IRT CONSOLIDATION OF IMPROVEMENT PROJECTS TO ADDRESS 2009 WORK ITEMS

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Presented by:

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TC Members
- Charles Parisot (co-chair)
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- Bob Yencha
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Overall Goal of Consolidations

- Consolidate a number of efforts into a cohesive approach to:
  - Improve HITSP specification usability (for implementers, reviewers)
  - Support improved communication to the broader community
  - Simplify and reduce documentation
  - Simplify specification development
  - Address "extensions/gaps" – a new type of request and one that presents a very large increase in number of work items for 2009
  - Knock down information barriers to new ways of delivering care

Efforts Being Consolidated

- Services (Foundations Framework Working Group and Subgroups)

- Simplify Requirements Analysis and Traceability

- Eliminate Excess and Overly Complex Documentation

- Modify Process To Reduce Effort and Address "Extensions/Gaps"

- Address Data Elements and Value Sets

- Tools to Enhance Usability and Authoring

HITSP Development Process

Use Case or Extension Business Requirements

HITSP Requirements for Information Exchange

Interoperability Specifications

Refined Fundamental Concept Definitions – Entities

Name	Refined Definition
Stakeholder	Person or organization that participates in a use-case.
System (formerly Business Actor)	An IT system application that plays a role in one or more information exchanges addressed by a HITSP specification.
Interface (Technical Actor)	The set of features and obligations that supports information exchanges for a Business Actor (system application) defined by HITSP constructs.

Refined Fundamental Concept Definitions – the HITSP Requirements Analysis Terms

Name	Refined Definition
Exchange Content	describes the information to be communicated in business terms.
Data Requirement	describes the details (e.g., specific attributes) of part or all of an Exchange Content.
Exchange Action	describes the interaction that communicates the Exchange Content between the systems (business actors).
Exchange Systems	the one sending and the one or more receiving Systems involved in an information exchange.
Exchange Qualifier(s)	one or more constraints on the information exchange.

Information Exchange Table

Information Exchange Number	Exchange Action	Exchange Content	What System initiates this exchange?	What System(s) consume this exchange?	Qualifier
	Send	Lab Report	Laboratory Information System	•PHR System •EHR System •Public Health Information System	None

Questions:
•How do we map this to the Use Case Requirements
•How do we present this for TC Analysis and Document Presentation

HITSP Framework and Specification Structure Refined

Existing HITSP Constructs

Concept	Refined Definition
Component	A construct that defines the set of data elements and the structure, relationships, and constraints needed for an Information Exchange.
Transaction	A logical grouping of data exchanges and transport methods that must all succeed or fail as a group.
Transaction Package	A logical grouping of two or more Transactions, Transaction Packages, and/or composite standards used to realize an IER.
Interoperability Specification	Integrates and constrains HITSP constructs to meet Use Case business needs and distilled interoperability requirements. Sets context for constructs used

Services – New Additions

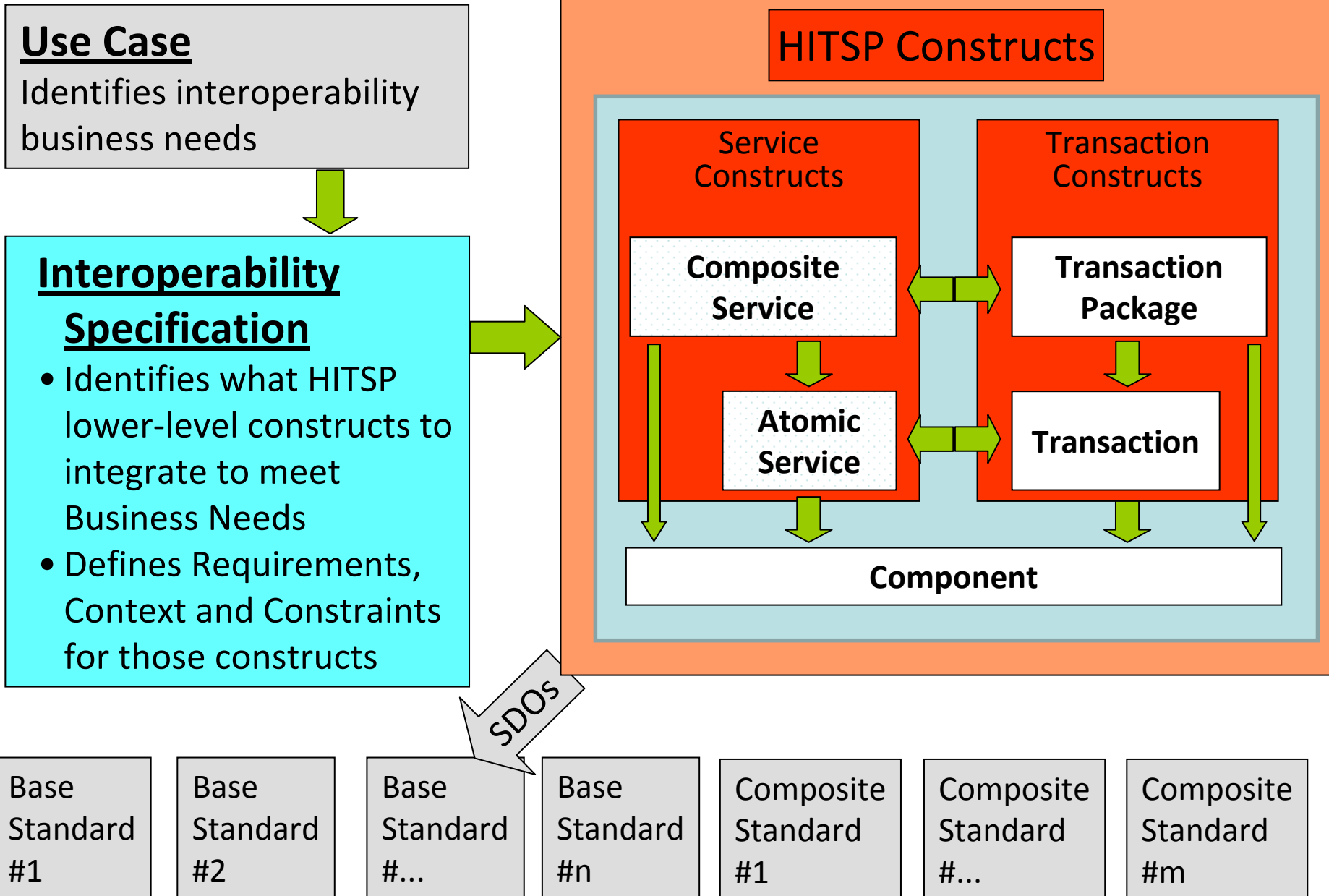| Concept	Refined Definition
Service (Related to Transaction Package and Transaction)	A construct that organizes a set of resources to support an information exchange between two or more organizations. It defines static "payload" (information content) and dynamic ("functional, behavioral") semantics and context for use to unambiguously specify a testable, enforceable information exchange contract between organizations. **Can be used outside an IS. When used inside an IS, simplifies the IS.**
Atomic Service	A service that does not use or interact with other services.
Composite Service	A service that is the aggregation or composition of one or more other services. These other services can be atomic services, other composite services, or a combination of both

Standards Term Definitions – No Change

Concept	Refined Definition
Base Standard	A standard capable of fulfilling a discrete function that is produced and maintained by a single standards organization
Composite Standard	Grouping of base standards, often from multiple standards organizations, maintained by a single organization. In HITSP, it can fulfill functional requirements for a component, transaction or transaction package.

HITSP Framework – Refined

Use Case
Identifies interoperability business needs

Interoperability Specification

- Identifies what HITSP lower-level constructs to integrate to meet Business Needs
- Defines Requirements, Context and Constraints for those constructs

HITSP Constructs

Service Constructs

Composite Service

Atomic Service

Transaction Constructs

Transaction Package

Transaction

Component

SDOs

| Base Standard #1 | Base Standard #2 | Base Standard #... | Base Standard #n | Composite Standard #1 | Composite Standard #... | Composite Standard #m |

Specification Structure - Duplication and Boilerplate Issues

- Goals:
  - Make the key implementation issues apparent
  - Simplify writing, editing, and maintenance of specifications

- Issues
  - Specifications currently include too much text intended to guide the writers that are not needed to inform the reader.
  - Text and concepts repeated in many specifications difficult to keep consistent and current
  - Some constructs are "pass-through" – the "meat" is a page, but document includes 10-20 pages of non-meaningful material

Specification Structure - Planned Solutions

- Modify specification templates such that the "instructions to writers" boilerplate are **not** carried forward into the IS and other constructs. This will help all new ISs to be more streamlined

- Delete the boilerplate sections from existing IS to streamline them (priority and timing TBD)

- Remove common repeated sections and put them in central technical notes

- Shrink "pass through" documents with new template

- End results: smaller documents (-5 to -30 pages per construct) that are quicker and easier to read

Tiger Team to Refine Strategy for Data Elements and Value Sets

- Current Approach Care Management and Health Records TC used

  – Catalog vocabulary and value sets in C80 - CDA documents and some messaging hves been addressed, but not all.

  – C83 is a catalog of all CDA template information modules and constraints on those content modules – note that some modules overlap with messages, but not all.

- Current difficulties

  – Usability – many constructs must be traversed to obtain information.

  – Completeness to accommodate the needs of all TCs.

  – Maintenance – need plan to keep current.

  – No single owning TC.

- Tiger Team launched to develop proposal for how we adjust approach to address difficulties.

Process Changes for 2009 Work

- Eliminate development of an RDSS, replace with Sections 1-3 of Interoperability Specification as intermediate document
- Provide IS development scenarios for:
  - Moderate Extensions to existing IS
  - Complex Extensions to existing IS
  - New IS or Service
- Questions still to be resolved:
  - How does Moderate and Complex Extensions relate to the "major/minor" concept relevant to acceptance/recognition cycle
  - How do we make the decision process consistent and who decides when an extension identifies a moderate or complex extension, a new IS or a new Service
  - How do extensions to existing ISs get integrated into the existing IS

Usability and core authoring tool

- Developing prototype of usability tool that will simplify navigation of an IS set of specifications – will demonstrate end of February

- Plan to extend navigation tool to become authoring tool to simplify construction of tables and to ensure consistency across constructs

- Work with AHRQ to explore use of USHIK tool to address Technical Committee data element needs

HITSP Development Process

Use Case or Extension Business Requirements

- Events/Actions
- Functional Requirements

HITSP Requirements

- Exchange Actions
- Exchange Content
- Exchange Qualifiers

Interoperability Specifications

- Services
- Transactions and Transaction Packages
- Components