



**Value Set Authority Center**  
U.S. National Library of Medicine



# The Value Set Authority Center

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**National Library of Medicine**



**[HTTPS://VSAC.NLM.NIH.GOV](https://vsac.nlm.nih.gov)**

- NLM tooling to support the creation, maintenance, and distribution of Value Sets
- Workflow (draft, review, publish)
- Soon code system query (Intensional) definitions
- VSAC Collaboration site
  - Open review and vetting of content
- Alignment of value set content with context of use may be critical



Welcome

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## Welcome to the NLM Value Set Authority Center (VSAC)

For VSAC announcements, please subscribe to the [VSAC Updates listserv](#).

The Value Set Authority Center (VSAC) is provided by the National Library of Medicine (NLM), in collaboration with the Office of the National Coordinator for Health Information Technology and the Centers for Medicare & Medicaid Services.

The VSAC provides downloadable access to all official **versions** of vocabulary **value sets** contained in the 2014 Clinical Quality Measures (CQMs). Each value set consists of the numerical values (codes) and human-readable names (terms), drawn from standard vocabularies such as SNOMED CT®, RxNorm, LOINC and ICD-10-CM, which are used to define clinical concepts used in clinical quality measures (e.g., patients with diabetes, clinical visit).

The content of the VSAC will gradually expand to incorporate value sets for other use cases, as well as for new measures and updates to existing measures.

**Viewing or downloading value sets requires a free [Unified Medical Language System® Metathesaurus License](#), due to usage restrictions on some of the **codes** included in the value sets.**

The [Data Element Catalog](#) contains the complete list of 2014 CQMs and value set names.

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▶ [What services does the Value Set Authority Center offer?](#)

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# VALUE SETS FOR DIABETES: HEMOGLOBIN A1C POOR CONTROL MEASURE

Welcome Search Value Sets Download Help Authoring Guidance

Search the NLM Value Set Repository

Query:  Search

Apply Filters Clear Filters

Narrow search results by selecting from pull-down menus below:

**CMS eMeasure (NQF Number)**  
 CMS122v2 (0059)

Quality Data Model Category  
 Select

Steward  
 Select

Meaningful Use Measures  
 Select

Code System  
 Select

Search Results Value Set Details

Export Search Results (Excel)

Matched Value Sets

Download View Toggle Clear Page 1 of 1 20 View 1 - 14 of 14

<input type="checkbox"/>	Name	Type	Code System	Steward	OID
<input type="checkbox"/>	Annual Wellness Visit	Grouping	HCPCS	AMA-PCPI	<a href="#">2.16.840.1.113883.3.526.3.1240</a>
<input type="checkbox"/>	Diabetes	Grouping	ICD10CM ICD9CM SNOMEDCT	NCQA	<a href="#">2.16.840.1.113883.3.464.1003.103.12.1001</a>
<input type="checkbox"/>	Ethnicity	Extensional	CDCREC	CDC NCHS	<a href="#">2.16.840.1.114222.4.11.837</a>
<input type="checkbox"/>	Face-to-Face Interaction	Grouping	SNOMEDCT	NCQA	<a href="#">2.16.840.1.113883.3.464.1003.101.12.1048</a>
<input type="checkbox"/>	Gestational Diabetes	Grouping	ICD10CM SNOMEDCT	NCQA	<a href="#">2.16.840.1.113883.3.464.1003.103.12.1010</a>
<input type="checkbox"/>	HbA1c Laboratory Test	Grouping	LOINC	NCQA	<a href="#">2.16.840.1.113883.3.464.1003.198.12.1013</a>
<input type="checkbox"/>	Home Healthcare Services	Grouping	CPT	NCQA	<a href="#">2.16.840.1.113883.3.464.1003.101.12.1016</a>
<input type="checkbox"/>	ONC Administrative Sex	Extensional	AdministrativeSex	NLM	<a href="#">2.16.840.1.113762.1.4.1</a>
<input type="checkbox"/>	Office Visit	Grouping	CPT	NCQA	<a href="#">2.16.840.1.113883.3.464.1003.101.12.1001</a>
<input type="checkbox"/>	Payer	Extensional	SOP	PHDSC	<a href="#">2.16.840.1.114222.4.11.3591</a>
<input type="checkbox"/>	Preventive Care Services - Established Office Visit, 18	Grouping	CPT	NCQA	<a href="#">2.16.840.1.113883.3.464.1003.101.12.1025</a>
<input type="checkbox"/>	Preventive Care Services-Initial Office Visit, 18 and Up	Grouping	CPT	NCQA	<a href="#">2.16.840.1.113883.3.464.1003.101.12.1023</a>
<input type="checkbox"/>	Race	Extensional	CDCREC	CDC NCHS	<a href="#">2.16.840.1.114222.4.11.836</a>
<input type="checkbox"/>	birth date	Extensional	LOINC	NQF	<a href="#">2.16.840.1.113883.3.560.100.4</a>

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# GESTATIONAL DIABETES VALUE SET DETAILS

Expanded Code List				
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Code	Descriptor	Code System	Version	Code System OID
11687002	Gestational diabetes mellitus (disorder)	SNOMEDCT	2013-01	2.16.840.1.113883.6.90
420491007	Gestational diabetes mellitus, class H (disorder)	SNOMEDCT	2013-01	2.16.840.1.113883.6.90
420738003	Gestational diabetes mellitus, class T (disorder)	SNOMEDCT	2013-01	2.16.840.1.113883.6.90
420989005	Gestational diabetes mellitus, class R (disorder)	SNOMEDCT	2013-01	2.16.840.1.113883.6.90
421223006	Gestational diabetes mellitus, class F (disorder)	SNOMEDCT	2013-01	2.16.840.1.113883.6.90
421389009	Gestational diabetes mellitus, class C (disorder)	SNOMEDCT	2013-01	2.16.840.1.113883.6.90
421443003	Gestational diabetes mellitus, class D (disorder)	SNOMEDCT	2013-01	2.16.840.1.113883.6.90
422155003	Gestational diabetes mellitus, class B (disorder)	SNOMEDCT	2013-01	2.16.840.1.113883.6.90
46894009	Gestational diabetes mellitus, class A>2< (disorder)	SNOMEDCT	2013-01	2.16.840.1.113883.6.90
71546005	Gestational diabetes mellitus, class B>1< (disorder)	SNOMEDCT	2013-01	2.16.840.1.113883.6.90
75022004	Gestational diabetes mellitus, class A>1< (disorder)	SNOMEDCT	2013-01	2.16.840.1.113883.6.90
O24.410	Gestational diabetes mellitus in pregnancy, diet controlled	ICD10CM	2013	2.16.840.1.113883.6.90
O24.414	Gestational diabetes mellitus in pregnancy, insulin controlled	ICD10CM	2013	2.16.840.1.113883.6.90
O24.419	Gestational diabetes mellitus in pregnancy, unspecified control	ICD10CM	2013	2.16.840.1.113883.6.90
O24.420	Gestational diabetes mellitus in childbirth, diet controlled	ICD10CM	2013	2.16.840.1.113883.6.90
O24.424	Gestational diabetes mellitus in childbirth, insulin controlled	ICD10CM	2013	2.16.840.1.113883.6.90
O24.429	Gestational diabetes mellitus in childbirth, unspecified control	ICD10CM	2013	2.16.840.1.113883.6.90
O24.430	Gestational diabetes mellitus in the puerperium, diet controlled	ICD10CM	2013	2.16.840.1.113883.6.90
O24.434	Gestational diabetes mellitus in the puerperium, insulin controlled	ICD10CM	2013	2.16.840.1.113883.6.90
O24.439	Gestational diabetes mellitus in the puerperium, unspecified control	ICD10CM	2013	2.16.840.1.113883.6.90



## Example: 'Body Site' value set, As defined in C-CDA

<a href="#">Metadata</a> <a href="#">Description</a>	<b>Name:</b> Body Site Value Set	<b>OID:</b> 2.16.840.1.113883.3.88.12.3221.8.9
	<b>Type:</b> Extensional	<b>Definition Version:</b> <a href="#">?</a> 20150819
	<b>Steward:</b> HL7 Terminology	
	***This update was generated by VSAC to align with code changes published by SNOMEDCT***	

**Over 30k concepts!!**

### Set Members

Code	Descriptor	Code System	Version	Code System
000	Lateral meniscus structure (body structure)	SNOMEDCT	2016-03	2.16.840.1.111
003	Structure of base of lung (body structure)	SNOMEDCT	2016-03	2.16.840.1.111
002	Structure of base of phalanx of index finger (body structure)	SNOMEDCT	2016-03	2.16.840.1.111
001	Structure of ventral spinocerebellar tract of pons (body structure)	SNOMEDCT	2016-03	2.16.840.1.111
009	Structure of nucleus pulposus of intervertebral disc of eighth thoracic vertebra (body s	SNOMEDCT	2016-03	2.16.840.1.111
008	Structure of intervertebral foramen of fifth thoracic vertebra (body structure)	SNOMEDCT	2016-03	2.16.840.1.111
002	Structure of transplanted lung (body structure)	SNOMEDCT	2016-03	2.16.840.1.111
00	Entire diaphragmatic lymph node (body structure)	SNOMEDCT	2016-03	2.16.840.1.111



## **VSAC – provides:**

- Source of truth for value set definitions
- Downloadable expansions (actual lists of codes)
- An API (based on an IHE standard – moving towards FHIR)
- Authoring and collaboration environment
- Duplicate content checking (based on Jaccard overlap)
- Warnings for inactive/obsolete codes
- Checking for invalid codes



## VSAC – beyond Clinical Quality Measure Value Sets

- Many C-CDA value sets are in VSAC or going into VSAC now to support implementation.
- Some of these value sets are very large and potentially burdensome for individual sites to generate/maintain on their own. VSAC can provide an always-up-to-date expansion of these value set definitions.
- Examples:
  - ❖ SNOMED CT ‘Findings’ value set > 105k concepts
  - ❖ SNOMED CT ‘Body site’ value set > 30k concepts
  - ❖ RxNorm ‘Medication Clinical Drug/Brand Name’ > 30k concepts each
- These large value sets really act as ‘filters’ (am I using a code from the right part of the vocabulary?), but nonetheless the community needs validation and expansion support.



## VSAC Downloadable Resources

This page contains groups of value sets designated for a particular program usage. You can search the entire repository of published VSAC value sets in the [Search Value Sets](#) tab.

CMS eCQM Value Sets

**C-CDA Value Sets**

CDCREC Roll-up codes

### Consolidated Clinical Document Architecture (C-CDA) Value Sets

The Consolidated Clinical Document Architecture (C-CDA) value sets in VSAC are authored by Health Level 7 International (HL7) to provide standardized terminology data elements for exchanging templated clinical information (e.g., Allergies, Encounters, Immunizations, Problems, Procedures, etc.) from electronic health records.

[Consolidated CDA Overview](#)

[HL7 Implementation Guide for CDA® Release 2: IHE Health Story Consolidation, Release 1.1 – US Realm](#)

Available in this download are the C-CDA value set expansions available in VSAC as of the date noted on the download for the list of value sets noted below. This is a partial set for use in creating C-CDA r1.1 based documents. We will update these download files with additional value set expansions as they become available in VSAC.

#### ▼ C-CDA r1.1 Value Sets Available in VSAC, Publication Date: June 23, 2016

Note: Sign In to access all files

C-CDA Release Description	Types of Download Formats
C-CDA r1.1	Excel (xlsx) Text (txt)

▶ C-CDA r1.1 Value Sets Available in VSAC

▶ C-CDA r1.1 Value Sets Unavailable in VSAC

Currently extremely large value sets are only available via this download section  
We'll soon be adding a download for C-CDA r2.1 value sets



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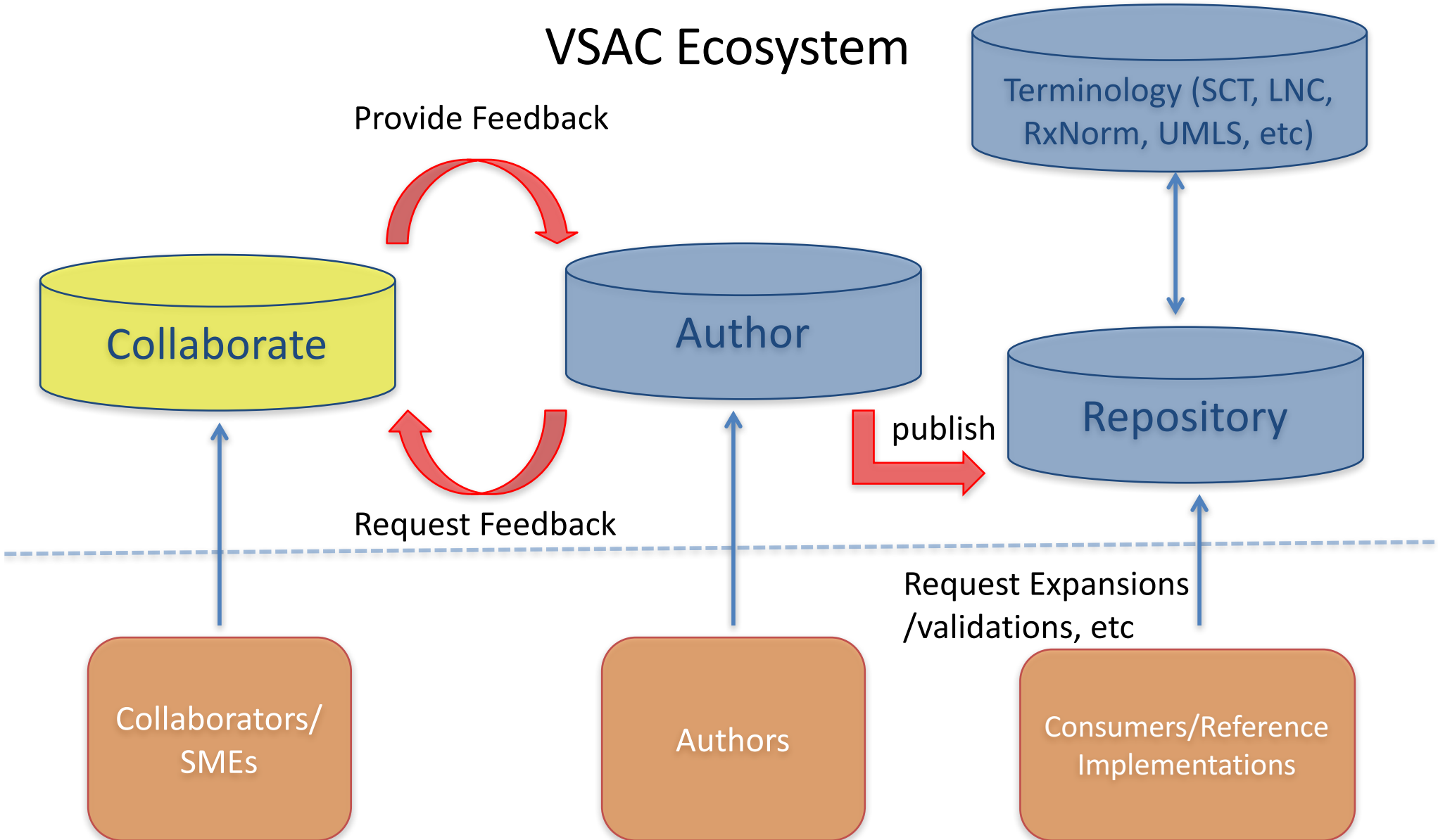


## Value Set Development – until very recently





## VSAC Ecosystem





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**VSAC**  
*Collaboration*

## Why collaborate?

VSAC authors need tooling that supports more interactive and centralized collaboration and discussion during the development process. The goal is to reduce development of duplicative and erroneous content, and to improve the overall quality of value sets through a process of social curation.



# View Documents within a Value Set's Collaboration Content Site

Home My Files Shared Files Sites Tasks People Maureen Madden Search files, people, sites

NIH VSAC Collaboration Type 1 Diabetes Findings Site Dashboard Document Library Links Discussions More

Wiki - Main Page

Collaborate and communicate about this value set.

Check this box for announcements from the value set steward.

File	Location	Creator	Created Date	Modifier	Modified Date
Type1DiabetesFindings(2015-07-21 08-41-13).xlsx	/Definition	Vsac Admin	21 Jul 2015 08:41:17 GMT-0400 (EDT)	Vsac Admin	21 Jul 2015 08:41:17 GMT-0400 (EDT)
5fb40b10-3534-4c4d-9397-3603d29e8a49	/Definition	Vsac Admin	21 Jul 2015 08:41:01 GMT-0400 (EDT)	Vsac Admin	21 Jul 2015 08:41:01 GMT-0400 (EDT)

Discussion Threads

All Topics

Topics updated in the last day

+ New Topic

- Value Set Usage  
Created by Vsac Admin 2 minutes ago.
- Value Set Purpose  
Created by Vsac Admin 2 minutes ago.
- Value Set Content  
Created by Vsac Admin 2 minutes ago.



# Invite Additional Collaborators to Your Value Set Collaboration Site

Home My Files Shared Files Sites Tasks People Maureen Madden Search files, people, sites

NIH VSAC Collaboration Type 1 Diabetes Findings Site Dashboard Document Library Links Site Members More

People Groups Pending Invites

Search for Site Members

Search	Invite People
<input type="text"/> Search	
Andrea Demsey	Steward Remove
Maureen Madden	Steward Remove
Vsac Admin	Steward Remove





# All Site Members Can Participate in Discussion Forums and Create New Topics



## Value Set Usage

Created on: Fri 10 Jul 2015 11:14:57 Author : Vvac Admin

Replies: None

Vvac Admin said:

Value Set Usage

Replies: (2) | Tag: remapped codes demonstration, 2.16.840.1.113762.1.4.1018.119

- Reply
- Edit
- Delete



Maureen Madden said:

Team: let's discuss how this value set will be used in the measure we are developing.

Replies: (1) | Posted on: Thu 16 Jul 2015 16:03:46

- Reply
- Edit



Maureen Madden said:

Should we use this value set in Measure A or in Measure B, or in both measures?

Replies: (0) | Posted on: Thu 16 Jul 2015 16:04:47

- Reply
- Edit

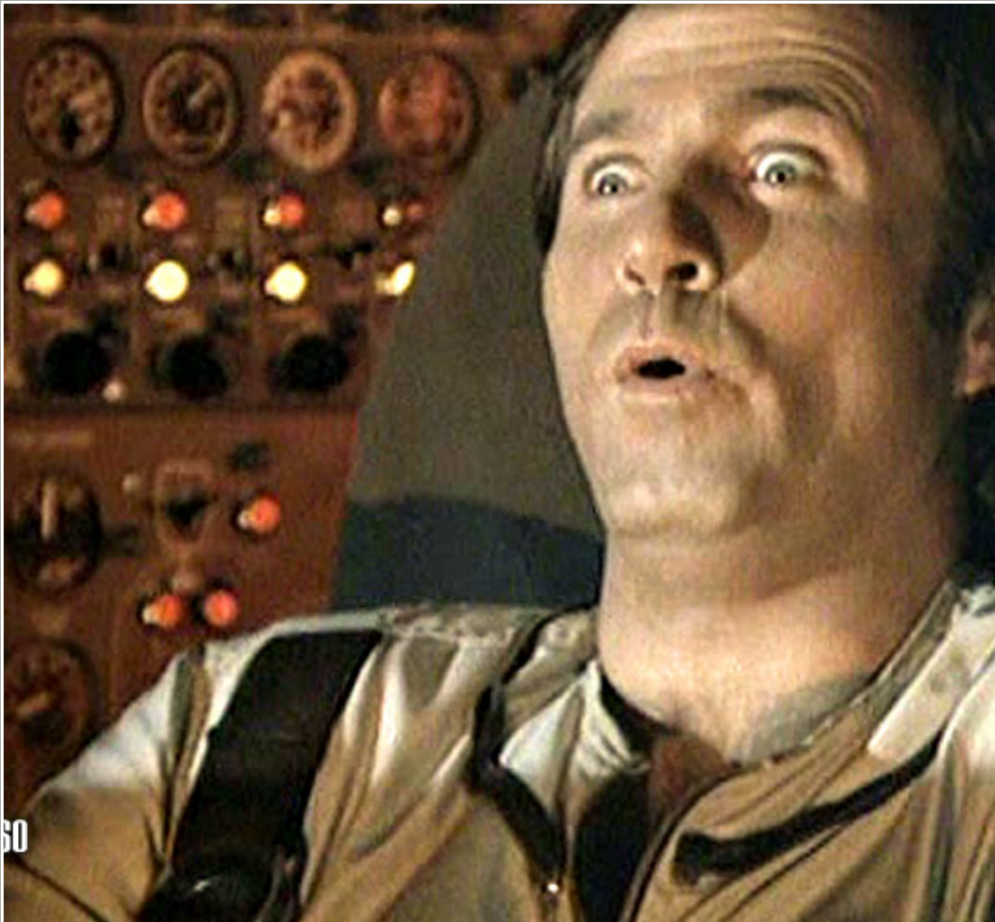


COMING  
*Soon*

## VSAC Collab-athon

Provide users the opportunity to test various collaborative scenarios such as inviting SMEs to collaborate, document upload, and review/issue tracking.





## VSAC - Future Directions

- Alignment with FHIR and VSD
- Publish more C-CDA value sets
- Binding Parameter Specification
- Collab-athon
- Integration with CDE repository