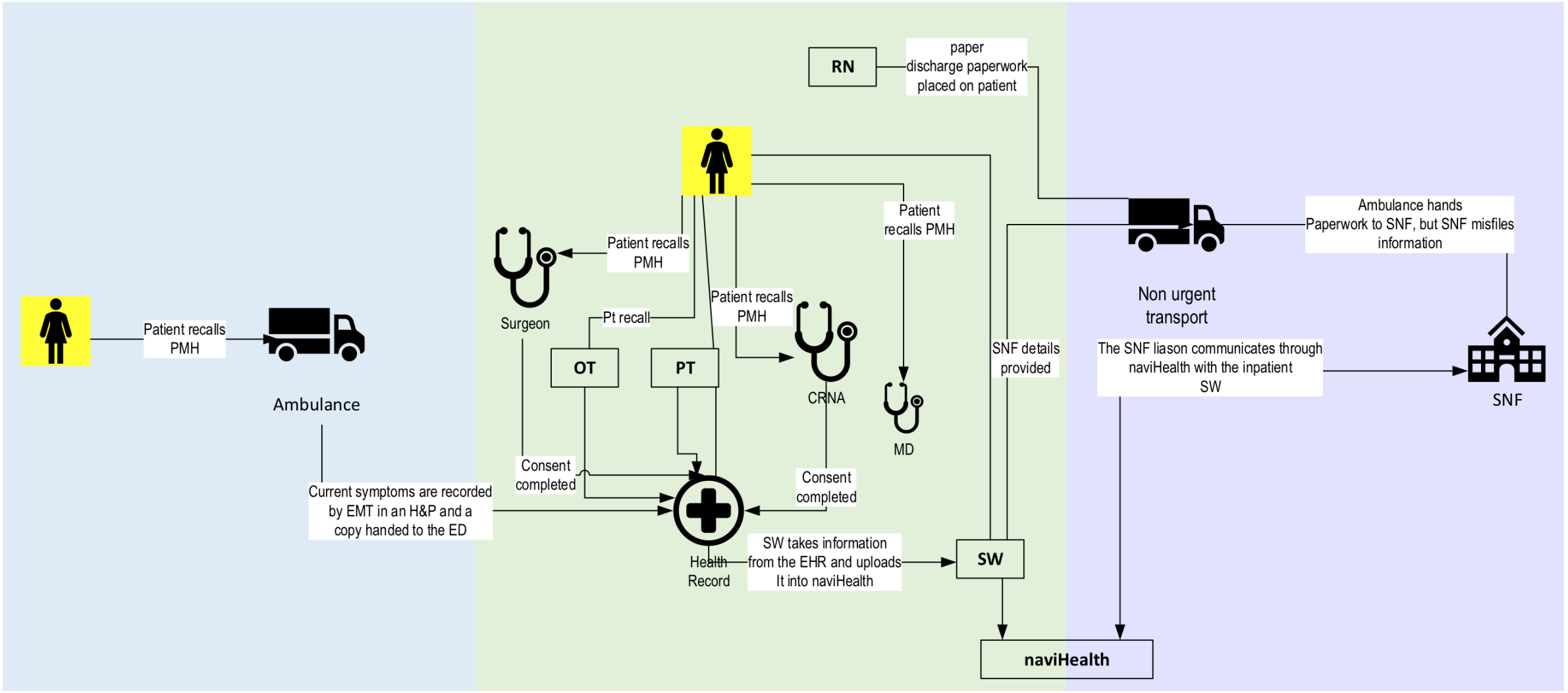
We’re Building the Future with FHIR

1) Participate in HL7 Working Groups
2) Create sustainable PAC Interoperability Working Group
3) Identify tightly-scoped use case to implement for a connect-a-thon
4) Develop FHIR Implementation Guides for use case data models
5) Review and harmonize FHIR Implementation Guides with key stakeholders
6) Host connect-a-thon to test FHIR Implementation Guides
7) Build industry consensus around FHIR Implementation Guides
8) Identify next agile part of use case to implement, and repeat steps 4 through 8.

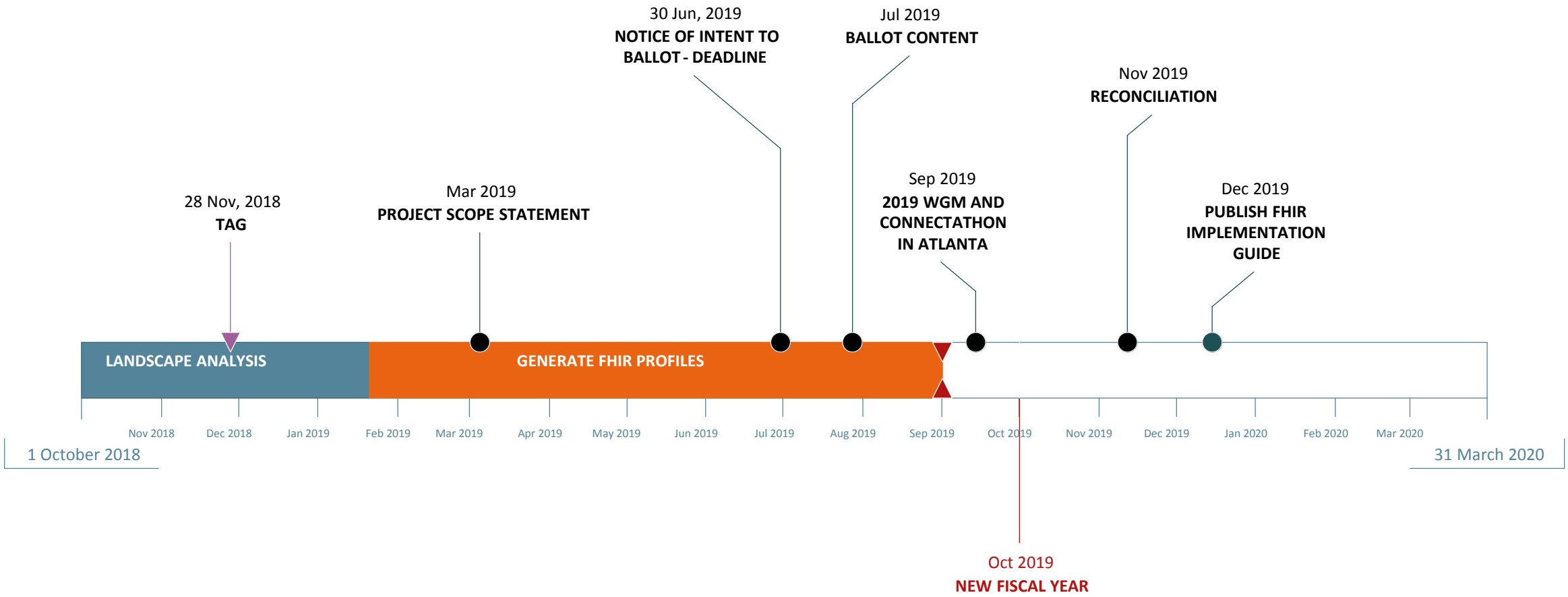
Outpatient → EMS → Inpatient → Home Health



EMS → Inpatient → SNF



Proposed Timeline for FHIR Work (Publish Dec 2019)



Call to Action: How to Participate

- **Health IT developers**
  - Build on existing health IT systems
  - Try out new projects/systems
- **PAC providers**
  - Analyze how and where assessment data fits in clinical workflow
  - Provide feedback on development priorities

- **Ways to contribute:**
  - Subject matter expertise
  - Scalability of implementing the eventual solution
  - Assist in the delivery of key deliverables and project artifacts
  - Development of testing tools, testing implementations, etc.

To participate in PAC Interoperability workgroup and FHIR connect-a-thon contact: Dave Hill, dwhill@mitre.org

Wrap Up and Question & Answer Session

Resources

- For more information on the IMPACT Act, visit the IMPACT Act webpage

- For more information on Post-Acute Care Quality Reporting Programs, visit:
  - Home Health Agencies
  - Hospice Agencies
  - Inpatient Rehab Facilities
  - Long-term Care Hospitals
  - Skilled Nursing Facilities

- For DEL updates, sign up for the listserv here
- For DEL feedback or questions, contact: DELHelp@cms.hhs.gov

Thank You

- Beth Connor, CMS
  - Beth.Connor@cms.hhs.gov
- Lorraine Wickiser
  - Lorraine.Wickiser@cms.hhs.gov
- Elizabeth Palena Hall, ONC
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- Michelle Dougherty, RTI International
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- Dave Hill, MITRE
  - Dwhill@mitre.org

CMS Contractors supporting the DEL:

NIC/Telligen
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