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Implementation and Standardization of Evidence Based Practice for Reprocessing of Flexible Endoscopes

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Purpose Statement

To improve patient safety and quality of care by implementing a standardized process for high level disinfection (HLD) of flexible endoscopes

Synthesis of Evidence

•Standard bedside cleaning and manual cleaning to prevent bacteria and bioburden from hardening onto the endoscopes must be completed immediately following the procedure with manually cleaning occurring within one hour of the bedside clean (Peterson et al., 2017).
•During manual cleaning to ensure consistency, reliability, and safety, all endoscopes are to be flushed and brushed, including aspiration and air purging (SGNA, 2018).
•Post manual cleaning, visual inspection of endoscopes and accessories provides quality assurance on cleanliness and identification of defects (CDC-HICPAC, 2017 and FDA 2009).
•Before HLD, assessment of level of cleanliness, endoscope integrity should be completed (AORN, 2016).
•Endoscopes are to be stored to prevent recontamination and damage by completing recommended drying, hanging vertically and freely, without accessories attached when not in use, and reprocessed at 7 days post HLD (SGNA, 2018).

Team Members

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Evidence-Based Practice Change

Standardized reprocessing standards implemented to be in compliance with best practice and evidence-based practice guidelines

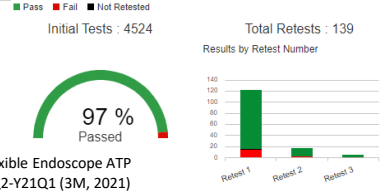
1. **Timed Cleaning-** Process enhanced to ensure immediate bedside cleaning followed by labeling the used scope bin with procedure end time to verify manual cleaning is completed within one hour. (Y20Q1)
2. **Lighted Magnification** glass installed over the manual cleaning sink for visual inspection of endoscopes prior to high level disinfection to assess for cracks and debris. (Y20Q1)
3. **Electronic flushing device** installed to ensure consistent, reliable, and safe means to aspirate and flush flexible endoscope channels. Process increased data monitoring and included implementation of disposable tubing and other endoscope disposables. (Y20Q1)
4. **ATP (adenosine triphosphate)** monitoring implemented to validate the effectiveness of detergents and the cleaning process by detecting any remaining biological matter and bacteria left behind after manual cleaning. (Y20Q1 high risk scopes and Y21Q1 all scopes)
5. **Borescope** use added to processes to visualize and inspect the internal channels of endoscopes for damage or defects when ATP testing procedures results in duplicate failures. (Y20Q1)
6. Endoscope **post cleaning hang time** policy standardized to 7 days and monitored in the scope labeling process to validate all flexible endoscopes are meeting reprocessing standards. (Y20Q1)

Measures of Compliance

ATP Monitor Results

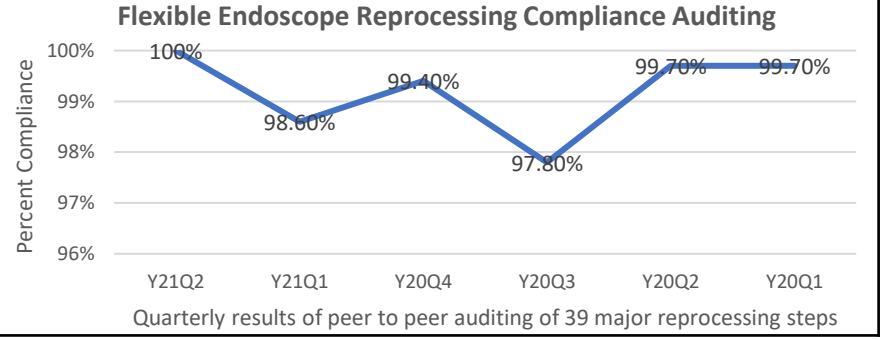
	% Pass / % Fail	% Pass	Total Tests	Average RLUs	Total Retests	Final % Pass	Devices Tested
Y21Q3		99%	3899	24	42	100%	54/61
Y21Q2		99%	3662	19	39	100%	53/60
Y21Q1*		99%	2406	20	39	100%	49/60
Y20Q4*		97%	611	24	23	100%	22/60
Y20Q3*		97%	885	21	26	100%	22/60
Y20Q2*		93%	622	29	51	100%	24/71

*Process occuring for only high risk flexible endoscopes. Implementation with all flexible endoscopes stated 8/19/2020.



High Risk Flexible Endoscope ATP Results Y20Q2-Y21Q1 (3M, 2021)

Supporting why every step is important



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