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**Table I.1  
Incident Patient Counts: ESRD Patients**

by age, gender, race, ethnicity, & primary diagnosis

|                    | 1980   | 1981   | 1982   | 1983   | 1984   | 1985   | 1986   | 1987   | 1988   | 1989   |
|--------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0-4                | 37     | 63     | 90     | 98     | 97     | 115    | 107    | 104    | 112    | 121    |
| 5-9                | 83     | 83     | 97     | 87     | 97     | 95     | 107    | 95     | 81     | 99     |
| 10-14              | 155    | 172    | 201    | 186    | 208    | 185    | 183    | 195    | 180    | 168    |
| 15-19              | 388    | 446    | 419    | 410    | 384    | 387    | 398    | 431    | 421    | 460    |
| 20-29              | 1,380  | 1,576  | 1,765  | 1,697  | 1,816  | 1,877  | 1,947  | 1,920  | 2,033  | 2,175  |
| 30-39              | 2,018  | 2,348  | 2,583  | 2,653  | 2,820  | 3,019  | 3,336  | 3,333  | 3,674  | 4,030  |
| 40-49              | 2,242  | 2,567  | 2,684  | 2,988  | 3,108  | 3,399  | 3,649  | 4,040  | 4,390  | 5,024  |
| 50-59              | 3,410  | 4,045  | 4,351  | 4,460  | 4,702  | 4,997  | 5,243  | 5,621  | 6,272  | 6,747  |
| 60-64              | 1,900  | 2,178  | 2,460  | 2,884  | 3,173  | 3,485  | 3,624  | 4,075  | 4,433  | 4,819  |
| 65-69              | 1,936  | 1,961  | 2,260  | 3,042  | 3,082  | 3,511  | 4,018  | 4,578  | 5,082  | 5,890  |
| 70-79              | 2,143  | 2,301  | 2,876  | 4,147  | 4,265  | 4,959  | 5,709  | 6,518  | 7,182  | 8,518  |
| 80+                | 338    | 346    | 497    | 826    | 881    | 1,116  | 1,361  | 1,600  | 1,944  | 2,395  |
| Male               | 8,942  | 9,986  | 11,165 | 12,889 | 13,596 | 14,756 | 16,216 | 17,593 | 19,301 | 21,933 |
| Female             | 7,088  | 8,100  | 9,118  | 10,589 | 11,037 | 12,389 | 13,466 | 14,917 | 16,503 | 18,513 |
| White              | 9,920  | 11,519 | 13,699 | 15,422 | 16,261 | 17,945 | 19,600 | 21,205 | 23,217 | 26,285 |
| Black              | 5,492  | 5,869  | 5,985  | 7,207  | 7,330  | 8,046  | 8,703  | 9,722  | 10,892 | 12,676 |
| Other              | 618    | 698    | 599    | 849    | 1,042  | 1,154  | 1,379  | 1,583  | 1,695  | 1,485  |
| †Hispanic          |        |        |        |        |        |        |        |        |        |        |
| †Non-Hispanic      |        |        |        |        |        |        |        |        |        |        |
| Diabetes           | 2,128  | 3,406  | 4,725  | 5,494  | 6,682  | 7,717  | 8,922  | 9,949  | 11,217 | 13,625 |
| Hypertension       | 2,398  | 3,760  | 5,039  | 5,491  | 6,154  | 7,065  | 7,697  | 8,738  | 9,878  | 11,678 |
| Glomerulonephritis | 2,052  | 2,945  | 3,697  | 3,884  | 4,125  | 4,321  | 4,426  | 4,684  | 4,988  | 5,332  |
| Cystic kidney      | 598    | 821    | 989    | 1,032  | 1,061  | 1,118  | 1,208  | 1,239  | 1,230  | 1,237  |
| Other urologic     | 249    | 363    | 387    | 456    | 457    | 585    | 590    | 602    | 655    | 717    |
| Other cause        | 1,495  | 2,134  | 2,893  | 3,258  | 3,483  | 3,814  | 3,895  | 4,018  | 4,058  | 4,484  |
| Unknown cause      | 1,262  | 1,452  | 1,249  | 1,238  | 1,289  | 1,286  | 1,523  | 1,768  | 1,753  | 1,601  |
| Missing cause      | 5,848  | 3,205  | 1,304  | 2,625  | 1,382  | 1,239  | 1,421  | 1,512  | 2,025  | 1,772  |
| All                | 16,030 | 18,086 | 20,283 | 23,478 | 24,633 | 27,145 | 29,682 | 32,510 | 35,804 | 40,446 |
|                    | 1990   | 1991   | 1992   | 1993   | 1994   | 1995   | 1996   | 1997   | 1998   | 1999   |
| 0-4                | 95     | 128    | 116    | 118    | 90     | 119    | 127    | 106    | 97     | 90     |
| 5-9                | 115    | 106    | 90     | 96     | 120    | 102    | 94     | 79     | 83     | 93     |
| 10-14              | 185    | 209    | 193    | 194    | 201    | 210    | 207    | 184    | 181    | 175    |
| 15-19              | 427    | 399    | 436    | 424    | 409    | 452    | 424    | 347    | 372    | 384    |
| 20-29              | 2,208  | 2,229  | 2,295  | 2,252  | 2,197  | 2,140  | 2,095  | 1,955  | 1,991  | 1,857  |
| 30-39              | 4,162  | 4,378  | 4,645  | 4,537  | 4,673  | 4,694  | 4,472  | 4,209  | 4,230  | 4,287  |
| 40-49              | 5,384  | 6,082  | 6,498  | 6,644  | 6,996  | 7,494  | 7,582  | 7,312  | 7,862  | 7,857  |
| 50-59              | 7,235  | 7,790  | 8,654  | 8,790  | 9,929  | 10,126 | 10,171 | 10,876 | 11,658 | 12,303 |
| 60-64              | 5,146  | 5,742  | 6,033  | 6,133  | 6,505  | 6,867  | 6,868  | 7,037  | 7,427  | 7,535  |
| 65-69              | 6,527  | 7,281  | 7,815  | 8,137  | 8,782  | 8,651  | 9,184  | 9,516  | 9,829  | 9,849  |
| 70-79              | 9,509  | 11,231 | 12,501 | 13,073 | 14,713 | 14,910 | 16,431 | 17,615 | 18,737 | 19,732 |
| 80+                | 2,790  | 3,258  | 3,804  | 4,114  | 4,648  | 5,008  | 5,882  | 6,709  | 7,420  | 8,240  |
| Male               | 23,656 | 26,177 | 28,144 | 29,173 | 31,479 | 32,269 | 34,207 | 35,306 | 37,386 | 39,079 |
| Female             | 20,127 | 22,656 | 24,936 | 25,339 | 27,784 | 28,504 | 29,330 | 30,639 | 32,501 | 33,323 |
| White              | 28,575 | 31,716 | 34,263 | 34,514 | 37,832 | 38,014 | 39,526 | 42,384 | 44,447 | 46,972 |
| Black              | 13,458 | 15,102 | 16,532 | 17,464 | 18,408 | 18,765 | 19,583 | 19,700 | 21,068 | 21,171 |
| Other              | 1,750  | 2,015  | 2,285  | 2,534  | 3,023  | 3,994  | 4,428  | 3,861  | 4,372  | 4,259  |
| †Hispanic          |        |        |        |        |        |        | 7,151  | 7,037  | 7,809  | 7,932  |
| †Non-Hispanic      |        |        |        |        |        |        | 56,386 | 58,908 | 62,078 | 64,470 |
| Diabetes           | 15,302 | 17,832 | 19,781 | 19,531 | 22,695 | 24,875 | 27,573 | 29,376 | 31,454 | 32,588 |
| Hypertension       | 12,606 | 14,261 | 15,914 | 15,180 | 17,275 | 15,476 | 16,493 | 17,498 | 18,606 | 19,286 |
| Glomerulonephritis | 5,598  | 5,912  | 6,139  | 5,984  | 6,394  | 6,548  | 6,829  | 6,579  | 6,635  | 6,477  |
| Cystic kidney      | 1,387  | 1,471  | 1,545  | 1,493  | 1,579  | 1,661  | 1,561  | 1,580  | 1,683  | 1,701  |
| Other urologic     | 754    | 1,026  | 1,062  | 936    | 973    | 1,102  | 1,305  | 1,207  | 1,240  | 1,322  |
| Other cause        | 4,366  | 4,570  | 4,817  | 4,726  | 5,138  | 6,214  | 6,409  | 6,582  | 6,926  | 7,103  |
| Unknown cause      | 1,701  | 2,042  | 2,221  | 1,981  | 2,035  | 2,037  | 2,292  | 2,383  | 2,618  | 2,585  |
| Missing cause      | 2,069  | 1,719  | 1,601  | 4,681  | 3,174  | 2,860  | 1,075  | 740    | 725    | 1,340  |
| All                | 43,783 | 48,833 | 53,080 | 54,512 | 59,263 | 60,773 | 63,537 | 65,945 | 69,887 | 72,402 |

The incident cohorts and associated modalities are determined at the time of ESRD initiation with the 60-day stable modality rule & the 90-day rule.

The age of the incident patient is determined as of the date of ESRD initiation.

Patients of unknown age, gender, race, or primary diagnosis are excluded.

†CMS has only started collecting Hispanic ethnicity data as of April, 1995, so Hispanic data in years prior to 1995 has been left blank.

**Table I.3  
Incident Patient Counts: Dialysis Patients**

*dialysis patients alive on day 91, by age, gender, race, ethnicity, & primary diagnosis*

|                    | 1980   | 1981   | 1982   | 1983   | 1984   | 1985   | 1986   | 1987   | 1988   | 1989   |
|--------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0-4                | 23     | 47     | 62     | 73     | 79     | 90     | 87     | 75     | 85     | 95     |
| 5-9                | 54     | 52     | 68     | 67     | 71     | 55     | 75     | 67     | 56     | 61     |
| 10-14              | 119    | 140    | 161    | 141    | 149    | 129    | 116    | 120    | 121    | 104    |
| 15-19              | 328    | 363    | 337    | 350    | 316    | 314    | 300    | 325    | 340    | 384    |
| 20-29              | 1,192  | 1,374  | 1,559  | 1,499  | 1,617  | 1,651  | 1,703  | 1,697  | 1,774  | 1,883  |
| 30-39              | 1,844  | 2,109  | 2,367  | 2,427  | 2,592  | 2,753  | 2,967  | 2,978  | 3,295  | 3,662  |
| 40-49              | 2,119  | 2,459  | 2,553  | 2,863  | 2,956  | 3,232  | 3,423  | 3,782  | 4,101  | 4,732  |
| 50-59              | 3,352  | 3,996  | 4,267  | 4,387  | 4,626  | 4,918  | 5,113  | 5,449  | 6,100  | 6,598  |
| 60-64              | 1,897  | 2,170  | 2,455  | 2,872  | 3,164  | 3,465  | 3,600  | 4,040  | 4,406  | 4,776  |
| 65-69              | 1,932  | 1,960  | 2,260  | 3,039  | 3,073  | 3,501  | 4,009  | 4,563  | 5,072  | 5,872  |
| 70-79              | 2,143  | 2,300  | 2,876  | 4,145  | 4,258  | 4,954  | 5,703  | 6,512  | 7,175  | 8,508  |
| 80+                | 337    | 345    | 497    | 826    | 880    | 1,114  | 1,359  | 1,599  | 1,944  | 2,395  |
| Male               | 8,492  | 9,491  | 10,635 | 12,376 | 13,067 | 14,169 | 15,450 | 16,787 | 18,478 | 21,094 |
| Female             | 6,848  | 7,824  | 8,827  | 10,313 | 10,714 | 12,007 | 13,005 | 14,420 | 15,991 | 17,976 |
| White              | 9,343  | 10,893 | 13,016 | 14,761 | 15,536 | 17,097 | 18,537 | 20,098 | 22,086 | 25,104 |
| Black              | 5,415  | 5,772  | 5,872  | 7,106  | 7,233  | 7,960  | 8,583  | 9,601  | 10,734 | 12,527 |
| Other              | 582    | 650    | 574    | 822    | 1,012  | 1,119  | 1,335  | 1,508  | 1,649  | 1,439  |
| †Hispanic          |        |        |        |        |        |        |        |        |        |        |
| †Non-Hispanic      |        |        |        |        |        |        |        |        |        |        |
| Diabetes           | 2,051  | 3,270  | 4,542  | 5,322  | 6,460  | 7,487  | 8,597  | 9,618  | 10,911 | 13,292 |
| Hypertension       | 2,363  | 3,708  | 4,975  | 5,448  | 6,099  | 7,010  | 7,617  | 8,655  | 9,781  | 11,595 |
| Glomerulonephritis | 1,933  | 2,797  | 3,502  | 3,699  | 3,925  | 4,090  | 4,187  | 4,402  | 4,728  | 5,040  |
| Cystic kidney      | 586    | 796    | 964    | 997    | 1,013  | 1,066  | 1,118  | 1,154  | 1,133  | 1,149  |
| Other urologic     | 245    | 352    | 368    | 442    | 445    | 565    | 561    | 589    | 636    | 695    |
| Other cause        | 1,393  | 2,020  | 2,783  | 3,128  | 3,322  | 3,637  | 3,703  | 3,806  | 3,874  | 4,281  |
| Unknown cause      | 1,233  | 1,416  | 1,209  | 1,205  | 1,260  | 1,241  | 1,477  | 1,722  | 1,708  | 1,559  |
| Missing cause      | 5,536  | 2,956  | 1,119  | 2,448  | 1,257  | 1,080  | 1,195  | 1,261  | 1,698  | 1,459  |
| All                | 15,340 | 17,315 | 19,462 | 22,689 | 23,781 | 26,176 | 28,455 | 31,207 | 34,469 | 39,070 |
|                    | 1990   | 1991   | 1992   | 1993   | 1994   | 1995   | 1996   | 1997   | 1998   | 1999   |
| 0-4                | 72     | 106    | 93     | 83     | 75     | 98     | 101    | 91     | 85     | 76     |
| 5-9                | 79     | 60     | 51     | 61     | 84     | 67     | 63     | 55     | 60     | 68     |
| 10-14              | 129    | 142    | 145    | 143    | 145    | 155    | 165    | 143    | 138    | 131    |
| 15-19              | 340    | 317    | 376    | 332    | 313    | 364    | 353    | 289    | 324    | 321    |
| 20-29              | 1,936  | 1,990  | 2,077  | 2,008  | 1,992  | 1,946  | 1,950  | 1,803  | 1,851  | 1,722  |
| 30-39              | 3,764  | 3,965  | 4,239  | 4,143  | 4,286  | 4,301  | 4,167  | 3,961  | 3,943  | 4,072  |
| 40-49              | 5,034  | 5,684  | 6,133  | 6,303  | 6,628  | 7,118  | 7,244  | 7,017  | 7,581  | 7,551  |
| 50-59              | 7,048  | 7,595  | 8,421  | 8,576  | 9,694  | 9,887  | 9,932  | 10,639 | 11,407 | 12,077 |
| 60-64              | 5,110  | 5,693  | 5,974  | 6,071  | 6,449  | 6,790  | 6,793  | 6,963  | 7,357  | 7,451  |
| 65-69              | 6,502  | 7,253  | 7,787  | 8,100  | 8,753  | 8,610  | 9,143  | 9,454  | 9,767  | 9,775  |
| 70-79              | 9,500  | 11,222 | 12,489 | 13,058 | 14,704 | 14,894 | 16,420 | 17,602 | 18,724 | 19,701 |
| 80+                | 2,788  | 3,256  | 3,803  | 4,114  | 4,648  | 5,008  | 5,882  | 6,708  | 7,419  | 8,239  |
| Male               | 22,780 | 25,268 | 27,299 | 28,257 | 30,632 | 31,393 | 33,415 | 34,594 | 36,686 | 38,375 |
| Female             | 19,522 | 22,015 | 24,289 | 24,735 | 27,139 | 27,845 | 28,798 | 30,131 | 31,970 | 32,809 |
| White              | 27,283 | 30,365 | 32,981 | 33,197 | 36,536 | 36,725 | 38,393 | 41,308 | 43,363 | 45,902 |
| Black              | 13,317 | 14,963 | 16,363 | 17,323 | 18,266 | 18,586 | 19,465 | 19,596 | 20,971 | 21,062 |
| Other              | 1,702  | 1,955  | 2,244  | 2,472  | 2,969  | 3,927  | 4,355  | 3,821  | 4,322  | 4,220  |
| †Hispanic          |        |        |        |        |        |        | 7,076  | 6,981  | 7,729  | 7,871  |
| †Non-Hispanic      |        |        |        |        |        |        | 55,137 | 57,744 | 60,927 | 63,313 |
| Diabetes           | 14,958 | 17,463 | 19,428 | 19,189 | 22,352 | 24,533 | 27,209 | 29,063 | 31,157 | 32,319 |
| Hypertension       | 12,506 | 14,157 | 15,784 | 15,078 | 17,177 | 15,376 | 16,409 | 17,416 | 18,519 | 19,200 |
| Glomerulonephritis | 5,302  | 5,631  | 5,835  | 5,680  | 6,119  | 6,227  | 6,549  | 6,318  | 6,376  | 6,214  |
| Cystic kidney      | 1,247  | 1,322  | 1,398  | 1,358  | 1,468  | 1,501  | 1,420  | 1,465  | 1,530  | 1,561  |
| Other urologic     | 729    | 974    | 1,021  | 880    | 936    | 1,053  | 1,254  | 1,157  | 1,193  | 1,288  |
| Other cause        | 4,152  | 4,343  | 4,614  | 4,504  | 4,928  | 5,985  | 6,184  | 6,345  | 6,736  | 6,903  |
| Unknown cause      | 1,646  | 1,988  | 2,172  | 1,922  | 1,980  | 1,996  | 2,247  | 2,340  | 2,582  | 2,567  |
| Missing cause      | 1,762  | 1,405  | 1,336  | 4,381  | 2,811  | 2,567  | 941    | 621    | 563    | 1,132  |
| All                | 42,302 | 47,283 | 51,588 | 52,992 | 57,771 | 59,238 | 62,213 | 64,725 | 68,656 | 71,184 |

The incident cohorts and associated modalities are determined at the time of ESRD initiation with the 60-day stable modality rule & the 90-day rule.

The age of the incident patient is determined as of the date of ESRD initiation.

†CMS has only started collecting Hispanic ethnicity data as of April, 1995, so Hispanic data in years prior to 1995 has been left blank.

Patients of unknown age, gender, race, or primary diagnosis are excluded.

Includes U.S. & territories; no unknown or foreign states.

**Table I.4**  
**Patient Counts: First Transplant Patients (Cadaveric Donor)**

by age, gender, race, ethnicity, & primary diagnosis

|                    | 1980  | 1981  | 1982  | 1983  | 1984  | 1985  | 1986  | 1987  | 1988  | 1989  |
|--------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 0-17               | 185   | 178   | 198   | 217   | 215   | 242   | 241   | 234   | 227   | 183   |
| 18-29              | 616   | 640   | 684   | 730   | 791   | 798   | 902   | 859   | 773   | 862   |
| 30-44              | 917   | 1,034 | 1,219 | 1,383 | 1,581 | 1,620 | 1,877 | 1,918 | 2,150 | 2,131 |
| 45-54              | 485   | 462   | 579   | 640   | 747   | 804   | 996   | 1,038 | 1,317 | 1,240 |
| 55+                | 164   | 169   | 202   | 279   | 384   | 460   | 609   | 749   | 1,053 | 1,021 |
| Male               | 1,498 | 1,618 | 1,804 | 2,068 | 2,347 | 2,445 | 2,943 | 2,974 | 3,365 | 3,311 |
| Female             | 869   | 865   | 1,078 | 1,181 | 1,371 | 1,479 | 1,682 | 1,824 | 2,155 | 2,126 |
| White              | 1,739 | 1,773 | 2,099 | 2,361 | 2,687 | 2,787 | 3,308 | 3,456 | 3,898 | 3,863 |
| Black              | 527   | 550   | 690   | 783   | 902   | 988   | 1,117 | 1,109 | 1,314 | 1,272 |
| Other              | 101   | 160   | 93    | 105   | 129   | 149   | 200   | 233   | 308   | 302   |
| †Hispanic          |       |       |       |       |       |       |       |       |       |       |
| †Non-Hispanic      |       |       |       |       |       |       |       |       |       |       |
| Diabetes           | 221   | 289   | 429   | 517   | 664   | 773   | 1,006 | 1,052 | 1,182 | 1,286 |
| Hypertension       | 237   | 272   | 381   | 453   | 501   | 596   | 699   | 744   | 941   | 888   |
| Glomerulonephritis | 613   | 630   | 802   | 916   | 1,063 | 1,039 | 1,229 | 1,294 | 1,404 | 1,373 |
| Cystic kidney      | 110   | 126   | 168   | 187   | 266   | 278   | 331   | 380   | 509   | 480   |
| Other urologic     | 26    | 28    | 39    | 47    | 42    | 50    | 74    | 63    | 69    | 59    |
| Other cause        | 328   | 343   | 408   | 555   | 643   | 697   | 770   | 759   | 793   | 748   |
| Unknown cause      | 192   | 185   | 198   | 188   | 198   | 195   | 188   | 198   | 248   | 218   |
| Missing cause      | 640   | 610   | 457   | 386   | 341   | 296   | 328   | 308   | 374   | 385   |
| All                | 2,367 | 2,483 | 2,882 | 3,249 | 3,718 | 3,924 | 4,625 | 4,798 | 5,520 | 5,437 |
|                    | 1990  | 1991  | 1992  | 1993  | 1994  | 1995  | 1996  | 1997  | 1998  | 1999  |
| 0-17               | 192   | 157   | 158   | 168   | 213   | 183   | 182   | 179   | 143   | 180   |
| 18-29              | 885   | 838   | 746   | 760   | 722   | 753   | 626   | 580   | 563   | 538   |
| 30-44              | 2,253 | 2,280 | 2,254 | 2,337 | 2,336 | 2,281 | 2,139 | 2,000 | 2,088 | 1,914 |
| 45-54              | 1,398 | 1,387 | 1,453 | 1,612 | 1,675 | 1,710 | 1,764 | 1,773 | 1,738 | 1,635 |
| 55+                | 1,242 | 1,311 | 1,356 | 1,520 | 1,588 | 1,666 | 1,805 | 1,887 | 2,081 | 2,054 |
| Male               | 3,629 | 3,659 | 3,595 | 3,886 | 4,029 | 4,126 | 3,949 | 3,875 | 4,018 | 3,824 |
| Female             | 2,341 | 2,314 | 2,372 | 2,511 | 2,505 | 2,467 | 2,567 | 2,544 | 2,595 | 2,497 |
| White              | 4,230 | 4,227 | 4,168 | 4,513 | 4,388 | 4,470 | 4,296 | 4,151 | 4,260 | 4,043 |
| Black              | 1,413 | 1,425 | 1,444 | 1,540 | 1,769 | 1,779 | 1,816 | 1,847 | 1,861 | 1,792 |
| Other              | 327   | 321   | 355   | 344   | 377   | 344   | 404   | 421   | 492   | 486   |
| †Hispanic          |       |       |       |       |       |       | 439   | 522   | 655   | 668   |
| †Non-Hispanic      |       |       |       |       |       |       | 6,077 | 5,897 | 5,958 | 5,653 |
| Diabetes           | 1,403 | 1,477 | 1,515 | 1,765 | 1,800 | 1,822 | 1,887 | 1,893 | 2,091 | 1,961 |
| Hypertension       | 1,054 | 1,041 | 1,112 | 1,181 | 1,310 | 1,275 | 1,235 | 1,206 | 1,218 | 1,163 |
| Glomerulonephritis | 1,501 | 1,493 | 1,408 | 1,442 | 1,452 | 1,472 | 1,421 | 1,432 | 1,470 | 1,378 |
| Cystic kidney      | 543   | 510   | 557   | 583   | 503   | 552   | 564   | 536   | 518   | 532   |
| Other urologic     | 75    | 89    | 76    | 132   | 98    | 99    | 107   | 103   | 136   | 116   |
| Other cause        | 781   | 757   | 771   | 765   | 739   | 771   | 733   | 700   | 716   | 728   |
| Unknown cause      | 237   | 218   | 218   | 235   | 254   | 203   | 203   | 229   | 219   | 240   |
| Missing cause      | 376   | 388   | 310   | 294   | 378   | 399   | 366   | 320   | 245   | 203   |
| All                | 5,970 | 5,973 | 5,967 | 6,397 | 6,534 | 6,593 | 6,516 | 6,419 | 6,613 | 6,321 |

The incident cohorts and associated modalities are determined at the time of ESRD initiation with the 60-day stable modality rule & the 90-day rule.

Age is as of the date of transplantation.

†CMS has only started collecting Hispanic ethnicity data as of April, 1995, so Hispanic data in years prior to 1995 has been left blank.

Includes U.S. & territories; no unknown or foreign states.

Patients of unknown age, gender, race, or primary diagnosis are excluded.

**Table I.5**  
**Patient Counts: First Transplant Patients (Living Donor)**

by age, gender, race, ethnicity, & primary diagnosis

|                    | 1980  | 1981  | 1982  | 1983  | 1984  | 1985  | 1986  | 1987  | 1988  | 1989  |
|--------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 0-17               | 95    | 121   | 137   | 172   | 205   | 186   | 190   | 221   | 195   | 218   |
| 18-29              | 306   | 331   | 475   | 501   | 451   | 497   | 545   | 488   | 434   | 437   |
| 30-44              | 297   | 405   | 489   | 539   | 603   | 713   | 924   | 816   | 548   | 564   |
| 45-54              | 84    | 135   | 185   | 198   | 239   | 365   | 430   | 422   | 181   | 214   |
| 55+                | 13    | 33    | 63    | 75    | 112   | 177   | 261   | 269   | 78    | 119   |
| Male               | 465   | 613   | 860   | 899   | 1,004 | 1,177 | 1,429 | 1,349 | 890   | 907   |
| Female             | 330   | 412   | 489   | 586   | 606   | 761   | 921   | 867   | 546   | 645   |
| White              | 671   | 840   | 1,090 | 1,202 | 1,302 | 1,573 | 1,896 | 1,752 | 1,180 | 1,291 |
| Black              | 95    | 114   | 201   | 231   | 234   | 282   | 331   | 332   | 190   | 194   |
| Other              | 29    | 71    | 58    | 52    | 74    | 83    | 123   | 132   | 66    | 67    |
| †Hispanic          |       |       |       |       |       |       |       |       |       |       |
| †Non-Hispanic      |       |       |       |       |       |       |       |       |       |       |
| Diabetes           | 81    | 119   | 220   | 241   | 284   | 398   | 488   | 453   | 299   | 305   |
| Hypertension       | 55    | 90    | 149   | 151   | 173   | 221   | 269   | 275   | 134   | 157   |
| Glomerulonephritis | 225   | 301   | 432   | 460   | 521   | 578   | 684   | 651   | 459   | 485   |
| Cystic kidney      | 29    | 39    | 54    | 77    | 97    | 126   | 171   | 179   | 59    | 64    |
| Other urologic     | 9     | 18    | 20    | 31    | 26    | 47    | 33    | 39    | 26    | 33    |
| Other cause        | 130   | 160   | 186   | 284   | 329   | 366   | 452   | 396   | 273   | 305   |
| Unknown cause      | 59    | 68    | 86    | 90    | 70    | 86    | 101   | 93    | 45    | 68    |
| Missing cause      | 207   | 230   | 202   | 151   | 110   | 116   | 152   | 130   | 141   | 135   |
| All                | 795   | 1,025 | 1,349 | 1,485 | 1,610 | 1,938 | 2,350 | 2,216 | 1,436 | 1,552 |
|                    | 1990  | 1991  | 1992  | 1993  | 1994  | 1995  | 1996  | 1997  | 1998  | 1999  |
| 0-17               | 194   | 244   | 227   | 266   | 210   | 260   | 244   | 223   | 219   | 218   |
| 18-29              | 469   | 481   | 460   | 530   | 520   | 455   | 515   | 492   | 482   | 487   |
| 30-44              | 622   | 702   | 756   | 776   | 838   | 907   | 876   | 873   | 936   | 815   |
| 45-54              | 219   | 275   | 330   | 391   | 429   | 508   | 583   | 585   | 620   | 643   |
| 55+                | 119   | 168   | 237   | 265   | 287   | 384   | 465   | 554   | 628   | 682   |
| Male               | 923   | 1,057 | 1,158 | 1,317 | 1,320 | 1,450 | 1,548 | 1,589 | 1,643 | 1,670 |
| Female             | 700   | 813   | 852   | 911   | 964   | 1,064 | 1,135 | 1,138 | 1,242 | 1,175 |
| White              | 1,359 | 1,511 | 1,627 | 1,754 | 1,784 | 1,981 | 2,074 | 2,082 | 2,238 | 2,146 |
| Black              | 198   | 272   | 288   | 366   | 377   | 387   | 446   | 460   | 464   | 506   |
| Other              | 66    | 87    | 95    | 108   | 123   | 146   | 163   | 185   | 183   | 193   |
| †Hispanic          |       |       |       |       |       |       | 267   | 342   | 385   | 356   |
| †Non-Hispanic      |       |       |       |       |       |       | 2,416 | 2,385 | 2,500 | 2,489 |
| Diabetes           | 327   | 413   | 396   | 456   | 485   | 487   | 572   | 569   | 700   | 626   |
| Hypertension       | 147   | 210   | 262   | 312   | 332   | 345   | 376   | 374   | 387   | 400   |
| Glomerulonephritis | 509   | 536   | 599   | 619   | 654   | 712   | 776   | 822   | 795   | 793   |
| Cystic kidney      | 82    | 96    | 108   | 113   | 120   | 161   | 178   | 171   | 195   | 192   |
| Other urologic     | 42    | 52    | 71    | 87    | 70    | 78    | 88    | 95    | 86    | 96    |
| Other cause        | 321   | 349   | 361   | 398   | 370   | 428   | 469   | 503   | 494   | 494   |
| Unknown cause      | 70    | 71    | 88    | 113   | 98    | 107   | 104   | 106   | 145   | 113   |
| Missing cause      | 125   | 143   | 125   | 130   | 155   | 196   | 120   | 87    | 83    | 131   |
| All                | 1,623 | 1,870 | 2,010 | 2,228 | 2,284 | 2,514 | 2,683 | 2,727 | 2,885 | 2,845 |

The incident cohorts and associated modalities are determined at the time of ESRD initiation with the 60-day stable modality rule & the 90-day rule. Age is as of the date of transplantation.

†CMS has only started collecting Hispanic ethnicity data as of April, 1995, so Hispanic data in years prior to 1995 has been left blank.

Includes U.S. & territories; no unknown or foreign states.

Patients of unknown age, gender, race, or primary diagnosis are excluded.

**Table I.6**  
**One-year Survival Probabilities: Incident ESRD Patients, Unadjusted**

*from day 91 to one year + 90 days*

|                    | 1989 | 1990 | 1991 | 1992 | 1993 | 1994  | 1995 | 1996 | 1997 | 1998  | 1999 |
|--------------------|------|------|------|------|------|-------|------|------|------|-------|------|
| 0-4                | 84.3 | 88.4 | 85.2 | 89.7 | 89.0 | 92.2  | 89.9 | 94.5 | 89.6 | 90.7  | 92.9 |
| 5-9                | 98.0 | 97.4 | 98.1 | 97.8 | 96.9 | 100.0 | 98.0 | 96.8 | 94.9 | 100.0 | 97.8 |
| 10-14              | 94.6 | 97.3 | 97.1 | 95.3 | 95.9 | 99.5  | 99.0 | 98.1 | 97.8 | 97.8  | 97.7 |
| 15-19              | 98.5 | 97.4 | 96.0 | 96.8 | 97.2 | 96.3  | 98.0 | 97.2 | 98.0 | 96.2  | 98.4 |
| 20-29              | 92.9 | 93.4 | 92.9 | 94.2 | 93.6 | 94.1  | 93.4 | 95.1 | 96.1 | 96.1  | 96.2 |
| 30-39              | 89.8 | 90.6 | 89.9 | 90.6 | 90.1 | 90.5  | 90.6 | 91.0 | 92.1 | 91.9  | 92.0 |
| 40-49              | 88.5 | 89.4 | 88.2 | 88.7 | 89.5 | 89.6  | 89.9 | 90.1 | 90.5 | 89.6  | 90.2 |
| 50-59              | 83.0 | 84.2 | 84.3 | 85.2 | 85.2 | 85.8  | 86.4 | 85.7 | 86.1 | 85.8  | 86.1 |
| 60-64              | 77.6 | 78.4 | 78.8 | 79.6 | 81.0 | 81.0  | 80.4 | 81.8 | 82.0 | 80.3  | 81.3 |
| 65-69              | 73.8 | 75.4 | 75.1 | 75.5 | 77.2 | 76.3  | 77.1 | 77.2 | 76.4 | 75.8  | 76.0 |
| 70-79              | 67.2 | 68.3 | 68.2 | 68.4 | 69.9 | 69.9  | 70.2 | 70.1 | 69.2 | 69.3  | 69.0 |
| 80+                | 57.7 | 59.2 | 59.1 | 58.2 | 60.9 | 60.8  | 60.0 | 59.7 | 59.0 | 57.0  | 57.8 |
| Male               | 78.2 | 79.1 | 78.5 | 78.6 | 79.8 | 79.3  | 79.5 | 79.2 | 78.6 | 77.9  | 78.2 |
| Female             | 78.5 | 79.1 | 78.4 | 78.8 | 79.1 | 79.2  | 79.3 | 78.7 | 77.9 | 77.1  | 76.7 |
| White              | 75.9 | 76.6 | 75.8 | 75.9 | 76.9 | 76.8  | 76.9 | 76.4 | 75.4 | 74.8  | 75.0 |
| Black              | 82.6 | 83.6 | 82.9 | 83.5 | 83.5 | 83.3  | 83.4 | 83.4 | 83.5 | 82.1  | 82.0 |
| Other race         | 85.1 | 85.7 | 86.9 | 85.1 | 87.1 | 85.2  | 84.8 | 82.6 | 83.4 | 82.9  | 82.9 |
| †Hispanic          |      |      |      |      |      |       |      | 82.7 | 82.6 | 82.6  | 82.3 |
| †Non-Hispanic      |      |      |      |      |      |       |      | 78.5 | 77.7 | 76.9  | 76.9 |
| Diabetes           | 76.4 | 76.6 | 76.9 | 77.3 | 79.1 | 78.5  | 78.4 | 77.7 | 76.8 | 77.5  | 77.5 |
| Hypertension       | 76.0 | 77.2 | 76.0 | 76.4 | 77.1 | 76.7  | 77.8 | 77.5 | 76.3 | 75.7  | 75.5 |
| Glomerulonephritis | 86.5 | 87.1 | 85.8 | 87.5 | 88.4 | 86.6  | 87.7 | 88.2 | 87.5 | 87.8  | 87.3 |
| Other cause        | 79.5 | 80.9 | 80.2 | 79.6 | 78.7 | 80.3  | 79.0 | 77.3 | 77.6 | 76.7  | 75.8 |
| All                | 78.4 | 79.1 | 78.5 | 78.7 | 79.5 | 79.3  | 79.4 | 79.0 | 78.3 | 77.5  | 77.5 |

The incident cohorts and associated modalities are determined at the time of ESRD initiation with the 60-day stable modality rule & the 90-day rule. Age as of date of ESRD initiation.

†CMS has only started collecting Hispanic ethnicity data as of April, 1995, so Hispanic data in years prior to 1995 has been left blank.

Includes U.S. & territories; no unknown or foreign states.

Patients of unknown age, gender, race, or primary diagnosis are excluded.





**Table I.7**  
**One-year Survival Probabilities: Incident ESRD Patients, Adjusted**  
*from day 91 to one year + 90 days, adjusted for age, gender, race, & primary diagnosis*

|                    | 1989 | 1990 | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 |
|--------------------|------|------|------|------|------|------|------|------|------|------|------|
| 0-19               | 91.4 | 92.6 | 89.7 | 91.3 | 91.5 | 94.4 | 94.3 | 93.9 | 92.9 | 92.9 | 95.2 |
| 20-44              | 89.6 | 90.6 | 89.8 | 90.4 | 90.1 | 90.8 | 90.8 | 91.6 | 92.2 | 91.9 | 92.1 |
| 45-64              | 82.2 | 83.2 | 83.3 | 84.3 | 85.0 | 85.3 | 85.4 | 85.8 | 86.3 | 85.5 | 86.1 |
| 65-74              | 71.9 | 73.4 | 73.2 | 73.7 | 75.3 | 74.7 | 75.6 | 75.6 | 75.0 | 74.8 | 75.0 |
| 75+                | 62.2 | 63.2 | 63.2 | 62.7 | 64.1 | 65.0 | 64.4 | 64.3 | 63.6 | 62.8 | 63.0 |
| Male               | 75.5 | 76.8 | 76.7 | 77.1 | 78.6 | 78.6 | 78.8 | 79.3 | 79.3 | 78.9 | 79.6 |
| Female             | 77.4 | 78.5 | 78.3 | 78.9 | 79.2 | 79.9 | 80.1 | 80.1 | 79.8 | 79.2 | 79.2 |
| White              | 74.4 | 75.5 | 75.4 | 76.0 | 77.1 | 77.7 | 78.0 | 78.3 | 77.9 | 77.7 | 78.2 |
| Black              | 79.6 | 81.2 | 80.7 | 81.3 | 81.9 | 81.6 | 81.6 | 82.0 | 82.4 | 81.0 | 80.9 |
| Other race         | 82.7 | 83.8 | 85.4 | 84.0 | 86.3 | 84.6 | 84.5 | 82.6 | 84.1 | 83.4 | 83.9 |
| Diabetes           | 74.0 | 74.7 | 75.4 | 76.0 | 78.1 | 78.0 | 78.0 | 78.3 | 78.1 | 77.4 | 78.3 |
| Hypertension       | 78.2 | 79.7 | 79.0 | 79.2 | 80.0 | 80.2 | 81.1 | 81.1 | 80.6 | 80.2 | 80.3 |
| Glomerulonephritis | 82.4 | 83.2 | 82.1 | 84.0 | 85.0 | 83.9 | 84.9 | 86.0 | 85.5 | 85.8 | 85.7 |
| Other cause        | 76.5 | 78.2 | 77.6 | 77.7 | 78.0 | 78.3 | 77.2 | 76.2 | 77.0 | 76.1 | 75.6 |
| All                | 76.4 | 77.6 | 77.5 | 78.0 | 79.0 | 79.2 | 79.4 | 79.7 | 79.6 | 79.1 | 79.4 |

The incident cohorts and associated modalities are determined at the time of ESRD initiation with the 60-day stable modality rule and 90-day rule.

Age as of date of ESRD initiation.

Includes U.S. & territories; no unknown or foreign states.

Patients of unknown age, gender, race, or primary diagnosis are excluded.

## Standard Errors

|                    | 1989 | 1990 | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 |
|--------------------|------|------|------|------|------|------|------|------|------|------|------|
| 0-19               | 1.52 | 1.46 | 1.70 | 1.59 | 1.57 | 1.21 | 1.20 | 1.33 | 1.52 | 1.55 | 1.28 |
| 20-44              | 0.33 | 0.32 | 0.31 | 0.30 | 0.30 | 0.27 | 0.28 | 0.28 | 0.32 | 0.28 | 0.28 |
| 45-64              | 0.34 | 0.30 | 0.27 | 0.26 | 0.25 | 0.24 | 0.26 | 0.24 | 0.26 | 0.22 | 0.23 |
| 65-74              | 0.41 | 0.39 | 0.41 | 0.35 | 0.30 | 0.31 | 0.31 | 0.30 | 0.32 | 0.29 | 0.31 |
| 75+                | 0.61 | 0.53 | 0.54 | 0.50 | 0.44 | 0.50 | 0.44 | 0.42 | 0.38 | 0.39 | 0.34 |
| Male               | 0.28 | 0.26 | 0.28 | 0.25 | 0.26 | 0.23 | 0.22 | 0.23 | 0.21 | 0.22 | 0.19 |
| Female             | 0.29 | 0.28 | 0.28 | 0.24 | 0.25 | 0.23 | 0.23 | 0.22 | 0.22 | 0.19 | 0.19 |
| White              | 0.29 | 0.25 | 0.25 | 0.23 | 0.21 | 0.19 | 0.20 | 0.20 | 0.19 | 0.17 | 0.19 |
| Black              | 0.39 | 0.34 | 0.32 | 0.32 | 0.30 | 0.29 | 0.29 | 0.28 | 0.26 | 0.28 | 0.31 |
| Other race         | 0.99 | 0.86 | 0.80 | 0.74 | 0.67 | 0.66 | 0.54 | 0.56 | 0.55 | 0.55 | 0.54 |
| Diabetes           | 0.37 | 0.35 | 0.32 | 0.29 | 0.26 | 0.27 | 0.27 | 0.25 | 0.22 | 0.24 | 0.21 |
| Hypertension       | 0.36 | 0.35 | 0.30 | 0.30 | 0.28 | 0.29 | 0.30 | 0.27 | 0.26 | 0.28 | 0.26 |
| Glomerulonephritis | 0.55 | 0.52 | 0.54 | 0.53 | 0.50 | 0.50 | 0.49 | 0.45 | 0.45 | 0.44 | 0.42 |
| Other cause        | 0.48 | 0.41 | 0.39 | 0.42 | 0.37 | 0.37 | 0.34 | 0.31 | 0.38 | 0.37 | 0.37 |
| All                | 0.20 | 0.19 | 0.19 | 0.18 | 0.18 | 0.16 | 0.16 | 0.14 | 0.15 | 0.14 | 0.15 |

**Table I.8**  
**Two-year Survival Probabilities: Incident ESRD Patients, Unadjusted**

*from day 91 to two years + 90 days, by age, gender, race, ethnicity, & primary diagnosis*

|                    | 1988 | 1989 | 1990 | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 |
|--------------------|------|------|------|------|------|------|------|------|------|------|------|
| 0-4                | 76.8 | 80.2 | 84.2 | 82.0 | 89.7 | 88.1 | 85.6 | 86.6 | 90.6 | 85.8 | 86.4 |
| 5-9                | 97.5 | 97.0 | 94.8 | 98.1 | 97.8 | 92.7 | 97.5 | 97.1 | 95.7 | 93.7 | 97.5 |
| 10-14              | 95.6 | 92.9 | 94.6 | 96.2 | 93.8 | 93.8 | 98.5 | 96.7 | 96.6 | 96.7 | 97.2 |
| 15-19              | 95.0 | 96.7 | 95.6 | 93.5 | 95.2 | 95.0 | 94.6 | 96.5 | 93.9 | 94.8 | 94.0 |
| 20-29              | 88.2 | 88.7 | 88.3 | 87.9 | 89.2 | 89.4 | 90.1 | 88.7 | 91.0 | 91.7 | 92.8 |
| 30-39              | 82.7 | 82.3 | 82.7 | 81.8 | 82.7 | 83.4 | 82.8 | 84.0 | 84.3 | 85.3 | 84.8 |
| 40-49              | 78.6 | 78.1 | 80.2 | 77.7 | 79.5 | 79.7 | 80.3 | 80.8 | 80.5 | 81.5 | 81.2 |
| 50-59              | 69.1 | 70.1 | 70.6 | 70.9 | 71.9 | 72.7 | 73.8 | 73.6 | 73.2 | 73.9 | 73.1 |
| 60-64              | 59.8 | 61.2 | 61.4 | 62.6 | 63.2 | 64.9 | 65.5 | 64.6 | 66.5 | 66.4 | 65.1 |
| 65-69              | 56.0 | 56.0 | 56.5 | 57.0 | 58.0 | 59.9 | 58.9 | 59.9 | 60.0 | 58.6 | 59.2 |
| 70-79              | 46.3 | 47.7 | 47.9 | 48.1 | 49.0 | 50.1 | 50.2 | 50.7 | 50.8 | 49.0 | 50.3 |
| 80+                | 33.1 | 37.3 | 36.6 | 36.0 | 36.5 | 37.5 | 38.3 | 38.0 | 37.5 | 36.4 | 36.7 |
| Male               | 63.4 | 63.9 | 64.0 | 63.4 | 63.9 | 65.2 | 64.7 | 65.2 | 64.4 | 63.2 | 63.4 |
| Female             | 64.1 | 64.1 | 63.9 | 63.1 | 64.0 | 63.9 | 64.2 | 63.9 | 63.6 | 62.2 | 62.0 |
| White              | 60.2 | 60.6 | 60.4 | 59.5 | 60.1 | 60.5 | 60.5 | 60.6 | 59.9 | 58.4 | 58.7 |
| Black              | 70.5 | 70.0 | 70.4 | 69.4 | 70.6 | 71.2 | 71.0 | 71.2 | 71.1 | 70.7 | 69.6 |
| Other race         | 68.4 | 73.3 | 72.4 | 76.3 | 73.3 | 75.2 | 72.9 | 71.8 | 69.7 | 70.4 | 70.3 |
| †Hispanic          |      |      |      |      |      |      |      |      | 68.9 | 68.7 | 69.6 |
| †Non-Hispanic      |      |      |      |      |      |      |      |      | 63.4 | 62.0 | 61.9 |
| Diabetes           | 57.6 | 59.0 | 58.1 | 59.0 | 59.8 | 61.7 | 61.0 | 61.1 | 61.1 | 60.0 | 60.0 |
| Hypertension       | 60.4 | 61.0 | 61.0 | 60.0 | 61.2 | 61.8 | 61.6 | 62.8 | 62.3 | 60.4 | 60.5 |
| Glomerulonephritis | 77.4 | 76.3 | 77.2 | 75.5 | 77.7 | 79.0 | 76.8 | 78.2 | 78.3 | 77.2 | 78.4 |
| Other cause        | 67.1 | 67.8 | 69.0 | 68.0 | 67.5 | 65.5 | 68.0 | 66.5 | 64.9 | 64.8 | 64.5 |
| All                | 63.7 | 64.0 | 64.0 | 63.3 | 63.9 | 64.6 | 64.4 | 64.6 | 64.0 | 62.7 | 62.7 |

The incident cohorts and associated modalities are determined at the time of ESRD initiation with the 60-day stable modality rule & the 90-day rule. Age as of date of ESRD initiation.

†CMS has only started collecting Hispanic ethnicity data as of April, 1995, so Hispanic data in years prior to 1995 has been left blank.

Patients of unknown age, gender, race, or primary diagnosis are excluded.

Includes U.S. & territories; no unknown or foreign states.



**Table I.9**  
**Two-year Survival Probabilities: Incident ESRD Patients, Unadjusted**

*from day 91 to two years + 90 days, adjusted for age, gender, race, & primary diagnosis*

|                    | 1988 | 1989 | 1990 | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 |
|--------------------|------|------|------|------|------|------|------|------|------|------|------|
| 0-19               | 87.6 | 89.0 | 89.3 | 87.8 | 90.3 | 88.9 | 91.3 | 91.7 | 90.2 | 89.6 | 90.3 |
| 20-44              | 82.3 | 82.1 | 82.9 | 81.5 | 82.6 | 82.7 | 83.4 | 83.6 | 84.5 | 85.6 | 85.3 |
| 45-64              | 66.7 | 68.4 | 69.2 | 69.6 | 70.8 | 71.9 | 72.9 | 72.7 | 73.4 | 74.0 | 73.3 |
| 65-74              | 53.1 | 53.7 | 54.1 | 54.7 | 56.0 | 56.9 | 56.8 | 58.2 | 58.1 | 56.8 | 57.8 |
| 75+                | 38.5 | 41.8 | 41.6 | 41.6 | 41.8 | 42.9 | 43.9 | 43.1 | 43.6 | 42.3 | 43.1 |
| Male               | 58.3 | 60.0 | 60.6 | 60.8 | 61.8 | 63.4 | 63.7 | 64.2 | 64.5 | 64.4 | 64.8 |
| Female             | 61.5 | 62.6 | 63.0 | 63.1 | 64.3 | 64.3 | 65.4 | 65.3 | 65.8 | 65.3 | 65.4 |
| White              | 56.8 | 58.5 | 59.0 | 59.1 | 60.3 | 61.0 | 62.1 | 62.4 | 62.9 | 62.4 | 63.1 |
| Black              | 65.7 | 65.6 | 66.6 | 66.0 | 67.3 | 68.7 | 68.4 | 68.6 | 69.1 | 68.9 | 68.0 |
| Other race         | 63.7 | 69.5 | 69.1 | 73.8 | 71.7 | 74.0 | 71.9 | 71.3 | 69.7 | 71.6 | 71.2 |
| Diabetes           | 53.9 | 56.0 | 55.8 | 57.2 | 58.3 | 60.4 | 60.6 | 60.8 | 61.3 | 61.0 | 61.1 |
| Hypertension       | 63.2 | 64.4 | 64.9 | 64.5 | 65.3 | 66.2 | 66.9 | 67.7 | 67.8 | 66.9 | 67.1 |
| Glomerulonephritis | 69.6 | 69.6 | 70.6 | 69.6 | 71.8 | 73.1 | 72.4 | 73.4 | 74.5 | 73.6 | 74.9 |
| Other cause        | 62.7 | 63.8 | 65.0 | 64.1 | 64.7 | 64.5 | 65.1 | 63.9 | 63.4 | 63.8 | 63.7 |
| All                | 59.9 | 61.3 | 61.8 | 61.9 | 63.0 | 63.9 | 64.5 | 64.8 | 65.2 | 64.9 | 65.1 |

The incident cohorts and associated modalities are determined at the time of ESRD initiation with the 60-day stable modality rule & the 90-day rule. Age as of date of ESRD initiation.

†CMS has only started collecting Hispanic ethnicity data as of April, 1995, so Hispanic data in years prior to 1995 has been left blank.

Patients of unknown age, gender, race, or primary diagnosis are excluded.

Includes U.S. & territories; no unknown or foreign states.

## Standard Errors

|                    | 1988 | 1989 | 1990 | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 |
|--------------------|------|------|------|------|------|------|------|------|------|------|------|
| 0-19               | 1.88 | 1.71 | 1.74 | 1.81 | 1.55 | 1.72 | 1.56 | 1.47 | 1.56 | 1.72 | 1.72 |
| 20-44              | 0.44 | 0.45 | 0.39 | 0.40 | 0.42 | 0.38 | 0.36 | 0.37 | 0.37 | 0.38 | 0.38 |
| 45-64              | 0.40 | 0.36 | 0.33 | 0.36 | 0.30 | 0.35 | 0.31 | 0.31 | 0.31 | 0.30 | 0.30 |
| 65-74              | 0.44 | 0.47 | 0.47 | 0.45 | 0.36 | 0.40 | 0.34 | 0.37 | 0.36 | 0.32 | 0.32 |
| 75+                | 0.72 | 0.60 | 0.61 | 0.57 | 0.54 | 0.50 | 0.48 | 0.48 | 0.44 | 0.41 | 0.41 |
| Male               | 0.37 | 0.31 | 0.31 | 0.32 | 0.29 | 0.27 | 0.27 | 0.24 | 0.24 | 0.23 | 0.23 |
| Female             | 0.32 | 0.36 | 0.31 | 0.28 | 0.26 | 0.28 | 0.24 | 0.26 | 0.23 | 0.24 | 0.24 |
| White              | 0.34 | 0.28 | 0.28 | 0.25 | 0.24 | 0.24 | 0.21 | 0.23 | 0.23 | 0.21 | 0.21 |
| Black              | 0.45 | 0.47 | 0.42 | 0.39 | 0.37 | 0.35 | 0.34 | 0.32 | 0.33 | 0.33 | 0.33 |
| Other race         | 1.22 | 1.13 | 1.18 | 0.97 | 0.86 | 0.83 | 0.75 | 0.62 | 0.70 | 0.71 | 0.71 |
| Diabetes           | 0.49 | 0.42 | 0.39 | 0.38 | 0.31 | 0.35 | 0.32 | 0.29 | 0.25 | 0.28 | 0.28 |
| Hypertension       | 0.46 | 0.41 | 0.38 | 0.36 | 0.35 | 0.33 | 0.29 | 0.34 | 0.29 | 0.30 | 0.30 |
| Glomerulonephritis | 0.67 | 0.58 | 0.63 | 0.58 | 0.60 | 0.65 | 0.59 | 0.58 | 0.55 | 0.51 | 0.51 |
| Other cause        | 0.48 | 0.53 | 0.45 | 0.47 | 0.42 | 0.40 | 0.43 | 0.38 | 0.36 | 0.39 | 0.39 |
| All                | 0.24 | 0.24 | 0.22 | 0.21 | 0.20 | 0.21 | 0.18 | 0.19 | 0.17 | 0.16 | 0.16 |

**Table I.10**  
**Five-year Survival Probabilities: Incident ESRD Patients, Unadjusted**

*from day 91 to five years + 90 days, by age, gender, race, ethnicity, & primary diagnosis*

|                    | 1985 | 1986 | 1987 | 1988 | 1989 | 1990 | 1991 | 1992 | 1993 | 1994 | 1995 |
|--------------------|------|------|------|------|------|------|------|------|------|------|------|
| 0-4                | 79.1 | 82.2 | 77.9 | 74.1 | 77.7 | 81.1 | 80.5 | 84.5 | 82.2 | 81.1 | 80.7 |
| 5-9                | 87.4 | 90.7 | 94.7 | 93.8 | 93.9 | 90.4 | 95.3 | 92.2 | 88.5 | 94.2 | 95.1 |
| 10-14              | 91.9 | 91.3 | 95.4 | 92.2 | 88.1 | 89.7 | 90.9 | 88.1 | 89.2 | 93.0 | 93.8 |
| 15-19              | 84.8 | 87.7 | 87.5 | 87.6 | 89.3 | 89.9 | 88.2 | 91.3 | 89.6 | 89.5 | 90.7 |
| 20-29              | 75.6 | 78.4 | 76.0 | 78.5 | 77.9 | 78.9 | 79.0 | 79.2 | 80.3 | 81.2 | 79.5 |
| 30-39              | 64.1 | 66.2 | 63.1 | 67.2 | 67.9 | 67.8 | 66.3 | 66.9 | 68.4 | 67.9 | 69.7 |
| 40-49              | 56.1 | 56.7 | 57.5 | 58.0 | 56.6 | 58.1 | 56.9 | 58.7 | 59.3 | 59.0 | 60.6 |
| 50-59              | 38.6 | 40.7 | 42.1 | 41.1 | 41.5 | 41.4 | 43.2 | 42.9 | 44.8 | 45.1 | 45.2 |
| 60-64              | 27.5 | 28.8 | 27.9 | 29.9 | 29.9 | 30.1 | 30.2 | 31.4 | 32.0 | 32.8 | 32.6 |
| 65-69              | 22.6 | 22.4 | 23.3 | 23.1 | 23.3 | 23.4 | 22.8 | 24.5 | 25.0 | 25.8 | 25.6 |
| 70-79              | 15.6 | 14.9 | 15.3 | 15.5 | 16.1 | 15.7 | 16.1 | 16.0 | 16.8 | 16.8 | 17.3 |
| 80+                | 8.4  | 7.6  | 7.7  | 6.6  | 8.9  | 8.6  | 7.6  | 7.5  | 8.0  | 8.2  | 8.6  |
| Male               | 38.4 | 39.2 | 38.3 | 38.4 | 38.6 | 38.0 | 37.2 | 37.0 | 38.1 | 37.3 | 38.4 |
| Female             | 38.9 | 38.4 | 37.4 | 37.7 | 36.5 | 36.0 | 35.1 | 35.6 | 35.3 | 35.4 | 35.0 |
| White              | 37.2 | 36.8 | 35.4 | 34.7 | 34.5 | 33.6 | 32.6 | 32.6 | 33.0 | 32.5 | 32.2 |
| Black              | 41.5 | 42.5 | 42.0 | 43.9 | 42.8 | 43.1 | 42.1 | 42.8 | 42.8 | 42.9 | 44.7 |
| Other race         | 41.3 | 45.1 | 45.5 | 45.3 | 49.6 | 46.9 | 48.4 | 45.5 | 46.6 | 45.6 | 43.5 |
| †Hispanic          |      |      |      |      |      |      |      |      |      |      |      |
| †Non-Hispanic      |      |      |      |      |      |      |      |      |      |      |      |
| Diabetes           | 26.4 | 28.2 | 27.2 | 28.1 | 28.1 | 27.3 | 27.7 | 28.4 | 29.6 | 29.1 | 28.8 |
| Hypertension       | 35.4 | 34.0 | 32.5 | 33.4 | 33.3 | 33.4 | 31.7 | 32.7 | 33.2 | 32.2 | 34.0 |
| Glomerulonephritis | 55.4 | 56.2 | 55.4 | 57.1 | 56.5 | 56.1 | 55.1 | 56.6 | 58.2 | 56.1 | 57.4 |
| Other cause        | 44.2 | 45.4 | 45.7 | 44.5 | 45.7 | 45.8 | 45.8 | 44.4 | 41.6 | 45.0 | 44.5 |
| All                | 38.6 | 38.9 | 37.9 | 38.0 | 37.6 | 37.1 | 36.2 | 36.4 | 36.8 | 36.4 | 36.8 |

The incident cohorts and associated modalities are determined at the time of ESRD initiation with the 60-day stable modality rule & the 90-day rule.  
Age as of date of ESRD initiation.

†CMS has only started collecting Hispanic ethnicity data as of April, 1995, so Hispanic data in years prior to 1995 has been left blank.

Includes U.S. & territories; no unknown or foreign states.

Patients of unknown age, gender, race, or primary diagnosis are excluded.





**Table I.11**  
**Five-year Survival Probabilities: Incident ESRD Patients, Adjusted**

*from day 91 to five years + 90 days, adjusted for age, gender, race, & primary diagnosis*

|                    | 1985 | 1986 | 1987 | 1988 | 1989 | 1990 | 1991 | 1992 | 1993 | 1994 | 1995 |
|--------------------|------|------|------|------|------|------|------|------|------|------|------|
| 0-19               | 76.5 | 80.2 | 81.5 | 79.4 | 80.4 | 81.6 | 81.0 | 83.1 | 81.0 | 83.6 | 84.4 |
| 20-44              | 63.6 | 65.7 | 64.0 | 66.2 | 66.8 | 67.5 | 66.0 | 66.8 | 67.7 | 68.0 | 68.7 |
| 45-64              | 35.5 | 37.6 | 38.1 | 38.9 | 39.7 | 40.0 | 41.5 | 42.3 | 43.5 | 44.4 | 44.8 |
| 65-74              | 19.7 | 19.2 | 20.4 | 20.8 | 21.4 | 21.5 | 21.3 | 22.7 | 22.7 | 23.7 | 24.0 |
| 75+                | 11.0 | 10.9 | 10.5 | 10.0 | 11.8 | 11.0 | 11.5 | 10.6 | 11.4 | 11.7 | 12.2 |
| Male               | 30.3 | 31.7 | 31.6 | 32.2 | 33.9 | 33.7 | 34.1 | 34.4 | 35.7 | 36.0 | 37.0 |
| Female             | 33.5 | 34.0 | 34.2 | 34.7 | 34.9 | 35.1 | 35.5 | 36.4 | 36.3 | 37.4 | 37.2 |
| White              | 29.8 | 30.4 | 30.4 | 30.8 | 32.1 | 31.9 | 32.3 | 33.1 | 33.8 | 34.7 | 34.8 |
| Black              | 34.3 | 36.1 | 36.1 | 37.4 | 37.0 | 38.1 | 37.9 | 38.4 | 39.3 | 39.5 | 41.0 |
| Other race         | 33.3 | 36.5 | 38.1 | 39.1 | 44.0 | 41.7 | 44.6 | 43.3 | 44.7 | 44.0 | 42.9 |
| Diabetes           | 22.2 | 24.1 | 24.1 | 25.3 | 26.0 | 25.9 | 27.0 | 27.9 | 29.3 | 29.7 | 29.7 |
| Hypertension       | 36.5 | 36.1 | 35.9 | 36.9 | 37.6 | 38.3 | 37.4 | 37.8 | 38.7 | 38.8 | 40.1 |
| Glomerulonephritis | 41.7 | 43.5 | 43.3 | 44.9 | 45.8 | 45.1 | 46.0 | 46.8 | 48.0 | 48.3 | 48.9 |
| Other cause        | 37.4 | 38.8 | 39.4 | 38.5 | 40.0 | 39.9 | 40.2 | 40.2 | 39.7 | 40.9 | 40.5 |
| All                | 31.8 | 32.8 | 32.8 | 33.4 | 34.4 | 34.4 | 34.7 | 35.4 | 36.0 | 36.7 | 37.1 |

The incident cohorts and associated modalities are determined at the time of ESRD initiation with the 60-day stable modality rule & the 90-day rule  
Age as of date of ESRD initiation.

Includes U.S. & territories; no unknown or foreign states.

Patients of unknown age, gender, race, or primary diagnosis are excluded.

## Standard Errors

|                    | 1985 | 1986 | 1987 | 1988 | 1989 | 1990 | 1991 | 1992 | 1993 | 1994 | 1995 |
|--------------------|------|------|------|------|------|------|------|------|------|------|------|
| 0-19               | 2.72 | 2.23 | 2.06 | 2.16 | 2.10 | 2.18 | 2.28 | 2.03 | 2.09 | 2.00 | 1.99 |
| 20-44              | 0.53 | 0.58 | 0.54 | 0.54 | 0.45 | 0.48 | 0.46 | 0.45 | 0.45 | 0.47 | 0.45 |
| 45-64              | 0.43 | 0.43 | 0.40 | 0.41 | 0.36 | 0.36 | 0.36 | 0.34 | 0.33 | 0.32 | 0.31 |
| 65-74              | 0.49 | 0.47 | 0.47 | 0.43 | 0.40 | 0.36 | 0.33 | 0.33 | 0.33 | 0.32 | 0.28 |
| 75+                | 0.58 | 0.52 | 0.45 | 0.41 | 0.45 | 0.38 | 0.33 | 0.33 | 0.33 | 0.33 | 0.33 |
| Male               | 0.38 | 0.33 | 0.33 | 0.34 | 0.28 | 0.32 | 0.27 | 0.26 | 0.25 | 0.25 | 0.23 |
| Female             | 0.33 | 0.32 | 0.29 | 0.27 | 0.27 | 0.25 | 0.24 | 0.22 | 0.23 | 0.22 | 0.26 |
| White              | 0.28 | 0.26 | 0.28 | 0.27 | 0.23 | 0.24 | 0.22 | 0.21 | 0.20 | 0.19 | 0.20 |
| Black              | 0.45 | 0.52 | 0.45 | 0.44 | 0.36 | 0.41 | 0.37 | 0.37 | 0.35 | 0.32 | 0.34 |
| Other race         | 1.21 | 1.10 | 1.12 | 1.17 | 1.17 | 1.06 | 0.94 | 0.96 | 0.89 | 0.82 | 0.68 |
| Diabetes           | 0.40 | 0.40 | 0.36 | 0.35 | 0.32 | 0.30 | 0.29 | 0.28 | 0.30 | 0.27 | 0.25 |
| Hypertension       | 0.51 | 0.45 | 0.48 | 0.40 | 0.37 | 0.36 | 0.35 | 0.34 | 0.34 | 0.33 | 0.33 |
| Glomerulonephritis | 0.67 | 0.66 | 0.64 | 0.68 | 0.60 | 0.57 | 0.56 | 0.62 | 0.60 | 0.56 | 0.57 |
| Other cause        | 0.50 | 0.47 | 0.45 | 0.40 | 0.45 | 0.45 | 0.44 | 0.43 | 0.39 | 0.39 | 0.40 |
| All                | 0.24 | 0.24 | 0.20 | 0.21 | 0.20 | 0.20 | 0.17 | 0.18 | 0.17 | 0.17 | 0.17 |

**Table I.12**  
**Ten-year Survival Probabilities: Incident ESRD Patients, Unadjusted**

from day 91 to ten years + 90 days, by age, gender, race, ethnicity, & primary diagnosis

|                    | 1980 | 1981 | 1982 | 1983 | 1984 | 1985 | 1986 | 1987 | 1988 | 1989 | 1990 |
|--------------------|------|------|------|------|------|------|------|------|------|------|------|
| 0-4                | 73.0 | 68.3 | 76.7 | 74.5 | 70.1 | 71.3 | 80.4 | 76.9 | 65.2 | 75.2 | 74.7 |
| 5-9                | 80.7 | 79.5 | 77.3 | 81.6 | 83.5 | 81.1 | 85.0 | 82.1 | 91.4 | 86.9 | 85.2 |
| 10-14              | 77.4 | 76.7 | 76.6 | 83.9 | 82.2 | 83.2 | 84.7 | 88.2 | 83.3 | 78.6 | 80.3 |
| 15-19              | 79.6 | 79.6 | 79.5 | 80.0 | 78.4 | 75.5 | 78.4 | 78.4 | 78.4 | 82.8 | 83.3 |
| 20-29              | 64.0 | 62.2 | 65.6 | 63.1 | 63.1 | 63.9 | 64.8 | 64.2 | 66.8 | 64.7 | 67.0 |
| 30-39              | 46.7 | 47.2 | 47.6 | 48.7 | 48.5 | 46.7 | 49.3 | 47.3 | 49.0 | 49.6 | 50.9 |
| 40-49              | 31.9 | 32.5 | 33.4 | 33.0 | 35.3 | 35.3 | 35.9 | 35.4 | 35.9 | 34.3 | 35.4 |
| 50-59              | 15.5 | 17.5 | 17.5 | 16.3 | 16.7 | 17.3 | 17.8 | 19.1 | 17.4 | 17.8 | 18.3 |
| 60-64              | 7.6  | 8.0  | 6.1  | 8.2  | 8.0  | 9.0  | 8.7  | 8.2  | 8.8  | 8.4  | 8.1  |
| 65-69              | 4.5  | 4.9  | 3.9  | 4.8  | 5.2  | 6.2  | 5.1  | 4.8  | 4.9  | 4.8  | 5.3  |
| 70-79              | 2.4  | 1.9  | 2.8  | 2.1  | 2.8  | 2.7  | 2.2  | 2.5  | 2.2  | 2.0  | 2.0  |
| 80+                | 1.5  | 0.6  | 1.6  | 0.2  | 1.2  | 0.8  | 0.6  | 0.7  | 0.4  | 0.5  | 0.3  |
| Male               | 24.2 | 25.0 | 25.3 | 22.8 | 23.1 | 22.5 | 22.8 | 21.6 | 21.1 | 20.6 | 20.8 |
| Female             | 24.2 | 25.3 | 23.8 | 21.1 | 21.9 | 21.2 | 20.4 | 19.5 | 19.4 | 18.2 | 17.5 |
| White              | 25.6 | 25.8 | 25.2 | 22.5 | 22.8 | 22.1 | 21.7 | 20.5 | 19.3 | 18.6 | 18.5 |
| Black              | 21.6 | 23.3 | 22.7 | 20.3 | 21.5 | 21.0 | 20.7 | 19.9 | 21.4 | 20.4 | 20.0 |
| Other race         | 25.9 | 28.5 | 31.4 | 28.9 | 27.0 | 25.8 | 28.6 | 27.0 | 27.0 | 27.9 | 27.6 |
| †Hispanic          |      |      |      |      |      |      |      |      |      |      |      |
| †Non-Hispanic      |      |      |      |      |      |      |      |      |      |      |      |
| Diabetes           | 11.3 | 11.3 | 11.5 | 10.9 | 11.5 | 11.8 | 12.0 | 11.5 | 11.1 | 10.9 | 10.2 |
| Hypertension       | 21.2 | 19.2 | 17.9 | 16.6 | 16.9 | 15.9 | 15.9 | 14.1 | 14.6 | 14.4 | 14.4 |
| Glomerulonephritis | 45.8 | 41.6 | 42.1 | 39.9 | 39.8 | 39.0 | 39.7 | 38.0 | 39.0 | 37.9 | 38.3 |
| Other cause        | 23.2 | 27.7 | 29.3 | 24.6 | 27.5 | 27.7 | 27.8 | 28.0 | 27.1 | 27.5 | 28.7 |
| All                | 24.2 | 25.1 | 24.7 | 22.0 | 22.6 | 21.9 | 21.7 | 20.6 | 20.3 | 19.5 | 19.3 |

The incident cohorts and associated modalities are determined at the time of ESRD initiation with the 60-day stable modality rule & the 90-day rule. Age as of date of ESRD initiation.

†CMS has only started collecting Hispanic ethnicity data as of April, 1995, so Hispanic data in years prior to 1995 has been left blank.

Patients of unknown age, gender, race, or primary diagnosis are excluded.

Includes U.S. & territories; no unknown or foreign states.

## Standard Errors

|                    | 1980 | 1981 | 1982 | 1983 | 1984 | 1985 | 1986 | 1987 | 1988 | 1989 | 1990 |
|--------------------|------|------|------|------|------|------|------|------|------|------|------|
| 0-4                | 7.20 | 5.80 | 4.40 | 4.40 | 4.60 | 4.20 | 3.80 | 4.10 | 4.50 | 3.90 | 4.40 |
| 5-9                | 4.30 | 4.40 | 4.20 | 4.10 | 3.70 | 4.00 | 3.40 | 3.90 | 3.10 | 3.40 | 3.30 |
| 10-14              | 3.30 | 3.20 | 3.00 | 2.70 | 2.60 | 2.70 | 2.70 | 2.30 | 2.80 | 3.20 | 2.90 |
| 15-19              | 2.00 | 1.90 | 2.00 | 2.00 | 2.10 | 2.20 | 2.10 | 2.00 | 2.00 | 1.80 | 1.80 |
| 20-29              | 1.30 | 1.20 | 1.10 | 1.20 | 1.10 | 1.10 | 1.10 | 1.10 | 1.00 | 1.00 | 1.00 |
| 30-39              | 1.10 | 1.00 | 1.00 | 1.00 | 0.90 | 0.90 | 0.90 | 0.90 | 0.80 | 0.80 | 0.80 |
| 40-49              | 1.00 | 0.90 | 0.90 | 0.90 | 0.90 | 0.80 | 0.80 | 0.80 | 0.70 | 0.70 | 0.70 |
| 50-59              | 0.60 | 0.60 | 0.60 | 0.60 | 0.50 | 0.50 | 0.50 | 0.50 | 0.50 | 0.50 | 0.50 |
| 60-64              | 0.60 | 0.60 | 0.50 | 0.50 | 0.50 | 0.50 | 0.50 | 0.40 | 0.40 | 0.40 | 0.40 |
| 65-69              | 0.50 | 0.50 | 0.40 | 0.40 | 0.40 | 0.40 | 0.30 | 0.30 | 0.30 | 0.30 | 0.30 |
| 70-79              | 0.30 | 0.30 | 0.30 | 0.20 | 0.30 | 0.20 | 0.20 | 0.20 | 0.20 | 0.20 | 0.10 |
| 80+                | 0.60 | 0.40 | 0.50 | 0.20 | 0.40 | 0.30 | 0.20 | 0.20 | 0.10 | 0.10 | 0.10 |
| Male               | 0.50 | 0.40 | 0.40 | 0.40 | 0.40 | 0.30 | 0.30 | 0.30 | 0.30 | 0.30 | 0.30 |
| Female             | 0.50 | 0.50 | 0.40 | 0.40 | 0.40 | 0.40 | 0.30 | 0.30 | 0.30 | 0.30 | 0.30 |
| White              | 0.40 | 0.40 | 0.40 | 0.30 | 0.30 | 0.30 | 0.30 | 0.30 | 0.30 | 0.20 | 0.20 |
| Black              | 0.60 | 0.60 | 0.50 | 0.50 | 0.50 | 0.50 | 0.40 | 0.40 | 0.40 | 0.40 | 0.30 |
| Other race         | 1.80 | 1.70 | 1.90 | 1.60 | 1.40 | 1.30 | 1.20 | 1.10 | 1.10 | 1.20 | 1.10 |
| †Hispanic          |      |      |      |      |      |      |      |      |      |      |      |
| †Non-Hispanic      |      |      |      |      |      |      |      |      |      |      |      |
| Diabetes           | 0.70 | 0.50 | 0.50 | 0.40 | 0.40 | 0.40 | 0.30 | 0.30 | 0.30 | 0.30 | 0.20 |
| Hypertension       | 0.80 | 0.60 | 0.50 | 0.50 | 0.50 | 0.40 | 0.40 | 0.40 | 0.40 | 0.30 | 0.30 |
| Glomerulonephritis | 1.10 | 0.90 | 0.80 | 0.80 | 0.80 | 0.70 | 0.70 | 0.70 | 0.70 | 0.70 | 0.70 |
| Other cause        | 0.40 | 0.50 | 0.60 | 0.50 | 0.50 | 0.50 | 0.50 | 0.50 | 0.50 | 0.50 | 0.40 |
| All                | 0.30 | 0.30 | 0.30 | 0.30 | 0.30 | 0.30 | 0.20 | 0.20 | 0.20 | 0.20 | 0.20 |

**Table I.13**  
**Ten-year Survival Probabilities: Incident ESRD Patients, Adjusted**

*from day 91 to ten years + 90 days, adjusted for age, gender, race, & primary diagnosis*

|                    | 1980 | 1981 | 1982 | 1983 | 1984 | 1985 | 1986 | 1987 | 1988 | 1989 | 1990 |
|--------------------|------|------|------|------|------|------|------|------|------|------|------|
| 0-19               | 66.7 | 65.6 | 64.5 | 68.2 | 66.6 | 64.2 | 69.7 | 69.8 | 67.4 | 70.7 | 71.1 |
| 20-44              | 42.6 | 43.1 | 45.2 | 45.0 | 46.5 | 46.5 | 47.8 | 46.5 | 47.9 | 48.2 | 49.3 |
| 45-64              | 11.9 | 13.4 | 13.9 | 14.0 | 14.7 | 15.4 | 16.4 | 16.8 | 16.6 | 17.0 | 17.3 |
| 65-74              | 3.0  | 3.3  | 3.3  | 3.4  | 4.0  | 4.7  | 3.9  | 3.9  | 3.8  | 4.0  | 4.2  |
| 75+                | 1.3  | 1.0  | 1.6  | 0.8  | 1.7  | 1.4  | 1.1  | 1.4  | 1.2  | 0.9  | 0.8  |
| Male               | 13.6 | 13.9 | 14.8 | 14.5 | 15.2 | 15.8 | 16.2 | 16.0 | 15.8 | 16.3 | 16.8 |
| Female             | 14.8 | 15.8 | 15.9 | 15.5 | 16.7 | 16.9 | 16.6 | 16.9 | 16.9 | 16.7 | 16.9 |
| White              | 13.9 | 14.3 | 14.9 | 14.7 | 15.6 | 16.0 | 16.1 | 16.2 | 15.8 | 16.3 | 16.6 |
| Black              | 14.0 | 14.7 | 14.6 | 14.0 | 15.0 | 15.4 | 15.4 | 15.3 | 16.1 | 15.5 | 15.9 |
| Other race         | 14.2 | 16.1 | 17.6 | 17.6 | 17.6 | 18.5 | 19.9 | 20.2 | 21.1 | 21.9 | 22.0 |
| Diabetes           | 8.0  | 8.1  | 8.6  | 8.5  | 9.2  | 9.8  | 9.9  | 10.1 | 9.9  | 10.0 | 10.0 |
| Hypertension       | 17.1 | 16.6 | 16.9 | 16.9 | 17.1 | 17.4 | 17.5 | 17.0 | 17.2 | 17.4 | 17.7 |
| Glomerulonephritis | 23.9 | 23.2 | 23.3 | 23.4 | 24.6 | 24.6 | 25.6 | 24.7 | 25.3 | 25.2 | 25.4 |
| Other cause        | 16.9 | 18.3 | 19.4 | 18.4 | 20.3 | 20.7 | 20.6 | 21.2 | 20.7 | 21.2 | 22.0 |
| All                | 14.1 | 14.8 | 15.3 | 14.9 | 15.9 | 16.3 | 16.4 | 16.4 | 16.3 | 16.5 | 16.8 |

The incident cohorts and associated modalities are determined at the time of ESRD initiation with the 60-day stable modality rule & the 90-day rule.

Age as of date of ESRD initiation.

Patients of unknown age, gender, race, or primary diagnosis are excluded.

Includes U.S. & territories; no unknown or foreign states.

## Standard Errors

|                    | 1980 | 1981 | 1982 | 1983 | 1984 | 1985 | 1986 | 1987 | 1988 | 1989 | 1990 |
|--------------------|------|------|------|------|------|------|------|------|------|------|------|
| 0-19               | 2.74 | 2.57 | 2.57 | 2.34 | 2.41 | 2.47 | 2.49 | 2.23 | 2.35 | 2.41 | 2.17 |
| 20-44              | 0.73 | 0.68 | 0.61 | 0.64 | 0.70 | 0.63 | 0.59 | 0.59 | 0.52 | 0.51 | 0.56 |
| 45-64              | 0.39 | 0.36 | 0.30 | 0.36 | 0.34 | 0.35 | 0.32 | 0.30 | 0.32 | 0.32 | 0.30 |
| 65-74              | 0.28 | 0.30 | 0.25 | 0.21 | 0.24 | 0.24 | 0.21 | 0.22 | 0.20 | 0.18 | 0.18 |
| 75+                | 0.34 | 0.27 | 0.30 | 0.16 | 0.23 | 0.21 | 0.16 | 0.18 | 0.14 | 0.12 | 0.10 |
| Male               | 0.28 | 0.31 | 0.30 | 0.24 | 0.25 | 0.25 | 0.26 | 0.22 | 0.21 | 0.20 | 0.20 |
| Female             | 0.25 | 0.24 | 0.23 | 0.23 | 0.22 | 0.22 | 0.19 | 0.21 | 0.20 | 0.19 | 0.18 |
| White              | 0.25 | 0.21 | 0.20 | 0.20 | 0.21 | 0.20 | 0.18 | 0.18 | 0.19 | 0.17 | 0.15 |
| Black              | 0.34 | 0.36 | 0.36 | 0.29 | 0.33 | 0.33 | 0.30 | 0.32 | 0.30 | 0.28 | 0.28 |
| Other race         | 0.95 | 1.01 | 1.21 | 1.07 | 0.81 | 0.84 | 0.84 | 0.84 | 0.75 | 0.83 | 0.83 |
| Diabetes           | 0.38 | 0.33 | 0.31 | 0.31 | 0.27 | 0.26 | 0.25 | 0.23 | 0.24 | 0.20 | 0.20 |
| Hypertension       | 0.54 | 0.48 | 0.42 | 0.41 | 0.35 | 0.33 | 0.34 | 0.31 | 0.31 | 0.28 | 0.28 |
| Glomerulonephritis | 0.71 | 0.57 | 0.58 | 0.52 | 0.46 | 0.51 | 0.51 | 0.51 | 0.50 | 0.44 | 0.47 |
| Other cause        | 0.31 | 0.33 | 0.38 | 0.33 | 0.38 | 0.36 | 0.35 | 0.36 | 0.32 | 0.33 | 0.34 |
| All                | 0.19 | 0.19 | 0.18 | 0.17 | 0.17 | 0.16 | 0.15 | 0.16 | 0.13 | 0.14 | 0.13 |

**Table I.22**  
**One-year Survival Probabilities: Incident Dialysis Patients, Unadjusted**

*censored at transplant, from day 91 to one year + 90 days, by age, gender, race, ethnicity, & primary diagnosis*

|                    | 1989  | 1990 | 1991 | 1992 | 1993 | 1994  | 1995 | 1996 | 1997 | 1998  | 1999 |
|--------------------|-------|------|------|------|------|-------|------|------|------|-------|------|
| 0-4                | 85.3  | 85.7 | 80.8 | 86.1 | 85.6 | 89.7  | 87.1 | 91.4 | 85.3 | 87.8  | 89.3 |
| 5-9                | 100.0 | 94.4 | 95.0 | 94.1 | 96.2 | 100.0 | 98.4 | 93.3 | 95.8 | 100.0 | 96.9 |
| 10-14              | 94.9  | 96.2 | 97.4 | 93.9 | 92.9 | 99.0  | 98.2 | 97.5 | 96.0 | 97.3  | 95.9 |
| 15-19              | 97.9  | 97.0 | 95.2 | 97.0 | 96.3 | 95.4  | 97.5 | 96.8 | 97.4 | 95.1  | 97.8 |
| 20-29              | 91.4  | 91.9 | 91.6 | 93.0 | 92.0 | 93.1  | 92.2 | 94.2 | 95.6 | 95.4  | 95.6 |
| 30-39              | 88.1  | 89.2 | 88.2 | 89.3 | 88.7 | 89.2  | 89.4 | 89.9 | 91.3 | 90.9  | 91.3 |
| 40-49              | 87.6  | 88.7 | 87.0 | 87.7 | 88.7 | 88.8  | 89.3 | 89.5 | 89.9 | 88.8  | 89.6 |
| 50-59              | 82.5  | 83.7 | 83.7 | 84.7 | 84.8 | 85.5  | 85.9 | 85.3 | 85.6 | 85.3  | 85.7 |
| 60-64              | 77.3  | 78.1 | 78.6 | 79.3 | 80.8 | 80.9  | 80.0 | 81.5 | 81.7 | 79.9  | 81.0 |
| 65-69              | 73.8  | 75.4 | 75.0 | 75.4 | 77.1 | 76.2  | 77.0 | 77.1 | 76.2 | 75.6  | 75.8 |
| 70-79              | 67.2  | 68.3 | 68.2 | 68.3 | 69.9 | 69.9  | 70.1 | 70.1 | 69.1 | 69.3  | 68.9 |
| 80+                | 57.7  | 59.3 | 59.1 | 58.2 | 60.9 | 60.8  | 60.0 | 59.7 | 59.0 | 57.0  | 57.8 |
| Male               | 76.8  | 77.8 | 77.2 | 77.4 | 78.8 | 78.4  | 78.5 | 78.4 | 77.8 | 77.1  | 77.5 |
| Female             | 77.5  | 78.2 | 77.4 | 77.9 | 78.3 | 78.4  | 78.6 | 78.1 | 77.2 | 76.4  | 76.1 |
| White              | 74.1  | 74.9 | 74.0 | 74.4 | 75.4 | 75.5  | 75.5 | 75.3 | 74.2 | 73.7  | 74.0 |
| Black              | 82.2  | 83.3 | 82.6 | 83.2 | 83.3 | 83.1  | 83.1 | 83.1 | 83.3 | 81.9  | 81.8 |
| Other race         | 84.1  | 84.9 | 86.2 | 84.4 | 86.5 | 84.7  | 84.3 | 82.1 | 83.1 | 82.4  | 82.5 |
| †Hispanic          |       |      |      |      |      |       |      | 82.3 | 82.2 | 82.2  | 81.9 |
| †Non-Hispanic      |       |      |      |      |      |       |      | 77.7 | 77.0 | 76.1  | 76.2 |
| Diabetes           | 75.4  | 75.8 | 76.1 | 76.5 | 78.5 | 78.0  | 77.9 | 77.9 | 77.2 | 76.4  | 77.1 |
| Hypertension       | 75.6  | 76.8 | 75.7 | 76.0 | 76.7 | 76.4  | 77.5 | 77.2 | 76.0 | 75.4  | 75.3 |
| Glomerulonephritis | 84.9  | 85.7 | 84.3 | 86.2 | 87.2 | 85.4  | 86.5 | 87.1 | 86.4 | 86.8  | 86.4 |
| Other cause        | 77.6  | 79.0 | 78.0 | 77.8 | 77.0 | 78.6  | 77.2 | 75.7 | 76.0 | 74.9  | 74.2 |
| All                | 77.1  | 78.0 | 77.3 | 77.7 | 78.5 | 78.4  | 78.5 | 78.2 | 77.5 | 76.8  | 76.9 |

The incident cohorts and associated modalities are determined at the time of ESRD initiation with the 60-day stable modality rule & the 90-day rule.

The age of the incident patient is determined as of the date of ESRD initiation.

†CMS has only started collecting Hispanic ethnicity data as of April, 1995, so Hispanic data in years prior to 1995 has been left blank.

Includes U.S. & territories; no unknown or foreign states.

Patients of unknown age, gender, race, or primary diagnosis are excluded.





**Table I.23**  
**One-year Survival Probabilities: Incident Dialysis Patients, Adjusted**  
*censored at transplant, from day 91 to one year + 90 days, adjusted for age, gender, race, & primary diagnosis*

|                    | 1989 | 1990 | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 |
|--------------------|------|------|------|------|------|------|------|------|------|------|------|
| 0-19               | 92.5 | 91.1 | 88.0 | 90.2 | 89.5 | 93.1 | 93.0 | 92.7 | 91.1 | 90.9 | 93.4 |
| 20-44              | 88.1 | 89.4 | 88.3 | 89.0 | 88.6 | 89.6 | 89.6 | 90.4 | 91.3 | 90.8 | 91.3 |
| 45-64              | 81.6 | 82.6 | 82.5 | 83.5 | 84.3 | 84.7 | 84.7 | 85.1 | 85.6 | 84.7 | 85.4 |
| 65-74              | 71.9 | 73.4 | 73.2 | 73.7 | 75.3 | 74.6 | 75.4 | 75.5 | 74.8 | 74.6 | 74.8 |
| 75+                | 62.2 | 63.2 | 63.3 | 62.7 | 64.1 | 65.0 | 64.4 | 64.3 | 63.6 | 62.8 | 63.0 |
| Male               | 75.0 | 76.3 | 76.1 | 76.5 | 78.0 | 78.0 | 78.1 | 78.6 | 78.6 | 78.1 | 78.9 |
| Female             | 76.7 | 77.8 | 77.4 | 78.1 | 78.5 | 79.0 | 79.3 | 79.2 | 78.9 | 78.2 | 78.2 |
| White              | 73.5 | 74.6 | 74.3 | 74.9 | 76.1 | 76.6 | 76.8 | 77.1 | 76.7 | 76.4 | 76.9 |
| Black              | 79.4 | 81.0 | 80.4 | 81.0 | 81.6 | 81.3 | 81.3 | 81.7 | 82.1 | 80.7 | 80.6 |
| Other race         | 82.4 | 83.5 | 85.0 | 83.6 | 86.0 | 84.1 | 84.0 | 82.1 | 83.6 | 82.8 | 83.4 |
| Diabetes           | 73.4 | 74.2 | 74.7 | 75.3 | 77.5 | 77.3 | 77.3 | 77.5 | 77.3 | 76.5 | 77.5 |
| Hypertension       | 77.5 | 79.0 | 78.2 | 78.4 | 79.2 | 79.4 | 80.3 | 80.4 | 79.8 | 79.3 | 79.5 |
| Glomerulonephritis | 82.4 | 83.3 | 82.1 | 84.0 | 84.9 | 83.8 | 84.7 | 85.8 | 85.2 | 85.5 | 85.6 |
| Other cause        | 76.1 | 77.5 | 76.8 | 76.9 | 77.0 | 77.6 | 76.4 | 75.5 | 76.1 | 75.2 | 74.8 |
| All                | 75.8 | 77.1 | 76.8 | 77.3 | 78.3 | 78.5 | 78.7 | 78.9 | 78.8 | 78.2 | 78.6 |

The incident cohorts and associated modalities are determined at the time of ESRD initiation with the 60-day stable modality rule & the 90-day rule.  
The age of the incident patient is determined as of the date of ESRD initiation.  
Includes U.S. & territories; no unknown or foreign states.  
Patients of unknown age, gender, race, or primary diagnosis are excluded.

## Standard Errors

|                    | 1989 | 1990 | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 |
|--------------------|------|------|------|------|------|------|------|------|------|------|------|
| 0-19               | 1.91 | 2.00 | 2.35 | 1.73 | 2.03 | 1.55 | 1.64 | 1.61 | 1.78 | 2.05 | 1.59 |
| 20-44              | 0.40 | 0.34 | 0.37 | 0.33 | 0.37 | 0.34 | 0.34 | 0.32 | 0.31 | 0.33 | 0.30 |
| 45-64              | 0.34 | 0.32 | 0.30 | 0.28 | 0.27 | 0.26 | 0.28 | 0.25 | 0.22 | 0.23 | 0.26 |
| 65-74              | 0.44 | 0.36 | 0.38 | 0.33 | 0.33 | 0.34 | 0.33 | 0.32 | 0.30 | 0.28 | 0.31 |
| 75+                | 0.61 | 0.59 | 0.53 | 0.51 | 0.47 | 0.47 | 0.43 | 0.40 | 0.38 | 0.35 | 0.35 |
| Male               | 0.33 | 0.29 | 0.27 | 0.29 | 0.27 | 0.24 | 0.24 | 0.22 | 0.22 | 0.21 | 0.22 |
| Female             | 0.29 | 0.29 | 0.27 | 0.27 | 0.23 | 0.24 | 0.22 | 0.22 | 0.21 | 0.19 | 0.20 |
| White              | 0.29 | 0.23 | 0.23 | 0.22 | 0.23 | 0.20 | 0.21 | 0.19 | 0.18 | 0.20 | 0.20 |
| Black              | 0.36 | 0.34 | 0.35 | 0.33 | 0.30 | 0.29 | 0.31 | 0.28 | 0.25 | 0.32 | 0.29 |
| Other race         | 1.09 | 0.90 | 0.79 | 0.81 | 0.71 | 0.74 | 0.57 | 0.59 | 0.60 | 0.52 | 0.52 |
| Diabetes           | 0.38 | 0.35 | 0.34 | 0.31 | 0.29 | 0.26 | 0.28 | 0.24 | 0.22 | 0.23 | 0.23 |
| Hypertension       | 0.38 | 0.35 | 0.33 | 0.29 | 0.28 | 0.26 | 0.28 | 0.30 | 0.27 | 0.27 | 0.25 |
| Glomerulonephritis | 0.60 | 0.56 | 0.61 | 0.50 | 0.52 | 0.49 | 0.49 | 0.45 | 0.44 | 0.46 | 0.46 |
| Other cause        | 0.48 | 0.42 | 0.43 | 0.43 | 0.36 | 0.40 | 0.38 | 0.36 | 0.38 | 0.40 | 0.36 |
| All                | 0.21 | 0.19 | 0.19 | 0.20 | 0.18 | 0.16 | 0.16 | 0.17 | 0.16 | 0.16 | 0.15 |

**Table I.24**  
**Two-year Survival Probabilities: Incident Dialysis Patients, Unadjusted**

*censored at transplant, from day 91 to two years + 90 days, by age, gender, race, ethnicity, & primary diagnosis*

|                    | 1988  | 1989 | 1990 | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 |
|--------------------|-------|------|------|------|------|------|------|------|------|------|------|
| 0-4                | 68.7  | 79.6 | 80.1 | 76.3 | 86.1 | 85.6 | 79.2 | 81.4 | 84.7 | 78.3 | 81.8 |
| 5-9                | 100.0 | 95.5 | 88.2 | 95.0 | 94.1 | 92.8 | 96.8 | 98.4 | 90.0 | 95.8 | 93.3 |
| 10-14              | 93.6  | 94.9 | 88.1 | 95.9 | 90.8 | 89.5 | 96.0 | 94.3 | 94.3 | 93.3 | 95.8 |
| 15-19              | 94.3  | 95.4 | 94.5 | 91.6 | 94.6 | 92.2 | 93.5 | 95.2 | 91.0 | 91.5 | 91.0 |
| 20-29              | 84.6  | 84.7 | 83.9 | 83.9 | 86.1 | 86.2 | 87.4 | 85.4 | 88.3 | 89.5 | 91.1 |
| 30-39              | 78.6  | 77.9 | 78.5 | 77.4 | 78.8 | 79.9 | 79.4 | 81.0 | 81.5 | 83.1 | 82.2 |
| 40-49              | 75.6  | 75.1 | 78.1 | 74.3 | 76.7 | 76.8 | 77.8 | 78.8 | 78.6 | 79.5 | 79.3 |
| 50-59              | 67.4  | 68.5 | 68.9 | 69.0 | 70.1 | 71.2 | 72.4 | 72.0 | 71.9 | 72.3 | 71.6 |
| 60-64              | 59.0  | 60.2 | 60.4 | 61.9 | 62.3 | 64.1 | 64.8 | 63.6 | 65.6 | 65.5 | 64.0 |
| 65-69              | 55.8  | 55.7 | 56.2 | 56.6 | 57.7 | 59.6 | 58.6 | 59.4 | 59.6 | 58.0 | 58.7 |
| 70-79              | 46.2  | 47.6 | 47.8 | 48.1 | 49.0 | 50.0 | 50.2 | 50.5 | 50.7 | 48.9 | 50.2 |
| 80+                | 33.1  | 37.3 | 36.6 | 36.1 | 36.6 | 37.5 | 38.3 | 38.0 | 37.5 | 36.4 | 36.7 |
| Male               | 59.5  | 60.3 | 60.5 | 60.2 | 60.9 | 62.4 | 62.2 | 62.6 | 62.1 | 61.1 | 61.4 |
| Female             | 61.4  | 61.4 | 61.5 | 60.6 | 61.7 | 61.7 | 62.2 | 62.0 | 61.9 | 60.5 | 60.4 |
| White              | 55.4  | 56.0 | 56.0 | 55.3 | 56.2 | 56.7 | 57.2 | 57.2 | 57.0 | 55.5 | 56.1 |
| Black              | 69.3  | 68.9 | 69.5 | 68.4 | 69.6 | 70.4 | 70.3 | 70.4 | 70.4 | 70.1 | 69.0 |
| Other race         | 65.9  | 70.3 | 70.0 | 73.9 | 71.6 | 73.4 | 71.4 | 70.3 | 68.1 | 69.1 | 68.9 |
| †Hispanic          |       |      |      |      |      |      |      |      | 67.5 | 67.3 | 68.3 |
| †Non-Hispanic      |       |      |      |      |      |      |      |      | 61.3 | 60.0 | 60.0 |
| Diabetes           | 54.6  | 56.3 | 55.9 | 56.8 | 57.8 | 59.9 | 59.3 | 59.6 | 59.7 | 58.7 | 58.8 |
| Hypertension       | 58.9  | 59.8 | 59.7 | 58.9 | 60.0 | 60.6 | 60.7 | 61.8 | 61.4 | 59.5 | 59.7 |
| Glomerulonephritis | 73.2  | 71.7 | 73.1 | 71.3 | 73.9 | 75.3 | 73.5 | 75.0 | 75.1 | 74.0 | 75.6 |
| Other cause        | 62.9  | 63.6 | 64.8 | 63.3 | 63.4 | 61.7 | 64.3 | 62.7 | 61.7 | 61.4 | 61.1 |
| All                | 60.4  | 60.8 | 61.0 | 60.4 | 61.3 | 62.1 | 62.2 | 62.3 | 62.0 | 60.8 | 60.9 |

The incident cohorts and associated modalities are determined at the time of ESRD initiation with the 60-day stable modality rule & the 90-day rule.

The age of the incident patient is determined as of the date of ESRD initiation.

†CMS has only started collecting Hispanic ethnicity data as of April, 1995, so Hispanic data in years prior to 1995 has been left blank.

Includes U.S. & territories; no unknown or foreign states.

Patients of unknown age, gender, race, or primary diagnosis are excluded.



**Table I.25**  
**Two-year Survival Probabilities: Incident Dialysis Patients, Adjusted**  
*censored at transplant, from day 91 to two years + 90 days, adjusted for age, gender, race, & primary diagnosis*

|                    | 1988 | 1989 | 1990 | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 |
|--------------------|------|------|------|------|------|------|------|------|------|------|------|
| 0-19               | 84.5 | 88.5 | 84.3 | 83.7 | 87.2 | 84.3 | 87.7 | 88.4 | 84.6 | 83.2 | 84.6 |
| 20-44              | 78.3 | 77.9 | 79.1 | 77.1 | 78.8 | 78.8 | 79.9 | 80.3 | 81.3 | 83.0 | 82.5 |
| 45-64              | 64.9 | 66.4 | 67.3 | 67.5 | 68.6 | 70.0 | 71.1 | 70.7 | 71.5 | 72.1 | 71.4 |
| 65-74              | 53.0 | 53.6 | 53.9 | 54.5 | 55.8 | 56.6 | 56.5 | 57.8 | 57.7 | 56.4 | 57.4 |
| 75+                | 38.5 | 41.8 | 41.6 | 41.6 | 41.9 | 42.9 | 43.8 | 43.1 | 43.6 | 42.2 | 43.0 |
| Male               | 56.7 | 58.3 | 58.9 | 59.1 | 60.0 | 61.7 | 62.1 | 62.5 | 62.9 | 62.6 | 63.1 |
| Female             | 59.9 | 60.9 | 61.4 | 61.1 | 62.5 | 62.5 | 63.5 | 63.5 | 64.0 | 63.4 | 63.5 |
| White              | 54.3 | 56.0 | 56.4 | 56.4 | 57.7 | 58.4 | 59.5 | 59.8 | 60.3 | 59.6 | 60.4 |
| Black              | 65.0 | 64.9 | 66.0 | 65.3 | 66.5 | 68.0 | 67.7 | 67.9 | 68.3 | 68.2 | 67.3 |
| Other race         | 62.9 | 68.3 | 68.1 | 72.6 | 70.7 | 73.0 | 70.9 | 70.1 | 68.4 | 70.4 | 69.9 |
| Diabetes           | 51.9 | 54.1 | 54.1 | 55.3 | 56.5 | 58.7 | 58.8 | 59.0 | 59.4 | 59.1 | 59.2 |
| Hypertension       | 61.6 | 62.9 | 63.4 | 63.0 | 63.8 | 64.6 | 65.4 | 66.2 | 66.3 | 65.3 | 65.6 |
| Glomerulonephritis | 68.9 | 68.5 | 69.8 | 68.4 | 70.9 | 72.1 | 71.6 | 72.4 | 73.3 | 72.4 | 73.9 |
| Other cause        | 61.1 | 62.1 | 63.2 | 62.1 | 62.7 | 62.1 | 63.3 | 61.9 | 61.6 | 61.8 | 61.7 |
| All                | 58.2 | 59.5 | 60.1 | 60.1 | 61.2 | 62.1 | 62.8 | 63.0 | 63.4 | 63.0 | 63.3 |

The incident cohorts and associated modalities are determined at the time of ESRD initiation with the 60-day stable modality rule & the 90-day rule. The age of the incident patient is determined as of the date of ESRD initiation. Includes U.S. & territories; no unknown or foreign states. Patients of unknown age, gender, race, or primary diagnosis are excluded.

## Standard Errors

|                    | 1988 | 1989 | 1990 | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 |
|--------------------|------|------|------|------|------|------|------|------|------|------|------|
| 0-19               | 3.00 | 2.45 | 2.67 | 2.82 | 2.31 | 2.57 | 2.36 | 2.63 | 2.70 | 2.92 | 2.66 |
| 20-44              | 0.52 | 0.54 | 0.52 | 0.48 | 0.45 | 0.50 | 0.44 | 0.44 | 0.45 | 0.46 | 0.43 |
| 45-64              | 0.47 | 0.39 | 0.35 | 0.40 | 0.37 | 0.37 | 0.34 | 0.33 | 0.31 | 0.30 | 0.31 |
| 65-74              | 0.51 | 0.44 | 0.46 | 0.42 | 0.39 | 0.41 | 0.36 | 0.34 | 0.37 | 0.37 | 0.38 |
| 75+                | 0.66 | 0.64 | 0.61 | 0.57 | 0.56 | 0.53 | 0.47 | 0.45 | 0.43 | 0.38 | 0.38 |
| Male               | 0.38 | 0.38 | 0.33 | 0.33 | 0.31 | 0.29 | 0.29 | 0.30 | 0.28 | 0.28 | 0.25 |
| Female             | 0.35 | 0.38 | 0.35 | 0.31 | 0.31 | 0.30 | 0.28 | 0.25 | 0.25 | 0.25 | 0.27 |
| White              | 0.35 | 0.30 | 0.31 | 0.26 | 0.25 | 0.26 | 0.23 | 0.24 | 0.21 | 0.21 | 0.22 |
| Black              | 0.48 | 0.45 | 0.38 | 0.44 | 0.38 | 0.36 | 0.34 | 0.32 | 0.33 | 0.31 | 0.32 |
| Other race         | 1.15 | 1.29 | 1.14 | 1.01 | 1.01 | 0.91 | 0.76 | 0.70 | 0.64 | 0.73 | 0.65 |
| Diabetes           | 0.48 | 0.46 | 0.42 | 0.39 | 0.36 | 0.37 | 0.33 | 0.30 | 0.31 | 0.27 | 0.29 |
| Hypertension       | 0.46 | 0.41 | 0.41 | 0.38 | 0.35 | 0.33 | 0.33 | 0.36 | 0.33 | 0.30 | 0.32 |
| Glomerulonephritis | 0.75 | 0.75 | 0.73 | 0.66 | 0.64 | 0.60 | 0.60 | 0.58 | 0.58 | 0.60 | 0.58 |
| Other cause        | 0.59 | 0.55 | 0.47 | 0.53 | 0.48 | 0.45 | 0.42 | 0.45 | 0.47 | 0.43 | 0.47 |
| All                | 0.26 | 0.24 | 0.24 | 0.23 | 0.21 | 0.21 | 0.20 | 0.19 | 0.20 | 0.18 | 0.17 |

**Table I.26**  
**Five-year Survival Probabilities: Incident Dialysis Patients, Unadjusted**

*censored at transplant, from day 91 to five years + 90 days, by age, gender, race, ethnicity, & primary diagnosis*

|                    | 1985 | 1986 | 1987 | 1988 | 1989 | 1990 | 1991 | 1992 | 1993 | 1994 | 1995 |
|--------------------|------|------|------|------|------|------|------|------|------|------|------|
| 0-4                | 63.1 | 85.9 | 78.7 | 64.8 | 74.6 | 69.7 | 67.0 | 68.4 | 65.6 | 65.7 | 69.3 |
| 5-9                | 54.7 | 71.7 | 81.8 | 90.9 | 84.8 | 77.1 | 95.0 | 68.9 | 78.0 | 84.7 | 87.5 |
| 10-14              | 96.0 | 77.6 | 82.8 | 79.5 | 87.5 | 79.3 | 78.6 | 79.1 | 78.6 | 78.0 | 84.0 |
| 15-19              | 69.5 | 75.2 | 82.2 | 76.0 | 78.9 | 84.9 | 83.0 | 85.7 | 78.5 | 79.3 | 84.8 |
| 20-29              | 58.5 | 65.3 | 61.4 | 67.3 | 63.6 | 66.5 | 66.5 | 68.4 | 69.9 | 71.6 | 71.7 |
| 30-39              | 50.4 | 50.8 | 48.7 | 54.5 | 55.0 | 54.5 | 53.6 | 55.5 | 57.6 | 56.8 | 59.9 |
| 40-49              | 46.8 | 46.6 | 46.7 | 48.5 | 45.8 | 47.8 | 47.1 | 48.2 | 49.5 | 50.0 | 52.3 |
| 50-59              | 33.7 | 34.9 | 35.9 | 35.0 | 35.2 | 34.9 | 37.0 | 36.6 | 38.9 | 39.0 | 39.6 |
| 60-64              | 25.8 | 26.7 | 25.5 | 27.2 | 27.0 | 27.3 | 27.7 | 28.3 | 29.1 | 30.0 | 28.9 |
| 65-69              | 22.2 | 22.0 | 22.6 | 22.4 | 22.3 | 22.4 | 21.6 | 23.5 | 23.7 | 24.6 | 24.1 |
| 70-79              | 15.4 | 14.8 | 15.2 | 15.4 | 16.0 | 15.5 | 15.9 | 15.9 | 16.6 | 16.7 | 17.1 |
| 80+                | 8.4  | 7.5  | 7.7  | 6.6  | 8.9  | 8.6  | 7.6  | 7.6  | 8.0  | 8.2  | 8.6  |
| Male               | 27.0 | 27.6 | 27.6 | 28.3 | 28.6 | 28.2 | 28.2 | 28.3 | 29.6 | 29.6 | 30.8 |
| Female             | 30.8 | 30.0 | 29.3 | 30.0 | 28.9 | 28.9 | 28.2 | 29.0 | 29.1 | 29.4 | 29.2 |
| White              | 24.5 | 23.7 | 23.3 | 23.0 | 22.9 | 22.4 | 22.1 | 22.5 | 23.0 | 23.3 | 23.1 |
| Black              | 36.8 | 37.7 | 37.1 | 39.4 | 38.2 | 39.0 | 38.3 | 38.7 | 39.1 | 39.4 | 41.2 |
| Other race         | 29.9 | 34.6 | 35.2 | 36.5 | 39.4 | 37.8 | 38.8 | 38.4 | 39.6 | 39.2 | 37.4 |
| †Hispanic          |      |      |      |      |      |      |      |      |      |      |      |
| †Non-Hispanic      |      |      |      |      |      |      |      |      |      |      |      |
| Diabetes           | 17.6 | 19.6 | 19.4 | 21.0 | 20.9 | 20.8 | 21.8 | 22.5 | 24.0 | 24.0 | 24.1 |
| Hypertension       | 30.4 | 28.8 | 27.5 | 28.8 | 29.1 | 29.0 | 27.7 | 28.6 | 29.0 | 28.7 | 30.5 |
| Glomerulonephritis | 39.6 | 40.2 | 40.5 | 43.0 | 41.5 | 42.1 | 42.4 | 43.5 | 45.5 | 44.1 | 46.2 |
| Other cause        | 33.7 | 34.1 | 34.9 | 33.6 | 34.4 | 34.4 | 34.2 | 33.7 | 32.1 | 35.2 | 34.9 |
| All                | 28.8 | 28.8 | 28.4 | 29.1 | 28.7 | 28.5 | 28.2 | 28.6 | 29.3 | 29.5 | 30.0 |

The incident cohorts and associated modalities are determined at the time of ESRD initiation with the 60-day stable modality rule & the 90-day rule.

The age of the incident patient is determined as of the date of ESRD initiation.

†CMS has only started collecting Hispanic ethnicity data as of April, 1995, so Hispanic data in years prior to 1995 has been left blank.

Includes U.S. & territories; no unknown or foreign states.

Patients of unknown age, gender, race, or primary diagnosis are excluded.





**Table I.27**  
**Five-year Survival Probabilities: Incident Dialysis Patients, Adjusted**  
*censored at transplant, from day 91 to five years + 90 days, adjusted for age, gender, race, & primary diagnosis*

|                    | 1985 | 1986 | 1987 | 1988 | 1989 | 1990 | 1991 | 1992 | 1993 | 1994 | 1995 |
|--------------------|------|------|------|------|------|------|------|------|------|------|------|
| 0-19               | 55.2 | 62.3 | 70.6 | 61.6 | 68.2 | 68.5 | 67.6 | 69.0 | 62.6 | 65.4 | 71.0 |
| 20-44              | 48.6 | 51.9 | 50.1 | 53.6 | 53.1 | 54.3 | 52.9 | 54.5 | 55.6 | 56.5 | 58.1 |
| 45-64              | 30.7 | 31.9 | 31.9 | 32.9 | 33.2 | 33.6 | 35.4 | 35.5 | 37.2 | 38.0 | 38.4 |
| 65-74              | 19.5 | 18.9 | 19.9 | 20.4 | 20.7 | 20.9 | 20.5 | 22.1 | 21.9 | 22.9 | 23.0 |
| 75+                | 11.0 | 10.8 | 10.5 | 10.0 | 11.8 | 10.9 | 11.5 | 10.6 | 11.3 | 11.6 | 12.2 |
| Male               | 25.0 | 26.0 | 26.0 | 26.7 | 28.1 | 27.8 | 28.6 | 28.7 | 30.1 | 30.6 | 31.6 |
| Female             | 29.1 | 29.3 | 29.4 | 29.9 | 29.8 | 30.3 | 30.4 | 31.4 | 31.4 | 32.4 | 32.4 |
| White              | 23.6 | 23.7 | 23.8 | 24.0 | 25.1 | 24.8 | 25.3 | 26.1 | 26.8 | 27.7 | 27.8 |
| Black              | 31.7 | 33.3 | 33.2 | 34.8 | 34.1 | 35.3 | 35.3 | 35.6 | 36.6 | 36.8 | 38.4 |
| Other race         | 28.1 | 32.0 | 33.3 | 34.6 | 39.1 | 37.1 | 39.7 | 39.3 | 40.7 | 40.2 | 38.7 |
| Diabetes           | 16.5 | 18.3 | 18.3 | 19.8 | 20.3 | 20.4 | 21.7 | 22.4 | 24.0 | 24.4 | 24.5 |
| Hypertension       | 32.8 | 32.2 | 32.0 | 32.9 | 33.7 | 34.2 | 33.5 | 33.9 | 34.5 | 34.9 | 36.3 |
| Glomerulonephritis | 36.4 | 37.3 | 37.5 | 39.5 | 39.5 | 39.3 | 40.6 | 41.1 | 42.4 | 42.8 | 43.5 |
| Other cause        | 32.7 | 33.6 | 34.1 | 32.8 | 34.1 | 33.8 | 34.0 | 34.1 | 33.5 | 35.0 | 34.5 |
| All                | 26.9 | 27.5 | 27.5 | 28.2 | 28.9 | 28.9 | 29.4 | 30.0 | 30.7 | 31.4 | 31.9 |

The incident cohorts and associated modalities are determined at the time of ESRD initiation with the 60-day stable modality rule & the 90-day rule.  
The age of the incident patient is determined as of the date of ESRD initiation.

Includes U.S. & territories; no unknown or foreign states.

Patients of unknown age, gender, race, or primary diagnosis are excluded.

## Standard Errors

|                    | 1985 | 1986 | 1987 | 1988 | 1989 | 1990 | 1991 | 1992 | 1993 | 1994 | 1995 |
|--------------------|------|------|------|------|------|------|------|------|------|------|------|
| 0-19               | 5.55 | 4.88 | 4.70 | 4.82 | 4.29 | 4.60 | 4.75 | 4.11 | 4.37 | 4.37 | .    |
| 20-44              | 0.91 | 0.79 | 0.83 | 0.75 | 0.72 | 0.71 | 0.69 | 0.65 | 0.69 | 0.67 | 0.55 |
| 45-64              | 0.44 | 0.51 | 0.46 | 0.43 | 0.43 | 0.44 | 0.38 | 0.36 | 0.38 | 0.37 | 0.35 |
| 65-74              | 0.43 | 0.47 | 0.40 | 0.42 | 0.36 | 0.36 | 0.34 | 0.34 | 0.32 | 0.32 | 0.33 |
| 75+                | 0.54 | 0.50 | 0.48 | 0.41 | 0.42 | 0.40 | 0.32 | 0.35 | 0.31 | 0.34 | 0.32 |
| Male               | 0.41 | 0.38 | 0.35 | 0.32 | 0.33 | 0.29 | 0.29 | 0.27 | 0.29 | 0.25 | 0.28 |
| Female             | 0.40 | 0.37 | 0.35 | 0.31 | 0.30 | 0.28 | 0.29 | 0.25 | 0.26 | 0.26 | 0.26 |
| White              | 0.33 | 0.31 | 0.32 | 0.30 | 0.27 | 0.27 | 0.25 | 0.25 | 0.22 | 0.22 | 0.23 |
| Black              | 0.54 | 0.50 | 0.49 | 0.45 | 0.41 | 0.41 | 0.37 | 0.37 | 0.35 | 0.34 | 0.37 |
| Other race         | 1.45 | 1.29 | 1.31 | 1.21 | 1.18 | 1.14 | 1.07 | 1.01 | 0.92 | 0.87 | 0.74 |
| Diabetes           | 0.42 | 0.43 | 0.41 | 0.40 | 0.33 | 0.30 | 0.29 | 0.31 | 0.27 | 0.29 | 0.28 |
| Hypertension       | 0.53 | 0.53 | 0.48 | 0.44 | 0.42 | 0.41 | 0.36 | 0.33 | 0.37 | 0.36 | 0.37 |
| Glomerulonephritis | 0.89 | 0.89 | 0.84 | 0.71 | 0.73 | 0.69 | 0.74 | 0.65 | 0.80 | 0.71 | 0.70 |
| Other cause        | 0.57 | 0.52 | 0.51 | 0.51 | 0.55 | 0.50 | 0.48 | 0.48 | 0.42 | 0.44 | 0.44 |
| All                | 0.28 | 0.27 | 0.26 | 0.23 | 0.23 | 0.21 | 0.22 | 0.19 | 0.20 | 0.18 | 0.20 |

rule.

**Table I.28**  
**Ten-year Survival Probabilities: Incident Dialysis Patients, Unadjusted**

*censored at transplant, from day 91 to ten years + 90 days, by age, gender, race, & primary diagnosis*

|                    | 1980 | 1981 | 1982 | 1983 | 1984 | 1985 | 1986 | 1987 | 1988 | 1989 | 1990 |
|--------------------|------|------|------|------|------|------|------|------|------|------|------|
| 0-4                | 72.0 | 69.2 | 64.3 | 57.9 | 55.6 | 25.3 | 85.9 | 78.7 | 43.2 | 74.6 | 47.8 |
| 5-9                | 87.6 | 52.9 | 52.1 | 78.8 | 83.3 | 36.5 | 71.7 | 81.8 | 90.9 | 70.7 | 51.4 |
| 10-14              | 55.9 | 52.7 | 61.8 | 76.9 | 69.5 | 86.4 | 67.9 | 76.9 | 60.2 | 57.9 | 57.7 |
| 15-19              | 77.3 | 61.9 | 64.9 | 70.6 | 61.4 | 53.5 | 52.2 | 60.8 | 62.0 | 67.0 | 64.6 |
| 20-29              | 53.2 | 46.3 | 46.9 | 42.6 | 42.3 | 41.0 | 42.6 | 40.4 | 45.1 | 40.6 | 44.8 |
| 30-39              | 38.2 | 34.2 | 30.4 | 32.3 | 31.4 | 29.4 | 28.4 | 27.5 | 28.7 | 30.2 | 30.9 |
| 40-49              | 24.1 | 23.4 | 22.5 | 21.3 | 23.1 | 20.9 | 20.5 | 20.9 | 22.4 | 18.7 | 20.1 |
| 50-59              | 12.2 | 13.6 | 13.4 | 11.4 | 10.9 | 11.7 | 10.3 | 11.1 | 10.2 | 10.1 | 10.4 |
| 60-64              | 7.3  | 7.3  | 5.4  | 6.9  | 6.5  | 7.0  | 6.7  | 5.8  | 6.4  | 5.5  | 5.4  |
| 65-69              | 4.4  | 4.8  | 3.7  | 4.6  | 4.8  | 5.7  | 4.6  | 4.1  | 4.2  | 4.0  | 4.4  |
| 70-79              | 2.4  | 1.9  | 2.8  | 2.1  | 2.8  | 2.6  | 2.2  | 2.4  | 2.2  | 1.9  | 1.9  |
| 80+                | 1.5  | 0.6  | 1.6  | 0.2  | 1.1  | 0.8  | 0.5  | 0.7  | 0.4  | 0.5  | 0.3  |
| Male               | 12.8 | 11.9 | 10.8 | 9.7  | 9.9  | 9.4  | 9.2  | 8.9  | 8.8  | 8.3  | 8.8  |
| Female             | 14.8 | 14.8 | 12.5 | 11.1 | 10.9 | 10.5 | 9.2  | 8.8  | 9.3  | 8.3  | 8.1  |
| White              | 12.2 | 10.8 | 10.0 | 8.3  | 8.4  | 7.6  | 6.8  | 6.5  | 5.9  | 5.4  | 5.6  |
| Black              | 16.3 | 17.2 | 14.8 | 13.8 | 13.9 | 14.2 | 13.1 | 12.6 | 14.3 | 13.2 | 13.2 |
| Other race         | 10.8 | 13.1 | 13.1 | 13.9 | 12.5 | 11.5 | 13.7 | 12.5 | 12.9 | 11.7 | 12.8 |
| Diabetes           | 5.4  | 4.6  | 4.4  | 4.0  | 4.0  | 4.0  | 3.8  | 4.0  | 4.3  | 3.8  | 4.0  |
| Hypertension       | 12.8 | 12.0 | 10.2 | 10.4 | 10.3 | 9.8  | 9.1  | 7.8  | 8.5  | 8.6  | 8.0  |
| Glomerulonephritis | 26.5 | 21.7 | 19.4 | 18.2 | 18.7 | 17.1 | 16.9 | 16.4 | 17.3 | 15.2 | 17.4 |
| Other cause        | 13.8 | 15.4 | 15.1 | 11.9 | 12.7 | 13.3 | 12.3 | 12.8 | 12.4 | 12.2 | 13.0 |
| All                | 13.7 | 13.3 | 11.7 | 10.4 | 10.3 | 10.0 | 9.2  | 8.8  | 9.0  | 8.3  | 8.4  |

The incident cohorts and associated modalities are determined at the time of ESRD initiation with the 60-day stable modality rule & the 90-day rule.

The age of the incident patient is determined as of the date of ESRD initiation.

Includes U.S. & territories; no unknown or foreign states.

Patients of unknown age, gender, race, or primary diagnosis are excluded.



**Table I.29**  
**Ten-year Survival Probabilities: Incident Dialysis Patients, Adjusted**

*censored at transplant, from day 91 to ten years + 90 days, adjusted for age, gender, race, & primary diagnosis*

|                    | 1980 | 1981 | 1982 | 1983 | 1984 | 1985 | 1986 | 1987 | 1988 | 1989 | 1990 |
|--------------------|------|------|------|------|------|------|------|------|------|------|------|
| 0-19               | 57.8 | 44.8 | 44.8 | 54.5 | 46.1 | 37.6 | 39.9 | 51.2 | 45.3 | 52.0 | 45.1 |
| 20-44              | 32.3 | 29.7 | 27.7 | 27.6 | 28.4 | 26.8 | 27.5 | 26.5 | 27.6 | 27.7 | 28.7 |
| 45-64              | 9.2  | 9.8  | 10.0 | 9.3  | 9.3  | 9.7  | 9.5  | 9.6  | 9.8  | 9.3  | 9.8  |
| 65-74              | 3.0  | 3.2  | 3.2  | 3.3  | 3.8  | 4.4  | 3.6  | 3.4  | 3.4  | 3.4  | 3.6  |
| 75+                | 1.3  | 1.0  | 1.6  | 0.7  | 1.6  | 1.4  | 1.1  | 1.4  | 1.2  | 0.9  | 0.7  |
| Male               | 9.1  | 8.7  | 9.0  | 8.5  | 9.1  | 9.7  | 9.5  | 9.2  | 8.9  | 9.0  | 9.4  |
| Female             | 10.8 | 11.2 | 11.0 | 10.3 | 11.0 | 11.1 | 10.1 | 10.4 | 10.8 | 10.3 | 10.4 |
| White              | 8.7  | 8.3  | 8.5  | 7.9  | 8.6  | 8.8  | 8.3  | 8.3  | 7.9  | 8.0  | 8.3  |
| Black              | 11.7 | 12.1 | 11.1 | 10.8 | 11.2 | 11.9 | 11.1 | 11.2 | 12.2 | 11.3 | 11.7 |
| Other race         | 8.2  | 10.5 | 11.3 | 12.0 | 11.4 | 12.0 | 13.3 | 13.3 | 13.5 | 13.9 | 13.8 |
| Diabetes           | 4.4  | 3.9  | 4.1  | 3.8  | 4.1  | 4.4  | 4.0  | 4.3  | 4.5  | 4.0  | 4.4  |
| Hypertension       | 12.2 | 12.3 | 11.9 | 12.2 | 12.3 | 12.8 | 12.4 | 11.9 | 11.9 | 12.2 | 11.9 |
| Glomerulonephritis | 18.7 | 17.1 | 16.2 | 15.6 | 17.0 | 16.6 | 16.3 | 15.7 | 16.2 | 15.1 | 16.2 |
| Other cause        | 12.5 | 13.1 | 13.7 | 12.2 | 13.4 | 13.9 | 13.1 | 13.4 | 12.9 | 13.0 | 13.4 |
| All                | 9.8  | 9.8  | 9.9  | 9.3  | 9.9  | 10.3 | 9.7  | 9.7  | 9.7  | 9.6  | 9.8  |

The incident cohorts and associated modalities are determined at the time of ESRD initiation with the 60-day stable modality rule & the 90-day rule.

The age of the incident patient is determined as of the date of ESRD initiation.

Includes U.S. & territories; no unknown or foreign states.

Patients of unknown age, gender, race, or primary diagnosis are excluded.

## Standard Errors

|                    | 1980 | 1981 | 1982 | 1983 | 1984 | 1985 | 1986 | 1987 | 1988 | 1989 | 1990 |
|--------------------|------|------|------|------|------|------|------|------|------|------|------|
| 0-19               | 5.34 | 4.75 | 5.35 | 5.89 | 6.33 | 5.41 | 7.77 | 5.56 | 5.66 | 5.22 | 4.74 |
| 20-44              | 0.99 | 0.92 | 0.90 | 0.85 | 0.99 | 0.87 | 0.84 | 0.70 | 0.69 | 0.77 | 0.68 |
| 45-64              | 0.35 | 0.36 | 0.35 | 0.32 | 0.32 | 0.35 | 0.32 | 0.29 | 0.31 | 0.25 | 0.28 |
| 65-74              | 0.27 | 0.27 | 0.25 | 0.23 | 0.25 | 0.25 | 0.22 | 0.20 | 0.19 | 0.18 | 0.18 |
| 75+                | 0.32 | 0.28 | 0.30 | 0.15 | 0.24 | 0.19 | 0.15 | 0.18 | 0.14 | 0.12 | 0.10 |
| Male               | 0.34 | 0.31 | 0.32 | 0.29 | 0.27 | 0.25 | 0.25 | 0.25 | 0.23 | 0.21 | 0.21 |
| Female             | 0.29 | 0.28 | 0.25 | 0.25 | 0.25 | 0.25 | 0.23 | 0.22 | 0.21 | 0.20 | 0.18 |
| White              | 0.26 | 0.24 | 0.26 | 0.23 | 0.23 | 0.21 | 0.20 | 0.21 | 0.18 | 0.17 | 0.18 |
| Black              | 0.37 | 0.42 | 0.40 | 0.36 | 0.36 | 0.33 | 0.31 | 0.31 | 0.30 | 0.28 | 0.27 |
| Other race         | 1.00 | 1.15 | 1.19 | 1.14 | 1.03 | 0.97 | 0.96 | 0.85 | 0.82 | 1.03 | 0.79 |
| Diabetes           | 0.44 | 0.31 | 0.28 | 0.26 | 0.26 | 0.28 | 0.22 | 0.23 | 0.23 | 0.20 | 0.20 |
| Hypertension       | 0.59 | 0.50 | 0.45 | 0.44 | 0.44 | 0.37 | 0.37 | 0.36 | 0.32 | 0.31 | 0.29 |
| Glomerulonephritis | 0.93 | 0.79 | 0.74 | 0.68 | 0.72 | 0.64 | 0.61 | 0.65 | 0.61 | 0.58 | 0.56 |
| Other cause        | 0.34 | 0.40 | 0.43 | 0.36 | 0.42 | 0.40 | 0.43 | 0.39 | 0.36 | 0.37 | 0.40 |
| All                | 0.21 | 0.21 | 0.21 | 0.17 | 0.18 | 0.17 | 0.18 | 0.18 | 0.15 | 0.15 | 0.14 |

**Table I.30**  
**One-year Survival Probabilities: First Transplant Patients (Cadaveric Donor), Unadjusted**  
*from day of transplant to one year, by age, gender, race, ethnicity, & primary diagnosis*

|                    | 1989 | 1990 | 1991 | 1992 | 1993 | 1994 | 1995 | 1996  | 1997 | 1998 | 1999 |
|--------------------|------|------|------|------|------|------|------|-------|------|------|------|
| 0-17               | 95.1 | 94.3 | 96.2 | 98.7 | 97.6 | 97.7 | 98.4 | 100.0 | 98.3 | 99.3 | 97.8 |
| 18-29              | 96.1 | 96.5 | 97.6 | 96.6 | 96.6 | 97.2 | 97.2 | 98.6  | 98.4 | 97.9 | 97.4 |
| 30-44              | 93.9 | 94.4 | 95.6 | 95.3 | 96.1 | 95.7 | 96.2 | 95.9  | 96.2 | 96.7 | 96.8 |
| 45-54              | 91.8 | 91.9 | 94.2 | 93.0 | 93.0 | 93.5 | 93.6 | 94.3  | 93.7 | 94.7 | 94.1 |
| 55+                | 87.9 | 87.7 | 89.5 | 89.2 | 89.4 | 89.4 | 89.7 | 90.7  | 89.4 | 90.7 | 89.8 |
| Male               | 92.0 | 92.4 | 93.9 | 93.3 | 93.9 | 93.5 | 93.9 | 94.4  | 93.9 | 94.3 | 94.0 |
| Female             | 93.6 | 93.3 | 94.7 | 94.1 | 93.7 | 94.3 | 94.3 | 94.4  | 93.6 | 94.7 | 93.8 |
| White              | 92.4 | 92.4 | 94.0 | 93.2 | 93.6 | 93.4 | 93.4 | 94.2  | 93.6 | 94.1 | 93.8 |
| Black              | 93.3 | 93.9 | 94.7 | 94.0 | 94.2 | 94.3 | 95.6 | 95.0  | 93.6 | 94.5 | 94.1 |
| Other race         | 92.4 | 92.4 | 95.0 | 96.3 | 94.5 | 96.6 | 94.8 | 94.1  | 96.4 | 97.2 | 93.8 |
| †Hispanic          |      |      |      |      |      |      |      | 96.6  | 96.9 | 96.9 | 94.8 |
| †Non-Hispanic      |      |      |      |      |      |      |      | 94.2  | 93.5 | 94.2 | 93.8 |
| Diabetes           | 91.3 | 90.7 | 91.2 | 91.4 | 91.4 | 91.7 | 92.0 | 92.3  | 92.3 | 92.8 | 92.3 |
| Hypertension       | 92.6 | 91.9 | 95.1 | 92.6 | 93.4 | 93.7 | 93.8 | 94.7  | 93.0 | 94.6 | 92.8 |
| Glomerulonephritis | 94.2 | 94.9 | 95.6 | 95.9 | 96.5 | 96.3 | 95.9 | 95.5  | 95.5 | 95.9 | 96.0 |
| Other cause        | 92.5 | 93.0 | 95.1 | 94.3 | 94.3 | 94.0 | 94.8 | 95.4  | 94.4 | 95.1 | 94.7 |
| All                | 92.6 | 92.7 | 94.2 | 93.6 | 93.8 | 93.8 | 94.1 | 94.4  | 93.8 | 94.5 | 93.9 |

The incident cohorts and associated modalities are determined at the time of ESRD initiation with the 60-day stable modality rule & the 90-day rule. Age is as of first transplant date.

Patients of unknown age, gender, race, or primary diagnosis are excluded.

†CMS has only started collecting Hispanic ethnicity data as of April, 1995, so Hispanic data in years prior to 1995 has been left blank.

Includes U.S. & territories; no unknown or foreign states.





**Table I.31**  
**One-year Survival Probabilities: First Transplant Patients (Cadaveric Donor), Adjusted**  
*from day of transplant to one year, adjusted for age, gender, race, & primary diagnosis*

|                    | 1989 | 1990 | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 |
|--------------------|------|------|------|------|------|------|------|------|------|------|------|
| 0-17               | 95.5 | 94.6 | 96.5 | 98.8 | 97.8 | 97.9 | 98.5 |      | 98.5 | 99.4 | 98.0 |
| 18-29              | 95.7 | 96.3 | 97.4 | 96.3 | 96.3 | 96.9 | 97.0 | 98.4 | 98.3 | 97.7 | 97.1 |
| 30-44              | 94.0 | 94.4 | 95.6 | 95.3 | 96.2 | 95.9 | 96.4 | 96.1 | 96.4 | 96.9 | 96.9 |
| 45-54              | 91.4 | 91.7 | 94.1 | 93.0 | 93.0 | 93.6 | 93.6 | 94.4 | 93.9 | 94.9 | 94.4 |
| 55+                | 87.3 | 87.2 | 89.3 | 89.0 | 89.3 | 89.4 | 89.7 | 90.8 | 89.6 | 91.0 | 90.0 |
| Male               | 91.1 | 91.7 | 93.5 | 93.0 | 93.9 | 93.5 | 94.0 | 94.7 | 94.4 | 95.0 | 94.7 |
| Female             | 92.5 | 92.2 | 94.1 | 93.5 | 93.3 | 94.1 | 94.1 | 94.5 | 93.8 | 95.0 | 94.2 |
| White              | 91.3 | 91.6 | 93.7 | 93.1 | 93.5 | 93.4 | 93.6 | 94.5 | 94.1 | 94.8 | 94.6 |
| Black              | 92.5 | 93.1 | 94.0 | 93.3 | 94.0 | 94.1 | 95.3 | 95.0 | 93.9 | 94.8 | 94.4 |
| Other race         | 91.2 | 91.1 | 94.1 | 95.6 | 94.0 | 96.5 | 94.2 | 93.9 | 96.3 | 97.2 | 94.5 |
| Diabetes           | 90.2 | 89.8 | 90.7 | 91.0 | 91.1 | 91.7 | 92.1 | 92.6 | 92.8 | 93.4 | 93.1 |
| Hypertension       | 93.0 | 92.6 | 95.5 | 93.3 | 94.2 | 94.5 | 94.5 | 95.6 | 94.2 | 95.5 | 94.2 |
| Glomerulonephritis | 93.0 | 94.0 | 94.8 | 95.2 | 95.9 | 95.9 | 95.5 | 95.2 | 95.3 | 95.7 | 95.9 |
| Other cause        | 91.7 | 92.3 | 94.7 | 93.9 | 94.0 | 93.6 | 94.6 | 95.4 | 94.5 | 95.2 | 94.8 |
| All                | 91.6 | 91.9 | 93.7 | 93.2 | 93.6 | 93.7 | 94.1 | 94.6 | 94.2 | 95.0 | 94.5 |

The incident cohorts and associated modalities are determined at the time of ESRD initiation with the 60-day stable modality rule & the 90-day rule.  
Age is as of first transplant date.

Includes U.S. & territories; no unknown or foreign states.

Patients of unknown age, gender, race, or primary diagnosis are excluded.

## Standard Errors

|                    | 1989 | 1990 | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 |
|--------------------|------|------|------|------|------|------|------|------|------|------|------|
| 0-17               | 1.79 | 2.21 | 1.77 | 0.99 | 1.26 | 1.19 | 0.90 | 1.03 | 1.13 | 1.29 | .    |
| 18-29              | 0.71 | 0.63 | 0.61 | 0.68 | 0.66 | 0.71 | 0.64 | 0.50 | 0.55 | 0.62 | 0.78 |
| 30-44              | 0.51 | 0.46 | 0.41 | 0.43 | 0.38 | 0.41 | 0.39 | 0.40 | 0.42 | 0.38 | 0.42 |
| 45-54              | 0.84 | 0.71 | 0.65 | 0.67 | 0.62 | 0.60 | 0.65 | 0.51 | 0.56 | 0.52 | 0.55 |
| 55+                | 1.03 | 0.92 | 0.89 | 0.88 | 0.82 | 0.80 | 0.76 | 0.72 | 0.70 | 0.59 | 0.65 |
| Male               | 0.61 | 0.55 | 0.51 | 0.51 | 0.53 | 0.47 | 0.48 | 0.46 | 0.47 | 0.42 | 0.44 |
| Female             | 0.52 | 0.48 | 0.43 | 0.42 | 0.37 | 0.38 | 0.34 | 0.32 | 0.35 | 0.33 | 0.33 |
| White              | 0.47 | 0.43 | 0.38 | 0.41 | 0.35 | 0.36 | 0.35 | 0.36 | 0.33 | 0.32 | 0.31 |
| Black              | 0.78 | 0.72 | 0.68 | 0.73 | 0.63 | 0.58 | 0.51 | 0.52 | 0.53 | 0.48 | 0.49 |
| Other race         | 1.74 | 1.66 | 1.38 | 1.23 | 1.25 | 0.98 | 1.41 | 1.16 | 0.93 | 0.74 | 0.94 |
| Diabetes           | 0.86 | 0.86 | 0.79 | 0.73 | 0.68 | 0.66 | 0.66 | 0.61 | 0.57 | 0.56 | 0.52 |
| Hypertension       | 0.79 | 0.77 | 0.65 | 0.71 | 0.63 | 0.58 | 0.56 | 0.55 | 0.62 | 0.55 | 0.63 |
| Glomerulonephritis | 0.72 | 0.66 | 0.59 | 0.62 | 0.53 | 0.51 | 0.58 | 0.59 | 0.55 | 0.56 | 0.53 |
| Other cause        | 0.67 | 0.64 | 0.53 | 0.57 | 0.54 | 0.59 | 0.49 | 0.45 | 0.51 | 0.49 | 0.51 |
| All                | 0.41 | 0.36 | 0.34 | 0.34 | 0.29 | 0.30 | 0.28 | 0.28 | 0.28 | 0.25 | 0.26 |

**Table I.32**  
**Two-year Survival Probabilities: First Transplant Patients (Cadaveric Donor), Unadjusted**  
*from day of transplant to two years, by age, gender, race, ethnicity, & primary diagnosis*

|                    | 1988 | 1989 | 1990 | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 |
|--------------------|------|------|------|------|------|------|------|------|------|------|------|
| 0-17               | 93.8 | 94.5 | 92.7 | 95.5 | 96.8 | 97.0 | 95.8 | 97.3 | 97.8 | 97.2 | 98.6 |
| 18-29              | 94.0 | 94.1 | 94.6 | 95.7 | 95.2 | 95.0 | 96.4 | 96.4 | 97.0 | 96.2 | 97.0 |
| 30-44              | 90.2 | 90.9 | 91.9 | 93.2 | 92.5 | 93.8 | 93.0 | 94.4 | 93.8 | 94.6 | 94.9 |
| 45-54              | 86.0 | 87.4 | 88.6 | 90.8 | 90.0 | 88.6 | 89.6 | 90.4 | 90.4 | 90.5 | 91.9 |
| 55+                | 81.4 | 81.4 | 83.7 | 84.8 | 83.9 | 84.3 | 84.2 | 84.9 | 85.9 | 85.2 | 85.7 |
| Male               | 87.3 | 88.2 | 89.4 | 90.9 | 90.2 | 90.5 | 89.9 | 90.9 | 91.3 | 90.8 | 91.0 |
| Female             | 89.7 | 90.2 | 90.4 | 91.7 | 90.7 | 90.5 | 91.4 | 91.9 | 90.7 | 91.0 | 92.2 |
| White              | 88.2 | 89.0 | 89.7 | 91.1 | 90.1 | 90.3 | 90.0 | 90.8 | 90.8 | 90.5 | 91.5 |
| Black              | 88.2 | 88.6 | 90.2 | 91.4 | 90.6 | 90.6 | 90.8 | 92.3 | 91.7 | 91.2 | 90.5 |
| Other race         | 88.3 | 90.1 | 90.5 | 92.5 | 93.0 | 92.7 | 93.9 | 92.4 | 92.1 | 93.6 | 94.9 |
| †Hispanic          |      |      |      |      |      |      |      |      | 93.4 | 94.6 | 95.9 |
| †Non-Hispanic      |      |      |      |      |      |      |      |      | 90.9 | 90.6 | 91.0 |
| Diabetes           | 83.2 | 86.2 | 85.9 | 86.6 | 86.2 | 86.9 | 87.2 | 88.3 | 88.1 | 87.8 | 88.6 |
| Hypertension       | 89.1 | 88.0 | 88.4 | 91.9 | 88.8 | 89.8 | 90.9 | 90.6 | 90.8 | 90.5 | 91.4 |
| Glomerulonephritis | 90.3 | 91.6 | 93.0 | 93.8 | 94.2 | 94.4 | 93.9 | 94.0 | 93.2 | 93.6 | 94.2 |
| Other cause        | 89.3 | 89.5 | 91.0 | 92.4 | 91.8 | 91.3 | 90.6 | 92.5 | 92.6 | 92.2 | 92.6 |
| All                | 88.2 | 89.0 | 89.8 | 91.2 | 90.4 | 90.5 | 90.4 | 91.3 | 91.1 | 90.9 | 91.5 |

The incident cohorts and associated modalities are determined at the time of ESRD initiation with the 60-day stable modality rule & the 90-day rule. Age is as of first transplant date.

†CMS has only started collecting Hispanic ethnicity data as of April, 1995, so Hispanic data in years prior to 1995 has been left blank.

Includes U.S. & territories; no unknown or foreign states.

Patients of unknown age, gender, race, or primary diagnosis are excluded.

## Standard Errors

|                    | 1988 | 1989 | 1990 | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 |
|--------------------|------|------|------|------|------|------|------|------|------|------|------|
| 0-17               | 1.60 | 1.70 | 1.90 | 1.60 | 1.40 | 1.30 | 1.40 | 1.20 | 1.10 | 1.20 | 1.00 |
| 18-29              | 0.90 | 0.80 | 0.80 | 0.70 | 0.80 | 0.80 | 0.70 | 0.70 | 0.70 | 0.80 | 0.70 |
| 30-44              | 0.60 | 0.60 | 0.60 | 0.50 | 0.60 | 0.50 | 0.50 | 0.50 | 0.50 | 0.50 | 0.50 |
| 45-54              | 1.00 | 0.90 | 0.90 | 0.80 | 0.80 | 0.80 | 0.70 | 0.70 | 0.70 | 0.70 | 0.70 |
| 55+                | 1.20 | 1.20 | 1.00 | 1.00 | 1.00 | 0.90 | 0.90 | 0.90 | 0.80 | 0.80 | 0.80 |
| Male               | 0.60 | 0.60 | 0.50 | 0.50 | 0.50 | 0.50 | 0.50 | 0.40 | 0.40 | 0.50 | 0.50 |
| Female             | 0.70 | 0.60 | 0.60 | 0.60 | 0.60 | 0.60 | 0.60 | 0.50 | 0.60 | 0.60 | 0.50 |
| White              | 0.50 | 0.50 | 0.50 | 0.40 | 0.50 | 0.40 | 0.50 | 0.40 | 0.40 | 0.50 | 0.40 |
| Black              | 0.90 | 0.90 | 0.80 | 0.70 | 0.80 | 0.70 | 0.70 | 0.60 | 0.60 | 0.70 | 0.70 |
| Other race         | 1.80 | 1.70 | 1.60 | 1.50 | 1.40 | 1.40 | 1.20 | 1.40 | 1.30 | 1.20 | 1.00 |
| †Hispanic          |      |      |      |      |      |      |      |      | 1.20 | 1.00 | 0.80 |
| †Non-Hispanic      |      |      |      |      |      |      |      |      | 0.40 | 0.40 | 0.40 |
| Diabetes           | 1.10 | 1.00 | 0.90 | 0.90 | 0.90 | 0.80 | 0.80 | 0.80 | 0.70 | 0.80 | 0.70 |
| Hypertension       | 1.00 | 1.10 | 1.00 | 0.80 | 0.90 | 0.90 | 0.80 | 0.80 | 0.80 | 0.80 | 0.80 |
| Glomerulonephritis | 0.80 | 0.80 | 0.70 | 0.60 | 0.60 | 0.60 | 0.60 | 0.60 | 0.70 | 0.60 | 0.60 |
| Other cause        | 0.70 | 0.70 | 0.60 | 0.60 | 0.60 | 0.60 | 0.70 | 0.60 | 0.60 | 0.60 | 0.60 |
| All                | 0.40 | 0.40 | 0.40 | 0.40 | 0.40 | 0.40 | 0.40 | 0.30 | 0.40 | 0.40 | 0.30 |

**Table I.33**  
**Two-year Survival Probabilities: First Transplant Patients (Cadaveric Donor), Adjusted**  
*from day of transplant to two years, adjusted for age, gender, race, & primary diagnosis*

|                    | 1988 | 1989 | 1990 | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 |
|--------------------|------|------|------|------|------|------|------|------|------|------|------|
| 0-17               | 93.8 | 94.5 | 92.5 | 95.5 | 96.8 | 97.0 | 95.8 | 97.3 | 97.8 | 97.2 | 98.6 |
| 18-29              | 93.4 | 93.5 | 94.2 | 95.2 | 94.7 | 94.6 | 95.9 | 96.1 | 96.7 | 95.9 | 96.7 |
| 30-44              | 90.1 | 91.1 | 91.8 | 93.3 | 92.6 | 94.0 | 93.3 | 94.7 | 94.1 | 94.8 | 95.2 |
| 45-54              | 85.4 | 86.9 | 88.3 | 90.6 | 89.9 | 88.7 | 89.7 | 90.4 | 90.6 | 90.8 | 92.2 |
| 55+                | 80.4 | 80.6 | 83.1 | 84.4 | 83.5 | 84.2 | 84.2 | 85.0 | 85.9 | 85.4 | 86.1 |
| Male               | 85.8 | 86.8 | 88.5 | 90.3 | 89.8 | 90.4 | 90.0 | 91.1 | 91.8 | 91.6 | 92.1 |
| Female             | 87.9 | 88.5 | 89.0 | 90.8 | 90.0 | 90.0 | 91.0 | 91.7 | 90.9 | 91.4 | 92.6 |
| White              | 86.5 | 87.4 | 88.7 | 90.5 | 89.8 | 90.1 | 90.0 | 91.1 | 91.4 | 91.3 | 92.5 |
| Black              | 86.8 | 87.2 | 88.8 | 90.4 | 89.5 | 90.2 | 90.5 | 91.9 | 91.6 | 91.5 | 91.0 |
| Other race         | 86.0 | 88.6 | 89.1 | 91.2 | 91.6 | 92.2 | 93.8 | 91.7 | 91.9 | 93.4 | 95.0 |
| Diabetes           | 81.5 | 84.5 | 84.6 | 85.8 | 85.6 | 86.5 | 87.2 | 88.4 | 88.5 | 88.6 | 89.5 |
| Hypertension       | 89.7 | 88.7 | 89.3 | 92.6 | 89.8 | 91.0 | 91.9 | 91.7 | 92.2 | 92.0 | 92.8 |
| Glomerulonephritis | 88.5 | 89.8 | 91.9 | 92.7 | 93.3 | 93.5 | 93.3 | 93.5 | 92.9 | 93.3 | 94.0 |
| Other cause        | 88.1 | 88.3 | 90.0 | 91.8 | 91.3 | 90.8 | 90.0 | 92.1 | 92.5 | 92.3 | 92.8 |
| All                | 86.5 | 87.4 | 88.7 | 90.5 | 89.8 | 90.2 | 90.4 | 91.3 | 91.5 | 91.5 | 92.3 |

The incident cohorts and associated modalities are determined at the time of ESRD initiation with the 60-day stable modality rule & the 90-day rule. Age is as of first transplant date.

Patients of unknown age, gender, race, or primary diagnosis are excluded.

†CMS has only started collecting Hispanic ethnicity data as of April, 1995, so Hispanic data in years prior to 1995 has been left blank.

Includes U.S. & territories; no unknown or foreign states.

## Standard Errors

|                    | 1988 | 1989 | 1990 | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 |
|--------------------|------|------|------|------|------|------|------|------|------|------|------|
| 0-17               | 2.80 | 3.04 | 2.17 | 1.83 | 1.79 | 1.68 | 1.55 | 1.39 | 1.50 | 1.05 | .    |
| 18-29              | 0.90 | 0.89 | 0.79 | 0.75 | 0.89 | 0.84 | 0.76 | 0.78 | 0.77 | 0.90 | 0.80 |
| 30-44              | 0.65 | 0.60 | 0.59 | 0.51 | 0.54 | 0.48 | 0.49 | 0.45 | 0.51 | 0.48 | 0.44 |
| 45-54              | 1.01 | 0.91 | 0.88 | 0.78 | 0.82 | 0.78 | 0.70 | 0.71 | 0.64 | 0.60 | 0.62 |
| 55+                | 1.28 | 1.27 | 1.07 | 1.02 | 1.04 | 0.96 | 0.96 | 0.83 | 0.80 | 0.76 | 0.73 |
| Male               | 0.73 | 0.72 | 0.68 | 0.62 | 0.61 | 0.59 | 0.60 | 0.56 | 0.57 | 0.53 | 0.50 |
| Female             | 0.60 | 0.59 | 0.54 | 0.48 | 0.51 | 0.46 | 0.46 | 0.44 | 0.43 | 0.43 | 0.38 |
| White              | 0.59 | 0.59 | 0.51 | 0.48 | 0.46 | 0.47 | 0.44 | 0.42 | 0.41 | 0.42 | 0.37 |
| Black              | 0.92 | 0.99 | 0.90 | 0.86 | 0.84 | 0.75 | 0.71 | 0.62 | 0.67 | 0.62 | 0.65 |
| Other race         | 2.01 | 1.85 | 1.78 | 1.70 | 1.65 | 1.55 | 1.24 | 1.52 | 1.43 | 1.25 | 1.01 |
| Diabetes           | 1.20 | 1.07 | 1.02 | 0.91 | 0.91 | 0.80 | 0.84 | 0.78 | 0.74 | 0.72 | 0.64 |
| Hypertension       | 0.98 | 1.01 | 0.88 | 0.74 | 0.83 | 0.78 | 0.69 | 0.70 | 0.68 | 0.70 | 0.69 |
| Glomerulonephritis | 0.86 | 0.85 | 0.75 | 0.74 | 0.68 | 0.67 | 0.69 | 0.64 | 0.70 | 0.67 | 0.60 |
| Other cause        | 0.73 | 0.72 | 0.66 | 0.68 | 0.65 | 0.70 | 0.72 | 0.57 | 0.57 | 0.61 | 0.58 |
| All                | 0.47 | 0.49 | 0.43 | 0.40 | 0.39 | 0.35 | 0.36 | 0.34 | 0.34 | 0.32 | 0.33 |

**Table I.34**  
**Five-year Survival Probabilities: First Transplant Patients (Cadaveric Donor), Unadjusted**  
*from day of transplant to five years, by age, gender, race, ethnicity, & primary diagnosis*

|                    | 1985 | 1986 | 1987 | 1988 | 1989 | 1990 | 1991 | 1992 | 1993 | 1994 | 1995 |
|--------------------|------|------|------|------|------|------|------|------|------|------|------|
| 0-17               | 88.8 | 88.4 | 92.3 | 87.7 | 89.6 | 90.6 | 90.4 | 93.0 | 93.5 | 93.4 | 96.2 |
| 18-29              | 84.8 | 83.4 | 87.4 | 88.1 | 86.5 | 89.5 | 90.2 | 89.5 | 89.7 | 91.0 | 90.3 |
| 30-44              | 76.2 | 75.2 | 75.9 | 78.7 | 82.2 | 83.8 | 84.2 | 83.6 | 85.4 | 84.2 | 86.1 |
| 45-54              | 65.2 | 63.3 | 67.1 | 72.0 | 74.8 | 74.7 | 77.4 | 75.6 | 76.3 | 79.2 | 78.5 |
| 55+                | 56.5 | 57.6 | 57.5 | 63.8 | 64.7 | 66.7 | 65.4 | 66.1 | 65.2 | 65.4 | 67.3 |
| Male               | 72.8 | 70.5 | 71.7 | 74.2 | 77.0 | 78.1 | 77.9 | 77.9 | 78.5 | 78.4 | 79.5 |
| Female             | 76.5 | 76.2 | 77.8 | 78.7 | 80.0 | 80.7 | 82.0 | 79.8 | 79.9 | 81.1 | 81.2 |
| White              | 75.3 | 73.0 | 74.4 | 76.4 | 78.2 | 78.7 | 79.8 | 78.5 | 79.1 | 79.7 | 79.9 |
| Black              | 70.4 | 70.4 | 71.4 | 74.4 | 76.9 | 79.8 | 78.3 | 77.8 | 77.6 | 78.0 | 79.7 |
| Other race         | 78.5 | 78.5 | 80.3 | 76.9 | 82.8 | 82.3 | 80.7 | 84.2 | 84.3 | 82.2 | 86.0 |
| †Hispanic          |      |      |      |      |      |      |      |      |      |      |      |
| †Non-Hispanic      |      |      |      |      |      |      |      |      |      |      |      |
| Diabetes           | 61.8 | 60.9 | 62.5 | 65.8 | 70.5 | 69.9 | 72.0 | 69.2 | 71.0 | 72.1 | 74.1 |
| Hypertension       | 71.5 | 73.0 | 69.0 | 74.7 | 75.9 | 77.7 | 79.0 | 76.3 | 77.5 | 78.6 | 76.9 |
| Glomerulonephritis | 83.2 | 79.3 | 81.1 | 81.0 | 84.5 | 84.9 | 84.1 | 85.8 | 85.9 | 85.3 | 84.7 |
| Other cause        | 75.4 | 74.5 | 77.9 | 79.0 | 79.8 | 82.1 | 82.0 | 82.2 | 82.1 | 82.2 | 84.3 |
| All                | 74.2 | 72.6 | 74.0 | 76.0 | 78.1 | 79.2 | 79.5 | 78.7 | 79.0 | 79.4 | 80.1 |

The incident cohorts and associated modalities are determined at the time of ESRD initiation with the 60-day stable modality rule & the 90-day rule. Age is as of first transplant date.

†CMS has only started collecting Hispanic ethnicity data as of April, 1995, so Hispanic data in years prior to 1995 has been left blank.

Includes U.S. & territories; no unknown or foreign states.

Patients of unknown age, gender, race, or primary diagnosis are excluded.





**Table I.35**  
**Five-year Survival Probabilities: First Transplant Patients (Cadaveric Donor), Adjusted**  
*from day of transplant to five years, adjusted for age, gender, race, & primary diagnosis*

|                    | 1985 | 1986 | 1987 | 1988 | 1989 | 1990 | 1991 | 1992 | 1993 | 1994 | 1995 |
|--------------------|------|------|------|------|------|------|------|------|------|------|------|
| 0-17               | 85.9 | 85.4 | 90.3 | 84.9 | 87.3 | 88.2 | 88.2 | 91.2 | 91.8 | 92.1 | 95.3 |
| 18-29              | 83.1 | 81.4 | 85.9 | 86.9 | 85.3 | 88.8 | 89.2 | 88.4 | 88.9 | 89.9 | 89.6 |
| 30-44              | 75.8 | 75.2 | 75.7 | 78.5 | 82.4 | 83.7 | 84.3 | 83.8 | 85.9 | 85.0 | 86.8 |
| 45-54              | 63.8 | 62.1 | 66.3 | 71.2 | 73.9 | 74.2 | 77.0 | 75.5 | 76.3 | 79.4 | 78.6 |
| 55+                | 54.4 | 55.7 | 56.0 | 62.1 | 63.4 | 65.4 | 64.7 | 65.2 | 64.9 | 65.4 | 67.5 |
| Male               | 66.1 | 65.0 | 67.4 | 71.7 | 74.6 | 76.5 | 76.6 | 77.1 | 78.4 | 78.6 | 79.9 |
| Female             | 70.1 | 70.4 | 73.0 | 75.5 | 77.1 | 78.2 | 80.3 | 78.3 | 78.8 | 80.5 | 80.7 |
| White              | 68.2 | 67.3 | 69.6 | 73.5 | 75.5 | 76.9 | 78.7 | 78.0 | 78.8 | 79.8 | 80.5 |
| Black              | 64.8 | 65.0 | 67.4 | 71.7 | 74.3 | 77.2 | 75.8 | 75.3 | 76.7 | 77.1 | 78.6 |
| Other race         | 70.6 | 69.7 | 75.0 | 73.1 | 80.4 | 79.9 | 77.5 | 81.7 | 83.4 | 82.0 | 84.7 |
| Diabetes           | 56.4 | 55.5 | 58.8 | 63.1 | 67.5 | 67.7 | 70.6 | 67.9 | 70.2 | 72.1 | 74.3 |
| Hypertension       | 70.3 | 72.7 | 69.2 | 76.3 | 77.2 | 79.4 | 80.5 | 78.4 | 79.9 | 80.9 | 79.3 |
| Glomerulonephritis | 76.7 | 72.9 | 76.0 | 77.7 | 81.5 | 82.6 | 81.4 | 83.6 | 83.9 | 83.7 | 83.5 |
| Other cause        | 69.7 | 69.8 | 74.0 | 76.7 | 77.6 | 80.3 | 80.5 | 81.2 | 81.1 | 81.0 | 83.5 |
| All                | 67.5 | 66.9 | 69.4 | 73.0 | 75.4 | 77.1 | 78.0 | 77.5 | 78.5 | 79.3 | 80.2 |

The incident cohorts and associated modalities are determined at the time of ESRD initiation with the 60-day stable modality rule & the 90-day rule. Age is as of first transplant date.

†CMS has only started collecting Hispanic ethnicity data as of April, 1995, so Hispanic data in years prior to 1995 has been left blank.

Includes U.S. & territories; no unknown or foreign states.

Patients of unknown age, gender, race, or primary diagnosis are excluded.

## Standard Errors

|                    | 1985 | 1986 | 1987 | 1988 | 1989 | 1990 | 1991 | 1992 | 1993 | 1994 | 1995 |
|--------------------|------|------|------|------|------|------|------|------|------|------|------|
| 0-17               | 3.67 | 3.91 | 2.99 | 3.88 | 3.46 | 3.38 | 3.60 | 3.11 | 2.93 | 2.72 | 2.08 |
| 18-29              | 1.33 | 1.41 | 1.26 | 1.29 | 1.26 | 1.12 | 1.16 | 1.20 | 1.21 | 1.12 | 1.12 |
| 30-44              | 1.08 | 0.93 | 0.96 | 0.89 | 0.83 | 0.80 | 0.75 | 0.77 | 0.73 | 0.69 | 0.63 |
| 45-54              | 1.66 | 1.53 | 1.45 | 1.24 | 1.20 | 1.12 | 1.17 | 1.11 | 1.09 | 0.99 | 1.00 |
| 55+                | 2.26 | 2.17 | 1.87 | 1.44 | 1.48 | 1.35 | 1.36 | 1.30 | 1.22 | 1.18 | 1.09 |
| Male               | 1.25 | 1.19 | 1.09 | 0.98 | 0.96 | 0.86 | 0.81 | 0.84 | 0.81 | 0.76 | 0.79 |
| Female             | 1.06 | 0.91 | 0.85 | 0.76 | 0.79 | 0.73 | 0.66 | 0.65 | 0.60 | 0.60 | 0.58 |
| White              | 0.97 | 0.87 | 0.81 | 0.69 | 0.76 | 0.66 | 0.58 | 0.60 | 0.58 | 0.56 | 0.60 |
| Black              | 1.61 | 1.57 | 1.40 | 1.26 | 1.31 | 1.21 | 1.14 | 1.16 | 1.11 | 0.94 | 0.97 |
| Other race         | 4.07 | 3.54 | 3.09 | 2.75 | 2.34 | 2.27 | 2.47 | 2.13 | 2.01 | 1.93 | 2.00 |
| Diabetes           | 1.79 | 1.69 | 1.54 | 1.46 | 1.34 | 1.22 | 1.18 | 1.23 | 1.05 | 1.06 | 0.99 |
| Hypertension       | 1.83 | 1.59 | 1.62 | 1.32 | 1.33 | 1.15 | 1.20 | 1.13 | 1.04 | 1.03 | 1.03 |
| Glomerulonephritis | 1.43 | 1.38 | 1.22 | 1.18 | 1.15 | 0.96 | 1.07 | 1.04 | 1.00 | 0.98 | 0.92 |
| Other cause        | 1.31 | 1.20 | 1.15 | 0.98 | 0.96 | 0.92 | 0.90 | 0.89 | 0.89 | 0.86 | 0.80 |
| All                | 0.78 | 0.74 | 0.67 | 0.61 | 0.58 | 0.53 | 0.58 | 0.51 | 0.48 | 0.49 | 0.48 |

**Table I.36**  
**Ten-year Survival Probabilities: First Transplant Patients (Cadaveric Donor), Unadjusted**  
*from day of transplant to ten years, by age, gender, race, ethnicity, & primary diagnosis*

|                    | 1980 | 1981 | 1982 | 1983 | 1984 | 1985 | 1986 | 1987 | 1988 | 1989 | 1990 |
|--------------------|------|------|------|------|------|------|------|------|------|------|------|
| 0-17               | 79.5 | 76.4 | 79.8 | 83.4 | 80.5 | 80.2 | 82.6 | 85.0 | 80.2 | 82.5 | 83.3 |
| 18-29              | 66.7 | 70.9 | 69.9 | 72.1 | 71.8 | 72.9 | 70.6 | 77.4 | 76.1 | 74.7 | 77.7 |
| 30-44              | 48.4 | 49.5 | 54.8 | 54.8 | 54.2 | 57.2 | 56.2 | 57.1 | 62.0 | 63.0 | 65.2 |
| 45-54              | 35.5 | 37.9 | 38.0 | 36.6 | 40.4 | 39.6 | 40.3 | 45.1 | 46.8 | 50.4 | 49.9 |
| 55+                | 22.0 | 20.1 | 26.2 | 26.5 | 25.0 | 25.9 | 26.8 | 30.0 | 33.6 | 35.3 | 35.8 |
| Male               | 49.6 | 51.4 | 52.1 | 52.9 | 51.3 | 53.1 | 50.8 | 52.8 | 53.4 | 55.6 | 56.4 |
| Female             | 53.7 | 55.4 | 59.1 | 57.5 | 57.7 | 56.9 | 57.0 | 59.4 | 59.2 | 60.3 | 60.3 |
| White              | 52.4 | 55.4 | 55.8 | 56.8 | 54.8 | 56.6 | 53.9 | 56.3 | 56.8 | 58.4 | 57.9 |
| Black              | 46.7 | 44.2 | 50.6 | 46.6 | 50.2 | 48.4 | 48.1 | 50.7 | 51.6 | 53.1 | 56.3 |
| Other race         | 51.5 | 53.8 | 61.3 | 63.8 | 55.0 | 57.0 | 67.5 | 62.2 | 59.1 | 63.2 | 65.4 |
| Diabetes           | 27.6 | 36.7 | 36.1 | 32.7 | 33.0 | 36.4 | 35.6 | 38.6 | 39.3 | 43.3 | 43.6 |
| Hypertension       | 52.3 | 49.6 | 52.0 | 51.9 | 49.3 | 48.5 | 47.6 | 47.8 | 49.0 | 52.7 | 53.5 |
| Glomerulonephritis | 66.1 | 64.4 | 65.0 | 65.9 | 63.7 | 67.9 | 65.8 | 65.4 | 65.3 | 68.2 | 68.6 |
| Other cause        | 47.8 | 51.4 | 55.4 | 56.1 | 57.2 | 57.1 | 56.5 | 61.2 | 61.7 | 61.5 | 62.3 |
| All                | 51.1 | 52.8 | 54.7 | 54.6 | 53.7 | 54.5 | 53.1 | 55.3 | 55.7 | 57.4 | 57.9 |

The incident cohorts and associated modalities are determined at the time of ESRD initiation with the 60-day stable modality rule & the 90-day rule.  
Age is as of first transplant date.  
Includes U.S. & territories; no unknown or foreign states.  
Patients of unknown age, gender, race, or primary diagnosis are excluded.

## Standard Errors

|                    | 1980 | 1981 | 1982 | 1983 | 1984 | 1985 | 1986 | 1987 | 1988 | 1989 | 1990 |
|--------------------|------|------|------|------|------|------|------|------|------|------|------|
| 0-17               | 3.00 | 3.20 | 2.80 | 2.50 | 2.70 | 2.60 | 2.40 | 2.30 | 2.60 | 2.80 | 2.70 |
| 18-29              | 1.90 | 1.80 | 1.80 | 1.70 | 1.60 | 1.60 | 1.50 | 1.40 | 1.50 | 1.50 | 1.40 |
| 30-44              | 1.60 | 1.60 | 1.40 | 1.30 | 1.30 | 1.20 | 1.10 | 1.10 | 1.00 | 1.00 | 1.00 |
| 45-54              | 2.20 | 2.30 | 2.00 | 1.90 | 1.80 | 1.70 | 1.60 | 1.50 | 1.40 | 1.40 | 1.30 |
| 55+                | 3.20 | 3.10 | 3.10 | 2.60 | 2.20 | 2.00 | 1.80 | 1.70 | 1.50 | 1.50 | 1.40 |
| Male               | 1.30 | 1.20 | 1.20 | 1.10 | 1.00 | 1.00 | 0.90 | 0.90 | 0.90 | 0.90 | 0.80 |
| Female             | 1.70 | 1.70 | 1.50 | 1.40 | 1.30 | 1.30 | 1.20 | 1.10 | 1.10 | 1.10 | 1.00 |
| White              | 1.20 | 1.20 | 1.10 | 1.00 | 1.00 | 0.90 | 0.90 | 0.80 | 0.80 | 0.80 | 0.80 |
| Black              | 2.20 | 2.10 | 1.90 | 1.80 | 1.70 | 1.60 | 1.50 | 1.50 | 1.40 | 1.40 | 1.30 |
| Other race         | 4.90 | 3.90 | 5.00 | 4.70 | 4.40 | 4.00 | 3.30 | 3.20 | 2.80 | 2.80 | 2.60 |
| †Hispanic          |      |      |      |      |      |      |      |      |      |      |      |
| †Non-Hispanic      |      |      |      |      |      |      |      |      |      |      |      |
| Diabetes           | 3.00 | 2.80 | 2.30 | 2.10 | 1.80 | 1.70 | 1.50 | 1.50 | 1.40 | 1.40 | 1.30 |
| Hypertension       | 3.20 | 3.00 | 2.60 | 2.30 | 2.20 | 2.00 | 1.90 | 1.80 | 1.60 | 1.70 | 1.50 |
| Glomerulonephritis | 1.90 | 1.90 | 1.70 | 1.60 | 1.50 | 1.40 | 1.40 | 1.30 | 1.30 | 1.30 | 1.20 |
| Other cause        | 1.40 | 1.40 | 1.40 | 1.30 | 1.30 | 1.30 | 1.20 | 1.20 | 1.10 | 1.10 | 1.10 |
| All                | 1.00 | 1.00 | 0.90 | 0.90 | 0.80 | 0.80 | 0.70 | 0.70 | 0.70 | 0.70 | 0.60 |

**Table I.37**  
**Ten-year Survival Probabilities: First Transplant Patients (Cadaveric Donor), Adjusted**

*from day of transplant to ten years, adjusted for age, gender, race, & primary diagnosis*

|                    | 1980 | 1981 | 1982 | 1983 | 1984 | 1985 | 1986 | 1987 | 1988 | 1989 | 1990 |
|--------------------|------|------|------|------|------|------|------|------|------|------|------|
| 0-17               | 75.7 | 72.3 | 76.3 | 80.1 | 76.9 | 76.3 | 79.3 | 82.0 | 77.3 | 80.2 | 80.1 |
| 18-29              | 60.4 | 65.7 | 65.1 | 67.7 | 68.1 | 69.9 | 67.6 | 74.7 | 73.6 | 72.3 | 76.1 |
| 30-44              | 45.1 | 46.8 | 52.9 | 52.9 | 52.8 | 56.4 | 56.2 | 56.7 | 61.4 | 63.4 | 64.8 |
| 45-54              | 31.7 | 34.6 | 34.8 | 34.1 | 38.1 | 38.0 | 38.9 | 43.9 | 45.5 | 49.0 | 49.3 |
| 55+                | 18.5 | 17.4 | 23.3 | 24.4 | 22.7 | 23.6 | 24.9 | 28.4 | 31.6 | 33.5 | 33.9 |
| Male               | 36.3 | 38.6 | 40.4 | 41.8 | 42.0 | 44.2 | 43.8 | 47.1 | 49.8 | 52.2 | 53.6 |
| Female             | 38.8 | 40.3 | 46.0 | 45.5 | 47.1 | 48.3 | 49.2 | 52.6 | 54.5 | 55.9 | 56.4 |
| White              | 37.7 | 41.1 | 42.5 | 44.8 | 44.6 | 47.2 | 46.7 | 49.9 | 52.7 | 54.7 | 55.3 |
| Black              | 35.6 | 33.6 | 40.5 | 37.1 | 41.0 | 40.8 | 41.0 | 45.2 | 47.5 | 48.7 | 51.2 |
| Other race         | 38.2 | 41.5 | 48.8 | 50.2 | 43.7 | 44.6 | 55.9 | 54.0 | 52.7 | 58.8 | 61.4 |
| Diabetes           | 21.1 | 29.1 | 28.7 | 26.8 | 26.7 | 30.7 | 30.4 | 34.9 | 36.4 | 39.7 | 40.9 |
| Hypertension       | 46.9 | 44.4 | 48.4 | 49.4 | 49.2 | 47.9 | 47.8 | 48.8 | 51.8 | 54.9 | 56.6 |
| Glomerulonephritis | 51.0 | 48.6 | 52.0 | 53.5 | 52.7 | 57.4 | 56.8 | 57.1 | 59.9 | 62.6 | 63.9 |
| Other cause        | 38.5 | 41.4 | 45.3 | 46.2 | 48.8 | 48.9 | 49.6 | 55.2 | 58.0 | 58.1 | 58.9 |
| All                | 37.2 | 39.3 | 42.4 | 43.1 | 43.7 | 45.6 | 45.7 | 49.0 | 51.5 | 53.5 | 54.6 |

The incident cohorts and associated modalities are determined at the time of ESRD initiation with the 60-day stable modality rule & the 90-day rule.

Age is as of first transplant date.

Includes U.S. & territories; no unknown or foreign states.

Patients of unknown age, gender, race, or primary diagnosis are excluded.

## Standard Errors

|                    | 1980 | 1981 | 1982 | 1983 | 1984 | 1985 | 1986 | 1987 | 1988 | 1989 | 1990 |
|--------------------|------|------|------|------|------|------|------|------|------|------|------|
| 0-17               | 4.19 | 4.34 | 4.25 | 3.42 | 3.81 | 3.75 | 3.77 | 3.53 | 3.88 | 3.64 | 3.75 |
| 18-29              | 2.05 | 1.98 | 1.86 | 1.75 | 1.78 | 1.75 | 1.57 | 1.55 | 1.75 | 1.62 | 1.40 |
| 30-44              | 1.56 | 1.53 | 1.47 | 1.31 | 1.25 | 1.21 | 1.10 | 1.07 | 1.03 | 1.01 | 0.94 |
| 45-54              | 1.99 | 2.12 | 2.03 | 1.90 | 1.66 | 1.64 | 1.49 | 1.49 | 1.28 | 1.42 | 1.23 |
| 55+                | 2.87 | 2.61 | 2.94 | 2.55 | 2.20 | 1.87 | 1.69 | 1.59 | 1.44 | 1.39 | 1.31 |
| Male               | 1.63 | 1.57 | 1.58 | 1.43 | 1.40 | 1.26 | 1.18 | 1.15 | 1.07 | 1.03 | 0.95 |
| Female             | 1.20 | 1.21 | 1.17 | 1.04 | 1.01 | 0.93 | 0.85 | 0.84 | 0.77 | 0.81 | 0.79 |
| White              | 1.08 | 1.11 | 1.04 | 0.98 | 0.91 | 0.94 | 0.80 | 0.80 | 0.72 | 0.73 | 0.69 |
| Black              | 1.94 | 1.86 | 1.95 | 1.66 | 1.61 | 1.43 | 1.34 | 1.49 | 1.35 | 1.39 | 1.33 |
| Other race         | 5.04 | 3.84 | 5.13 | 4.83 | 4.32 | 3.86 | 3.46 | 3.33 | 2.83 | 2.73 | 2.59 |
| Diabetes           | 2.66 | 2.44 | 1.88 | 1.82 | 1.61 | 1.63 | 1.43 | 1.47 | 1.38 | 1.28 | 1.26 |
| Hypertension       | 3.28 | 2.95 | 2.46 | 2.23 | 2.05 | 1.84 | 1.91 | 1.62 | 1.51 | 1.54 | 1.38 |
| Glomerulonephritis | 2.07 | 2.14 | 1.76 | 1.69 | 1.49 | 1.60 | 1.42 | 1.36 | 1.29 | 1.27 | 1.18 |
| Other cause        | 1.39 | 1.32 | 1.43 | 1.38 | 1.41 | 1.24 | 1.19 | 1.24 | 1.15 | 1.12 | 1.02 |
| All                | 1.01 | 0.92 | 0.88 | 0.81 | 0.79 | 0.71 | 0.71 | 0.70 | 0.65 | 0.63 | 0.61 |

**Table I.38**  
**One-year Survival Probabilities: First Transplant Patients (Living Donor), Unadjusted**  
*from day of transplant to one year, by age, gender, race, ethnicity, & primary diagnosis*

|                    | 1989  | 1990  | 1991  | 1992 | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 |
|--------------------|-------|-------|-------|------|------|------|------|------|------|------|------|
| 0-17               | 97.7  | 97.4  | 98.8  | 96.0 | 98.5 | 98.6 | 97.7 | 99.2 | 99.6 | 99.1 | 99.5 |
| 18-29              | 97.7  | 99.4  | 98.5  | 98.0 | 98.5 | 99.6 | 98.9 | 99.4 | 98.8 | 99.6 | 99.4 |
| 30-44              | 98.4  | 97.9  | 98.0  | 98.1 | 97.7 | 98.0 | 98.3 | 99.0 | 98.5 | 98.5 | 98.3 |
| 45-54              | 98.1  | 95.4  | 97.5  | 96.7 | 96.2 | 97.0 | 97.0 | 96.7 | 95.2 | 97.4 | 98.3 |
| 55+                | 90.8  | 91.6  | 92.9  | 92.8 | 93.6 | 94.8 | 93.5 | 94.2 | 94.9 | 94.4 | 95.3 |
| Male               | 97.0  | 97.8  | 97.5  | 97.2 | 97.2 | 97.0 | 97.2 | 97.9 | 97.9 | 97.7 | 97.5 |
| Female             | 98.1  | 97.0  | 97.9  | 96.7 | 97.3 | 98.9 | 97.6 | 97.6 | 96.3 | 97.4 | 98.3 |
| White              | 97.5  | 97.3  | 97.7  | 97.2 | 97.4 | 98.0 | 97.2 | 97.7 | 97.1 | 97.8 | 97.8 |
| Black              | 96.4  | 98.0  | 97.1  | 95.5 | 96.2 | 97.1 | 97.9 | 97.5 | 96.7 | 96.3 | 97.6 |
| Other race         | 100.0 | 100.0 | 100.0 | 98.9 | 98.1 | 96.7 | 98.6 | 98.8 | 99.5 | 98.4 | 99.5 |
| †Hispanic          |       |       |       |      |      |      |      | 97.4 | 99.1 | 98.4 | 99.2 |
| †Non-Hispanic      |       |       |       |      |      |      |      | 97.8 | 96.9 | 97.5 | 97.7 |
| Diabetes           | 98.4  | 96.0  | 95.4  | 96.0 | 95.0 | 96.7 | 95.9 | 96.7 | 94.0 | 95.4 | 96.6 |
| Hypertension       | 96.8  | 93.9  | 97.1  | 96.6 | 96.8 | 97.0 | 96.5 | 97.1 | 96.8 | 97.7 | 98.0 |
| Glomerulonephritis | 96.7  | 98.2  | 98.5  | 97.8 | 98.5 | 98.8 | 98.2 | 99.0 | 98.8 | 99.2 | 98.0 |
| Other cause        | 97.9  | 98.4  | 98.6  | 97.1 | 97.6 | 98.0 | 97.8 | 97.7 | 97.9 | 97.8 | 98.4 |
| All                | 97.5  | 97.5  | 97.7  | 97.0 | 97.2 | 97.8 | 97.4 | 97.8 | 97.2 | 97.6 | 97.9 |

The incident cohorts and associated modalities are determined at the time of ESRD initiation with the 60-day stable modality rule & the 90-day rule.  
Age is as of first transplant date.

Includes U.S. & territories; no unknown or foreign states.

†CMS has only started collecting Hispanic ethnicity data as of April, 1995, so Hispanic data in years prior to 1995 has been left blank.

Patients of unknown age, gender, race, or primary diagnosis are excluded.





**Table I.39**  
**One-year Survival Probabilities: First Transplant Patients (Living Donor), Adjusted**  
*from day of transplant to one year, adjusted for age, gender, race, & primary diagnosis*

|                    | 1989 | 1990 | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 |
|--------------------|------|------|------|------|------|------|------|------|------|------|------|
| 0-17               | 97.8 | 97.5 | 98.8 | 96.2 | 98.5 | 98.6 | 97.7 | 99.2 | 99.6 | 99.1 | 99.5 |
| 18-29              | 97.5 | 99.3 | 98.4 | 97.9 | 98.3 | 99.6 | 98.7 | 99.3 | 98.5 | 99.5 | 99.3 |
| 30-44              | 98.5 | 98.1 | 98.2 | 98.3 | 97.9 | 98.1 | 98.4 | 99.0 | 98.6 | 98.6 | 98.3 |
| 45-54              | 98.2 | 95.4 | 97.6 | 96.9 | 96.3 | 97.2 | 97.1 | 97.0 | 95.5 | 97.6 | 98.4 |
| 55+                | 90.9 | 91.8 | 93.5 | 93.0 | 94.2 | 95.1 | 94.0 | 94.7 | 95.4 | 95.1 | 95.8 |
| Male               | 96.2 | 97.2 | 97.1 | 96.8 | 96.9 | 96.9 | 97.2 | 98.0 | 98.1 | 98.1 | 98.0 |
| Female             | 97.7 | 96.3 | 97.7 | 96.6 | 97.1 | 98.8 | 97.6 | 97.8 | 96.7 | 97.7 | 98.5 |
| White              | 96.9 | 96.6 | 97.3 | 96.8 | 97.1 | 97.9 | 97.1 | 97.9 | 97.4 | 98.2 | 98.2 |
| Black              | 95.4 | 97.1 | 96.6 | 95.3 | 96.0 | 96.9 | 98.0 | 97.7 | 97.0 | 96.7 | 97.9 |
| Other race         | .    | .    | .    | 98.6 | 98.1 | 96.8 | 98.4 | 98.8 | 99.5 | 98.5 | 99.5 |
| Diabetes           | 98.3 | 95.9 | 95.6 | 96.2 | 95.5 | 97.0 | 96.6 | 97.3 | 95.4 | 96.6 | 97.6 |
| Hypertension       | 96.8 | 93.9 | 97.2 | 97.0 | 97.2 | 97.4 | 97.2 | 97.8 | 97.7 | 98.2 | 98.6 |
| Glomerulonephritis | 95.6 | 97.5 | 98.0 | 97.4 | 98.1 | 98.4 | 97.9 | 98.8 | 98.7 | 99.2 | 98.0 |
| Other cause        | 97.1 | 97.9 | 98.1 | 96.4 | 97.1 | 97.7 | 97.5 | 97.5 | 97.8 | 97.8 | 98.5 |
| All                | 96.8 | 96.8 | 97.3 | 96.7 | 97.0 | 97.7 | 97.4 | 97.9 | 97.5 | 98.0 | 98.2 |

The incident cohorts and associated modalities are determined at the time of ESRD initiation with the 60-day stable modality rule & the 90-day rule.  
Age is as of first transplant date.

Includes U.S. & territories; no unknown or foreign states.

Patients of unknown age, gender, race, or primary diagnosis are excluded.

## Standard Errors

|                    | 1989 | 1990 | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 |
|--------------------|------|------|------|------|------|------|------|------|------|------|------|
| 0-17               | 1.10 | 1.15 | 1.02 | 1.53 | 0.77 | 0.84 | 1.03 | 0.57 | 0.49 | 0.58 | 0.37 |
| 18-29              | 0.76 | 0.41 | 0.62 | 0.70 | 0.61 | 0.49 | 0.56 | 0.56 | 0.68 | 0.36 | 0.38 |
| 30-44              | 0.49 | 0.54 | 0.48 | 0.46 | 0.47 | 0.45 | 0.42 | 0.33 | 0.38 | 0.35 | 0.44 |
| 45-54              | 0.89 | 1.47 | 0.93 | 0.94 | 1.00 | 0.76 | 0.73 | 0.67 | 0.84 | 0.61 | 0.49 |
| 55+                | 2.57 | 2.45 | 1.84 | 1.59 | 1.33 | 1.24 | 1.18 | 0.95 | 0.90 | 0.81 | 0.71 |
| Male               | 0.65 | 0.79 | 0.52 | 0.64 | 0.56 | 0.37 | 0.43 | 0.41 | 0.50 | 0.38 | 0.34 |
| Female             | 0.69 | 0.61 | 0.55 | 0.55 | 0.49 | 0.50 | 0.41 | 0.33 | 0.32 | 0.30 | 0.30 |
| White              | 0.52 | 0.51 | 0.44 | 0.44 | 0.40 | 0.34 | 0.38 | 0.32 | 0.33 | 0.27 | 0.28 |
| Black              | 1.75 | 1.31 | 1.23 | 1.25 | 1.04 | 0.93 | 0.70 | 0.68 | 0.70 | 0.78 | 0.63 |
| Other race         | .    | .    | .    | 0.88 | 0.71 | 0.70 | 0.70 | 0.33 | .    | .    | .    |
| Diabetes           | 0.82 | 1.14 | 1.03 | 0.93 | 0.95 | 0.73 | 0.74 | 0.64 | 0.80 | 0.63 | 0.54 |
| Hypertension       | 1.43 | 1.98 | 1.12 | 1.02 | 0.90 | 0.80 | 0.79 | 0.66 | 0.70 | 0.56 | 0.51 |
| Glomerulonephritis | 1.00 | 0.79 | 0.71 | 0.72 | 0.60 | 0.56 | 0.57 | 0.41 | 0.40 | 0.32 | 0.47 |
| Other cause        | 0.78 | 0.63 | 0.62 | 0.74 | 0.65 | 0.53 | 0.53 | 0.54 | 0.46 | 0.44 | 0.38 |
| All                | 0.50 | 0.47 | 0.40 | 0.38 | 0.36 | 0.31 | 0.33 | 0.27 | 0.28 | 0.25 | 0.24 |

**Table I.40**  
**Two-year Survival Probabilities: First Transplant Patients (Living Donor), Unadjusted**  
*from day of transplant to two years, by age, gender, race, ethnicity, & primary diagnosis*

|                    | 1988 | 1989 | 1990  | 1991  | 1992 | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 |
|--------------------|------|------|-------|-------|------|------|------|------|------|------|------|
| 0-17               | 93.3 | 97.7 | 96.9  | 98.8  | 96.0 | 97.4 | 98.6 | 96.5 | 98.4 | 97.8 | 98.6 |
| 18-29              | 97.5 | 95.9 | 99.1  | 97.9  | 96.7 | 98.1 | 99.0 | 98.0 | 98.6 | 98.4 | 99.0 |
| 30-44              | 95.3 | 96.3 | 96.6  | 95.9  | 96.8 | 96.8 | 96.7 | 96.7 | 97.1 | 97.5 | 97.3 |
| 45-54              | 93.4 | 95.3 | 92.2  | 95.3  | 95.2 | 94.1 | 93.2 | 95.7 | 94.3 | 93.8 | 95.2 |
| 55+                | 83.3 | 88.2 | 87.4  | 89.9  | 91.1 | 90.9 | 90.2 | 88.5 | 91.4 | 93.1 | 92.8 |
| Male               | 94.7 | 94.9 | 96.5  | 96.0  | 95.9 | 96.2 | 95.5 | 95.4 | 96.2 | 96.6 | 96.3 |
| Female             | 94.9 | 96.6 | 95.6  | 96.3  | 95.5 | 95.7 | 96.5 | 95.5 | 95.6 | 95.2 | 96.2 |
| White              | 94.6 | 95.8 | 96.0  | 96.0  | 96.1 | 96.3 | 96.5 | 95.3 | 96.0 | 96.0 | 96.5 |
| Black              | 95.8 | 93.3 | 96.0  | 95.6  | 93.4 | 94.0 | 93.6 | 96.1 | 94.6 | 95.0 | 94.6 |
| Other race         | 95.5 | 98.5 | 100.0 | 100.0 | 97.9 | 98.1 | 94.3 | 95.9 | 98.2 | 98.9 | 97.8 |
| †Hispanic          |      |      |       |       |      |      |      |      | 96.6 | 98.2 | 97.7 |
| †Non-Hispanic      |      |      |       |       |      |      |      |      | 95.9 | 95.7 | 96.0 |
| Diabetes           | 91.6 | 94.8 | 94.2  | 91.8  | 92.9 | 93.2 | 94.2 | 91.8 | 93.5 | 91.9 | 92.9 |
| Hypertension       | 94.0 | 96.2 | 91.8  | 96.2  | 95.0 | 94.6 | 95.2 | 94.8 | 94.1 | 95.7 | 96.6 |
| Glomerulonephritis | 96.9 | 95.5 | 97.2  | 97.6  | 97.3 | 98.1 | 97.6 | 96.6 | 97.8 | 98.5 | 98.4 |
| Other cause        | 94.9 | 96.0 | 97.2  | 97.6  | 96.3 | 96.6 | 95.9 | 96.7 | 96.6 | 96.4 | 96.8 |
| All                | 94.8 | 95.6 | 96.1  | 96.1  | 95.8 | 96.0 | 95.9 | 95.5 | 95.9 | 96.0 | 96.3 |

The incident cohorts and associated modalities are determined at the time of ESRD initiation with the 60-day stable modality rule & the 90-day rule. Age is as of first transplant date.

†CMS has only started collecting Hispanic ethnicity data as of April, 1995, so Hispanic data in years prior to 1995 has been left blank.

Includes U.S. & territories; no unknown or foreign states.

Patients of unknown age, gender, race, or primary diagnosis are excluded.



**Table I.41**  
**Two-year Survival Probabilities: First Transplant Patients (Living Donor), Adjusted**  
*from day of transplant to two years, adjusted for age, gender, race, & primary diagnosis*

|                    | 1988 | 1989 | 1990 | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 |
|--------------------|------|------|------|------|------|------|------|------|------|------|------|
| 0-17               | 94.2 | 98.0 | 97.4 | 98.9 | 96.6 | 97.7 | 98.8 | 97.0 | 98.6 | 98.1 | 98.9 |
| 18-29              | 97.3 | 95.6 | 99.1 | 97.7 | 96.4 | 97.9 | 98.9 | 97.7 | 98.4 | 98.0 | 98.8 |
| 30-44              | 95.8 | 96.6 | 96.8 | 96.3 | 97.0 | 97.1 | 96.9 | 96.8 | 97.3 | 97.6 | 97.5 |
| 45-54              | 93.2 | 95.4 | 92.2 | 95.5 | 95.5 | 94.4 | 93.8 | 95.8 | 94.9 | 94.3 | 95.5 |
| 55+                | 83.6 | 88.5 | 87.7 | 90.7 | 91.4 | 91.8 | 90.9 | 89.5 | 92.1 | 93.7 | 93.7 |
| Male               | 92.9 | 93.5 | 95.5 | 95.3 | 95.3 | 95.8 | 95.3 | 95.4 | 96.4 | 96.9 | 96.9 |
| Female             | 93.5 | 95.9 | 94.6 | 95.9 | 95.4 | 95.5 | 96.4 | 95.6 | 95.8 | 95.7 | 96.7 |
| White              | 92.8 | 94.8 | 95.0 | 95.4 | 95.6 | 95.9 | 96.3 | 95.3 | 96.2 | 96.3 | 97.0 |
| Black              | 94.7 | 91.5 | 94.3 | 95.0 | 93.2 | 93.8 | 93.4 | 96.3 | 95.0 | 95.5 | 95.2 |
| Other race         | 93.1 | 98.0 |      |      | 97.3 | 98.1 | 94.2 | 95.1 | 98.1 | 98.9 | 98.0 |
| Diabetes           | 90.8 | 94.5 | 93.9 | 92.2 | 93.4 | 93.9 | 94.8 | 93.2 | 94.8 | 93.8 | 94.6 |
| Hypertension       | 94.3 | 96.2 | 92.0 | 96.4 | 95.8 | 95.3 | 96.0 | 95.9 | 95.7 | 97.0 | 97.5 |
| Glomerulonephritis | 95.7 | 94.0 | 96.1 | 96.8 | 96.8 | 97.5 | 96.9 | 96.2 | 97.5 | 98.4 | 98.3 |
| Other cause        | 92.5 | 94.7 | 96.2 | 96.8 | 95.4 | 95.8 | 95.2 | 96.2 | 96.3 | 96.2 | 96.7 |
| All                | 93.1 | 94.5 | 95.1 | 95.6 | 95.3 | 95.7 | 95.8 | 95.5 | 96.2 | 96.4 | 96.8 |

The incident cohorts and associated modalities are determined at the time of ESRD initiation with the 60-day stable modality rule & the 90-day rule.  
Age is as of first transplant date.  
Patients of unknown age, gender, race, or primary diagnosis are excluded.  
Includes U.S. & territories; no unknown or foreign states.

## Standard Errors

|                    | 1988 | 1989 | 1990 | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 |
|--------------------|------|------|------|------|------|------|------|------|------|------|------|
| 0-17               | 1.62 | 1.07 | 1.02 | 1.20 | 0.86 | 0.75 | 0.57 | .    | .    | .    | .    |
| 18-29              | 0.82 | 1.05 | 0.90 | 1.02 | 1.13 | 0.75 | 0.81 | 0.76 | 0.68 | 0.78 | 0.54 |
| 30-44              | 0.82 | 0.70 | 0.69 | 0.66 | 0.58 | 0.59 | 0.56 | 0.56 | 0.53 | 0.51 | 0.48 |
| 45-54              | 1.88 | 1.53 | 2.01 | 1.18 | 1.15 | 1.16 | 1.20 | 0.93 | 0.88 | 0.95 | 0.79 |
| 55+                | 4.08 | 2.83 | 3.03 | 2.06 | 1.69 | 1.59 | 1.83 | 2.01 | 1.35 | 0.99 | 0.90 |
| Male               | 1.19 | 0.81 | 0.90 | 0.74 | 0.71 | 0.67 | 0.61 | 0.63 | 0.58 | 0.55 | 0.48 |
| Female             | 1.01 | 0.88 | 0.79 | 0.66 | 0.67 | 0.58 | 0.57 | 0.52 | 0.47 | 0.39 | 0.39 |
| White              | 0.82 | 0.69 | 0.67 | 0.58 | 0.53 | 0.48 | 0.45 | 0.46 | 0.43 | 0.41 | 0.33 |
| Black              | 1.90 | 2.35 | 1.98 | 1.40 | 1.54 | 1.32 | 1.60 | 0.99 | 0.99 | 0.91 | 0.91 |
| Other race         | 3.67 | 2.10 | .    | .    | 0.95 | 0.97 | 1.13 | .    | .    | .    | .    |
| Diabetes           | 1.72 | 1.36 | 1.34 | 1.24 | 1.24 | 1.04 | 0.98 | 1.03 | 0.90 | 0.88 | 0.77 |
| Hypertension       | 2.26 | 2.87 | 1.19 | 1.18 | 1.06 | 0.96 | 0.98 | 1.04 | 0.72 | 0.66 | .    |
| Glomerulonephritis | 1.18 | 1.32 | 1.00 | 0.90 | 0.87 | 0.81 | 0.84 | 0.95 | 0.64 | 0.45 | 0.47 |
| Other cause        | 1.44 | 1.02 | 0.86 | 0.74 | 0.87 | 0.77 | 0.79 | 0.63 | 0.60 | 0.61 | 0.57 |
| All                | 0.77 | 0.64 | 0.60 | 0.50 | 0.47 | 0.44 | 0.44 | 0.41 | 0.36 | 0.33 | 0.30 |

**Table I.42**  
**Five-year Survival Probabilities: First Transplant Patients (Living Donor), Unadjusted**  
*from day of transplant to five years, by age, gender, race, ethnicity, & primary diagnosis*

|                    | 1985 | 1986 | 1987 | 1988 | 1989 | 1990 | 1991 | 1992 | 1993 | 1994 | 1995 |
|--------------------|------|------|------|------|------|------|------|------|------|------|------|
| 0-17               | 96.8 | 94.2 | 94.1 | 90.3 | 95.9 | 93.8 | 97.1 | 93.0 | 94.4 | 98.1 | 95.4 |
| 18-29              | 91.3 | 90.3 | 91.4 | 93.5 | 93.4 | 97.0 | 95.4 | 93.3 | 95.1 | 95.6 | 93.4 |
| 30-44              | 87.0 | 89.6 | 88.8 | 87.2 | 89.7 | 90.5 | 89.9 | 91.4 | 90.3 | 90.6 | 92.4 |
| 45-54              | 81.4 | 88.8 | 87.7 | 84.5 | 85.0 | 82.2 | 83.6 | 85.8 | 83.9 | 84.8 | 89.0 |
| 55+                | 83.1 | 85.1 | 81.0 | 69.2 | 73.1 | 72.3 | 79.2 | 81.0 | 71.3 | 71.4 | 75.8 |
| Male               | 87.0 | 88.9 | 88.4 | 88.9 | 89.7 | 91.0 | 90.4 | 90.4 | 88.5 | 88.4 | 89.9 |
| Female             | 88.6 | 90.4 | 89.3 | 87.2 | 89.6 | 89.4 | 90.4 | 89.1 | 88.7 | 89.6 | 89.3 |
| White              | 87.8 | 89.3 | 88.6 | 89.3 | 89.9 | 90.0 | 90.6 | 90.4 | 88.8 | 90.0 | 89.4 |
| Black              | 86.9 | 90.3 | 89.8 | 82.1 | 85.6 | 91.4 | 87.5 | 86.1 | 86.6 | 85.7 | 89.9 |
| Other race         | 86.7 | 90.2 | 88.6 | 86.4 | 97.0 | 93.9 | 95.4 | 92.6 | 90.7 | 83.7 | 91.8 |
| †Hispanic          |      |      |      |      |      |      |      |      |      |      |      |
| †Non-Hispanic      |      |      |      |      |      |      |      |      |      |      |      |
| Diabetes           | 75.1 | 80.7 | 78.8 | 81.6 | 84.3 | 83.5 | 79.7 | 81.6 | 79.4 | 80.8 | 81.3 |
| Hypertension       | 90.5 | 90.7 | 90.9 | 82.1 | 86.0 | 83.7 | 89.5 | 89.7 | 86.5 | 86.1 | 87.2 |
| Glomerulonephritis | 90.5 | 92.1 | 92.2 | 93.7 | 92.2 | 93.5 | 93.8 | 93.2 | 93.7 | 94.0 | 93.8 |
| Other cause        | 91.2 | 91.9 | 90.8 | 88.8 | 91.4 | 92.8 | 94.2 | 91.6 | 90.5 | 90.8 | 91.6 |
| All                | 87.6 | 89.5 | 88.8 | 88.2 | 89.7 | 90.3 | 90.4 | 89.9 | 88.6 | 88.9 | 89.7 |

The incident cohorts and associated modalities are determined at the time of ESRD initiation with the 60-day stable modality rule & the 90-day rule. Age is as of first transplant date.

†CMS has only started collecting Hispanic ethnicity data as of April, 1995, so Hispanic data in years prior to 1995 has been left blank.

Includes U.S. & territories; no unknown or foreign states.

Patients of unknown age, gender, race, or primary diagnosis are excluded.





**Table I.43**  
**Five-year Survival Probabilities: First Transplant Patients (Living Donor), Adjusted**  
*from day of transplant to five years, adjusted for age, gender, race, & primary diagnosis*

|                    | 1985 | 1986 | 1987 | 1988 | 1989 | 1990 | 1991 | 1992 | 1993 | 1994 | 1995 |
|--------------------|------|------|------|------|------|------|------|------|------|------|------|
| 0-17               | 96.5 | 93.1 | 93.3 | 89.2 | 95.4 | 93.2 | 96.7 | 92.1 | 93.7 | 97.8 | 94.8 |
| 18-29              | 91.3 | 90.1 | 90.8 | 93.0 | 92.8 | 96.8 | 95.0 | 92.6 | 94.5 | 95.0 | 92.2 |
| 30-44              | 87.9 | 90.6 | 90.1 | 88.8 | 90.6 | 91.1 | 90.9 | 91.9 | 91.2 | 91.3 | 92.7 |
| 45-54              | 81.4 | 88.7 | 87.8 | 84.2 | 85.2 | 82.4 | 84.6 | 86.7 | 84.7 | 86.2 | 89.5 |
| 55+                | 82.8 | 84.1 | 80.4 | 69.9 | 73.8 | 73.0 | 80.7 | 81.3 | 73.4 | 73.0 | 77.4 |
| Male               | 85.7 | 87.8 | 87.5 | 85.8 | 87.4 | 88.8 | 88.9 | 89.2 | 87.6 | 87.9 | 89.9 |
| Female             | 86.7 | 89.4 | 88.7 | 84.4 | 87.7 | 87.4 | 89.5 | 88.8 | 88.3 | 89.6 | 89.7 |
| White              | 86.2 | 88.3 | 87.7 | 86.5 | 87.8 | 88.0 | 89.3 | 89.4 | 87.8 | 89.5 | 89.4 |
| Black              | 85.5 | 89.5 | 89.7 | 78.7 | 82.4 | 88.5 | 86.3 | 86.1 | 86.4 | 85.4 | 90.5 |
| Other race         | 84.7 | 87.8 | 86.8 | 80.7 | 96.2 | 92.6 | 94.4 | 90.3 | 90.6 | 83.5 | 90.2 |
| Diabetes           | 74.3 | 79.7 | 78.6 | 79.8 | 83.5 | 82.7 | 80.2 | 82.3 | 80.9 | 82.3 | 83.8 |
| Hypertension       | 91.0 | 91.6 | 91.8 | 82.8 | 86.1 | 84.1 | 90.0 | 91.2 | 88.2 | 88.1 | 89.8 |
| Glomerulonephritis | 88.5 | 91.1 | 91.1 | 91.5 | 89.8 | 91.2 | 92.0 | 91.9 | 92.1 | 92.6 | 93.2 |
| Other cause        | 90.2 | 91.1 | 90.2 | 84.1 | 88.6 | 90.4 | 92.4 | 89.8 | 88.6 | 89.2 | 90.5 |
| All                | 86.0 | 88.4 | 88.0 | 85.2 | 87.4 | 88.1 | 89.1 | 89.0 | 87.9 | 88.6 | 89.7 |

The incident cohorts and associated modalities are determined at the time of ESRD initiation with the 60-day stable modality rule & the 90-day rule.

Age is as of first transplant date.

Includes U.S. & territories; no unknown or foreign states.

Patients of unknown age, gender, race, or primary diagnosis are excluded.

## Standard Errors

|                    | 1985 | 1986 | 1987 | 1988 | 1989 | 1990 | 1991 | 1992 | 1993 | 1994 | 1995 |
|--------------------|------|------|------|------|------|------|------|------|------|------|------|
| 0-17               | 1.67 | 2.02 | 2.40 | 3.04 | 1.86 | 2.57 | 2.51 | 2.33 | 2.26 | 1.87 | 1.57 |
| 18-29              | 1.19 | 1.30 | 1.34 | 1.33 | 1.27 | 0.83 | 1.09 | 1.32 | 1.00 | 1.11 | 1.33 |
| 30-44              | 1.21 | 0.90 | 0.96 | 1.26 | 1.16 | 1.09 | 1.00 | 0.94 | 0.97 | 0.91 | 0.86 |
| 45-54              | 2.09 | 1.61 | 1.58 | 2.83 | 2.38 | 2.49 | 2.13 | 1.82 | 1.79 | 1.56 | 1.36 |
| 55+                | 2.89 | 2.31 | 2.54 | 5.27 | 4.26 | 3.72 | 2.89 | 2.62 | 2.53 | 2.52 | 2.07 |
| Male               | 1.25 | 1.05 | 1.07 | 1.51 | 1.31 | 1.28 | 1.08 | 1.01 | 1.04 | 0.95 | 0.85 |
| Female             | 1.10 | 0.84 | 0.91 | 1.21 | 1.20 | 1.09 | 1.06 | 0.95 | 0.88 | 0.90 | 0.78 |
| White              | 0.93 | 0.77 | 0.84 | 1.04 | 0.93 | 0.92 | 0.81 | 0.81 | 0.78 | 0.75 | 0.67 |
| Black              | 2.16 | 1.83 | 1.69 | 3.02 | 2.96 | 2.60 | 2.25 | 2.05 | 1.78 | 1.99 | 1.45 |
| Other race         | 4.32 | 3.16 | 3.76 | 5.85 | 3.01 | 3.14 | 3.32 | 3.45 | 4.72 | 4.52 | 2.47 |
| Diabetes           | 2.30 | 1.89 | 1.87 | 2.46 | 2.10 | 2.09 | 2.00 | 1.93 | 1.77 | 1.62 | 1.52 |
| Hypertension       | 1.77 | 1.70 | 1.65 | 3.09 | 2.62 | 2.73 | 1.89 | 1.64 | 1.72 | 1.66 | 1.40 |
| Glomerulonephritis | 1.40 | 1.08 | 1.14 | 1.51 | 1.48 | 1.38 | 1.25 | 1.14 | 1.18 | 1.12 | 1.02 |
| Other cause        | 1.15 | 0.97 | 1.07 | 1.67 | 1.42 | 1.33 | 1.12 | 1.16 | 1.21 | 1.19 | 1.01 |
| All                | 0.82 | 0.69 | 0.69 | 1.02 | 0.91 | 0.85 | 0.74 | 0.70 | 0.71 | 0.63 | 0.58 |

**Table I.44**  
**Ten-year Survival Probabilities: First Transplant Patients (Living Donor), Unadjusted**  
*from day of transplant to ten years, by age, gender, race, & primary diagnosis*

|                    | 1980 | 1981 | 1982 | 1983 | 1984 | 1985 | 1986 | 1987 | 1988 | 1989 | 1990 |
|--------------------|------|------|------|------|------|------|------|------|------|------|------|
| 0-17               | 77.9 | 86.8 | 83.9 | 80.2 | 88.8 | 93.5 | 86.3 | 87.8 | 87.7 | 91.3 | 88.7 |
| 18-29              | 87.3 | 83.7 | 81.5 | 80.6 | 81.4 | 81.7 | 81.7 | 80.1 | 88.0 | 86.0 | 88.5 |
| 30-44              | 69.7 | 66.2 | 65.6 | 70.5 | 72.0 | 72.9 | 73.9 | 74.4 | 71.2 | 77.5 | 79.1 |
| 45-54              | 48.8 | 54.1 | 57.3 | 63.1 | 64.4 | 62.2 | 68.1 | 64.5 | 64.6 | 65.9 | 56.6 |
| 55+                | 38.5 | 45.5 | 39.7 | 60.0 | 59.8 | 52.0 | 56.3 | 55.8 | 46.2 | 44.5 | 39.5 |
| Male               | 75.1 | 69.5 | 69.7 | 72.3 | 74.1 | 71.9 | 71.7 | 71.8 | 76.5 | 77.0 | 77.5 |
| Female             | 74.2 | 75.7 | 72.6 | 75.4 | 75.9 | 75.3 | 76.9 | 74.4 | 76.0 | 78.8 | 76.4 |
| White              | 75.7 | 72.7 | 70.6 | 74.6 | 75.9 | 74.3 | 73.5 | 72.8 | 77.2 | 77.6 | 77.9 |
| Black              | 71.6 | 65.8 | 72.1 | 67.1 | 66.2 | 67.0 | 71.9 | 72.6 | 70.0 | 74.2 | 71.2 |
| Other race         | 62.1 | 73.2 | 69.0 | 76.9 | 82.4 | 73.5 | 82.1 | 74.2 | 78.8 | 89.6 | 77.3 |
| Diabetes           | 51.9 | 46.2 | 46.4 | 46.9 | 50.7 | 51.5 | 54.7 | 55.2 | 60.9 | 62.6 | 63.0 |
| Hypertension       | 70.9 | 74.4 | 65.1 | 74.8 | 76.3 | 71.5 | 71.7 | 71.6 | 68.7 | 72.6 | 66.7 |
| Glomerulonephritis | 82.7 | 80.4 | 81.5 | 82.0 | 78.7 | 81.1 | 81.6 | 79.4 | 83.2 | 83.9 | 82.1 |
| Other cause        | 75.3 | 72.6 | 73.5 | 77.3 | 82.0 | 79.2 | 78.5 | 77.7 | 80.9 | 81.7 | 82.5 |
| All                | 74.7 | 72.0 | 70.7 | 73.5 | 74.8 | 73.2 | 73.7 | 72.8 | 76.3 | 77.7 | 77.0 |

The incident cohorts and associated modalities are determined at the time of ESRD initiation with the 60-day stable modality rule & the 90-day rule.  
Age is as of first transplant date.

Includes U.S. & territories; no unknown or foreign states.

Patients of unknown age, gender, race, or primary diagnosis are excluded.

## Standard Errors

|                    | 1980  | 1981 | 1982 | 1983 | 1984 | 1985 | 1986 | 1987 | 1988 | 1989 | 1990 |
|--------------------|-------|------|------|------|------|------|------|------|------|------|------|
| 0-17               | 4.20  | 3.10 | 3.10 | 3.00 | 2.20 | 1.80 | 2.50 | 2.20 | 2.30 | 1.90 | 2.30 |
| 18-29              | 1.90  | 2.00 | 1.80 | 1.80 | 1.80 | 1.70 | 1.70 | 1.80 | 1.60 | 1.70 | 1.50 |
| 30-44              | 2.70  | 2.30 | 2.10 | 2.00 | 1.80 | 1.70 | 1.40 | 1.50 | 1.90 | 1.80 | 1.60 |
| 45-54              | 5.40  | 4.30 | 3.60 | 3.40 | 3.10 | 2.50 | 2.20 | 2.30 | 3.50 | 3.20 | 3.30 |
| 55+                | 12.60 | 8.50 | 6.10 | 5.60 | 4.60 | 3.70 | 3.10 | 3.00 | 5.60 | 4.50 | 4.40 |
| Male               | 2.00  | 1.90 | 1.60 | 1.50 | 1.40 | 1.30 | 1.20 | 1.20 | 1.40 | 1.40 | 1.40 |
| Female             | 2.40  | 2.10 | 2.00 | 1.80 | 1.70 | 1.60 | 1.40 | 1.50 | 1.80 | 1.60 | 1.60 |
| White              | 1.70  | 1.50 | 1.40 | 1.30 | 1.20 | 1.10 | 1.00 | 1.10 | 1.20 | 1.20 | 1.10 |
| Black              | 4.60  | 4.40 | 3.20 | 3.10 | 3.10 | 2.80 | 2.50 | 2.40 | 3.30 | 3.10 | 3.20 |
| Other race         | 8.80  | 5.20 | 6.00 | 5.80 | 4.40 | 4.80 | 3.40 | 3.80 | 5.00 | 3.70 | 5.10 |
| †Hispanic          |       |      |      |      |      |      |      |      |      |      |      |
| †Non-Hispanic      |       |      |      |      |      |      |      |      |      |      |      |
| Diabetes           | 5.50  | 4.50 | 3.30 | 3.20 | 3.00 | 2.50 | 2.20 | 2.30 | 2.80 | 2.80 | 2.70 |
| Hypertension       | 6.10  | 4.60 | 3.90 | 3.50 | 3.20 | 3.00 | 2.70 | 2.70 | 4.00 | 3.50 | 3.90 |
| Glomerulonephritis | 2.50  | 2.30 | 1.90 | 1.80 | 1.80 | 1.60 | 1.50 | 1.60 | 1.70 | 1.70 | 1.70 |
| Other cause        | 2.10  | 2.00 | 1.90 | 1.70 | 1.50 | 1.50 | 1.40 | 1.40 | 1.70 | 1.60 | 1.50 |
| All                | 1.50  | 1.40 | 1.20 | 1.10 | 1.10 | 1.00 | 0.90 | 0.90 | 1.10 | 1.10 | 1.00 |

**Table I.45**  
**Ten-year Survival Probabilities: First Transplant Patients (Living Donor), Adjusted**  
*from day of transplant to ten years, adjusted for age, gender, race, & primary diagnosis*

|                    | 1980 | 1981 | 1982 | 1983 | 1984 | 1985 | 1986 | 1987 | 1988 | 1989 | 1990 |
|--------------------|------|------|------|------|------|------|------|------|------|------|------|
| 0-17               | 75.0 | 84.1 | 81.0 | 76.9 | 87.0 | 92.4 | 84.1 | 85.6 | 85.3 | 89.7 | 87.2 |
| 18-29              | 84.4 | 79.5 | 80.2 | 79.0 | 80.2 | 81.7 | 81.3 | 78.9 | 87.3 | 85.1 | 88.0 |
| 30-44              | 68.8 | 65.9 | 66.5 | 71.8 | 73.4 | 74.4 | 76.1 | 77.1 | 74.4 | 79.3 | 80.4 |
| 45-54              | 45.9 | 53.5 | 55.5 | 61.4 | 63.3 | 62.6 | 67.9 | 64.9 | 64.1 | 66.6 | 57.4 |
| 55+                | 38.6 | 44.0 | 40.9 | 57.9 | 58.3 | 51.3 | 55.2 | 54.6 | 47.2 | 44.8 | 40.0 |
| Male               | 64.4 | 60.4 | 62.9 | 65.9 | 69.1 | 70.1 | 70.4 | 70.8 | 71.3 | 72.7 | 73.0 |
| Female             | 64.2 | 68.7 | 65.3 | 69.4 | 70.9 | 72.2 | 75.2 | 73.8 | 71.8 | 75.4 | 72.7 |
| White              | 65.1 | 63.5 | 63.6 | 67.9 | 71.1 | 72.0 | 72.2 | 71.7 | 72.5 | 74.0 | 74.2 |
| Black              | 62.4 | 62.7 | 64.6 | 61.7 | 59.5 | 63.5 | 69.7 | 71.9 | 63.9 | 68.3 | 63.6 |
| Other race         | 52.9 | 60.7 | 60.5 | 68.9 | 78.7 | 71.4 | 80.0 | 71.9 | 72.3 | 86.9 | 72.7 |
| Diabetes           | 47.2 | 44.8 | 41.9 | 43.3 | 47.1 | 50.4 | 53.7 | 55.3 | 57.6 | 61.0 | 60.9 |
| Hypertension       | 67.4 | 74.1 | 64.1 | 76.9 | 77.6 | 73.3 | 75.4 | 74.7 | 69.8 | 73.1 | 68.1 |
| Glomerulonephritis | 73.5 | 73.1 | 74.3 | 76.1 | 73.9 | 77.5 | 79.6 | 77.3 | 78.2 | 79.3 | 76.1 |
| Other cause        | 66.9 | 64.0 | 68.1 | 70.9 | 77.6 | 76.9 | 76.9 | 76.2 | 73.7 | 76.2 | 77.3 |
| All                | 64.2 | 63.5 | 63.8 | 67.3 | 69.9 | 70.8 | 72.3 | 71.9 | 71.5 | 73.7 | 72.7 |

The incident cohorts and associated modalities are determined at the time of ESRD initiation with the 60-day stable modality rule & the 90-day rule.  
Age is as of first transplant date.

Includes U.S. & territories; no unknown or foreign states.

Patients of unknown age, gender, race, or primary diagnosis are excluded.

## Standard Errors

|                    | 1980  | 1981 | 1982 | 1983 | 1984 | 1985 | 1986 | 1987 | 1988 | 1989 | 1990 |
|--------------------|-------|------|------|------|------|------|------|------|------|------|------|
| 0-17               | 4.84  | 3.63 | 3.81 | 3.85 | 2.65 | 2.37 | 3.09 | 2.79 | 3.07 | 2.39 | 2.68 |
| 18-29              | 2.26  | 2.30 | 1.85 | 1.82 | 1.74 | 1.67 | 1.60 | 1.76 | 1.62 | 1.70 | 1.51 |
| 30-44              | 2.79  | 2.17 | 2.03 | 1.85 | 1.79 | 1.53 | 1.30 | 1.36 | 1.71 | 1.56 | 1.50 |
| 45-54              | 5.90  | 4.13 | 3.44 | 3.17 | 2.87 | 2.37 | 2.16 | 2.12 | 3.63 | 3.25 | 3.28 |
| 55+                | 13.61 | 8.52 | 6.18 | 5.79 | 4.68 | 3.81 | 2.94 | 3.14 | 5.22 | 4.50 | 4.42 |
| Male               | 2.75  | 2.44 | 2.07 | 1.89 | 1.80 | 1.45 | 1.32 | 1.43 | 1.96 | 1.69 | 1.70 |
| Female             | 2.23  | 1.94 | 1.56 | 1.59 | 1.45 | 1.17 | 1.09 | 1.24 | 1.50 | 1.37 | 1.41 |
| White              | 4.44  | 3.38 | 2.83 | 2.65 | 2.31 | 2.00 | 1.82 | 1.87 | 2.55 | 2.26 | 2.29 |
| Black              | 1.87  | 1.60 | 1.41 | 1.36 | 1.29 | 1.04 | 0.91 | 1.00 | 1.29 | 1.14 | 1.18 |
| Other race         | 5.21  | 4.48 | 3.51 | 3.27 | 3.26 | 2.91 | 2.40 | 2.46 | 3.49 | 3.25 | 3.37 |
| Diabetes           | 7.69  | 5.73 | 7.23 | 6.44 | 5.20 | 5.38 | 4.12 | 3.78 | 6.85 | 5.42 | 5.47 |
| Hypertension       | 5.38  | 4.29 | 3.44 | 3.42 | 3.01 | 2.41 | 2.23 | 2.40 | 2.94 | 2.67 | 2.75 |
| Glomerulonephritis | 6.16  | 4.55 | 3.89 | 3.24 | 2.95 | 2.86 | 2.44 | 2.36 | 3.65 | 3.18 | 3.49 |
| Other cause        | 3.14  | 2.80 | 2.35 | 2.16 | 1.89 | 1.76 | 1.47 | 1.55 | 2.00 | 2.02 | 1.94 |
| All                | 2.43  | 2.22 | 2.08 | 1.93 | 1.77 | 1.62 | 1.39 | 1.42 | 2.08 | 1.77 | 1.71 |
|                    | 1.76  | 1.55 | 1.32 | 1.10 | 1.09 | 0.97 | 0.86 | 0.90 | 1.18 | 1.06 | 1.13 |