2005 ANNUAL REPORT

FOR

END-STAGE RENAL DISEASE NETWORK 9/10

THE RENAL NETWORK, INC.

Submitted By:
The Renal Network, Inc.
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Sponsored By:
Centers for Medicare & Medicaid Services
Contract Numbers:
500-03-NW 09 & 500-03-NW10

Date: June 30, 2006
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<td>CMS Table 6: Renal Transplant Recipients - Network 10</td>
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June 30, 2006

I am proud to present the 2005 Annual Report for End-Stage Renal Disease (ESRD) Network 9/10, which outlines a year of Network activities, and is made possible by the coordinated effort among health care providers, patients, and Network staff.

The Renal Network, Inc. (ESRD Network 9/10) is an independent agency that monitors the treatment of patients with ESRD in Illinois, Indiana, Kentucky, and Ohio. A total of 18 ESRD Networks throughout the country provide oversight of dialysis and transplant centers. The goal of the ESRD Networks is to assure appropriateness of dialytic care while fostering patient independence and well-being. ESRD Networks are funded through the Centers for Medicare and Medicaid Services (CMS).

The Renal Network, Inc., fosters and appreciates patient participation at all levels of its operation from the Board of Trustees, the Medical Review Board, the Pediatric Renal Group, the Patient Leadership Committee and Network Coordinating Council to each individual dialysis unit.

Our committee members are volunteers who have given of their time to improve the quality of care provided to patients receiving treatment for ESRD. Their contributions of time, effort, dedication and expertise have enabled our Network to go well beyond the requirements of our CMS contract to drive a progressive pro-active organization. We are especially grateful to for the contributions of the steering committee overseeing the Fistula First Initiative – the Vascular Access Advisory Panel. Under the leadership of Dr. Peter DeOreo as chair, their expertise has helped Network 9/10 improve in the area of fistula placement and maintenance. Increasing the use of fistulae is a national, as well as a Network, goal, one which will ensure better quality of care for all hemodialysis patients.

I wish to thank all the dedicated professionals, including those in each of our dialysis and transplant facilities and the Network administrative office, without whose hard work and perseverance the Network accomplishments would not have been possible. I am proud of my association with The Renal Network, Inc., and I expect that the contributions of our stakeholders will continue to make our Network a model for others to emulate.

Sincerely,

Jay B. Wish, M.D.
President
2. INTRODUCTION

A. Network Description


Small increases in incidence and prevalence during 2005 for both Network 9 and Network 10 illustrate that the chronic dialysis population continues to grow. A one-year comparison of incidence and prevalence of all ESRD patients is shown below.

<table>
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<tr>
<th>Incidence</th>
<th>2004</th>
<th>2005</th>
<th>Percentage Change</th>
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<tr>
<td>Network 9</td>
<td>8,011</td>
<td>8,408</td>
<td>1%</td>
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<tr>
<td>Network 10</td>
<td>4,482</td>
<td>4,617</td>
<td>1%</td>
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</table>

<table>
<thead>
<tr>
<th>Incidence</th>
<th>2004</th>
<th>2005</th>
<th>Percentage Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prevalence</td>
<td>2004</td>
<td>2005</td>
<td>Percentage Change</td>
</tr>
<tr>
<td>Network 9</td>
<td>22,978</td>
<td>24,076</td>
<td>1%</td>
</tr>
<tr>
<td>Network 10</td>
<td>13,395</td>
<td>14,067</td>
<td>1%</td>
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</tbody>
</table>


Illinois, "The Prairie State," ranks 5th among all states in population at 12,713,634. Figures from the U.S. Department of Commerce, Bureau of the Census, show the population divided by race as:

- White 73.5%
- Black 15.1%
- Other 11.4%

About 12% of the population is defined as Hispanic in ethnicity. Divided by age groups, approximately 26% of the population was under the age of 18; 61% were between the ages of 18 and 64; and 12% were aged 65 or greater. Currently, the female population is approximately 51% and the male population is 49%.

One-half of the population of the state lives in the metropolitan Chicago area. In total, 83 percent of the population live in urban areas and 17 percent of the population live in rural areas. Other urban areas in Illinois (with a population of greater than 100,000) are Springfield (the state capital), Rockford, and Peoria.
Indiana, "The Hoosier State," ranks 14th among all states in population at 6,237,569. Figures from the U.S. Department of Commerce, Bureau of the Census show the population divided by race as:

<table>
<thead>
<tr>
<th>Race</th>
<th>Percentage</th>
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<tbody>
<tr>
<td>White</td>
<td>87.5%</td>
</tr>
<tr>
<td>Other</td>
<td>4.1%</td>
</tr>
<tr>
<td>Black</td>
<td>8.4%</td>
</tr>
</tbody>
</table>

About 3.5% of the population is defined as Hispanic in ethnicity. Divided by age groups, approximately 26% of the population was at age 18 or under; 62% were between the ages of 18 and 65; and 12% were over the age of 65. Currently, the female population is approximately 51% and the male population is 49%.

About two-thirds of Indiana's population live in urban areas. Indianapolis, the state capital, is the largest city in the Network area, as well as Indiana, with a population of over 1,000,000. Other urban areas in Indiana (with population greater than 100,000) are Fort Wayne, Gary, Evansville and South Bend.

Kentucky, "The Bluegrass State," ranks 25th among all states in population at 4,145,922. Figures from the U.S. Department of Commerce, Bureau of the Census show the population divided by race as:

<table>
<thead>
<tr>
<th>Race</th>
<th>Percentage</th>
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</thead>
<tbody>
<tr>
<td>White</td>
<td>90.1%</td>
</tr>
<tr>
<td>Other</td>
<td>2.6%</td>
</tr>
<tr>
<td>Black</td>
<td>7.3%</td>
</tr>
</tbody>
</table>

About 1.5% of the population is defined as Hispanic in ethnicity. Divided by age groups, approximately 25% of the population was at age 18 or under; 62% were between the ages of 18 and 65; and 13% were over the age of 65. The female population is approximately 51% and the male population is 49%.

The Kentucky population is about evenly divided between rural and urban dwellers. Urban centers (with population greater than 100,000) are Louisville, Lexington, Owensboro, Covington, Bowling Green, Paducah, Hopkinsville, and Ashland. Kentucky's state capital is Frankfort.

Ohio, "The Buckeye State," ranks 7th among all states in population at 11,459,011. Figures from the U.S. Department of Commerce, Bureau of the Census show the population divided by race as:

<table>
<thead>
<tr>
<th>Race</th>
<th>Percentage</th>
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<tbody>
<tr>
<td>White</td>
<td>85%</td>
</tr>
<tr>
<td>Other</td>
<td>3.5%</td>
</tr>
<tr>
<td>Black</td>
<td>11.5%</td>
</tr>
</tbody>
</table>

About 1.9% of the population is defined as Hispanic in ethnicity. Divided by age groups, approximately 25% of the population was at age 18 or under; 62% were between the ages of 18 and 65; and 13% were over the age of 65. Currently, the female population is approximately 51% of total population and the male population is 49%.
About three-quarters of the population of Ohio live in urban areas. Urban centers (with population greater than 100,000) include Cleveland, Columbus (the state capital), Cincinnati, Toledo, Akron, Dayton, and Youngstown.

B. Network Structure

1. Staffing.

The Renal Network employs 18 full-time employees, allocated to Network 9 and Network 10 based upon assigned duties.

Susan A. Stark, Executive Director: Project Director, responsible for the overall operation of all functions of The Renal Network, Inc.

Bridget M. Carson, Assistant Director: provides back-up in administrative responsibilities. This position is also responsible for coordinating activities for Medical Review Board, the Pediatric Renal Group, the Nominating Committee and the annual Nephrology Conference.

Janet Nagle, Office Manager: responsible for operation of the Network office, including bookkeeping and personnel.

Raynel Kinney, R.N., C.N.N., C.P.H.Q., Quality Improvement Director: oversees all quality improvement projects and intervention activities, and coordinates the clinical performance measures project.

Mary Ann Webb, M.S.N., R.N., C.N.N., Quality Improvement Coordinator: assists with quality improvement and intervention activities and grievance resolution.

Patricia Coryell-Hendricks, R.N., C.N.N., Quality Improvement Coordinator: assists with quality improvement and intervention activities, and grievance resolution.

Janie Hamner, Quality Improvement Assistant: responsible for support to Quality Improvement Department.

Dolores Perez, M.S., Communications Director: oversees the Network Web sites, publications and resource information; assists with implementation of all patient activities.

Kathi Niccum, Ed.D., Patient Services Director: responsible for direction of all patient activities including grievance resolution.

Leanne Emery, M.A., Patient Services Assistant: provides secretarial support to the Patient Services Department.

Richard Coffin, Data Services Director: responsible for all programming needs and also directs the staff of the Data Services Department.

Christina Harper, Data Manager: oversees the day-to-day operation of the Data Services Department.
Marietta Gurnell, Information Management Coordinator: responsible for administering data clean-up tools and CMS notifications on the SIMS database to correct errors in the system.

Roianne Johnson, Data Specialist: Responsible for tracking patients for Network 10 facilities.

Deborah Laker, Data Specialist: responsible for tracking patients for Network 9 facilities.

Katy Simmons, Data Specialist: Responsible for tracking patients in Network 9 facilities.

Helen McFarland, Special Projects Coordinator: Responsible for validation activities for the Network 9/10 database.

Rita Cameron, Secretary: responsible for reception and secretarial support.

2. Committees.

Network Coordinating Council: The Network Coordinating Council (NCC) is composed of representatives of ESRD providers in Illinois, Indiana, Kentucky, and Ohio which are certified by the Secretary of Health and Human Services to furnish at least one specific ESRD service. The NCC includes a representative of each of the current Medicare approved ESRD facilities. Each facility has a single representative, designated by its chief executive officer or medical director, who is approved by the governing board of the facility. The NCC is responsible for the election of members to the Board of Trustees and the Medical Review Board. Elections are held by mail-in ballot. The Council meets once annually. During 2005, the Council met on May 25.

During 2005, the following occurred:

- The 2005 Nephrology Conference was held at the Indianapolis Marriott Downtown on May 25 and 26. The Conference offered educational programs for administrators, physicians, nurses, social workers, dietitians, and technicians. A Board of Nephrology Examiners, Inc., Nursing and Technology (BONENT) certification examination was held for nurses and technicians on May 24. During the Conference, the annual meeting of the NCC was held on Wednesday, May 25. At this time the Council was updated on activities with Network 9/10 as well as those activities related to the Centers for Medicare and Medicaid Services (CMS) and The Forum of ESRD Networks. Dialysis facilities within Network 9/10 were informed of the outcomes of the CMS Clinical Performance Measures Project and the Fistula First: National Vascular Access Improvement Initiative. The nominating process for open positions to the MRB and the BOT ended at the conclusion of the NCC meeting.

- The 2005 slates for membership on the Board of Trustees and Medical Review Board were mailed in October for the 2005 election after the nominating process was completed. (Nominations were accepted from January through May 25 for open positions.) Members were elected to both committees by mail-in ballot in the fall. Terms of office were to begin on January 1, 2006 and end on December 31, 2008.
• 2004 data were presented and the 2004 Annual Report was distributed to facility representatives and posted to the Network Web site (www.therenalnetwork.org).

**Board of Trustees:** The Board of Trustees is the chief governing body of ESRD Network 9/10. The Board of Trustees holds the Network contracts for ESRD Network 9/10 with the CMS, and is responsible for meeting contract deliverables and oversight of the administration of the Network budget.

In 2005, the Board of Trustees was composed of 22 members and an ex-officio immediate Past President, elected for three year terms of office including:

- Six Renal Physicians
- Two At-Large Physicians
- Four ESRD Patients (three positions filled/one vacancy)
- One Non-Categorical Position
- Chairperson of the Medical Review Board
- One Nurse
- One Social Worker
- One Administrator
- One Dietitian
- One Technician
- One Legal Representative
- One Financial Representative
- The Past President

The Board of Trustees met on January 12 via WebX conference, April 28 by telephone conference call, May 24 and October 12 for in person meetings.

Members of the Board of Trustees for 2005 were:

- Jay B. Wish, M.D., President
- Chester Amedia, Jr., M.D., Treasurer
- George Aronoff, M.D., MRB Chair
- William (Dirk) Combs
- Evernard Davis
- Billie Goble, M.S.W.
- Richard J. Hamburger, M.D.
- Mark Parks, C.H.T.
- Janeen Beck Leon, R.D.
- Stanton Schultz, M.D.
- Cheryl Sweeney, R.N., C.N.N.
- Craig Stafford, M.D., Vice President
- Pat Gunnerson, Secretary
- Emil P. Paganini, M.D., Past President
- Dan DeFalcono, CPA
- Leslie DeBaun, R.N.
- Thomas Golubski, M.D.
- Stephen Korbet, M.D.
- Benjamin Pflederer, M.D.
- Jane Robinson, M.S.N., R.N.
- Joseph Scodro, Esq.
- Gordon McLennan, MD

During 2005, the Board of Trustees accomplished the following:

- Network financial records were reviewed and expenditure reports approved.
The Board of Trustees monitored and approved the activities of the Medical Review Board, the Pediatric Renal Group, the Patient Advisory Councils, the Nominating Committee, the Strategic Planning Committee, and the Nephrology Conference Program Committee. Committee progress reports included updates on projects and action items.

The Board of Trustees was updated on activities with CMS, The Forum of ESRD Networks, and contract issues.

The Board approved the slates for election to the MRB and the BOT. The slates were formulated from nominations from the Network at large. The Nominating Committee reviewed the nominations to ensure the candidates were qualified for the positions being sought. The slates were sent on the BOT for approval, then mailed to the NCC facility representatives for voting. The election was final and results were announced by year-end.

The Board oversaw the development of Network projects by special contract with CMS, including the development of a special study devoted to overcoming barriers to transplantation (begun in 2004), hemodialysis delivered within the nursing home setting, and overcoming barriers to admission to dialysis facilities.

Medical Review Board: The Medical Review Board (MRB) is composed of 28 members, elected for three year terms of office including:

10 Renal Physicians 2 ESRD Nurses
2 Physicians At Large 1 Transplant Physician
1 Pediatric Renal Physician 2 ESRD Social Workers
2 ESRD Dietitians 2 ESRD Facility Administrators
4 ESRD Patients 2 ESRD Technicians

The Medical Review Board functions with the concurrence and subject to the review and control of the Board of Trustees. The President of the Board of Trustees serves in an ad hoc capacity. The MRB performs functions prescribed by the regulations issued by the Secretary of Health and Human Services, as well as other duties related to quality improvement, vocational rehabilitation, and patient concerns as requested by the Network Coordinating Council. The MRB met on March 23, August 31, and November 2.

Members of the MRB for 2005 were:

George Aronoff, M.D., Chairperson  Ashwini Sehgal, M.D., Vice Chairperson
Steve Adley, B.S.N.  Rajiv Agarwal, M.D.
Dianne Carter  Deepa Chand, M.D.
David Charney, MD  Paul Crawford, M.D.
Peter DeOreo, M.D.  John Ducker, M.D.
Lorraine Edmond  Andrew Finnegan, C.H.T.
Elisabeth Fry, R.D., L.D.  Pamela Kent, M.S., R.D.
Kathy Lord, M.S.W.  Stephen McMurray, M.D.
During 2005, the Medical Review Board:

- Continued the implementation of the CMS Fistula First: National Vascular Access Improvement Initiative. A special Vascular Access Advisory Panel (VAAP) continued to assist the MRB coordinate this project. The Network 9/10 Fistula First initiative included providing reports on fistula incidence and prevalence to the dialysis providers to serve as a benchmarking tool, dissemination of educational resources to dialysis facilities, placement of resources and educational materials on the Network Web site, and technical assistance to regional vascular access committees. The VAAP began development for future projects including working within the fellowship programs for both surgery and nephrology, working within the hospital setting, and cannulation training workshops and learning sessions.

- Reviewed and updated the CPM Plan. Outcomes were reviewed as data became available. QI activities/interventions were developed as necessary.

- Oversaw the distribution of the Facility Specific Lab Data Reports that included hemodialysis adequacy and anemia management. The facility reports detailed the fourth quarter 2004 data collection outcomes and were distributed to facility medical directors, administrators, and nurse managers. The facility reports were mailed to approximately 450 dialysis programs during December 2005. The facility feedback reports will continue with the 2005 4th quarter lab data collection with CMS approval.

- Oversaw the dissemination of a Facility Profile, which displays descriptive data from each facility, with comparisons of regional, state, Network and national statistics for those same areas. The data include demographic and diagnosis data, as well as Standardized Mortality Ratio (SMR) and gross mortality. These profiles are distributed annually to each facility to help them in their continuous quality improvement efforts.

- Oversaw the activities of the Pediatric Renal Group, a subcommittee of the Medical Review Board. The goal of the Group is to act as a resource to the Network on the care and treatment of pediatric dialysis and transplant patients. The Pediatric Renal Group met on May 25, and September 22 and 23. Subcommittee work was accomplished through conference calls during the year.

- Received continuous updates on the activities of CMS and the ESRD Network Scope of Work, the United States Renal Data System (USRDS), The Forum of ESRD Networks, and the Quality Assurance Committee of The Forum.
• Reviewed data profiles, including rates for clinical performance measures, mortality, home therapy, and transplantation.

• Reviewed grievances, patient complaints and facility concerns filed with the Network.

• Oversaw the implementation of the national CMS clinical performance measures project.

• Formulated a response to the CMS request for re-evaluation of outcomes data for patients received hemodialysis treatment within the nursing home setting.

• Oversaw the plan for MRB review of 2728 forms for GFR. The SIMS database was queried in March 2005 to identify dialysis facilities and physicians with greater than 10% incident patients during 2004 initiating dialysis with a GFR greater than 22.32/min/1.73m² in adults and 31.08/min/1.73m² in children. The result of the query showed 290 patients from 132 facilities identified, under the care of 115 different nephrologists. Documentation was requested from the physicians justifying the initiation of dialysis in these patients.

• Oversaw all quality improvement and education projects that were in the process of development.

• Developed project ideas for concept papers to submit to CMS.

**Patient Leadership Committee**: The purpose of the Patient Leadership Committee (PLC) is to identify and address ESRD patient needs and concerns through the development of educational projects and activities. The PLC met on April 15, August 5, and November 11, 2005.

Members of the Patient Leadership Committee during 2005:

- Teri Browne
- Tracee Bauer
- Diana Belton
- Audrey Chengelis
- Celia Chretien
- William "Dirk" Combs
- Helen Considine
- Lorraine Edmond
- Craig Fisher
- Barb Gronefeld
- Eric Gronefeld
- Karen Habercoss
- Sonia Juhasz
- Kathy Kirk-Franklin
- Evaret Lesser
- Lucille Nelson
- Ellen Newman
- Janet Schueller
- Fonda Setters
- Kristin Sheleek
- Martinlow Spaulding
- Fred Terman
- Guy Tibbles
- Lynn Winslow
During 2005, the PLC accomplished the following:

The **Pediatric Subcommittee** updated the information for an educational project entitled *Your Kidneys and You*. It is geared toward school age children to educate them about the kidney disease of their loved ones and to help them cope with chronic illness in their family.

The **Family Subcommittee** developed articles for the *Renal Outreach* on issues related to families and having a family member with kidney failure. This committee will also develop questions to use for couple-journaling which will then be shared in the *Renal Outreach* and the Network Web sites.

The **Special Projects Subcommittee** developed a monthly calendar for dialysis facilities titled *Conflict Management, A Leadership Perspective to Growth Through Problem Solving*. The committee also developed a brochure entitled *Ease the Ouch* that was directed to patients to take the fear out of AV fistula placement and articles that addressed vascular access for the patient newsletter.

The **Vocational Rehabilitation Subcommittee** developed a list of articles for Network newsletters which would encourage positive stories by facility staff to enable patients to be independent, work, volunteer and to be involved in modality choices. A resource, *Guidelines for Assessment and Referral to Vocational Rehabilitation for Patients Between the Ages of 18 –54*, was approved for inclusion in the Social Worker packet.

**3. CMS NATIONAL GOALS & NETWORK ACTIVITIES**

All ESRD Network organizations are responsible for the goals listed in the following section. Under each goal are the activities accomplished during 2005 toward meeting each goal:

**GOAL 1: Improving the quality of care of health care services and quality of life for ESRD beneficiaries, including assistance in resolving patient complaints and grievances.**

Improving quality of care for ESRD beneficiaries was accomplished through clinical initiatives developed and supervised by the Medical Review Board and implemented by the Quality Improvement Department of The Renal Network, Inc. These activities can be categorized in five main subject areas; each is described in the following section of this report:

A. The Clinical Performance Measures Project  
B. Network 9/10 CPM Interventions  
C. CMS National CPM Project  
D. Network Special Projects/Studies  
E. Focused Quality Assurance Activities  
F. Grievance Activities
A. The Clinical Performance Measures Project

The Clinical Performance Measures (CPM) Project contributes to a consistent clinical database to assess patient outcomes and support improvement activities at Network 9/10 and facilities. The fourth quarter 2005 lab data elements consisted of:

- Pre and post BUN to calculate URR for adequacy management of HD
- Reported Kt/V for adequacy management of HD
- Reported weekly CrCl and reported weekly Kt/V for adequacy management of PD
- Hemoglobin for anemia management
- Serum Albumin and lab method for nutrition management
- Transferrin Saturation for mineral metabolism management
- Ferritin for mineral metabolism management
- Phosphorus for mineral metabolism management
- Calcium for mineral metabolism management

In the fourth quarter of 2005 (October, November and December), approximately 91% of hemodialysis facilities and 78% of peritoneal dialysis facilities voluntarily participated in the lab data collection for Network 9/10.

The goals of the project were to:

(1) increase the knowledge and awareness of the CPM/Lab Data Collection Project to Network 9/10 ESRD providers,
(2) analyze the applicability of the data on facility and Network levels,
(3) implement improvement intervention programs on a Network-wide level, and,
(4) improve patient outcomes.

The Renal Network maintains a process to collect, analyze, and provide data feedback reports to facilities. In the fourth quarter of 2005, hemodialysis and peritoneal dialysis facilities were asked to voluntarily submit lab data via Excel spreadsheet. The data are being analyzed and ESRD Network 11 is preparing feedback reports. These feedback reports will be distributed in summer 2006 detailing the data collection outcomes. The reports will compare facility-specific outcomes to state and national outcomes. Aggregate information will be placed on the Network 9/10 Web site and the data will be reviewed by the MRB. The facility feedback reports will continue with the 2006 fourth quarter lab data collection, pending CMS approval.
B. Network 9/10 CPM Interventions.

The goals of the CPM interventions are to:

1. increase the knowledge of the CPM/Lab Data Collection Project to Network 9/10 ESRD providers,
2. standardize the data collection process
3. analyze the applicability of the data on the facility and network levels, and,
4. implement programs and projects that can be repeated on a facility and Network-wide level.

Interventions include facility specific data collection, feedback reports, and regional education workshops. The focus is on K/DOQI™ guidelines, facility outcome data, and facility plans for improvement. Feedback reports are specifically targeted to medical directors, administrators and nurse managers. Multi-color reports display data in tables and charts.

In 2005, Network 9/10 Clinical Performance Goals and resources for adequacy of dialysis, anemia management, and vascular access were available on the Network 9/10 Web site, www.therenalnetwork.org.

Adequacy of Dialysis Goals 2005 – Hemodialysis

All patients measured for adequacy every month.

- ≥ 95% of patient population achieve URR ≥65%
- ≥ 95% of patient population achieve Kt/V_{Daugirdas II} ≥1.2
Chart B.1. Percentage of HD Patients with Kt/V >= 1.2 by State and Network 9/10 for Selected Collection Periods

<table>
<thead>
<tr>
<th></th>
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<th>IN</th>
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<th>OH</th>
<th>Net 9/10</th>
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<tbody>
<tr>
<td>4Q96</td>
<td>66%</td>
<td>76%</td>
<td>64%</td>
<td>71%</td>
<td>70%</td>
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<tr>
<td>4Q98</td>
<td>78%</td>
<td>86%</td>
<td>78%</td>
<td>84%</td>
<td>82%</td>
</tr>
<tr>
<td>4Q00</td>
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<td>89%</td>
<td>86%</td>
<td>87%</td>
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<td>92%</td>
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<td>92%</td>
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</tr>
</tbody>
</table>

Chart B.2. Percentage of HD Patients with URR >= 65% by State and Network 9/10 for Selected Collection Periods

<table>
<thead>
<tr>
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<th>Net 9/10</th>
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<tr>
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<td>73%</td>
<td>61%</td>
<td>68%</td>
<td>66%</td>
</tr>
<tr>
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<td>85%</td>
<td>88%</td>
<td>87%</td>
<td>86%</td>
<td>86%</td>
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<td>88%</td>
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<td>89%</td>
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<td>88%</td>
<td>91%</td>
<td>87%</td>
<td>88%</td>
<td>88%</td>
</tr>
</tbody>
</table>
**Adequacy of Dialysis Goals 2005 - Peritoneal Dialysis**

All patients measured for adequacy every four months.

CAPD ≥ 85% of patient population achieve weekly creatinine clearance ≥ 60 L/bsa or weekly Kt/V ≥2.0

CCPD ≥ 85% of patient population achieve weekly creatinine clearance ≥ 63 L/bsa or weekly Kt/V ≥2.1

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**Chart B.3. Percentage of PD Patients with Reported Kt/V ≥ 2.0**

by State and Network 9/10 for Selected Collection Periods

<table>
<thead>
<tr>
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<td>72%</td>
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<td>79%</td>
<td>69%</td>
<td>76%</td>
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</tr>
<tr>
<td>O-D04</td>
<td>73%</td>
<td>77%</td>
<td>75%</td>
<td>75%</td>
<td>74%</td>
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<td>67%</td>
<td>76%</td>
<td>74%</td>
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**Chart B.4. Percentage of PD Patients with reported CrCl ≥ 60 L/wk**

by State and Network 9/10 for Selected Collection Periods

<table>
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<th>OH</th>
<th>Net 9/10</th>
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<td>72%</td>
<td>65%</td>
<td>69%</td>
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<tr>
<td>S-D01</td>
<td>69%</td>
<td>69%</td>
<td>76%</td>
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<td>69%</td>
</tr>
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<td>66%</td>
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<tr>
<td>O-D04</td>
<td>67%</td>
<td>69%</td>
<td>73%</td>
<td>69%</td>
<td>69%</td>
</tr>
<tr>
<td>O-D05</td>
<td>63%</td>
<td>70%</td>
<td>71%</td>
<td>67%</td>
<td>67%</td>
</tr>
</tbody>
</table>
Anemia Management Goals 2005 - Hemodialysis & Peritoneal Dialysis
All patients measured every month of PD clinic visit.
≥ 85% of patient population achieve hemoglobin ≥11 gm/dL

Chart B.5. Percentage of HD Patients with HGB >= 11 gm/dL by State and Network 9/10 for Selected Collection Periods

<table>
<thead>
<tr>
<th>State</th>
<th>4Q98 %</th>
<th>4Q00 %</th>
<th>4Q02 %</th>
<th>4Q04 %</th>
<th>4Q05 %</th>
<th>Net 9/10 %</th>
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<td>OH</td>
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<td>70</td>
<td>77</td>
<td>83</td>
<td>83</td>
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</tr>
<tr>
<td>Net 9/10</td>
<td>58%</td>
<td>72%</td>
<td>79%</td>
<td>83%</td>
<td>82%</td>
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</table>

Chart B.6. Percentage of PD Patients with HGB >= 11 gm/dL by State and Network 9/10 for Selected Collection Periods

<table>
<thead>
<tr>
<th>State</th>
<th>S-D 99 %</th>
<th>S-D 01 %</th>
<th>S-D 02 %</th>
<th>O-D 04 %</th>
<th>O-D 05 %</th>
<th>Net 9/10 %</th>
</tr>
</thead>
<tbody>
<tr>
<td>IL</td>
<td>65</td>
<td>71</td>
<td>76</td>
<td>77</td>
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<td>71</td>
<td>74</td>
<td>79</td>
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</tr>
<tr>
<td>Net 9/10</td>
<td>68%</td>
<td>73%</td>
<td>76%</td>
<td>79%</td>
<td>77%</td>
<td></td>
</tr>
</tbody>
</table>
**Albumin Goals 2005 – Hemodialysis & Peritoneal Dialysis**

Albumins will be measured monthly on all hemodialysis and peritoneal dialysis patients.

---

**Chart B.7. Percentage of HD Patients with Average Albumin >= 3.5 gm/dL by State and Network for Selected Collection Periods**

<table>
<thead>
<tr>
<th></th>
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<th>KY</th>
<th>OH</th>
<th>Net 9/10</th>
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<td>82%</td>
<td>81%</td>
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<tr>
<td>4Q98</td>
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<tr>
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<td>81%</td>
<td>78%</td>
<td>75%</td>
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</tbody>
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**Chart B.8. Percentage of PD Patients with Average Albumin >= 3.5 gm/dL by State and Network 9/10 for Selected Collection Periods**

<table>
<thead>
<tr>
<th></th>
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<th>Net 9/10</th>
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<td>56%</td>
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<tr>
<td>O-D05</td>
<td>55%</td>
<td>57%</td>
<td>56%</td>
<td>57%</td>
<td>56%</td>
</tr>
</tbody>
</table>
Hemodialysis Vascular Access Goals 2005

- ≥ 40% prevalent patient population fistula rate
- ≤ 10% prevalent patient population catheter rate

Chart B.9. Network 9
Prevalent Vascular Access Rates
Selected Collection Periods

Chart B.10. Network 10
Prevalent Vascular Access Rates
Selected Collection Periods
C. CMS National CPM Project.

All 18 Networks participated in the national Clinical Performance Measures (CPM) project. Random samples of hemodialysis and peritoneal dialysis patients were drawn. The hemodialysis sample had sufficient size to be representative of each Network. The peritoneal dialysis sample size was used for national rates only.

On the following pages, Chart C.1 shows the national comparison of Network 9 and Network 10 rankings for clinical outcomes to the other 16 networks for the past four years. Chart C.2 shows the Network 9 and Network 10 random samples for the CMS National CPM Project. Data reliability of the national sample was conducted on five percent of the random sample. Network 9/10 staff abstracted patient charts for this process.

| Chart C.1. Network 9/10 National Ranking for 4Q01-4Q04 Data for Adult (≥18 years) In-center Hemodialysis Patients |
|---|---|---|---|---|---|---|---|
| Clinical Characteristic | Network 9 | Network 10 |
| | 4Q01 | 4Q02 | 4Q03 | 4Q04 | 4Q01 | 4Q02 | 4Q03 | 4Q04 |
| Percentage Patients with Average: |  |  |  |  |  |  |  |  |
| URR ≥ 65% | 5 | 12 | 7 | 1 | 13 | 5 | 6 | 5 |
| Kt/V ≥ 1.2 | 5 | 8 | 6 | 1 | 10 | 12 | 10 | 8 |
| Percentage Prevalent Patients: |  |  |  |  |  |  |  |  |
| AV Fistula | 13 | 12 | 13 | 11 | 8 | 10 | 7 | 11 |
| Catheter (low rate) | 17 | 18 | 17 | 16 | 9 | 12 | 15 | 16 |
| Albumin ≥ 3.5 gm/dL | 10 | 17 | 15 | 11 | 3 | 2 | 6 | 7 |
| Albumin ≥ 4.0 gm/dL | 16 | 15 | 6 | 9 | 7 | 1 | 1 | 8 |
| Hgb ≥ 11 gm/dL | 16 | 14 | 9 | 10 | 8 | 1 | 1 | 10 |
| Ferritin ≥ 100 ng/mL | 1 | 1 | 8 | 1 | 3 | 3 | 4 | 3 |
| TSAT ≥ 20% | 14 | 14 | 17 | 8 | 7 | 8 | 5 | 12 |
| % patients receiving EPO with HGB value 11-12 gm/dL | 18 | 16 | 17 | 18 | 16 | 18 | 11 | 11 |
| % patients prescribed IV Iron | 1 | 1 | 2 | 3 | 3 | 8 | 10 | 4 |
| % patients prescribed EPO SC | 1 | 7 | 4 | 9 | 7 | 4 | 10 | 7 |
Charts C.3 - C.6 compare and rank the 18 Networks and the U.S. in regards to several quality indicators that were collected during the 2005 National CPM project.
Chart C.3. Percent of adult in-center hemodialysis patients receiving dialysis with a mean spKt/V $\geq 1.2$
By Network, October-December 2004
2005 ESRD CPM Project.

Chart C.4. Percent of adult in-center hemodialysis patients with mean hemoglobin $\geq 11$ g/dL.
By Network, October-December 2004
2005 ESRD CPM Project.
Chart C.5. Percent of adult in-center hemodialysis patients with mean serum albumin $\geq 4.0/3.7$ (BCG/BCP) By Network, October-December 2004
2005 ESRD CPM Project.

Chart C.6. Percent of prevalent patients with AV Fistula By Network, October-December 2004
2005 ESRD CPM Project.
D. Network special Projects/Studies


The development of Quality Improvement Projects (QIP) is mandated in the Network 9/10 contract with CMS. The QIPs are developed and directed by the Medical Review Board (MRB). In 2005, the majority of quality improvement efforts were focused on continuing the Fistula First Initiative.

**Background:** In 2003 the ESRD Networks and CMS, along with clinicians, dialysis providers, and patients, developed a three-year plan called the National Vascular Access Improvement Initiative (renamed Fistula First in 2004). This plan implements strategies for the improvement of patient vascular access outcomes to reach the CPM and K/DOQI guidelines for AVF use of 50% incidence and 40% prevalence.

Fistula First aims to build on prior work and to take advantage of system-level diagnosis and strategies for improvement. Collaboration between Networks, providers, physicians, vascular surgeons, and health professionals is key to spread the change ideas for improving AV fistulas.

**Primary objectives:**
- To increase prevalence rate of AVF in Network 9 from 30.3 percent in 2002 to 34.3 percent in 2006 (an increase of four percent) and increase Network 10 from 33.3 percent in 2002 to 37.3 percent in 2006 (an increase of four percent).
- To increase the incidence rate of new ESRD patient AVF, i.e. increase five percent per year.
- Educate providers, physicians, and vascular access surgeons on documentation of AVF assessment pre hemodialysis access placement
- Educate providers, physicians, and vascular access surgeons on the AVF improvement strategy

During 2005, the Networks achieved its initial prevalence goals, as follows:

<table>
<thead>
<tr>
<th>Chart D.1. Network 9/10: Fistula First Percentages As of December 2005</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fistula Incidence (used)</td>
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<td>Fistula Prevalence (used)</td>
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**Actions.** Network 9/10 participated on all Fistula First Breakthrough Initiatives at the national, regional and local level. Nationally, Network 9/10 participated on conference calls on June 17, September 16, and December 9, 2005. Additionally the Quality Improvement staff members were active participants on the Quality Measures and Reporting Workgroup of the Fistula First Breakthrough Initiative, as well as the ESRD Network Fistula First conference calls (April 28, August 18, and November 17, 2005) and the ESRD Network Surgeon data conference call (October 24, 2005).
Regionally, at the Network level, the goals were achieved through the following activities:

**Vascular Access Advisory Panel.** A panel of experts oversees the Fistula First Initiatives, under the direction of the MRB. This Vascular Access Advisory Panel (VAAP) was organized at the beginning of the Fistula First Initiative in 2004. The VAAP continued its activities during 2005. Members of the panel include:

Peter DeOreo, M.D., Chair, Centers for Dialysis Care, Cleveland, Ohio
Anil Agarwal, M.D., Ohio State University, Columbus, Ohio
George Aronoff, M.D., University of Louisville, Louisville, Kentucky
Michael Brier, Ph.D., University of Louisville, Louisville, Kentucky
Luis Cespedes, M.D., RCG-Villa Park, Elmhurst, Illinois
Deepa Chand, M.D., Cleveland Clinic Pediatric Nephrology, Cleveland, Ohio
Wendy Jagusch, R.N., Centers for Dialysis Care, Cleveland, Ohio
Peter Ivanovich, M.D., Northwestern University, Chicago, Illinois
Richard Keen, M.D., Rush University, Chicago, Illinois
Joseph Leventhal, M.D., Northwestern Memorial, Chicago, IL
Gordon McLennan, M.D., Indiana University Medical Center, Indianapolis, Indiana
Jackie Miller, R.N., Renal Care Group, Fort Wayne, Indiana
Rino Munda, M.D., University of Cincinnati, Cincinnati, Ohio
Tim Pfleiderer, M.D., Renal Care Associates, Peoria, Illinois
Prabir Roy-Chaudhury, M.D., University of Cincinnati, Cincinnati, Ohio
Mary Showers, R.N., VA Medical Center, Cleveland, Ohio
Greg Stephens, M.D., The Christ Hospital, Cincinnati, Ohio
Jay B. Wish, M.D., University Hospitals of Cleveland, Cleveland, Ohio

The VAAP is charged with developing and implementing strategies to achieve Fistula First goals, under the direction of the MRB. The VAAP met three times during 2005, in March, August and November. Conference calls were scheduled during interim times to continue the work of this advisory body. Reports of VAAP activities were made continuously to the MRB.

**Data Distribution.** Fistula First Facility Specific Reports were sent in September 2005 (first and second quarter 2005), December 2005 (third quarter 2005), March 2006 (fourth quarter 2005). Through this report, facilities with poor outcomes can be targeted for intervention. Facilities with good outcomes are tapped for positive intervention (see Quality Improvement IQC plan).

**Communications.** Stakeholders were identified as the facility medical director, administrator, vascular access coordinators, and nephrologists, as well as patients, vascular access surgeons, and interventional radiologists. A database was constructed to enable ongoing communications with these audiences. WebX sessions were conducted with members of the leadership of the Large Dialysis Organizations to inform them of Fistula First goals, and progress toward meeting those goals.

**Education.** A series of Learning Sessions, begun in November 2004, concluded in early 2005. The Learning Sessions were conducted in geographic areas where improvements were needed. The sessions took a more comprehensive and discipline-
specific format. The session for nurses and facility staff focused on developing a “Master Cannulator” program in the dialysis facility. The cannulation session was interactive, designed to assist facilities in finding solutions to barriers.

The physician session presented innovative ideas in vascular surgery and highlighted regional best practices to promote processes demonstrating improvements in a facility or a group AV fistula rate. Year-two Learning Sessions were held in Indianapolis, Indiana on January 19, Cincinnati, Ohio on February 3, and Columbus, Ohio on March 22, 2005.

At the conclusion of these Learning Sessions, follow-up was done with participants. The Learning Sessions had featured an Idea Garden for the nurse participants, a brainstorming session on ways to overcome barriers to fistula placement. These ideas were collated into a resource which was sent to all Learning Session participants in June 2005.

Through targeting specific regions for Learning Sessions, Leadership Groups were developed to continue the work begun by the local experts. Cincinnati was the first Learning Session and is the most advanced with local meetings held to discuss commonalities and data collection. Network 9/10 is assisting at present to develop facility, nephrologist, and surgeon specific reports for the Cincinnati area. Indianapolis was the second regional area that has developed a leadership group that has been active in developing policies and procedures for use by dialysis facilities, hospital acute units, surgeons, and case managers. The Indianapolis area is also in the process of designing an education program focusing on cannulating fistulas and using the buttonhole technique.

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<tr>
<td>Indianapolis, IN, Jan 19, 2005</td>
<td>A,B,C,D, E,M,N,O, S,T</td>
<td>65 Nurse/staff</td>
<td>21 Nurse/staff 20 Physicians</td>
<td>10 21</td>
<td>7 3</td>
<td>2 N,O</td>
<td>8 A,B,C,N, M,O,W,Z</td>
<td>79%</td>
<td>79%</td>
<td>88%</td>
<td>80%</td>
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<tr>
<td>Cincinnati, OH, Feb. 3, 2005</td>
<td>A,B,C,D,O</td>
<td>115 Nurse/staff</td>
<td>53 Nurse/staff 20 Physicians</td>
<td>13 53</td>
<td>7 0</td>
<td>5 A,B,C,D G</td>
<td>7 A,B,C,D, N,O,U</td>
<td>87%</td>
<td>91%</td>
<td>89%</td>
<td>87%</td>
<td></td>
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<tr>
<td>Columbus, OH, Mar. 22, 2005</td>
<td>C,D,E,F,G, H,I,J,K,L</td>
<td>80 Nurse/staff</td>
<td>46 Nurse/staff 13 Physicians</td>
<td>13 46</td>
<td>3 0</td>
<td>6 B,D,E, G,IJ</td>
<td>9 D,E,F,G, H,J,K,M</td>
<td>N/A</td>
<td>N/A</td>
<td>90%</td>
<td>96%</td>
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<tr>
<td>Totals</td>
<td>319</td>
<td>159 Nurse/staff 72 Physicians</td>
<td>51 159</td>
<td>21 3</td>
<td>14 21</td>
<td>82%</td>
<td>82%</td>
<td>88%</td>
<td>86%</td>
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Communications & Shared Resources: To promote Fistula First goals continuously, educational resources have been developed which can be easily shared. The Vascular Access DVD/CD developed through the University of Oklahoma was provided to all surgeons in the Network area. Surgeon-specific claims data was provided to all surgeons, along with a surgeon survey. A Fistula First page was developed for the Network Web site to allow new materials to be added expeditiously. The Fistula First Educational Campaign by direct mail continued quarterly, sending resources and educational materials to nurse managers in June, October, and December 2005. A Fistula First Newsletter was introduced in December 2005; copies were provided to all dialysis facilities. The newsletter was also posted to the Fistula First page on the Network Web site.

The Network has acted as a community outreach partner by providing information on Fistula First through presentations to state surveyor groups, kidney patient organizations and quality improvement organizations. Representatives of the QIOs attended a VAAP meeting in 2005 to orient them to the Fistula First initiative and to discuss with them ways of collaborating.

Data Review. Chart D.3 through Chart D.5 display the percentages of prevalent and incident hemodialysis patients with fistulas in Network 9 and Network 10.
**Fistula First Quality Award**: In 2005 The Renal Network established an award designed to recognize leaders of the Fistula First Initiative. Award criteria were developed using the CMS “11 Change Concepts,” K-DOQI Guidelines, and the IHI “How to Improve” information. Detailed applications were submitted by 21 separate organizations; eight were chosen for the first award. Each winning applicant submitted a program overview and supporting data with narratives. Members of the VAAP reviewed each application. Representatives of these eight programs agreed to act as mentors to facilities seeking resources to improve their fistula percentages. The following recipients of the first annual Fistula First Quality Award were chosen.
FMC-Akron Area/Akron Canton Kidney Center, Uniontown, Ohio: This facility began by creating a formal multi-disciplinary vascular access team, which included nephrology, vascular surgery, interventional radiology, and nursing, with the nephrologist as leader.

- Monthly access team meetings were held.
- A vascular access database was created.
- A tracking form was developed to communicate all interventions.
- A vascular access coordinator was hired to coordinate all vascular access related issues.
- Vascular access was an integral part of the quality improvement program.
- Formal surveillance and treatment procedures were developed.
- A database was created for each patient to track the vascular access data. Findings are presented twice yearly to their renal community.
- Surgeon specific data and radiology data were tracked and presented to the surgeons at conferences with emphasis placed on areas to improve outcomes.

University of Chicago Hospitals, Chicago, Illinois: Taking a team approach, the dialysis patient population was positively impacted in the areas of access care and preservation. Goals included improving communication among disciplines, providing a full range of surgical approaches, monitoring and maintenance of existing AVFs, early CKD interventions, and using outcomes to guide practice.

- A vascular access team was created including nephrologists, interventional radiologists, surgeons, renal fellows, and key members of the clinical dialysis staff.
- Monthly meetings were initiated with the intent to facilitate discussion between caregivers about specific access cases, facilitate referrals, provide education and heighten awareness of the importance of access in the care of the ESRD patient.
- Access numbers were tracked and reviewed on a monthly basis. A database for tracking accesses and education of staff was created.
- A protocol to address access issues was developed. A goal was identified to increase the number of prevalent patients with AVF while decreasing the number of central venous catheter patients.

RCG-Northwestern, Chicago, Illinois: This program utilizes a multidisciplinary approach including an access team. This involves monthly meetings of nephrologists, interventional radiologists, surgeons, the access surgeon assistant, and an access coordinator.

- Patient education was completed by the access coordinator and nephrologist prior to the initiation of dialysis.
- Early referral, or within 30 days of admission to clinic, to evaluate the patient for the permanent access was an established goal.
- All staff performed routine daily physical exam of access.
- Staff education was done to maintain and update their knowledge of practice.
- An Access Coordinator responsible for coordinating, implementing, and overseeing the vascular access program was hired.
- Monthly CQI meetings reviewed venograms, fistulagrams, and planned interventions.
Surgical practice focused on integrating and revising problematic fistula maturation and use.

**Fox Valley-Tri Cities Dialysis, Aurora, Illinois:** Under the guidance of the medical director, a team devoted to the Fistula First concept and the K-DOQI guidelines, gained improvement in fistula placement and survival. The team consisted of nurse managers, dialysis staff, a nurse educator, and surgeons. The Fistula First tools and resources from CMS and Network 9/10 were utilized. The facility encouraged its surgeons to attend the Fistula First Learning Session in Chicago, Illinois. An emphasis was placed on educating all staff and members of the access care team regarding cannulation, graft to fistula conversion, and monitoring studies. An outline was designed, and followed, stating the goals for their project.

- Monthly meetings to discuss and plan patient access were held.
- The “button-hole” technique was initiated through staff and patient education.
- Staff education was done focusing on cannulation techniques.
- The team focused on individual surgeon’s needs and the dialysis patient needs.
- Master Cannulators were chosen and developed.
- Patient education was done regarding access types and care.
- Monthly access monitoring and adequacy was incorporated into their quality improvement program.
- Policies were developed for new AVFs with documentation tools.

**Cincinnati Veterans Administration Medical Center, Cincinnati, Ohio:** This team was dedicated to meeting and exceeding the K-DOQI and Fistula First guidelines. A vascular access coordinator position was created, joining the existing team which consisted of nephrologists, surgeons, and nursing staff.

- Regular transonics and blood flow monitoring were done.
- Consistent standards of care were written and followed.
- AV fistulas were placed in patients prior to initiation of hemodialysis.
- Consistent CKD program tracking was done.
- Continuing staff education on vascular access principles and practice was completed.
- Evidence based practice incorporating the “11 Change Concepts” was realized.
- Monitored individual surgeon access rates.

**Renal Intervention Center & RCG of Central Illinois, Peoria Heights, Illinois:** This group consists of 11 facilities. The medical director serves as liaison between physician practice and dialysis units to facilitate communication, protocol development, and implementation. One physician group performs the vast majority of dialysis access surgery and endovascular procedures. Team members have implemented a comprehensive program to educate staff and patients thus increasing native AV Fistula use in the dialysis patient population. A centrally located center provides dialysis access surgery and endovascular procedures.
Dialysis facility managers review patient access on a monthly basis.
Dialysis staff monitor fistulas for maturation, cannulation readiness, and provide ongoing patient education.
CQI efforts are reviewed within the access team.
The medical director reviews the collection and review of quality data.
The vascular access coordinator serves as a liaison between nephrology, surgery, the intervention center, and the dialysis facility to coordinate access care procedures and acts as the program expert.
Cannulation training is ongoing.
All peritoneal dialysis patients have an AV Fistula placed.
Early patient referral for access and surgeon specific data is in use and reviewed quarterly.
Surgeons utilize a full range of operative techniques for access placement and preservation including graft to fistula conversion.
All accesses are tracked and monitored regularly.
Monthly fistula and catheter data are reviewed monthly and shared with each team member and facility.

**RCG-Prairie/Loop/Garfield, Chicago, Illinois:** The program designated a single nephrologist as program director. A dialysis nurse was chosen as access cannulation expert, and a single surgeon was chosen to perform most access surgeries. These three individuals formed the team; all agreed with the principle of Fistula First, and proceeded to activate a plan to reduce the access thrombosis rate.

- Pre-op vein mapping was done on all patients.
- Transposition of deep veins was identified by vein mapping.
- New surgical techniques were utilized.
- Early intervention was a goal to prevent catheter placement or reduce catheter time.
- Peritoneal dialysis was considered rather than graft placement when AV fistulas failed.
- Data were compiled for analysis and tracking.
- Cannulation training for staff was ongoing.
- Expert cannulators were designated.
- Monthly access assessment was done through recirculation studies and transonics with data tracking and follow-up.

**Olney Dialysis Center, Olney, Illinois:** A vascular access management program was designed utilizing a multi-disciplinary team including nephrology, surgery, interventional radiology, vascular access coordinator, nephrology clinical coordinator, and director of nephrology. The facility staff was included in the project. Access improvement was identified as a CQI project and analyzed at monthly meetings. A letter was sent to the medical community explaining the Vascular Access National Quality Initiative.

- Vein mapping is required on all patients anticipating vascular access.
- Early referral to the nephrologist and surgeon has become a standard practice for CKD patients.
Surgeons were educated through The Renal Network by attending regional learning sessions.

Patient education stressing permanent access was completed.

Master Cannulators were identified and utilized.

New and unconventional surgical methods have been used, including vein transpositions.

Monitoring of accesses has led to early correction of access complications.

**CKD Coalition:** To promote the goals of Fistula First in the pre-ESRD community, the Network began seeking partnerships with other healthcare and quality improvement organizations to reach primary physicians, internists, and nephrologists and the hospital community. Members of the four quality improvement organizations working within the Network 9/10 boundaries attended orientation sessions to learn of the Fistula First Initiative and the Network 9/10 plan for implementation. These organizations, Ohio KePro, the Illinois Foundation for Quality Healthcare and Health Care Excel, work under CMS contract to improve quality within the hospital, physician office and outpatient center settings.

From this alliance the concept of a coalition to address chronic kidney disease (CKD) was developed. The Network and the QIOs invited representatives from organizations with an interest in CKD to collaborate on initiatives to educate on interventions to prevent or slow the progression of kidney disease. The resulting effort was the formation of the Midwest CKD Coalition. Details on the Coalition’s activities can be found in “Goal 2: Partnerships.”

2. **Quality Improvement Projects - Phosphorus Management Project.**

A Phosphorus Management education quality improvement project has been designed in Network 9/10. The purpose of this voluntary quality improvement project is to address obstacles to compliance with phosphorus control therapy through a combined dialysis facility staff and patient education program. This program will support the K/DOQI phosphorus guidelines, and is intended to minimize the amount of time required to integrate phosphorus management into dialysis facility practice.

The primary goal of this project is to utilize a rigorous education program for dialysis facility staff and patients with the intent to improve phosphorus management. The secondary goal of this project is to promote the use of guidelines for the management of phosphorus and to encourage communication of compliance-enhancing strategies to patients through an education program for the dialysis facility staff (physicians, dietitians, technicians, and nurses).

Specific learning objectives include increased awareness of the benefits of aggressive phosphorus management, increased use of learning materials with patients to promote compliance with phosphorus management regimen, and increased communication of compliance-enhancing strategies to patients.
The project was finalized and approved by the MRB, the BOT, and CMS; it met all requirements for IRB approval by Metro Health in Cleveland, Ohio. Two facilities within the Network agreed to participate, one from South Bend, Indiana and one from Cleveland, Ohio. The educational QIP was conducted in the Cleveland facility May through August and in the South Bend facility June through September. The activities in both facilities included:

- K/DOQI de-identified lab review utilizing staff renal dietitian.
- Dialysis facility staff in-service on education program to improve patient compliance.
- Assessment of facility dialysis staff phosphorus management knowledge through quiz on phosphorus.
- Placing posters in the dialysis unit to announce the education program/patient phosphorus contest.
- A questionnaire to identify and assess specific barriers to compliance experienced by the patient in regards to phosphorus management.
- Patient education consisting of: an initial assessment with quiz on phosphorus and a brief phosphorus review.
- Items to patients including a diet handout, binder reminder information sheet listing the current binder and dosage, and a pill box for the meds.

Monthly serum phosphorus, calcium, and PTH (if available) levels of patients were reported electronically to Network 9/10 during the project period. The patient lab information was de-identified and placed in a database for analysis. Labs were collected from the Cleveland facility from May through November and from the South Bend facility from June through December, capturing post education outcomes. Data from both facilities was sent to Ash Sehgal, MD in Cleveland; analysis was ongoing at year-end.

3. Dialysis Facility-Specific Kidney Transplant Referral Measures Project.

Work on this project began in 2004 under the direction of Dr. Ashwini Sehgal of MetroHealth Medical Center/Case Western Reserve University in Cleveland, Ohio. Through use of a technical expert panel (TEP), the processes leading to referral to transplant were examined.

TEP members included:

- Teri Arthur, MSW, LSW, University of Chicago
- Francis Delmonico, MD, Harvard University - Massachusetts General Hospital
- Jens Goebel, MD, Cincinnati Children’s Hospital Medical Center
- Richard Goldman, MD, Chair, RPA Quality Safety & Accountability Committee
- Bonita Balkcom Guilford, Consumer Member
- Lawrence G. Hunsicker, MD, University of Iowa Health Care
- Mysore S. Anil Kumar, MD, Drexel University College of Medicine
- J. Michael Lazarus, MD, Fresenius Medical Care North America
- Keith Mentz, Nephrology, Inc.
- Kim E. Phillips, MSN, RN, CCTC, U. of Utah Solid Organ Transplant Services
- Kris Robinson, American Association of Kidney Patients
- Marlon Yu, RN, Southern California Permanente Medical Group
- Erick B. Edwards, Ph.D., United Network for Organ Sharing
The panel met in October 2004, and February and April 2005. The TEP made recommendations on the development of clinical performance measures to track outcomes in referral to transplant at the dialysis facility level. Twice during the TEP process, recommendations were posted for public comment. The TEP members included this public input in their deliberations. A final report was submitted to CMS on June 30, 2005. The report recommended that the Barriers to Transplant project should be extended as a second phase to allow pilot testing of the draft CPMs recommended by the TEP.


Based on intense interest in the delivery of hemodialysis treatment within the nursing home setting, CMS funded a special project to examine current practices and make recommendations on a model for this form of treatment. During 2005, the Network worked with CMS to identify experts for a technical expert panel, conducted a literature search, surveyed other Networks, and scheduled a TEP meeting for January of 2006 in Baltimore.

TEP members included:

Susan Cronin, RN, Dialysis Consultant, ANNA, Elkhorn, Wisconsin
Marlene Demers, Nurse Consultant, CMS Region 1, Boston, Massachusetts
Marilyn Duncan, RN, Fresenius Medical Care, Westchester, Illinois
Kathy Hybarger, RN, QIO, Health Care Excel, Terre Haute, Indiana
Stephen Korbet, MD, Circle Medical Management, Chicago, Illinois
Veronica Marotta, Illinois Department of Public Health, Bellwood, Illinois
Cecilia Meehan, DaVita, Rocky Hill, Connecticut
Maureen Michael, NRAA, Orlando, Florida
Gail Palmeri, Massachusetts Department of Public Health, Boston, Massachusetts
Lana Price, Chronic Care Policy Group, CMS, Baltimore, Maryland
Joan Rogers, Nursing Home Administrator, Independent Dialysis, Baltimore, Maryland
Anita Rowan, RN, Hemodialysis Patient, Zion, Illinois

5. Special Study – Barriers to Admission.

Networks increasingly have been called upon to help with placement of “difficult” patients. Behavior and high levels of acuity are two reasons frequently given for denial. CMS funded a special project to examine current practices and make recommendations on a model to alleviate these difficulties for patients seeking to change dialysis units. During 2005, the Network worked with CMS to identify experts for a technical expert panel, conducted a literature search, surveyed other Networks, and scheduled a TEP meeting for February of 2006 in Baltimore.
E. Focused Quality Assurance Activities - Cooperative Activities with Other Agencies

1. Kidney Economics Cost Center (KECC).

Network 9/10 distributed the 2005 Dialysis Facility Reports for the KECC in August 2005 to facility medical directors and administrators. The reports included standardized mortality ratios (SMR), standardized total admission ratios (STAR), and standardized transplant ratio (STR) for Medicare-only patients for 2001-2004.

2. Network Connections Newsletter.

Network 9/10 continued to distribute a quarterly publication, *Network Connections*, to state surveyors and Quality Improvement Organization personnel in 2005. Topics include data regarding complaints and grievances, news about Network activities, special projects and timely topics. Three issues were distributed during 2005; the newsletter is available through the Network Web site, as well.

3. Outreach.

Network staff presented to various state survey organizations throughout the year. The Quality Improvement Director presented to members of the Ohio Department of Health on August 9 on the topic of Fistula First. The Executive Director and the Quality Improvement Director co-presented on “Exploring the Survey Process for the ESRD Facility” for the Kentucky Cabinet for Public Health on November 30. Members of the state survey teams attended the 2005 Nephrology Conference, and members of the state survey team are participating on the Midwest CKD Coalition.

F. Grievance Activities

1. 2005 Investigations. Investigations performed independently of a grievance are described in Section 4. Recommended Sanctions.

2. 2005 Formal Grievances. The Network used a variety of formats to make information available to the dialysis community to help resolve patient grievances and complaints. Specific activities include the following:

- Network staff members routinely handle many requests for assistance directly from patients and their families, as well as facility staff members. These requests involve supplying information from various sources available from the Network, such as location of dialysis centers, help with transient dialysis, location of isolation stations, and specific federal regulations. The Network provides assistance to facilities to avoid discharging patients involuntarily, to develop effective behavioral agreements, and works with patients and facilities to resolve issues before they become grievances. In some instances, the Network acted as a go-between, making an initial contact for an individual who is seeking assistance. The staff has worked directly with patients to develop effective strategies for the patients to use when communicating with their dialysis facility staff. Staff also suggest alternative approaches to address concerns. These contacts are tracked by the SIMS information system.
The Network participated in the roll-out of the Decreasing Patient-Provider Conflict program which was developed through The Forum of ESRD Networks. The DPC Toolbox was distributed to nurse managers and training sessions were scheduled at sites throughout the four-state area.

*Alternative Solutions*, a brochure offering alternative methods to deal with difficult situations within the dialysis unit, was written and published. It was distributed to nurse managers and social workers, and posted to the Network Web site. The goal of the brochure is to decrease the number of involuntary discharges for patients due to behavioral issues.

A Leadership Perspective to Growth Through Problem-Solving was the topic of the 2005 Calendar which lists helpful information and resources on this topic in a calendar format which can be displayed in the dialysis facility setting.

An updated grievance packet was posted to the Network Web site and included in the Social Worker Packet which is distributed to new social workers in the dialysis unit.

On request, the Director of Patient Services provided in-service training to social workers in small group settings. Topics include writing behavioral contracts, professional boundaries, and creative problem solving for dealing with difficult patients.

The complaints are reported through the CMS quarterly report format as investigations or grievances. Investigations are the result of complaints brought to the attention of the Network through a variety of means. Grievances are formal, written complaints filed by patients or their representatives, or by facility staff members. A special subcommittee of the Medical Review Board is designated to review grievances.

Network staff tries to intervene as soon as a complaint is received to resolve problems before they escalate into a formal grievance situation. Often, the Network staff member acts as a mediator between the dialysis facility and the patient to objectively work out problems. During 2005, Network staff members were called upon to intervene in 116 patient complaints and 207 facility concerns. Of these issues, only three proceeded to the formal grievance phase. This is detailed in Chart F-1.

In 2005, three grievances were filed by patients or their family members. In many instances, one grievance will include several of the complaint categories listed: discharge/transfer, staff related, treatment/quality of care, transient, other.

Through the MRB, The Network analyzes facility-specific grievance data to identify patterns of concerns at the facility of Network level. No specific patterns were detected in the 2005 grievance data, either by facility or LDO affiliation. Top complaints were in the following areas: staff-related, treatment/quality of care, and transfer/discharge.
### 2005 Grievances, Patient Complaints and Facility Concerns

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<tr>
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<th>Number of Calls</th>
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<td>Grievances</td>
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<tr>
<td>Pt. Complaints</td>
<td>116</td>
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<tr>
<td>Facility Concerns</td>
<td>207</td>
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The Renal Network, Inc.
2005 Annual Report – ESRD Network 9/10
GOAL 2: Establishing and improving partnerships and cooperative activities among and between the ESRD Networks, QIOs, state survey agencies, and ESRD facilities/providers, ESRD facility owners, professional groups, and patient organizations.

During 2005, the Network maintained ongoing cooperative relationships with a wide variety of organizations within the renal and Medicare communities.

A. Professional Affiliations.

1. Midwest CKD Coalition.

During 2005, with the help of the CMS Building Partnerships Initiative, The Renal Network began its first project in development of a coalition. The purpose of this coalition was to address common concerns for kidney patients through working with a diverse array of agencies and organizations, all with an interest in kidney-related problems. The Network began first in development of this coalition with help from the area quality improvement organizations. From this a list was developed to invite potential members to the coalition. An organizational meeting was held on November 15 in Chicago. From this first meeting, the Midwest CKD Coalition was formed.

At the first meeting, partner organizations in the Coalition included:

- Illinois Academy of Family Physicians
- Fresenius Medical Care-North America
- Davita
- Dialysis Clinics, Inc.
- University of Illinois at Chicago College of Medicine
- Illinois, Ohio, Indiana and Kentucky State Boards of Health
- Wellpoint
- National Kidney Foundation-Ohio
- National Kidney Foundation-Kentucky
- National Kidney Foundation-Indiana
- The Renal Network, Inc.
- Renal Care Associates, SC
- Ohio KePro
- Health Care Excel
- Illinois Foundation for Quality Health Care
- Indiana University Medical Center
- Centers for Dialysis Care-Cleveland
- University of Louisville
- University Hospitals of Cleveland
- Renaissance Healthcare
- MetroHealth-Cleveland
- Stroger Cook County Hospital
- Northwestern Memorial Hospital
- VA Medical Center-Cleveland
The objective for the Midwest CKD Coalition is to work with the medical community at large to better manage the health and quality of life of patients with chronic kidney disease. The members oriented themselves and began development of projects. Initial endeavors included a GFR Calculation Position Paper, a CKD-ESRD Payer Summit, and developing educational resources for the primary care physician. Follow-up meetings were scheduled for 2006.

2. Liaisons with Affiliated Organizations.

The Network is represented on cooperative committees organized by Health Care Excel. The Assistant Director is a member of the Partners Promoting Quality (PPQ) committee for Health Care Excel. The Network acts as a resource to the state departments of health within Illinois, Indiana, Kentucky, and Ohio. Interactions between the Network and the state health agencies are ongoing. The Network continuously serves as an expert adviser for the technical aspects of dialysis, a resource for complaints, grievances and facility concerns, and provides Network developed resources when requested. The Network also provides resources and contacts with other dialysis agencies, such as the National Kidney Foundation and its affiliates, The University of Michigan Kidney Epidemiology and Cost Center, the United States Renal Data Service, and the United Network for Organ Sharing. The relationship between state health agencies and Network 9/10 continues to develop in a collaborative manner. Additionally, the President and the Executive Director served on the Executive Committee of The Forum of Renal Networks and the Director of Patient Services chaired the Patient Services Coordinator Committee, organized by The Forum.

B. Patient Interaction in Network Activities.

To promote patient input and participation in the Network, the following activities were conducted during 2005.

- New patients were informed about the Network through a New Patient Packet that the Forum distributes to new patients.
- Patients participated on Network committees including the Board of Trustees, the Medical Review Board, and the Patient Leadership Committee.
- Patients participated in the Robert Felter Memorial Award program, both in choosing a recipient for the facility award as well as the patient award.
- Throughout the year, information about the PLC and Patient-to-Patient Program as well as other patient resources were sent to patients and staff who expressed an interest in becoming involved with any of the programs.
- Patients participated in the development of the pediatric training tool for staff, family multimedia project, the calendar for dialysis staff, and the brochure on fistula placement.
C. Community Outreach Activities.

The Renal Network acts as a clearinghouse to provide information concerning ESRD technology and treatment advances to ESRD professionals, patients, and other interested persons and organizations. Information received or generated by the Network was disseminated to the appropriate individuals at the discretion of the Executive Director or other appropriate staff persons. During 2005 information was distributed Network-wide in the following manner:

1. Newsletters, Renal Outreach and Progress Notes.

The Renal Network publishes two newsletters for the different renal audiences newsletter in the four-state area. Renal Outreach is directed toward the community of ESRD patients, but ESRD professionals and members of the renal community receive the newsletter, as well. In total, about 10,000 copies are distributed with each mailing. Progress Notes is written for the community of renal professionals; about 5,000 copies are distributed with each mailing. During 2005, three issues of Renal Outreach were produced and distributed, and two issues of Progress Notes were produced and distributed.

Renal Outreach provides a continuing means of communication to all patients within Network 9/10. It contains information on new therapies, rehabilitation, medications, nutrition, exercise, and general topics of interest, as well as news of Network 9/10 and Patient Leadership Committee activities. Patients are encouraged to submit their ideas for articles and to write articles for the newsletter. Each newsletter contains at least one article written by a patient or family member. Progress Notes contains updates on Network activities and nephrology news of national interest for the renal professional. During 2005, articles were devoted to vocational rehabilitation, Medicare, home dialysis, grievances and complaints, transplantation and Network activities.


The Network 9/10 Handbook was developed to ensure all member facilities are continuously apprised of Network 9/10 policies and procedures as approved by Network 9/10 Coordinating Council. The Handbook is updated periodically as policies are developed or are amended; materials are posted to the Network Web site at www.therenalnetwork.org, in the policies and guidelines section.

3. Web Sites

The main Network Web site is found at the www.therenalnetwork.org. This site is intended to provide information about Network 9/10 activities and links to other resources in the renal community. The front page is updated monthly with news. Policies, procedures, and selected data items are added as they become available.

A second Web site is devoted to issues of interest to patients and family members. This site, www.kidneypatientnews.org, contains articles and information with a patient focus. There are links to other sites as well as the ability to download and/or order Network materials. It is updated on a regular basis.
4. **Resources:** During 2005, resources were added and/or updated to the Networks offerings. The most frequently requested resources were as follows:

- CMS Emergency Booklets for Patients
- Access Booklets & Guides
- *Renal Outreach* Newsletter
- Nutrition Brochure
- Exercise Brochure
- Patient Rights & Responsibilities
- Learning to live with Kidney Failure – A Patient’s Perspective
- Quality of Life
- The Patient Manual
- Support Group Flyers

5. **Educational and Cooperative Activities.**

- Information was sent to all four state vocational rehabilitation offices within Network 9/10 to provide information about the Network and to learn about their concerns in working with ESRD patients. This information was shared with facilities through the *Progress Notes*. Web site information was augmented to include access to local vocational rehabilitation offices.

- Educational pamphlets and resources were sent to patients and staff when requested that supported rehabilitation goals, such as activities to promote quality of life, exercise tips, journaling suggestions, tips for sleeping well, and financial resources.

- Articles related to patients working, the benefits of employment and how to find resources to go back to school or work were made available to patients and staff through the patient newsletter as well as on the Network’s web site.
On September 22 and 23, the Network sponsored the annual Fall Pediatric Renal Symposium at the Omni Severin Hotel in Indianapolis. This is a two-day educational offering which is planned by a committee of Pediatric Renal Group members. Topics included: Cultural sensitivity, using child life resources, Fistula First for Pediatrics, immunizations, HUS, BK Virus and a review of case histories. Approximately 50 representatives from pediatric centers within the Network participated over the course of the two days.

A Transplant Educational Packet was developed for April 2005 for Transplant Awareness Month. This was sent to nurse managers in all dialysis facilities and posted to the Network Web site.

Immunization information was sent to all medical directors and administrators, alson with tools for tracking immunization and samples of standing orders.

A special issue of Network Connections was devoted to the potential for a Flu Pandemic.

6. Nephrology Conference

In combining its roles as an information clearinghouse and a professional renal association, The Renal Network sponsors the Nephrology Conference each year. The 2005 Nephrology Conference was held on May 25 and 26 at the Indianapolis Marriott Downtown. This annual event is designed to allow members of the Network to come together to conduct Network business while providing educational opportunities and allowing for the exchange of ideas among members of the renal community in Illinois, Indiana, Kentucky and Ohio.

The goal of the Conference is to offer a multi-disciplinary scientific seminar, individual meetings of different professional groups, and to provide awards to those individuals and facilities that have excelled in meeting of Network goals during the year. These activities are planned in conjunction with the meeting of the Network Coordinating Council. The chart below shows attendance rates for 2001 - 2005.

<table>
<thead>
<tr>
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</thead>
<tbody>
<tr>
<td>Meeting</td>
</tr>
<tr>
<td>---------</td>
</tr>
<tr>
<td>2005</td>
</tr>
<tr>
<td>2004</td>
</tr>
<tr>
<td>2003</td>
</tr>
<tr>
<td>2002</td>
</tr>
<tr>
<td>2001</td>
</tr>
</tbody>
</table>

* Figure not included in TOTAL column.
The Conference is organized by the Conference Program Planning Committee to ensure input from the Network members. Additionally, Network-wide professional groups for administrators, social workers, technicians and registered dietitians were formed to facilitate planning individual sessions for these disciplines. The Network works in conjunction with the American Nephrology Nurses Association to plan a full-day session for nurses and sponsors a certification exam for technicians with BONENT.

All programs are designed to provide continuing education credits for participants, to enhance the value of these offerings to Network members. To further integrate the Conference into the renal community, businesses dealing in renal products are invited to exhibit during the event. This serves the dual purpose of providing useful information to conference participants while underwriting the event through these sponsors.

Topics for presentations included:
- State of the Network and Collaborative Initiatives
- End-Of-Life Issues – Overview
- Incorporating Palliative Care Into the Dialysis Unit
- A Patient Centered Approach to Advance Care Planning
- Hospice & Bereavement
- Overcoming Barriers – Case Studies
- Compassion Fatigue: The Cost of Chronic Caring & Strategies to Nourish the Caregiver
- Heparin Concentration in Hemodialysis Catheters
- Crisis Intervention Skills for Nursing
- Technician’s Toolkit: Treating Ill Tempers, Tiffs & Tantrums
- Empowering Your Patients for Better Treatment
- Diabetes – Its Impact on the Dialysis Population
- Psychosocial Issues Related to Pain Management & Palliative Care for the CKD Patient
- The Role of the Social Worker in the Team Approach to Pain & Palliative Care
- KDOQI & Nutrition Guidelines
- Nutritional Aspects of Bariatric Surgery
- Sleep Disorders & the Renal Patient
- Leadership During Times of Uncertainty

**Midwest Nephrology Fellows Research Day.** On May 24, as a prelude to the 2005 Nephrology Conference, the Network co-sponsored the Midwest Nephrology Fellows Research Day with Indiana University School of Medicine. This activity was supported through an unrestricted educational grant from Amgen. The day featured presentations from 18 nephrology fellows representing 10 academic centers throughout the Midwest. The content of the abstracts focused on original research being conducted by the fellows. Recognition was awarded to four presentations.
Network Awards Program. The Network recognizes achievement among its members by presenting awards for individuals who have made outstanding contributions to the Network, and also who have gone above and beyond the minimum to meet network reporting requirements, both in data and quality assurance. During 2004, collection of anemia and adequacy data was suspended until a CMS approved data collection tool becomes available.

The Network was able to continue collecting vascular access data through the Fistula First data collection tool. The Chart C.3 illustrates the number of facilities that were recognized for vascular access achievement through the Network 9/10 Quality Awards Program.

<table>
<thead>
<tr>
<th>Network Quality Award</th>
<th>2001 # (% total)</th>
<th>2002 # (% total)</th>
<th>2003 # (% total)</th>
<th>2004 # (% total)</th>
<th>2005 # (% total)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fistula Rate ≥ 40%</td>
<td>24 (6%)</td>
<td>70 (16%)</td>
<td>56(12%)</td>
<td>135 (27%)</td>
<td>203 (39%)</td>
</tr>
<tr>
<td>Catheter Rate ≤ 10%</td>
<td>6 (1%)</td>
<td>16 (4%)</td>
<td>3(.6%)</td>
<td>13 (2.3%)</td>
<td>10 (2%)</td>
</tr>
<tr>
<td>Sustaining Member: Hemodialysis Programs</td>
<td>17</td>
<td>25</td>
<td>25</td>
<td>15 (Fistula rate for 3 consecutive years)</td>
<td>31 (6%)</td>
</tr>
</tbody>
</table>

7. Disaster Preparedness.

Hurricanes Katrina & Rita: Network 9/10 received 34 patients from Hurricane Katrina and four patients from Hurricane Rita. These patients were tracked and reported according to instructions received from CMS Central Office. Network staff attended conference calls during the week of September 6 through 9 to hear updates on the tracking of displaced dialysis patients. The Network queried its facilities to determine where space would be available if needed for displaced hurricane victims. A list was kept of those dialysis units responding to the request. Although many dialysis facilities responded that they would gladly take patients if needed, no calls for assistance were received. Network staff maintained communications with the state departments of health to provide information on placing dialysis patients for organizations who were setting up shelters, and to act as a general resource when questions arose. Additionally, disaster preparedness information was added to the Web site. By September 12, it appeared the need for any acute interventions had passed. Because of the magnitude of these disasters, the Program Planning Committee for the 2006 Nephrology Conference decided to devote the entire morning program of the Nephrology Update multi-disciplinary session to disaster preparedness.
8. Other Activities.

Medicare Part D. The Network helped to promote activities to educate providers on the new Medicare Part D prescription drug program. Announcements were sent to support the monthly informational conference calls sponsored by the National Kidney Foundation, and information was posted to the Network Web site, as well.

On November 16, the Network sponsored a Medicare Part D and ESRD workshop in Rosemont, Illinois with help from the CMS Region V office. Approximately 100 renal professionals, including social workers and nurses, attended the meeting. CMS provided technical support with three speakers to discuss the new Medicare benefit.

Ongoing Communications. The Network has developed and maintained email list services for different audiences, including physicians, administrators and social workers. These list services are used as warranted to provide an expedient and inexpensive means to reach a large audience with information, such as news on a variety of topics, including FDA recalls, Network nominations process and election, Network meetings, and quality initiatives.

As events warrant, informational bulletins are sent to the appropriate individuals via regular mail. These releases of information may be sent to committee members, council members, professional disciplines, patients or other related organizations. If necessary, a general release may be sent to all interested parties.

News of general interest is included in the newsletters of Network 9/10 to ensure that the membership is kept informed of activities on a continuing basis. Network 9/10 maintains a mailing list, by category, on computer to facilitate clearinghouse functions. This listing is continuously updated to provide an efficient mailing process. Additionally, Network 9/10 responds to individual requests for information as these are received. The requests come from a variety of individuals, from dialysis patients and family members, renal professionals, students, researchers, and planning organizations and/or dialysis corporations.
**GOAL 3: Supporting the marketing, deployment, and maintenance of CMS approved software.**

ESRD Network 9/10 has been an active partner in promoting CMS programs for data collection, specifically the VISION software package. Work continued throughout 2005 to train and support dialysis facilities in the VISION program.

<table>
<thead>
<tr>
<th>2005 Activities - VISION ADOPTION</th>
<th>NETWORK 9</th>
<th>NETWORK 10</th>
<th>COMBINED</th>
</tr>
</thead>
<tbody>
<tr>
<td>VISION – COMPLETED TRAINING</td>
<td>60% (65 facilities)</td>
<td>44% (22 facilities)</td>
<td>55% (87 facilities)</td>
</tr>
<tr>
<td>VISION - SUBMITTING DATA</td>
<td>48% (52 facilities)</td>
<td>36% (18 facilities)</td>
<td>44% (70 facilities)</td>
</tr>
<tr>
<td>N = 109*</td>
<td>N = 50*</td>
<td>N = 159*</td>
<td></td>
</tr>
</tbody>
</table>

* Facilities eligible to participate through VISION are those which are not affiliated with a Large Dialysis Organization.
GOAL 4: Improving data reliability, validity, and reporting between ESRD facilities/providers, Networks, and CMS and other related agencies.

A. Facility Compliance

During the year 2005, all dialysis and transplant facilities within the Network were participating as required by CMS and The Renal Network.

B. System Description

The data processing system is based on the generation of CMS mandated forms and a Network tracking report by ESRD facilities. These forms provide the necessary information and updates that assure the accuracy of the data system.

CMS Medical Information System (MIS) Forms that are processed through the Network office include:

- CMS 2728 - Chronic Renal Medical Evidence Report
- CMS 2744 - ESRD Facility Survey
- CMS 2746 - ESRD Death Notification

As these forms are received in the Network office, they are input into the SIMS database, the CMS logging program, and a compliance program. This information is forwarded to CMS.

The Network 9/10 Data Department routinely completes the following activities:

- Handling daily receipt of MIS forms and logging forms on the Network computer.
- Verifying information on MIS forms.
- Monthly review of facility compliance goals for forms submission.
- Input of MIS forms and tracking forms on the SIMS patient information system.
- Processing of CMS generated facsimile forms.

C. Compliance Reporting

The SIMS program tracks compliance for forms submission and completion by each facility. The program generates a report showing each facility, which forms were received, and whether or not they were compliant. It also generates a master report showing compliance rates for all facilities within the Network. Compliance rates are reviewed monthly by Network staff. Quarterly, compliance reports are generated and sent to the facilities. The Medical Review Board routinely reviews compliance rates for those facilities which fall below the CMS goals at their quarterly meetings.
D. Patient Tracking System.

The data system has unlimited capability to collect information on ESRD patients. Currently, more than 33,000 active and inactive patient listings are in the system. Information collected on each patient includes:

- Full Patient Name
- Social Security Number
- Medicare Number
- Demographic Information
- Patient Address
- County of Residence
- Transfer Information and Date
- Initial and Subsequent Providers
- Modes of Therapy
- Primary Diagnosis and Co-morbid Conditions
- All Types of Changes in Patient Status
- Transplant Candidate Status
- Vocational Rehabilitation Status
- Number of Treatments Performed
- Date of First Dialysis
- Current Status
- Cause of Death
- Clinical Performance Measures

After the data are entered, they are then available for statistical manipulation. The data tables contained in this report were generated through the Network data system as well.

Validation activities include routine investigations of accretions and notifications provided by CMS. When corrections are found they are updated directly in SIMS. A three percent sample of 2728 forms is drawn quarterly and reviewed for accuracy and completeness.

E. Community Outreach Through Data

Network 9/10 uses its database as a constant source of information on the ESRD population for the renal community. During 2005, Network 9/10 filled requests for Statistical Report data, for ZIP Code and county data, for facility demographic profiles, for SMR data, for core indicator data, and compliance data. Data requests are received continuously from a variety of interested parties, including:

- Requests from facilities for information on their own programs. Often these requests ask for historical information to allow the facility to assess trends. SMR data was also released which displayed a facility’s ratio compared to the Network. This allows the facility to make comparison of its ratio with its peers.

- Requests from organizations attempting to establish new ESRD programs within a given area, or from current providers who are attempting to expand their services.
• Data often requested includes capacity and utilization figures, and patients by residence, divided by county or ZIP Code. (All patient data released is done within the confines of established CMS confidentiality rules.)

• Requests from state health planning agencies to assist them in assessing the need for ESRD service when reviewing Certificate of Need (CON) applications.

• Requests from researchers in a variety of interests, such as patients dialyzing by modality, by diagnoses, demographic information, and transplantation.

4. SANCTION RECOMMENDATIONS.

No sanction recommendations were made during 2005.

5. RECOMMENDATIONS FOR ADDITIONAL FACILITIES

Each year through the patient tracking system, The Renal Network conducts a review of facility operations. This information is made available to the provider community for many uses, including estimating need for additional services.

From this report the following information is available:

• Services Rendered: describes each facility by area of location within the Network and the modes of therapy offered.
• Current Operations: shows the number of stations currently operating at each dialysis facility within the Network.
• Patient Capacity by Facility: calculates the total number of patients that could dialyze at each facility based on the number of shifts and stations available at that facility.
• Utilization: identifies the actual utilization of each dialysis facility at year-end 1999.
• Pediatric ESRD Facilities: shows the number of stations currently operating at each pediatric dialysis facility within the Network.
6. DATA TABLES