



The Impact of Single Use Cystoscopes on Clinical Workflow in an Outpatient Setting



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Single use cystoscopes in office: ↓ encounter time by 22 min (66 to 44 min), ↑ patient visits per day from 12 to 21

Introduction

- Outpatient Urology procedures are historically performed with reusable equipment, which requires dedicated time from clinical staff to perform cleaning and sterilization related tasks.
- The single-use cystoscope recently developed by Ambu (Ballerup, Denmark) could optimize clinical staff encounter time in a high-volume outpatient setting.
- No studies exist evaluating outpatient clinic time with use of a single-use cystoscope compared to reusable cystoscope.
- We hypothesize single use cystoscopes may improve ancillary staff workflow and overall clinical productivity.

Methods

- Single-institution, prospective study including two full days of outpatient Urology clinic cystoscopy procedures
- Two procedure rooms were staffed by two nurses and one provider for an entire clinic day, where cystoscopy procedures were completed.
- Encounter times for each portion of nursing care responsibilities were observed and divided into discrete categories, and time spent during each portion of the clinical encounter was recorded.
- The differences in overall clinical encounter time and capacity (patient visits per day) for cystoscopy procedure clinics with single use and reusable cystoscopes were compared.

Results

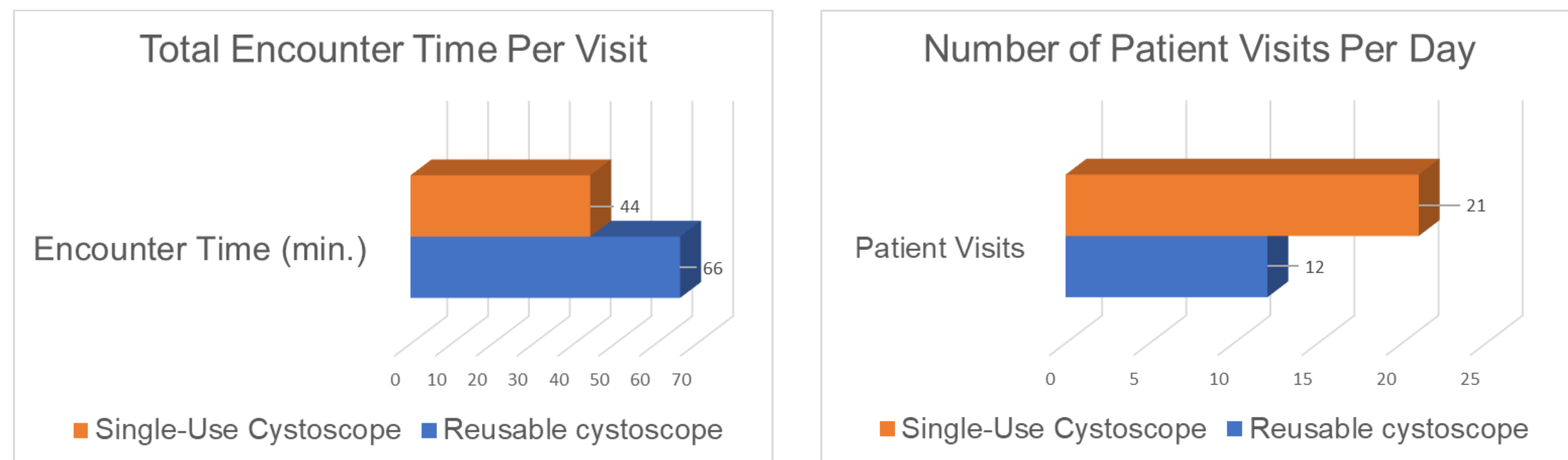


Table 1. Average Clinical Encounter Time for Each Workflow Category

Encounter Workflow Category	Reusable Cystoscope (min.)	Single-Use Cystoscope (min.)
Preparation of cystoscope tray	4	0
Transportation of cystoscope tray	1	0
Setup of cystoscope	5	5
Prepare sterile processing	5	0
Prepare patient for consent	5	5
Intake and provider consent	17	17
Lidocaine instillation	10	10
Procedure length	3	3
Cystoscope breakdown	2	2
Cystoscope preliminary cleaning	10	0
Alert transportation of cystoscope	2	0
Room turnover	2	2
Total	66	44

Objective

- Evaluate the change in overall clinical encounter time and clinical capacity with single-use cystoscopes compared to reusable cystoscopes in an outpatient clinic setting.

Conclusions

- Single-use cystoscopes in outpatient clinic procedures improved clinical efficiency, which increased the overall patient volume compared to reusable cystoscopes.