Electronic Submission of Medical Documentation (esMD)

Secure, Efficient & Cost-Effective

PRESENTERS

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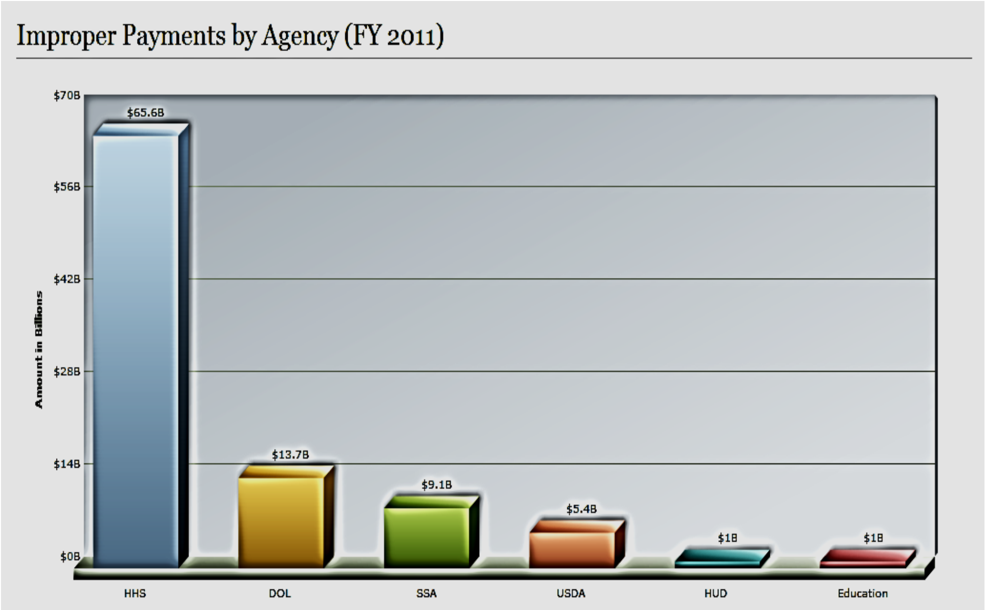
HIMSS12
Annual Conference & Exhibition

Putting the I in Health IT℠

Improper Payments

- Medicare receives 4.8 M claims per day.
- CMS' Office of Financial Management estimates that each year
  - the Medicare FFS program issues more than $28.8 B in improper payments (error rate 2011: 8.6%).
  - the Medicaid FFS program issues more than $21.9 B in improper payments (error rate: 8.1%).
- Most improper payments can only be detected by a human comparing:
  - a claim to
  - the medical documentation.


Improper Payments by Agency (FY 2011)

www.paymentaccuracy.gov

Background Facts about Medical Documentation Requests

- **Medical Documentation Requests are sent by:**
  - Medicare Administrative Contractors (MACs) Medical Review (MR) Departments
  - Comprehensive Error Rate Testing Contractor (CERT)
  - Payment Error Rate Measurement Contractor (PERM)
  - Medicare Recovery Auditors (formerly called RACs)

These contractors are overseen by OFM/PCG

- **George Mills,** Director
- **Melanie Combs-Dyer,** Deputy Director

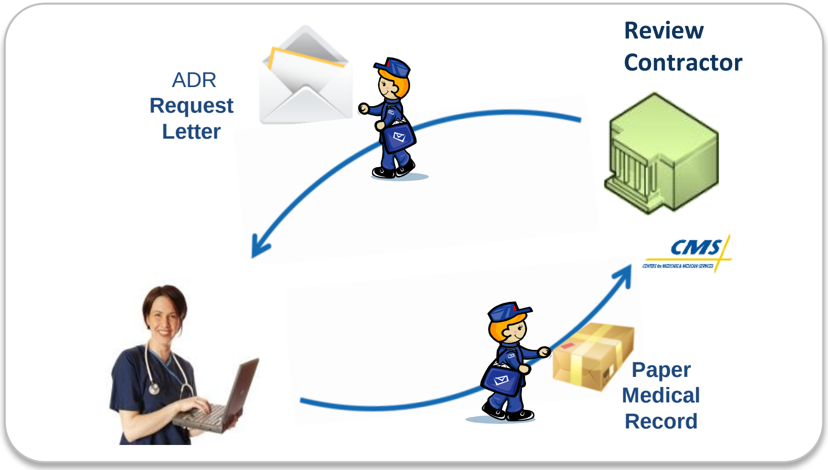
- **Claim review contractors issue over 1 million ADR requests each year.**

- **Claim review contractors currently receive most medical documentation in paper form or via fax.**

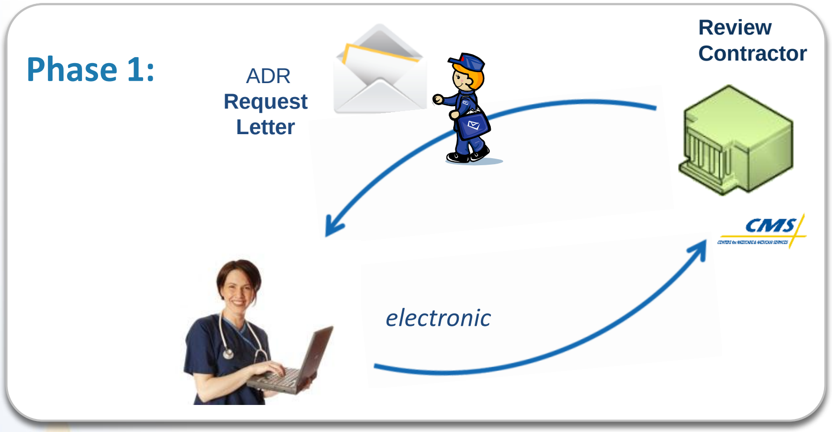
- **Health Information Handler (HIH) is any organization that handles health information on behalf of a provider. Examples include:**
  - Health Information Exchange (HIE)/Regional Health Information Organization (RHIO)
  - Release of Information (ROI) Vendor
  - Electronic Health Record (EHR) Vendor
  - Claim Clearing house
  - Health Internet Service Provider (HISP)

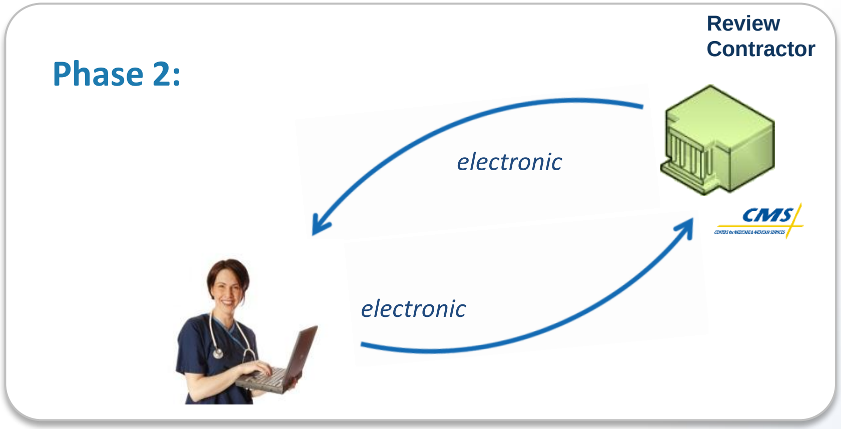
Submission of Medical Documentation (esMD)

Today's Paper Medical Documentation Process

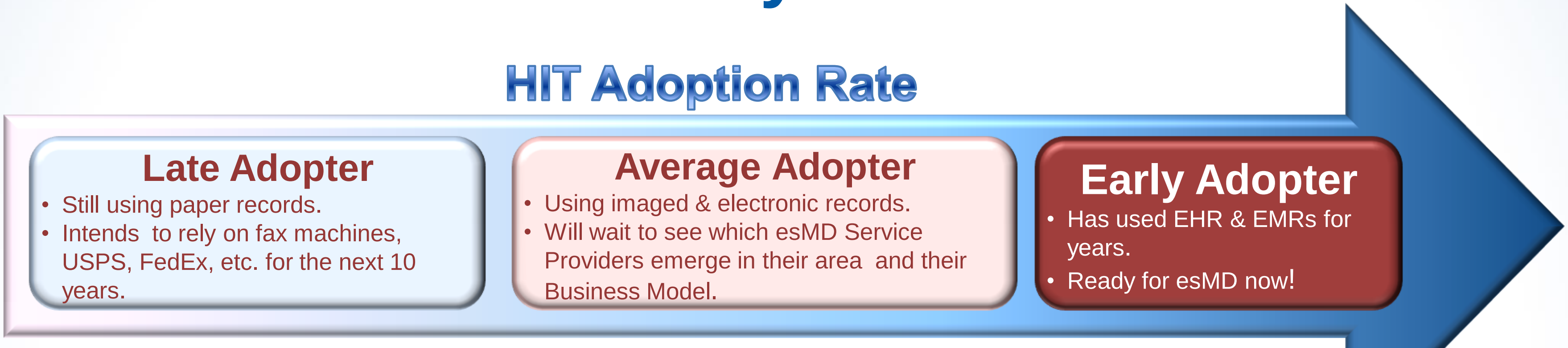

ADR
Request
Letter
Review
Contractor
CMS
Paper
Medical
Record

The Solution: Electronic Submission of Medical Documentation (esMD)


Phase 1:
ADR
Request
Letter
Review
Contractor
CMS
electronic


Phase 2:
Review
Contractor
electronic
CMS
electronic

esMD Adoption Rate and Live Submissions by Providers



HIT Adoption Rate

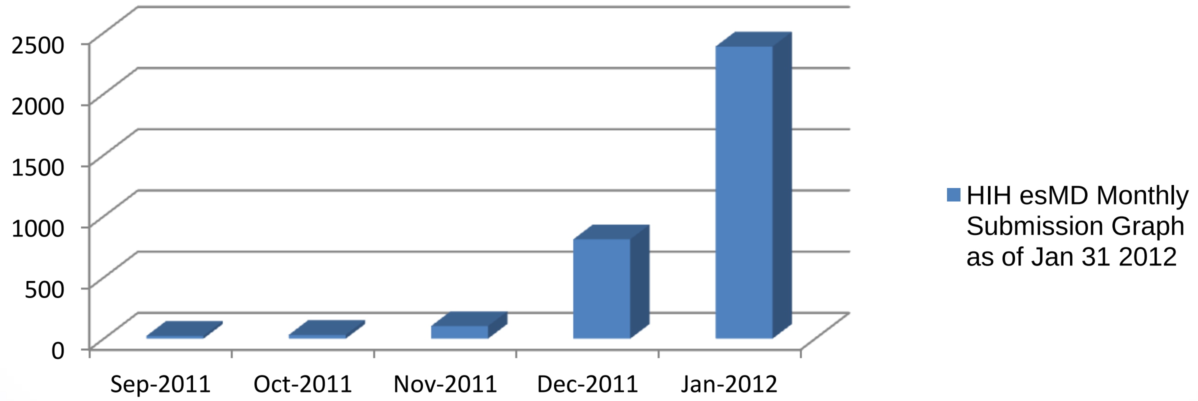
Late Adopter
- Still using paper records.
- Intends to rely on fax machines, USPS, FedEx, etc. for the next 10 years.

Average Adopter
- Using imaged & electronic records.
- Will wait to see which esMD Service Providers emerge in their area and their Business Model.

Early Adopter
- Has used EHR & EMRs for years.
- Ready for esMD now!

Review contractors cannot target providers for medical review just because they use esMD, CMS Program Integrity Manual Chapter 3, Section 3.2.1.

As of January 31, 2012: esMD Live Transactions (5 Active HIHs)



CMS Review Contractors that Accept esMD

Approved CMS Review Contractors
Region A Medicare Recovery Auditor (DCS)
Region B Medicare Recovery Auditor (CGI)
Region D Medicare Recovery Auditor (HDI)
Medicare Administrative J1 (Palmetto GBA)
Medicare Administrative J3 (Noridian)
Medicare Administrative J4 (Trailblazer)
Medicare Administrative J5 (Wisconsin)
Medicare Administrative J9 (First Coast)
Medicare Administrative J10 (Cahaba)
Medicare Administrative J11 (Palmetto)
Medicare Administrative J12 (Highmark)
Medicare Administrative J13 (NGS)
Medicare Administrative J14 (NHIC)
DME Medicare Administrative JA (NHIC)
DME Medicare Administrative JB (NGS)
DME Medicare Administrative JD (NAS)
Comprehensive Error Rate Testing (CERT)
Program Error Rate Measurement (PERM)

Planning for March 2012
Region C Medicare Recovery Auditor (Connolly)

Planning for April 2012
Medicare Administrative J15 (CGS)
DME Medicare Administrative JC (CGS)
ZPIC Z1 (SGS)
ZPIC Z7 (SGS)

Medicare Administrative JF (Noridian) will be replacing J2 and J3
For updated list, visit to: www.cms.gov/esMD .

CMS Certified HIHs to Offer esMD Services

IVANS
http://www.ivans.com

MRO
http://www.mrocorp.com

RISARC
http://www.risarc.com

NaviNet
http://www.navinet.net

HealthPort
http://www.healthport.com

Health IT
TECHNOLOGY, SIMPLIFIED
http://www.healthitplus.com

ApeniMED
http://www.apenimed.com/

cobius
HEALTHCARE SOLUTIONS
http://www.cobius.com

http://www.ecorpnet.com

IOD
http://www.iodincorporated.com

MEA
Medical Electronic Attachment
http://www.mea-fast.com

HIHs under Certification Process to offer esMD Services

PROFICIENT HEALTH
http://www.proficienthealth.com/

MediConnect Global
Medical Record Retrieval & Health Information Exchange
http://www.mediconnect.net/

SSI
http://www.thessigroup.com/

dorado SYSTEMS
www.doradosystems.com

ACS
A xerox Company
www.acs-inc.com/healthcare.aspx

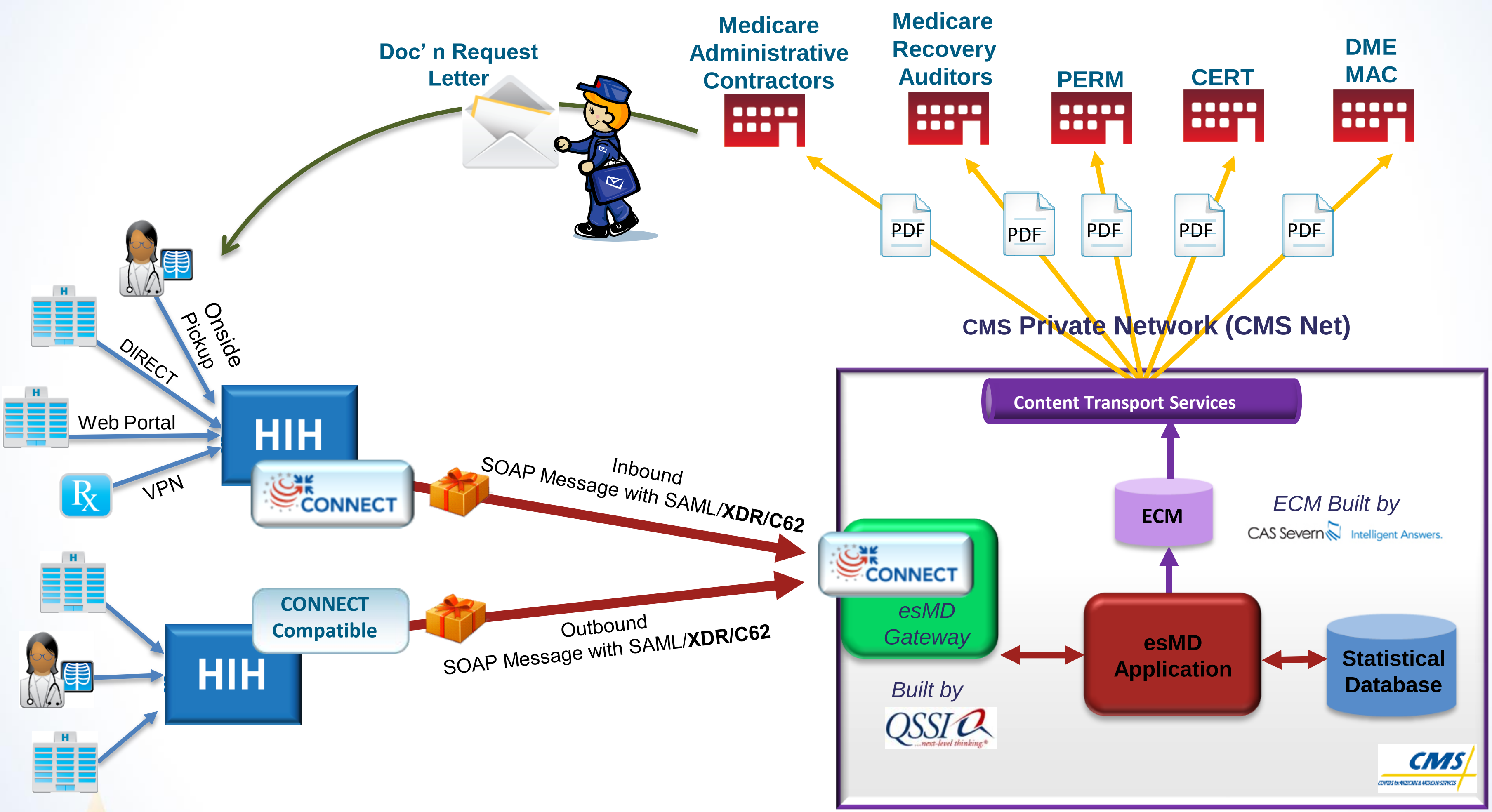
MDclick
PATIENT CENTERED MEDICAL HOME
http://www.mdclick.com

Craneware InSight
http://www.cranewareinsight.com

verisma
SECURE RELEASE OF INFORMATION
http://www.verismasystems.com/

onesource
document management
www.onesourcedoc.com

esMD Phase 1: September 2011



Doc' n Request Letter

Medicare Administrative Contractors

Medicare Recovery Auditors

PERM

CERT

DME MAC

PDF

PDF

PDF

PDF

PDF

CMS Private Network (CMS Net)

Onside Pickup

DIRECT

Web Portal

VPN

HIH

CONNECT

Inbound SOAP Message with SAML/**XDR/C62**

CONNECT Compatible

HIH

Outbound SOAP Message with SAML/**XDR/C62**

Content Transport Services

ECM

ECM Built by

CAS Severn Intelligent Answers.

CONNECT

esMD Gateway

Built by

QSSI ...next-level thinking.

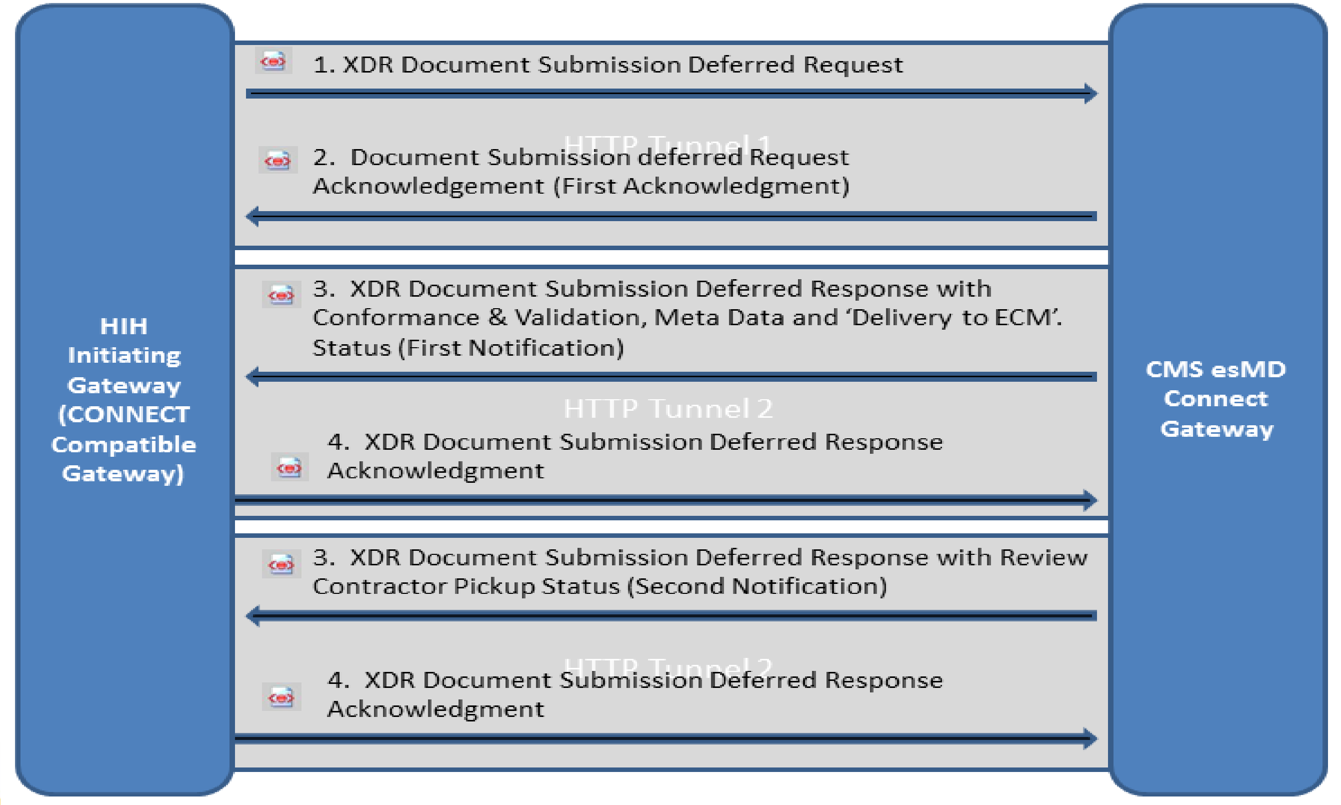
esMD Application

Statistical Database

CMS

esMD XDR Document Submission Message Flow: In Deferred Message Mode

- Using the Health Information Handler (HIH) Gateway, the provider submits a claim document response to a single CMS Additional Documentation Request Letter (ADR), using the Document Submission deferred request (as a part of deferred messaging flow).
- esMD implements the NHIN Document Submission with Deferred Messaging mode. In a deferred mode, the Document Submission is a two-way message as shown in the diagram below:



HIH Initiating Gateway (CONNECT Compatible Gateway)

CMS esMD Connect Gateway

HTTP Tunnel 1

1. XDR Document Submission Deferred Request

2. Document Submission deferred Request Acknowledgement (First Acknowledgment)

HTTP Tunnel 2

3. XDR Document Submission Deferred Response with Conformance & Validation, Meta Data and 'Delivery to ECM'. Status (First Notification)

4. XDR Document Submission Deferred Response Acknowledgment

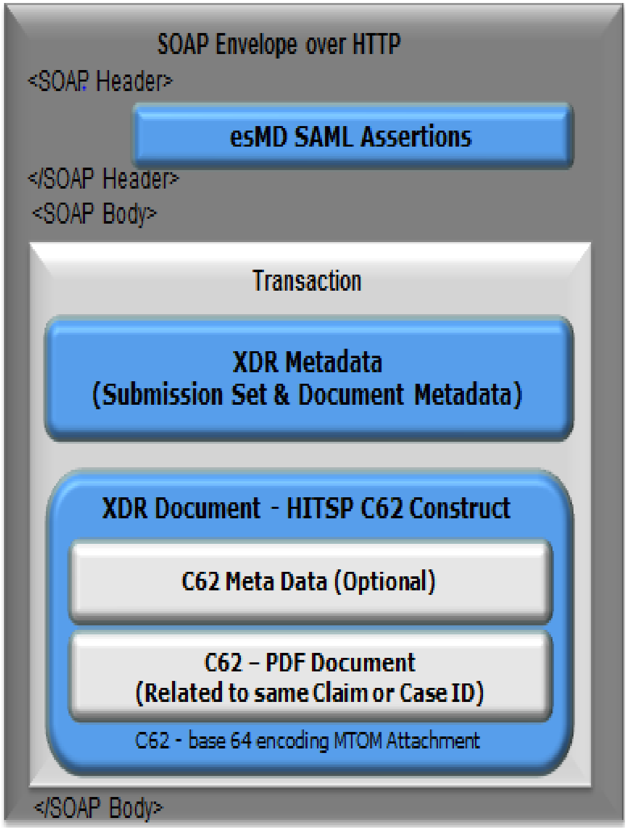
HTTP Tunnel 2

3. XDR Document Submission Deferred Response with Review Contractor Pickup Status (Second Notification)

4. XDR Document Submission Deferred Response Acknowledgment

esMD Phase 1 – esMD XDR Implementation

XDR - SOAP Envelope



SOAP Envelope over HTTP

<SOAP Header>

esMD SAML Assertions

</SOAP Header>

<SOAP Body>

Transaction

XDR Metadata
(Submission Set & Document Metadata)

XDR Document - HITSP C62 Construct

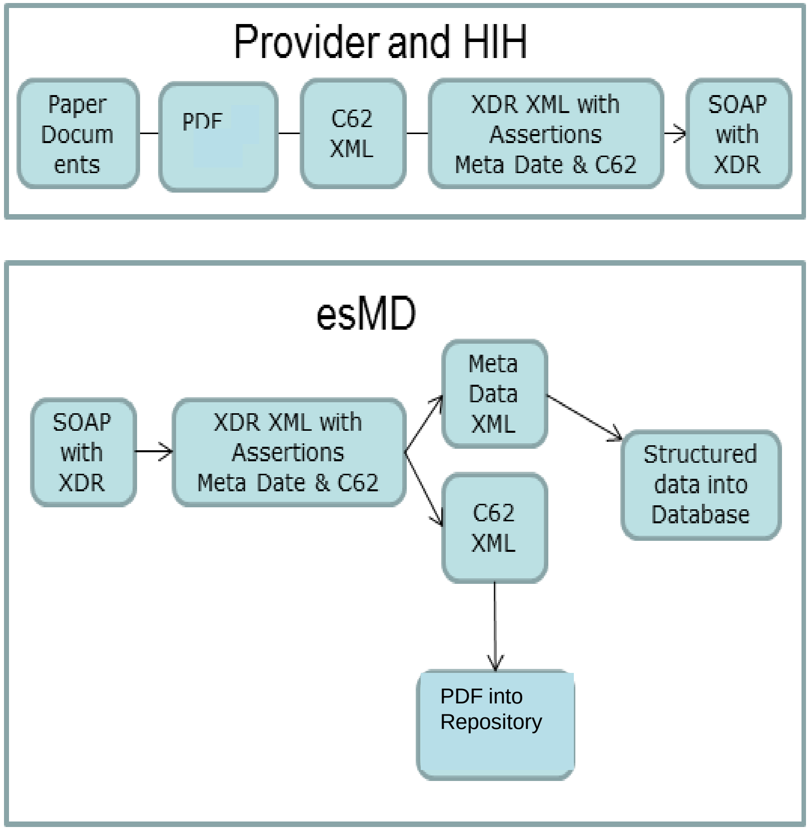
C62 Meta Data (Optional)

C62 – PDF Document
(Related to same Claim or Case ID)

C62 - base 64 encoding MTOM Attachment

</SOAP Body>

Data Conversion Flow



Provider and HIH

Paper Documents → PDF → C62 XML → XDR XML with Assertions Meta Date & C62 → SOAP with XDR

esMD

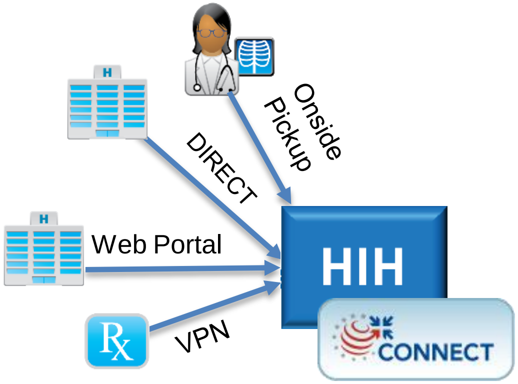
SOAP with XDR → XDR XML with Assertions Meta Date & C62

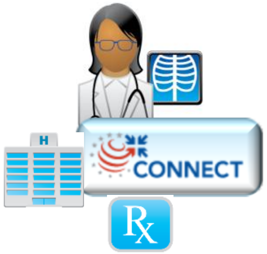
XDR XML with Assertions Meta Date & C62 → Meta Data XML → Structured data into Database

XDR XML with Assertions Meta Date & C62 → C62 XML → PDF into Repository

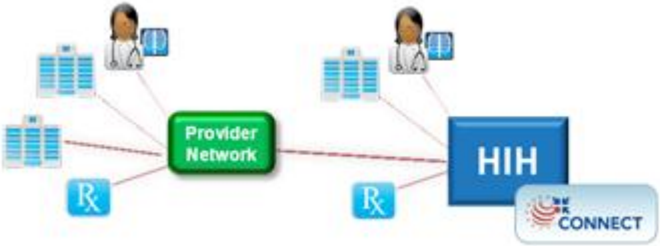
How Can Providers Obtain Access to a Gateway?

- Providers can contract with a Health Information Handler (HIH) or Providers can build their own gateway.

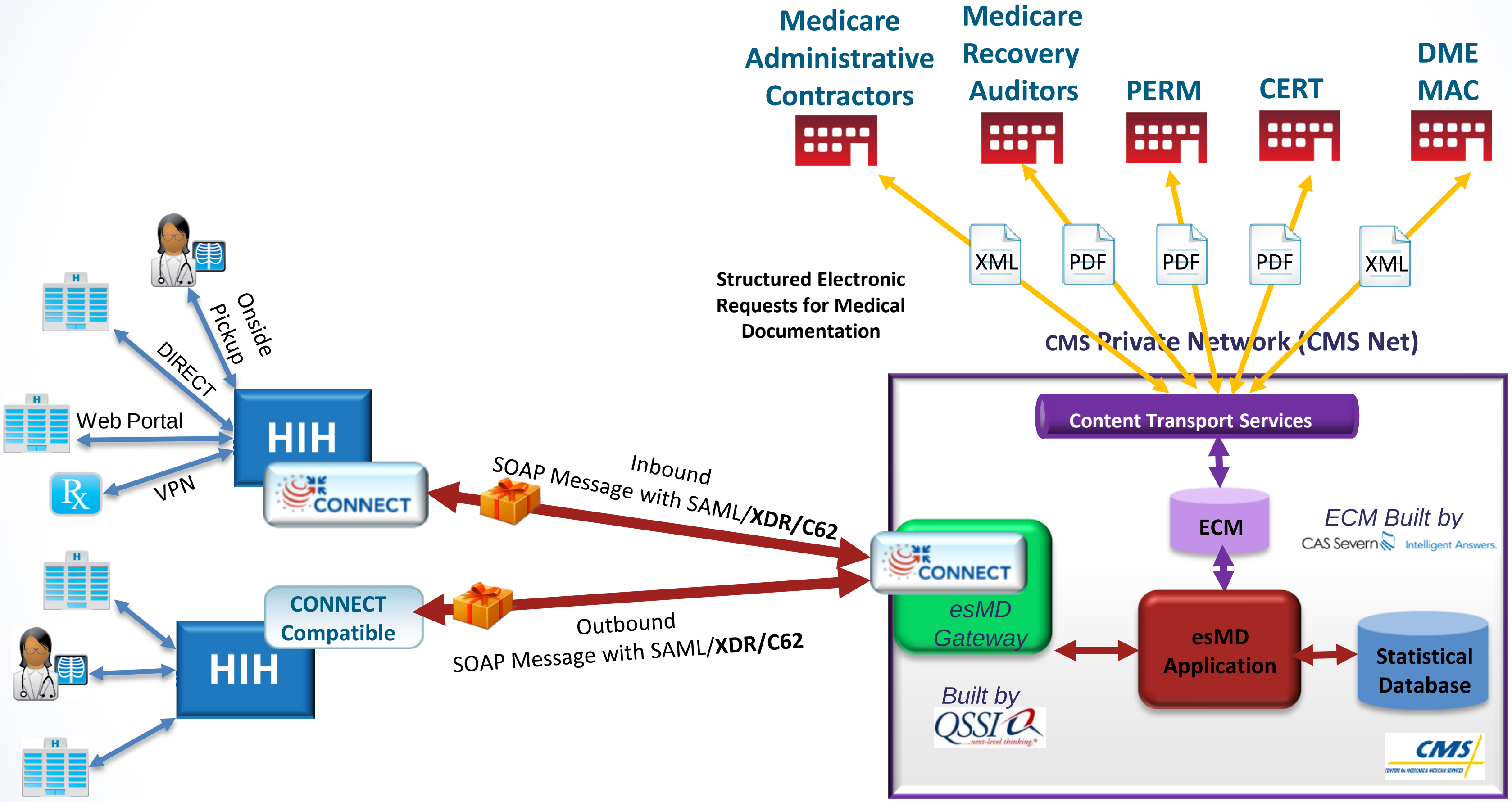

Onsite Pickup
DIRECT
Web Portal
VPN
HIH
CONNECT



- esMD is open to Providers or Provider Networks


Provider Network
HIH
CONNECT

esMD Phase 2


Medicare Administrative Contractors
Medicare Recovery Auditors
PERM
CERT
DME MAC
XML
PDF
PDF
PDF
XML
Structured Electronic Requests for Medical Documentation
CMS Private Network (CMS Net)
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CONNECT
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Inbound
SOAP Message with SAML/XDR/C62
Outbound
SOAP Message with SAML/XDR/C62
CONNECT Compatible
HIH

What Next in esMD ?

- **Future esMD Use Cases**

- **How will esMD accommodate ASC X12 transactions?**
  - Does CONNECT Support ASC X12 Transactions?
  - Are there any NHIN profiles to support the ASC X12 Transactions?

- **How will esMD allow outbound transactions from CMS esMD Gateway to HIH in compliance with FISMA and other security requirement?**
  - CMS Enterprise Architecture, Security and Policies.
  - S&I Framework
    - *Identify the Technical requirements to expand the esMD Use Cases.*
    - *Provider Profile Authentication*
    - *Author of Record*
    - *Structured Content*

Current and Future Use Cases for esMD

We Are Here

INBOUND

- Responses to Documentation Request Letters in PDF
- Appeal Requests in PDF
- Unsolicited Documentation in PDF (called paperwork or “PWK”)
- Structured Orders, Progress Notes, ADMC Requests
- Structured esMD Phase 2 Registration
- Etc.

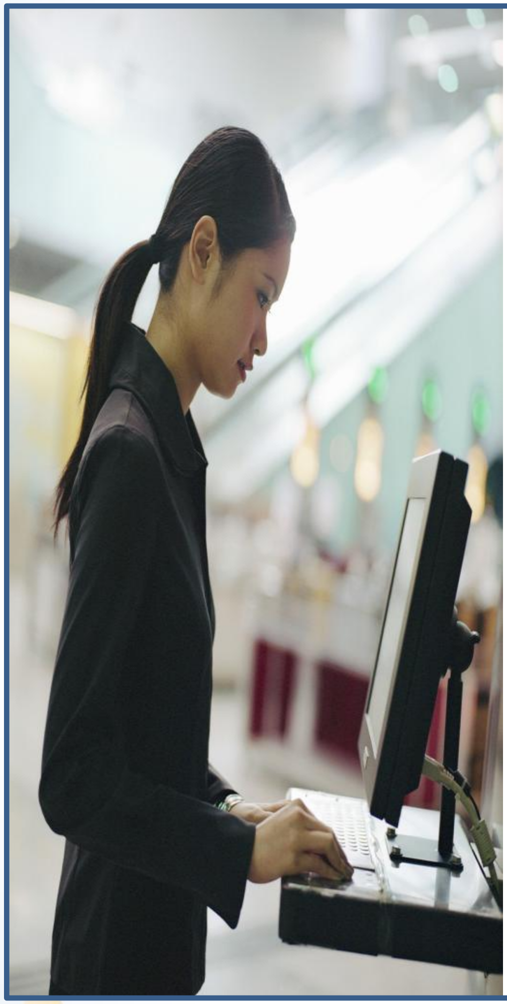
OUTBOUND

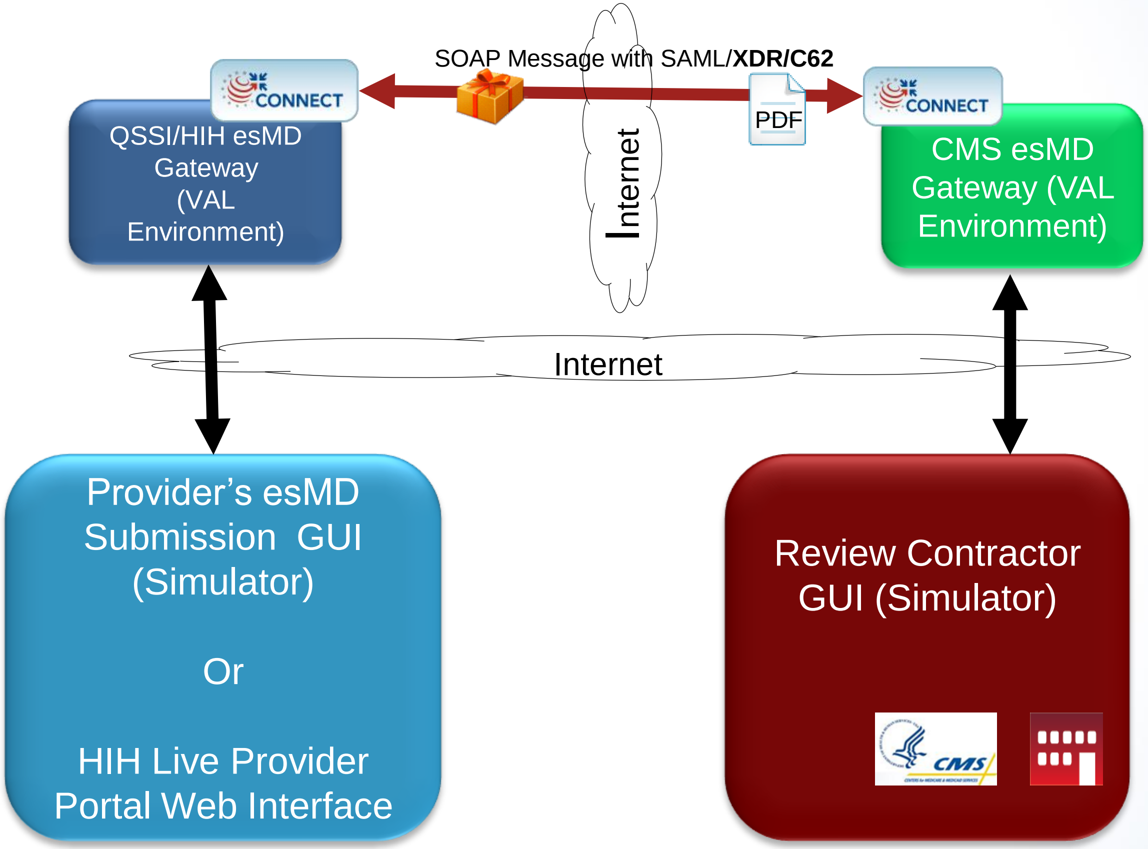
- Structured Outbound Documentation Requests
- Review Results Letters
- Demand Letters
- Etc.

LOOKUP

- Request\Receive Documentation Status
- Request\Receive Claim Status
- Request\Receive Appeals Status
- Request\Receive Eligibility Info
- Etc.

Demonstration at CMS Kiosk / CMS Kiosk ← → HIH Kiosk





SOAP Message with SAML/**XDR/C62**

QSSI/HIH esMD Gateway (VAL Environment)

CMS esMD Gateway (VAL Environment)

Provider's esMD Submission GUI (Simulator)

Or

HIH Live Provider Portal Web Interface

Review Contractor GUI (Simulator)

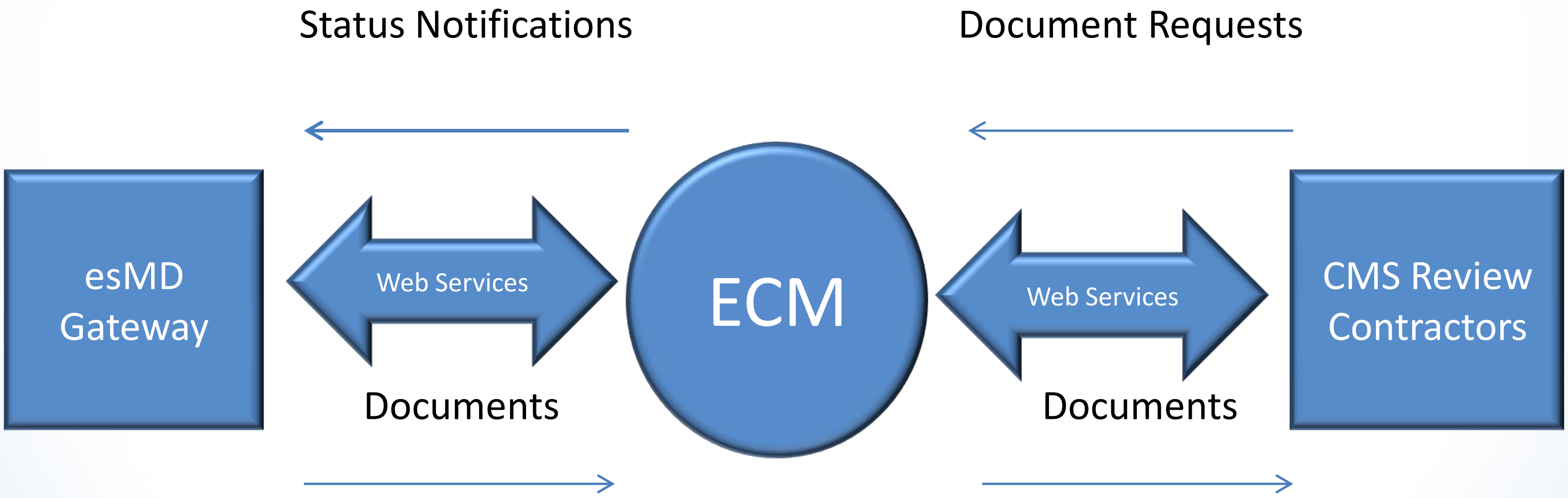
CONNECT
CONNECT
PDF
Internet
Internet

esMD Backbone and Review Contractor Interactions

- **Overview**
  - Workflow
  - Technology overview
  - Web Services
  - Enterprise Content Management

esMD Backbone and Review Contractor Interactions

Moving Parts



Status Notifications

Document Requests

esMD Gateway

Web Services

ECM

Web Services

CMS Review Contractors

Documents

Documents

esMD Backbone

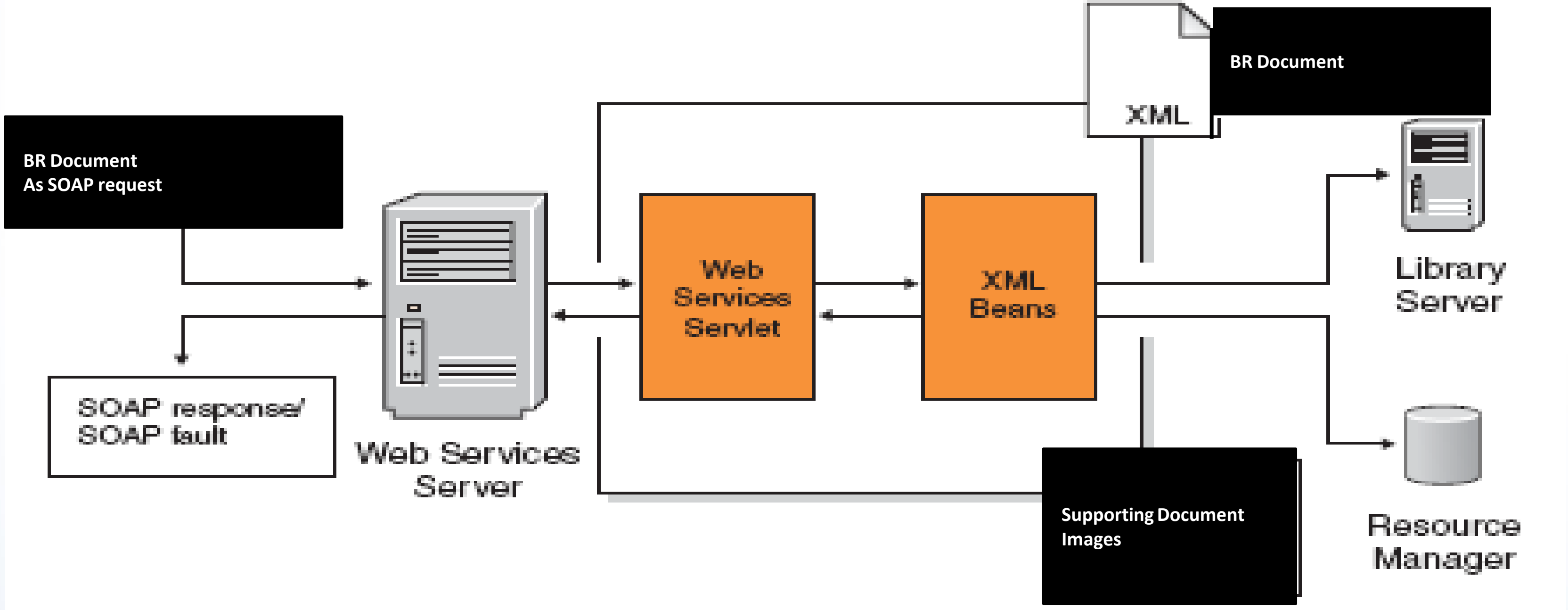
- **Systems at the CMS Baltimore Data Center**

System	Role
Enterprise Content Management (ECM)	The CMS ECM system provides for temporary storage of esMD documents that are awaiting pickup by the Review Contractor.
SOAP Based Web Messaging Client Transport Services (CTS)	CTS is a Communication engine that allows cross-platform and multi-standard applications existing through the Review Contractor user base and the Gateway to integrate with the esMD.

Interoperability through Web Services Communication

Interoperability through Web Services Communication

The CTS Web Services leverages SOAP-based message communications between the esMD Gateway, ECM and the Review Contractor end user base.



BR Document

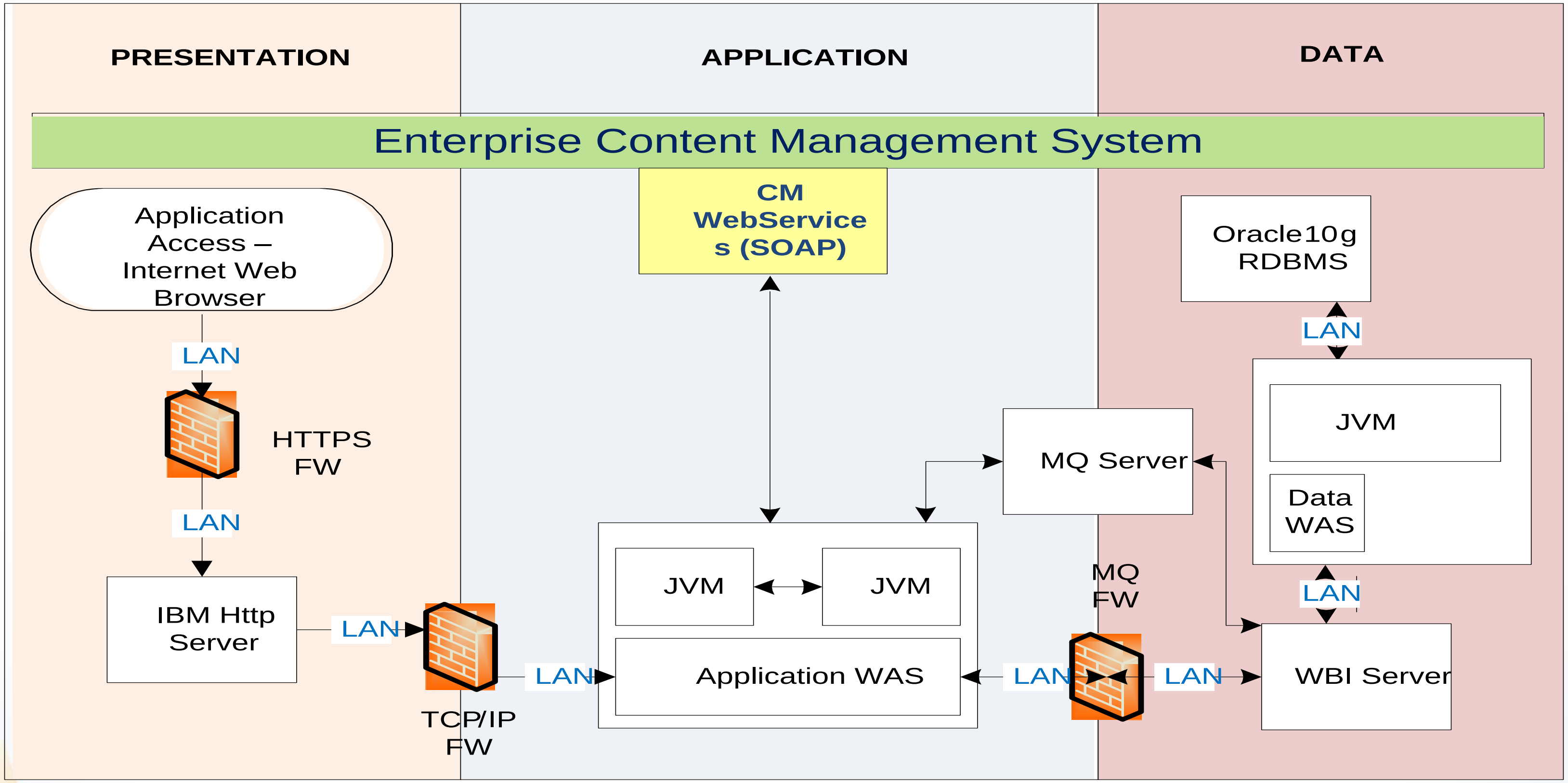
BR Document
As SOAP request

Supporting Document
Images

XML
SOAP response/
SOAP fault
Web Services
Server
Web
Services
Servlet
XML
Beans
Library
Server
Resource
Manager

Enterprise Content Management

The esMD Gateway and Review Contractor client systems leverage CMS' Enterprise Content Management solution for the storage and retrieval of unstructured documents associated with esMD transactions.


PRESENTATION
APPLICATION
DATA
Enterprise Content Management System
Application Access – Internet Web Browser
LAN
HTTPS FW
LAN
IBM Http Server
LAN
TCP/IP FW
LAN
CM WebServices (SOAP)
JVM
JVM
Application WAS
MQ Server
MQ FW
LAN
LAN
Oracle10g RDBMS
LAN
JVM
Data WAS
LAN
WBI Server

Questions

Putting the I in Health IT

S&I Framework esMD Initiative

- The Standards and Interoperability (S&I) Framework empowers CMS to establish esMD standards, specifications and other implementation guidance that facilitate effective medical documentation exchange.

- Key objectives for the S&I Framework esMD Initiative :

  1. Identify a standards-based machine-interoperable electronic format to replace the current paper version of the medical document request letter sent to providers.
  2. Develop a registration process to allow Providers to sign up to receive electronic medical documentation request letters from CMS Review Contractors
  3. Identify a secure method of sending medical documentation request letters from CMS review contractors to providers
  4. Identify a solution that will enable an electronic replacement of wet signatures, for medical documents submitted from providers to CMS

esMD Phase 2 on NHIN Exchange

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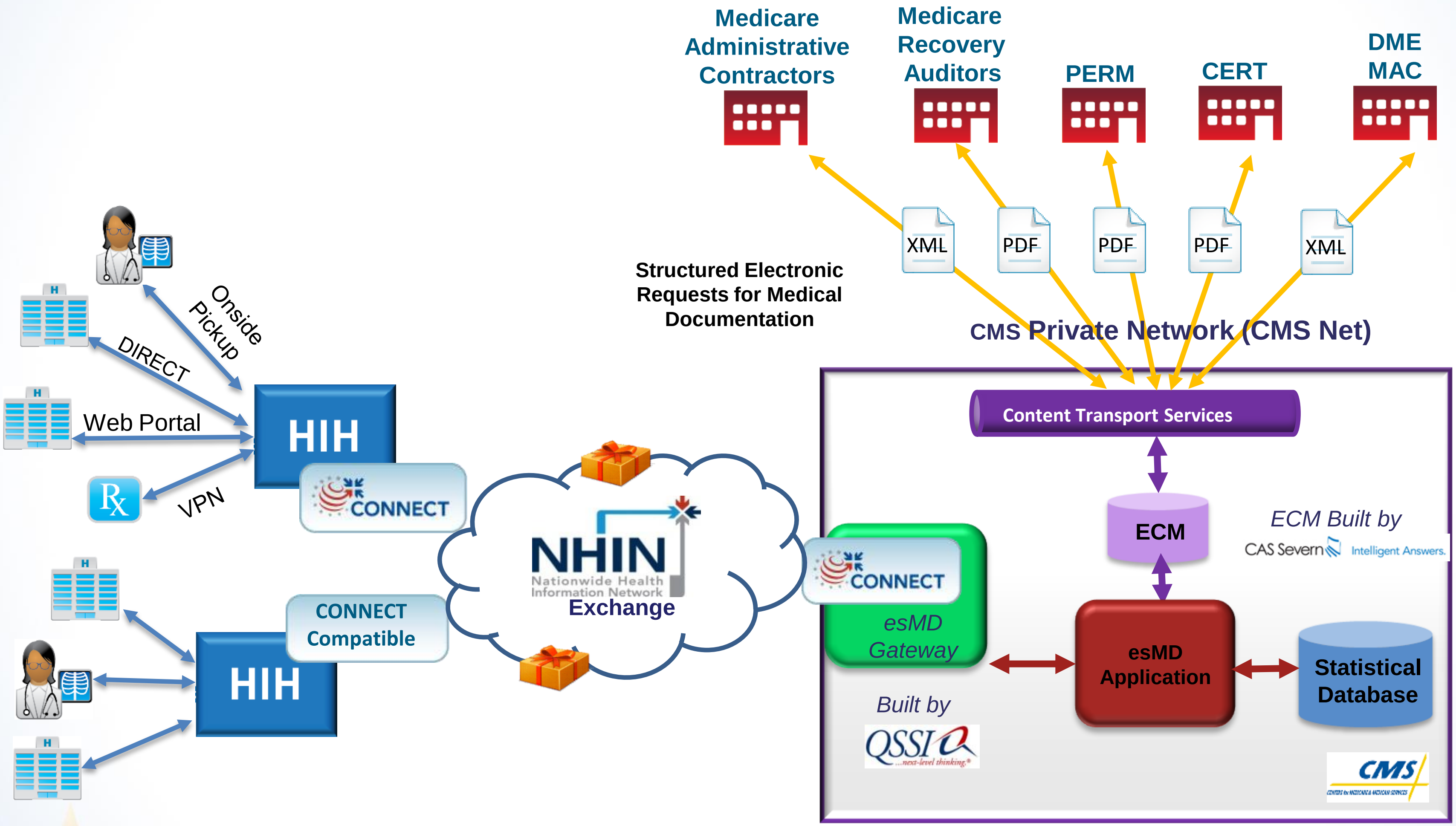
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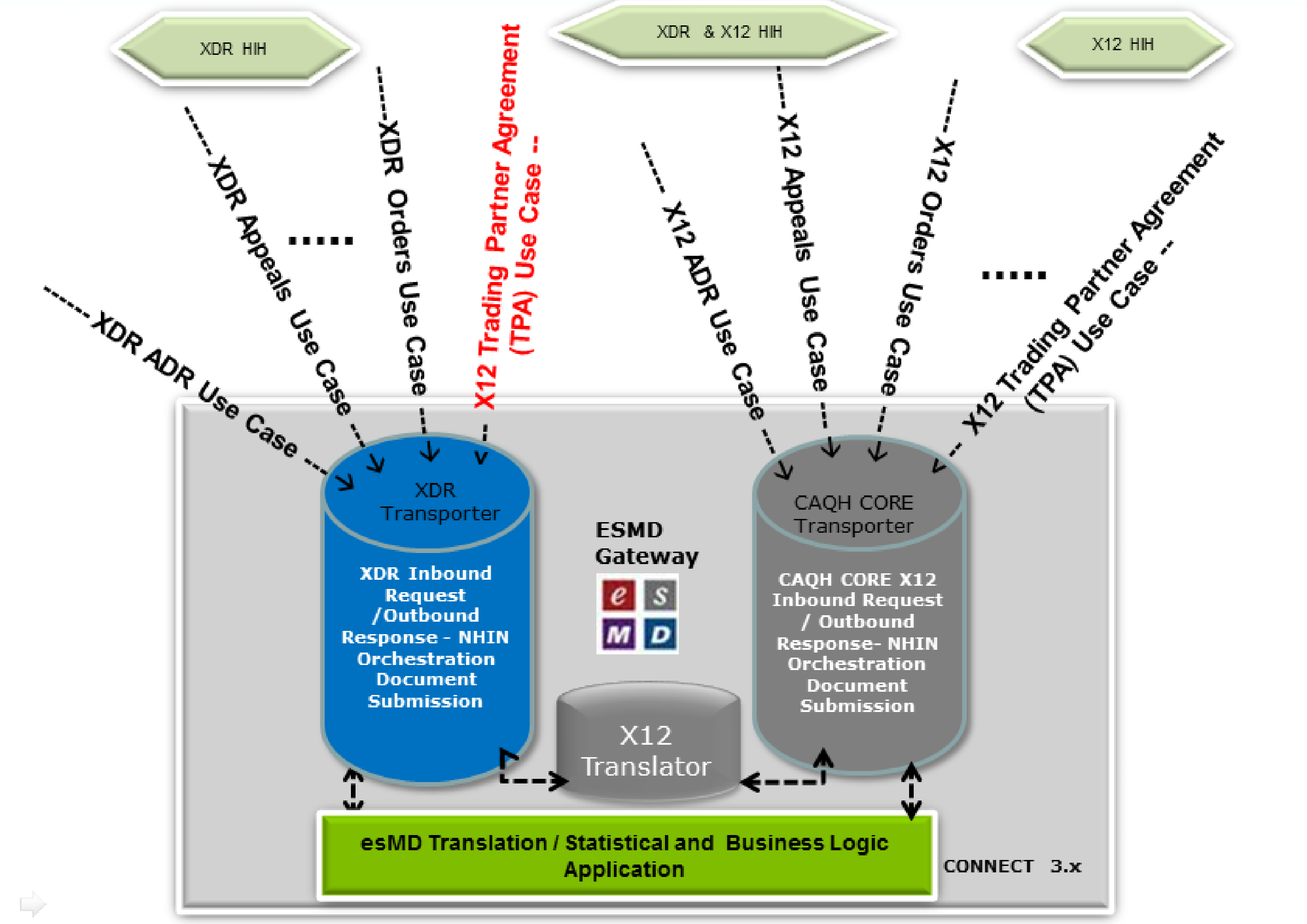
esMD Application
Statistical Database
CMS
Onside Pickup
DIRECT
Web Portal
VPN
HIH
CONNECT
NHIN Nationwide Health Information Network
Exchange
CONNECT Compatible
HIH

How to accommodate ASC X12 transactions through the esMD Gateway?

- Need to build CAQH Transport service (Parallel to XDR) in the CONNECT software by adopting NwHIN CAQH CORE X12 Document Submission Service Specification.

- Identify the ASC X12 Translator software to process the X12 Messages.

esMD ASC X12 with CAQH CORE and XDR Services



XDR HIH

XDR & X12 HIH

X12 HIH

XDR ADR Use Case

XDR Appeals Use Case

.....

XDR Orders Use Case

X12 Trading Partner Agreement (TPA) Use Case --

X12 ADR Use Case

X12 Appeals Use Case

X12 Orders Use Case

.....

X12 Trading Partner Agreement (TPA) Use Case --

XDR Transporter

XDR Inbound Request /Outbound Response - NHIN Orchestration Document Submission

ESMD Gateway

CAQH CORE Transporter

CAQH CORE X12 Inbound Request / Outbound Response- NHIN Orchestration Document Submission

X12 Translator

esMD Translation / Statistical and Business Logic Application

CONNECT 3.x

Putting the I in HealthIT