

TRANSITIONING TO ERCP PERFORMED UNDER ANESTHESIA: AN OUTCOMES-BASED ANALYSIS OF QUALITY MEASURES AND IMPACT

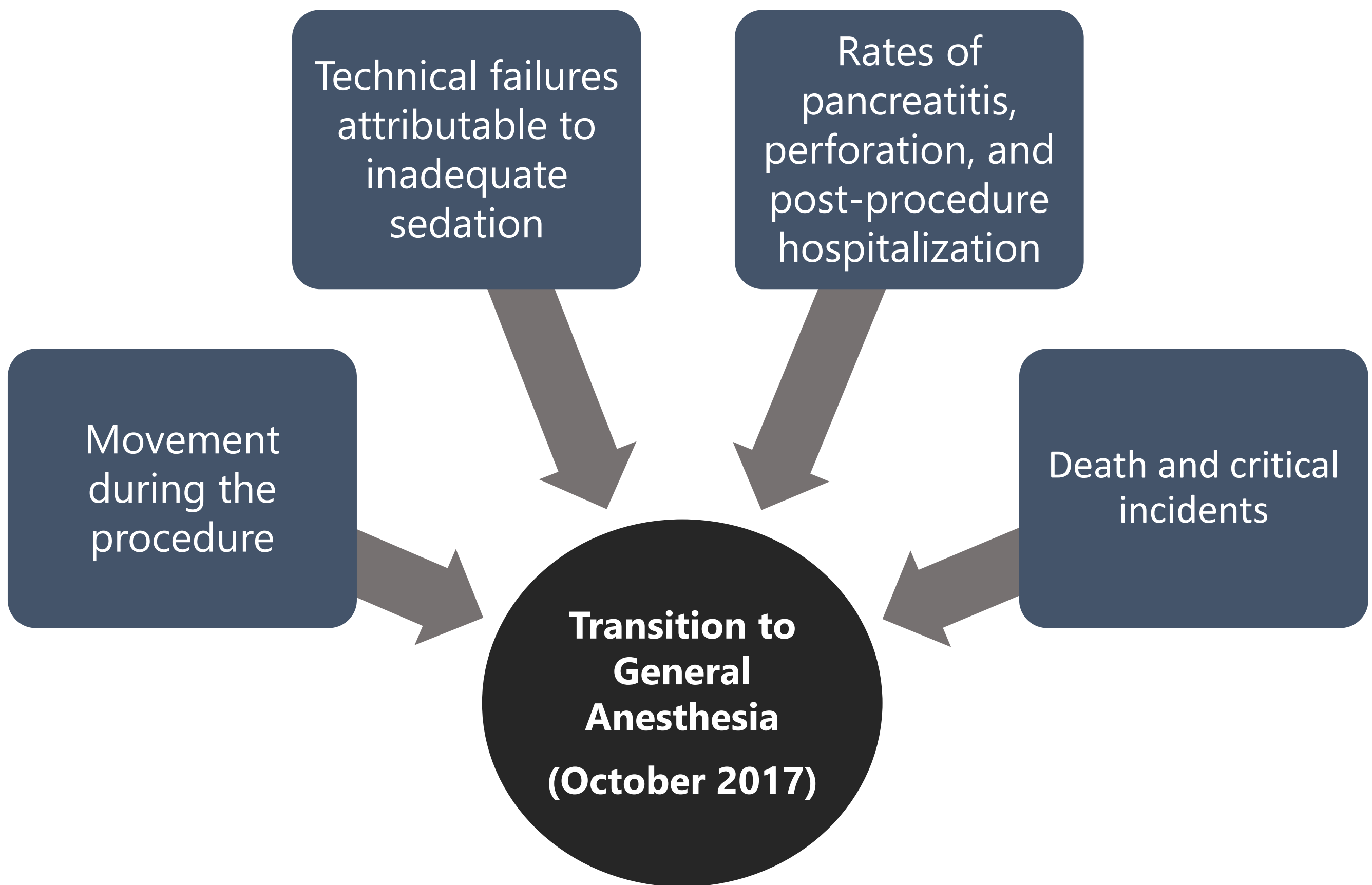
AIM: To compare the effect of the transition of sedation practice in ERCP from conscious sedation with ad hoc or selective anesthesia involvement to full-time anesthesia support.

CONTEXT

Endoscopic retrograde cholangiopancreatography (**ERCP**) is the gold standard in the diagnosis and treatment of numerous biliary and pancreatic diseases.

1,000 ERCP procedures are performed each year at **Kelowna General Hospital**.

The standard of practice for sedation in ERCP across Canada is conscious sedation without anesthesia assistance. A transition to full time anesthesia assistance in ERCP has the potential to further minimize:

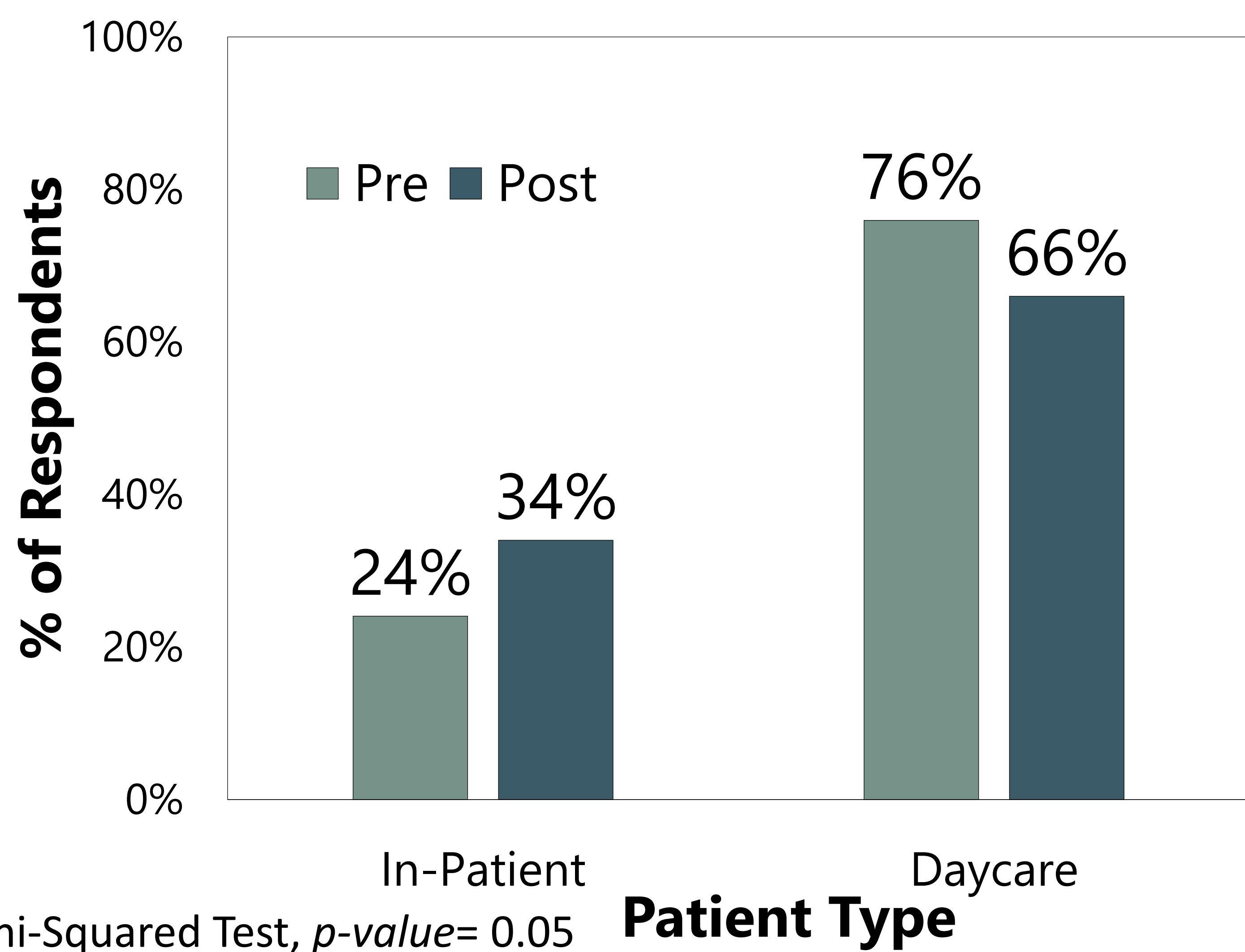


KEY FINDINGS

1. There was a significant **reduction** in the number of serious patient safety events in the year following the practice change. This is illustrated in the below table.

Level of Harm	1 Year Before	1 Year After	Grand Total
1 - No harm	3	5	8
2 - Minor harm		1	1
3 - Moderate harm	1		1
4 - Severe harm	2		2
5 - Death	2		2
Grand Total	8	6	14

2. There was evidence to indicate that the ERCP program is currently serving **a broader and more medically complex** population than prior to this practice change. This is illustrated in the below table which shows an increase in the number of in-patients managed, which is an indicator of higher acuity and complexity patients.



3. Intraprocedural and other post-procedural quality and safety outcomes were **similar or superior** in the post-cohort when compared to the pre-practice change cohort.

4. The overall **OR utilization time** and time in PAR is similar.

LESSONS LEARNED

The transition to ERCP being performed under general anesthesia with the hope of improving the safety and outcomes has been associated with improvements in the provision of care at KGH.

This transition has allowed a more medically complex population to be provided this service.



PROCEDURE

1. **A retrospective review** of the number of events recorded in the hospital's **Patient Safety Learning System** for the year prior to and following the implementation of this practice change.
2. **A retrospective review** comparing several process metrics, efficiency indicators, and critical quality outcomes for a two-month period in the months preceding (N=158) and following (N=150) this practice change.

3. **A review** of findings of overall **volumes/referral trends** available from IH's administrative database system.
4. **A Literature review** to evaluate how other institutions address safety and quality concerns in ERCP.
5. **A discussion** with medical, nursing and administrative leadership occurred to inform this evaluation process and to **validate** findings.

NEXT STEPS

Currently, we plan to expand the scope of evaluation to 1 full year pre and post practice change to attain a more robust sampling of the data and to determine if rates of pancreatitis and perforation are significantly improved as a result of the change in sedation practice in ERCP.