USCDI ONDEC Submission Form Prep Sheet

This resource provides all of the USCDI ONDEC submission form questions and allows stakeholders to gather necessary information in advance of submission. You may choose to copy/paste your information from this document directly into the USCDI ONDEC submission form.

Please visit www.healthIT.gov/ONDEC to submit information through the USDCI ONDEC system.

Submitter Details

Name of Submitter*:

Becky Gradl

Email Address of Submitter*:

(auto-populated from Interoperability Standards Advisory user account, but can be edited)

Email will **not** be published with submission but will be available to ONC for evaluation

Secondary Email Address:

Organization of Submitter:

Academy of Nutrition and Dietetics

Please note: your name and organization will be visible and associated with your submission.
Email addresses will only be visible to ONC and used for communication regarding your submission.

Data Element

Data Class Name: (or select an existing USCDI Data Class):*

Nutrition and Diet

Data Element Name:*

Oral Diet Type

Data Element Description:*

The name or type of oral diet or diet restrictions that describe what can be consumed orally. For example “general healthful diet”, “consistent carbohydrate diet”, or “renal diet”.

Are there similar or related data elements in USCDI?* (select one)

☐ Yes ☒ No ☐ Unknown

If yes, why should this data element be considered separately?

You may submit additional data elements within this data class, using the same information below:

Data Element Name - 2:*

Oral Diet Nutrient Modifiers

Data Element Description:*

Nutrients that are increased or decreased in conjunction with the oral diet type as part of a therapeutic diet. For example, “decreased sodium” or “increased protein”.

Data Element Name - 3:*

Oral Diet Texture Modifiers

Data Element Description:*

Texture modifications to indicate how to alter the texture of foods to improve safety for patients with swallowing difficulties. For example, “pureed” or “soft & bite-sized”. The ISDDI Framework (https://iddsi.org/Framework) for foods is recommended as the terminology for this data element.

Data Element Name - 4:*

Oral Diet Fluid Consistency

Data Element Description:*

The required consistency of fluids and liquids provided to improve safety for patients with swallowing difficulties. For example, “moderately thick” or “thin”. The ISDDI Framework (https://iddsi.org/Framework) for drinks is recommended as the terminology for this data element.

Data Element Name - 5:*

Food Allergy or Intolerance

Data Element Description:*

The patient's food and nutrition-related allergies and intolerances. These are common food substances and allergens that can cause harmful or undesirable physioloical responses when exposed to the substance or the substance is consumed. Note: Substance (Food) was submitted in 2020 and classified as a Level 2 data element under the allergies and intolerances class (https://www.healthit.gov/isa/taxonomy/term/1441/level-2).

Data Element Name - 6:*

Oral Nutritional Supplement

Data Element Description:*

A food item consumed to manage calories, protein or other nutrient(s) to enhance nutritional quality; the supplement could be a meal replacement, a part of a meal or consumed as a snack. Examples: Commercial ready-to-use beverages or powdered products to be reconstituted with milk/milk substitute or water, puddings, soups or bars.

Data Element Name - 7:*

Enteral Nutrition Type

Data Element Description:*

Enteral Nutrition is the delivery of nutrients to a functional segment of the gastrointestinal tract distal to the oral cavity employing the use of a tube or catheter device to supply a liquid formula. This data element is for the type or brand name of the enteral formula.

Data Element Name - 8:*

Enteral Nutrition Volume

Data Element Description:*

The volume of formula to provide at each feeding. This data element must be provided in conjunction with the Enteral Nutrition Type and other Enteral Nutrition data elements.

Data Element Name - 9:*

Enteral Nutrition Rate

Data Element Description:*

Speed with which the enteral formula is provided per period of time. This data element must be provided in conjunction with the Enteral Nutrition Type and other Enteral Nutrition data elements.

Data Element Name - 10:*

Enteral Nutrition Frequency

Data Element Description:*

Scheduled frequency of enteral feeding. This data element must be provided in conjunction with the Enteral Nutrition Type and other Enteral Nutrition data elements.

Data Element Name - 11:*

Enteral Nutrition Additive

Data Element Description:*

Type of modular component to add to the enteral nutrition feeding. This data element must be provided in conjunction with the Enteral Nutrition Type and other Enteral Nutrition data elements.

Data Element Name - 12:*

Enteral Nutrition Flush

Data Element Description:*

The amount and frequency of water to run through the feeding tube to prevent the feeding tube from getting clogged. Also used for providing medication.

Data Element Name - 13:*

Eating/drinking assistive device

Data Element Description:*

External devices that are designed, made, or adapted to assist a person with eating and/or drinking

Use Case

Briefly describe the main use cases to support adoption of the data element into the USCDI:*

Per 42 C.F.R. 482.28 (https://www.ecfr.gov/current/title-42/chapter-IV/subchapter-G/part-482/subpart-C/section-482.28) for hospitals and 42 C.F.R. 483.60 (https://www.ecfr.gov/current/title-42/chapter-IV/subchapter-G/part-483#483.60) for long-term care facilities, facilities must ensure patients' or residents' nutritional needs are met through therapeutic diets that meet any nutritional and special dietary needs. The data elements described in this submission for a new Nutrition and Diet class represent the minimum data elements that should be interoperable to support these regulations.

In the long-term care setting, therapeutic diets are defined (in Interpretive Guidelines for as "a diet ordered by a physician or other delegated provider that is part of the treatment for a disease or clinical condition, to eliminate, decrease, or increase certain substances in the diet (e.g., sodium or potassium), or to provide mechanically altered food when indicated." In the hospital setting, CMS stated (https://www.federalregister.gov/d/2014-10687/p-172) that they "consider all patient diets to be therapeutic in nature, regardless of the modality used to support the nutritional needs of the patient" given they are part of the totality of treatment.

The data elements included are those necessary to define the care delivered and facilitate transitions.

Currently, most EHR systems are collecting the data elements described in this submission for a new Nutrition and Diet class and transmitting them to a food management system so that patients or residents may be provided with appropriate meals. Either a dietitian or a physician will enter the data elements in the EHR to create the diet order that is then sent to the food management system so the food and nutrition services can provide appropriate meals. Similarly, any changes to a patient or resident's diet order is typically made in the EHR and transmitted again to the food management system; typically, only one diet order is active at a given time.

Estimate the number of stakeholders who would capture, access, use or exchange this data element or data class:*

All patients and residents are impacted by this new Nutrition and Diet class. This would also impact all healthcare facilities who provide meals to patients and residents, including, but not limited to hospitals, long term care, rehabilitation facilities, and home health. Practitioners such as physicians, nurses, and dietitians would capture, access, use and exchange this data and people who work to prepare and serve meals, including food service companies such as Sysco, Aramark, and Compass Group would also use the data elements.

Link to use case project page:

HL7 Version 3 Domain Analysis Model: Diet and Nutrition Orders, Release 2: http://www.hl7.org/implement/standards/product_brief.cfm?product_id=289

Please add if there are additional use cases for this data element that could affect significant numbers of other stakeholders.

Please describe the additional use case:*

Diet orders are also critical during transitions of care, smoothing the transition process and reinforcing discharge planning to help prevent hospital readmissions and improve quality of life across the continuum of care.

When there is a transition of care, nutrition and diet data elements are sometimes included, however should always be included to prevent any patient safety issues or unnecessary tests and costs associated with the need to reevaluate a patient for an appropriate therapeutic diet to meet their nutritional or special dietary needs. These proposed requirements to enhance communication between providers should reduce risks of complications and adverse events for patients and residents, for many of whom nutrition is a particularly essential part of the plan of care.

Estimate the number of stakeholders who would capture, access, use or exchange this data element or data class:*

Any patients who require a transition of care are impacted by this new Nutrition and Diet class. This would also impact those healthcare facilities who provide meals to patients and residents, including, but not limited to hospitals, long term care, rehabilitation facilities, and home health that the patient is transferred from and to. Practitioners such as physicians, nurses, and dietitians would also use this data related to the transition of care.

Link URL:

Section 2.40 in HL7 CDA® R2 Implementation Guide: Consolidated CDA Templates for Clinical Notes - US Realm
http://www.hl7.org/implement/standards/product_brief.cfm?product_id=492

Attachment describing this use case:

Does this data element support the following aims in healthcare?
(check all that apply):*

☒ Improving patient experience of care (quality and/or satisfaction)

☒ Improving the health of populations

☒ Reducing the cost of care

☒ Improving provider experience of care

☐ None of the above

Submissions should support at least one of the aims of the Quadruple aim, but may not fit into these buckets well.

Maturity

Does a vocabulary, terminology, content, or structural standard exist for this data element? (e.g., SNOMED CT, LOINC, RxNorm)* (select one)

☒ Yes ☐ No ☐ Unknown

If yes, please cite the applicable standard*:

HL7 Version 2 – ODS – Dietary orders, supplements, and preferences
HL7 Version 3 Standard: Orders; Diet and Nutrition, Release 1
HL7 FHIR NutritionOrder

In addition, many there are many nutrition-related terms in SNOMED CT. Many of these terms have been put in value sets in VSAC or through HL7 terminology. Here are some examples:
Diet Type (OID 2.16.840.1.113883.4.642.3.385) – HL7 terminology
Nutrient Modifier (OID 2.16.840.1.113883.4.642.3.386) – HL7 terminology
Nutrition Supplement (OID 2.16.840.1.113883.4.642.3.390) – HL7 terminology
Enteral Nutrition Type (OID 2.16.840.1.113883.4.642.3.391) – HL7 terminology
Enteral Nutrition Additive (OID 2.16.840.1.113883.4.642.3.392) – HL7 terminology
Food Allergies and Intolerance (OID 2.16.840.1.113762.1.4.1186.3) - VSAC
Feeding Device Grouping (OID 2.16.840.1.113762.1.4.1095.87) - VSAC

If yes, link URL:

V2: http://www.hl7.org/implement/standards/product_brief.cfm?product_id=185

V3: http://www.hl7.org/implement/standards/product_brief.cfm?product_id=317

FHIR: https://www.hl7.org/fhir/nutritionorder.html

Are there additional technical specifications such as an implementation guide (IG) or profile using this data element? (e.g., HL7® FHIR® US Core Implementation Guide v3.1.0 based on FHIR R4)

☒ Yes ☐ No ☐ Unknown

If yes, please cite the relevant technical specification(s)*:

Nutrition data is included in nine of the thirteen "transitions of care" documents between facilities in the HL7 Consolidated Clinical Document Architecture (C-CDA) Release 2. This should ensure (if implemented) that patients on a modified diet will have that data arrive at the hospital or other connected facility upon transition and admission. See section 2.40 in

HL7 CDA® R2 Implementation Guide: Consolidated CDA Templates for Clinical Notes - US Realm is a Nutrition Section, including value sets, for Nutrition and Diet data elements.
http://www.hl7.org/implement/standards/product_brief.cfm?product_id=492

There is also additional nutrition templates in HL7 CDA® R2 Implementation Guide: C-CDA R2.1 Supplemental Templates for Nutrition, Release 1 - US Realm.
http://www.hl7.org/implement/standards/product_brief.cfm?product_id=478

Which of the following best describes the use of this data element?* (select one)

☐ Not currently captured or accessed

☐ In limited use in test environments only

☐ In limited use in production environments

☐ Extensively used in production environments

☒ This data element has been used at scale between multiple different production environments to support the majority of anticipated stakeholders

Please cite supporting artifacts:*

Per HL7, 95% of healthcare organizations in the US are using some form of the V2 standards. As examples of EHRs using the ODS for exchange of Nutrition and Diet data elements are EPIC, Cerner, and MatrixCare, while CBORD, Delegate, Computrition, and MealTracker are examples of food management systems.

Link URL

http://www.hl7.org/implement/standards/product_brief.cfm?product_id=185

Attachment:

Has this data element been electronically exchanged with external organizations or individuals (including patients)?* (select one)

☒ Yes ☐ No

If yes, with how many outside entities has this been exchanged?*

☐ 1

☐ 2-3

☐ 4

☒ 5 or more. This data element has been tested at scale between multiple different production environments to support the majority of anticipated stakeholders.

Please cite supporting artifacts:*

Per HL7, 95% of healthcare organizations in the US are using some form of the V2 standards. As examples of EHRs using the ODS for exchange of Nutrition and Diet data elements are EPIC, Cerner, and MatrixCare, while CBORD, Delegate, Computrition, and MealTracker are examples of food management systems.

While most organizations are using the ODS in HL7 V2 standards to exchange Nutrition and Diet data elements, the use of FHIR and the NutritionOrder resource (https://www.hl7.org/fhir/nutritionorder.html) should be encouraged as it better supports interoperability and a more complex structure for the exchange of the data. The NutritionOrder resource has a maturity of FMM3.

Supporting Link

http://www.hl7.org/implement/standards/product_brief.cfm?product_id=185

Attachment:

Challenges

Describe any restrictions on the standardization of this data element (e.g., proprietary code).*

There are limited to no restrictions on the standardization of the data elements in the Nutrition and Diet class. The majority of data elements already have potential value sets through VSAC (with SNOMED CT), through HL7 terminology, or other open source terminologies.

Describe any restrictions on the use of this data element (e.g., licensing, user fees).*

There are limited to no restrictions on the use of the data elements in the Nutrition and Diet class. The majority of data elements already have potential value sets through VSAC (with SNOMED CT), through HL7 terminology, or other open source terminologies.

Describe any privacy and security concerns with the use and exchange of this data element.*

Since the data elements proposed in the new Nutrition and Diet class are currently being exchanged, they should continue to follow any existing privacy and security requirements, if any.

Please provide an estimate of overall burden to implement. Overall estimate of burden to implement, including those not affected by the primary use case(s) (i.e., impact to broader healthcare community for specialty-specific data element submission.)*

Since the data elements in the proposed Nutrition and Diet class are currently being captured and exchanged through HL7 V2 standards in many systems, there should be limited to no burden to implement. This also applies to those systems using the C-CDA standards as well. If FHIR is not currently being utilized and is required as the standard to exchange the Nutrition and Diet class data elements, this may pose additional burden to implement.

Please provide information on other challenges to implementation

There are no other known challenges to implement.