

E. IMPROVE THE COLLECTION, RELIABILITY, TIMELINESS, AND USE OF DATA TO MEASURE PROCESSES OF CARE AND OUTCOMES; MAINTAIN PATIENT REGISTRY; AND TO SUPPORT THE ESRD NETWORK PROGRAM

Information Management

Background:

Centers for Medicare and Medicaid Services (CMS) is charged with the effective administration of Medicare benefits to eligible persons with ESRD. Integral to the effective management of the ESRD program is the operation of a comprehensive data system covering medical and demographic information for the ESRD population. In 1978, the Department of Health and Human Services established the Program Management and Medical Information Systems (PMMIS) as a repository of Medicare ESRD beneficiary information. This system, as required by public law 95-292, section (c) (1) (A), is designed to serve the needs of the Department of Health and Human Services in support of ESRD program analysis, policy development, and epidemiological research. Currently it is accessed through Renal Management Information System (REMIS).

CMS standardized the collection, storage, and reporting of patient registry data by ESRD Network Organizations by establishing the Standard Information Management System (SIMS). Data from individual Network organizations SIMS data base is replicated on a nightly basis to Central SIMS. Reliable linkages were built between REMIS and SIMS system, allowing data matching based on the unique patient identification number. REMIS connects with other ESRD registry components such as the Social Security Administration's Master Beneficiary Record, Medicare Enrollment and entitlement database and National Medicare claims databases. REMIS is used to determine Medicare coverage periods for ESRD patients and serves as the primary mechanism to track the ESRD patient population for both Medicare and non-Medicare patients.

– System Architecture:

IT Infrastructure: CMS provides standard desk top image for Network Organizations. This is updated according to the security standards on a regular basis. These updates include all Federal Desktop Core Configuration (FDCC) policies, all applicable Microsoft operating system and application patches, and the Symantec Endpoint Protection client updates. Several additional protections were provided in standard image for laptops and desktop workstations such as stronger password protection, disabling wireless connectivity and requiring all laptops to have Pointsec encryption and CompuTrace security activated and the utility installed. In 2010, CMS also moved Network Organizations and Quality Improvement Organizations into a single domain called QUALNET.ORG. All these changes provide extra security required to protect confidential information according to Federal Information Systems Security Guidelines that CMS and its contractors have to follow.

Security: Many of the changes above are to improve the security of the confidential data maintained by Network Organizations. System security and data security are high priority for CMS and

Network Organizations. CMS has also required the Networks to improve the security of the physical access and data access. This includes having policies and procedures for security. Due to implementation of CROWNWeb where data is collected from facilities directly, Network of New England also started educating dialysis providers on security by developing a security statement and posting it on Network web site:

http://www.networkofnewengland.org/InformationManagement/Security_Statement.pdf.

Network of New England provided education to facilities on security at their annual meeting in October 2010. All security breaches are tracked education provided to person responsible for the breach. All Network staff take annual security awareness training.

In 2010, CMS has moved many applications used by ESRD Network Organizations from client/server to web based systems. One example is REMEDY that is discussed below.

– **Components of CROWN:**

All ESRD Networks rely on several data sources to fulfill their CMS contractual obligations for conducting quality improvement projects, providing technical assistance to ESRD providers and professionals, and responding to patient inquiries. These data systems are maintained and developed by CMS contractors. The following summaries briefly describe the scope and type of data available to ESRD Networks and CMS in each system.

– **VISION:**

The Vital Information System to Improve Outcomes in Nephrology is a program that supports electronic data entry and storage of patient information at the facility level. Using this software, facilities can encrypt the data and transmit directly to their respective Networks via a secure, Web-enabled environment called "QualityNet Exchange". This program is going to become obsolete once CROWNWeb is implemented. Networks download VISION data from Qualitynet and import it into SIMS. Many VISION facilities have started using CROWNWeb to submit data to the Network.

– **SIMS:**

The ESRD Standard Information Management System is a program that allows the data entry, storage and retrieval of the patient data at Network level. It also supports the business processes of the ESRD Network such as maintaining provider information and Personnel information. Servers located at the Network function as both file server and data base server. This program is going to become obsolete once CROWNWeb is implemented and the servers located at the Networks will function as file servers only and not as database servers.

– **Central-SIMS:**

The Central ESRD Standard Information Management System is a program that holds data from all ESRD Networks. Central SIMS database server is maintained at the C3 complex in Baltimore. Data from individual Network SIMS server is replicated nightly to the SIMS central repository.

– **REMIS:**

The Renal Management Information System which determines the Medicare coverage periods for ESRD patients and serves as the primary mechanism to store and access ESRD patient and facility

information in the ESRD Program Management and Medical Information System Database. REMIS includes an operational interface to the SIMS Central Repository; and it interacts with Enrollment, Medicare entitlement, National Medicare claims and Social Security Administration databases. REMIS is maintained at the C3 complex in Baltimore. REMIS acts as renal registry as both Medicare and Non-Medicare ESRD patient's information is maintained in REMIS.

- **QualityNet Exchange:**

QNet Exchange provides an interactive secure web site that allows ESRD Facilities to transmit electronic patient data to their corresponding ESRD Network. ESRD Networks use the QualityNet Exchange to transmit patient databases i.e., "seed" database, to ESRD Facilities, receive electronic patient data files from ESRD Facilities, and provide feedback to ESRD Facilities regarding data transmission. The QualityNet Exchange is responsible for routing files to/from the appropriate ESRD Facilities and Networks, ensuring each ESRD Facility and Network access only their data files. Network organizations and CMS contractors use Qualitynet to transmit confidential data from one another. QualityNet Exchange is maintained by IFMC.

- **REMEDY:**

Remedy is an inventory management system. Networks are required to purchase and use CMS approved software and hardware for conducting their business under CROWN environment using REMEDY and maintain inventory in it. REMEDY also tracks help desk tickets.

- **National Help Desk for ESRD CROWN System:**

Help desk support for Networks: In order to support the use of VISION, SIMS, Qualitynet, REMIS, CROWNWeb and Qualitynet Identity Provisioning System (QIPS) by Network organizations CMS has provided Help Desk support via CROWN Help Desk. Questions about the technical implementation of CROWNWeb can be directed to the CROWN Help Desk 1-888-ESRD-HD1, or email support@crownhelpdesk.com or visit crownhelpdesk.com. They have also developed CROWN Help Desk Customer Portal, a self service system to create help desk tickets.

In order to support the use of Remedy, Internet, Email, computer infrastructure and QualityNet Exchange by Networks, CMS provided Qualitynet Help Desk. Networks can request assistance for help and for troubleshooting. These calls are coordinated by CMS IT support contractor Buccaneer Computers Systems and Services Incorporated for hardware, email and Internet problems, by Quality Net exchange contractor (IFMC) for issues related to Quality net, security related issues and REMEDY. Networks can use CROWN help desk for all the issues and the calls will be directed to QNet Help desk by CROWN help desk.

Help desk support for Dialysis Facilities: In order to support the use of CROWNWeb and Qualitynet Identity Provisioning System (QIPS) by dialysis facilities CMS has provided Help Desk support via CROWN Help Desk. Questions about the technical implementation of CROWNWeb can be directed to the CROWN Help Desk 1-888-ESRD-HD1, or email support@crownhelpdesk.com or visit crownhelpdesk.com. Dialysis facilities can also use CROWN Help Desk Customer Portal, a self service system to create help desk tickets.

- **Individual Network's IT Infrastructure:**

These include but not are limited to file servers and database servers (in case of Network of New England they both are one and same), workstations, commercial off the shelf (COTS) products,

custom written software, WebEx conferencing capabilities and secure Email and Internet services. All workstations contain standard image that complies with CMS security standards. All Network 1 employees using CMS approved workstations must complete QualityNet System Security Awareness Training. Employees are trained on policies regarding code of ethics, confidentiality, rules of behavior, destruction of sensitive information, Internet and email usage. New employees must pass the training before gaining access to a CMS workstation and current employees must take and pass the training annually. The Networks are required to develop policies and procedures, in accordance with CMS requirements, to maintain the security and confidentiality of the data and use reasonable safeguards to protect it.

- **Electronic Laboratory Data Collection Project**

Through the Electronic Laboratory Data Collection (Elab) Project, the ESRD Network Program collects laboratory data from independent dialysis facilities and Large Dialysis Organizations (LDO) to produce facility-specific reports. This allows comparisons of dialysis facilities to each other and to state, Network and US. The LDOs submit data electronically to a CMS contractor. CMS Contractor then forwards the data to Network 11 to be compiled. Independent dialysis facilities voluntarily submit patient-specific data to the Networks for data entry by Network staff. Maintaining confidentiality, the Networks send these data to Network 11. Network 11 compiles data from LDOs and independent dialysis facilities to generate facility-specific reports that are returned to the Networks for distribution to providers. This process allows for both provider-specific reports and Network trending reports for specific clinical indicators and helps Network Medical Review Boards improve patient outcomes through focused quality improvement initiatives.

- **Fistula First Initiative**

In 2003, the LDOs began submitting aggregate vascular access data electronically to CMS. Independent, hospital-based, and Veterans Health Administration dialysis clinics submit their aggregate vascular access data to the Networks. The data from both sources are compiled on a monthly basis by a CMS contractor. Each Network is able to create standardized feedback reports for all providers participating in the Fistula First Initiative and mail them out on a quarterly basis. CMS produces a monthly Fistula First Outcomes Dashboard, which depicts each Network's progress in increasing arteriovenous fistula (AVF) placement rates as well as Network and national level data. For further information on dashboard please visit <http://www.esrdncc.org/index/fistula-first>.

- **Dialysis Facility Specific Reports**

CMS in 2010 distributed Dialysis Facility Reports (DFR) via **web-based only**. Dialysis facilities accessed their report via secure Web site www.DialysisReports.org. Provider-specific data reports are generated annually based on data from Medicare dialysis hospitalization claims, Medical Evidence Reports (CMS-2728), Death Notification Forms (CMS-2746), Annual Facility Survey Reports (CMS-2744), and other CMS and Social Security Administration data. The University of Michigan Kidney Epidemiology and Cost Center UM-KECC conducts statistical analyses of the information provided in these reports with funding from CMS. Secure.DialysisReports.org is administered by [Arbor Research Collaborative for Health](#) and the University of Michigan [Kidney Epidemiology and Cost Center \(KECC\)](#). These reports facilitate comparisons of patient characteristics, treatment patterns, transplantation rates, hospitalization rates, and mortality rates to local and national averages. For further information please see <http://www.dialysisreports.org/>. In 2010, CMS

determined that distribution of DFR's will be web based only. Network of New England provided information to dialysis facilities on how to access their reports and provided user ID and passwords.

- **Dialysis Facility Compare**

CMS is committed to providing consumers with information to empower them to make more informed decisions regarding their health care. The Dialysis Facility Compare (DFC) on www.medicare.gov allows consumers to review and compare facility characteristics and quality information on all Medicare approved dialysis facilities in the United States. This information can help consumers, especially dialysis patients, choose a dialysis facility that meets their needs and/or stimulate patients to discuss this information with their dialysis care giver. Another goal of the website is to drive quality improvement efforts by the dialysis facilities by publicly reporting facility-specific information. For information on Dialysis Facility Compare, please go to <http://www.medicare.gov/Dialysis/Home.asp>

- **United States Renal Data System**

The United States Renal Data System (USRDS) is required by law to collect and analyze information about ESRD in the United States on an annual basis. The USRDS Coordinating Center produces an annual data report on ESRD in the United States, fulfills data requests, provides standard analysis files and specialized datasets to researchers, and presents the results of its research at national conferences and in peer-reviewed journals. For further information please visit <http://www.usrds.org/>

- **United Network for Organ Sharing**

The United Network for Organ Sharing (UNOS) is a nonprofit scientific and educational organization funded by CMS that administers the nation's only Organ Procurement and Transplantation Network (OPTN). UNOS facilitates the organ matching and placement process including kidney transplants. UNOS also collects and manages data about every transplant event occurring in the United States and brings together medical professionals, transplant recipients, and donor families to develop organ transplantation policy. For further information please visit <http://www.unos.org/>

Network Role in Maintaining ESRD data

SIMS is the authoritative source for provider forms 2728, 2746, 2744, and patient event/status information. The accuracy and completeness of the patient data and patient status in SIMS is of great importance. The SIMS database is also quickly becoming a single source database for the Networks to use in performing all of their quality of care and oversight activities.

– **Patient Registry**

The Network of New England collects, maintains, validates and analyzes the end stage renal disease (ESRD) patient data for individuals receiving ESRD services in the six New England states as mandated by the Social Security Act. The purpose of maintaining the patient registry is to ensure a patient's renal medical condition has reached end stage and to register all ESRD patients (Medicare and Non-Medicare) with the National Renal Registry as mandated by law. The first step in the process of registering a patient as ESRD is to submit a Medical Evidence form (CMS Form 2728-U4) by the dialysis or transplant facility. Network 1 staff enters the information on the 2728 form in to SIMS database using SIMS software program. Providers also submit a death notification form (CMS Form 2746) when a patient dies. All the required forms and educational material required to submit those forms were posted to Network of New England Web site at <http://www.networkofnewengland.org/dataforms.htm>.

– **Updating Status of Medicare ESRD Beneficiaries:**

The Network staff tracks change of treatment provider and modality for each patient through reporting of events. Each provider submits event changes through a reporting tool called Monthly Patient Activity Report (MPAR) on a monthly basis. The events for change of treatment provider can be transfer-in, transfer-out or transplant and events of different treatment setting can be a change to home dialysis from in-center hemodialysis. Annually, all ESRD providers submit the year-end CMS Facility Survey Form (CMS 2744) reconciling all the patients at the facility as of December 31st.

– **Verification of Patient Data:**

The patient data is also verified through the process of accretions and notifications that are received from CMS. Accretions are ESRD patients that do not exist in SIMS database but are known to CMS through other related data systems. Notifications are mismatches in data elements in SIMS database for existing patients with other renal related data systems including Social Security Administration database. These mismatches could be due to reporting or data entry errors in different data systems. Network staff verify accretions and notifications with the facilities and either rejects or accepts the changes to data elements. REMIS alerts are discrepancies in the patient entitlement status. When CMS is unable to resolve a patient's status a request for clarification is sent to the Network staff to verify and correct these discrepancies. Data processing, validation, compliance monitoring and data verification are daily activities conducted by data staff. As of December 31, 2010, the New England region has prevalent patient population of 12,427. During 2010, Network 1 staff processed 4,166 Medical Evidence Forms, 2,976 Death Notification Forms and Monthly Activity forms that represent 15,359 events. Network also processed 6,535 manual notifications in 2010.

– **Provider and Personnel Database**

The Network of New England maintains a provider database in its SIMS database. This information is updated when Departments of Public Health of various states inform the Network of certification of a new facility ownership updates, or changes in services provided for existing facilities. Providers update personnel information on an annual basis.

The current and active provider information maintained in SIMS database is uploaded to maintain demographic information on providers listed on CMS's Dialysis Facility Compare (DFC) website <http://www.medicare.gov/Dialysis>. Information on facility address, phone and fax numbers, type

of services provided, number of dialysis stations, etc. can be obtained for every facility in the geographic area of New England using Dialysis Facility Compare. This information is updated on a quarterly basis from SIMS provider database. Dialysis Facility Compare also allows comparison of the quality measures of dialysis facilities in every state. The quality measures such as adequacy of the treatment, anemia management and patient survival on the Dialysis Facility Compare are obtained from United States Renal Data Systems (USRDS) based on the billing records of the Medicare patients.

The Network also maintains facility personnel information in its SIMS database. This information is used to communicate with the facility personnel as well as to distribute educational materials. The Network staff communicates with facilities via regular mail and also uses email and fax to broadcast important and emergency information.

Quality Assurance of Patient Data

The primary function of the Network of New England is to identify opportunities to improve health care related to the quality and appropriateness of ESRD patient care. The basis for objective and informed decisions about quality of patient care is reliable patient data. Network 1 not only obtains and maintains the ESRD patient information as described above but also verifies the data for completeness and accuracy. The completeness and accuracy of the data in the SIMS database is maintained due to the cooperation and dialogue between the Network data staff and the staff of each dialysis and transplant program in New England. Network of New England provides reports such as missing data-element or reject reports and missing forms reports to facilities. This process allows the facilities to update missing data and submit missing forms. Biannually, Network of New England provides required forms submission compliance reports to the facilities. Facilities are expected to maintain more than 90% compliance in forms submission. Table U shows the comparative number of facilities that met CMS compliance goal annually. Several tools are provided to facilities to maintain 90% compliance as shown in the data packet manual posted to Network Website at:

http://www.networkofnewengland.org/InformationManagement/Data_Packet_Manual.pdf.

Table U: Facility Forms Submission Compliance 2008 - 2010

	Annual compliance below 90%		
	Jan – Dec		
	2008	2009	2010
# Facilities	30	15	21

In 1994, the United Network for Organ Sharing (UNOS) and the Centers for Medicare & Medicaid Services developed a process of reporting transplantation events to the National Renal Registry. The Network of New England receives kidney transplant updates from UNOS. The data received from UNOS is compared and validated with the data submitted by transplant facilities in the New England states. Transplant data validation and compliance reporting is still the responsibility of the Network. On a quarterly basis the Network notifies the transplant centers of delinquent registration and follow up forms that need to be submitted to UNOS. In 2010, very seldom were transplant

centers delinquent with its transplant related forms. Network also processes the data submitted by Veteran's administration facilities as there is an agreement between VHA and CMS for this activity.

– **VISION Generated 2728 Forms Validation**

When Network 1 receives VISION data electronically, it is directly imported into the SIMS database. Also Network 1 extracts data from CROWNWeb and enters in to SIMS for facilities involved in Phased implementation of CROWNWeb. This will reduce the burden on facilities for double data submission. The 2728 forms imported via VISION or extracted from CROWNWeb do not have physician or patient's signatures. The facilities are required to generate the form after it is completed in VISION / CROWNWeb and obtain both patient's and physician's signature in blue ink. The person submitting the form via VISION / CROWNWeb only verifies the signatures and enters the dates of the signatures in VISION / CROWNWeb. This necessitates the validation of the forms submitted using VISION / CROWNWeb for signatures of both physician and patient and the dates of those signatures. In order to perform validation of forms, 3% of the total forms were randomly selected. The names of the patients on the selected forms were sent to the appropriate provider that submitted the forms. The facilities were then asked to send the VISION / CROWNWeb generated forms signed by physician and patient. Many facilities continue to complete a hard copy 2728 form and then enter the data electronically. Network staff will continue to validate the data received for appropriateness of initiation of ESRD, quality of care and reconcile patient events for data submitted via electronic systems.

The following are the results of the VISION imported forms verification process:

- | | |
|---|------|
| a. Number of forms imported from VISION or CROWNWeb for 2010. | 607 |
| b. Total number of forms requested from VISION or CROWNWeb facilities. | 18 |
| c. Total number of forms received from VISION or CROWNWeb facilities. | 18 |
| d. Total percent of forms validated from VISION or CROWNWeb facilities. | 100% |

Information Management Support for Quality Management Reports

Several reports required for quality management are run using data from SIMS, Lab data collection, and vascular access data. The vascular access data are used by CMS to create vascular access dashboard that compares AVF rates by Network. The dashboard is used to evaluate the performance of the Networks in improving the rate of AVF placement and use in dialysis patients. These data are also used to trend providers on monthly basis. Vascular access reports by provider are sent to providers once every quarter. These feedback reports are aggregated data at the facility level. Based on the data fields related to vascular access on 2728 form, Network of New England generates reports specific to nephrologists' and provider. These report cards are also sent to providers on a half yearly and yearly basis.

Information Management Support for Administrative Reports

SIMS has the capability to generate reports that allow the Networks to conduct its functions. All data tables in this annual report are generated from SIMS. This function gives standardized information across all Networks.

Information Management Support for Patient Services

Contacts utility was created by CMS contractor to track contacts received by the Networks in preparation for CROWNWeb implementation. These contacts are classified as grievances, complaints, facility concerns, facility enquiries and data management related contacts. There are different areas of concern under these different classes of contacts that are also captured in contacts utility. Reports can be generated on the contacts received and are used for quality improvement purposes.

Information Management Support for Provider Education

– Statistical Summary Booklet

Annually, the Network of New England publishes the statistical highlights by state that are distributed to the providers and is posted on the Network of New England's website <http://www.networkofnewengland.org/statis.htm>. This report has comparative data from 1989. It illustrates trends in incident and prevalent patients and analysis of the patient characteristics. Statistical analysis such as crude mortality rates, trends in transplantations are included in the statistical summary.

– Facility Directory

Once a year, the Network of New England prepares a facility directory that contains information on all the facilities in the New England area. This booklet contains information such as the address, telephone and fax numbers of the facility, key staff positions, and types of services provided. This is distributed to all the providers in New England states. This has been a useful tool for providers and hospitals in the placement of patients and in patient referrals.

– Information for New Facility / Data Packet / QI Packet

Network 1 provides a new facility packet, which contains information on regulations, QI information and materials as well as information on how to submit required data to the Network. A data packet was developed that accompanies the new facility packet. This data packet contained several educational tools for providers to complete and submit required data to Network 1 as well as CMS manual "Instruction Manual for Renal Providers" that was updated by Network of New England. This was posted to Network Web site at:

http://www.networkofnewengland.org/InformationManagement/Data_Packet_Manual.pdf

A CROWNWeb data packet and a QI data packet were developed to be included in the new facility kit. These tools provide information regarding data submission requirements as well as how the data is used for CMS reports.

– **Information for New Patient Packets**

CMS, via Network Coordinating Center, mailed informational materials to all new ESRD patients. The addresses were obtained from Networks' SIMS databases on a monthly basis. Any mailings that are returned are held in a central place until each Network investigates the reasons as to why the materials did not reach the intended party. Network 1 monitors the monthly return rate as part of its internal quality control activities. Network 1 consistently stayed below a 10% return rate this past year.

– **Technical Assistance**

Technical assistance provided by the information management consists of data processing related request from providers. These are data related, information, request for technical assistance related to data, request for forms such as ESRD Medical Evidence form - 2728 and data requests such as patient count by zip code.

– **Data Requests**

Throughout the year, the Network 1 staff responds to written data requests for special data analysis from facility personnel, researchers, corporations, managed care organizations, State Health Departments and health care consultants. Data that are released comply with CMS contractual requirements and HIPAA regulations to protect patient and facility confidentiality.

– **Disaster Preparedness and Business Continuity and Contingency Plan (BCCP)**

In order to prepare for disasters such as hurricane Katrina, CMS required each Network to outline its disaster preparedness plans in the form of a document called Business Continuity and Contingency Plan. This document requires the Network to outline the roles and responsibilities of its staff, CMS and the CMS contractors who are in-charge of maintaining Network IT infrastructure. A copy is sent to the backup Network 9/10. The plan allows for the prevention, assessment, and recovery operations in case of disasters and contains contact information. A copy of the plan and a set of back up data tapes are kept off site. This plan also allows for maintenance of Network 1 oversight as well as provision for assistance to dialysis facilities during disasters.

– **Development and Testing of ESRD Data and Data Systems**

Network of New England staff reviewed and provided comments on the ESRD Kidney Data Dictionary definitions, constraints, and valid values, on the business requirements and file specifications for the batch transmission of ESRD data. Network staff also participated in testing ESRD CROWNWeb.

– **Task Groups and Committees**

The Network 1 staff participates in task groups, committees, and beta testing of software before release. These committees meet by conference calls on a regular basis. The intent is to engage the end users of the software in the establishment of the business rules that are used in the software development as well as standardize the policies across 18 Networks. One of the major quality improvement activities conducted in the past few years, the National Vascular Access Improvement Initiative, has several committees in which the Network staff is involved. Network 1 staff is also involved in the core data set project that consolidates all data elements required to conduct the program functions and provides clear definitions for each data element. One of the new major initiatives, CROWNWeb, the Network 1 staff are involved in many committees to create a Web

based ESRD data system. In 2010 Network 1 was involved in several CROWNWeb related committees including batch admission error task group.

CROWNWeb

CMS is working with several contractors and the Network Organizations to build the CROWNWeb system, which will facilitate the collection and maintenance of information directly from ESRD facilities using a web based system. CROWNWeb will also require facilities to enter clinical data on all dialysis patients and report administrative information on facility personnel and dialysis services. CROWNWeb system is shared by CMS, the Networks, and facility users, with role-based access.

VISON, Network SIMS data bases and Central SIMS database will be replaced with CROWNWeb when CROWNWeb is fully implemented. CROWNWeb will be implemented in a phased manner. The first phase was rolled out in Feb of 2009 that consists of four Networks and eight dialysis facilities. Phase II of CROWNWeb consisted of all Networks and 10 facilities in each Network area and was implemented in July of 2009. Phase III was supposed to start in November of 2010 but was delayed due to two factor authentication and other security requirements that were not tested completely. When CROWNWeb is fully implemented, using CROWNWeb for data entry will be a requirement for ESRD facilities under the conditions for coverage. During 2010, major efforts were dedicated to transition from QualityNet Identity Provisioning System (QIPS) to QualityNet Identity Management System (QIMS).

CMS has established a help desk to support CROWNWeb application as well as support for deployment and training for CROWNWeb. Each facility should have a security administrator (SA) and user who can access and enter data in CROWNWeb. Web Address for CROWNWeb application is <https://www.qualitynet.org/esrdcrown/loginform.xhtml>.

Forms Required to Access CROWNWeb:

QualityNet Identity Provisioning System (QIPS) Account Form: QualityNet Identity Provisioning (Management) System (QIPS / QIMS) account form has to be completed in order to access CROWNWeb. This form can be down loaded from:

https://www.qualitynet.org/crown/registration_form.pdf. This will be transitioned to QualityNet Identity Management System (QIMS) when CROWNWeb is fully implemented as two factor authentications is a requirement for using CROWNWeb. Network of New England ensured that all facilities have End User Manager (EUM) and Security Official (SO) as required by the new QIMS process. The Network staff and facility staff participated in training for the new QIMS process.

Delegation of Authority Form: Dialysis facilities that are affiliated with large dialysis organizations such as DaVita, DCI and FMC should complete a CMS-10268, Delegation of Authority Form to allow for CROWNWeb Batch Data Submission. For more information, please visit <http://www.qualitynet.org/crown/faq.pdf>.



Project CROWNWeb: CMS has offered QIPS/CROWNWeb on line training courses to dialysis facilities. On line training courses can be found at <http://www.projectcrownweb.org/crown/index.php>

Renal Communication, Outreach and Training Contractor (RCT): CROWNWeb training and communications are performed by CMS contractor called Renal Communication, Outreach and Training Contractor (RCT). They provide latest updates to CROWNWeb on the Project CROWNWeb web site at <http://www.projectcrownweb.org/crown/index.php>. Several self paced and WebEx training modules are also posted to this Web site.

Help Desk for CROWNWeb:

CROWN Help Desk: This help desk provides support to both Networks and Dialysis facilities for issues related to use of Crown and QIPS. Questions about the technical implementation of CROWNWeb should be directed to the CROWN Help Desk 1-888-ESRD-HD1, or email support@crownhelpdesk.com or visit crownhelpdesk.com.

CROWN Help Desk Customer Portal: The portal is used for the management of submitting and tracking Help Desk tickets, to navigate through recent CMS notification for users, to search a Knowledgebase to find answers to frequently asked questions or reported issues. New CROWN Help Desk Customer Portal URL is www.crownhelpdesk.com.

Network Staff Training: In Preparation for proposed implementation of Phase III, Network staff participated in training for updates to CROWNWeb application. This training is conducted by CMS contractor for Renal Communication, Outreach and training contractor (RCT).

Facility Staff Training: Facilities that volunteered to participate in proposed Phase III participated in training conducted by the CMS contractor for Quality Infrastructure Support, Network 7.

Registering Users: Network of New England registers facility users as security administrators and regular users in to QIPS. The security administrators not only can access CROWNWeb application but also can create other users at their facility. Creating two users as security administrators at each facility was Network's responsibility as well as maintaining the accounts when there are changes to these users such as when the user leaves the facility. As of December 2010, Network of New England has registered 274 users for approximately 170 facilities. Network also processes disabling of users forms. There is on an average 5 - 10% turnaround of users on a monthly basis.

Maintaining User Accounts current for CROWNWeb: Maintenance of user access to CROWNWeb is the responsibility of the Network for the users in Network scope. This includes unlocking the users, resetting passwords and disabling accounts. The problem is compounded due to the fact the user's passwords need to be reset every 60 days in CROWNWeb. Further confusion arises due to the fact that the web site to change the password is different than CROWNWeb web site. There are several websites that users have to use in order to maintain the access to CROWNWeb. Network of New England developed an excel spread sheet that provides website address of these sites and allows users to write down the user id and password. Network of New England assists users to set up reminders to change the password every 60 days.

Communication to Facilities Regarding CROWNWeb Implementation: Network of New England communicated the information regarding CROWNWeb implementation to all facilities via Email and Fax broadcast. The Network also communicates with facilities that volunteered to participate in phased implementation via email.

Enrolling Providers for proposed Phase III of CROWNWeb: Network of New England enrolled providers to participate in proposed Phase III of CROWNWeb. Twenty six providers were enrolled in proposed Phase III of CROWNWeb deployment, half of those facilities belonging to large dialysis organizations. Major task associated with the proposed Phase III was to update users as End User Manager (EUM) or Security Administrator (SA) according to two factor authentication requirements. Other tasks were helping providers with any technical difficulties, obtaining data from CROWNWeb to enter in SIMS to reduce data submission burden on the facilities (this includes clinical data), submitting weekly deliverables to CMS as to the time spent on proposed Phase III activities. Also communicating on monthly basis information regarding CMS user calls is Network's responsibility.

Development and Testing of CROWNWeb:

Preparation of SIMS Database for Data Import into CROWNWeb: In preparation for CROWNWeb implementation of proposed Phase III in 2010, data in SIMS is cleaned up so that the incompatibility between SIMS and CROWNWeb is reduced when data is imported into CROWNWeb.

Facility data update in CW: Network updates facility data in CW when it updates the same in SIMS. When a new facility is created in SIMS, it is also created in CW. If that facility is an LDO facility this will help if they submit delegation of authority form or if LDO submits data on behalf of the facility. Network rarely gets any LDO data rejected due to facility being not mapped in CW. Network also clarifies facility data for help desk if help desk have issues in processing DOA forms submitted by LDO facilities.

Near Match Reports: Near match reports were sent to Networks on monthly basis by CROWNWeb contractor for data submitted by Large Dialysis Organizations to CROWNWeb. These corrections need to be made by looking at REMIS, making corrections in SIMS as well as CW for those near matches where the error is on the Network side. Where the errors on the LDO side, the list is sent to LDO via QNet Exchange. This is a monthly process conducted by Network.

Network also provided several recommendations to CMS on data quality as well as suggestions for improvements. These include issues related to missing clinical information, overwriting of patient demographics by data submitted by batch, overwriting start dates and new patient information and creation of duplicate patient issues.

Achieving Network 1 Goals in Data Management

Network 1 successfully met all data related deliverables to CMS for data processing, validation and CMS required forms submission compliance monitoring. Network 1 continues to support local providers using VISION. Network 1 also achieved its goals in providing support to develop data systems especially CROWNWeb in 2010 by participating in proposed Phase III of CROWNWeb deployment. Network develops several policies and procedures for data management and also conducts several Internal Quality Improvements (IQI) to constantly improve processes to become efficient in data management.