cost-effectiveness analysis. Initial responses suggest that manufacturers will accept the challenge to improve the quality of available evidence to support future decisions.

CASE3

THE VA TECHNOLOGY ASSESSMENT ADVISORY GROUP: INFORMING EVIDENCE-BASED POLICY RECOMMENDATIONS FOR ROBOTIC PROSTATECTOMY

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ORGANIZATION: Veterans Health Administration (VHA) Office of Patient Care Services provides policy and program development and oversight of clinical care delivered to 7.8m veterans nationally. PROBLEM OR ISSUE ADDRESSED: Should VA conduct a technology assessment (TA) of robotic prostatectomy (RP) for use in VA clinical care? If so, how might it be implemented? GOALS: (1) Apply a new health technology assessment (HTA) process for evaluating FDA-approved non-IT and non-pharmacologic new and emerging health care technologies that draws upon a wide range of VHA expertise as well as multidisciplinary policy and evidence-based medicine experts. (2) Make policy recommendations on the need, purchase, and appropriate infrastructure in place to support training, backup, maintenance, and facilities make an informed make or buy decision based on demonstration of an appropriate technology. (3) The TAAG process proved feasible and effective in supporting informed and timely policy recommendations for the purchase and implementation of these technologies in VHA clinical care in a timely fashion. OUTCOMES ITEMS USED IN THE DECISION: Available clinical efficacy/effectiveness, cost-effectiveness and safety data from the literature, regulatory status, utilization and cost analysis (UCA). IMPLEMENTATION STRATEGY: The Technology Assessment Advisory Group (TAAG) applied input from HTA, a clinical expert panel and a utilization and cost analysis (UCA) panel to make evidence-based recommendations on the acquisition, use and funding of RP in VA. RESULTS: As of 2006 evidence from heterogeneous case series demonstrated the safety and feasibility of RP. Its clinical use was limited by the cost of the robotic system and operating costs. Without substantial reimbursement, the lack of multicenter experience and clinical trial data from which to determine effectiveness and cost-effectiveness relative to current practices. The impact of RP on the design and work processes in the surgical theater was also unclear. Fulfilling research and education needs and enhancing prestige and profit were the primary motivators for the robotic system. The primary motivator was the potential for the robotic system to perform prostatectomy and other urologic procedures and because charge and estimated cost information is available. The UCA showed that patient recapture estimates of $13,000 million would not offset the costs unique to the robotic system, and therefore, would not be economically viable. The VA does not have sufficient resources and cost benefit to justify widespread purchase and implementation of this technology solely for RP. Cautious diffusion to centers of excellence with skills and infrastructure to support the technology was recommended, as were options to help defray costs such as leasing the robotic system, providing training to outsiders and/or providing this option to the Department of Defense (DoD) as a DoD VA Partner Organizational (DVAPO) benefit. The TAAG process proved feasible and effective in supporting informed and timely policy recommendations for the purchase and use of RP in a manner that enhances quality of care in a environment of cost-containment. After a one-year moratorium, VHA guidance was created to help individual facilities make an informed make or buy decision based on documentation and appropriate infrastructure in place to support training, backup, maintenance, and outcome data collection. The guidance included site visit and approval from the VHA National Surgery Program with oversight of outcome data collection, which continues today.

NEW FINDINGS FROM INTEGRATING ADMINISTRATIVE AND FINANCIAL DATABASES TO ESTIMATE PRICE OF HOSPITALIZATIONS

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ORGANIZATION: Agency for Healthcare Research and Quality (funding organization), Thomson Reuters PROBLEM OR ISSUE ADDRESSED: Hospital administrative data have been used in “cost-effectiveness,” “cost-benefit,” and “burden-of-illness” studies because they contain large numbers of cases for specific conditions and procedures and because charge information is available. While these data generally contain information on how much the facility charged for the hospital stay, they lack information on the cost to provide care and the amount reimbursed for care. In the past, AHRQ developed a set of hospital-level cost-to-charge ratios to estimate the cost of providing care. AHRQ is piloting a project to create price-to-charge ratios that will be used in conjunction with charge information collected on hospital discharge records to estimate the “price” of inpatient hospital care. The term “price” reflects the amount that hospitals are paid by insurers and consumers based on payer revenue information for each hospital. This is the amount of revenue that hospitals actually receive, net of any discounts negotiated with insurers. These ratios have been linked to the Healthcare Cost and Utilization Project (HCUP) State Inpatient Databases (SID) for 5 states. The HCUP SID files contain the universe of inpatient discharge abstracts (including information on charges) in participating States, translated into a uniform format to facilitate multi-State comparisons and analyses. Currently, 40 states participate in HCUP, encompassing about 90 percent of all U.S. community hospital discharges. The impetus for this project is to make health care information more transparent to consumers. While the addition of price information will help consumers make more informed choices about hospitalizations for themselves and their families, this information will also be valuable for researchers by providing alternatives to using resource use that are better suited for their studies. This presentation builds on last year’s talk by presenting price results for 5 states. GOALS: The short-term goals of this project include: - Estimate prices by payer (Medicare, Medicaid, Private, and Self-pay) for common diagnoses in 5 states for 2006 - Assess the credibility of estimated prices (“proof-of-concept”) - Evaluate price differences for major payers, geographic areas, and common diagnoses. The long term goals of this project include: - Extend study to a total of 10 states - Create models to estimate prices for HCUP states not included in the pilot - Provide states with information on hospital average prices that can be used to populate a Website where consumers can explore pricing for common diagnoses - Release price publicly on AHRQ databases to explore inpatient pricing by market area and address issues such as hospitals competing on pricing differentials between payers, relationship between prices and quality, and effects of hospital entry on prices. OUTCOMES ITEMS USED IN THE DECISION: HCUP data have been used in “cost-effectiveness,” “cost-benefit,” and “burden-of-illness” studies because they contain large numbers of cases for specific conditions and procedures and because charge and estimated cost information is available. The addition of estimated prices will provide researchers an additional tool to more effectively conduct their studies. IMPLEMENTATION STRATEGY: AHRQ solicited participa- tion from State Purchasing Consortia that have access to hospital inpatient care price data. States were informed that the data were available for release by hospital and are willing to release state-level charge and price information broken out by the four broad payer groups and broad diagnostic categories. Initially, AHRQ is distributing information from 5 HCUP SID Partner States in conjunction with hospital-specific revenue information to develop prices for hospitalizations. RESULTS: Prices have been estimated for 5 states. We show the consistency and reasonableness of estimated prices by presenting the average prices of specific diagnoses by payers, states, and metropolitan areas. In addition, average prices by bed-size, teaching status, and hospital ownership are examined. One important advantage of using “prices” rather than “costs” or “charges” is that prices are specific to each payer group, reflecting the sum of contractual and other adjustments. We demonstrate the differences in resource use as measured by “charges,” “costs,” and “prices.” An explanation of what these concepts will be discussed. LESSONS LEARNED: To date, the lessons learned include: 1. The financial information by major payers for each hospital is limited. 10 States have been identified with most of the detailed information required. 2. While States may collect gross and net revenue information by payer, not all separate these revenues completely for inpatient and outpatient services and for the methods have been developed to address these issues. 3. Definitions of revenues and the level of detailed data collection vary consider- ably among States and needs to be reconciled.

PODUIUM SESSION III: COMPLIANCE/ADHERENCE STUDIES

CMI

ADHERENCE, DISCONTINUATION, AND SWITCHING OF BIOLOGIC THERAPIES IN MEDICAID ENROLLEES WITH RHEUMATOID ARTHRITIS

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OBJECTIVES: Biological therapies are an expensive but important advance in the management of RA. The potential therapeutic benefits of biologics demonstrated in clinical trials may be undermined by poor adherence and early discontinuation of treatment (i.e., non-persistence) in clinical practice. This study examined adherence, discontinuation, and switching of Rheumatoid Arthritis (RA) biologics over a one year period following initiation of the biologic treatment in Medicaid patients with RA. METHODS: The study sample consisted of Medicaid patients with RA in California, Florida and New York who had newly initiated etanercept (n = 1,139), anakinra (n = 2,67), or infliximab (n = 1,102) between January 1, 2000 and December 31, 2002. Adherence (proportion of days covered (PDC) ≥ 0.80), discontinuation (90-day con- tinuous gap), and switching (initiation of second biologic within 90 days of discontinu- ation date of index biologic) were measured during the 12 months post-index biologic initiation. Sensitivity analyses were conducted by varying the thresholds to define these measures. Logistic regressions examined the factors associated with RA biologic adherence and discontinuation. RESULTS: Anakinra users had the lowest mean PDC (0.36) and percent adherent patients (10.5%) followed by etanercept users (mean PDC=0.57; % adherent=32%) and infliximab users (mean PDC=0.64; % adher- ent=43%). All three groups had high discontinuation rates (41% etanercept, 76% anakinra, and 41% infliximab). Few patients who discontinued the index biologic switched to another biologic (0.2% to 9%). Logistic regressions found that patients in Florida had lower odds of being adherent and higher odds of discontinuing their index biologic than patients in California. Consistent with descriptive results, Anakinra users had lower odds and infliximab users had higher odds of being adherent than etanercept users. Anakinra users had higher odds of discontinuation than etan- recpse users. CONCLUSIONS: This study highlights poor adherence and premature discontinuation without concurrent switching of RA biologics that should raise concern for clinicians as well as payers.

CM2

EFFECTS OF NONADHERENCE WITH ANGIOTENSIN CONVERGING ENZYME INHIBITORS/ANGIOTENSIN RECEPTOR BLOCKERS ON HOSPITALIZATION AND MORTALITY AMONG PATIENTS WITH DIABETES

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OBJECTIVES: The objective was to determine the effect of nonadherence to angio- tensin-converting enzyme inhibitors/angiotensin receptor blockers (ACE/ARB) and subsequent diabetes-related hospitalization and mortality among patients with diabe- tes enrolled in a state Medicaid program. METHODS: This is a retrospective cohort study of patients with diabetes using Medicaid pharmacy and medical claims data.

Abstracts