The day-to-day impact of the economy is felt in all sectors today, with each section reevaluating the best cost-efficiencies for their respective areas. Decision makers in healthcare are facing similar issues: limited budget and increased spending. The International Society for Pharmacoeconomics and Outcomes Research (ISPOR) is the one organization that tries to assist decision makers in healthcare through the application and promotion of pharmacoeconomics and outcomes research—the scientific discipline that evaluates the effect of healthcare interventions on patient well-being, including clinical outcomes, economic outcomes, and patient-reported outcomes. ISPOR facilitates the translation of this research into useful information that can be used by decision makers, in the attempt to ensure that society allocates scarce healthcare resources wisely, fairly, and efficiently. ISPOR serves the public in the following ways:

- Provides a forum to facilitate the interchange of scientific knowledge in pharmacoeconomics and patient outcomes
- Facilitates and encourages communication in all sectors of society by educating public and private agencies on the utility of research in pharmacoeconomics and in assessing patient outcomes
- Acts as a resource for forming public policy relevant to the pharmacoeconomics and healthcare outcomes assessment
- Promotes the science of pharmacoeconomics by providing services to advance pharmacoeconomic, outcomes research, and educational activities
- Represents the science of pharmacoeconomics and outcomes assessment before public and governmental bodies by:
  - Making available the results of pharmacoeconomics analyses and healthcare outcomes studies concerning important healthcare interventions
  - Developing scientifically based input (evidence) for public policy decisions for these areas
  - Providing evidence and data to governmental bodies and other public entities
- Promotes individual achievement and growth in the field of pharmacoeconomics and outcomes research.

In May 2008, ISPOR gathered in Toronto for its 13th annual international meeting to present research results across multiple therapeutic areas. Two common themes permeated the meeting—(1) the importance and measurement of compliance/adherence/persistence and (2) the structure and impact of health technology assessment (HTA). The following topics presented at the meeting highlight different aspects of these 2 themes.

An Integrated Pilot Project Utilizing an Internal HTA Process to Set Medical and Payment Policy in a US Commercial Health Plan, presented by John Watkins and colleagues, from Premera Blue Cross, provided an example of how to implement a rigorous, flexible integrated internal process for HTA support for formulary decisions, medical policy development, and payment policy development. Potential benefits of the plan include rapid response to emerging technologies, coordination among internal policy decision makers, and process credibility with the medical community. Premera Blue Cross is a commercial, preferred provider organization health plan with 1.7 million members representing 1.2 million pharmacy lives across 4 states—Washington, Alaska, Oregon, and Arizona.

Their project was initiated in the fall of 2005 and is still ongoing. The strategic phase included the development of an internal HTA process; cost-effectiveness analyses; development of or a proactive pipeline surveillance process that integrates all internal stakeholders; clinical review panel consisting of outside experts;
and integration with existing formulary, actuarial, medical policy, and payment policy processes. The implementation phase includes the development of business cases from pilot project results, using existing resources—staff, Pharmacy & Therapeutics (P&T) Committee members used as an expert clinical review panel—conducting a series of HTA reviews, and selecting technologies that demonstrate various aspects of the review process. A total of 8 new diagnostic and therapeutic technologies were reviewed:

- Diagnostic imaging: computer-assisted breast magnetic resonance imaging (MRI); upright MRI
- Genetic diagnostics: oncotype diagnosis; Trofile
- Other diagnostics: long-term, continuous glucose monitoring
- Robotic surgery: robot-assisted laparoscopic prostatectomy
- Image-guided radiotherapy: Calypso 4D system; Cyberknife

In evaluating the Cyberknife, they looked for evidence for safe and effective extracranial use, as well as published economic evidence. Only small, prospective or retrospective studies were available, with no blinded, randomized clinical trials (because of ethical and logistic reasons). Published studies included patients with liver, lung, renal, or prostate cancers. Findings included severe toxicities or death associated with image-guided radiotherapy; the maximal tolerated radiation dose was not clearly defined. Implementation decisions included coverage for inoperable spinal tumors and refractory tumors.

Mr Watkins and colleagues concluded that the overall strength of evidence was poor—the US Food and Drug Administration (FDA) requires only evidence of analytic validity—and they could not demonstrate the cost-effectiveness or identify target populations that would benefit most from this technology. Problems included payor’s complex internal structures with many stakeholders, coding issues that complicated enforcement of decisions, and providers having mixed financial incentives.

Additional elements needed to support HTA include better evidence, aligning requirements for registration and payors, dialogue with providers before they buy expensive equipment, and improved Healthcare Common Procedure Coding System and Current Procedural Terminology coding systems and coding accuracy.

HTA Trends in the United States, by Sean Tunis, MD, MSc, and colleagues, highlighted recent trends related to HTA, including a backdrop for value-based benefit design and evidence development, role of costs and cost-effectiveness analyses, critical knowledge gaps, Medicare coverage with evidence development and its challenges, international classification of diseases registry, and effectiveness guidance documents. A working definition of HTA was developed in 2001, although costs were not initially considered in defining adequate evidence.

No statute or regulations address the role of economic factors in the reimbursement process. The Centers for Medicare & Medicaid Services does not explicitly consider costs, whereas payors consider evidence more carefully for higher-cost items. Most of the critical evidence is currently provided by groups such as the National Institutes of Health, the FDA, the Agency for Health Research and Quality, BlueCross association, and Cochrane reviews; decision makers have minimal influence on what evidence is evaluated or developed.

Developing and Maintaining a Formulary in a Medicare Plan, by David Yoder, PharmD, MBA, and colleagues, studied the formulary process, including committee development and constraints, monograph presentation, internal resources to support needed activities, and decision criteria. Dr Yoder and colleagues concluded that the smaller the plan, the more demands are placed on the P&T Committee. They found that formulary positioning is very variable between plans, and formularies can be a differentiating factor between plans, which may attract or discourage people from joining a plan. Their findings confirmed that member choice is very important for most plan designs, when building a formulary.

Differential Take-Up of the Medicare Part D Prescription Drug Benefit, by G. Caleb Alexander, MD, MS, and colleagues, provided data associated with uptake metrics for Medicare Part D beneficiaries that included a 10% increase in insurance generosity, with a 16% lower likelihood of Part D utilization. The researchers found that 1 standard deviation increase in comorbid disease score translated into 8% greater likelihood of Part D utilization. The results also show that utilization of new insurance is seldom uniform. These results may help inform Part D welfare analyses; estimates are important for assessing Medicare Part Ds impact on processes or outcomes of care. The findings are important to continuing public financing and long-term viability of the program.