

# ***Case Mix Severity Study***

***1989 Administration  
to 1986-87 Incident Patients***

CONFIDENTIAL REPORT  
USRDS RETROSPECTIVE CASE MIX STUDY

Check box to left of item number if unable to determine, and leave item blank.

**A: PATIENT AND FACILITY IDENTIFICATION**

1. Network:   2. Abstractor:

3. Date Completed:

4. Patient Registration #:

5. Patient's SSN:

6. Medicare Claim Number:             BIC: (add justify)

7. Provider Number:

8. Facility Name:

9. Date of Birth:

10. Date of First ESRD Service:  
a. Date of first chronic maintenance dialysis, regardless of setting:        
*☞ (If a not available, answer b.)*  
b. Earliest known date of chronic dialysis:

11. Insurance just before start of ESRD  
1-Yes 2-No

a. Blue Cross:

b. Medicare:

c. Medicaid:

d. Private:

e. VA:

f. Other:

g. None:

PLACE LABEL HERE

**B: PATIENT HISTORY PRIOR TO START OF ESRD**

1. Regular cigarette smoking status prior to ESRD:   
1-Active 2-Former 3-Smoker, time unknown 4-Non Smoker

2. Comorbid Conditions within 10 Years Prior to ESRD (Items 2 to 11):

2. Hx of Coronary Heart Disease (CHD) or Coronary Artery Disease (CAD)  
For a & b code 1-Yes 2-No 3-Suspected

a. Prior Dx of CHD/CAD:

b. Angina:

For c to g code 1-Yes 2-No

c. Bypass surgery: (CABG)

If yes, enter date:

d. Coronary angioplasty:

If yes, enter date:

e. Coronary angiography:

If done, enter date:

Abnormal?

f. Cardiac arrest:

g. Myocardial Infarction (MI):

If yes, enter date of last MI:

3. Hx of Cerebrovascular Disease:  
1-Yes 2-No 3-Suspected

a. Dx of Cerebrovascular Accident (CVA/Stroke)

*☞ (If item 3a is Yes, leave item 3b blank.)*

b. Any Transient Ischemic Attacks (TIA)?

4. Hx of Peripheral Vascular Disease (PVD):  
For a & b code 1-Yes 2-No 3-Suspected

a. Prior Dx of PVD:

b. Amputation due to PVD:

For c & d code 1-Yes 2-No

c. Absent foot pulses:

d. Claudication:

e. Arteriography (angiography) of lower extremities:

5. Hx of Heart Disease:  
1-Yes 2-No

a. Congestive heart failure:

b. Pulmonary edema:

c. Pericarditis:

d. Arrhythmia:

e. Atrial fibrillation:

6. Hx of Hypertension:   
1-Yes 2-No  
*☞ If no, skip to item 7.*

a. Treated prior to first dialysis ever:

b. Treated since onset of ESRD:

7. Prior Dx of Diabetes:   
1-Yes 2-No  
*☞ If no, skip to number 8.*  
*☞ Complete either a or b:*

a. Year of dx:    
OR

b. Duration: (years)

c. Type of diabetic:

1-IDDm (Juvenile, Type 0) 2-NIDDM (Adult, Type ID)

d. Diabetic retinopathy:   
1-Yes 2-No

e. Ever insulin therapy:   
1-Active 2-Stopped 3-Never

8. Lung Disease:  
1-Yes 2-No

a. Chronic obstructive pulmonary disease (COPD):

b. Asthma:

c. Home oxygen prescribed:

\* (Hx means history, Dx means diagnosis)

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Pat Id: [ ][ ][ ][ ][ ]

9. Neoplasms:.....

1-Yes 2-No

*IF* If no, skip to number 10.

a. Primary type/site: \_\_\_\_\_

b. Date of first dx:..... [ ][ ] [ ][ ] [ ][ ]  
mm yy

c. Known metastases:.....   
1-Yes 2-No

10. Liver Disease:

1-Yes 2-No

a. Hepatitis:.....

b. Cirrhosis:.....

11. Other major diagnoses not recorded above (up to 6), by ICD-9 codes or write in descriptive terms: if none check box:

1: \_\_\_\_\_

2: \_\_\_\_\_

3: \_\_\_\_\_

4: \_\_\_\_\_

5: \_\_\_\_\_

6: \_\_\_\_\_

C: INFORMATION AT START OF ESRD

*IF* WINDOW: One month prior to onset of ESRD to 6 weeks after first treatment.

1. Height (at any time):  
[ ] ft. [ ][ ] in. or [ ][ ][ ] cm.

2. Wet weight before 1st dialysis ever, or if not available, earliest available predialysis weight:  
wt: [ ][ ][ ] lb. or [ ][ ][ ] kg.

3. Dry weight as ordered:  
*IF* If unavailable, list lowest weight just after dialysis session within 6 weeks after start of ESRD:  
wt: [ ][ ][ ] lb. or [ ][ ][ ] kg.

4. Nutritional status recorded in the records:.....   
1. Obese/overweight 2. Under-nourished/cachectic

5. Blood pressure:  
 a. At onset of ESRD (taken at first dialysis treatment ever, predialysis)  
SBP [ ][ ][ ] / DBP [ ][ ][ ]

b. At 2 to 4 weeks after ESRD onset (taken before dialysis treatment that day)  
SBP [ ][ ][ ] / DBP [ ][ ][ ]

6. Patient status at one month of ESRD:.....   
1-Dead, complete item 7 and complete either 8, or 9, or 10  
2-Hemodialysis, complete item 8 (skip 7, 9 & 10)  
3-Peritoneal dialysis, complete item 9 (skip 7, 8 and 10)  
4-Transplanted, complete item 10 (skip 7, 8 & 9)  
5-Recovered renal function (skip to item 11)  
6-Lost to follow-up or transferred to another unit (skip to item 11)

7. If dead, enter date of death: [ ][ ][ ] [ ][ ][ ] [ ][ ][ ]  
mm dd yy

8. For Hemodialysis Patients:  
 a. Dialysis location:.....   
1-In-center 2-Home Training 3-At Home

b. Prescribed or usual hours per treatment: (HR:MI)..... [ ][ ] : [ ][ ][ ]  
hr ml

c. # of dialysis sessions per week:.....

d. Reuse of dialyzer in this patient:.....

e. Highest weight loss during dialysis:  
(check in weeks 2 to 6)  
(Rounded) [ ][ ][ ] lbs. or [ ][ ][ ] kg.

f. Blood flow rate (BFR):..... [ ][ ][ ][ ] ml/min

*IF* (If BFR varies, code prescribed rate or most common rate)

g. Dialyzer type: (see Code Book - Attachment B)..... [ ][ ][ ]  
If code 300, please specify: \_\_\_\_\_

h. Vascular access in use: (list up to two)..... [ ][ ][ ]  
1-Fistula (arterio-venous shunt) 4-Temporary line  
2-Goretex graft 5-Permanent subclavian catheter  
3-Bovine graft 6-Other

9. For Peritoneal Dialysis Patients:

a. Dialysis location:.....   
1-Home 2-Home Training 3-In-center

b. Type:.....

c. # of exchanges per treatment day:..... [ ][ ][ ]

d. # of liters per exchange: (e.g. 2.0)..... [ ][ ][ ]

e. # of treatment days per week (up to 7):...

10. For Transplant Recipients:

a. Date of Transplant: [ ][ ][ ] [ ][ ][ ] [ ][ ][ ]  
mm dd yy

b. Donor Source:.....   
1-Cadaver 2-Living Related 3-Living Unrelated

*IF* Complete with information from the psychosocial evaluation closest to first dialysis. Use social worker's, nurse's, and/or dietician's records; may use your interpretation of the records.

11. Date of psychosocial evaluation: [ ][ ][ ] [ ][ ][ ] [ ][ ][ ]  
mm dd yy

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12. Activities of daily living:

1-Yes 2-No

a. Independent eating:.....

b. Independent transferring:.....

c. Independent ambulating: (Includes ambulating with an assistance device)..

13. Marital status: .....

1-Single 4-Divorced  
 2-Married 5-Separated  
 3-Widowed

14. Living alone: .....

1-Yes 3-Nursing home, institution  
 2-No 4-Homeless  
 (If 1, 3, or 4, skip to item 16.)

15. # of Household Members (including patient):

16. Employment Level according to the following scale:

(Consider 1 highest)

1-Employed full time or full time student  
 2-Employed part time or part time student  
 3-Homemaker  
 4-Retired  
 5-Unemployed  
 6-Disabled  
 7-Other (specify) \_\_\_\_\_

a. Highest level within one year before ESRD:.....

b. Level at onset of ESRD:.....

17. Education.....

1- Less than 12 Yrs. 3- Some College  
 2-High School Grad 4- College Grad

18. Occupational level before ESRD:.....

1- Clerical 5- Housewife  
 2- Professional 6- Student  
 3- Tradesperson 7- Other  
 4- Manual Labor

D: LABORATORY DATA

D.1 Serum Creatinine Readings

1. Serum Creatinine 1 to 12 months before "first chronic maintenance dialysis"   .   mg/dl

Date of reading:.....     mm yy

Answer 2a. If not available, answer 2b.

2a. Predialysis serum creatinine on day of first chronic maintenance dialysis (refer to date in item A:10a.):   .   mg/dl

or, if 2a not available,

2b. Predialysis serum creatinine on earliest date after first chronic maintenance dialysis (refer to date in item A:10b.):   .   mg/dl

3. Highest serum creatinine any time before onset of ESRD:   .   mg/dl

4. Highest serum creatinine within first month following onset of ESRD (predialysis value):   .   mg/dl

5. Serum Creatinine 2 to 6 weeks following onset of ESRD (predialysis value):   .   mg/dl

D.2: Laboratory Data Prior to Start of ESRD

1. Cardiomegaly by X-ray:.....

1-Yes 2-No

2. Left ventricular hypertrophy by:

1-Yes 2-No

a. by EKG.....

b. by echocardiography.....

D.3 Laboratory Data Post ESRD

Window for items 1 to 7 is 2 to 6 weeks following onset of ESRD. Take an average if there are multiple data for an item.

1. Bilirubin total:   .   mg/dl

2. HBsAg:.....

1-Positive 2-Negative

3. Lipids

a. Cholesterol Total:.....     mg/dl

b. Triglycerides:.....     mg/dl

4. Highest Blood Sugar:(may be only one)     mg/dl

5. Serum phosphorous (predialysis treatment in hemodialysis patients):   .   mg/dl

6. Hematocrit (rounded):(If transfused, give value before transfusion.)   %

7a. BUN (predialysis treatment in hemodialysis patients):     mg/dl

7b. BUN (post dialysis treatment on same day):     mg/dl

Window for item 8 is 2 weeks prior to onset of ESRD to 6 weeks following onset of ESRD. May be only one, but take an average if there are multiple data for this item.

8. Serum albumin:   .   g/dl