



Southern California  
Renal Disease Council  
INCORPORATED

*Clinical Performance Measures  
for ESRD Patients*



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*26<sup>th</sup> Annual NANT Symposium*  
*February 12, 2009*

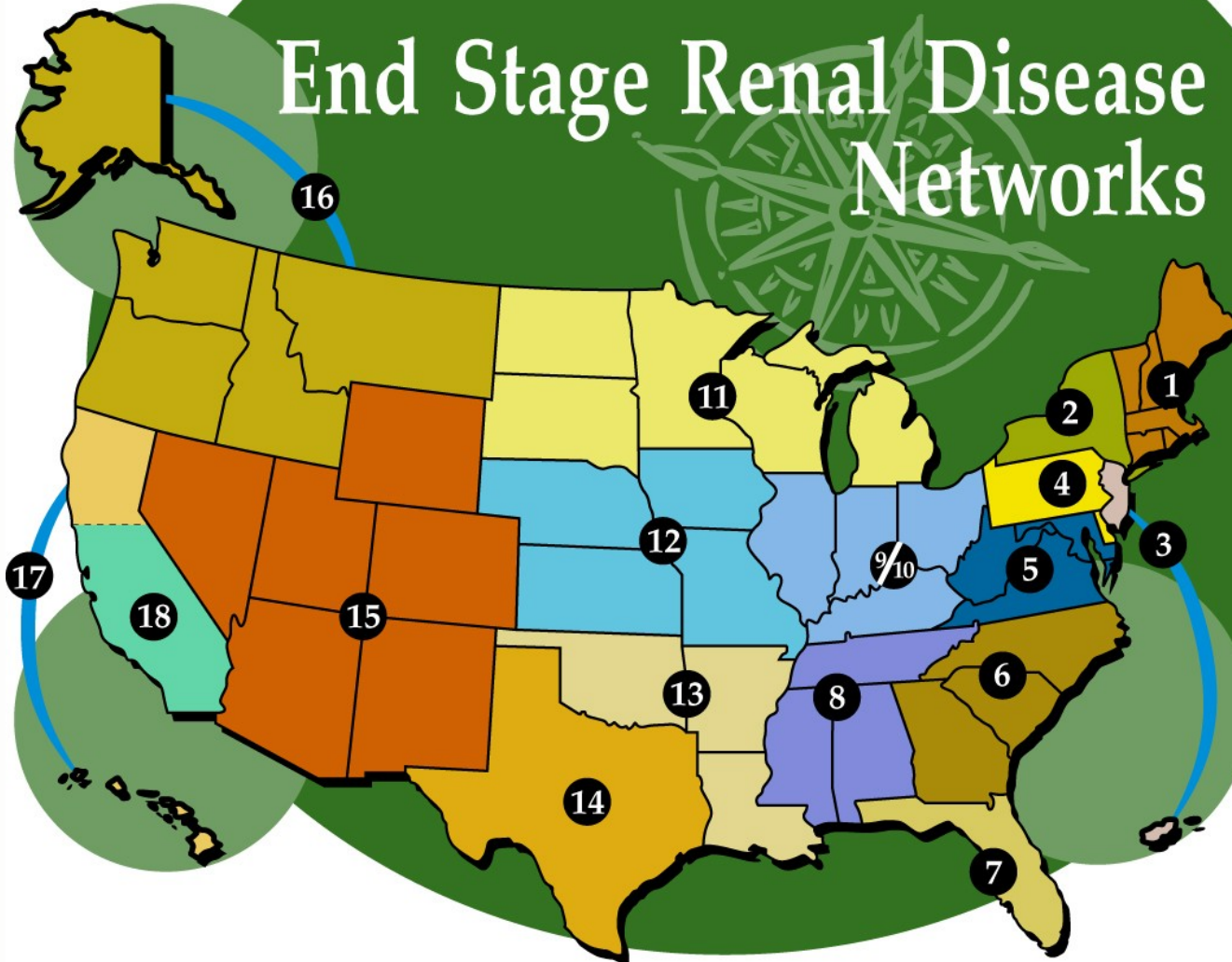




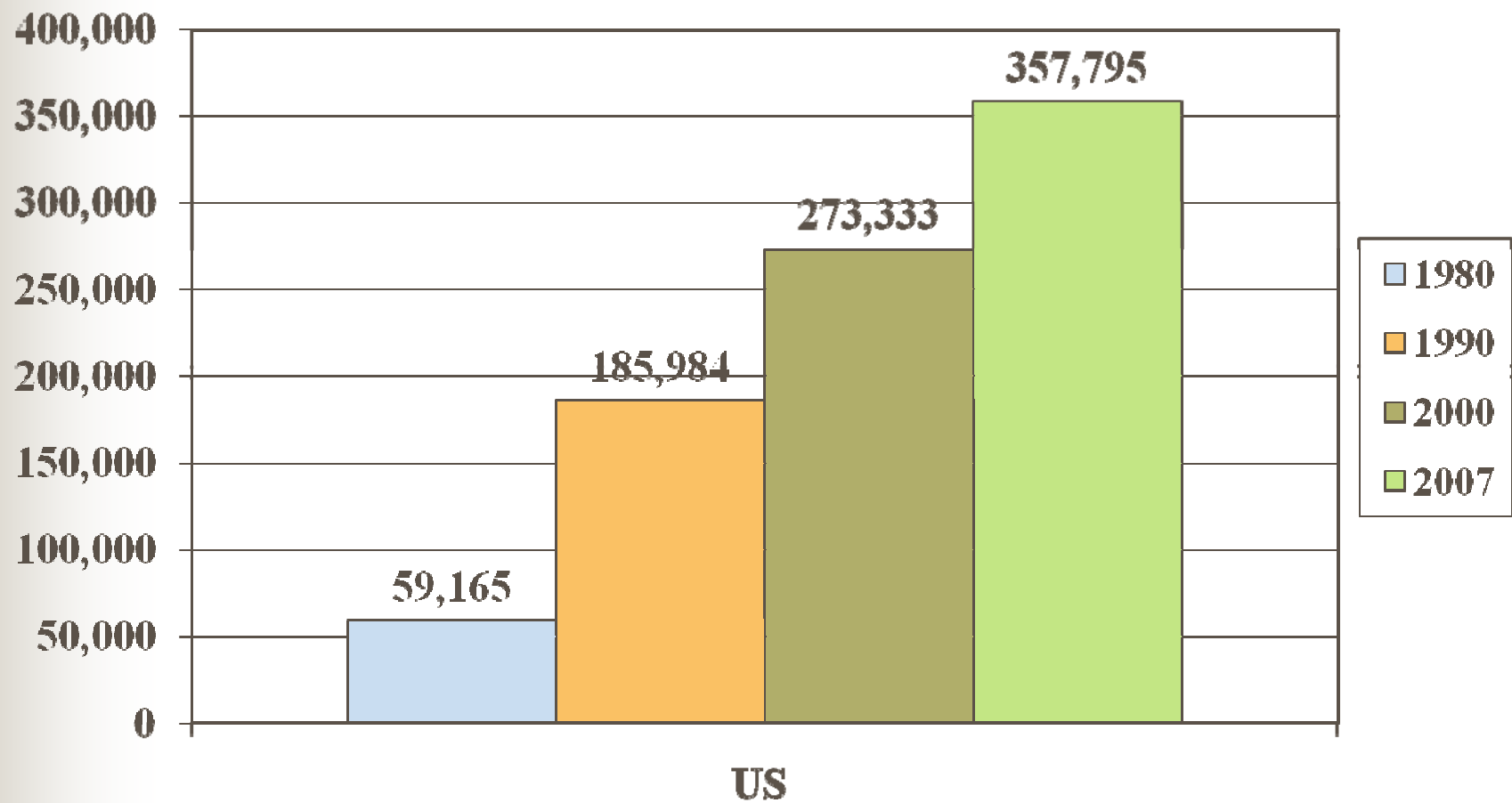
## *Health Care Quality Improvement Program (HCQIP)*

- The Center for Medicare & Medicaid Services (CMS) contracts with 18 ESRD Network Organization throughout the United States
- The ESRD Network perform oversight activities to assure appropriateness of services and protection for ESRD patients.
- This approach has been named the ESRD Health Care Quality Improvement Program (HCQIP)

# End Stage Renal Disease Networks



# *Number of Prevalent ESRD Patients in the US*





## *ESRD Network National Goals*

- Improve the quality of health services & quality of life for ESRD beneficiaries
- Improve data reporting, reliability, & validity between providers, NWs, and CMS
- Evaluate and resolve patient grievances
- Support the marketing, deployment, and maintenance of CMS approved software

*CMS, ESRD NW Organization Manual*





## *ESRD Network National Goals*

- Establish & improve partnerships & cooperate activities with
  - Providers & Owners
  - NWs, Quality Improvement Organizations (QIOs)
  - State Survey Agencies
  - Professional Groups & Patient Organizations

*CMS, ESRD NW Organization Manual*



## *Network Cannot Help With The Following:*

- Recommendations on specific doctors or clinics
- Financial assistance
- Transportation service
- Licensing dialysis facilities or staff
- Obtaining medical insurance
- Tracing payments or status of applications
- Networks are not CMS or SSA (State Survey Agencies)



## *Clinical Performance Goals*

- Provides measurement tool to assess facility patient care processes and outcomes, and identify opportunities for improvement.
- The Network goal is to combine efforts with renal facilities to improve performance in the delivery of quality patient care





## *Goals Established by the ESRD Networks based on:*

- Past performance
- CMS thresholds
- NKF/KDOQI Clinical Practice Guidelines
- The expectation is that facilities not meeting expected performance standards develop internal quality monitors to promote continuous improvement



## *Quality Improvement Activities with Providers*

- CMS-approved QIPs (Fistula First)
- Clinical Performance Measures Project (CPM)
- Network-Specific Projects
- Annual Lab Data Collection Project
- Facility Specific QI Projects
- Technical Assistance
- Internal QI Program



## *What is the cost of Poor Quality?*

- No show rates?
- Lost charts?
- Lost labs?
- Train wreck visits?
- Lost revenue – improper billing?
- Staff turnover?



## *ESRD Clinical Performance Measures (CPM) Project:*

- National effort led by CMS and 18 ESRD Networks that started in 1994
- Random sample of patients that are representative of each Networks
- For HD patients – (October-December 2007)
- For PD patients – (October 2007- March 2008)
- Upcoming CPM data collection:
  - for HD patients – January-March 2009
  - for PD patients - January – June 2009



## *Five Major Domains of Care:*

- Adequacy of Dialysis
- Anemia Management
- Nutritional Status
- Bone and Mineral Metabolism
- Vascular Access



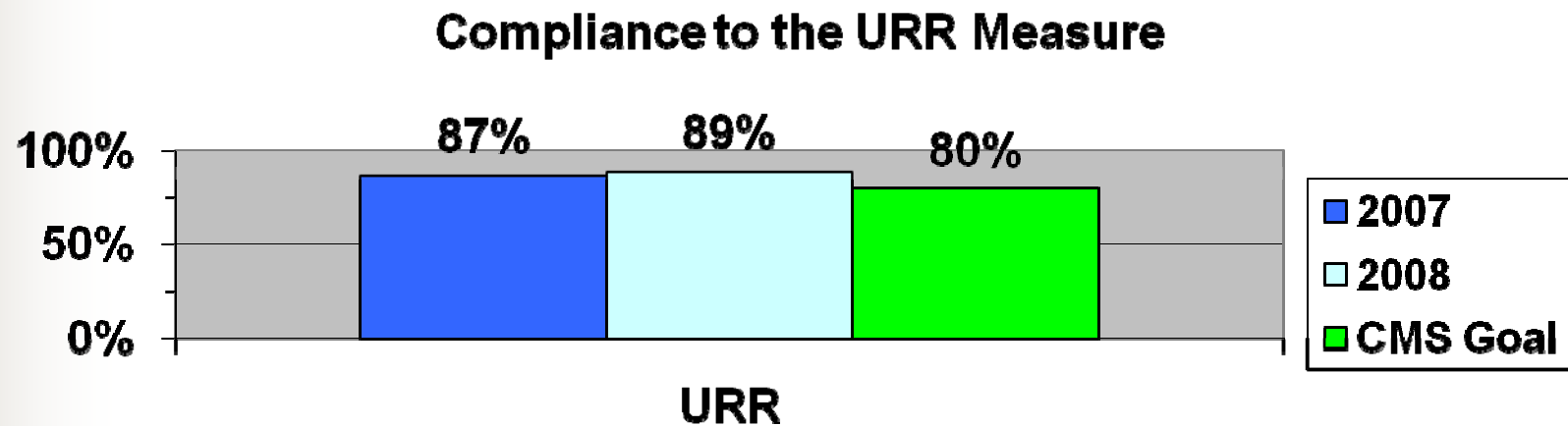


## *Adequacy of Dialysis*

- Numerous outcome studies have demonstrated a correlation between the delivered dose of hemodialysis and patient mortality and morbidity
- Pre and post-dialysis blood urea nitrogen (BUN) levels were drawn and reported to calculate URR results
- $Kt/V$  was calculated using the pre- and post BUN, post dialysis weight, and time on dialysis

## *Adequacy of Dialysis: adult HD pts (U.S.)*

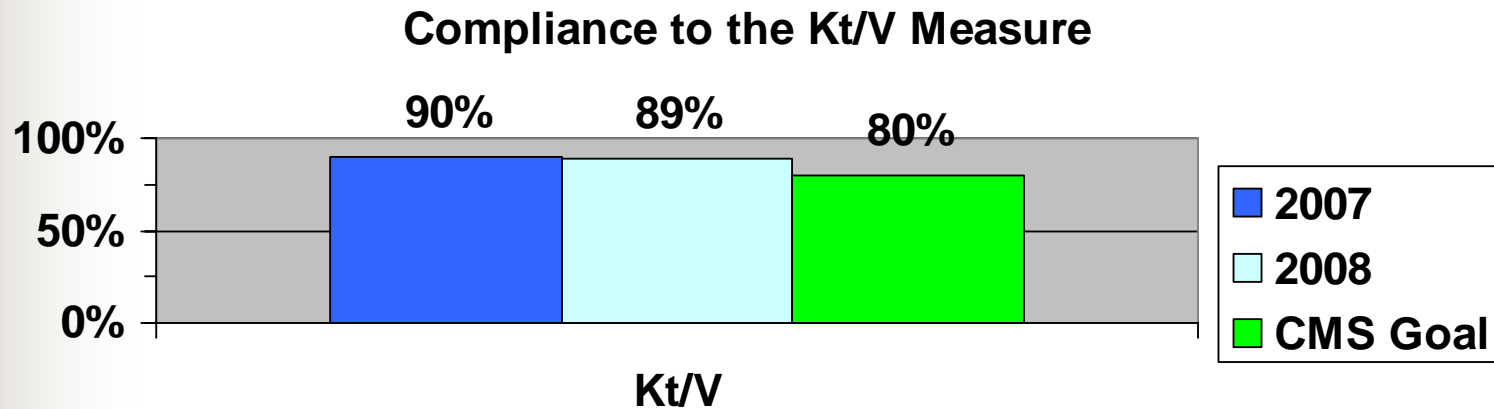
	2007	2008	CMS Goal
Mean URR	73.0	73.2	$\geq 65$
% of Pts with mean URR $\geq 65$	87%	89%	80%




*Data source: 2007 & 2008 CPM Study*

## *Adequacy of Dialysis Adult HD pts (Kt/V)*

	2007	2008	CMS Goal
<b>Mean Kt/V</b>	<b>1.55</b>	<b>1.56</b>	<b><math>\geq 1.2</math></b>
<b>% of Pts with mean Kt/V <math>\geq 1.2</math></b>	<b>90%</b>	<b>89%</b>	<b>80%</b>



*Data source: 2007 & 2008 CPM Study*



## ***US: 2007 CPM Results Pediatric HD Patients: Adequacy of Dialysis***

<b>% of Pts with a mean sp. Kt/V <math>\geq</math> 1.2</b>	<b>91%</b>
<b>Mean sp. Kt/V</b>	<b>1.62</b>
<b>Mean dialysis session length</b>	<b>203</b>

<b>% of Pts with a mean sp. Kt/V <math>\geq</math> 1.8</b>	<b>87%</b>
<b>Mean weekly Kt/V for CAPD patients</b>	<b>2.20</b>
<b>Mean weekly Kt/V for cycler patients</b>	<b>2.52</b>

*Data source: 2007 & 2008 CPM Study*

## *Dialysis Session Time: U.S*

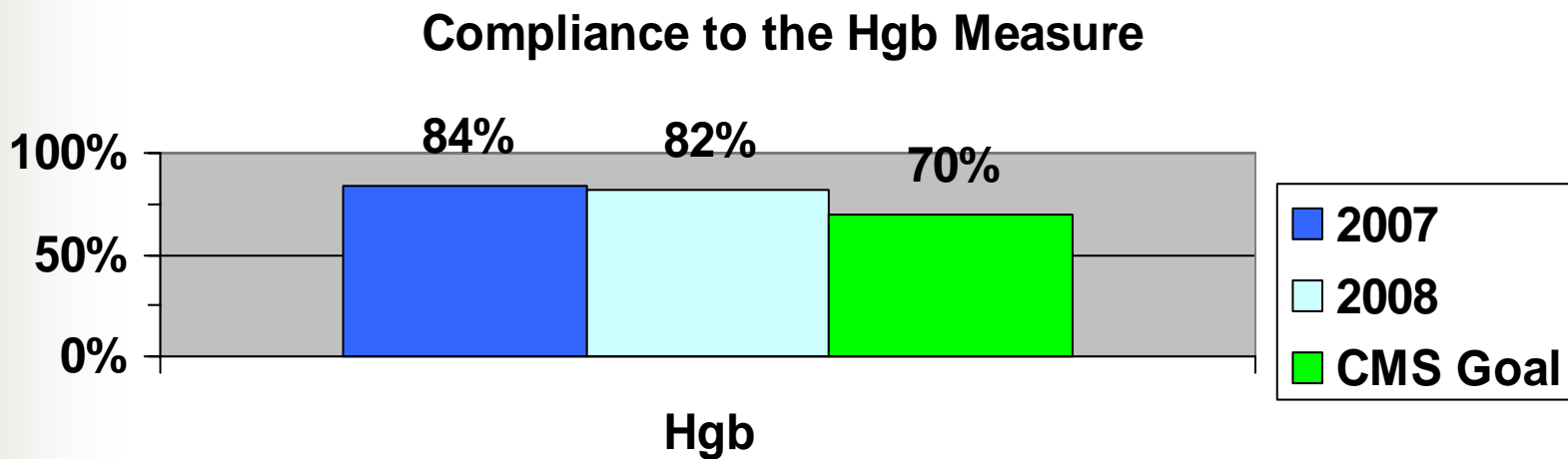
Dialysis Adequacy	2002	2003	2004	2005	2006	2007	2008
% Pts with mean Kt/V > 1.2	89	89	91	91	91	90	91
Median Kt/V	1,49	1,52	1,53	1,55	1,55	1,55	1.56
% Pts with mean URR > 65%	84	86	87	88	88	88	89
Median URR	71.5	72,4	72.6	73	73	73	73.2
Median Blood Flow Rate	400	400	400	400	n/a	n/a	n/a
Medican Treatment Time (min)	212	213	213	213	213	212	213.7

*Data source: CPM Study (2002 – 2008)*



## *Anemia Management Adult HD pts (Hgb)*

	<b>2007</b>	<b>2008</b>	<b>CMS Goal</b>
<b>Mean Hgb</b>	<b>12.1</b>	<b>11.9</b>	<b><math>\geq 11.0</math></b>
<b>% of Pts with mean Hgb &gt; 11.0</b>	<b>84%</b>	<b>82%</b>	<b>70%</b>



*Data source: 2007 & 2008 CPM Study*

# *Anemia Management:*

*(Souse: Phase III CMP effective April 1, 2008)*

- Assessment of Iron Stores
- Hemoglobin (Hgb) control for patients receiving ESA (Erythropoietin Stimulating Agents) therapy (target- 10-12 g/dL)
- Hematocrit (Hct) control for patients receiving ESA therapy (30-36%)
- Closely monitoring Hgb & Hct levels below target minimum

Median Hgb (g/dl)	Hgb $\geq$ 11	Hgb 11-12	Hgb < 10	<b>Hgb 10-12</b>	Hgb > 12
11.90	82	39	5	<b>50</b>	45



## ***2007 CPM Results Pediatric HD Patients: Anemia Management***

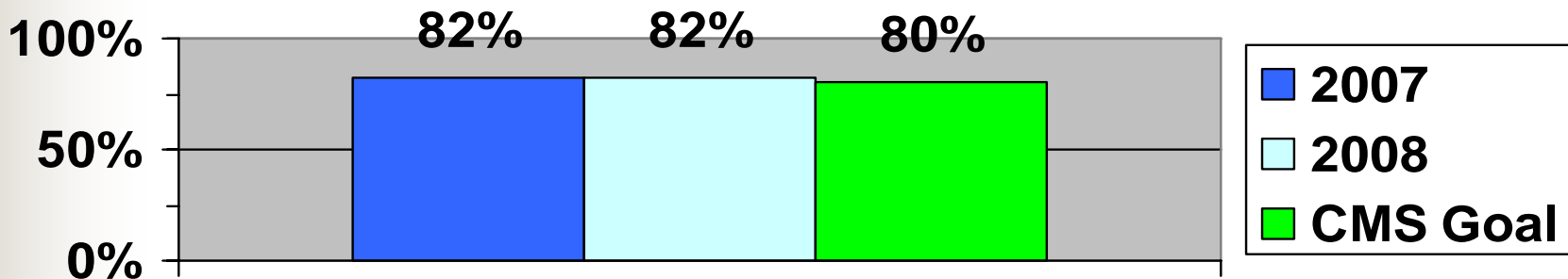
<b>% of Pts with mean Hgb &gt; 11.0 G/DL</b>	<b>69%</b>
<b>Mean Hgb (g/dl)</b>	<b>11.5</b>
<b>% of Pts with mean TSAT <math>\geq</math> 20%</b>	<b>76%</b>
<b>% of Pts with mean serum Ferritin <math>\geq</math> 100 ng/ml</b>	<b>82%</b>
<b>% of Pts with mean Serum Ferritin &gt; 800%</b>	<b>19%</b>

*Data source: 2007 CPM Study*

## *Nutritional Status Adult HD patients (Serum Albumin)*

	2007	2008	CMS Goal
Mean Serum Albumin BCG (g/dl)	3.8	3.83	-
Mean Serum Albumin BCG (g/dl)	3.5	3.47	-
% of Pts with mean Serum Albumin $\geq$ 3.5/3.2 (BCG/BCP)	81%	82%	80%

### Compliance to the Serum Albumin Measure



### Serum Albumin

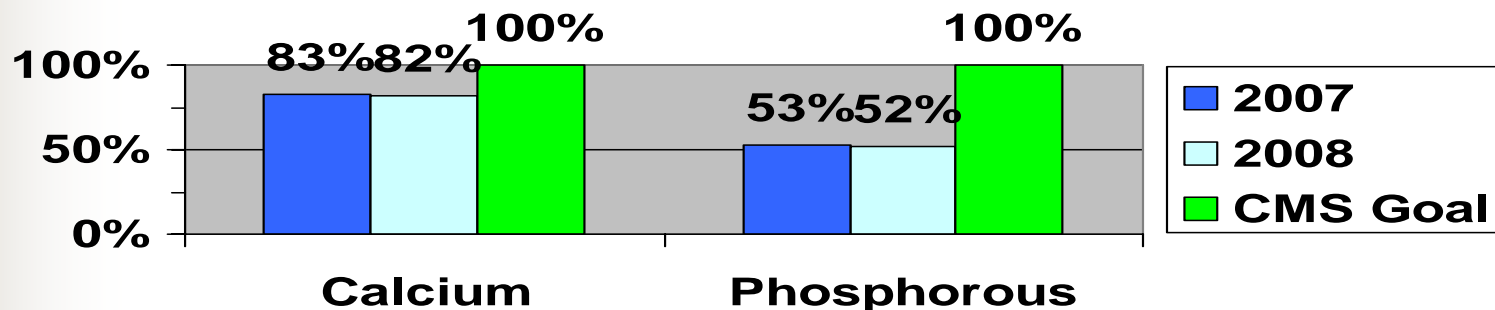
*Data source: 2007 & 2008 CPM Study*

## Bone and Mineral Metabolism: Adult HD pts

	2007	2008	CMS Goal
Mean Calcium	9.3	9.26	-
% of Pts with adjusted Calcium between 8.4 and 10.2	83%	82%	100%

	2007	2008	CMS Goal
Mean Phosphorous	5.2	5.2	-
% of Pts with mean Phosphorous between 3.5 and 5.5	53%	52%	100%

Compliance to the Bone & Mineral Metabolism Measures



Data source: 2007 & 2008 CPM Study





## *Vascular Access Clinical Performance Measures: Facility Level*

- Minimize use of catheters as Chronic Dialysis Access
- Maximize placement of Arterial Venous Fistula (AVF)



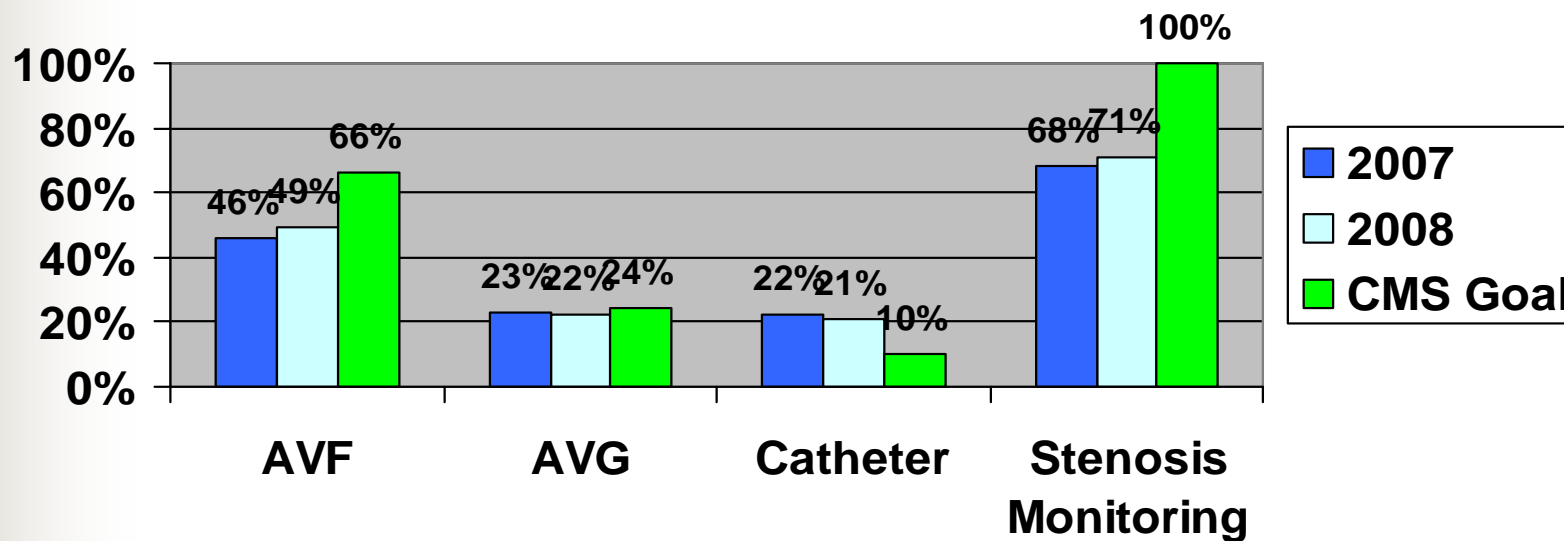
## *Vascular Access Clinical Performance Measures: Clinician Level*

- Functional AVF or referral to vascular surgeon for placement
- Catheter patients referral to vascular access for evaluation for permanent access at least once during 12 months reporting period
- Percentage of patient with advanced chronic disease (CKD stage 4 or 5) or ESRD receiving AVF

## 2007 CPM Results: Vascular Access

	2007	2008	CMS Goal
% Prevalent Pts with AVF	45%	49%	66%
% Prevalent Pts with AVG	23%	22%	24%
% Prevalent Pts with Catheter	22%	21%	< 10%
Stenosis Monitoring of AVG	68%	71%	100%

### Compliance to Vascular Access Measures



*What is the most visible vascular access  
QI project in the United States??*

- Fistula First (Fistula First Breakthrough Initiative)





## *“Fistula First” GOAL*

Goal is to maximize autogenous AVF construction & success rate.....

To achieve in the shorter term (2006) the initial K/DOQI minimum benchmark of AVF use in 40% of prevalent patients.....

And in the long-term (2009), a 66% AVF rate in prevalent patients

**Additional Goal: Reduce Catheter Use!**

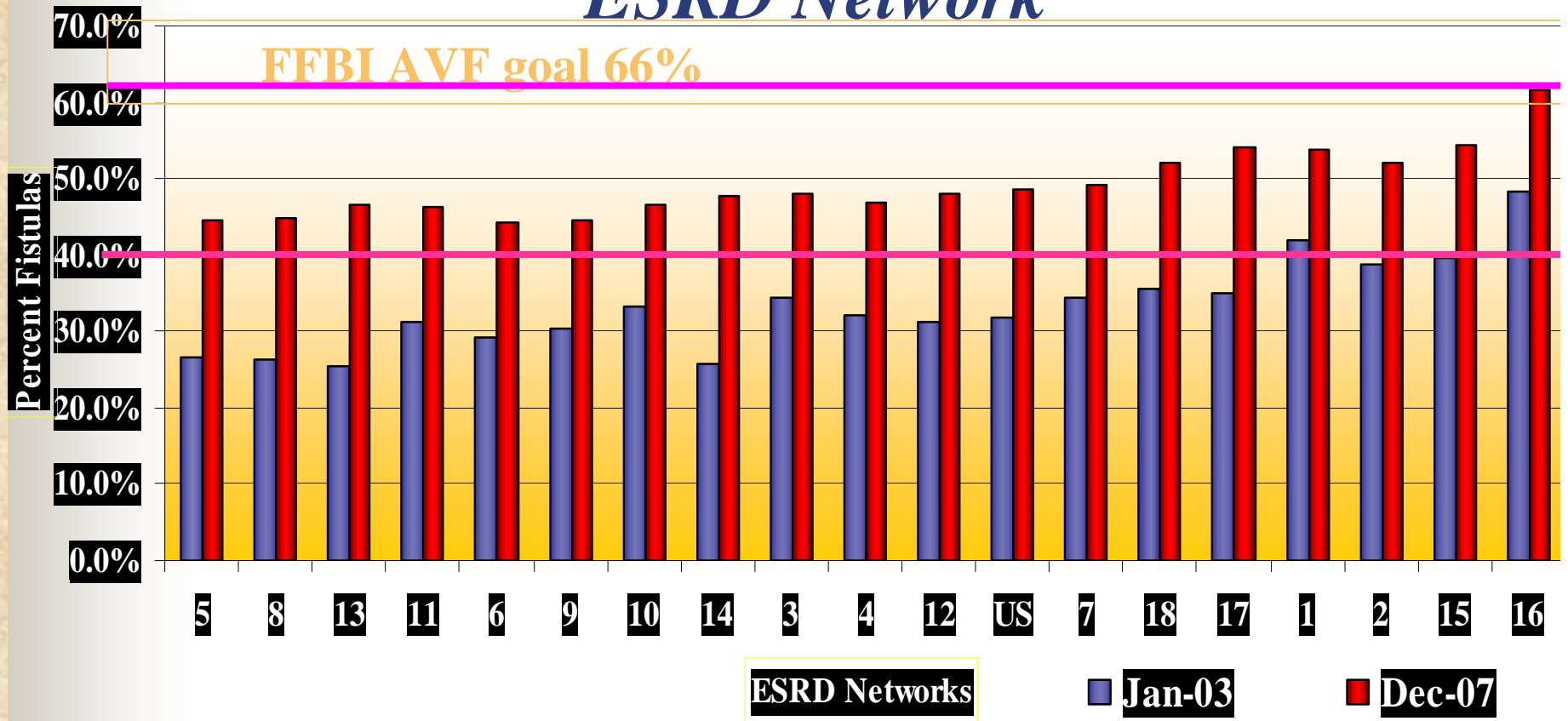


## *Fistula First Change Concepts*

1. Routine CQI Review of vascular access
2. Timely referral to nephrologist
3. Early referral to surgeon for “AVF Only”
4. Surgeon Selection
5. Full range of appropriate surgical approaches
6. Secondary AVFs in AFG patients
7. AVF evaluation/placement in catheter pts
8. Cannulation training
9. Monitoring and maintenance
10. Continuing Education
11. Outcomes feedback



# Improvement in Prevalent AVF Rates by ESRD Network



Data Source: FFBI Dashboard



## *Important Elements of Vascular Access Care: What can you do?*

- Physical assessment of vascular access
- Vascular Access Monitoring & Surveillance Program
- Stenosis monitoring for both AVG and AVF
- Proactive referral for intervention based on the monitoring results
- Improve your cannulation skills (Cannulation Training DVD)



## *New ESRD CPM Measures:*

- Influenza vaccination
- Patient Education, Perception of Care, and Quality of Life
- Patient Survival

## *Dialysis Facility Compare Website*

- Located at [www.Medicare.gov](http://www.Medicare.gov)



List of all Facilities in Country

Dialysis facility characteristics

Quality measures

Helpful contacts and links

# Medicare

The Official U.S. Government Site for People with Medicare

**MyMedicare.gov**

**Secure Sign In**

*This is an optional and free service*

Sign In ID:

Password:

[learn more](#) | [sign up](#)

- Prescription Drug Plan
- NEW!** Medicare & You 2009
- Am I Eligible?
- Medicare Billing ▶
- Medicare Appeals ▶
- Long-Term Care ▶

## Medicare Spotlights [Site Updates](#)

RSS

### Medicare Premiums and Coinsurance Rates for 2009

[View an online demonstration on how to use the Prescription Drug Plan Finder](#)

### Medicare Prescription Drug Coverage

- ▶ [Medicare Prescription Drug Plans - 2009 Plan Data](#)
- ▶ [Medicare Health Plans - 2009 Plan Data](#)
- ▶ [Formulary Finder - 2009 Plan Data](#)
- ▶ [Lower Your Costs During the Coverage Gap](#)
- ▶ [Learn More About Plans in Your Area](#)

### Medicare & You 2009

### Prescription Drug Plans

- ▶ [Compare](#)
- ▶ [Check Current Enrollment](#)
- ▶ [Enroll](#)
- ▶ [Add/Update Drug & Pharmacy Information](#)

### Medicare Stories

"Until I enrolled in Medicare Part D, I paid more than \$4,000 each year for premiums alone. Now I..."



*Condition 494.110:  
Quality Assessment and Performance  
Improvement Project (QAPI)*

- Interdisciplinary team (IDT)
- Under leadership of Medical Director and Quality Improvement committee
- Outcome- focused & data driven
- Process continuous & on-going
- Use community accepted standards as targets
- Requires RN and interdisciplinary team participation
- **CHTs are team members too – get involved!**

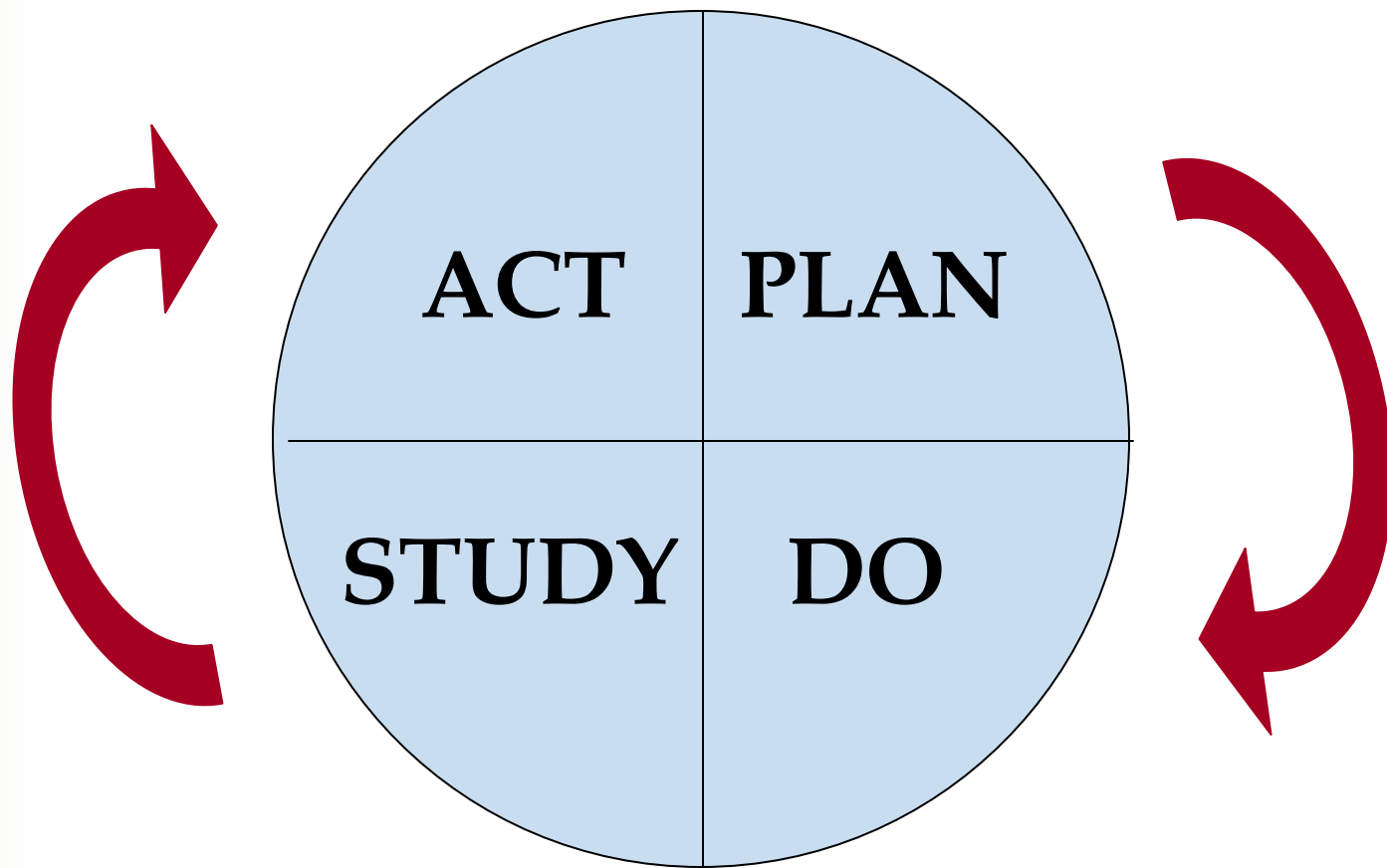


# *Interdisciplinary Team:*

Show Me  
The Progress:



*Plan-Do-Study-Act: Close the loop!*

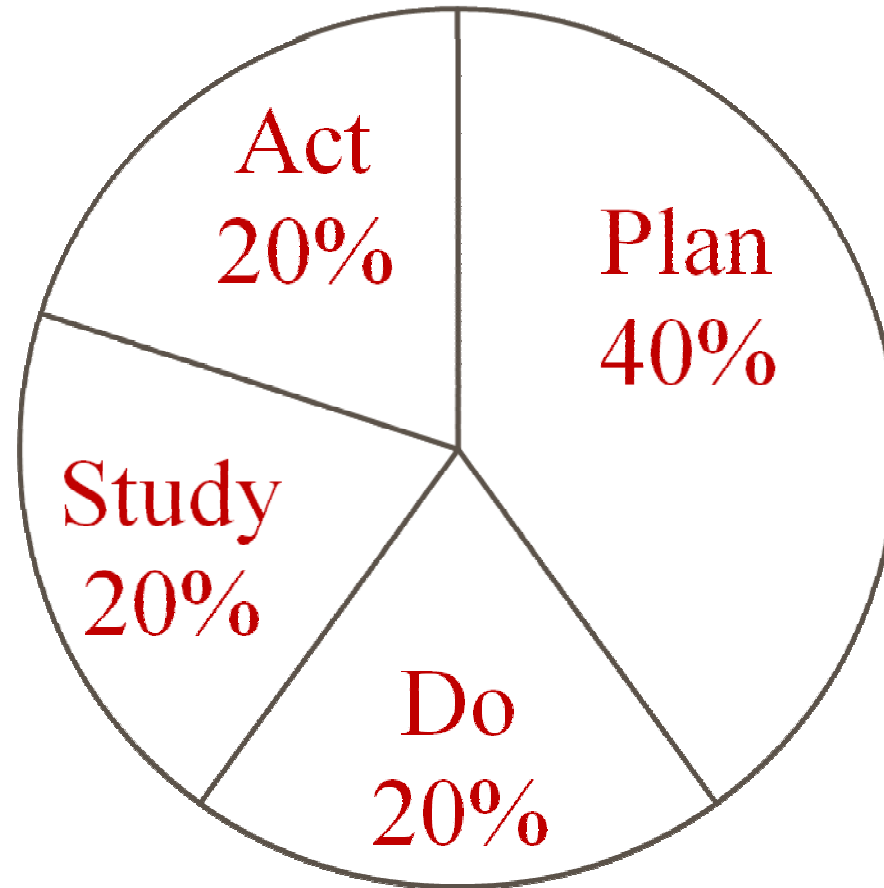




## *Plan-Do-Study-Act*

- *Plan* – Identify Opportunity and plan for change
- *Do* – Implement the Change on a small scale
- *Study* – Use data to analyze for the change and determine whether it made a difference
- *Act* – If the change was successful, implement the plan and continuously monitor results. If the change did not work – start the process again.

## ***PDSA Time Distribution***



## *Developing Your Goal*



- Write a clear goal statement--make the target for improvement unambiguous
- Include numeric goals
- Set “stretch” goals
- Focus on issues that are important to your organization  
- choose appropriate goals

*Examples: “  $\geq 85\%$  of patients to have  $Kt/V$  of 1.2 or more by June 30, 2009”*

*“100% of new patients with catheters to be evaluated for AVF placement within 30 days after initiation of dialysis”*





## *Monitoring Performance Improvement*

V638: The facility must:

- Continuously monitor its performance
- Take actions that result in performance improvement
- Track to assure improvements are sustained over time



## *Performance Measures: include but not limit to:*

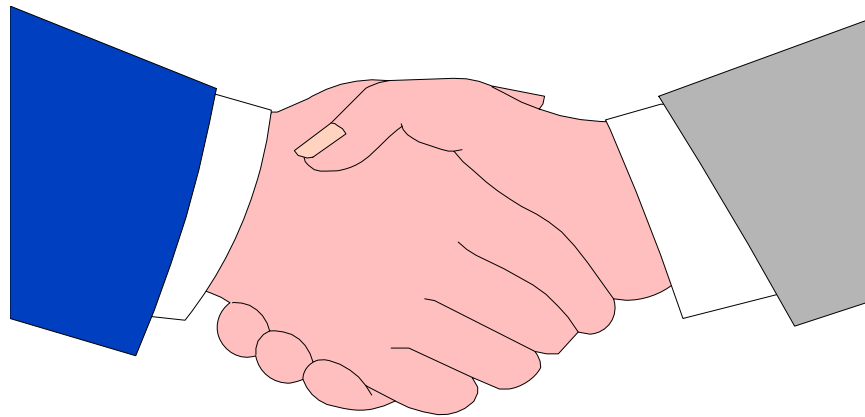
(V629) Adequacy	Kt/V, URR
(V630) Nutrition	Albumin, body weight
(V631) Bone disease	PTH, Ca+, Phos
(V632) Anemia	Hgb, Ferritin
(V633) Vascular access	↑Fistula, ↓catheter rate
(V634) Medical errors	↓Frequency of specific errors
(V635) Reuse	↓Adverse outcomes
(V636) Pt satisfaction	↑Survey scores
(V637) Infection control	↓Infections, ↑vaccination status



## *In Summary:*

- ESRD Clinical Performance Measures are to support and monitor quality of care given to dialysis patients
- New ESRD CFC require participation by all team members
- Opportunities to engage: vascular access manager, patient education, infection control, and many more!
- Any question/concerns, please call your Network for help or visit the website

*The Networks are Here to Help You...*



[www.esrdnetworks.org](http://www.esrdnetworks.org)

# The National FORUM of ESRD NETWORKS

Improving Care Through Collaboration

Search Site Search

only in current secti

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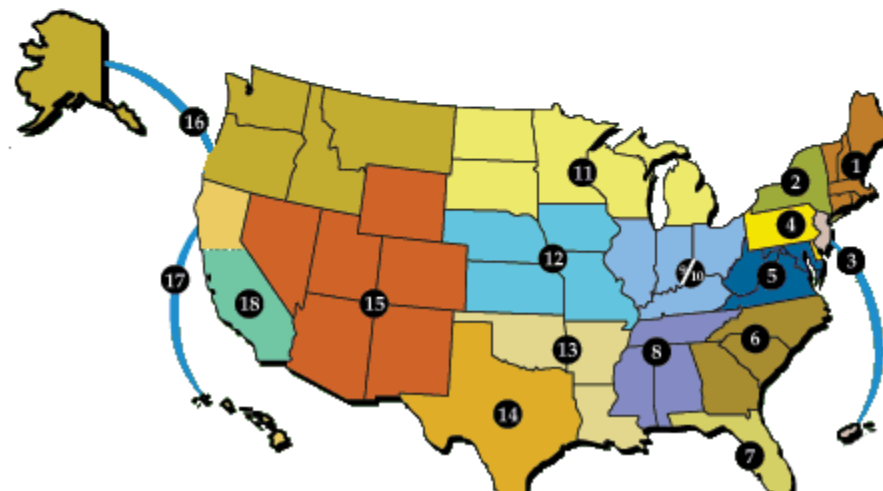
### Log in

Login Name

## Welcome to the ESRD Network Forum Website

The Forum of ESRD (End-stage Renal Disease) Networks advocates for the organizations that monitor the quality of chronic kidney disease, dialysis and kidney transplant care in the United States.

Click on a Network to visit its website.



« January 2009 »

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			1	2	3	
5	6	7	8	9	10	11
12	13	14	15	16	17	18
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26	27	28	29	30	31	

### Upcoming Events

American Health Quality Forum Annual Meeting

Tampa, FL  
Feb 23, 2009

Renal Physicians Association (RPA) Annual Meeting

Baltimore, MD



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Renal Disease Council  
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