End stage renal disease (ESRD) is defined as a permanent loss of the kidneys' ability to filter wastes from the circulatory system. Its prevalence and treatment costs have increased substantially over the past few decades. Once kidney function declines to less than 12%–15%, patient survival is dependent on renal replacement therapy—either ongoing dialysis treatments or kidney transplant. For eligible candidates, transplant and subsequent anti-rejection therapy is preferable because it eliminates the need for dialysis, reduces mortality, improves quality of life, and is less costly than dialysis. (http://www.cdc.gov/nchs/data/hus/hus07.pdf#highlights)

In the Southeast, hypertension is the most common cause of ESRD, followed closely by diabetes mellitus occurring most frequently in older minority patients, particularly blacks. ESRD almost always follows chronic kidney failure, which may exist for 10-20 years or more before progressing to become ESRD. (http://www.kidney.org) In 2005 in the U.S., more than 485,000 people have ESRD. Of these, more than 341,000 are dialysis patients and more than 140,000 have a functioning kidney transplant. (http://www.kidney.org/news/newsroom)

In 2005, the number of new patients with kidney failure in the U.S. in 2005 was 106,912. (http://kidney.niddk.nih.gov/kudiseases/pubs/kustats/)

In 2005, the costs of ESRD treatment totaled $32 billion in public and private spending. (http://kidney.niddk.nih.gov/kudiseases/pubs/kustats/) Although the majority of the costs of kidney transplantation are paid by Medicare’s End-Stage Renal Disease program or by private insurance, the ability to pay for transplantation does not ensure access to a kidney.

In 2005, 17,429 kidney transplants were performed, compared to just over 7,500 in 1985, and 12,000 in 1995. As of the end of 2007, there were 74,182 individuals awaiting a kidney transplant. (http://kidney.niddk.nih.gov/kudiseases/pubs/kustats/)

In fiscal year 2007:
- 8,795 Medicaid recipients had paid claims associated with a primary diagnosis of end stage renal disease or 1.05% of the total Medicaid recipient population.
- Total medical expenditures for this population were $139,087,290, accounting for 4.20% of the state Medicaid expenditures.
- Using paid claims, statewide prevalence rates for ESRD between 2005 and 2007 increased by 3.0 cases per 1,000 recipients.

### South Carolina Medicaid Recipients

#### SC Population Demographics in 2007

<table>
<thead>
<tr>
<th>Ages</th>
<th>Race</th>
<th>Gender</th>
<th>Geographic Residence</th>
</tr>
</thead>
<tbody>
<tr>
<td>18 and Under</td>
<td>180 Black</td>
<td>Female</td>
<td>5,900 Rural</td>
</tr>
<tr>
<td>19-64</td>
<td>4,952 White</td>
<td>Male</td>
<td>2,041 Urban</td>
</tr>
<tr>
<td>65+</td>
<td>3,663 Hispanic</td>
<td>53</td>
<td>Unclassified</td>
</tr>
<tr>
<td>Other</td>
<td>801</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Counties With the Largest Numbers Related to End Stage Renal Disease

<table>
<thead>
<tr>
<th>Top 10 counties by prevalence (Number of cases per 1,000 Medicaid recipients)</th>
<th>Top 10 counties by Medicaid dollars paid</th>
</tr>
</thead>
<tbody>
<tr>
<td>Allendale</td>
<td>Richland</td>
</tr>
<tr>
<td>Bamberg</td>
<td>Charleston</td>
</tr>
<tr>
<td>Marlboro</td>
<td>Spartanburg</td>
</tr>
<tr>
<td>Georgetown</td>
<td>Florence</td>
</tr>
<tr>
<td>Barnwell</td>
<td>Greenville</td>
</tr>
<tr>
<td>Calhoun</td>
<td>$11,926,041</td>
</tr>
<tr>
<td>McCormick</td>
<td>$11,300,434</td>
</tr>
<tr>
<td>Hampton</td>
<td>$8,860,891</td>
</tr>
<tr>
<td>Williamsburg</td>
<td>$8,555,936</td>
</tr>
<tr>
<td>Clarendon</td>
<td>$8,425,136</td>
</tr>
</tbody>
</table>


Developed under contract for the SC Department of Health and Human Services. Factsheet is available online at www ifs.sc.edu/HSR/Factsheets.
End Stage Renal Disease and SC Medicaid Recipients
SFY 2007 Fact Sheet

Prevalence of ESRD among South Carolina Medicaid Recipients by County
(N = 8,795)

ESRD Cases per 1,000 Medicaid Recipients

- 5.6 - 5.9
- 6.0 - 8.9
- 9.0 - 11.9
- 12.0 - 19.3

# Total Cases per County

Data Source: South Carolina Medicaid Information System, FY2007.
Created by the University of South Carolina, Institute for Families in Society, June 2008.

Change in Prevalence of ESRD from 2005 to 2007 among South Carolina Medicaid Recipients by County

Change in ESRD Cases per 1,000 Medicaid Recipients

- -1.0 - 1.0 Little or No Change
- 1.1 - 4.9 Increased Prevalence
- 5.0 - 8.2

Data Source: South Carolina Medicaid Information System, FY2007.
Created by the University of South Carolina, Institute for Families in Society, June 2008.