Quality Measure Essential Components Tiger Team

Kick-off Call

Jim Walker, Chair

April 3, 2012 - 11:30a-12:30p/Eastern

Tiger Team Membership

CHAIR

Jim Walker   Geisinger Health System

MEMBERS

Keith W. Boone	GE Healthcare
Christopher Chute	Mayo Clinic
Jason Colquitt	Greenway Medical
Floyd Eisenberg	NQF
Brian Levy	Health Language, Inc.
Galen Murdock	Veracity Solutions
Joachim Roski	Brookings Institution
Philip Renner	Kaiser Permanente
Gene Nelson	Dartmouth University

Federal Ex Officio

Aneel Advani, Indian Health Service

Jon White, AHRQ

Kate Goodrich, CMS

Staff

Jacob Reider, ONC

Kevin Larsen, ONC

Dana Womack, ONC Contractor

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Tiger Team Purpose

The Essential Components Tiger Team will focus on identifying essential components of high quality clinical quality measures.

Includes (but is not limited to) discussion of value sets, standard terminologies, and the technical & custodial requirements for creation, sharing and maintenance of these components.

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The Recipe

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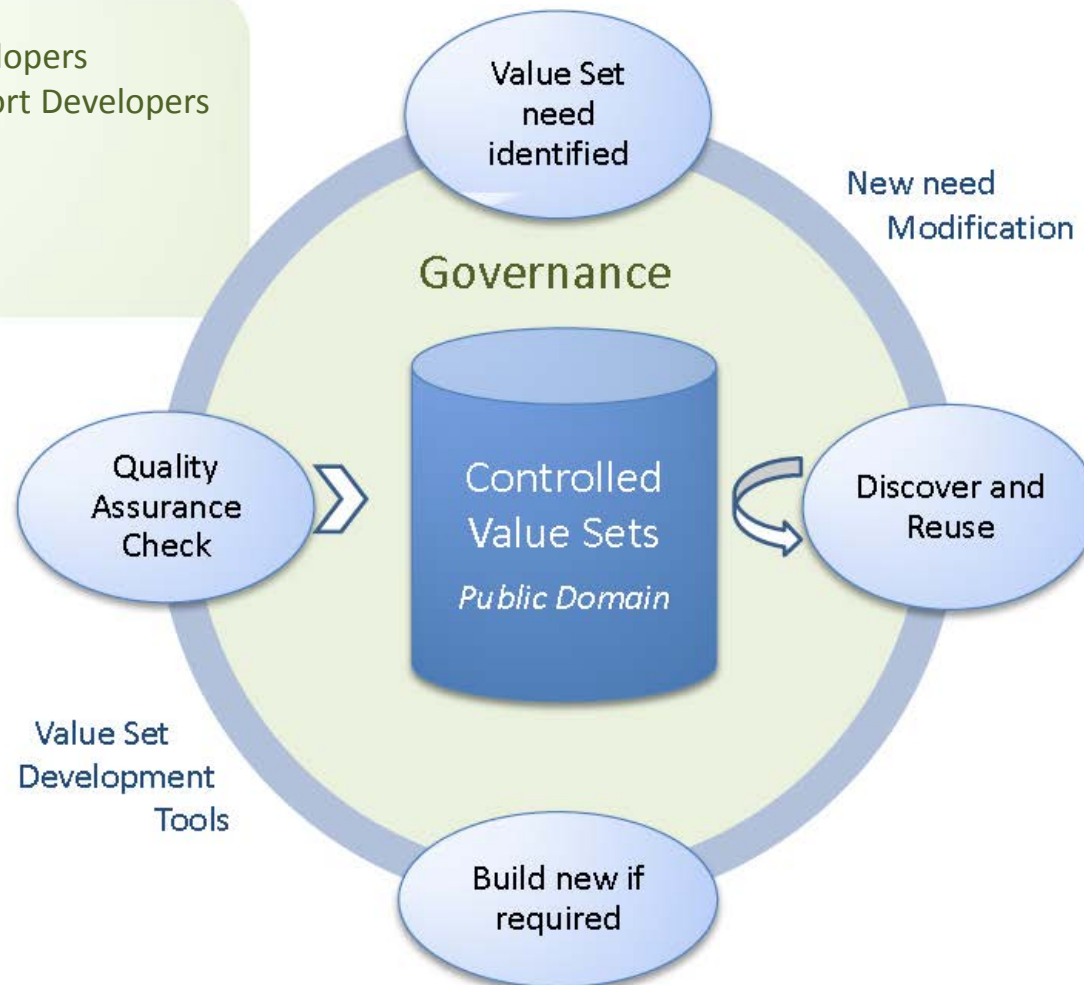Health Information Technology

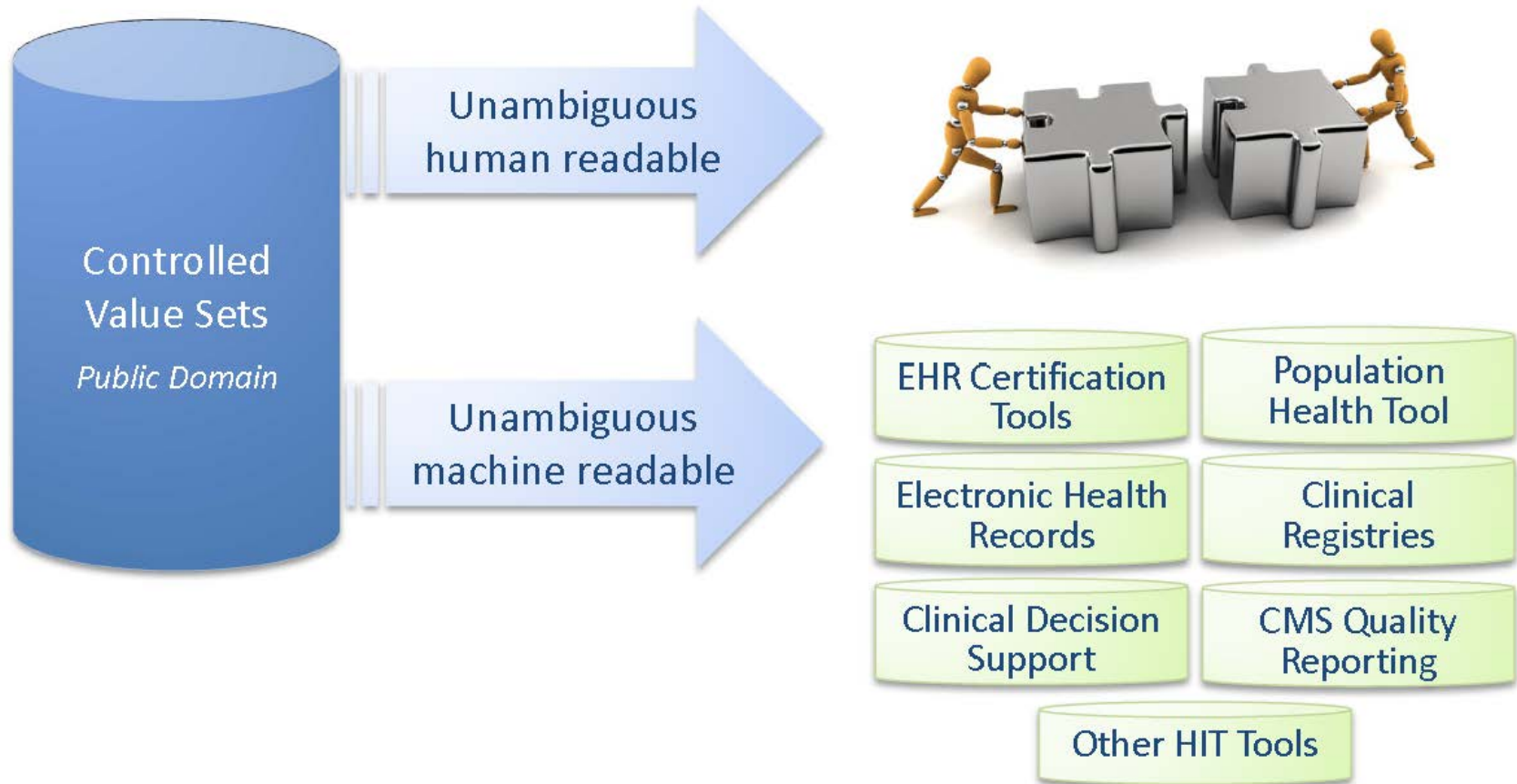# Vision: Value Set Creation

Speaker's Notes: Mechanisms for governance and quality assurance; Unambiguous communication and version control; Freely available for use as building blocks; Discoverability to support reuse; Authoritative source to support harmonization; Automated update notifications; Automated machine consumption
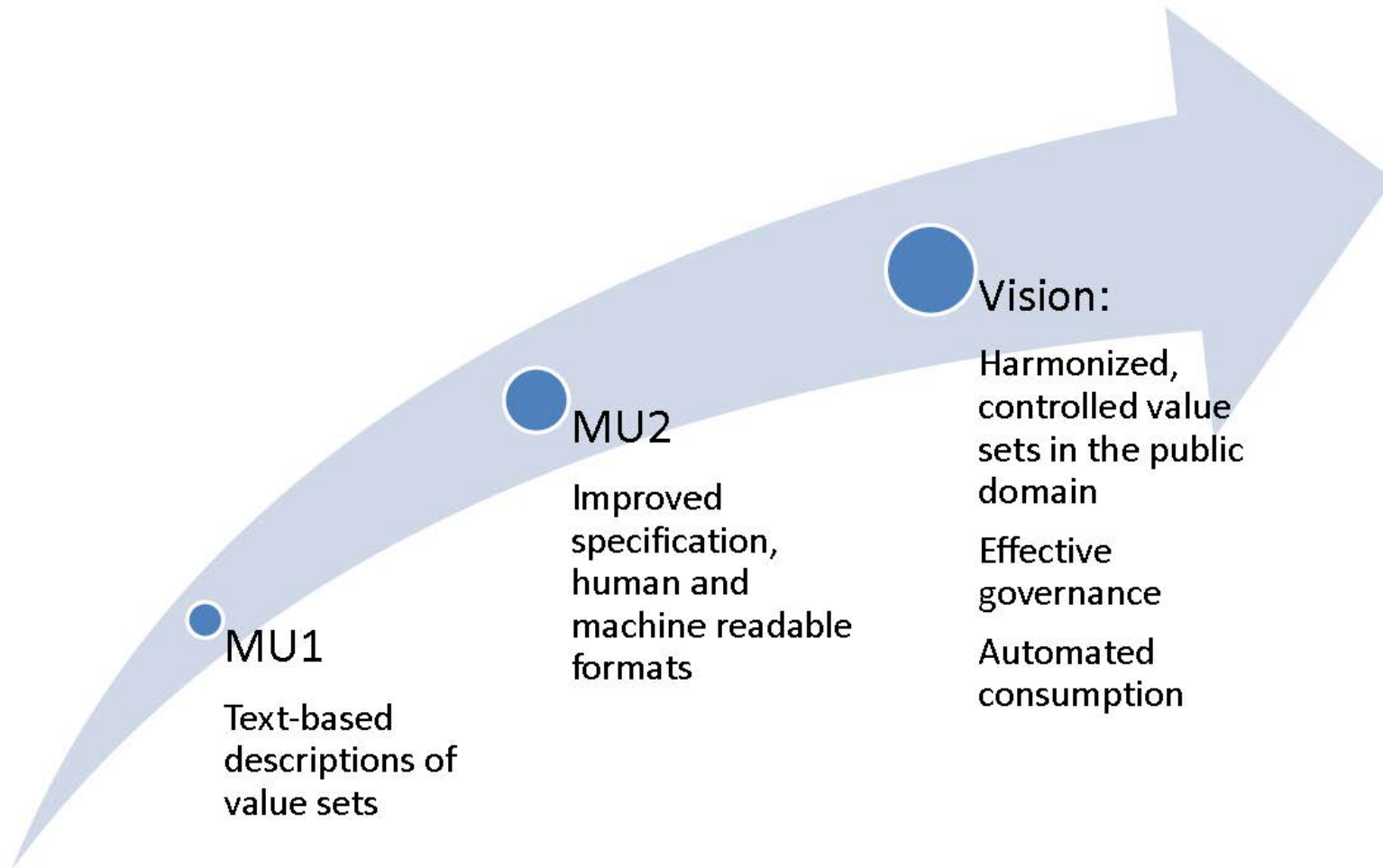
Key Stakeholders

Quality Measure Developers
Clinical Decision Support Developers
Clinical Researchers
Provider Organizations
Health IT Vendors
Others

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Vision: Value Set Distribution

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Value Set Progression

MU1
Text-based descriptions of value sets

MU2
Improved specification, human and machine readable formats

Vision:
Harmonized, controlled value sets in the public domain

Effective governance

Automated consumption

Today's Discussion

- ## Value Set Evolution

  - Review value set challenges & opportunities

  - Identify / validate desired value set characteristics

- ## MU2 Value Set Readiness

  - Review current state of recommended MU2 value sets

  - Recommend value set activity to prepare for MU2

MU2 Value Set Challenge

People
- Usable, useful value set development tools needed
- Difficult to discover and reuse value sets

Process
- Local interpretation of value set descriptions is required
- Consistent quality assurance check does not exist
- Duplicate and near-duplicate value sets exist

Technology
- Inconsistent content and format
- Need automated consumption rather than hard coding of value sets in HIT applications

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Desired Value Set Characteristics

Valid

- Valid codes, matching descriptors, associated with correct vocabulary
- Accurate code-based representations of well defined concepts

Unambiguous

- Consistent documentation
- Version controlled
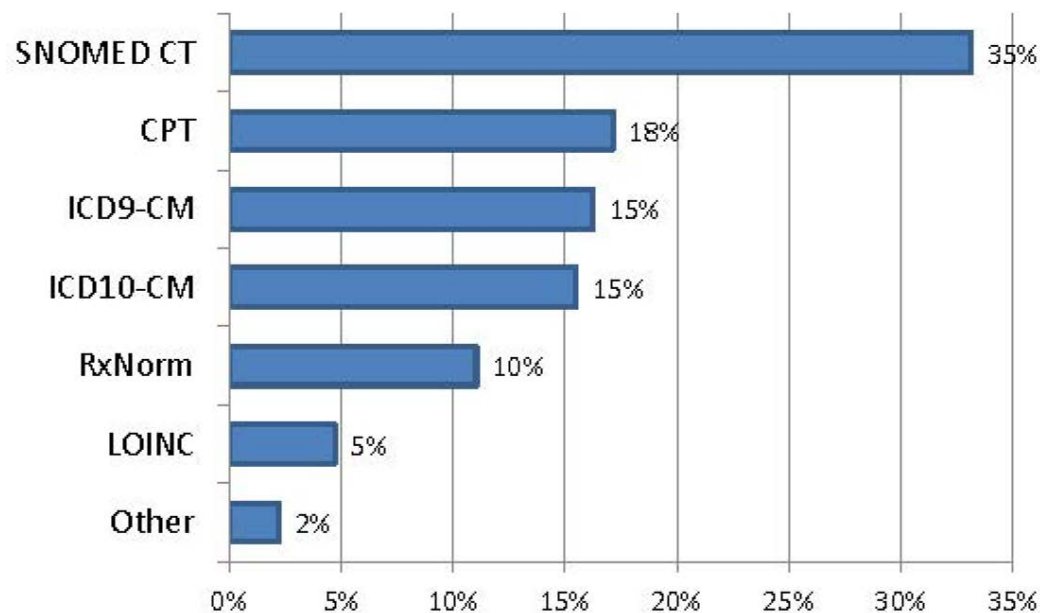- Accommodate proxy codes / inferred diagnoses

Harmonized

- Support discovery and reuse
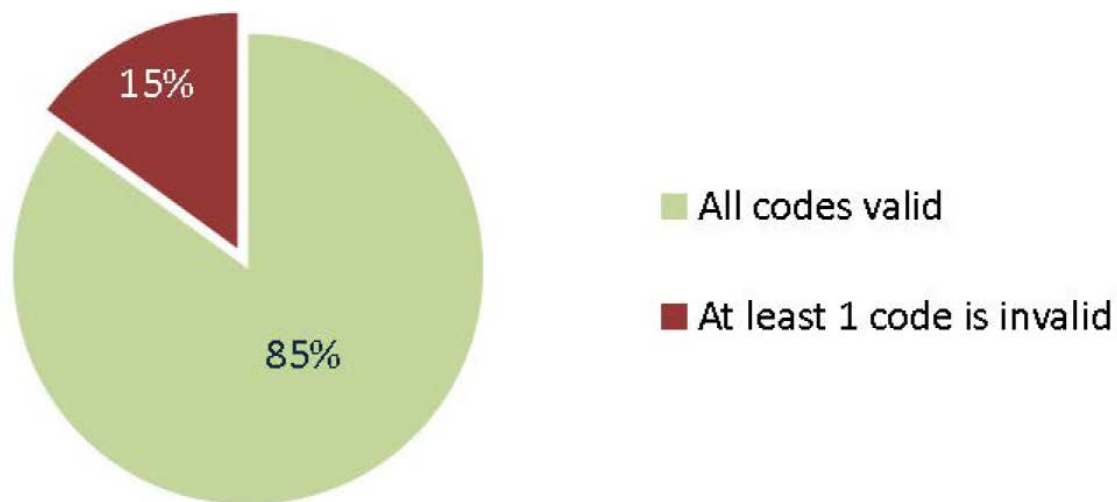- Facilitate standardization in measurement

Human & Machine readable

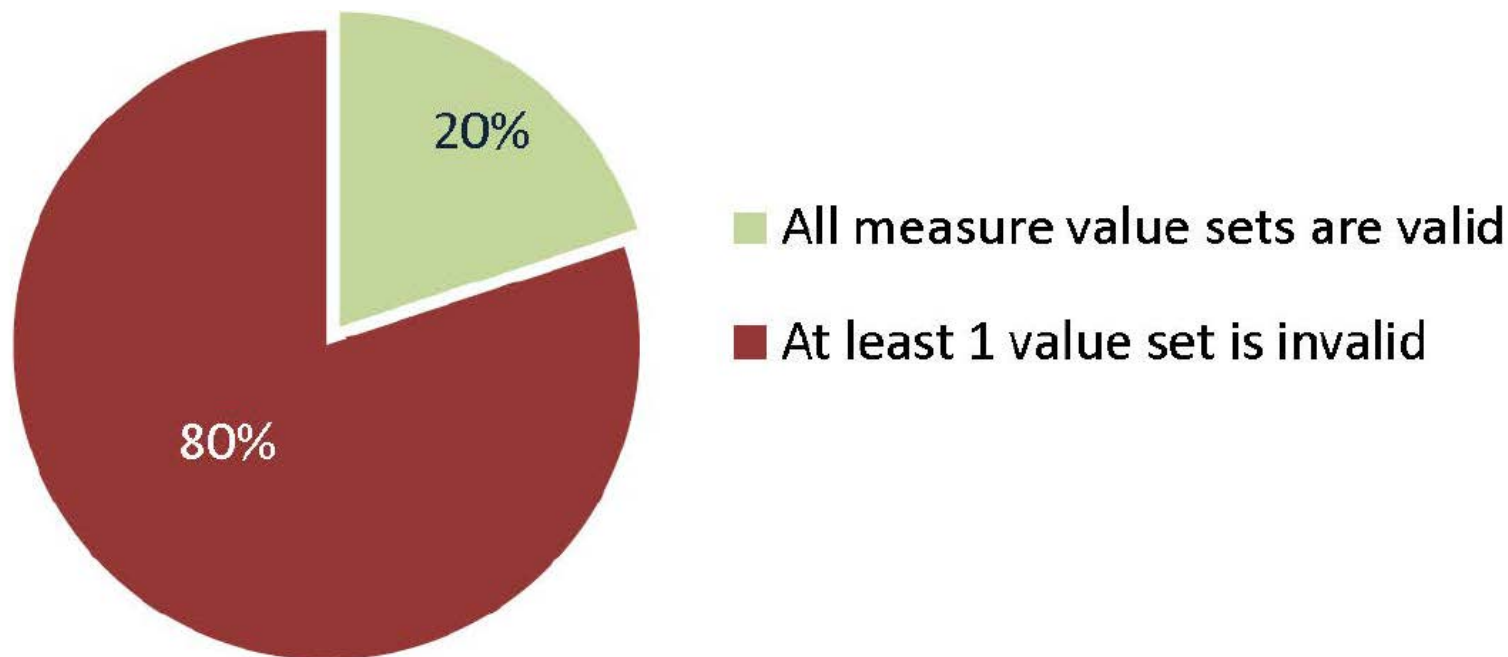- Formats for consideration: Spreadsheet, database, XML, web service

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Vocabularies Used in Value Sets*

* NLM analysis of 850 value sets recommended for inclusion in MU2

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**Value Sets* affected by
Invalid Vocabulary Codes**

All codes valid

At least 1 code is invalid

* NLM analysis of 850 value sets recommended for inclusion in MU2

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**Quality Measures* affected by
Invalid Value Sets**

20%

80%

■ All measure value sets are valid

■ At least 1 value set is invalid

* NLM analysis of 70 quality measures recommended for inclusion in MU2

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Pairwise Comparison of Value Sets*

Duplicates

- *20 pairs of value sets contain exactly the same codes*

Near-Duplicates

- *Other pairs of value sets exhibit a high degree of similarity and would benefit from review.*

* NLM analysis of 800 value sets recommended for inclusion in MU2

Reasons for Inaccurate Codes

Need better support tools

- Formatting issues – e.g. trailing zeros trimmed
- Truncated terms

Lack of an update model

- Stale codes related to terminology evolution

Operator Error

- Vocabulary system inconsistent with code
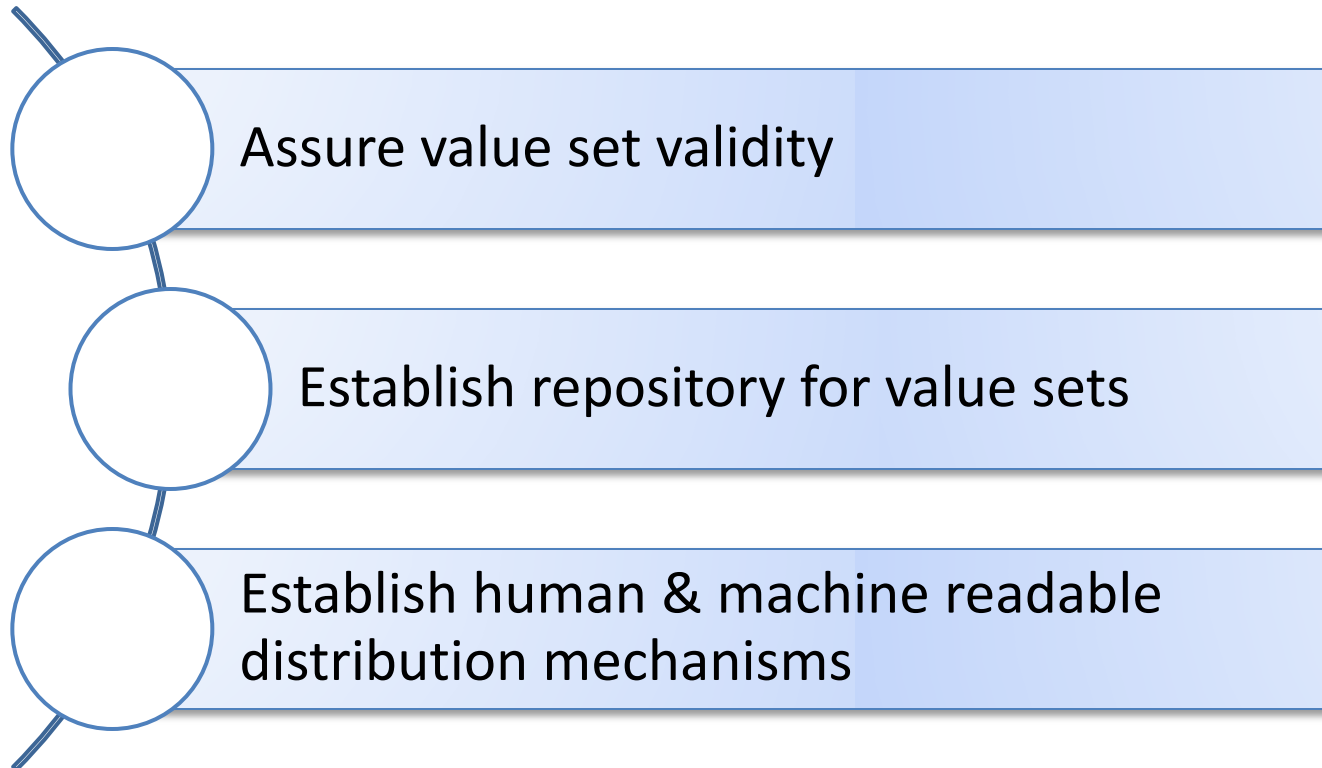- Code name inconsistent with code number
- Typos

IP/Licensing

- Incomplete information (CPT code names missing)

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Activity to support MU2

Assure value set validity

Establish repository for value sets

Establish human & machine readable distribution mechanisms

Discussion

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