Data release procedures: Paul Eggers
Current status of the ESRD and CKD populations

- Growth in ESRD, rates of change and modalities
Incident & prevalent ESRD patient counts, by modality

Figure p.1

- Incident ESRD patients
- December 31 point prevalent patients.
Annual percent changes in patient counts

Figure p.3

Incident patients: USRDS data contain all ESRD patients, while CMS Facility Survey data (FSD) contain dialysis patients only. Prevalent patients: USRDS data contain patients with the indicated modality on December 31, FSD data for “all” include dialysis patients only, & FSD data for dialysis include patients with the indicated modality at the time of the survey.
Annual percent changes in patient counts

Figure p.3 (continued)

Incident patients: USRDS data contain all ESRD patients, while CMS Facility Survey data (FSD) contain dialysis patients only. Prevalent patients: USRDS data contain patients with the indicated modality on December 31, FSD data for “all” include dialysis patients only, & FSD data for dialysis include patients with the indicated modality at the time of the survey.

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Medicare vs. non-Medicare spending

Figure p.6

Medicare spending includes paid claims, estimated Medicare+ Choice costs, & estimated organ acquisition costs. Non-Medicare spending includes estimates of costs for EGHP patients & for non-Medicare ESRD patients, & estimates of patient obligations. See Appendix A for further details.
Patients with type I & II diabetes, by age & race

Figure 2.12

Incident ESRD patients.
Adjusted incident rates of diabetes, by age & race/ethnicity

Figure 2.13

Incident ESRD patients. Adjusted for gender.
Adjusted incident rates of diabetes, by age & race/ethnicity

Figure 2.13 (continued)

Incident ESRD patients. Adjusted for gender.

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Adjusted hospital admissions, by modality & patient vintage: prevalent patients  Figure p.7

Period prevalent ESRD patients; adjusted for age, gender, race, & primary diagnosis. All ESRD patients, 2002, used as reference cohort. At the end of 1998 a new ICD-9-CM code was added for infections due to internal devices in peritoneal dialysis patients; data prior to this date are omitted.
Adjusted mortality rates, overall, by modality & patient vintage: prevalent patients Figure p.10

Period prevalent ESRD patients; adjusted for age, gender, race, & primary diagnosis. ESRD patients, 2001, used as reference cohort.

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Adjusted five-year survival, by first modality

Incident dialysis patients & patients receiving a first transplant in the incident year; adjusted for age, gender, race, & primary diagnosis. Incident ESRD patients, 1996, used as reference cohort. Modality determined on first ESRD service date; excludes patients transplanted or dying during the first 90 days.

ASN 2003
Patient distribution, by access use & race: prevalent patients

Figure p.16

Year represents the prevalent year. Prevalent hemodialysis patients; CPM data. Map data from 2002. No vascular access information collected prior to the 1999 survey. Includes only patients whose access is known.
Year represents the prevalent year. Prevalent hemodialysis patients; CPM data. Map data from 2002. Each patient has 1–3 URR measurements (one for each of three consecutive one-month intervals), which are transformed into categories, & the median category is calculated. If the median falls between two categories, 0.5 patients are added to each.
Anemia treatment in prevalent patients

Period prevalent dialysis patients with EPO claims. Monthly hemoglobin includes all claims with a hematocrit value between 10 & 50; weekly EPO dose includes all claims for patients with an average number of administrations per month of ≤20; EPO doses adjusted for inpatient days.
Anemia in prevalent patients

Figure p.20

Period prevalent dialysis patients with EPO claims. Monthly hemoglobin includes all claims with a hematocrit value between 10 & 50; weekly EPO dose includes all claims for patients with an average number of administrations per month of ≤20.
HD and PD patient distribution, by EPO use & hemoglobin: prevalent patients

Figure p.18

Year represents the prevalent year. Prevalent hemodialysis patients; CPM data. Each patient has 1–3 hematocrit measurements, each of which is converted to a hemoglobin by dividing it by three. A mean hemoglobin is calculated for each patient, then an overall mean across patients is calculated. For data collected in 1997–1998, an individual hemoglobin value is substituted if the corresponding hematocrit value is missing. For data collected in 1999 & after, hemoglobin values are used instead of hematocrit values.
Per member per month expenditures for patients initiating in 2001, by age

Figure p.21

Medicare: incident ESRD patients age 67 & older, 2001, with Medicare as primary payor for the six months before & the six months after the first ESRD service date.

Medstat (EGHP): incident EGHP patients younger than 65, 2001, enrolled for the six months before & the six months after the first ESRD service date.
Care of the CKD population

- Preventive care measures in DM patient
- Cardiovascular risk factors
- CKD care
HbA1c testing in diabetic CKD patients

Figure 1.23

Medicare: general Medicare patients enrolled in Medicare before January 1 of each one- or two-year period, & alive through the last day of the period. Patients enrolled in an HMO, with Medicare as secondary payor, or diagnosed with ESRD during the period are excluded. Age calculated on the last day of the study period. EGHP: patients younger than 65, & enrolled for the entire study period in a fee-for-service plan; patients with ESRD diagnosed before & during the study period are excluded. Age calculated at the testing year. Patients with diabetes & CKD in the first year of the study period; HbA1c tracked in the second year.
Medicare: general Medicare patients enrolled in Medicare before January 1 of each one- or two-year period, & alive through the last day of the period. Patients enrolled in an HMO, with Medicare as secondary payor, or diagnosed with ESRD during the period are excluded. Age calculated on the last day of the study period. EGHP: patients younger than 65, & enrolled for the entire study period in a fee-for-service plan; patients with ESRD diagnosed before & during the study period are excluded. Age calculated at the testing year. Patients with diabetes & CKD in the first year of the study period; lipid testing tracked in the second year. Codes for lipid testing changed in 1998; data for prior years are omitted here.
Lipid testing in CKD patients with CVD  

Figure 1.25

Medicare: general Medicare patients enrolled in Medicare before January 1 of each one- or two-year period, & alive through the last day of the period. Patients enrolled in an HMO, with Medicare as secondary payor, or diagnosed with ESRD during the period are excluded. Age calculated on the last day of the study period. EGHP: patients younger than 65, & enrolled for the entire study period in a fee-for-service plan; patients with ESRD diagnosed before & during the study period are excluded. Age calculated at the testing year. Lipid testing tracked each year. Codes for lipid testing changed in 1998; data for prior years are omitted here.
Pneumonia vaccinations in CKD patients

Figure 1.26

Medicare: general Medicare patients enrolled in Medicare before January 1 of each one- or two-year period, & alive through the last day of the period. Patients enrolled in an HMO, with Medicare as secondary payor, or diagnosed with ESRD during the period are excluded. Age calculated on the last day of the study period. EGHP: patients younger than 65, & enrolled for the entire study period in a fee-for-service plan; patients with ESRD diagnosed before & during the study period are excluded. Age calculated at the testing year. Vaccinations tracked during the entire period.
Medicare: general Medicare patients enrolled in Medicare before January 1 of each one- or two-year period, & alive through the last day of the period. Patients enrolled in an HMO, with Medicare as secondary payor, or diagnosed with ESRD during the period are excluded. Age calculated on the last day of the study period. EGHP: patients younger than 65, & enrolled for the entire study period in a fee-for-service plan; patients with ESRD diagnosed before & during the study period are excluded. Age calculated at the testing year. Vaccinations tracked between September 1 & December 31 of each year.
Vitamin D hormone use in CKD patients

Figure 1.28

MCBS patients, age 65 & older; data from MCBS “Cost & Use” file. EGHP: patients younger than 65, & enrolled for the entire study period in a fee-for-service plan; patients with ESRD diagnosed before & during the study period are excluded. Age calculated at the testing year. Hormone use tracked during each year.
Calcium phosphorus testing in CKD patients

Figure 1.29

Medicare: general Medicare patients enrolled in Medicare before January 1 of each one- or two-year period, & alive through the last day of the period. Patients enrolled in an HMO, with Medicare as secondary payor, or diagnosed with ESRD during the period are excluded. Age calculated on the last day of the study period. EGHP: patients younger than 65, & enrolled for the entire study period in a fee-for-service plan; patients with ESRD diagnosed before & during the study period are excluded. Age calculated at the testing year. Calcium phosphorus testing tracked during each year.
**Medicare**: general Medicare patients enrolled in Medicare before January 1 of each one- or two-year period, & alive through the last day of the period. Patients enrolled in an HMO, with Medicare as secondary payor, or diagnosed with ESRD during the period are excluded. Age calculated on the last day of the study period. 

**EGHP**: patients younger than 65, & enrolled for the entire study period in a fee-for-service plan; patients with ESRD diagnosed before & during the study period are excluded. Age calculated at the testing year. PTH testing tracked during each year.

**Figure 1.30**

*Graphs showing PTH testing in CKD patients.*
Adjusted five-year survival, by modality: incident patients

Figure 6.34

Incident dialysis patients; adjusted for age, gender, race, & primary diagnosis. All ESRD patients, 1996, used as reference cohort. Modality determined on first ESRD service date; excludes patients transplanted or dying during the first 90 days.
Adjusted mortality rates, by vintage: dialysis patients

Figure 6.6

Period prevalent dialysis patients; rates adjusted for age, gender, race, & primary diagnosis. Dialysis patients, 2001, used as reference cohort.
Adjusted all-cause mortality, by vintage: prevalent patients

Figure 6.35

Period prevalent dialysis patients; rates adjusted for age, gender, race, & primary diagnosis. Dialysis patients, 2001, used as reference cohort. The Death Notification form was revised in September 1990 to include more detailed categories for cause of death; prior to this time cardiovascular deaths were often classified as being of “other” causes. Because of this, data for cardiovascular & “other” deaths prior to 1991 have been omitted here.
Incident female adult dialysis patients without breast, cervical, uterine, or ovarian cancer in the first year of dialysis. Rates include first new cancer admissions (in the second year) with cancer as a principal or secondary diagnosis code. Included patients from 1997–1999 used as reference cohort. Adjusted for age, race, & diabetic status.
New cancer hospitalization rates, by diabetic status: female dialysis patients

Incident female adult dialysis patients without breast, cervical, uterine, or ovarian cancer in the first year of dialysis. Rates include first new cancer admissions (in the second year) with cancer as a principal or secondary diagnosis code. Included patients from 1997–1999 used as reference cohort. Adjusted for age & race.
New cancer hospitalization rates, by race: female dialysis patients

Incident female adult dialysis patients without breast, cervical, uterine, or ovarian cancer in the first year of dialysis. Rates include first new cancer admissions (in the second year) with cancer as a principal or secondary diagnosis code. Included patients from 1997–1999 used as reference cohort. Adjusted for age & primary diagnosis.
Treatment rates for new cancers: female dialysis patients  Figure 6.60

Incident female adult dialysis patients with a new cancer hospitalization.
Prevalent patients initiating therapy at least 90 days before December 31 of prior year, age 14–45 on January 1 of prevalent year, alive on December 31 of that year, & with Medicare as primary payor & Medicare Part B coverage during the year. Treatment modality defined on December 31 of previous year, & assumed to be fixed during prevalent year. A complication event or pregnancy outcome is attributed to the year of the first claim indicating pregnancy, not the year in which the event or outcome occurred (although these years may be identical).
Complications in pregnancy, by modality

Figure 6.62

Prevalent patients initiating therapy at least 90 days before December 31 of prior year, age 14–45 on January 1 of prevalent year, alive on December 31 of that year, & with Medicare as primary payor & Medicare Part B coverage during the year. Treatment modality defined on December 31 of previous year, & assumed to be fixed during prevalent year. A complication event or pregnancy outcome is attributed to the year of the first claim indicating pregnancy, not the year in which the event or outcome occurred (although these years may be identical).
Prevalent patients initiating therapy at least 90 days before December 31 of prior year, age 14–45 on January 1 of prevalent year, alive on December 31 of that year, & with Medicare as primary payor & Medicare Part B coverage during the year. Treatment modality defined on December 31 of previous year, & assumed to be fixed during prevalent year. A complication event or pregnancy outcome is attributed to the year of the first claim indicating pregnancy, not the year in which the event or outcome occurred (although these years may be identical).
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Prevalent patients initiating therapy at least 90 days before December 31 of prior year, age 14–45 on January 1 of prevalent year, alive on December 31 of that year, & with Medicare as primary payor & Medicare Part B coverage during the year. Treatment modality defined on December 31 of previous year, & assumed to be fixed during prevalent year. A complication event or pregnancy outcome is attributed to the year of the first claim indicating pregnancy, not the year in which the event or outcome occurred (although these years may be identical).
Prevalent patients initiating therapy at least 90 days before December 31 of prior year, age 14–45 on January 1 of prevalent year, alive on December 31 of that year, & with Medicare as primary payor & Medicare Part B coverage during the year. Treatment modality defined on December 31 of previous year, & assumed to be fixed during prevalent year. A complication event or pregnancy outcome is attributed to the year of the first claim indicating pregnancy, not the year in which the event or outcome occurred (although these years may be identical).
Race and CKD in the Medicare Population

ASN 2003
Design

• Medicare patients who survived from January 1, 1998, to December 31, 1999.
• Patient characteristics defined as of December 31, 1999.
• Followed from January 1, 2000, to December 31, 2001 for study outcomes.
• ICD-9-CM codes to define events.
Models

• Multivariate logistic regression for cross-sectional associations of CKD.
• Cox regression for event-free survival analysis.
• Exploratory variables: race, DM, CKD, age, sex, days hospitalized in preceding 2 years, several comorbid conditions.
Patient Characteristics Dec 31 1999

- DM: 18.1%
- CKD: 3.8%
- DM and CKD: 1.6%
- 75-79: 24.5%
- 80+: 31.6%
- F: 60.8%
- AA: 7.1%
- Other: 3.9%
- ASVD: 21.8%
- CHF: 13.8%
- Anemia: 16.7%
Race and DM and CKD

Overall

DM+/CKD-

DM-/CKD+

DM+/CKD+

AA

Other

0.00%

2.00%

4.00%

6.00%

8.00%

10.00%

12.00%

14.00%

16.00%

7.1%

3.9%

10.8%

5.7%

9.8%

3.3%

13.9%

6.8%

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Adjusted Odds Ratio of CKD

- White: 1
- AA: 1.4
- Other: 1.24
Population Event Rates Per 100 PY

- CHF: 10.8
- ASVD: 16.5
- RRT: 0.14
- Death: 6.4
Race and Events in the General Population
Adjusted Hazards Ratios

<table>
<thead>
<tr>
<th>Event</th>
<th>White</th>
<th>AA</th>
<th>Other</th>
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<tbody>
<tr>
<td>CHF</td>
<td>1.05</td>
<td>0.89</td>
<td>0.89</td>
</tr>
<tr>
<td>ASVD</td>
<td>1.06</td>
<td>0.89</td>
<td></td>
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<tr>
<td>RRT</td>
<td></td>
<td></td>
<td>1.28</td>
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<tr>
<td>Death</td>
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<td>0.88</td>
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</table>
Events in the CKD Population
Adjusted Hazards Ratios

<table>
<thead>
<tr>
<th>Condition</th>
<th>White</th>
<th>AA</th>
<th>Other</th>
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<tbody>
<tr>
<td>CHF</td>
<td>1</td>
<td>0.98</td>
<td>0.94</td>
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<td>ASVD</td>
<td>1</td>
<td>1.1</td>
<td>0.9</td>
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<tr>
<td>RRT</td>
<td>1</td>
<td>1.77</td>
<td>1.12</td>
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<tr>
<td>Death</td>
<td>1</td>
<td>1.06</td>
<td>0.89</td>
</tr>
</tbody>
</table>
Adjusted Hazards Ratios for RRT
African American vs White (ref)

Overall CKD+ CKD- DM+ DM-

2.09 1.77 2.6 1.86 2.36

Overall

CKD+

CKD-

DM+

DM-
Adjusted Hazards Ratios for RRT
African American vs White (ref)

<table>
<thead>
<tr>
<th>Condition</th>
<th>Ratio</th>
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<tbody>
<tr>
<td>CKD+/DM+</td>
<td>1.71</td>
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<tr>
<td>CKD+/DM-</td>
<td>1.86</td>
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<tr>
<td>CKD-/DM+</td>
<td>2.16</td>
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<tr>
<td>CKD-/DM-</td>
<td>2.95</td>
</tr>
</tbody>
</table>
Conclusions

• In spite of higher rates of the major competing event (death), African American Medicare recipients have much higher rates of RRT than White counterparts.
Drug Therapy in Chronic Kidney Disease--Focus on Diabetes

Wendy L. St. Peter, Pharm.D., FCCP
Associate Professor
University of Minnesota, College of Pharmacy
Diabetes Predicts Cardiovascular Disease

• 44% of incident ESRD patients have diabetes as a primary diagnosis
• Diabetes is the leading cause of ESRD
• Cardiovascular disease (CVD) is the major cause of mortality in patients with diabetes
Chronic Kidney Disease predicts CVD

- ESRD increases the risk of death and in particular, CVD death
- Recently, a study of Kaiser Permanente (N. California) database showed:
  - Independent, graded association b/t ↓ eGFR and risk of death and CVD

Go AS. NEJM 2004;351:1296.
Public Health Questions

• How is diabetes being managed in ESRD patients compared w/ patients not on dialysis?

• Are CVD risk factors being addressed with appropriate medications?

• Are there opportunities for improvement in medical management of diabetic CKD patients?
Methods

- Population: Patients with diabetes
- Data: Medstat Marketscan® Database
  - Employer group health plan (EGHP) database
  - 100 employer groups included
  - Over 2 million enrollees with FFS medical and Rx claims
- Create yearly cohort of patients (1999-2002) of patients < 65 y/o
- Inclusion Criteria:
  - 12 months continuous coverage
  - Fee for service plan with NMT 40 day gap b/t plan changes
  - Continuous prescription drug coverage
Methods (cont)

• Define dialysis and CKD (w/o dialysis) cohorts (incident and prevalent)

• Define patients with diabetes or CVD or hypertension (HTN)
  - “Diabetic”, “CKD” or has “CVD” or “HTN” if w/in 1 yr observation period, patient has an appropriate ICD-9-CM diagnosis code on:
    • 1 or more Part A institutional claims
    • 2 or more Part A outpatient or Part B claims
Methods (cont)

• Study periods
  • 1 year selection period (determine CKD, ESRD, diabetes, CVD, HTN)
    • Selection years 1999, 2000, 2001
  • 1 year observation period (2nd yr)
    • Count prescription drug therapy
    • Figures demonstrate cumulative percentage of patients receiving drug therapy over observation year
    • Observation years 2000, 2001, 2002
Cumulative % of diabetic patients receiving insulin: 2000, 2001, 2002

Figure 5.11
Cumulative % of diabetic patients receiving Thiazolidinediones: 2000, 2001, 2002

Figure 5.13
Cumulative % of diabetic patients receiving Secretagogues: 2000, 2001, 2002

Figure 5.14

Percent of patients receiving drug vs years vs 2000, 2001, 2002

- 45-64
- 65-74
- 75+

ESRD

Non-ESRD
Cumulative % of diabetic CVD patients receiving ACE inhibitors or ARBs: 2000, 2001, 2002

Figure 5.15
Cumulative % of diabetic CVD patients receiving lipid lowering agents: 2000, 2001, 2002

Figure 5.18
Key Points

• ~ 60% of diabetic ESRD patients receive insulin compared to only 25% of non-ESRD pts aged 45-64
• Use of oral agents is much less in ESRD patients with diabetes
• Interestingly, some dialysis patients are receiving metformin
• Use of lipid-lowering agents is less in ESRD patients with diabetes and CVD than in non-ESRD patients despite probability of more CVD risk factors
Percent of Patients with HTN, by CKD Stage

Figure p.31 (continued)

Blood pressure $\geq 140/90$ mm/Hg

- NHANES III
- NHANES 1999-2000

<table>
<thead>
<tr>
<th>Stage 1</th>
<th>Stage 2</th>
<th>Stage 3</th>
<th>Stages 4-5</th>
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<td>III 99-0</td>
<td>III 99-0</td>
<td>III 99-0</td>
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</table>

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Percent of Patients with Proteinuria, by CKD Stage

(continued)
Percent of Patients with high Cholesterol, by CKD Stage

Figure p.31 (continued)
ACE-I/ARB and LLA use in CKD patients, by diabetic status  

Figure 1.31

- **ACE-I’er/ARB**
  - Diabetic
  - Non-diabetic

- **Lipid lowering agents**

Percent of patients receiving drug

- Diabetic status
  - 20-44
  - 45-64
  - Male
  - Female
  - Diabetic
  - Non-diabetic

Months

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ACE-I’er/ARB and B-blocker use in CKD patients with CHF, by diabetic status

Figure 1.32
Key Messages

• + trend in use of ACE-I’ers/ARBs and lipid-lowering agents (LLAs) in CKD patients with diabetes
  ▪ But…only about 50% of these patients are receiving LLAs
• Opportunities to improve ACE-I’er/ARB use in CKD patients w/ DM and CHF?
• + trend in Beta blocker use in CKD patients with w/ DM and CHF
Percent of patients meeting K/DOQI guidelines

Figure 5.1

- 100% (target)
  - 90% (2002 actual)
- 100% (target)
  - 90% (2002 actual)
- 100% (target)
  - 74% (2002 actual)
- 50% (target)
  - 30% (2002 actual)
- 40% (target)
  - 32% (2002 actual)
- 100% (target)
  - 83% (2002 actual)
- 100% (target)
  - 36% (2002 actual)

% pts with delivered Kt/V ≥1.2
% HD pts with URR ≥65%
% CAPD pts with delivered Kt/V ≥2.0
New pts with AV fistula as first access
Prevalent pts with AV fistula as current access
% pts with hgb ≥11 g/dl
% pts with serum albumin ≥test’s lower limit

Incident & prevalent adult dialysis patients. Kt/V & vascular access data from CPM, 2002; URR & hemoglobin data from Medicare claims, 2002; albumin data from Medical Evidence form, 2002.
percent of point prevalent ESRD patients receiving HbA1c testing

Figure 5.2

2001, by HSA. ESRD: point prevalent patients with 90-day rule, 2001, age 67–75 on December 31 of 2002, alive through that date, & with diabetes as primary diagnosis, as a comorbidity at initiation, or diagnosed in 2001 (Medicare claims); includes only patients with Medicare Parts A & B as primary payor coverage through the whole period. General Medicare: patients entering Medicare before January 1, 2001, alive & in the program through December 31, 2002, age 67–75 on this date, & with diabetes diagnosed in 2001. Patients enrolled in an HMO, with Medicare as secondary payor, or diagnosed with ESRD during the period are excluded. Diabetic care tracked in 2002.
Geographic variation in the percent of general Medicare patients receiving HbA1c testing

Figure 5.2 (continued)

2001, by HSA. ESRD: point prevalent patients with 90-day rule, 2001, age 67–75 on December 31 of 2002, alive through that date, & with diabetes as primary diagnosis, as a comorbidity at initiation, or diagnosed in 2001 (Medicare claims); includes only patients with Medicare Parts A & B as primary payor coverage through the whole period. General Medicare: patients entering Medicare before January 1, 2001, alive & in the program through December 31, 2002, age 67–75 on this date, & with diabetes diagnosed in 2001. Patients enrolled in an HMO, with Medicare as secondary payor, or diagnosed with ESRD during the period are excluded. Diabetic care tracked in 2002.
HbA1c testing in ESRD & general Medicare patients

**Figure 5.3**

ESRD: point prevalent patients initiating ESRD therapy at least 90 days prior to January 1 of the first year, age 67–75 on December 31 of the second year, alive through this date, & with diabetes as the primary cause of ESRD, as a comorbidity at initiation, or diagnosed during the first year; includes only patients with Medicare Parts A & B as primary payor coverage during the two-year period. General Medicare: patients entering Medicare before January 1 of the first year, alive & remaining in the program through December 31 of the second year, age 65–75 on this date, & with diabetes diagnosed in the first year. Patients enrolled in an HMO, with Medicare as secondary payor, or diagnosed with ESRD during the period are excluded. For both populations, HbA1c testing, lipid testing, & diabetic testing supplies (blood glucose tests or reagent strips for home blood glucose monitors) tracked in the second year; for lipid & HbA1c figures, tests are at least 30 days apart.
Point prevalent ESRD patients with 90-day rule, 2001, alive through December 31, 2002 & age 18–75 on this date, & with diabetes as the primary cause of ESRD, as a comorbidity at initiation, or diagnosed in 2001; includes only patients with Medicare Parts A & B as primary payor coverage during the period. HbA1c testing, lipid testing, & diabetic testing supplies tracked in 2002.
Geographic variation in the percent of point prevalent ESRD patients receiving lipid testing

Figure 5.5

2001, by HSA. ESRD: point prevalent patients with 90-day rule, 2001, age 67–75 on December 31 of 2002, alive through that date, & with diabetes as primary diagnosis, as a comorbidity at initiation, or diagnosed in 2001 (Medicare claims); includes only patients with Medicare Parts A & B as primary payor coverage through the whole period. General Medicare: patients entering Medicare before January 1, 2001, alive & in the program through December 31, 2002, age 67–75 on this date, & with diabetes diagnosed in 2001. Patients enrolled in an HMO, with Medicare as secondary payor, or diagnosed with ESRD during the period are excluded. Diabetic care tracked in 2002.
2001, by HSA. ESRD: point prevalent patients with 90-day rule, 2001, age 67–75 on December 31 of 2002, alive through that date, & with diabetes as primary diagnosis, as a comorbidity at initiation, or diagnosed in 2001 (Medicare claims); includes only patients with Medicare Parts A & B as primary payor coverage through the whole period. General Medicare: patients entering Medicare before January 1, 2001, alive & in the program through December 31, 2002, age 67–75 on this date, & with diabetes diagnosed in 2001. Patients enrolled in an HMO, with Medicare as secondary payor, or diagnosed with ESRD during the period are excluded. Diabetic care tracked in 2002.
Lipid testing in ESRD & general Medicare patients

Figure 5.6

ESRD: point prevalent patients initiating ESRD therapy at least 90 days prior to January 1 of the first year, age 67–75 on December 31 of the second year; alive through this date, & with diabetes as the primary cause of ESRD, as a comorbidity at initiation, or diagnosed during the first year; includes only patients with Medicare Parts A & B as primary payor coverage during the two-year period. General Medicare: patients entering Medicare before January 1 of the first year, alive & remaining in the program through December 31 of the second year, age 65–75 on this date, & with diabetes diagnosed in the first year. Patients enrolled in an HMO, with Medicare as secondary payor, or diagnosed with ESRD during the period are excluded. For both populations, HbA1c testing, lipid testing, & diabetic testing supplies (blood glucose tests or reagent strips for home blood glucose monitors) tracked in the second year; for lipid & HbA1c figures, tests are at least 30 days apart.

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Point prevalent ESRD patients with 90-day rule, 2001, alive through December 31, 2002 & age 18–75 on this date, & with diabetes as the primary cause of ESRD, as a comorbidity at initiation, or diagnosed in 2001; includes only patients with Medicare Parts A & B as primary payor coverage during the period. HbA1c testing, lipid testing, & diabetic testing supplies tracked in 2002.
percent of point prevalent ESRD patients receiving diabetic testing supplies

Figure 5.8

2001, by HSA. ESRD: point prevalent patients with 90-day rule, 2001, age 67–75 on December 31 of 2002, alive through that date, & with diabetes as primary diagnosis, as a comorbidity at initiation, or diagnosed in 2001 (Medicare claims); includes only patients with Medicare Parts A & B as primary payor coverage through the whole period. General Medicare: patients entering Medicare before January 1, 2001, alive & in the program through December 31, 2002, age 67–75 on this date, & with diabetes diagnosed in 2001. Patients enrolled in an HMO, with Medicare as secondary payor, or diagnosed with ESRD during the period are excluded. Diabetic care tracked in 2002.
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percent of general Medicare patients receiving diabetic testing supplies

Figure 5.8 (continued)
ESRD: point prevalent patients initiating ESRD therapy at least 90 days prior to January 1 of the first year, age 67–75 on December 31 of the second year, alive through this date, & with diabetes as the primary cause of ESRD, as a comorbidity at initiation, or diagnosed during the first year; includes only patients with Medicare Parts A & B as primary payor coverage during the two-year period. General Medicare: patients entering Medicare before January 1 of the first year, alive & remaining in the program through December 31 of the second year, age 65–75 on this date, & with diabetes diagnosed in the first year. Patients enrolled in an HMO, with Medicare as secondary payor, or diagnosed with ESRD during the period are excluded. For both populations, HbA1c testing, lipid testing, & diabetic testing supplies (blood glucose tests or reagent strips for home blood glucose monitors) tracked in the second year; for lipid & HbA1c figures, tests are at least 30 days apart.
Diabetic testing supplies in prevalent ESRD patients, by age, race/ethnicity, & modality

Figure 5.10

Point prevalent ESRD patients with 90-day rule, 2001, alive through December 31, 2002 & age 18–75 on this date, & with diabetes as the primary cause of ESRD, as a comorbidity at initiation, or diagnosed in 2001; includes only patients with Medicare Parts A & B as primary payor coverage during the period. HbA1c testing, lipid testing, & diabetic testing supplies tracked in 2002.