increased public awareness and interest, together with government financing of health services, have created a need for measures of health status that can aid in planning and evaluating health care delivery systems. From a developmental perspective, the general consensus among health researchers is that traditional measures of health status, morbidity and mortality, are too insensitive to other outside influences to be of much use in evaluating health services. Therefore, a more comprehensive method of measuring health status is needed.

The Federal government is moving to utilize health indicators as a basis for national health planning. One federal program which evaluates several health and social indicators identifies medically underserved areas. The U.S. Public Health Service Act defines a "medically underserved population" as the population of a rural or urban area with a shortage of personal health services. Such designated areas receive national priority in meeting their health care needs and are targets for special federal health initiative programs.

A medically underserved area (MUA) is determined through use of an index of medical underservice (INU). The INU is calculated by applying a weighted value to the following indicators: infant mortality rate, ratio of primary care physicians to the population, and the percentage of the population age 65 and over. The sum of the weighted indicators then becomes the INU score.

The median INU score for all U.S. counties in 1975 was 62.0. Those counties with an INU below 62.0 were designated by the Secretary of the U.S. Department of Health, Education, and Welfare as medically underserved. In metropolitan areas, the INU was calculated for each individual census tract. If one or more census tract scored below 62.0, the entire metropolitan area was designated as partially underserved medically.

The INU, on which the MUA list was based, was calculated using data from the following sources:


It must be noted that the MUA designation refers to specific geographic areas (counties, census tracts, and minor civil divisions) and may not easily correlate with population. Therefore, it is necessary to compare the percentage of the population residing in the area of medical underservice with the percentage of the counties designated as medically underserved. For example, 71 percent of the counties in thirteen southern states are designated as medically underserved. However, only 33.2 percent (18.3 million) of the population in these states resides in the MUA (Table 1). Only 19.2 percent of the counties in
### TABLE I

MEDICAL UNDERSERVICE IN THIRTEEN SOUTHERN STATES AND IN FLORIDA*

<table>
<thead>
<tr>
<th></th>
<th>Percentage Fully MUA</th>
<th>Percentage Partially MUA</th>
<th>Percentage Fully Served</th>
</tr>
</thead>
<tbody>
<tr>
<td>Population</td>
<td>33.2 (17.3)</td>
<td>57.2 (74.7)</td>
<td>9.6 (8.0)</td>
</tr>
<tr>
<td>Counties</td>
<td>71.0 (67.2)</td>
<td>19.3 (22.3)</td>
<td>9.7 (7.5)</td>
</tr>
</tbody>
</table>

* Florida figures in italics

The degree of medical underservice in the thirteen southern state region varied from 74.7 percent of the population in Mississippi to 17.3 percent of the population in Florida (Fig. 1). Partial medical underservice ranged from 76.7 percent of the population of Texas to 15.3 percent of the population in Mississippi. The percent of the population which was considered to be fully served medically varied from 44.4 percent in Virginia to 0 percent in Alabama and Louisiana.

In the State of Florida, 67.2 percent of the counties are designated as medically underserved (Table I), however, only 17.3 percent of the population resides in these medically underserved areas. Some 25.3 percent of the counties in Florida are considered as partially underserved medically; 74.7 percent of Florida's population is included in this category. Only a small portion (7.5 percent of Florida's counties and 8.0 percent of the population) is designated as fully served medically.

When the degree of medical underservice is mapped, several patterns become evident immediately (Fig. 2). Counties designated as medically underserved are distributed throughout the state. However, they do appear to have a positive correlation with those counties with a large rural population. The partially underserved and fully served counties are associated with denser population.

The IMU represents only the most basic information needed to evaluate the health status of the residents of Florida. It is recognized that there are other indicators of health status such as disability days (i.e., work loss and restricted activity), death rates, and life expectancy which are not yet addressed by the IMU. It is, however, a positive step forward in the quest for more appropriate indicators regarding the effectiveness of health care services in Florida.

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