KEEP 2.0 Annual Data Report
Chapter Four
Figure 4.1 · End-stage renal disease: trends in patient counts

USRDS 2002 Annual Data Report
Figure 4.2 · percent distribution of KEEP participants, by measured blood pressure

KEEP: n=11,064; excludes participants with missing blood pressure values; hypertension based on JNC VI definition

JNC VI hypertension
Stage I: systolic 140–159 or diastolic 90–99
Stage II: systolic 160–179 or diastolic 100–109
Stage III: systolic ≥180 or diastolic ≥110

Normal: 53.8%
Stage 1: 29.4%
Stage 2: 12.4%
Stage 3: 4.4%
Figure 4.3 · percent distribution of KEEP participants with self-reported hypertension, by age & gender

KEEP: n=11,131 total, 5,722 with self-reported hypertension; excludes participants with missing hypertension status
Figure 4.4 · percent distribution of KEEP participants reporting family members with hypertension, by age & gender

KEEP: n=10,942 total, 8,755 with self-reported hypertension; excludes participants with missing family history of hypertension
Figure 4.5 · % distribution of KEEP participants with elevated blood pressure (≥140/90 mmHg), by age, gender, race, & ethnicity

KEEP: n=10,729; excludes participants with missing hypertension values or missing or unknown race; hypertension based on JNC VI definition

JNC VI hypertension
Stage I: systolic 140–159 or diastolic 90–99
Stage II: systolic 160–179 or diastolic 100–109
Stage III: systolic ≥180 or diastolic ≥110
Figure 4.6 · percent distribution of KEEP participants with self-reported diabetes, by age & gender

KEEP: n=11,062 total, 2,690 with self-reported diabetes; excludes participants with missing diabetes status
Figure 4.7 · percent distribution of KEEP participants with a family history of diabetes, by age & gender

KEEP: n=10,876 total, 7,469 with a reported family history of diabetes; excludes participants with missing family history of diabetes
Figure 4.8 · percent distribution of KEEP participants with self-reported diabetes, by age, race, & ethnicity

KEEP: n=10,732 total, 2,607 with self-reported diabetes; excludes participants with missing diabetic status, or missing or unknown race
Figure 4.9 · percent distribution of Hispanic KEEP participants with self-reported diabetes, by gender

KEEP: all Hispanics, n=1,115 total, 297 with self-reported diabetes; excludes participants with missing diabetic status
Figure 4.10 - percent distribution of KEEP participants with self-reported diabetes, by BMI & gender

BMI index
BMI <18.5: UW: Underweight
BMI 18.5–24.9: N: Normal
BMI 25–29.9: OW: Overweight
BMI 30–39.9: OB: Obese
BMI ≥40: EO: Extremely Obese

KEEP: self-reported diabetes, n=2,657
Figure 4.11 · percent distribution of KEEP participants, by age, gender, & BMI

KEEP: n=11,122; excludes participants with missing BMI values
Figure 4.12 · percent distribution of KEEP participants, by age, race, ethnicity, & BMI

KEEP: n=10,790; excludes participants with missing race or BMI values

BMI index
BMI <18.5: UW: Underweight
BMI 18.5–24.9: N: Normal
BMI 25–29.9: OW: Overweight
BMI 30–39.9: OB: Obese
BMI ≥40: EO: Extremely Obese
Figure 4.13 · percent distribution of Hispanic KEEP participants with obesity ($\geq 25$ kg/m$^2$), by gender

KEEP: n=886; excludes participants with missing Hispanic ethnicity or BMI values
Figure 4.14 • percent distribution of KEEP participants, by BMI, self-reported hypertension, & diabetic status

KEEP: diabetes, n=10,942; hypertension, n=11,011; excludes participants with missing diabetic status or hypertension status
Figure 4.15 · percent distribution of KEEP participants, by age, gender, & smoking status

KEEP: n=10,536; excludes participants with missing smoking status
Figure 4.16 · percent distribution of KEEP participants, by age, race, & smoking status

KEEP: n=10,233; excludes participants with missing race or smoking status
Figure 4.17 - percent distribution of KEEP participants, by age, Hispanic ethnicity, & smoking status

KEEP: n=10,233; excludes participants with missing race/ethnicity or smoking status
Figure 4.18  · percent distribution of KEEP participants with anemia, by age & gender

KEEP: n=10,136; excludes participants with missing hemoglobin values or race; anemia defined by NKF-K/DOQI:
males: Hgb <12 g/dl; females age >50: Hgb <12 g/dl; females age ≤50: Hgb <11
Figure 4.19 · % distribution of KEEP participants with anemia, by age, race, & ethnicity

KEEP: n=10,136; excludes participants with missing hemoglobin values or race or ethnicity; anemia defined by NKF-K/DOQI: males: Hgb <12 g/dl; females age >50: Hgb <12 g/dl; females age ≤50: Hgb <11
Figure 4.20 · percent distribution of KEEP participants with anemia, by CKD & self-reported diabetic status

KEEP: n=9,935; anemia defined by NKF-K/DOQ: males: Hgb <12 g/dl; females age >50: Hgb <12 g/dl; females age ≤50: Hgb <11; CKD status defined by calculated creatinine clearance (CCR) using the MDRD formula.
Figure 4.21 · percent distribution of KEEP & NHANES III participants, by number of risk factors

Major risk factors
- Anemia (WHO definition)
- Diabetes (self-reported)
- Hypertension (measured)
- Obesity (BMI ≥ 25 kg/m²)
- Smoking or used to smoke

WHO anemia definition
- Male: Hemoglobin <13 g/dl
- Female: Hemoglobin <12 g/dl

JNC VI hypertension
- Stage I: systolic 140–159 or diastolic 90–99
- Stage II: systolic 160–179 or diastolic 100–109
- Stage III: systolic ≥180 or diastolic ≥110

KEEP: n=10,053; NHANES III: n=16,652. Anemia as defined by WHO, hypertension according to JNC VI definition (Stages 1, 2, and 3).
Figure 4.22 · % distribution of KEEP participants with elevated blood pressure ($\geq$140/90 mmHg), by BMI & self-reported diabetic status

KEEP: n=10,769; excludes participants with missing BMI value or blood pressure value; hypertension based on JNC VI definition
Figure 4.23 · percent distribution of KEEP participants with elevated blood pressure ($\geq 140/90$ mmHg), by BMI & smoking status

- **BMI index**
  - BMI <18.5: UW: Underweight
  - BMI 18.5–24.9: N: Normal
  - BMI 25–29.9: OW: Overweight
  - BMI 30–39.9: OB: Obese
  - BMI $\geq$40: EO: Extremely Obese

- **JNC VI hypertension**
  - Stage I: systolic 140–159 or diastolic 90–99
  - Stage II: systolic 160–179 or diastolic 100–109
  - Stage III: systolic $\geq$180 or diastolic $\geq$110

KEEP: n=10, 268; excludes participants with missing BMI value, blood pressure value, or smoking status; hypertension based on JNC VI definition
Figure 4.24 · % distribution of KEEP participants with elevated blood pressure ($\geq 140/90$ mmHg), by BMI & anemia status

KEEP: n=10,216; excludes participants with missing BMI value, blood pressure value, or hemoglobin; hypertension based on JNC VI definition; anemia defined as Hgb $<11$ g/dl
Figure 4.25 · percent distribution of KEEP & NHANES III participants, by number of risk factors & CKD status

Major risk factors
- Anemia (WHO definition)
- Diabetes (self-reported)
- Hypertension (measured)
- Obesity (BMI ≥ 25 kg/m²)
- Smoking or used to smoke

CKD stages
- Stage 1: CCR ≥ 90, microalbuminuria =+
- Stage 2: CCR 60–89, microalbuminuria = +
- Stage 3: CCR 30–59
- Stage 4: CCR 15–29
- Stage 5: CCR <15 or patient on dialysis

KEEP: n=10,008; NHANES III: n= 15,594; excludes participants with missing CKD status or risk factor description; CKD status defined by calculated creatinine clearance (CCR) using the MDRD formula