



# **CMS End Stage Renal Disease Prospective (Bundled) Payment**

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***THIRD NATIONAL BUNDLED PAYMENT SUMMIT***

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An iceberg floating in the ocean. The tip of the iceberg, which is above the water line, is labeled 'ESRD' in orange text. The much larger part of the iceberg, which is submerged below the water line, represents the earlier stages of Chronic Kidney Disease (CKD).

ESRD

CKD  
5

- GFR < 15 mL/min per 1.73 m<sup>2</sup>
- 0.23% of US population
- 600,000

CKD  
4

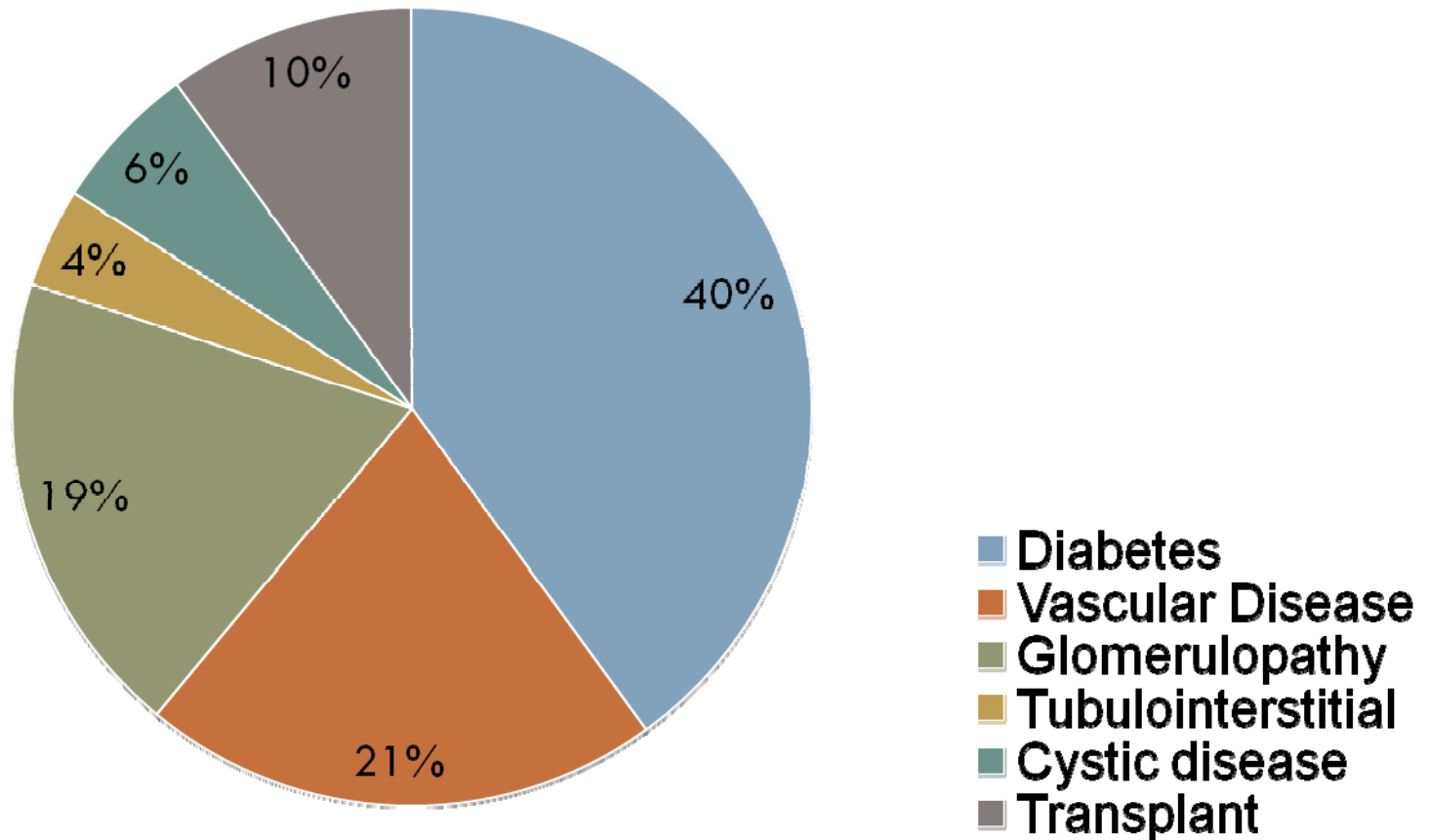
- GFR 15-29 mL/min per 1.73 m<sup>2</sup>
- 0.35% of US population
- 1 Million

CKD  
3

- GFR 30-59 mL/min per 1.73 m<sup>2</sup>
- 7.7% of US population
- 23 Million

Coresh J et al: Am J Kidney Dis 2003  
Jan;41(1):1-12

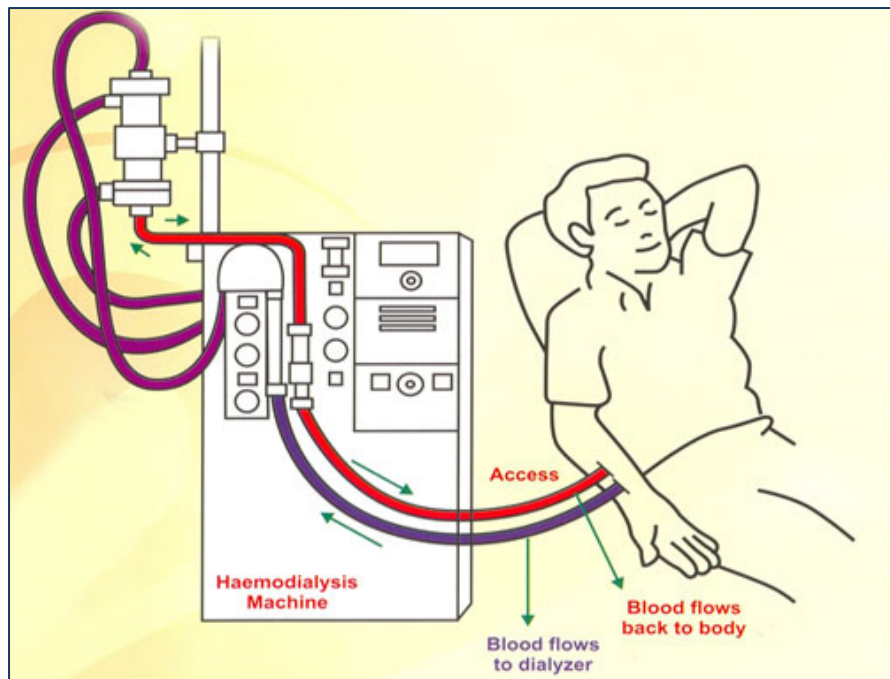
# Cause of ESRD



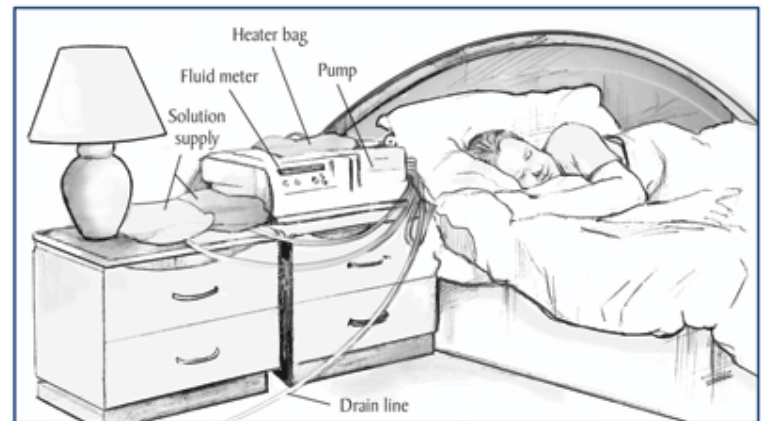
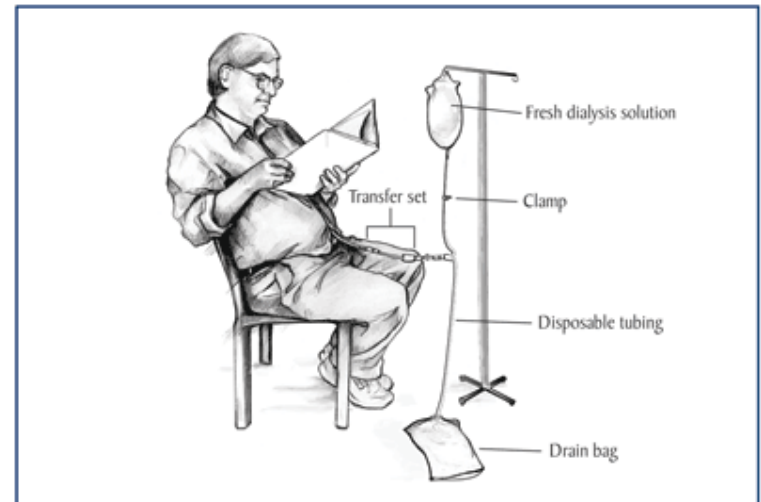
USRDS 2008 ADR

# Hemodialysis and Peritoneal Dialysis

HD



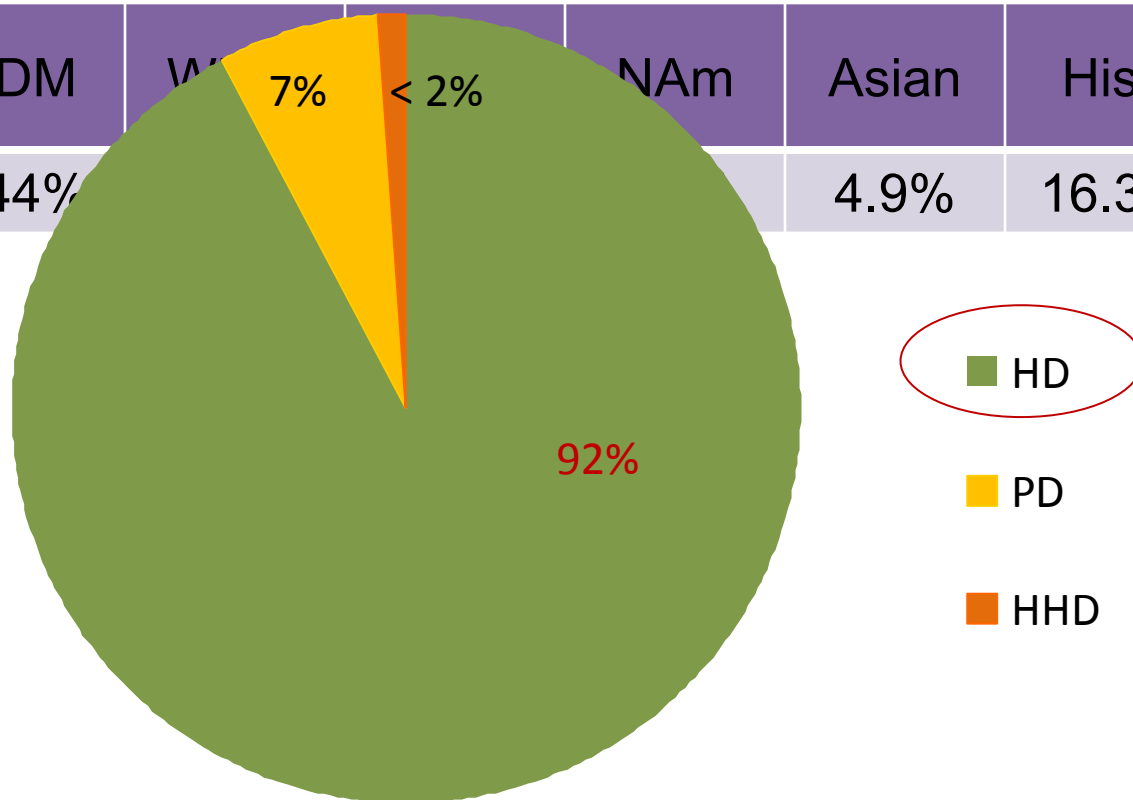
PD



# Number of ESRD patients in the US

## Dialysis Modality Distribution 2009

All patients	Mean age	DM	W	NA	NAm	Asian	Hisp
398,861	61.1	44%				4.9%	16.3%



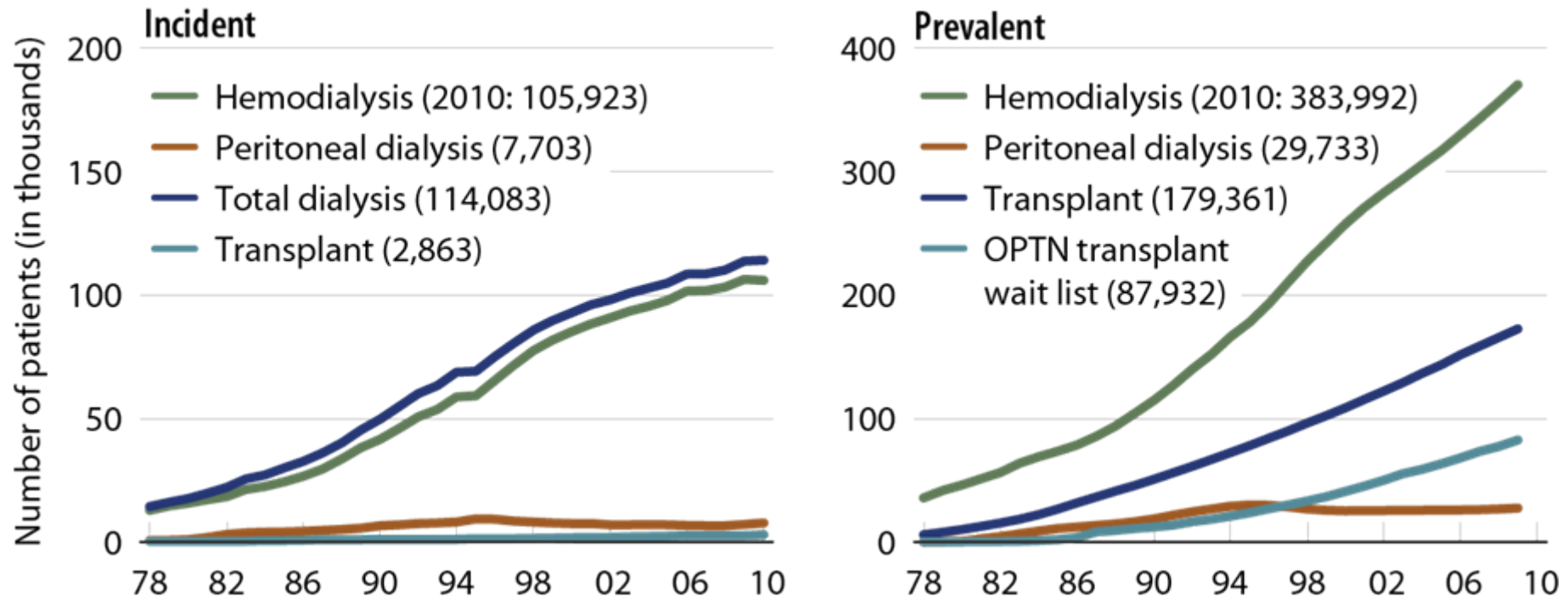
The rate of prevalent ESRD cases reached 1,738 PMP  
An increase of 2.1 percent from 2008

USRDS 2011ADR



# Incident & prevalent patient counts by modality

Figure 1.1 (Volume 2)

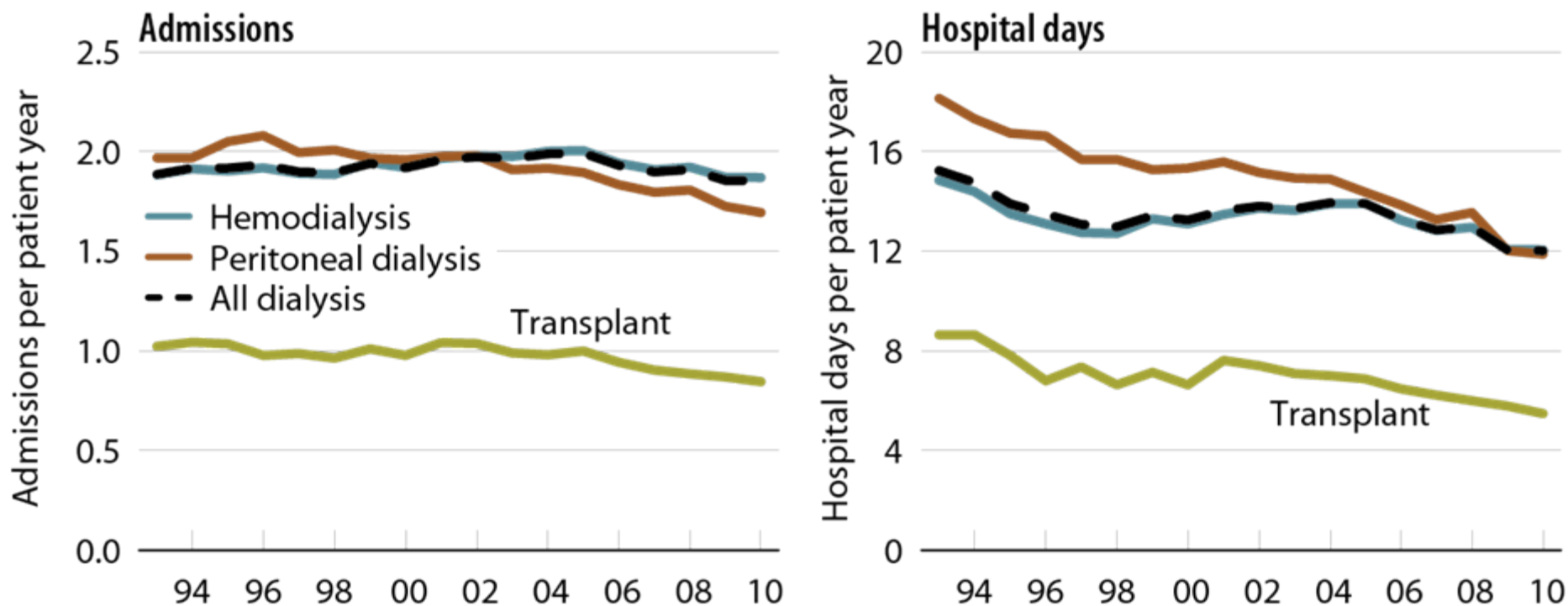


Incident & December 31 point prevalent patients.

USRDS ADR 2012

# Adjusted hospital admission rates & days by modality

Figure 3.2 (Volume 2)



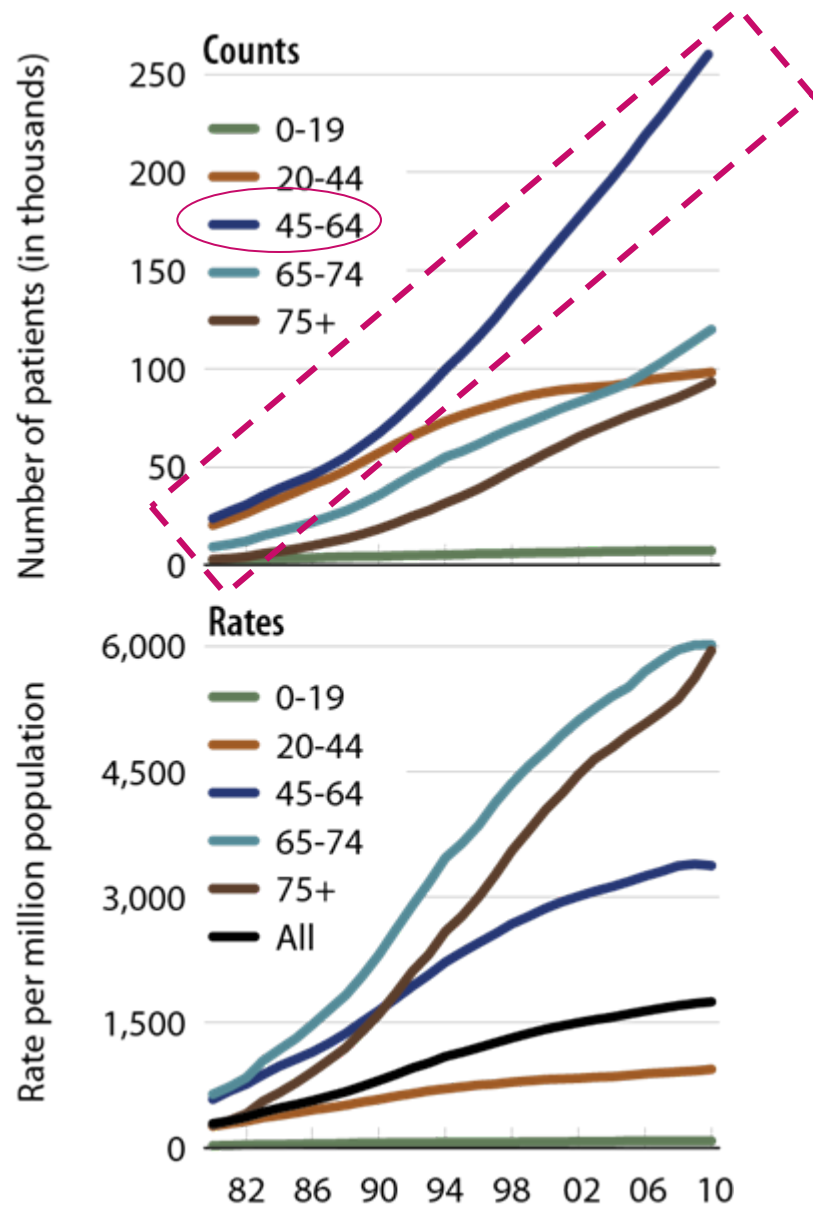
Period prevalent ESRD patients. Adj: age/gender/race/primary diagnosis; ref: ESRD patients, 2005.

USRDS 2012 ADR

# Prevalent counts of ESRD, by age

Figure 1.12 (Volume 2)

ESRD population growth is caused by the 45-64 year old “Baby Boomers”



December 31 point prevalent ESRD patients.  
Adj: gender/race; ref: 2005 ESRD patients.

USRDS 2012 ADR



# Dialysis Bundle Payment

## Fixed Payment (1983)

- **Bundled:**
  - Dialysis procedure – labor and supplies for both HD/PD
  - ESRD composite rate tests including renal and hepatic function tests, CBC, clotting time
- **Not bundled:**
  - IV medication given on dialysis – ESA, iron, Vit D, antibiotics
  - Other lab tests – PTH, iron monitoring, tests for co-morbid conditions, cultures

## Bundle (2011)

- ***All bundled:***
  - Dialysis procedure – labor and supplies
  - All labs – 53 total – all ESRD related, cultures
  - All IV drugs – ESA, VitD, iron, carnitine, antibiotics
  - PO medications with IV equivalent
    - Sensipar and Phosphate binders will be included in 2016

# ESRD PPS Final Rule – 186 pages



## Federal Register

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Thursday,  
August 12, 2010

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### Part II

### Department of Health and Human Services

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Centers for Medicare & Medicaid Services

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42 CFR Parts 410, 413 and 414  
Medicare Program; End-Stage Renal  
Disease Prospective Payment System;  
Final Rule and Proposed Rule



# Medicare New Bundled Dialysis PPS

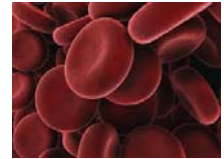
- Payment per treatment
  - \$229.63 in 2011 ↑ \$234.81 in 2012 ↑ \$240.88 in 2013
- Adjusters
  - Low volume adjustment: 1.202
    - < 4000 treatments x 3 years
  - ***Starting dialysis first 120 days: 1.51***
  - Co-morbid conditions
    - *Acute: current month + 3 months*
      - Pericarditis: 1.114
      - Bacterial pneumonia: 1.135
      - GI bleed with hemorrhage: 1.183
    - *Chronic: added on the current month until death or Tx*
      - Hereditary hemolytic or sickle cell anemia: 1.072
      - Myelodysplastic syndrome: 1.099
      - Monoclonal gammopathy: 1.024

The ESRD QIP is the *first* Medicare program which is linking payments to performance based upon SPECIFIC quality measures

Measure	2012	2013	2014
Performance Year	2010	2011	2012
Hb > 12g/dL	X	X	X
URR ≥ 65%	X	X	X
Hb < 10g/dL	X		
Other measures			Catheter > 90 days Fistula NHSN ICAHPS Ca/Phos

# 2015 QIP

- Clinical Measures
- **Dialysis Adequacy: Kt/V HD or PD**
- Anemia: Hb > 12g/dL
- Vascular Access Type: (CVC > 90 days & AVF,
- Reporting Measures
- **Dialysis Infections: NHSN**
- Patient Experience: ICAHPS
- Mineral Metabolism: Ca/Phos
- **Anemia Management: ESA dose/Hb**





8. Using any number from 0 to 10, where 0 is the worst kidney doctors possible and 10 is the best kidney doctors possible, what number would you use to rate the kidney doctors you have now?

- ☐ 0 Worst kidney doctors possible
- ☐ 1
- ☐ 2
- ☐ 3
- ☐ 4
- ☐ 5
- ☐ 6
- ☐ 7
- ☐ 8
- ☐ 9
- ☐ 10 Best kidney doctors possible

Physician ratings

21. In the last 3 months, how often did dialysis center staff insert your needles with as little pain as possible?

- <sup>1</sup> ☐ Never
- <sup>2</sup> ☐ Sometimes
- <sup>3</sup> ☐ Usually
- <sup>4</sup> ☐ Always
- <sup>5</sup> ☐ I insert my own needles

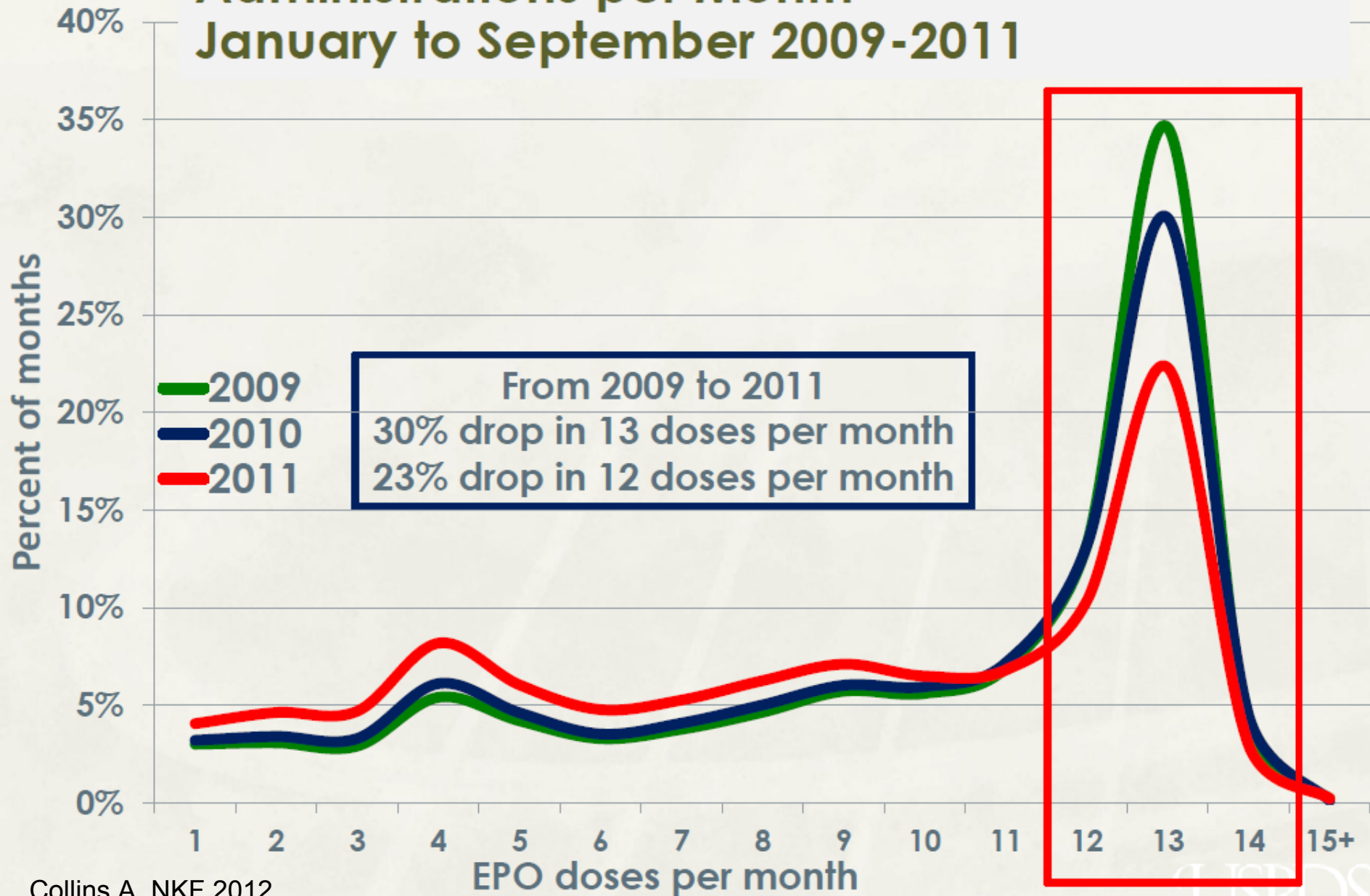
Staff ratings

34. In the last 3 months, how often was the dialysis center as clean as it could be?

- <sup>1</sup> ☐ Never
- <sup>2</sup> ☐ Sometimes
- <sup>3</sup> ☐ Usually
- <sup>4</sup> ☐ Always

Facility ratings

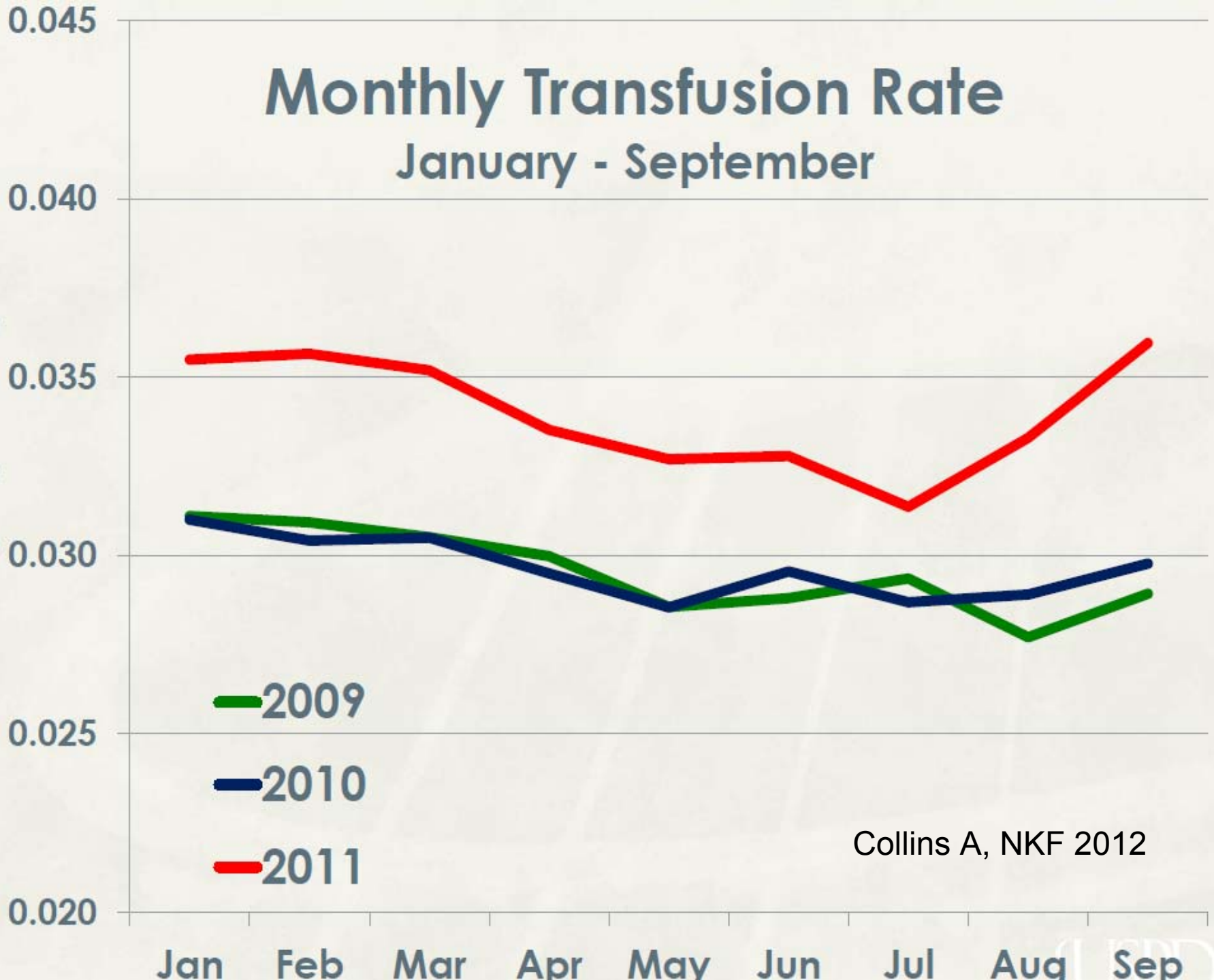
# % of Patients by the Mean Number of EPO Administrations per Month January to September 2009-2011



# Monthly Transfusion Rate

## January - September

Transfusions per person per month

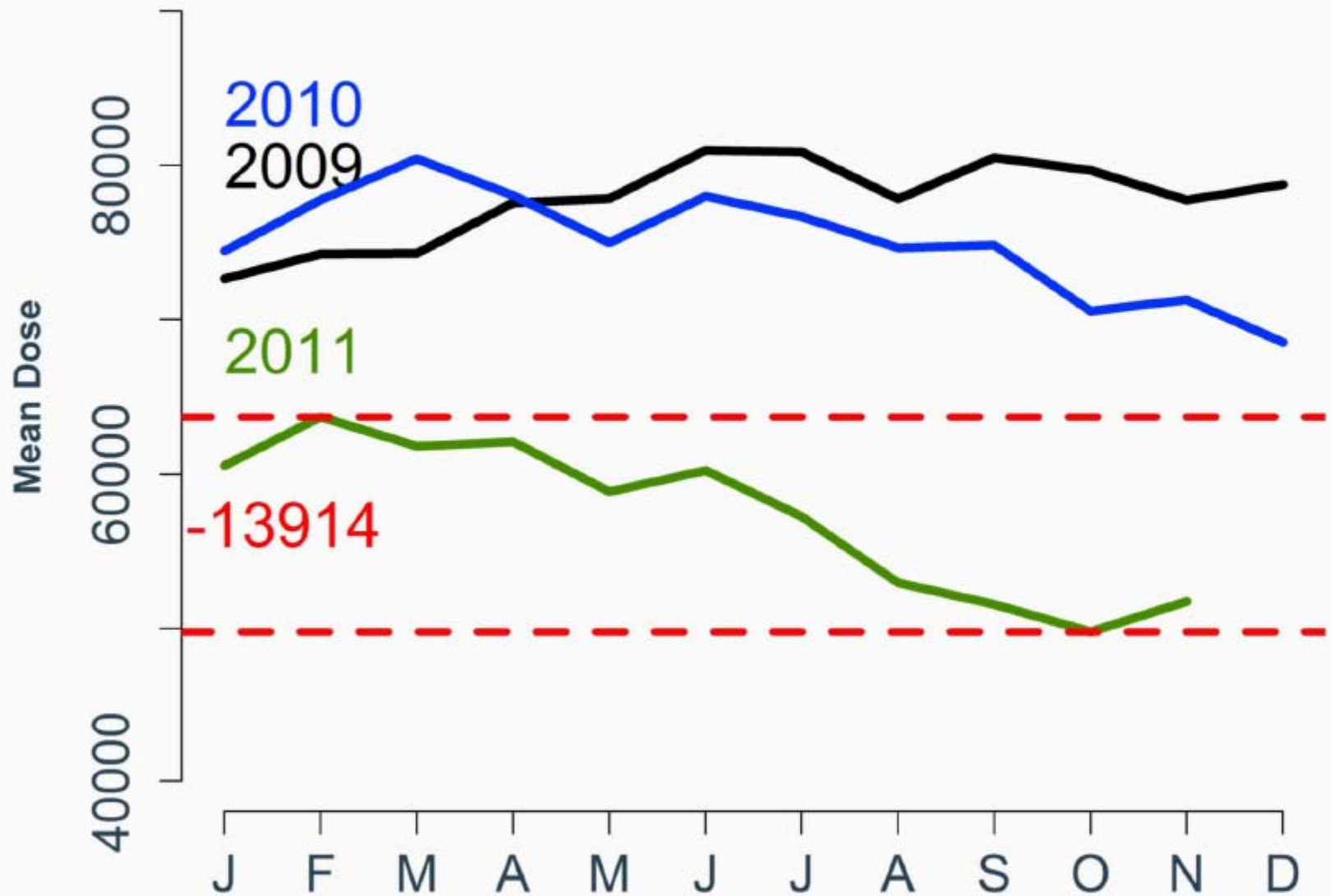


Collins A, NKF 2012

# Transfusion Rate per 100 Pt Months

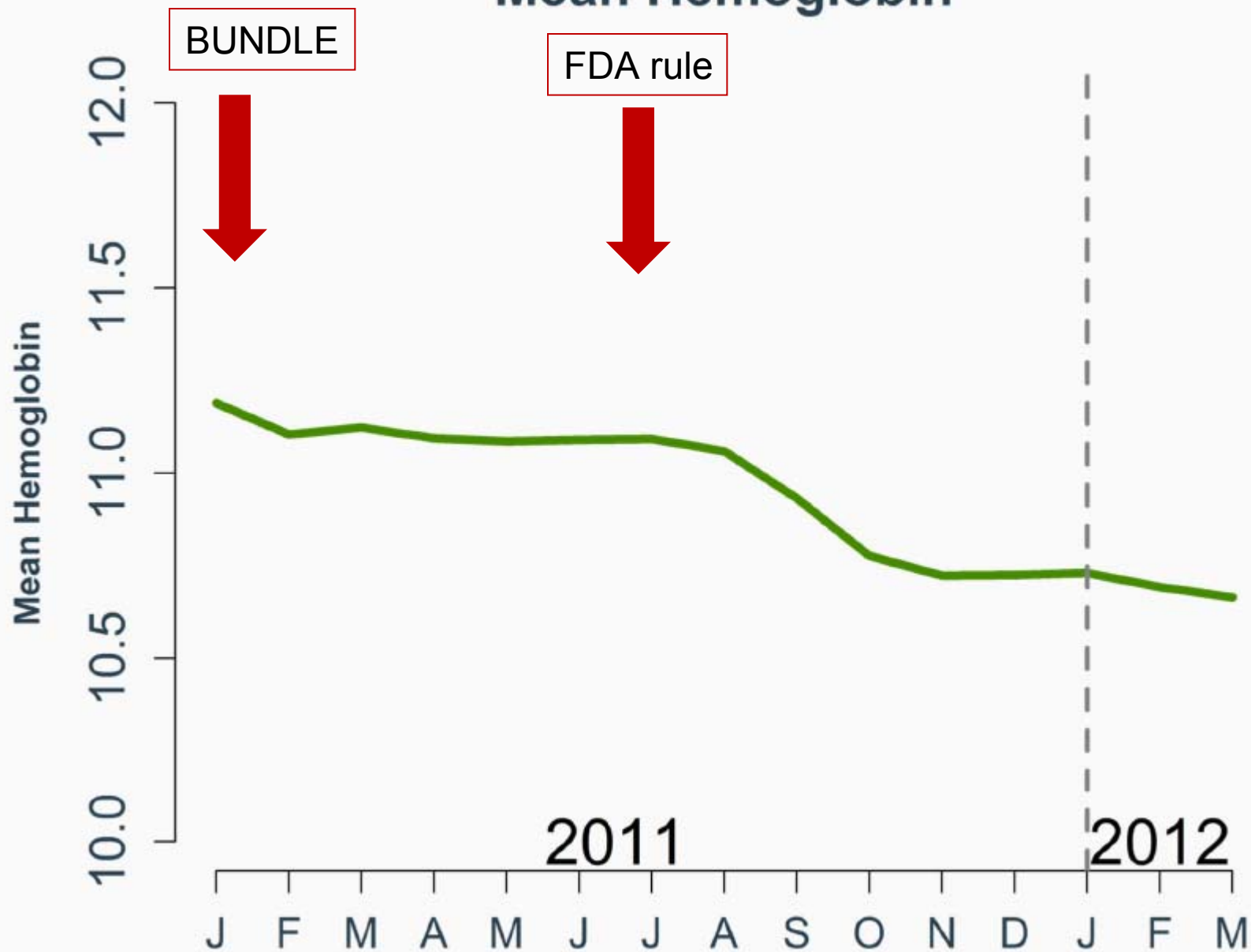


# Mean Monthly EPO Dose Among Pts Receiving EPO

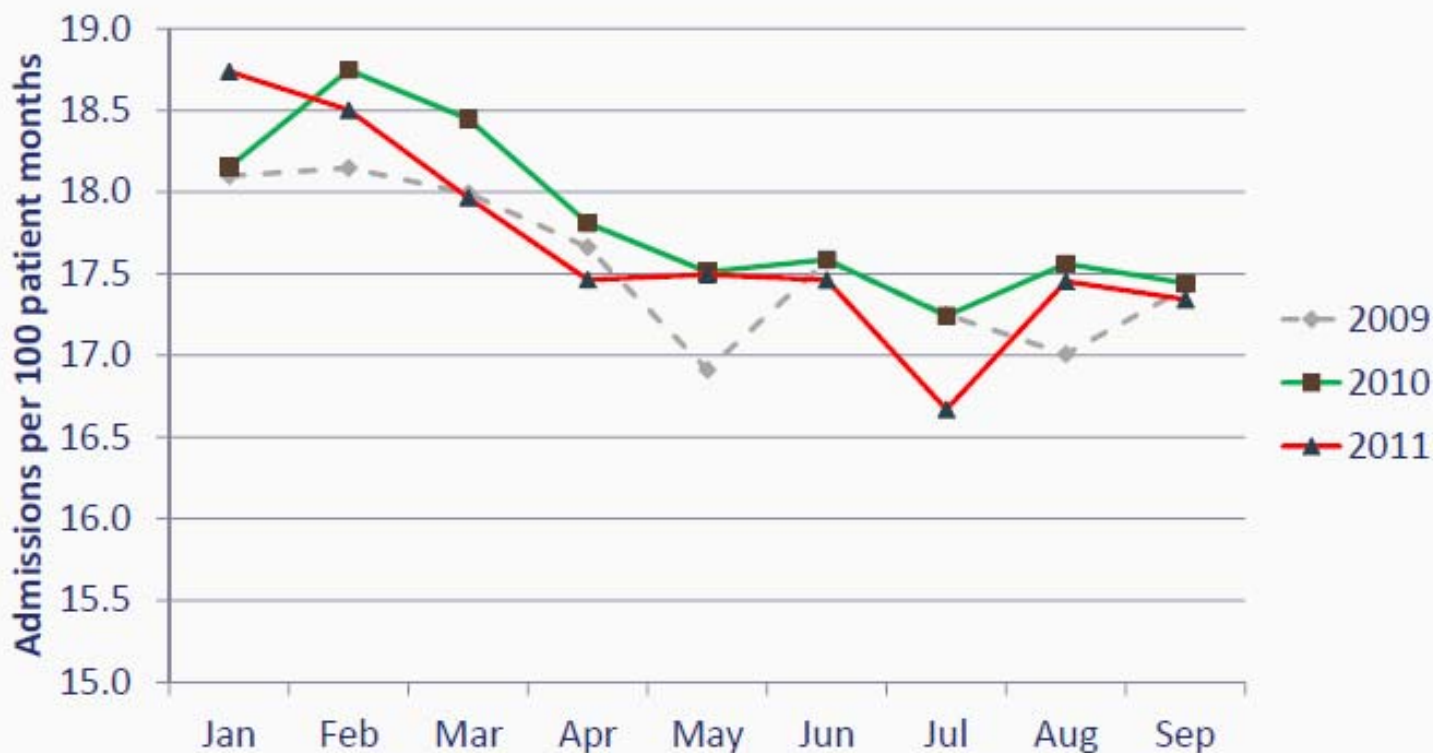




# Mean Hemoglobin

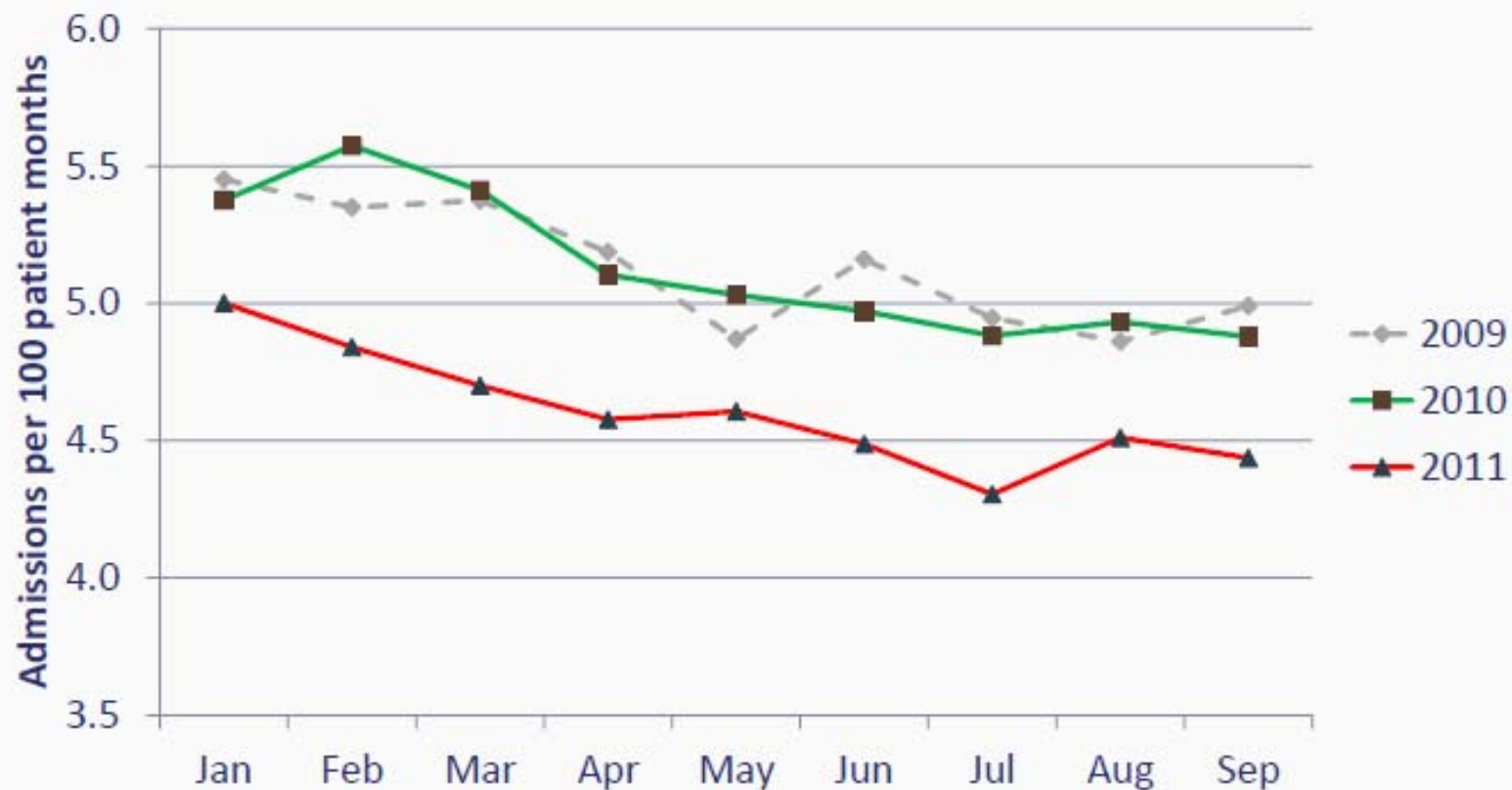


## All-cause hospital admission rates



USRDS 2012 ADR

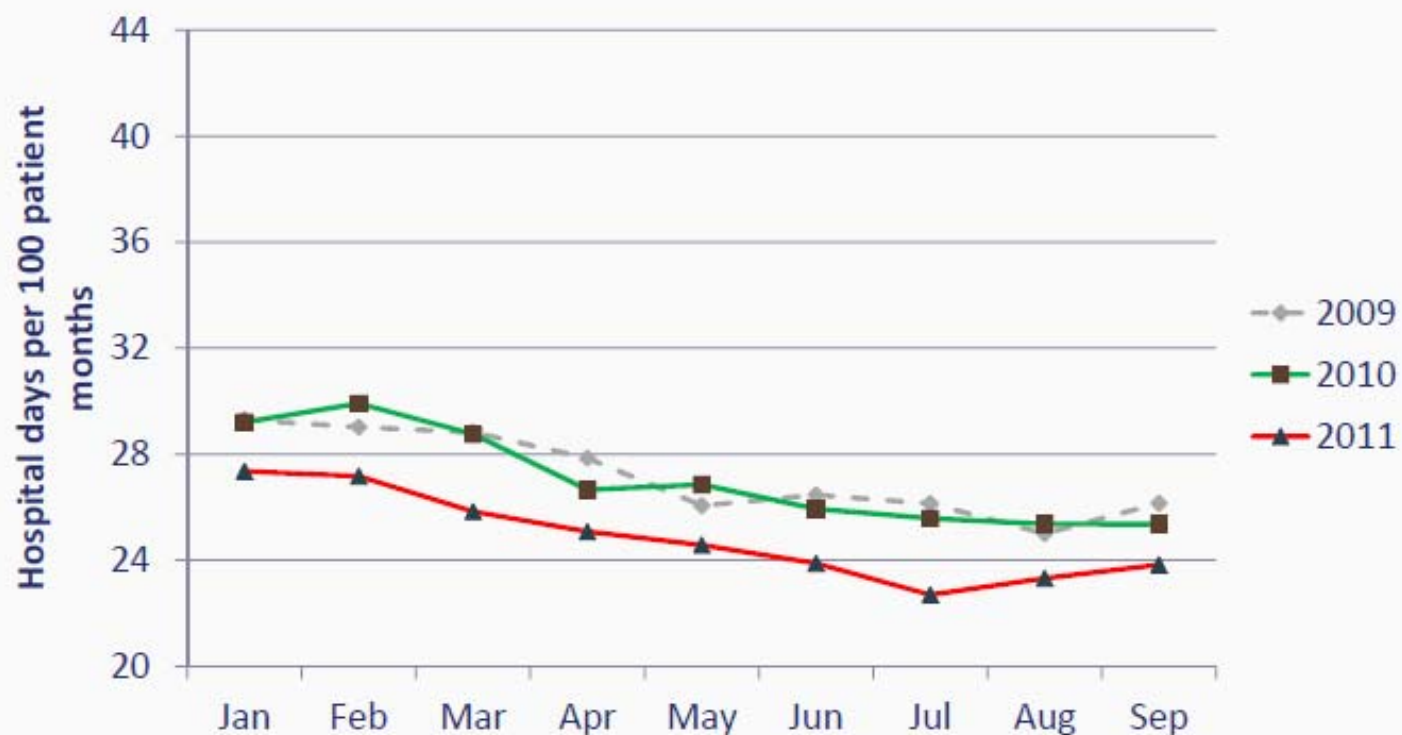
## CV hospital admission rates



USRDS 2012 ADR

Foley, ASN 2012

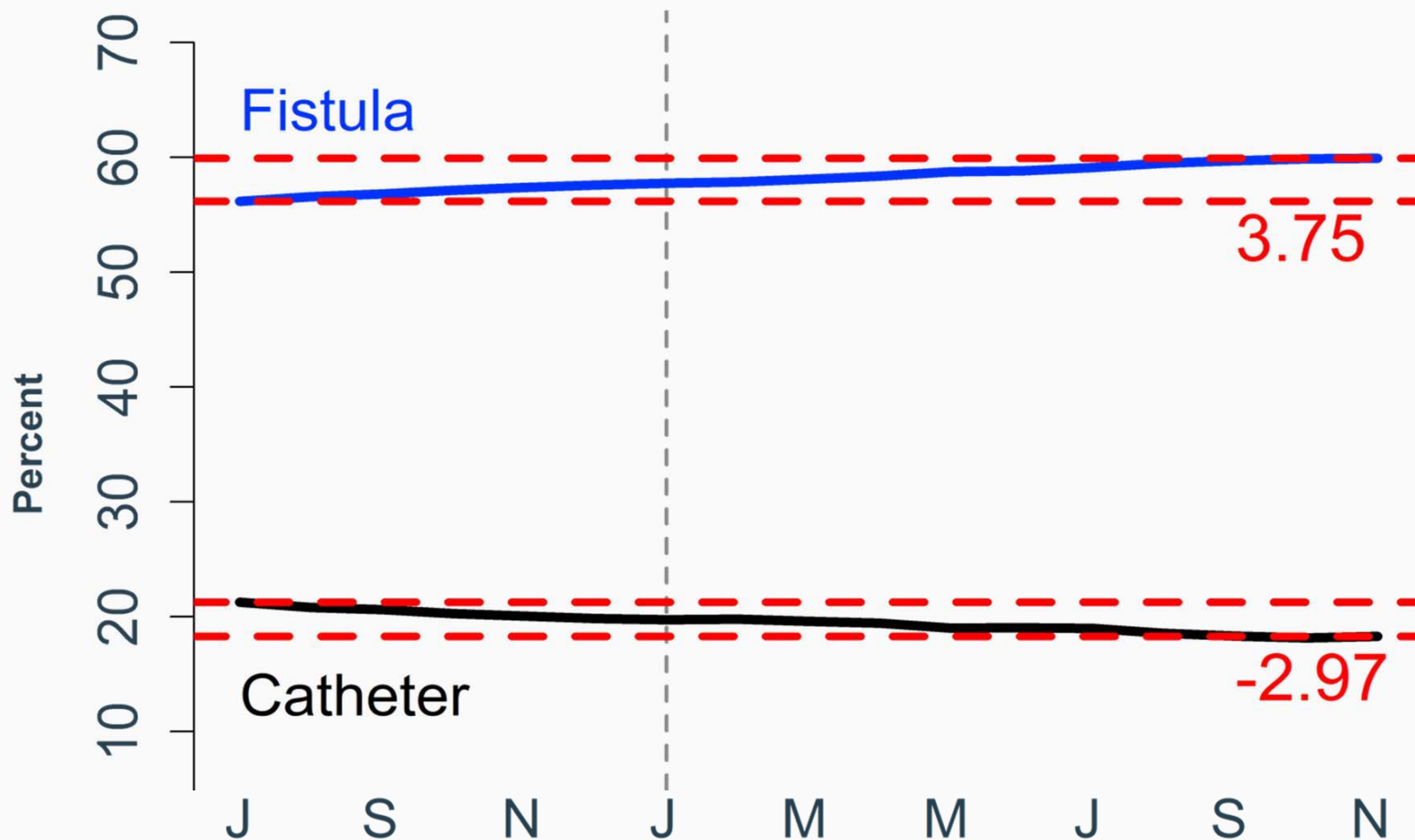
## Cardiovascular hospital day rates



ASN 2012

Foley, ASN 2012

## Vascular Access

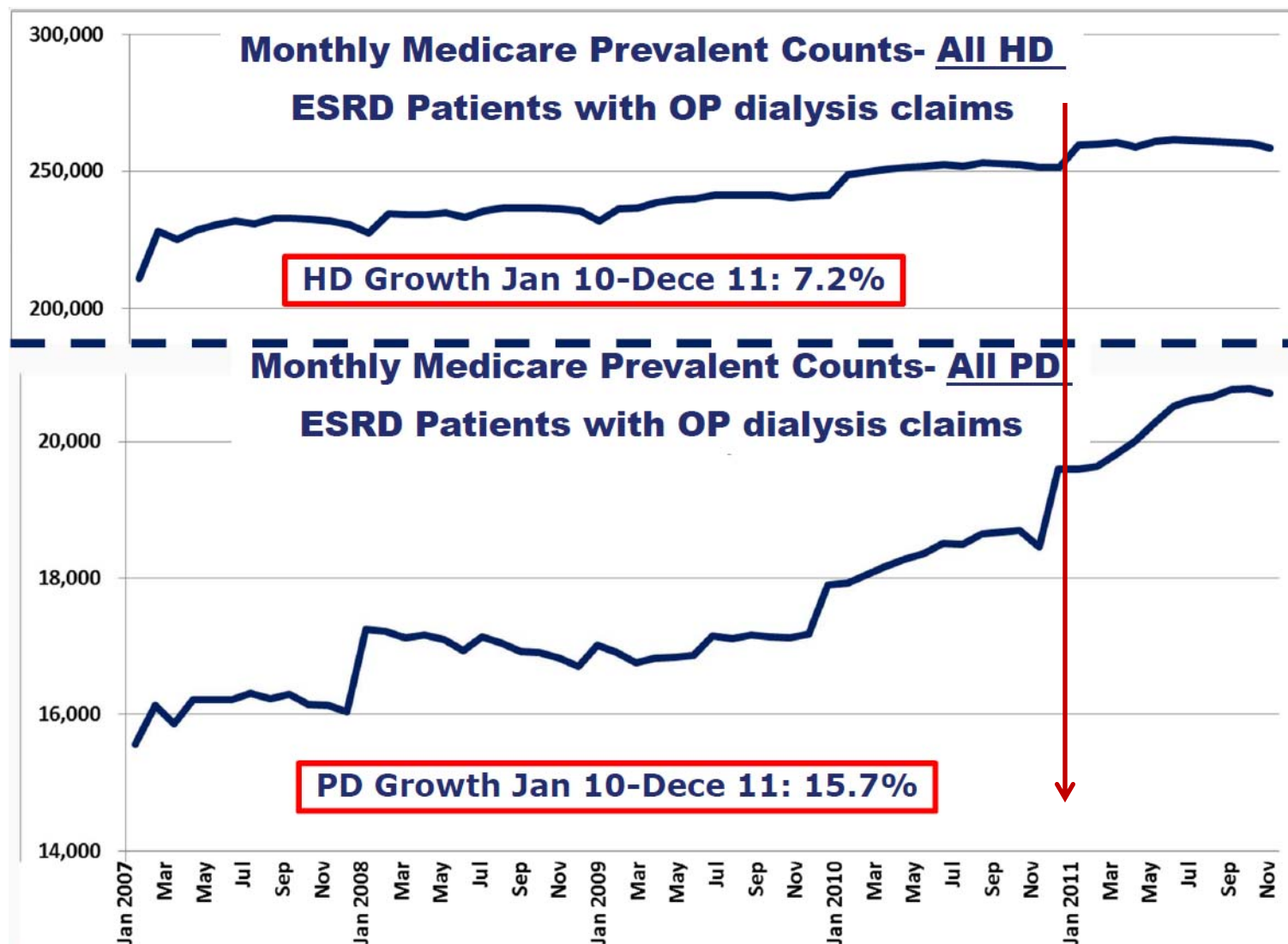


Gilbertson, ASN 2012



# USRDS: Impact of the Bundled Payment System; ADR Highlights

Allan J. Collins, ASN 2012



# ESRD Bundle

- Changes noted
  - Utilization of Epo decreased
  - Transfusion rate increased
  - CV hospitalizations/admission and days decreased
  - Dialysis Access – Fistulas ↑ and catheters ↓ slightly
  - Home Dialysis increasing
  - QIP
    - 70% of centers under bundle without penalty
- Questions remaining:
- Metrics – impacting both outcome and costs difficult to define
- Ultimate test will be QIP among all stakeholders with risk sharing