

Extracts from:
“Quality Improvement Redesign
Impact Analysis”

Presented 25 August 2009

By James Brandes, MD

CMS Shares the Network's Goal

Ensure the right care
for every person
every time

Networks Strive to Address Institute of Medicine Aims for Health Care

- Patient-Centered
- Effective
- Safe
- Efficient
- Equitable
- Timely

Institute of Medicine Definition of Quality

“The degree to which health services for individuals and populations increase the likelihood of desired health outcomes and are consistent with current professional knowledge.”

ESRD Networks

Spectrum of Responsibility

Spectrum

- Patient Protection
- Technical assistance
- Quality Improvement

Impact

- Individuals: NO!
- Hundreds
- Hundreds of thousands

QI Design Process

- Identify problems, select topics
- Root Cause Analysis
- Design QI plan
 - Methods (PDCA, Failure Mode and Effects Analysis, Reduction in Failure Rate, FOCUS, Measure/Intervention, Re-measure)
 - Interventions
 - Evaluation (effort, time, costs, impact on patients, impact on health system)



David Hume

(1711-1776)

Studied the problem of causation

Examples of Interventions

- Conduct focused reviews (on-site or off-site)
- Convene workshops
- Share best practices
- Monitor routinely (labs, QI minutes)
- Coordinate collaboratives
- Educate (patients and professionals)
- Organize coalitions

Do Networks Make a Difference?

Network Accomplishments

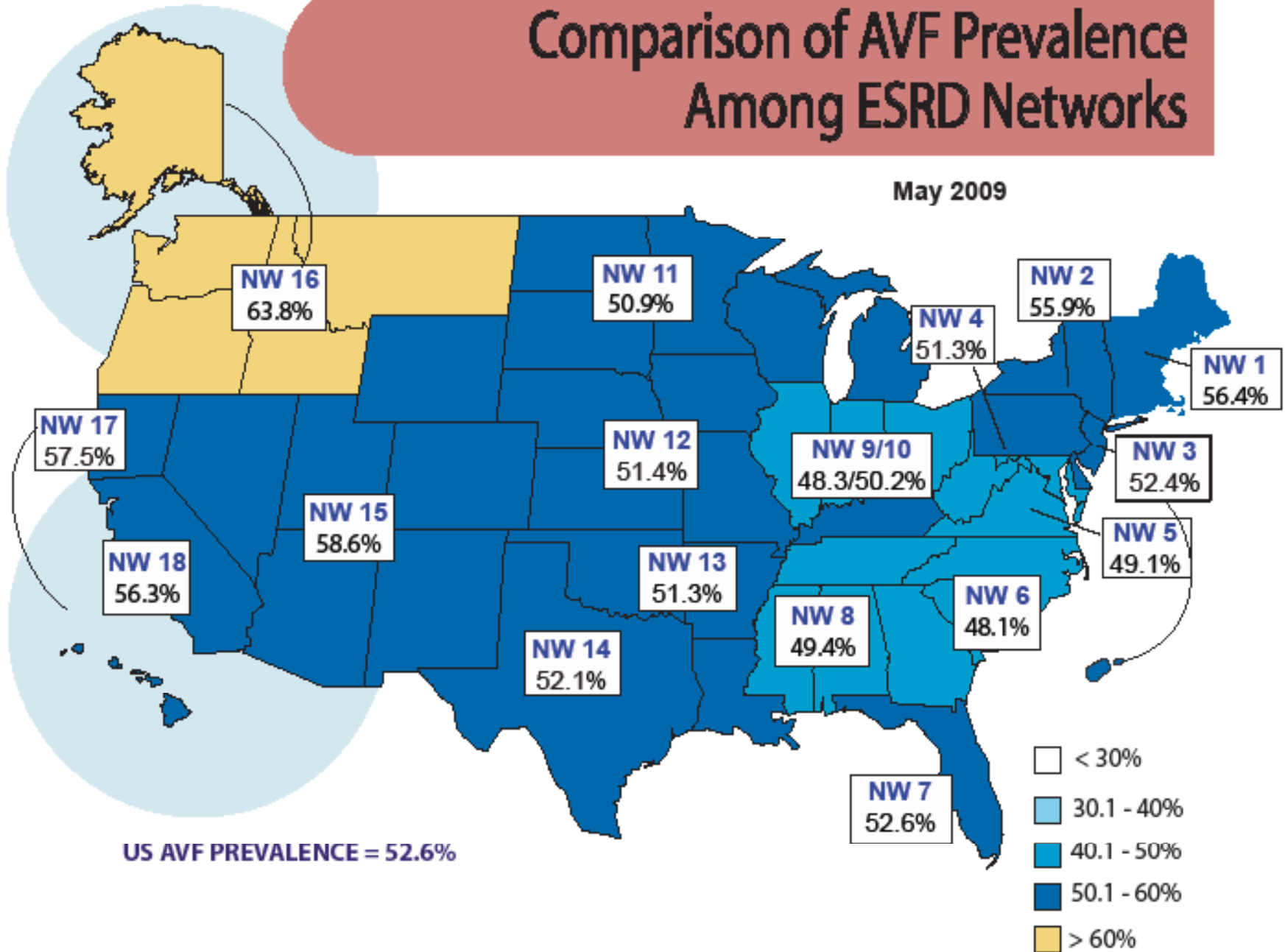
Three Examples

- Dialysis adequacy
- Vascular Access
- Anemia management

Vascular Access

Comparison of AVF Prevalence Among ESRD Networks

May 2009



Business Case

- In 2006, the per person per year (PPPY) expenditure was \$59,347 for an AVF patient, \$71,616 for a graft patient, and \$77,093 for a catheter patient.
- On average, there is a savings of \$15K PPPY for AVF when compared to AVG or catheter
- 83,780 more patients received an AVF during the 5-year period from 2004-2009 with potential of
 - 5-year savings of \$1.2 B or
 - An annual savings of \$251 M

U.S. Renal Data System, USRDS 2008 Annual Data Report: Atlas of Chronic Kidney Disease and End-Stage Renal Disease in the United States, National Institutes of Health, National Institute of Diabetes and Digestive and Kidney Diseases, Bethesda, MD, 2008.

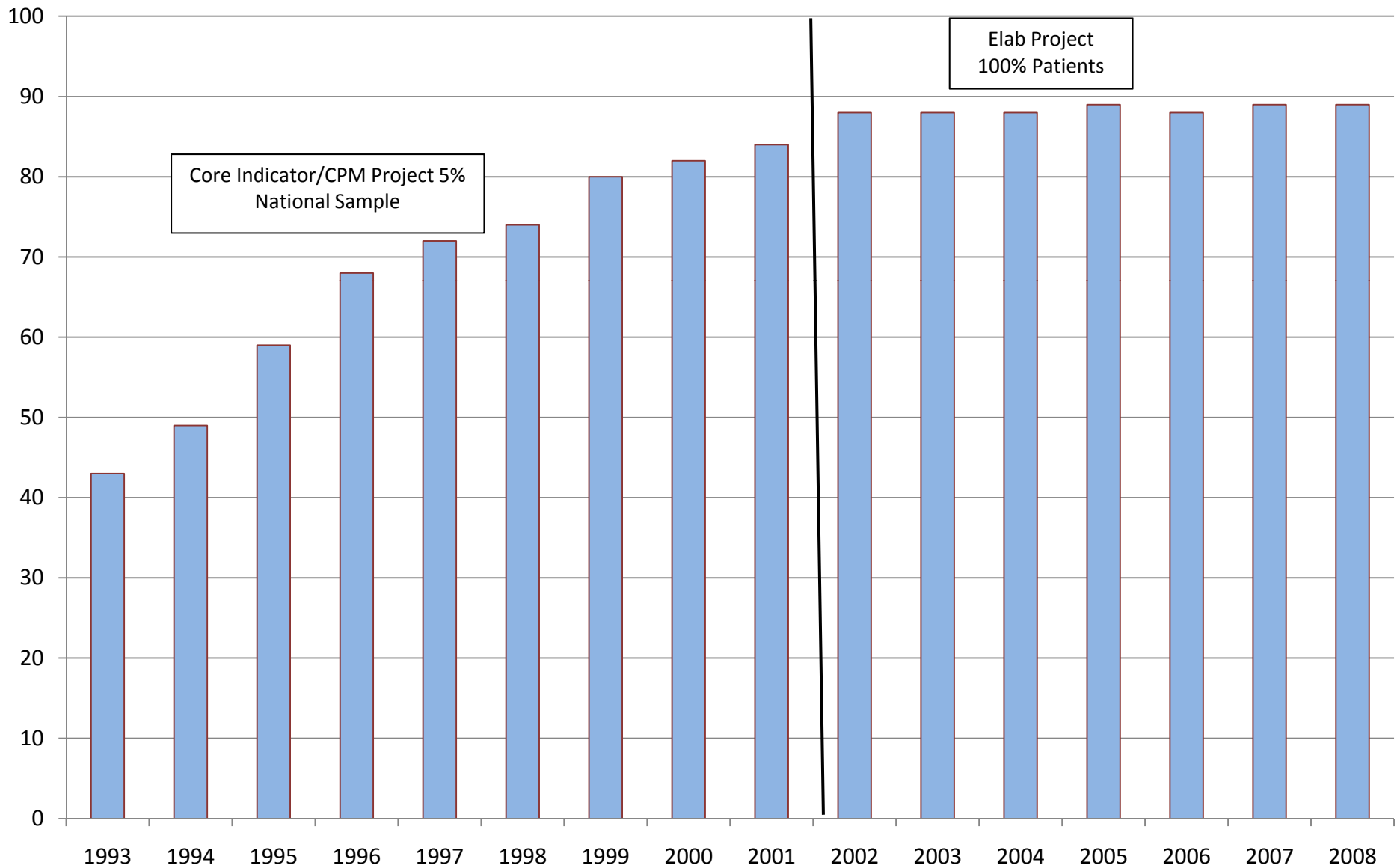


Factors Influencing Network QI Initiatives

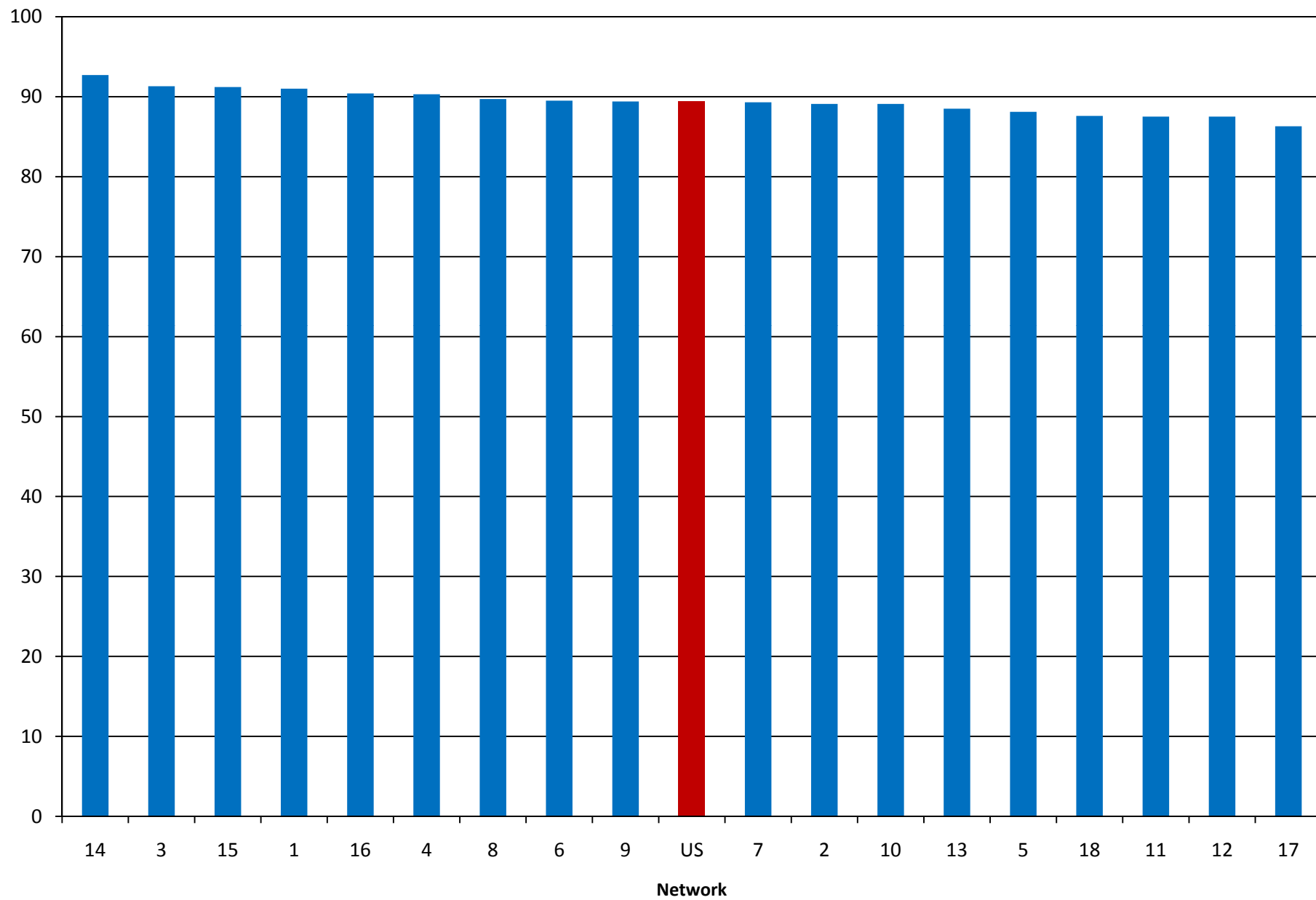
- KDOQI Guidelines
- FDA Black box warning, CREATE, CHOIR
- CMS reimbursement changes
- Public Reporting: Dialysis Facility Compare
- National CPM Project
- National Elab Project
- Professional focus (ASN, ANNA)
- Fistula First Breakthrough Initiative

Hemodialysis Adequacy

Percent of Patients with URR \geq 65%
National Data - 4th Quarter Data
1993-2001 CPM
2002-2008 Elab



**Percent of Patients with $Kt/V \geq 1.2$
National Elab Data Collection
Network Comparison – Q4 2008**



Anemia Management

Business Case for improving anemia management

- Decreased mortality¹
- Decreased morbidity¹
- Decreased disparities²
- Increased cost effectiveness³

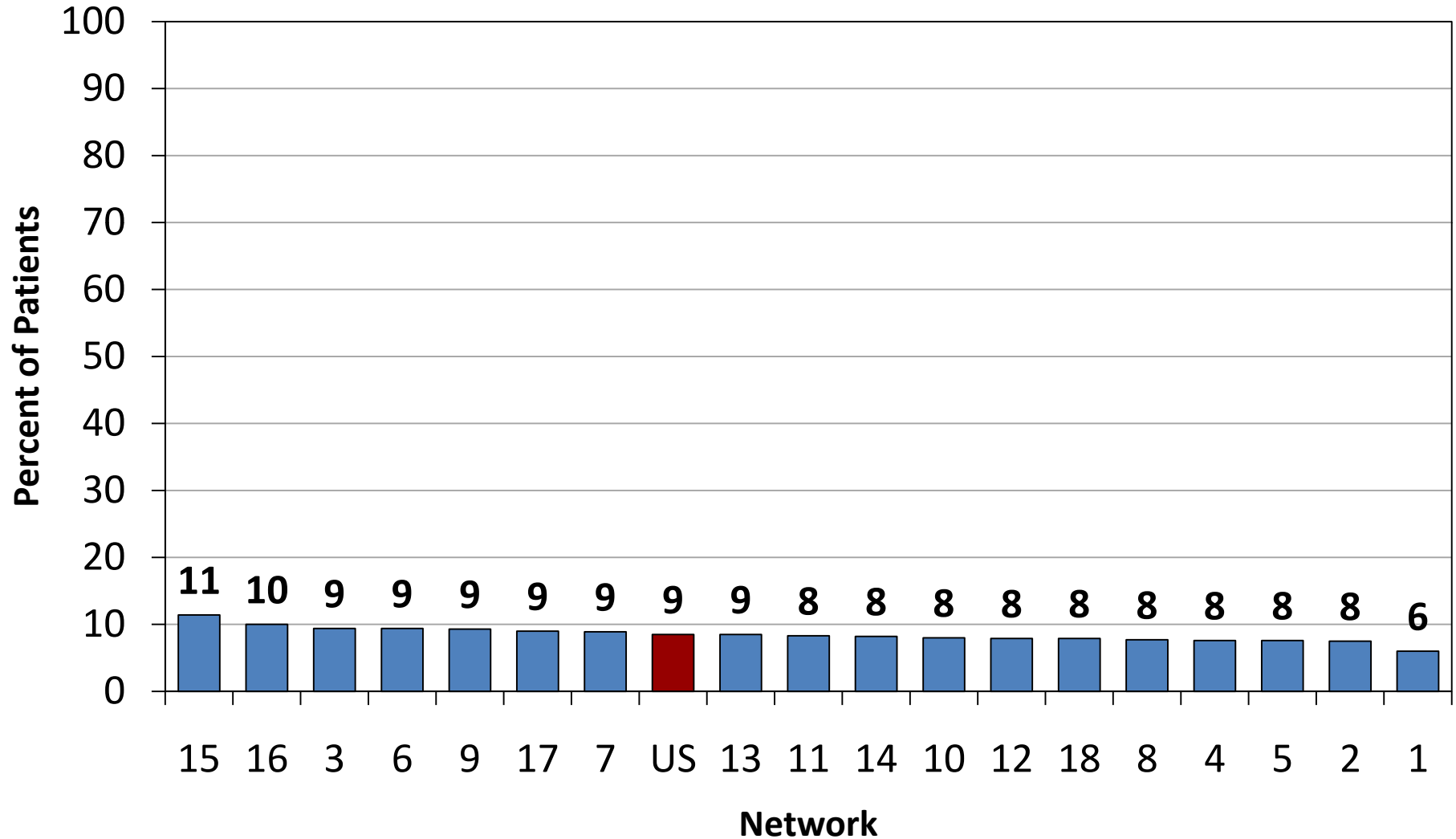
¹ Singh AK, Szczech L, Tang KL, et al. Correction of anemia with epoetin alfa in chronic kidney disease. *N Engl J Med* 2006; 355:2085-2098.

² Lea JP, Norris K, Agodoa L. The role of anemia management in improving outcomes for African-Americans with Chronic Kidney Disease. *Am J Nephrol* 2008; 28:732-743.

³ Singh AK, Szczech L, Tang KL, et al. Anaemia of CKD-the CHOIR study revisited. *Nephrol Dial Transplant* 2007; 22:1806-1810.

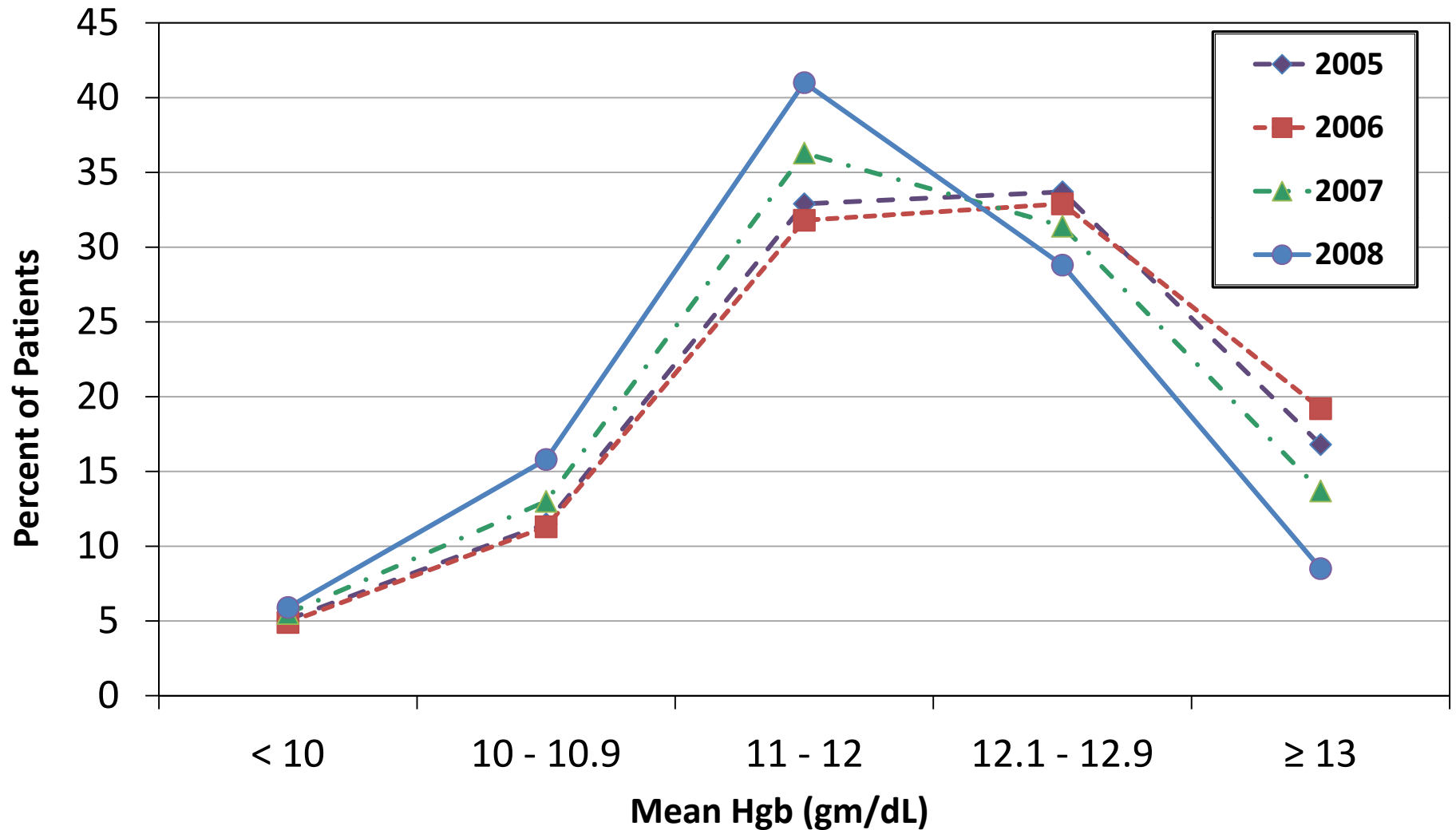
Percent of adult hemodialysis patients with mean hemoglobin concentration ≥ 13 gm/dL, by Network

Source: Elab Project, Q4 2008



Distribution of hemoglobin concentration for adult hemodialysis patients

Source: Elab Project, Q4 2005 – Q4 2008

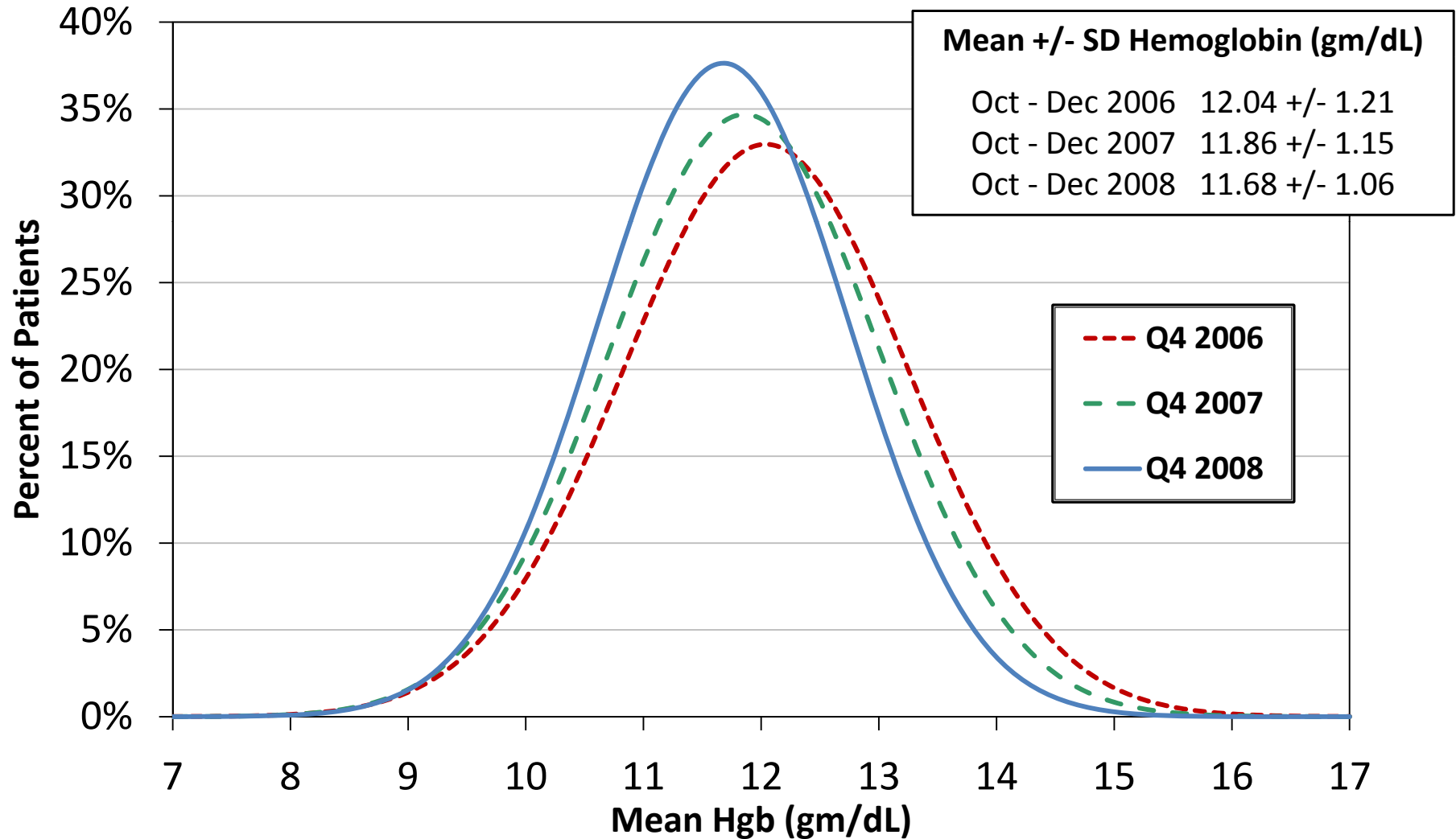


Factors Influencing Network QI Initiatives

- KDOQI Guidelines
- FDA Black box warning, CREATE, CHOIR
- CMS reimbursement changes
- Public Reporting: Dialysis Facility Compare
- National CPM Project
- National Elab Project
- Professional focus (ASN, ANNA)
- Fistula First Breakthrough Initiative

Normal curves for the hemoglobin distribution in adult hemodialysis patients

Source: Elab Project, Q4 2006 – Q4 2008



Summary

- Network responsibilities include patient level complaints, facility level technical assistance, Network-wide quality improvement, and national focus
- Impact has been demonstrated on clinically important issues such as dialysis adequacy, vascular access, and anemia management
- Evolving QI and evaluation science offers exciting new opportunities to make a difference by partnering with CMS and providers to improve quality of care for patients with kidney disease

Alternate Perspective

- Processing of Grievances and Complaints is presently inefficient and ineffective and not linked to system improvements
- Impact of NW intervention is not convincing
- Perceived sense of Urgency
- Networks need to focus more on the facilities who need help the most

Summary Points

- This is not academia. Pay attention to CMS contractor reform:
 - QIOs
 - FI's and Carriers to MACs
 - IT contractors
- We will operate using more of a business model in the future
- Response to complaints & grievances requires rapid, dramatic improvement:
 - It should be much more than the “individual”, it is about the entire “system”: it is the Networks' responsibility to make it so
 - There may need to be more regulatory “interventions” to some facilities
 - Involuntary discharges, health care disparities, and unintended consequences to minority populations are all part of our charge

Future Opportunities

Topics

- Reduction in health disparities
- Prevention (CKD, vaccination, diabetic complications, rehospitalizations*)
- Palliative care , end of life care, and hospice services
- Care transitions
- Reduced medication errors
- New performance measures

**Jencks SF, Williams MV, Coleman EA. Rehospitalizations among patients in the Medicare fee-for-service program. N Engl J Med 2009;360:1418-28.*

Key Needs

- Attribution
 - Comparison groups are needed
 - Competing initiatives (MIPPA153c) need to be taken into account
 - Focus on poor performance: that is quality improvement, not research
- Greater focus in our work
- Close attention to
 - Cost
 - Cost effectiveness
 - Absolute National Benchmarks of quality (and of poor care)
- **Minority Populations are of great importance**
 - Health care disparities
 - Grievance and complaints including IVD and enforcement
 - Unintended consequences from new payment systems (153b & 153c)
 - Methods for collecting data on race & ethnicity (MIPPA 185)