Towards Developing a Satellite Account for Health

- **Harmonize national data on nominal expenditures for health care**
  - BEA plans to do a reconciliation of the health care spending estimates from the Center for Medicare Services and the Bureau of Economic Analysis. Although the measures are quite similar for health spending as a whole, there are substantial differences in the underlying disaggregates owing to different estimation approaches.

- **Develop Satellite National Health Accounts for Direct and Indirect Costs of Illness**
  - The account would provide measures for National Health Expenditures by disease and product class.
  - BEA also plans to develop measures for the indirect costs of illness, such as mortality costs and morbidity costs due to absenteeism.

- **Improve measures on real expenditures for treatment of diseases**
  - Account for reductions in cost that arise from the substitution across treatment classes.
    - An important source of reductions in the cost of treating illnesses is the arrival of new, less costly treatments. Because the price indexes from the Bureau of Labor Statistics (BLS) are constructed by treatment (i.e., inpatient care, outpatient care, drugs, office visits, etc.), any cost reductions that arise from switching treatments from one class to another will be missed. BEA is working with the BLS to construct disease-based price indexes that properly account for this source of substitution.
  - Explore ways to account for improvements in outcomes from treatments for individual diseases.
    - Accounting for quality change is particularly difficult in the health sector. BEA staff is investigating existing methods (such as the use of quality-adjusted life years) and their potential incorporation in a satellite account.

- **Crosswalk between disease- and product-based deflators**
  - While measuring the cost of health care by disease is a critical step in constructing quality-adjusted deflators for spending, BEA also plans to develop a set of product-based deflators that may be used to deflate expenditures by product class, as is currently reported in the accounts, in a manner consistent with the disease-based deflators.

- **Possible Integration with broader accounts of cost of disease and illness**
  - Cutler/Rosen National Health Accounts will encompass:
    - a model of population health which can attribute changes in health to particular symptoms and impairments, and ultimately to diseases;
    - a cost model that can attribute medical spending to particular diseases; and
    - a series of disease-specific models that relate risk factors and treatments to costs and outcomes.
ONGOING WORK ON
NATIONAL HEALTH ACCOUNTS

COMMITTEE ON NATIONAL STATISTICS OF THE NATIONAL ACADEMIES

Conceptual, Measurement, and Other Statistical Issues in Developing Cost-of-Living Indexes

The study investigated conceptual and measurement issues in the development of cost-of-living indices. Explicit assumptions were made underlying different approaches to index construction and the study assessed the appropriate technical use of such indices for indexing federal programs. The study also outlined a program of research and experimental measures to allow for further assessment and refinement of cost-of-living indices.

A Study on the Design of Nonmarket Accounts

The panel was established to examine the design of nonmarket accounts that would parallel the market-based national income and product accounts. The panel reviewed current approaches, examined data requirements and limitations, determined the priorities for developing nonmarket accounts, and suggested further research to strengthen the knowledge base about nonmarket accounting.

Research Program on the Design of National Health Accounts

The National Academies’ Committee on National Statistics proposes a study to advance research on the topic of how to design national health accounts. A health account would contain statistical data relating the population’s health status to an array of factors—including but not limited to medical care—that affect that status. The study would be conducted by assembling a small panel of experts on the topic who, working with CNSTAT staff, would hold a number of meetings and a workshop, commission papers, and produce a final report. The final report would summarize the workshop, the panel's findings, and offer recommendations on how to proceed with construction of health accounts.

NATIONAL HEALTH ACCOUNTS GROUP,
David Cutler (Harvard and NBER) and Allison Rosen (Michigan)

Current accounts to track the health care economy, termed National Health Accounts, are focused exclusively on the flow of funds. Aggregate medical costs are determined and assigned to payers and providers. These aspects are relatively easy to measure, but they are also incomplete. Measuring only costs skews political debate on health care issues towards lowering spending rather than raising value.

The broad goal of the health accounts project is to introduce and produce a new satellite set of National Health Accounts to supplement current measures. These accounts will explicitly measure health in addition to medical spending. To relate health outcomes to costs, the accounts will decompose both health and medical spending by particular diseases.

Conceptually, such accounts would have three parts:
- a model of population health which can attribute changes in health to particular symptoms and impairments, and ultimately to diseases;
- a cost model that can attribute medical spending to particular diseases; and
- a series of disease-specific models that relate risk factors and treatments to costs and outcomes.

The models will allow significant questions to be asked about disease-specific changes in health and spending. Linking health and spending together in the aggregate model makes it possible to evaluate the efficiency of the medical system across diseases and treatments. Such accounts would allow researchers to address questions such as:
- How has the population’s health changed over time?
- To the extent health has improved, what accounts for this change?
- What is the productivity of medical spending?
- What changes in the medical system would increase the value of the system as a whole?

3 http://www.kellogg.northwestern.edu/faculty/dranove/htm/Dranove/coursepages/Mgmt%20444/national_health_accounts.pdf