

access, dialysis. *See* vascular access
 ACE inhibitors 43
 acute myocardial infarction (AMI)
 mortality and 37
 admission rates. *See* hospitalization:
 admission rates
 anemia. *See* erythropoietin therapy;
 hemoglobin
 anemia treatment
 dialysis unit affiliation and 167
 hemoglobin levels 75
 hemoglobin levels and 27, 91, 92
 at initiation 75



index to
 Volume Two

iron therapy 92
 in pediatric patients 136
 angiography 151, 152
 angioplasty 99, 108
 angiotensin receptor blockers
 (ARBs) 43
 antibody induction medications 123
 antimetabolites 123
 arrhythmia 142
 arteriovenous fistulas
 placement rates 39
 arteriovenous grafts
 placement rates 39
 atherosclerotic heart disease
 (ASHD). *See* cardiovascular
 disease
 mortality and 37
 bacteremia/septicemia
 hospitalization and 104, 105
 in pediatric patients 142
 vascular access and 99
 Bayesian hospitalization ratios 172
 Bayesian mortality ratios 172
 bypass, coronary 108
 Calcijex 170
 calcineurin inhibitors 123
 calcium/phosphorus testing 168
 CAPD. *See* dialysis
 cardiac arrest. *See* cardiovascular
 disease
 cardiovascular disease
 diabetes and 52–55
 diagnosis & testing 150–153
 expenditures and 179
 glomerulonephritis and 52, 53,
 54, 55
 hospitalization and 28, 54, 55, 104,
 105, 108, 142, 143, 179
 hypertension and 52–55
 mortality and 37, 46, 51–53, 58, 59,

109, 143
 in pediatric patients 142, 143
 catheters 56, 57, 73, 74, 98, 99, 108,
 139, 171, 184. *See also* vascular
 access
 placement rates 39
 CBC testing 169
 CCPD. *See* dialysis
 cellulitis 104
 cholesterol 134
 at initiation 76
 chronic kidney disease
 dietitian care and 38
 expenditures 21, 91, 177
 nephrologist care and 38
 pre-ESRD counseling and 38
 preventive care and 38, 43, 47
 Comprehensive Dialysis Study (CDS)
 154, 155–159
 congestive heart failure (CHF). *See*
also cardiovascular disease
 expenditures 21
 hospitalization and 142
 mortality and 37
 in pediatric patients 142
 counts, patient. *See* incidence;
 prevalence; transplantation
 CPM data 91, 98, 99
 creatinine, serum
 at initiation 76
 cystic kidney disease
 hospitalization and 140
 at initiation 36
 modality and 82, 84
 patient counts 22, 65, 67
 rates of ESRD due to 22, 65, 67
 transplantation and 40
 death. *See* mortality
 dectot procedures 99
 diabetes
 cardiovascular disease and 52–55

comprehensive monitoring 183
 congestive heart failure and 21, 91
 ESRD networks and 68
 expenditures 21, 91, 180
 in the general population 36
 hospitalization and 54, 55
 infection and 52–55
 at initiation 36
 at initiation 191
 international comparisons 191
 microalbumin testing 44
 modality and 82, 84
 monitoring, recommended 91, 96
 mortality and 52, 53, 58
 patient counts 22, 65, 67
 prescription drug therapy and 43
 preventive care 43, 91, 96, 170
 rates of ESRD due to 22, 42, 47,
 65, 67, 68
 recommended monitoring 170
 survival and 107
 transplantation and 40
 transplant wait list and 40
 dialysis
 adequacy 27, 91
 ESRD network populations 69
 expenditures 30, 31, 178, 180, 182
 hospitalization and 28, 104, 105,
 140
 infection and 104, 105
 international comparisons 193
 mortality and 29, 103, 106
 patient counts
 incident 22, 23, 24, 63, 81, 82
 pediatric 22, 82, 84, 133
 prevalent 22–24, 84
 patient rates
 incident 22, 24, 25, 82, 83
 pediatric 22, 82, 84
 prevalent 22, 24, 25, 84, 85
 patients returning from transplant
 23, 125

- patients starting or restarting 23
survival and 29, 107, 140, 141
- dialysis unit affiliation**
changes over time 163, 164
clinical monitoring and 168, 169
hemoglobin levels and 166
hospitalization ratios and 172, 173
iron therapy and 167
modality and 82, 84
mortality ratios and 172, 173
patient counts and 164
preventive care and 170
time managed 164
transfusions and 167
unit counts and 164
vascular access and 171
vitamin D therapy and 170
- dialysis unit location 165**
- dialysis, withdrawal from 110, 111**
- dietitian care, pre-ESRD 38, 134**
- drug therapy, prescription 43**
expenditures 31
- ECD kidneys 121**
- ECGs 151, 152**
- echocardiograms 151, 152**
- erythropoiesis stimulating agent (ESA)**
expenditures 31, 177, 181
at initiation 75
in pediatric patients 135
pre-ESRD use 26
- erythropoietin (EPO) therapy. See also anemia treatment**
expenditures 177, 181, 182
in pediatric patients 136
weekly 136
- erythropoietin therapy**
hemoglobin levels and 92
weekly dose 92
- ESRD networks**
HP2010 objectives and 46, 47
- patient counts, growth in 68, 69
providers and 164
- expected remaining lifetimes 106**
- expenditures. See also Medicare expenditures**
actual and predicted costs 185
before and after initiation 31
CKD 21, 91
ESAs 177
ESRD 21, 30, 31, 91
injectables 31
inpatient 180
non-Medicare 178
outpatient 180
physician/supplier 180
during transition to ESRD 179
- eye examinations, diabetic 91, 96, 170, 183**
- eye exams, diabetic 43, 46**
- ferritin testing 169**
- Ferrlecit 167**
- fistulas, arteriovenous 56, 57, 73, 74, 91, 98, 108, 139, 171, 184. See also vascular access**
- glomerular filtration rate (eGFR)**
at initiation 74, 76, 77
- glomerular filtration rate, estimated (eGFR)**
at initiation 135
in pediatric patients 135
- glomerulonephritis**
ESRD networks and 68
hospitalization and 54, 55, 140
at initiation 36
modality and 82, 84
mortality and 52, 53
patient counts 22, 65, 67
rates of ESRD due to 22, 65, 67, 68
survival and 107
transplantation and 40
- glycosylated hemoglobin levels**
at initiation 76
- glycosylated hemoglobin testing**
in CKD patients 43, 46
dialysis unit affiliation and 170
expenditures 183
guidelines, patients meeting 91, 96
recommended testing 170
- grafts, arteriovenous 56, 57, 73, 74, 98, 108, 139, 184. See also vascular access**
- graft survival 125, 127**
- half-lives, graft 124**
- Healthy People 2010**
arteriovenous fistula use 39, 46
cardiovascular mortality rates 37, 46
diabetic preventive care 43, 46
incident rates 36, 46
diabetes 42, 47
pre-ESRD counseling 38, 46
targets 35, 46, 47
transplant recipients 41, 46
transplant wait list 40, 46
vaccinations 45, 46
- Hectorol 170**
- hematocrit. See anemia treatment; hemoglobin**
- hemodialysis, home 86, 87**
- hemoglobin**
anemia treatment and 91, 92, 167
dialysis unit affiliation and 166, 167
EPO dose and 27, 92
ESA treatment and 75
after initiation 75
at initiation 75, 76, 77, 135
at initiation 74
monthly 27, 92, 136
overshooting of target levels 91, 95, 137, 166
patient distribution and 27, 92
- patient distribution by 77
in pediatric patients 135–137
pre-ESRD nephrologist care and 74
target levels 91
undershooting of target levels 94, 137, 166
- hepatitis B vaccinations 91, 97, 138, 170**
- hospice care 110, 111**
- hospitalization**
admission rates 104, 105, 108, 140
all-cause 28, 104, 105, 140, 142, 179
for bacteremia/septicemia 104, 105, 142
cardiovascular disease 143
cardiovascular disease and 28, 54, 55, 108, 142, 179
cause-specific 28, 108
for cellulitis 104, 105
diabetes and 54, 55
dialysis unit affiliation and 172, 173
expenditures 179
glomerulonephritis and 54, 55
hospital days 104, 140
hypertension and 54, 55
infection and 28, 54, 55, 108, 142, 143
modality and 104, 105
in pediatric patients 105, 140, 142, 143
for peritonitis 105
for pneumonia 104, 105, 142
ratios 172, 173
vascular access and 28, 104, 105, 108, 142
- hypertension**
ESRD networks and 68
hospitalization and 54, 55
at initiation 36
modality and 82, 84
mortality and 52, 53
patient counts 22, 65, 67

- rates of ESRD due to 22, 65, 67, 68
survival and 107
transplantation and 40
- ICDs/CRT-Ds 151, 153**
- immunizations 45, 47, 91, 96, 97, 138, 170**
- immunosuppression medications 123, 127**
- incidence**
diabetes and 42, 47, 65
ESRD network populations 68, 69
mean age and 68
median age and 65
modality and 22, 24, 25, 82, 83, 133
patient counts 22, 24, 64, 65, 82
pediatric 22, 64, 82, 133
patient distribution
pediatric 132
patient rates 22, 24, 25, 36, 46, 64, 65, 82, 189, 190
pediatric 22, 36, 64, 82
by payor 65
international comparisons 189, 190, 191, 196, 197
primary diagnosis and 22, 65
projections 63
- infection**
access and 99, 105
diabetes and 52–55
due to internal device 142
glomerulonephritis and 52–55
hospitalization and 28, 54, 55, 104, 105, 108, 142, 143
hypertension and 52–55
mortality and 51, 109, 143
in pediatric patients 139, 142, 143
vascular access 139
- INFeD 167**
- influenza vaccinations 45, 47, 91, 96, 138, 170**
expenditures 183
- injectables**
expenditures 31, 181
- insurance coverage**
at initiation 83
modality and 83, 85
- iron saturation testing 168**
- iron therapy 92**
dialysis unit affiliation and 167
expenditures 31, 181, 182
in pediatric patients 136
- K/DOQI targets 91**
- Kt/V 27, 91**
- lifetimes, expected remaining 106**
- lipid lowering agents 43**
- lipid testing 151, 152**
in CKD patients 43, 47
in diabetic patients 43, 47, 91
dialysis unit affiliation and 170
expenditures 183
guidelines, patients meeting 91, 96
in pediatric patients 134
recommended monitoring 170
- Medicare expenditures**
CKD 21, 91
for clinical services 182
dialysis 30, 31
ESRD 30, 31, 178, 179
growth in 22
home health 178
hospice 178
injectables 31, 181, 182
inpatient 30, 178, 179, 180
laboratory 182
modality and 22, 30
outpatient 30, 178, 180
physician/supplier 30, 178, 180
preventive care 183
skilled nursing 178
during transition to ESRD 179
- transplant 30
vascular access 184
- microalbumin testing 44**
- modality**
EPO dose and 136
expenditures and 30, 178, 180
hemoglobin levels and 136
home therapies 86, 87
hospitalization and 104, 105, 140
international comparisons 193
iron therapy and 136
mortality and 29, 103
patient counts 22, 23, 82, 84, 133
patient distribution 83, 85
survival and 29, 107, 140, 141
- mortality. See also survival**
all-cause 29, 51, 106, 107
cardiovascular disease and 37, 46, 51–53, 58, 109, 143
cause-specific 109
diabetes and 52, 53, 58
dialysis unit affiliation and 172, 173
first-year 51–53
glomerulonephritis and 52, 53
hypertension and 52, 53
infection and 51–53, 109, 143
modality and 29, 103, 106
in pediatric patients 127, 143
predictors of 58, 59
ratios 172, 173
in transplant patients 124, 125, 127
vintage and 29, 103
- nephrologist care, pre-ESRD 38, 46, 74, 134**
- networks. See ESRD networks**
- nutrition. See albumin, serum**
- obesity. See body mass index**
- parathyroid hormone (PTH) testing 168**
- pediatric patients**
anemia treatment in 135
bacteremia/septicemia in 142
cardiovascular disease in 143
cardiovascular disease in 142
diabetes in 42
ESA use in 135
growth hormone use in 131, 144, 145
height of 131, 144, 145
hemoglobin and 136
hemoglobin in 135, 137
hospitalization in 105, 140, 142, 143
incidence 132
infection and 143
infection in 139, 142
iron therapy and 136
modality in 133
mortality in 143
patient counts
incident 22, 64, 82, 133
pediatric 133
prevalent 22, 66, 84
patient rates
incident 22, 36, 42, 64, 82
prevalent 22, 66, 84
pneumonia in 142
pre-ESRD care 134
preventive care 138
by primary diagnosis 132
survival in 140, 141
transplantation in 41, 126, 127
transplant wait list and 40
vaccinations in 138
vascular access in 139, 142
wait-listed patients 126
- peritonitis 99, 105**
- pneumococcal pneumonia vaccinations 45, 91, 97, 138, 170, 183**
- pneumonia 104, 142**
- pre-ESRD care**
dietitian care 38, 134

ESA use 75, 135
nephrologist care 38, 46, 74, 134

prevalence

diabetes and 67
ESRD network populations 69
mean age and 68
median age and 67
modality and 22, 24, 25, 84, 85
patient counts 22, 24, 63, 66, 67, 81, 84
 pediatric 22, 66, 84, 133
 unit affiliation and 164
patient rates 22, 24, 25, 66, 67, 84, 189
 pediatric 22, 66, 84
international comparisons 189, 192
primary diagnosis and 22, 67
projections 63

prevalence of ESRD

international comparisons 192

preventive care

in CKD patients 38, 43, 47
diabetic 43, 91, 96, 170
expenditures 183
guidelines 91, 96
lipid testing 91
in pediatric patients 138
vaccinations 45, 47, 91, 97, 170

projections of ESRD counts and costs through 2020 63

rapamycin 123

rates, disease. See incidence; prevalence; transplantation recombinant growth hormone 131, 144, 145

revascularization 151, 153

stents, coronary 108

steroids 123

stress testing 151, 152

survival. See also mortality

modality and 29, 107
in pediatric patients 140, 141
in transplant patients 29, 124

tacrolimus 123

transfusions, blood 27, 93, 167

transplantation

cardiovascular disease and 125, 127
counts 119, 122, 126
DCD kidneys 122
delayed graft function 124
dialysis, return to 125
donors 119, 122
ECD kidneys 121, 122
ESRD network populations 69
expenditures 30, 178–180
graft failure 124
graft survival 125, 127
hospitalization and 28, 104, 105, 140

immunosuppression 123, 127
infection and 125, 127
international comparisons 194, 195
malignancy and 125, 127
mortality and 22, 29, 103, 106, 121, 125, 127

outcomes after 124

outcomes after listing 121

patient counts

incident 22, 24, 63, 81, 82
pediatric 22, 82, 84, 133
prevalent 22, 24, 63, 81, 84

patient rates

incident 22, 24, 25, 82
pediatric 22, 82, 84
prevalent 22, 24, 25, 84

patients returning to dialysis from 23

in pediatric patient 127

in pediatric patients 126

primary non-function 124

projections 63

rates 122, 126
retransplantation 125
survival and 29, 107, 140, 141
wait list for 24, 40, 46, 63, 81, 120, 126
wait time for 24, 120, 126
within three years of registration 41, 46

transplant options, pre-ESRD information on 38

triglycerides 134

at initiation 76

units. See dialysis unit affiliation urea reduction ratio (URR) 27, 91

vaccinations 45, 47, 91, 96, 97, 138, 170, 183

vascular access

current access 39, 46, 91, 98, 99
dialysis unit affiliation and 171
events and complications 99
expenditures 184
first access 39, 91
first-year 56, 57
hospitalization and 28, 104, 105, 108, 142
infection and 104, 139, 142
at initiation 26, 56, 57, 73, 74, 139
in pediatric patients 139
nephrologist care and 74
in pediatric patients 142
placement, probability of 56
placement rates 57
pre-ESRD nephrologist care and 26

Venofer 167

vintage, patient

mortality and 29, 103, 107

vitamin D hormone

expenditures 31, 181, 182
use of 170

wait list for transplantation 24, 40, 63, 81, 120, 126

wait time for transplantation 24, 120, 126

walking disabilities 112, 113, 114, 115

Zemplar 170