## ALMOST 45,000 EXCESS DEATHS - REALLY?

Stephen L. Bakke - December 10, 2009
I have had several questions posed to me about new arguments and issues which are surfacing as the debate continues in the House and Senate. In this and future reports I will attempt to address several of those while trying not to make too many redundant opinions or comments which I have presented in earlier reports.

## The Holocaust Claim

A few weeks ago Democratic Rep. Alan Grayson of Florida spoke boldly on the floor of the House of Representatives. Remember his claim that the Republicans opposition to the current draft of the health care legislation demonstrated their desire for sick Americans to "die quickly"? He referred to our health insurance problems as "holocaust in America." He explained those statements by stating that annually, almost 45,000 deaths in the U.S. are because of lack of health insurance. Those claims intrigued me and I decided to try to find out his source and analyze the information. Guess what I found!

## Where'd That Come From?

The statistic comes from the recent study "Health Insurance and Mortality in U.S. Adults." Dr. Andrew Wilper was the lead author, along with co-authors Dr. David Himmelstein, Dr. Steffie Woolhandler, along with several others. Himmelstein and Woolhandler are co-founders of Physicians for a National Health Program - self described as the only U.S. organization of physicians "dedicated exclusively to implementing a single-payer national health program."

The study appeared in the American Journal of Public Health. The researchers were Harvard based and used data gathered in the Third National Health and Nutrition Examination Survey conducted between 1988 and 1994. A sample of 9,000 was used and participants had been asked if they were insured at the time of the survey interview. The federal Centers for Disease Control tracked these people through the year 2000, thereby determining the number who had died by the later date.

The authors of this study "piggy-backed" on the data from the original researcher. They appear to have simply used the death statistics for those without insurance at a point in time, and extrapolated them to the current census data. In fairness, they did make certain relevant statistical adjustments for race, health status, alcohol use, etc. The result was an estimate of 44,789 deaths annually in the U.S. as the result of lack of health insurance.

## The Flaws

Any user of this study should be put on guard immediately when reading the caveat on limitations expressed by the authors - quite a concession: "Our study has several
limitations" ...... the survey data used "assessed health insurance at a single point in time and did not validate self-reported insurance status. We were unable to measure the effect of gaining or losing coverage after the interview." I guess they thought "We like the results of the study - we fulfilled our professional obligation with the disclaimer - so we estimate the excess level of deaths annually is 44,789 ."

Let's take a look at the lack of credible math and science which is glaring in this study:

- The subjects were interviewed only once with no verification of responses.
- Experience from other research tells us that respondents typically under-report the existence of health insurance. The authors admitted this but no such adjustment was made. Studies have shown that this under-reporting is between 7 and $11 \%$.
- Given that the study was done years after the original data was gathered meant they were forced to ask a flawed question: How many people who were without health insurance on the day of the survey actually died by the end of the study in 2000? The question that should have been asked was: How many people who were without health insurance for a substantial period of time between the survey date and the end of the study in 2000, actually died? Do you see the difference? I will provide a simple computational example later.
- The last point is crucial because a significant portion of our uninsured at any point in time have that status only for a short transitional period. I have seen credible estimates that this "temporary" status may apply to 40 to $50 \%$ of total uninsured (excluding illegal aliens). In fact, most uninsured are able to obtain insurance in a matter of months - if they so desire. In any case, it is a significant percentage.
- Other factors relevant to the results were not investigated - e.g. what type of medical care was sought and received? There are many others.
- The study disregards the cause of death in any of the analyses. For example, a percentage of these deaths were due to accidents and homicide. Violent deaths do occur more frequently in the ranks of the uninsured.
- Also, regarding cause of death, there are many other than violence that have no relation to health insurance coverage. This was not investigated or adjusted for.
- Now, when finished, the researchers applied their "risk factor" to the entire U.S. population and came up with total excess deaths of over 44,000. VOILA!

John C. Goodman, President of the National Center for Policy Analysis, reacted: "This is a ridiculous claim that cannot possibly be justified by generally accepted standards of statistical inference." He pointed to a similar study conducted by former CBO Director June O'Neill. That study, specifically designed for this issue, found the risk for those without insurance approximated $3 \%$. That's far less than the study that manufactured a $40 \%$ risk. I also found an estimate coming out of the Institute of Medicine (2002) which would have put the excess deaths at approximately 18,000 rather over 44,000 .

## A Simplified(?) Example

This example is not scientific nor is it intended to convey real information. And it is over-simplified. It is intended to clarify how these flaws, however small, could affect
the results of the study. First are the assumptions and then some simple computations. Examine if you wish. If you don't "wish", go to the last two paragraphs of this section. Assume:

- U.S. population is 350 million
- Uninsured total is $15 \%$ of population or 52,500
- Survey sample totals 10,000
- Survey sample as \% of total population is $.0029 \%$
- Uninsured portion of sample is the same as the population, $15 \%$ or 1,500
- Insured portion of sample is the same as the population, $85 \%$ or 8,500
- Of the total survey sample, $3.5 \%$, or 350 , died over the several years of the study
- Based on the prior item, $12,250,000$ of the total population died over that time
- Since the survey covered several years, the annualized death rate is $3,250,000$
- The contention that uninsured died at a $40 \%$ higher rate than insured, implies that of the 350 deaths, 71 ( $4.7 \%$ ) were uninsured while 279 ( $3.3 \%$ ) were insured
- The estimate of temporarily uninsured and under-reported insurance, etc. totals $50 \%$ of those reported as uninsured at the survey date, or 750 from the sample
- The estimate of violent and other non-medical deaths totals $10 \%$ of total deaths, or 35 from the sample


## Method $A$ - used in the published study:

The method would simply take the higher death rate for uninsured ( $4.7 \%$ minus $3.3 \%$ from above) and apply that $1.4 \%$ to the annualized total population deaths of $3,250,000$.
$1.4 \% \times 3,250,000=45,500$ excess deaths each year in the U.S.
The result is similar to the study because I used statistics and methods which were plausibly similar to those of the study.

Method B-adjusting for reasonable estimates of valid items caused by research flaws:
I assume the allocation of the adjustments in insured vs. uninsured also will cause marginal adjustments in the percentage of deaths occurring in each category.

The number of persons who were actually uninsured for a substantial period of time is:
Estimate from the survey less adjustments, or 1,500-750-35 = 715
The number of persons who were insured for virtually all of the test period is:
Estimate from the survey plus adjustments, or $\mathbf{8 , 5 0 0}+\mathbf{7 5 0}+\mathbf{3 5}=\mathbf{9 , 2 8 5}$
Assuming a total of 350 people died, and if the reallocated deaths are reasonably distributed, the number of deaths among those uninsured for a substantial period is:

Original "uninsured deaths" less the adjustment allocation, or 71-42 $=29$
The number of total insured deaths is:
Original "insured deaths" plus the adjustment allocation, or 279+42=321
Deaths as a percentage of total uninsured:
29 deaths $/ 715=4.1 \%$
Deaths as a percentage of total insured:

$$
321 \text { deaths/ } 9,285=3.5 \%
$$

Difference between the two percentages:
$.6 \%$ is the higher death rate for the uninsured
Apply this percentage to the annualized death rate for the total population:
$.6 \% \times 3,250,000=19,500$ or the excess uninsured deaths using this method

Compare this estimate of deaths to the first method - 45,500 vs. 19,500. The adjustments reduced the percentage of deaths for the uninsured sample to $4.1 \%$ from $4.7 \%$. The percentage of deaths for the insured sample increased from $3.3 \%$ to $3.5 \%$. THE DIFFERENCE BETWEEN A PROCLAIMED "HOLOCAUST" AND A "ROUTINE STATISTIC" MUST NOT BE DEPENDENT ON A SMALL "TWEEK" IN ADMITTEDLY IMPRECISE DATA!! GOOD GRIEF!!

I do not suggest that I have created a better number or procedure for arriving at that result. I just want to emphasize that this was a very flawed research study, with admitted, inherent limitations. And be aware that the smallest assumption change can result in an increase or decrease by tens of thousands in the projected mortality statistics. We must not be naïve while listening to these proclamations!

## Don't Get Me Wrong!

I am a supporter of significant health care reform - to the dismay of a few who have read my opinions. But I am totally against the public insurance option and the government takeover of our health system. I believe we should do things to reduce the number of uninsured and to control costs through interstate insurance competition, individual ownership of insurance policies, tort reform, and relatively small changes in the tax code.

And, it is logical to me that being uninsured leads to lack of attention to health care. I also "buy" the concept that lack of health insurance will, on the margin, decrease one's expected life span. However, as with all major issues facing us today, we are overwhelmed with inaccurate, distorted, and exaggerated proclamations of "facts." We need accurate information so we can see just how important health coverage can be.

Our economy, society, and culture are way too important to naively respond to claims by extremist demagogues, who often spout distorted information, when evaluating transformational legislation on something as important as our health system. We do not need exaggerated information which will lead us to the wrong conclusions and wasteful solutions. Representative Grayson, PLEASE HUSH UP!

## Please don't ask me to disclose my raw data and computations - just trust me!

I extend thanks, as always, to the many writers, commentators, researchers, and others, from all political extremes, whose hard work helps me greatly. They gather details and present much information. About all I do is gather, organize, summarize, and attempt to fill in with comments - commonly referred to as my frequent "RANTS".

More comments will follow on important topics and personal thoughts as our President battles through tough territory. I want to join other conservatives in recognizing and respecting our new President - and supporting him when we should. But when we oppose our President's policies, we should act in accordance with values of decency - but that doesn't preclude a healthy dose of sarcasm and satire, which are valuable tools for political commentary.

