

# QualityNet eXchange

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**Office of Clinical Standards & Quality**

**Centers for Medicare and Medicaid Services**



**HCQIP**

MEDICARE'S HEALTH CARE QUALITY IMPROVEMENT PROGRAM



# Overview

- What is it
- Security Features
- Registration
- Authentication
- Clinical Warehouse
  - Data Collection
  - File Exchange
- Information Dissemination
- Future Changes



# QualityNet eXchange

- Secure Internet web applications
- Internet portal for hospitals and other providers to report and exchange privacy and QIO sensitive data securely with QIOs
- Internet portal for ESRD facilities to report and exchange privacy and confidential data securely with CMS and ESRD Networks
- Digital signatures of CMS forms



# QualityNet eXchange

Single Sign-On - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Back Forward Stop Home Search Favorites History Print Copy Paste

Address <http://www.qnetexchange.org/Login/Login.jsp> Go Links >>



Monday February 25, 2002

Login ID:

Password:

Sign On Clear

[Welcome](#) [Getting Started](#) [Support](#) [Site Tour](#)

***Welcome - Please Login to Quality Net Exchange,***

the web-based system developed to allow secure real-time communication and data exchange between the PROs and Providers.

The purpose of QNet is to provide a system that will allow online data collection, management, and reporting of hospital-based Health Care Quality Improvement Projects to improve the quality of care for Medicare beneficiaries.

**AHA - American Hospital Association**

**JCAHO - Joint Commission on Accreditation of Healthcare Organizations**

**CDC - Centers for Disease Control and Prevention**

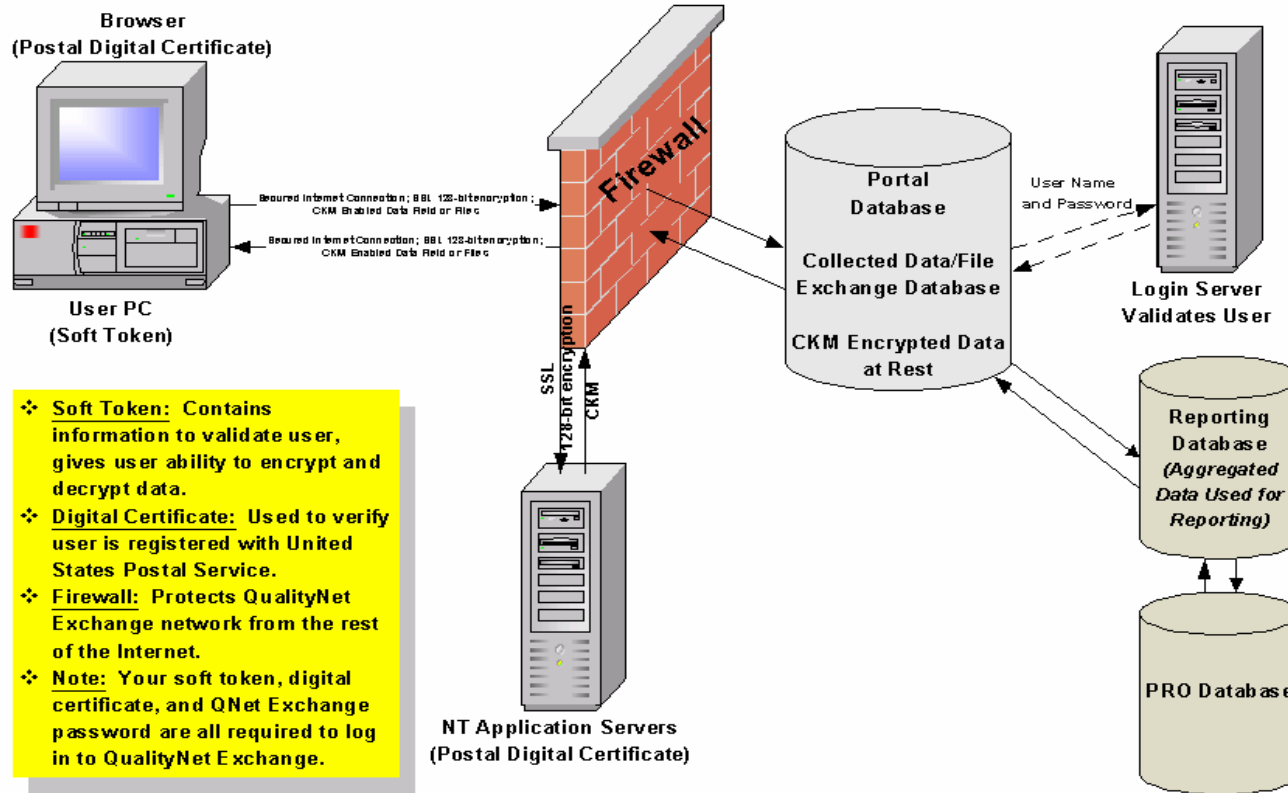
**American Heart Association**

**CMS - Centers for Medicare**

Error on page. Internet

Start GroupWise -... Baltimore Le... Microsoft Po... Mail From: M... Single Sign... 11:26 AM

# QualityNet eXchange



- ❖ **Soft Token:** Contains information to validate user, gives user ability to encrypt and decrypt data.
- ❖ **Digital Certificate:** Used to verify user is registered with United States Postal Service.
- ❖ **Firewall:** Protects QualityNet Exchange network from the rest of the Internet.
- ❖ **Note:** Your soft token, digital certificate, and QNet Exchange password are all required to log in to QualityNet Exchange.

10/29/2001

# PKI,CKM, and Oracle

- US Postal is currently providing certificate authority, registration authority, certificate distribution, and in-person-proofing
- TecSec CKM has been integrated into the QualityNet web applications for authentication and data encryption
- Oracle database roles along with CKM credentials are used to limit both access and the ability to decrypt data at rest



# Security Features- Identifying Users



- Digital Certificate – Issued by the USPS
- Used to identify the computer to the QNet server
- Digital signatures
- User Token
- Tiny, safeguarded file
- Password protected
- User information - Credentials

# Registration to QualityNet eXchange

- Currently two separate processes
  - Registration to US Postal website where private and public keys are distributed to individual users along with in-person-proofing at local Post Office
  - Registration to QualityNet Exchange site where designated administrators sign-off on users for access and roles





# Authentication to QualityNet eXchange

- Users must have these components for authentication to QualityNet Exchange
  - US Postal x509 certificate for bi-directional (verification of user and web server) 128 bit SSL to QualityNet Exchange
  - Pass the Certification Revocation List (CRL)
  - CKM token
  - QualityNet Exchange Database ID
- Users login into QualityNet Exchange web application that seamlessly verifies all security components through a single sign-on

# Clinical Warehouse - Data Flow



QIOs



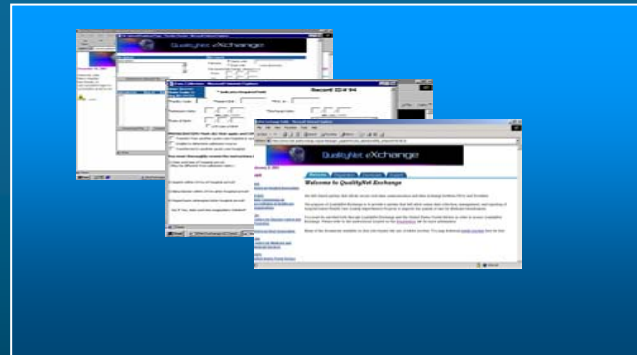
Providers



Vendors



CDACs



QIO Clinical  
Warehouse

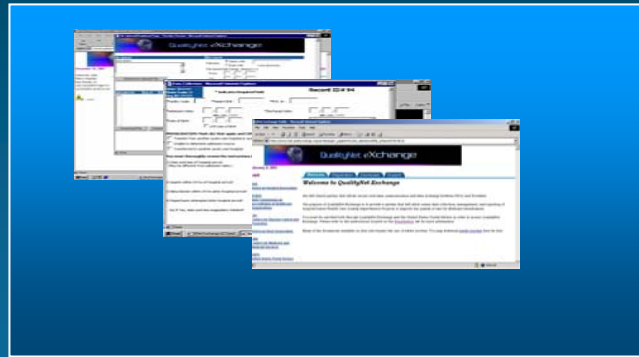
# Clinical Warehouse - Data Flow



Information

QIOs

- Clinical indicators
- Provider specific
- State aggregates
- Quality improvement reports



QIO Clinical Warehouse

Information



Providers

- Comparisons to state and national norms
- Immediate feedback reports

Information



CMS

- Aggregate reports
- State & national indicators

# Data Collection

- Abstraction tools
- File import according to specifications

# Online Data Collection

**Data Collection - Microsoft Internet Explorer**

User: JBennett  
State Code: IA  
Org ID: 990009

**\* Indicates Required Field**

**Record ID# 94**

\*Facility Code:  \*Patient ID#:  \*M.R. #:

\*Admission Date:  /  /  \*Discharge Date:  /  /   
*MM / DD / YYYY* *MM / DD / YYYY*

\*Date of Birth:  /  /  Primary Pay Source:   
 UTD Date of Birth

**PREVALIDATION: Mark ALL that apply and CONTINUE with review.**

Transfer from another acute care hospital or another ER  Expired during hospital stay  
 Unable to determine admission source  Unable to determine discharge disposition  
 Transferred to another acute care hospital

**You must thoroughly review the instructions before marking the ONE BEST response for each question.**

1) Date and time of hospital arrival.  
(May be different from admission date.)  /  /    
 UTD Arrival Date *Military Time*  
 UTD Arrival Time

2) Aspirin within 24 hrs of hospital arrival?

3) Beta blocker within 24 hrs after hospital arrival?

4) Reperfusion attempted after hospital arrival?

4a) If Yes, date and time angioplasty initiated?  /  /    
 UTD Angioplasty Date *Military Time*  
 UTD Angioplasty Time

Done Internet net

Start QNet Exchange AZ DataC... Data Collection - Micr... 5:17 PM

# Functionality - File Exchange

- Secure distribution channel for any file
- Safe transfer of confidential or private data
- Encryption is transparent to users
- Files are encrypted at rest
- Monitoring activity in real-time by user (who, what, when and how often)




# File Exchange Screen

QNet Exchange AZ FE - Microsoft Internet Explorer

File Edit View Favorites Tools Help


Back Forward Stop Refresh Home Search Favorites History Mail Print Edit Real.com

Address [https://www.test.qnetexchange.org/servlet/page?\\_pageid=89,91&\\_dad=portal30&\\_schema=PORTAL30](https://www.test.qnetexchange.org/servlet/page?_pageid=89,91&_dad=portal30&_schema=PORTAL30) Go Links >>



*January 10, 2002*      *Home Reports Data Collection*

Welcome, Julie  
Mercy Hospital - 990009  
Des Moines, IA  
Last successful login on 01/09/2002 05:17:00

 Log Out

**My Files**    Upload/Download/Search

**Out Box**  
All Files Uploaded have been received

**File In Box Portlet**  
**Julie Bennett's Inbox**

Filename	Upload Date	Uploaded By
Mds.mdb.....	01/09/02 @ 15:06.....	JTaylor
Ad Hoc Instruct Manual13-31-01.p65	01/09/02 @ 15:10.....	JTaylor
Chapt4.p65.....	01/09/02 @ 15:13.....	JTaylor
User.Guide.Cover.doc.....	01/09/02 @ 15:26.....	JTaylor
Chapt6.p65.....	01/09/02 @ 15:29.....	JTaylor
Cats3260.doc.....	01/09/02 @ 15:31.....	JTaylor


Show Selected File(s)

Internet

Start | Exploring - 12... | Daily Scan | GroupWise - M... | QNet Exch... | 12:17 PM

# File Exchange Screen

File Upload/Download Page - Provider Version - Microsoft Internet Explorer



**File Upload**

Description:

Select and Upload File

**File Search**

Filename  Starts with:   
 Ends with: (CASE SENSITIVE)

File Saved Date Range: (MM/DD/YYYY)

From:  /  /   
To:  /  /

Search: Search All Files

Search Clear

Uploaded By	Org Id	File Name	File Size	Date Saved	#Dnld	File ID	Archived?
JTaylor.....	99.....	Cats3260.doc.....	522K...	01/09/02 @ 15:31.....	2.....	37....	Y
JTaylor.....	99.....	Chapt6.p65.....	213K...	01/09/02 @ 15:29.....	1.....	36....	Y
JTaylor.....	99.....	User.Guide.Cover.doc.....	991K...	01/09/02 @ 15:26.....	1.....	35....	Y
JTaylor.....	99.....	Chapt4.p65.....	173K...	01/09/02 @ 15:13.....	2.....	34....	Y
JTaylor.....	99.....	Ad Hoc Instruct Manual13-31-01.....	687K...	01/09/02 @ 15:10.....	1.....	33....	Y
JTaylor.....	99.....	Mds.mdb.....	397K...	01/09/02 @ 15:06.....	2.....	32....	Y

Download File Delete File Archive File File Details

Done

Start | Explorin... | Daily Sc... | GroupW... | QNet Ex... | Microsof... | Mail Fro... | File U... | 12:21 PM



# Information Dissemination

- Immediate feedback reports
- Aggregate data reports
- Aggregate reports posted by QIOs
- Quality improvement progress by providers



# Feedback Reports


QNet Exchange AZ Reports - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Back Forward Stop Refresh Home Search Favorites History Mail Print Edit Real.com

Address [rg/servlet/page?760841.2.226\\_HSPRPT\\_760841.next\\_page=hsprpt.jsp&\\_pageid=94,98&\\_dad=portal30&\\_schema=PORTAL30](http://rg/servlet/page?760841.2.226_HSPRPT_760841.next_page=hsprpt.jsp&_pageid=94,98&_dad=portal30&_schema=PORTAL30) Go Links

Welcome, Julie  
Mercy Hospital - 990009  
Des Moines, IA  
Last successful login on 01/08/2002 01:59:12

 Log Out

Reports Feedback Reports Quarterly Reports

## Hospital Specific Data Entry Report

[Print Report](#) Created for: Julie Bennett  
Date: Wednesday Jan 9, 2002 5:19 PM

**Report Statistics:**  
Review Date Range: **Review Dates 12-01-2001 To 12-31-2001**  
Provider(s) Included in Report: **'990009'** (100% of Total Number of Providers)  
Number of Abstractions Submitted by Provider(s): **5** (100% of Total Abstractions)

Org ID	Aspirin within 24 hrs of arrival?	Beta-blocker within 24 hrs of arrival?	Reperfusion attempted after arrival?	Counseling on smoking cessation?	Aspirin prescribed at discharge?	Beta-blocker prescribed at discharge?
990009	Yes:100% No:0% Contraindicated:0% Not Required:0%	Yes:100% No:0% Contraindicated:0% Not Required:0%	Yes:20% No:80% NA/Contraind:0% Not Required:0%	Yes:80% No:20% N/A:0% Not Required:0%	Yes:0% No:20% Contraindicated:0% Not Required:80%	Yes:0% No:20% Contraindicated:0% Not Required:80%
<b>Statewide Averages</b>	Yes:100% No:0% Contraindicated:0% Not Required:0%	Yes:100% No:0% Contraindicated:0% Not Required:0%	Yes:20% No:80% NA/Contraind:0% Not Required:0%	Yes:80% No:20% N/A:0% Not Required:0%	Yes:0% No:20% Contraindicated:0% Not Required:80%	Yes:0% No:20% Contraindicated:0% Not Required:80%

**Statewide Statistics for Review Dates 12-01-2001 To 12-31-2001:**  
Number of Providers Submitting Abstractions: **1**  
Number of Abstractions Submitted: **5**

Done Internet

Start QNet Exchange AZ R... Microsoft Word - datacoll.d... 5:19 PM

# QualityNet eXchange Future Changes

- Single registration for everything through QualityNet Exchange web site
- QualityNet Exchange will pass required information to US Postal for certificate creation
- US Postal will still provide in-person-proofing at local post office
- QualityNet Exchange will manage distribution of US Postal Certificates by merging onto CKM tokens prior to delivery



# QualityNet eXchange Future Changes

- IFMC will fully automate the process for sign-off of users and distribution of tokens with US Postal certificates on them
- Users will only need to call IFMC QualityNet Exchange Help Desk for support questions