Encounter Disposition Value Set Definition & Alignment

HL7 Working Group

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Virtual Zoom Meeting

Topic Discussion Facilitator:

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A key part of the CMS Final Regulation

- CMS modified the Medicare and Medicaid Hospital CoP to require hospitals, psychiatric hospitals, and critical access hospitals (CAHs), which utilize an EHR, to send notifications of a patient's ADT to certain providers. These providers include the patient's established primary care practitioner or group; post-acute care service providers and suppliers with whom the patient has an established care relationship; and, other practitioners, groups or entities, identified by the patient. The notifications are intended to focus on sending information to the providers that need to receive notification of the patient's status for treatment, care coordination, or quality improvement purposes. CMS is not specifying a standard for the content, format, or delivery of these notifications.
- It is important to note that if the hospital and patient cannot identify a provider to share the notification with, the hospital is not required to send a notification for that patient. Moreover, CMS emphasized that, at the time of this applicability date, this provision is limited to a hospital that currently possesses an EHR system with the technical capacity to generate the basic patient personal or demographic information for electronic patient event notifications.

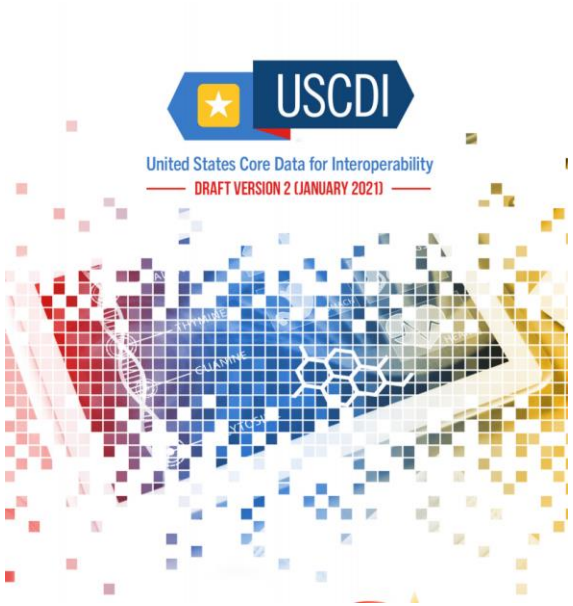
https://www.himss.org/news/final-cms-interoperability-regulation-what-you-need-know

Agenda

- Overview on current status of Encounter Disposition (discharge disposition) data element
- Review of value set guidance from V2, CDA, FHIR, Quality, Payers
  - Harmonization
  - Licensing issues
- Next steps to meet existing needs
  - Use in ADT Event Notification use cases

USCDI (Comment Level 2)

- Data Class: Encounter Information (draft)
  - Encounter Type (draft)
  - Encounter Time (draft)
  - Encounter Diagnosis (draft)
  - Encounter Location (comment L2)
  - Encounter Disposition (comment L2)

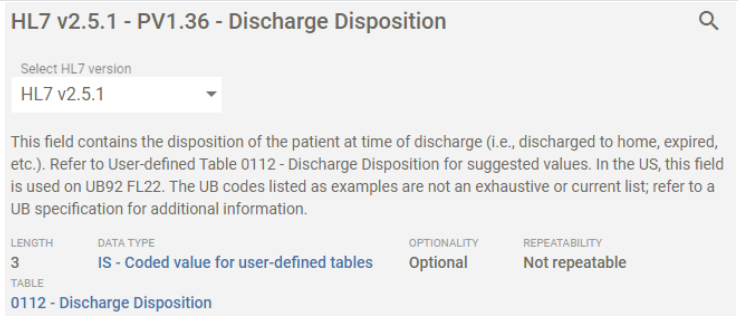


https://www.healthit.gov/isa/uscdi-data/encounter-disposition

Encounter Disposition

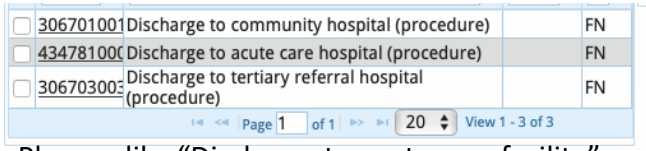
HL7 V2

HL7 version of the NUBC FL17 codes



CMS.gov
Centers for Medicare & Medicaid Services

valueset "Discharge To Acute Care Facility"
using “2.16.840.1.113883.3.117.1.7.1.87” SNOMED CT



Phrases like “Discharge to acute care facility” and “Discharged to home for hospice care” and each of these more general ideas became a value set into which they put all the SNOMED CT codes that “mapped” to that more general idea.

HL7 CDA

NUBC FL17 – not available

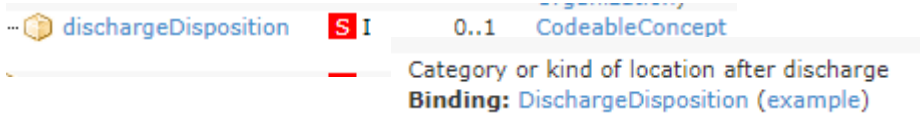
Encounter Activity: sdtc:dischargeDispositionCode

This sdtc:dischargeDispositionCode **SHOULD** contain exactly [0..1] *code*, which **SHOULD** be selected from ValueSet 2.16.840.1.113883.3.88.12.80.33 NUBC UB-04 FL17-Patient Status (code system 2.16.840.1.113883.6.301.5) *DYNAMIC* or, if access to NUBC is unavailable, from CodeSystem 2.16.840.1.113883.12.112 HL7 Discharge Disposition (CONF:1198-32177).

Encounter Disposition

HL7 FHIR

US Core Encounter: Encounter.hospitalization.dischargeDisposition



All codes from system `http://terminology.hl7.org/CodeSystem/discharge-disposition`

EOB.supportingInfo:discharge-status.code

AHANUBCPatientDischargeStatus

carin

NUBC FL17

10.22.1.1 Logical Definition (CLD)

- Include all codes defined in `https://www.nubc.org/CodeSystem/PatDischargeStatus`

C-CDA – Not much help.

- a. This sdtc:dischargeDispositionCode **SHOULD** contain exactly [0..1] *code*, which **SHOULD** be selected from ValueSet 2.16.840.1.113883.3.88.12.80.33 NUBC UB-04 FL17-Patient Status (code system 2.16.840.1.113883.6.301.5) *DYNAMIC* or, if access to NUBC is unavailable, from CodeSystem 2.16.840.1.113883.12.112 HL7 Discharge Disposition (CONF:1198-32177).
- b. This sdtc:dischargeDispositionCode **SHOULD** contain exactly [0..1] *codeSystem*, which **SHOULD** be either CodeSystem: NUBC 2.16.840.1.113883.6.301.5 *OR* CodeSystem: HL7 Discharge Disposition 2.16.840.1.113883.12.112 (CONF:1198-32377).

- ValueSet NUBC UB-04 FL17-Patient Status 2.16.840.1.113883.3.88.12.80.33 – NOT IN VSAC
- UTG: https://build.fhir.org/ig/HL7/UTG/codesystems.html All Code Systems
  - No Code System named HL7 Discharge Disposition
  - No Code System identified with 2.16.840.1.113883.12.112

eCQMs (Anticoagulation Therapy for Atrial Fibrillation/Flutter CMS71v10)

- valueset "Discharge To Acute Care Facility" (2.16.840.1.113883.3.117.1.7.1.87)

306701001	Discharge to community hospital (procedure)
306703003	Discharge to tertiary referral hospital (procedure)
434781000124105	Discharge to acute care hospital (procedure)

- valueset "Discharged to Health Care Facility for Hospice Care" (2.16.840.1.113883.3.117.1.7.1.207)

428371000124100	Discharge to healthcare facility for hospice care (procedure)

- valueset "Discharged to Home for Hospice Care" (2.16.840.1.113883.3.117.1.7.1.209)

428361000124107	Discharge to home for hospice care (procedure)

Don’t look at this….it’s an IP violation!

NUBC	UB04 - Patient Form Field 17 codes. FHIR uses an HL7 Value Set. NUBC - UB 04 - Patient Form 17	Proposed Mapping	Encounter.hospitalization.discharge Disposition from system http://	Example Binding	Proposed Mapping	Anticoagulation Therapy for Atrial Fibrillation/Flutter CMS71v10 SNOMED CT Value Sets Used		
01	Discharged to home or self care (routine discharge)	equivalent	home	Home				
02	Discharged/transferred to another short term general hospital for inpatient care	narrow to broad	other-hcf	Other healthcare facility	broad to narrow	Discharge To Acute Care Facility	306701001	Discharge to community hospital (procedure)
							306703003	Discharge to tertiary referral hospital (procedure)
							434781000124105	Discharge to acute care hospital (procedure)
03	Discharged/transferred to skilled nursing facility (SNF)	equivalent	snf	Skilled nursing facility				
04	Discharged/transferred to an intermediate care facility (ICF)	narrow to broad	other-hcf	Other healthcare facility				
05	Discharged/transferred to another type of institution for inpatient care or referred for outpatient services to another institution	narrow to broad	other-hcf	Other healthcare facility				
05	Discharged/transferred to another type of institution for inpatient care or referred for outpatient services to another institution	broad to narrow	psy	Psychiatric hospital				
05	Discharged/transferred to another type of institution for inpatient care or referred for outpatient services to another institution	broad to narrow	hosp	Hospice	equivalent	Discharged to Health Care	428371000124100	Discharge to healthcare facility for hospice care (procedure
05	Discharged/transferred to another type of institution for inpatient care or referred for outpatient services to another institution	broad to narrow	long	Long-term care				
05	Discharged/transferred to another type of institution for inpatient care or referred for outpatient services to another institution	broad to narrow	rehab	Rehabilitation				
06	Discharged/transferred to home under care of organized home health service organization	narrow to broad	alt-home	Alternative home	broad to narrow	Discharged to Home for	428361000124107	Discharge to home for hospice care (procedure)
07	Left against medical advice or discontinued care	narrow to broad	aadvice	Left against advice				
08	Discharged/transferred to home under care of Home IV provider	narrow to broad	alt-home	Alternative home				
09	Admitted as an inpatient to this hospital	narrow to broad	oth	Other				
10	Discharge to be defined at state level, if necessary	narrow to broad	oth	Other				
20	Expired (i.e. dead)	equivalent	exp	Expired				
21 …	Expired to be defined at state level, if necessary	narrow to broad	exp	Expired				
30	Still patient or expected to return for outpatient services (i.e. still a	narrow to broad	oth	Other				
31 …	Still patient to be defined at state level, if necessary (i.e. still a patient)	narrow to broad	oth	Other				
40	Expired (i.e. died) at home	narrow to broad	exp	Expired				
41	Expired (i.e. died) in a medical facility; e.g., hospital, SNF, ICF, or free standing hospice	narrow to broad	exp	Expired				
42	Expired (i.e. died) - place unknown	narrow to broad	exp	Expired				

What are the implementer ramifications?

6 Terminology Licensure

6.1 Code Systems Requiring Licenses

6.1.1 Access to Licensed Code Systems

This HL7 specification contains and references intellectual property owned by third parties ("Third Party IP"). Implementers and testers of this specification SHALL abide by the license requirements for each terminology content artifact utilized within a functioning implementation. Terminology licenses SHALL be obtained from the Third Party IP owner for each code system and/or other specified artifact used. It is the sole responsibility of each organization deploying or testing this specification to ensure their implementations comply with licensing requirements of each Third Party IP.

6.1.2 Licensed Industry Standard Code Systems

This IG includes value set bindings to code systems that reference industry standard codes which require implementers to purchase a license before the coded concepts can be used. The following information summarizes the set of licensed Code Systems required by this IG and provides links to the information about where to go to obtain a license.

- AMA CPT: The CPT procedure and modifier codes are owned by the American Medical Association.
- X12: CARC (Claim Adjustment Reason Codes are owned by X12..
- NUBC: The NUBC secretariat is the American Hospital Association..
- NUCC: National Uniform Claim Committee (NUCC) is presently maintaining the Taxonomy code set. The codes are free and publically available for download and use. If the use however is "For commercial use, including sales or licensing, a license must be obtained". It would be appropriate for an app developer to file the license form just like they would for any other code set; however, there is no fee.
- NCPDP: Retail Pharmacy data standards are defined by the NCPDP .
- 3M APR-DRG: AP-DRGs and APR-DRGs are owned by 3M. Use of AP-DRGs and APR-DRGs require a license.

https://build.fhir.org/ig/HL7/carin-bb/Terminology_Licensure.html

Next Steps:

- Within HL7 how do we align data element definitions to use the same value set, or fully mapped value sets?
- What are the expectations regarding code system licensing?
- Billing information isn't even available at the point the discharge event takes place
- There is a way to build a clinical code system
  - Effort would need to be funded by ONC and maintained over time
    - Creation is different than maintenance
    - ONC doesn't create value sets, it names them, when they exist and are ready to use (agreed to by implementers)
  - It's time to address this problem…
  - Who would launch this, who would do the work? How will it be funded?
- Maybe we are not talking about "Discharge Disposition", maybe we could do a survey to figure out "what type of situation is a person being discharged to?"
  - This might not be the right use case for using NUBC

Next actionable steps

- Find a group that cares about this problem and wants to see this work get done
- Collect a set of concepts currently used today
- Compare “map” the concepts
- Clarify the Use Cases
- Seek agreement on a starting value set, test it, recommend it to ONC for the discharge disposition data element
  - Invent a way to create a social media approach to finding the collaborative creation
  - Once the “open source” value set exists, people can improve it.
- What is the proper binding?
  - Either a preferred binding, or if it is an extensible binding there will be some very specific rules for how the value set gets defined