Since the launch of the award-winning LithoVue Single-Use Digital Flexible Ureteroscope, the landscape of flexible ureteroscopy has changed. A growing body of evidence supports the financial, operational and clinical benefits the LithoVue System offers your facility, healthcare professionals and patients. We invite you to explore the evidence for yourself.
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“Micro-cost analysis revealed the total cost per case for reusable and disposable flexible ureteroscopes were comparable. LithoVue may provide value in conserving resources for labor, consumables, and repair.”

Taguchi K, et al. Micro-cost analysis demonstrates comparable costs for LithoVue versus reusable flexible ureteroscope use. Poster session presented at the 32nd Annual Meeting of Engineering and Urology Society; May 12, 2017, Boston, Massachusetts, USA.

“In a cost analysis, it was determined that 46%–59% of the cost of maintaining a flexible ureteroscopy program results from ureteroscope damage.”


“If fewer than 99 flexible URS cases were performed at our institution in that year, a disposable URS would have been a better cost-effective alternative.”

“The results of this pilot study reveal a glimpse of the time and effort it takes to reprocess endoscopes in accordance with the new standards. Despite being unable to account for every aspect of reprocessing, the costs are staggering—from $114.07 to $280.71 for one endoscope.”


Digital scope acquisition can cost on average $20,000.


Fiber-optic scope acquisition can range on average from $15,000–$19,000.


A reprocessing breach is estimated to cost between $1.79 million and $20.4 million per incident depending on the number of patients impacted.

Approximately 70% of major ureteroscope repairs resulted from operator-induced damage that is not covered by any manufacturer’s warranty.

Strategic Health Resources. National SGNA Congress Presentation 2012. Aggregate figures include the costs of patient notification testing, incident investigation, medical malpractice defense, settlement/verdict, loss of volume.

The use of LithoVue was associated with a 14- and 15.5-minute shortening of procedure and operating room durations, respectively."


The entire ureteroscope sterilization process was a combined 31 steps. Mean cumulative time for the entire process was 15.5 hours. Only 25% of the ureteroscopes completed the entire process in a single day, with the remaining ureteroscopes (75%) delayed due to personnel task assignments.


“Matched pair analysis demonstrates that handing a surgeon a broken, non-usable, catastrophically damaged refurbished flexible ureteroscope from a flawed inventory of similar scopes results in an operative room time increase of 23 minutes (26.6%) and an operative procedure time increase of 19 minutes (35.5%).”

Carey RI, Carey MS. The ureteroscope matters: matched pair analysis reveals increased operative time and reoperation associated with the use of refurbished flexible ureteroscopes from a third party out-sourced vendor. Poster session presented at the Southeast Section American Urological Association Annual Meeting; March 24, 2017; Austin, Texas, USA.
Research suggests three procedures per day are delayed per operating room. (Massachusetts General Hospital endoscopy unit)

The average reprocessing delay is 10 minutes.

“This systematic evaluation of reprocessing effectiveness found that **100% of patient-ready flexible ureteroscopes** had visible irregularities and residual contamination that exceeded benchmarks for manually cleaned gastrointestinal endoscopes.”


“**Given the documented occurrence of infections and patient injury associated with the use of damaged or contaminated ureteroscopes,** infection preventionists (IPs) should frequently audit endoscope reprocessing practices and identify suboptimal practices that could contribute to the formation of biofilm and the transmission of infection.”


**Reprocessing guidelines are difficult to adhere to – lapses, errors and non-compliance with standards are common.**

“Concern for scope function was expressed in 48 (12.8%) cases, while image quality was compromised or unusable in 107 (28%) of cases.”


“Working in the lower pole results in stress and fatigue of the deflection mechanism, which leads to a loss of scope deflection and in some cases to scope failure.”


On average, new flexible, fiberoptic ureteroscopes require repair after fewer than 15 uses.


Flexible ureteroscope repairs were necessary on average in as few as 12 uses for digital scopes.


Once repaired, a flexible ureteroscope can expect to require a major repair after less than eight uses.


“70% of current ureteroscope major repairs result from damage to the working channel from malfunction or incorrect use of the holmium laser.”


“Somewhat to our surprise, and in contrast to other reports, it emerged that 72% of damages occurred during out-of-patient handling, cleaning and storage where usually the surgeon is not involved.”


Approximately 15% of user-related damage is due to loss of scope deflection.


Operational Efficacy | An Alternative to Durability and Repair Challenges
“Deflection characteristics (with LithoVue) are maintained even when thicker laser fibers are passed through the working channel.”* 

“Impressive performance: New digital ureteroscope allows for extreme lower pole access and use of 365 micron holmium laser fiber.”* 

*Results from case studies are not necessarily predictive of results in other cases. Results in other cases may vary.*
“The complication rate was lower in the LithoVue group compared with the reusable scope group (5.4% vs. 18.0%, p<0.05).”

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