



CONTRACT COSTS ASSOCIATED WITH MAINTAINING FLEXIBLE URETEROSCOPES: A SINGLE CENTER EXPERIENCE

John Michael DiBianco, Jeffrey Twum-Ampofo, Jennifer B. Rolef, Patrick Mufarrij and Thomas W. Jarrett
 Department of Urology, George Washington University Medical School

> INTRODUCTION:

Servicing of flexible ureteroscopes (FUS) is a major cost of ureterorenoscopy (URS). Several third-party repair companies provide processing and maintenance of FUS, offering rates that are typically lower than those for similar services offered by the FUS manufacturer.

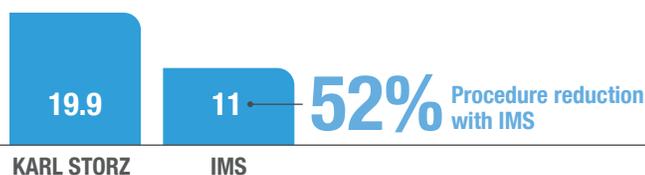
This study attempts to provide a modicum of evidence-based information regarding the costs associated with maintaining fiberoptic ureteroscopes in proper working order and a comparison of the differences between manufacturer and third-party contracts. The study compares the cost of flexible ureteroscope processing and maintenance contracts offered by a scope manufacturer (KARL STORZ) and a third-party repair company (Integrated Medical Systems International, Inc. [IMS]).

> MATERIALS AND METHODS:

Use and repairs of the KARL STORZ 11278AU1 Flex X2 Flexible Ureteroscope are prospectively recorded at George Washington University Hospital, a 371-bed, acute care hospital. Between 2011 and 2013, a retrospective review of all URS procedures was performed. The number and type of procedures, repair records, cost of maintenance contracts, and individual service calls for all FUS were obtained and the yearly costs were calculated. The handling of ureteroscopes was compared between 1 year under IMS and 2 prior years under the KARL STORZ contract. During the separate contract periods, there were no changes in faculty use of URS or in the resident supervision practices for URS.

More Procedures Performed during KARL STORZ Contract

PROCEDURES PER REPAIR/EXCHANGE



> RESULTS:

From January 1, 2011 through October 1, 2012, George Washington University Hospital used KARL STORZ for ureteroscope servicing. From January 1, 2013 through December 9, 2013, they used the third-party contractor IMS for repairs. The number of procedures performed per repair/exchange during the KARL STORZ contract was 19.9 and the number of procedures performed per repair/exchange during the IMS contract was 11. The IMS contract resulted in a reduction of procedures performed per repair/exchange by 52%. Adjusted for inflation, the yearly cost of ureteroscope repairs was \$125,715 during the KARL STORZ contract and \$158,040 during the IMS contract. By analyzing the costs incurred in 2013, if the institution had maintained the KARL STORZ contract for all 3 years, the estimated repair cost would have resulted in a savings of \$32,325.

> CONCLUSIONS:

Comparison of the annual cost of repair by the manufacturer or by the third-party showed that the third-party repairs were more expensive because of the decrease in durability of the repaired ureteroscopes, resulting in more breakage and fewer procedures performed per repair/exchange. Using the manufacturer service contracts is more cost-effective than using that of third-party companies because higher quality servicing prolongs and protects the use life of the equipment investment, reducing the need to repurchase capital equipment and lowering the total cost of ownership.

Lower Yearly Service Costs with KARL STORZ

YEARLY COST OF REPAIRS/EXCHANGES

