

UROLOGIC DISEASES IN AMERICA PROJECT

The burden of urological disease on Americans is immense financially and personally. Until recently, however, documentation and evaluation of this burden were not systematically studied. In response to this need and at the urging of the American Urological Association the National Institute of Diabetes and Digestive and Kidney Diseases initiated a contract announcement for the Urologic Diseases in America (UDA) project based on the success of a similar project for medical renal disease (United States Renal Disease Study). Investigators at the University of California, Los Angeles (UCLA) and Rand Health successfully competed for the contract and, thus, began the largest secondary analysis of urological epidemiology ever conducted.

When completed the UDA project will be available in a compendium containing chapters for each major urological disease state.¹ These chapters will contain data on changes in the overall health care burden, changes in physician practice patterns, changes in patient demographic data, impact on minority populations, and documentation of new and evolving treatments and their potential impact on outcomes and health care costs. A series of articles on a distilled version of the most pertinent findings from the compendium will be published in this and future issues of *The Journal of Urology*® prepared by a group of prominent academic urological investigators with health service research interests and training. The initial expanded interim compendium is also available online at <http://uda.niddk.nih.gov>.

In this issue of *The Journal* Litwin (UDA project principal investigator) et al (page 933) define the conceptual framework and analytical methods used throughout the UDA project. They describe the process of standardizing the quantification of data across various diseases, databases and settings of care. To capture the depths of the burden, the UCLA/Rand team mined 10 sets of private and public databases. The findings often confirmed prior published reports but many diverge, permitting the authors to provide variance rationale. For other findings, comparable prior studies are nonexistent, reflecting the uniqueness of the UDA project.

Many trends identified in UDA are prompted by the advent of minimally invasive therapies and increased prescription drug use. In this issue Pearle et al (page 848) note that while physician office and hospital outpatient visits for urolithiasis increased by 29% and 41%, respectively, between 1992 and 1998 in the Medicare population, open stone surgery decreased by 64%. These shifts in service venue have not led to cost-saving across all conditions, as an increase in annual expenditures was noted for urolithiasis, for which claims were nearly \$2.1 billion in 2000, a 50% increase over 1994. Pearle et al attribute this finding to a simultaneous increase in the prevalence of urolithiasis.

In 4 other reports, which will be published in the April issue of *The Journal of Urology*®, the UDA captures the impact of the growing elderly population, which has become one of the major forces driving health care demand. For example, in the United States the number of people older than 65 years has increased almost 13%, from 31 million in 1990 to 34 million in 2000.² The "baby boom" generation begins to turn 65 in 2011, and by 2030 1 in 5 Americans will be 65 years old or older. The fastest growing segment of seniors is those 85 years old or older. These "very old" patients had a marked increase in emergency room visits and hospitalizations for urinary tract infections from 1992 to 1998. Total expenditures for adult urinary incontinence nearly doubled during the same period, reaching a high of \$234 million for females and \$38 million for males. Thus,

profound aging effects are expected on the epidemiology of urological disease in the United States in the near future.

The UDA will allow evaluation of how practice guidelines, new procedures and pharmaceuticals have been integrated into practice as well. For example, treatment of urinary incontinence in the 1990s was widely influenced by the first clinical practice guidelines from the Agency for Health Care Policy and Research (now known as the Agency for Health Research and Quality) but was also shaped by mass advertising of new oral anticholinergics and Food and Drug Administration approval of collagen injection treatments. These advances coincided with doubling outpatient visits, decreased needle suspension procedures and increased outpatient surgery procedures for incontinence from 1992 to 2000. However, not all guidelines have diffused into the clinical setting. For example, trimethoprim sulfamethoxazole was recommended as first-line treatment for urinary tract infections by the Infectious Disease Society of America in 1999, yet the trend toward the use of more expensive and broader spectrum fluoroquinolones has trumped their recommendation.

A poignant benefit of the UDA, which will be discussed in a final article in the April issue of *The Journal*, is the provision of new insights into discrepancies in access to care in the United States. For example, emergency room visits for pediatric urinary tract infections has nearly tripled in Medicaid populations compared to the commercially insured, while overall rates for both declined. Hospitalization for urinary tract infections was greatest for Hispanic followed by black children. Similar statistics are available for adults as well.

Each article in this UDA series will conclude with an analysis of shortcomings in the available data and recommendations for future research. The need for more complex tracking of health care use is the universal theme. The inconsistencies across data sets, inaccuracies of current administrative coding systems such as ICD-9 CM and scarcity of databases for some populations (particularly pediatric health care use and cost data) are all prominent revelations from the UDA project which are documented in the compendium and *The Journal of Urology*® articles.

The UDA project and its findings are a substantial advance in our understanding of the prevalence, etiology and impact of urological conditions in America. It is hoped that results from the UDA project will be used by policy makers to evaluate quality of and access to health care, as well as to judiciously allocate precious scarce research dollars, and by medical scientists to guide further research. Furthermore, in my view the evolving health care status of Americans with urological disease requires an ongoing, periodic evaluation similar to but beyond the UDA project.

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2. Litwin, M. S.: Federal Interagency Forum on Aging-Related Statistics. Older Americans 2000: Key Indicators of Well-Being. Federal Interagency Forum on Aging-Related Statistics, Washington, D. C.: U.S. Government Printing Office, 2000