Gaps in the Economic Evaluation of Prostate Cancer
Yoko Komatsuishi, Chris Atzinger1, Won Chan Lee1, and L. Chris Pashos2

1Abt Associates Inc., Bethesda, MD, USA
2Abt Associates Inc., Lexington, MA, USA

Abstract

The two purposes of this study were to systematically review the medical literature:

- The overall economic impact of PCA.
- The direct costs associated with specific treatments, and the indirect costs of PCA associated with reduced work productivity.

(2) to synthesize and identify gaps in the economic literature of PCA.

Methods

- Social, indirect, and intangible costs contribute to the overall economic consequences of PCA including (but not limited to) loss in work productivity, loss in earned income, caregiver expenses, and psychological distress. Studies on indirect costs associated with PCA are particularly scarce.

Only two studies from the U.S. and Canada presented the indirect mortality costs (the cost of lost productivity due to premature death) associated with PCA.3

Three studies, including two in the U.S.19,20 and one in the U.K.,19 examined the indirect costs of screening and treatment.

Another U.S. study calculated the cost of not ruling out cancer among patients with a falsely positive screen on the prostate-specific antigen (PSA) or the digital rectal exam.

Key References

3. Surveillance, Epidemiology, and End Results Program. Available at: URL: www.seer.cancer.gov

Figure 2. Distribution of Economic PCA Articles among the 11 Most Commonly Cited Journals

Figure 2 illustrates the number of articles published in the 11 most commonly cited journals in the economic evaluation of PCA. The Journal of Urology was the leading journal with 15 articles, followed by Cancer and Cancer Epidemiology and Biomarkers Prevention with 9 articles each. Other common journals included the Scandinavian Journal of Urology and Nephrology, the British Journal of Urology, the American Journal of Medicine, and the Journal of Urology. Some journals, such as the British Journal of Urology International, were represented with only one article.

Figure 2

*Data on the incidence is not available for 2003 and 2004; Data for the partial 2005 not included for comparision.

Conclusions

- The prevalence of PCA will increase as life expectancies, occupations, and noninvasive increases in number in the U.S., Europe, Japan, and other countries. As the population ages and as earlier detection becomes more common, PCA will become a more important focus of economic assessment.

- Cost comparisons among diagnostic or treatment modalities will remain challenging as interventional changes in clinical practice that make evaluation of treatment effectiveness comparable across regimens.

- Overall recommendations for future economic analyses should take into account the following factors:

  - The absence of country-specific cost data across all endpoints.
  - The controversy over various screening, diagnostic, and staging options.
  - The disparate benefits of various primary and secondary treatments (ie., initial recurrent treatments), and additional costs.
  - The lack of indirect cost data in non-U.S. countries.

- Economic Evaluation of Symptom Management

  - Symptom management for urinary tract issues, erectile function, and pain associated with advanced PCA contribute significantly to the overall cost of managing PCA; however, few studies have reported cost estimates attributable to PCA.

- Economic Evaluation of Prostate Cancer Screening

  - With the increase of PCA screening practiced worldwide, the economic consequences of screening and early detection become more important.

- Economic Evaluation of Treatment and Palliative Care

  - The lack of indirect cost data in non-U.S. countries.

- Economic Evaluation of Treatment and Palliative Care

  - The lack of indirect cost data in non-U.S. countries.

- Economic Evaluation of Prostate Cancer Screening

  - The lack of indirect cost data in non-U.S. countries.

- Economic Evaluation of Prostate Cancer Screening

  - The lack of indirect cost data in non-U.S. countries.

- Economic Evaluation of Prostate Cancer Screening

  - The lack of indirect cost data in non-U.S. countries.

- Economic Evaluation of Prostate Cancer Screening

  - The lack of indirect cost data in non-U.S. countries.