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Reducing TennCare enrollment will increase the number of deaths of children and adults over the next 15 years.

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THE IMPACT OF REDUCING TENNCARE ENROLLMENT ON MORTALITY RATES

Lack of health insurance has a substantial impact on access to health care and on health status. The uninsured are less likely than the insured to obtain necessary physician and hospital services. The gap between the insured and the uninsured is especially large for those with chronic health conditions (1,2). This diminished access can lead to serious complications. For example, the uninsured have significantly higher rates of hospitalization for conditions that can usually be treated on an outpatient basis (3).

In some cases, lack of insurance leads to premature death. Using data from a national longitudinal database, researchers found that persons without insurance for the prior year have a 25% greater chance of dying when compared to similar insured individuals. This comparison controlled for other factors that can affect mortality, such as socioeconomic status, types of chronic diseases, and important personal health behaviors (4).

Reducing enrollment in TennCare has been proposed as one approach to reducing state health care expenditures. Removing Tennesseans from the TennCare rolls will lead to a greater number of uninsured in Tennessee and, based on the observations cited above, will lead to increased mortality in this population.

Estimating Mortality. Using the data published by Franks, Clancy and Gold (4) in 1993, as well as annual Tennessee mortality rates published by the Tennessee Department of Health for 1998, we estimate that a reduction of 160,000 Tennesseans on TennCare will result in approximately 3,311 additional deaths over the next 15 years (an average increase of 221 deaths per year). Tables I and II outline how this estimate was derived.

Table I: Increased Mortality Among Children Removed From TennCare

Age (Yrs)	# Losing Coverage	Expected 15 Yr Deaths	Uninsured 15 Yr Deaths	Added Deaths
<3	158	2 (1.2%)	2 (1.5%)	0
1-14	3,326	27 (0.8%)	33 (1.0%)	6
14-19	948	16 (1.7%)	20 (2.1%)	4
Total	4,432	45 (1.0%)	55 (1.2%)	10

Table II: Increased Mortality Among Adults Removed From TennCare

Age (Yrs)	# Losing Coverage	Expected 15 Yr Deaths	Uninsured 15 Yr Deaths	Added Deaths
20-44	102,126	3,472 (3.4%)	4,289 (4.2%)	817
45-64	48,031	7,781 (16.2%)	9,702 (20.2%)	1,921
65+	5,411	2,251 (41.6%)	2,814 (52.0%)	563
Total	155,568	13,504 (8.7%)	16,805 (10.9%)	3,301

Sensitivity Analysis. These estimates of increased mortality are based on nationally representative data drawn from the 1970s and 1980s (4). To the extent that the individuals removed from the TennCare differ from those in these databases, mortality rates may differ. For example, if the persons removed from TennCare have more chronic illnesses, the number of additional deaths would be expected to be higher than estimated here.

It is also likely that some of the people removed from TennCare will obtain other insurance and not remain uninsured. Based on recently published estimates of the “crowd out” of private coverage that results from expanded public coverage, we estimate that, at most, 42% of individuals removed from TennCare will find private coverage (5). If this conversion to private insurance was seamless, our estimates of increased mortality would be reduced to approximately 1,920 additional deaths over 15 years, or an average of 128 additional deaths per year. However, it seems likely that the transition from public to private insurance would take months, if not years, resulting in substantial spells of uninsurance and may result in less adequate coverage. Even short periods of uninsurance have significant impacts on health care and health status (6). Thus, our best estimate of the number of additional deaths over the next 15 years that would result from reducing TennCare rolls by 160,000 exceeds 1,920 (128 per year) and may be as high as 3,311 (221 per year), depending on the availability of other sources of adequate health insurance.

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