

HITSP Query for Existing Data Transaction Package

HITSP/TP21



Healthcare Information Technology Standards Panel

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1.0 INTRODUCTION

1.1 OVERVIEW

To support the HITSP Query of Existing Data Transaction Package, HITSP is using the Integrating the Healthcare Enterprise (IHE) Query for Existing Data Integration Profile (QED), as described in the IHE Patient Care Coordination (PCC) Technical Framework Supplement 2008 – 2009 (IHE PCC-TF QED).

The text for the IHE PCC-TF QED Integration Profile specification begins here:

The Query for Existing Data Integration Profile (QED) supports dynamic queries for clinical data, including vital signs, problems, medications, immunizations, diagnostic results, procedures and visit history. A wide variety of systems often needs access to dynamic clinical information stored and maintained in an EMR system or other clinical data repository. This profile makes the information widely available to other systems within and across enterprises to support provision of better clinical care. The information made available by this profile can be used to support clinical care, quality reporting, financial transactions, public health reporting, clinical trials, drug interaction checking, and patient qualification for various protocols.

The text for the IHE PCC-TF QED Integration Profile specification ends here.

1.2 COPYRIGHT PERMISSIONS

COPYRIGHT NOTICE

© 2009 ANSI. This material may be copied without permission from ANSI only if and to the extent that the text is not altered in any fashion and ANSI's copyright is clearly noted.

IHE materials used in this document have been extracted from relevant copyrighted materials with permission of Integrating the Healthcare Enterprise (IHE) International. Copies of this standard may be retrieved from the IHE Web Site at www.ihe.net.

1.3 REFERENCE DOCUMENTS

This section provides a list of key reference documents and background material. If you are already familiar with this information, proceed to Section 2.0.

A list of key reference documents and background material is provided in the table below. These documents can be retrieved from the www.hitsp.org Web Site.

Table 1-1 Reference Documents

Reference Document	Document Description
HITSP Acronyms List	Lists and defines the acronyms used in this document
HITSP Glossary	Provides definitions for relevant terms used by HITSP documents
TN900 - Security and Privacy	TN900 is a reference document that provides the overall context for use of the HITSP Security and Privacy constructs

1.4 CONFORMANCE

This section describes the conformance criteria, which are objective statements of requirements that can be used to determine if a specific behavior, function, interface, or code set has been implemented correctly.



1.4.1 CONFORMANCE CRITERIA

In order to claim conformance to this construct specification, an implementation must satisfy all the requirements and mandatory statements listed in this specification, the associated HITSP Interoperability Specification, its associated construct specifications, as well as conformance criteria from the selected base and composite standards. A conformant system must also implement all of the required interfaces within the scope, subset or implementation option that is selected from the associated Interoperability Specification.

Claims of conformance may only be made for the overall HITSP Interoperability Specification or Capability with which this construct is associated.

1.4.2 CONFORMANCE SCOPING, SUBSETTING AND OPTIONS

A HITSP Interoperability Specification must be implemented in its entirety for an implementation to claim conformance to the specification. HITSP may define the permissibility for interface scoping, subsetting or implementation options by which the specification may be implemented in a limited manner. Such scoping, subsetting and options may extend to associated constructs, such as this construct. This construct must implement all requirements within the selected scope, subset or options as defined in the associated Interoperability Specification to claim conformance.



2.0 TRANSACTION DEFINITION

2.1 CONTEXT OVERVIEW

This Transaction Package enables interoperable systems, e.g., those supporting quality measurements, to query and retrieve data from another clinical system. The Transaction Package supports queries for:

- Vital Signs
- Problems and Allergies
- Diagnostic Data
- Medications
- Immunizations
- Professional Services

A further description for each of the above data categories is provided in Section 3.2 of the IHE PCC-TF QED Supplement, Volume 1.

2.1.1 TRANSACTION CONSTRAINTS

Table 2-1 Transaction Constraints

Constraint
No applicable constraints

2.1.2 INTERFACES

All Interfaces and Transactions are described in the IHE PCC-TF Supplement – Query for Existing Data, Volume 1 (IHE PCC-TF QED Supplement, Volume 1).

Table 2-2 Interfaces

Interface	Description	Used in Component/ Standard	Transaction/Content	T/C Optionality ¹
Clinical Data Consumer	A clinical data consumer makes use of clinical patient data	IHE PCC-TF QED Supplement, Volume 1	[PCC-1] Query Existing Data	C ²⁰²
Clinical Data Source	Maintains patient information about vital signs, problem and allergies, results from diagnostic tests (e.g., Lab, Imaging, or other test results), medications, immunizations or historical or planned visits and procedures	IHE PCC-TF QED Supplement, Volume 1	[PCC-1] Query Existing Data	C ²⁰²

Implementation Constraints

Table 2-3 Interface and Transaction/Content Constraints

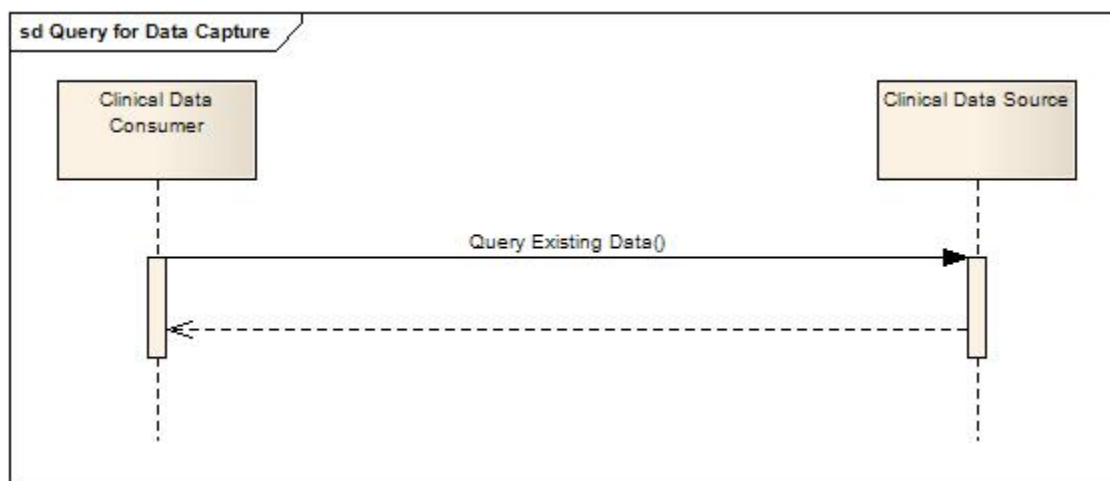
Constraint Code	Constraint Description
202	The Interface shall support at least one of the interface options provided in Section 3.4 of the IHE PCC-TF QED Supplement, Volume 1

¹ Optionality = "R" for Required, "R2" for Required if known, "O" for Optional, or "C" for Conditional



2.1.3 INTERFACE INTERACTIONS

Figure 2-1 Query for Existing Data Transactions



The Clinical Data Consumer requests a list of data (vital signs, problems, allergies, diagnoses, medications, or immunizations) matching a minimal set of selection criteria from the respective Clinical Data Source. The appropriate Clinical Data Source returns data (vital signs, problems, allergies, diagnoses, medications, or immunizations) matching the selection criteria supplied by the Clinical Data Consumer.

Further details can be found in Section 3.3 of the IHE PCC-TF QED Supplement, Volume 1

2.1.4 PRE-CONDITIONS

Table 2-4 Pre-conditions

Pre-condition
A secure communications channel is available, as provided with HITSP/T17 Secured Communication Channel
Consistent time is established, using HITSP/T16 Consistent Time
HITSP/TP30 Manage Consent Directives is used to document the authorization directive for release of the requested data, whether by patient or by regulation
It is expected that the security framework under which this Transaction Package operates is in accordance with the Interoperability Specification that references this construct. Therefore all applicable HITSP Security and Privacy constructs are implemented as required
The ability to collect an audit trail is provided, using HITSP/T15 Collect and Communicate Security Audit Trail

2.1.4.1 PROCESS TRIGGERS

Table 2-5 Process Triggers

Process Trigger
HL7 trigger event: OUPC_TE043100UV

2.1.5 POST-CONDITIONS

Table 2-6 Post-conditions

Post-condition
The requested clinical data are returned to the clinical data consumer



2.1.5.1 REQUIRED OUTPUT

Table 2-7 Required Output

Required Output	Format/Usage
All required outputs are specified in detail in Section 3.1 of the IHE PCC-TF QED Supplement, Volume 2	

2.1.6 DATA FLOWS

Data flows that are supported by this Transaction Package are specified in detail by IHE PCC-TF QED Supplement, Volume 2.

2.2 LIST OF CONSTRUCTS

Table 2-8 List of Constructs

Construct Name	Interface	Description	Content
No applicable constructs			

2.2.1 CONSTRUCT DEPENDENCIES

Table 2-9 Construct Dependencies

Construct	Depends On (Name of Component that it depends on)	Dependency Type (Pre-condition, post-condition, general)	Purpose
HITSP/TP21 Query for Existing Data	HITSP/T15 Collect and Communicate Security Audit Trail	Pre-condition	Required to manage audit trail of exported PHI
HITSP/TP21 Query for Existing Data	HITSP/T16 Consistent Time	Pre-condition	Required to manage and resolve conflicts in multiple updates
HITSP/TP21 Query for Existing Data	HITSP/T17 Secured Communication Channel	Pre-condition	Required to manage node authentication, and transport encryption
HITSP/TP21 Query for Existing Data	HITSP/TP30 Manage Consent Directives	Pre-condition	Documents authorization directive for release of the requested data, whether by patient or by regulation

2.2.2 ADDITIONAL CONSTRAINTS ON REQUIRED CONSTRUCTS

Table 2-10 Additional Constraints on Required Constructs

Data Element	Construct	Constraint	Constraint Type (Pre-condition, post-condition, general)	Purpose (Reason for this constraint)
No applicable constraints				

2.3 STANDARDS

2.3.1 REGULATORY GUIDANCE

Table 2-11 Regulatory Guidance

Regulation	Description
No applicable regulatory guidance	



2.3.2 SELECTED STANDARDS

Table 2-12 Selected Standards

Standard	Description
Health Level Seven (HL7) Version 3.0 Infrastructure Management - Query Infrastructure, Release 2 DSTU Ballot 1 - September 2008	Query Infrastructure domain specifies the formation of information queries and the responses to these queries to meet the needs of healthcare applications using the HL7 version 3 messaging standard. For more information visit www.hl7.org
Health Level Seven (HL7) Version 3.0 Standard: Transport Specification - Web Services Profile, Release 2 Committee Ballot 1 - May 2008	The Web Services Profile for HL7 promotes the use of Web Services to exchange HL7 messages and to ease interoperability between implementations. The profile focuses on basic Web services protocols and technologies like SOAP (Simple Object Access Protocol) and WSDL (Web Services Description Language), which lay the groundwork for more complex interactions based on higher-level Web services specifications. For more information visit www.hl7.org
Integrating the Healthcare Enterprise (IHE) Patient Care Coordination (PCC) Technical Framework Supplement 2008 – 2009, Draft for Trial Implementation, August 22, 2008	The Query for Existing Data Profile (QED) supports dynamic queries for clinical data, including vital signs, problems, medications, immunizations, diagnostic results, procedures and visit history. This profile makes the information widely available to other systems within and across enterprises to support provision of better clinical care. The QED profile leverages the existing content modeling defined previously in other IHE document profiles and the HL7 CCD Implementation Guide to deliver information that is semantically equivalent as a web service using the IHE ITI web services and HL7 web services guidelines. For more information visit www.ihe.net
Organization for the Advancement of Structured Information Standards (OASIS) Simple Object Access Protocol (SOAP) Version 1.1, 1.2	SOAP is a protocol specification for invoking methods on servers, services, components and objects. SOAP codifies the existing practice of using XML and HTTP as a method invocation mechanism. The SOAP specification mandates a small number of HTTP headers that facilitate firewall/proxy filtering plus an XML vocabulary that is used for representing method parameters, return values, and exceptions." (DevelopMentor) SOAP consists of three parts: an envelope that defines a framework for describing what is in a message and how to process it, a set of encoding rules for expressing instances of application-defined data types, and a convention for representing remote procedure calls and responses. For more information visit www.oasis-open.org

2.3.3 INFORMATIVE REFERENCE STANDARDS

Table 2-13 Informative Reference Standards

Standard	Description
World Wide Web Consortium (W3C) Web Services Description Language (WSDL) v1.1	WSDL is an XML-based language that provides a model for describing Web services. It is also an XML-based service description on how to communicate using web services. The WSDL defines services as collections of network endpoints, or ports. WSDL specification provides an XML format for documents for this purpose. For more information visit www.w3.org



3.0 APPENDIX

The following sections include relevant materials referenced throughout this document.

No additional information at this time.

RELEASED FOR IMPLEMENTATION



4.0 DOCUMENT UPDATES

The following sections provide the history of all changes made to this document since the last publication.

4.1 DECEMBER 5, 2007

No changes at this time.

4.2 DECEMBER 13, 2007

Upon approval by the HITSP Panel on December 13, 2007, this document is now Released for Implementation.

4.3 AUGUST 20, 2008

This document has been modified to reflect the updated HITSP approach to categorizing standards as Regulatory Guidance, Selected Standards, and Informative References.

The following was designated as Informative Reference:

- World Wide Web Consortium (W3C) Web Services Description Language (WSDL) v1.1

4.4 AUGUST 27, 2008

Upon approval by the HITSP Panel on August 27, 2008, this document is now Released for Implementation.

4.5 DECEMBER 10, 2008

This document has received a major update for the following:

- Reference the most recent version of the IHE QED Integration Profile supplement
- Additional updates have been made based on changes in the underlying standard with respect to the interfaces that are referenced, the transactions that are used by the interfaces, and a further refinement of the HL7 V3.0 standard to specifically reference the underlying specification from the HL7 V3.0 Messaging Standard

Minor editorial updates were made to this construct.

4.6 DECEMBER 18, 2008

Upon approval by the HITSP Panel on December 18, 2008, this document is now Released for Implementation.

4.7 JUNE 30, 2009

Minor editorial changes were made to this document. Removed boilerplate text for simplification. The term “actor” was replaced with “interface”.

4.8 JULY 8, 2009

Upon approval by the HITSP Panel on July 8, 2009, this document is now Released for Implementation.

