September 20, 2017

RE: Measuring Future Medical and Care Costs

In addition to the estimation of lost earning capacity and household services, medical and care costs estimates are a typical task for forensic economists. One of the first, published works on the methods and issues involved was chapter six of Mike's 1987 book *Economic Damages* and the follow-up chapter in his 1990 book. Dr. Frank Slesnick's 1990 article in the *Journal of Forensic Economics*, "Forecasting Medical Costs in Tort Cases: The Role of the Economist," supported the basic positions and methods advocated by Brookshire, and the basics of loss estimation have not significantly changed. Brookshire and Slesnick also began in 1990 to publish every-three-year surveys of prevailing methods by forensic economists, and questions were often asked about this category of economic damages.

Medical and care costs estimates are based upon a "replacement cost" theory of economic loss. The economist calculates a present value lump sum designed to exactly cover the future costs of necessary services and items. The lump sum should exactly be used up over the anticipated life expectancy. Zero dollars should remain at the end of the anticipated loss period, so that the plaintiff is "made whole" in the provision of these necessary goods and services.

The economist usually begins with a life care plan from a foundation expert, although the reports of medical doctors may sometimes be directly used. Four pieces of information are needed.

1. The type of need or treatment: doctor visit, therapy, medical or related commodity, attendant care, etc.

2. The start and stop dates of the item.

3. The frequency of the item.

4. The cost of the item in dollars of a stated year.

The economist must then choose to follow an "aggregate" or "disaggregated" approach to future price growth and discounting issues.

The "aggregate" approach is the easiest method and is also guaranteed <u>not</u> to produce a "make whole" estimate. All items in the life care plan are increased by the same rate of price growth, even though more specific categories of government price inflation data are available for the specific medical, or non-medical, items in the life care plan. For example, the 25-year (1992-2016) trend rate of annual increase in all medical prices is 3.93 percent per year. Some economists would use only this rate--the aggregate of all Consumer Price Index items falling in the medical cost area--for all items in the life care plan. The future costs would then be discounted to present value, but the choice of discount rates is apart from this discussion. Under the generally accepted "disaggregated" approach, however, more specific price indexes would be used. Some examples of these more specific indexes, and 25-year trends, are

Medical Care Services	4 20%/year
Medical Care Commodities	2.97%/year
Physician Services	3.24%/year
Services of Other Medical Professionals	2.24%/year
Hospital Related Services	5.77%/year
Prescription Drugs and Medical Supplies	3.77%/year
Outpatient Services	6.11%/year
Nursing Homes	3.87%/year
All U. S. Wages	3.31%/year
Non-Medical Equipment and Supplies	2.30%/year

Depending upon the mix of items in a particular plan, the more accurate, disaggregated approach might result in a loss estimate significantly higher or lower than under the aggregated method. Two-thirds of the life care plan might involve unskilled care, for example, or the life care plan might be dominated by hospitalizations, outpatient services, and prescription drugs.

Another important principle of loss estimation is incrementalism. Only incremental (additional) costs of medical care, resulting from the tort, are considered, not the cost of an annual physical exam, for example. Only the costs of (wheelchair) modifications for a van or a home are considered; one way or another, the costs of an average car and home are subtracted, because a plaintiff would likely have had a vehicle and home absent the injury. Moreover, when both lost earning capacity and institutional care are estimated, dollars exist in both damages categories to cover shelter and food. These dollars are a double count of losses, and a personal maintenance deduction must be made to one of the categories.

The Patient Protection and Affordable Care Act of 2010 required coverage of pre-existing conditions; suggested Republican replacements do the same, likely with different risk pools and premiums. Thus, a legal argument has been that "make whole" simply requires the recompense of these premiums plus necessary costs not covered by the government plan. The opposing view is that existing collateral source rules require that the tortfeasor pay the full costs of the life care plan. A related issue is whether list prices should be costed or discounted prices that are accepted as payment by the provider. The former is the traditional practice of life care planners and economists, but this is an issue of law versus forensic economics. The economist must know the legal directives in a particular jurisdiction, although these legal parameters may be unclear in particular jurisdictions.

Finally, the life expectancy of a severely injured plaintiff may be an issue. Without foundation opinions to the contrary, a forensic economist will carry loss projections to a normal life expectancy. However, medical doctors and economists specializing in life expectancies for those with specific conditions sometimes opine on shortened life expectancies, during which the replacement of necessary costs through a present value award should occur. Pre-existing conditions may also affect the length of the loss period. The forensic economist will respond to these foundation issues, sometimes showing alternative estimates or cumulating the present value loss estimates through a normal life expectancy.

As always we are happy to answer questions about the above, or other topics in forensic vocational evaluation and forensic economics. We are pleased to participate in continuing legal education seminars and sessions regarding economic damages.

Sincerely,

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