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For more information:
Calgary_ANE_QI@ahs.ca



General

1. What is the Anesthesia Feedback Report?

In 2017, anesthesiologists in the Calgary Zone identified 5 key clinical measures for which regular feedback would help them improve their practice. Several databases were used to build a Feedback Report containing these measures, which were tested and validated in several cycles by a pilot group of 25+ anesthesiologists. Based on the positive feedback received during the pilot, the Calgary Zone Department of Anesthesia is providing this report to all anesthesiologists in the Calgary Zone who opt-in to receive their report. This is intended to provide a catalyst for individual performance improvement related to mortality, morbidity, patient experience and cost, as well as a shared platform of indicators for prioritizing quality improvement activities in the zone.

The Anesthesia Feedback Reports are **confidential**, with the goal of improving practice and will **not** be used for purposes of discipline or privileging.

2. How were the clinical topics and targets identified?

Clinical topics and targets were identified through conducting a literature review and surveying anesthesiologists in the Calgary Zone to identify high priority areas of interest to clinicians that impact patient morbidity, mortality and cost.

3. How do I view my report?

There are multiple ways to view your report:

- ▶ **Sign-up to receive your quarterly report in your [AHS email account](#) and a notification to your primary email address.**
 - To sign-up or change your preferences, such as your primary email address, please click [here](#) or email: Calgary_ANE_QI@ahs.ca
 - If you have not already done so, users **must** sign the [Tableau End User Agreement](#) from an AHS computer using your AHS ID and Password, or email Calgary_ANE_QI@ahs.ca to acknowledge that you agree to and have read the agreement [here](#).
- ▶ **Securely view your report online in [Tableau](#)* from:**
 - An AHS computer using your AHS ID and Password.
 - A non-AHS device using your AHS ID and Password, and a FOB.
(FOB requests can be emailed to Calgary_ANE_QI@ahs.ca. Please identify whether you have an iPhone or an Android, or prefer a hard-token).

***Notes about Tableau:**

- ▶ First time users need to sign the [Tableau User Agreement](#) from an AHS computer using your AHS ID and Password, or email Calgary_ANE_QI@ahs.ca to acknowledge that you agree and have read the agreement [here](#).
- ▶ It takes a few minutes to display each page of your report in Tableau. Please be patient. We are actively working on reducing the loading time in the next few weeks.



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4. I forgot my AHS login information

[Click here](#) or call the Help Desk: 1-844-955-4999

5. I'm having trouble signing the Tableau End User Agreement

Users will need to sign the [Tableau User Agreement](#) from an AHS computer using your AHS ID and Password, or email Calgary_ANE_QI@ahs.ca to acknowledge that you have read the agreement [here](#).

6. Is it necessary to use Anesthesia Manager to generate my report?

Yes, Anesthesia Manager is the main data source for the Anesthesia Feedback Reports. Regardless of the number of cases in Anesthesia Manager, a report can be generated for you if you opt-in to receive your report, however data charted on paper anesthetic records are not included.

7. Will this be on One45?

No, it will be on [Tableau](#), and sent securely to each physician's AHS email on a quarterly basis.

8. How do I see my data for multiple sites?

Coming soon: For physicians with over 50 cases in each site, there will be a dropdown box to select which site you want to see in the [Tableau](#) version of your report.

9. How do I review my report with a Clinical Topic Lead or the Physician Learning Program?

Please email Calgary_ANE_QI@ahs.ca to arrange this, or contact a topic lead directly:

Topic Lead	Physician Name
Low Flow Anesthesia	Donal Finegan
Intraoperative Normothermia	Farrah Morrow
Post-Operative Nausea / Vomiting (PONV) Prophylaxis	Desiree Teoh
Thoracic Epidural Complication Rate	Lorraine Chow
Timing of Perioperative Antibiotic Prophylaxis	Kaylene Duttchen

10. What about addressing systemic issues such as pre-operative warming?

In the summer of 2018, the Department of Anesthesia will start prioritizing quality improvement initiatives based on the aggregated data provided in these reports to improve anesthesia performance related to the 5 key indicators.



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11. As a physician (ie: a contracted AHS affiliate), can I access patient health information to audit my own practice or to help improve the operations of the department?

Yes. AHS Information & Privacy has provided the following information and clarification:

- You may access health and personal information to perform your job duties and responsibilities, including providing a health service to a patient and to support AHS operations.
- This includes the ability to access patient information when required for your job to conduct quality improvement work. This is not limited to reviewing your own work, but can include reviewing others', so long as it's necessary to the department or program.
- Only access the health and personal information that you need to perform your job duties and responsibilities. You may not use the information for other purposes (e.g. personal or independent research).

12. Who do I contact to make suggestions to improve this report?

Please email Calgary_ANE_QI@ahs.ca with your suggestions.

Low Flow Anesthesia

13. What does the cost include? How is it calculated?

The cost represents the average calculated cost of volatile anesthetics for cases included in your report. Cases in which volatile are not used at all – i.e TIVA, MAC are excluded from this calculation.

The cost displayed on your report is calculated using fresh gas flow rates, volatile levels from your cases recorded in anesthesia manager and the current pharmacy cost for desflurane and sevoflurane as applicable. (Full details on the calculation can be reviewed in the 'data notes' section of the report.)

14. What about compound A and low flow rates with sevoflurane?

Non-reactive absorbents (Litholyme® or Amsorb®) do not generate Compound A or carbon monoxide. Litholyme is currently the commonly used absorbent in the Calgary Zone. The operating room respiratory therapists can confirm which absorbent is currently in use at your site.



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PONV

15. What are the criteria used to determine PONV 'risk' in this report? How were these decided upon?

Post op nausea and vomiting 'risk score' is determined based on a modified Apfel score. The factors include: Female Gender, Non-Smoker Status, Administration of Opioids in PACU, Age, and use of Volatile Anesthesia.

Apfel includes a "History of PONV" as a risk but unfortunately this could not be reliably obtained from the charting. Therefore, in consultation with a statistician a review of the literature was conducted to identify alternate factors conferring similar risk. Ultimately, Age <40 and Use of Volatile Anesthesia were added to the risk score. Finally, the modified aggregate risk scores were compared to aggregate PONV rates in the Calgary Zone population.

16. How is "sufficient" prophylaxis determined?

"Sufficient" prophylaxis is based on the Consensus Guidelines for Management of PONV (Gan 2014) which recommend agents/interventions based on risk assessment.

The targets adapted for use here are:

- Low risk – 0 agents/interventions
- Medium risk 1 agent/intervention
- High risk 2 agents/interventions
- Very High risk – 3 agents/interventions

17. What are the agents/interventions that are accounted for in the report?

Due to data limitations it is difficult to incorporate all anti PONV interventions into the report. The following medications/interventions are counted in your prophylaxis report:

- Aprepitant – if charted in anesthesia manager as a medication (not able to be captured if documented as free text/memo)
- Ondansetron
- Dexamethasone
- Haldol
- Propofol Infusion – either as part of a volatile based anesthetic or as TIVA
- Granisetron



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18. When will PLC have PONV data available?

Unfortunately, PLC did not participate during the PONV data collection phase. We are working to collect this data from all sites in the future.

Timing of Perioperative Antibiotic Prophylaxis

19. What cases are used to determine antibiotic percentages?

Antibiotic percentages are based on all cases when antibiotics are recorded (emergency and elective). If antibiotics are not recorded, the case is not included in the measure. The measure does not include information on the clinical indication for antibiotics as this information is not reliably documented by Surgery.

All cases are documented on nursing documentation.

20. What if antibiotics are given 'late' on purpose?

There are cases in which antibiotics are requested to be given 'late' (ie. during an incision and drainage). Unfortunately, the data does not allow us to identify these cases and they will be reported as 'late'. However, our audit indicates these cases are rare.

Thoracic Epidurals

21. What are the epidural complications?

Epidural "complications" are pulled for the acute pain service note for the first 24 hours after the epidural is inserted. They included minor items such as "inadequate analgesia" and more major issues such as "Catheter Reinsertion". There is some variability in when and why these "complications" are charted.

This initial version of the report intends to make anesthesiologists aware of the documentation on their cases. Moving forward we hope to facilitate physicians investigating and providing feedback that can drive change in both the report and perhaps the APS charting so that we are collecting information that is meaningful and relevant.



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22. What are the definitions that the APS nurses are using to determine 'complications'?

Below are the definitions from the nursing manual for the complications that may appear in your report:

Complication	Definition from Nursing Manual
Catheter Leakage	EA/IT/PNB solution leaking from the catheter insertion site at the skin or directly from the exposed catheter.
Catheter Migration	The EA/IT/PNB catheter has moved from the original insertion site as evidenced by a change in the markings.
Catheter Reinsertion	Original EA/IT/PNB catheter was ineffective and required replacement
Catheter / Connector Disconnect	EA/IT/PNB catheter comes apart at the distal tip, filter or tubing.
Inadequate Analgesia	Poor pain control
Inadequate Block	Block that is unilateral, patchy, too high, or too low
Motor Block	Patient unable to move limb(s)
No Block	Patient does not have a sensory block and has poor pain control.

Normothermia

23. Why is PACU arrival temperature not reported?

We wished to include Recovery Room arrival temperatures unfortunately this information is not recorded electronically. Also, the predominant thermometer used in the region has been demonstrated to have a low level of accuracy compared to reference methods. (Geijer H, Udumyan R, Lohse G, et al Temperature measurements with a temporal scanner: systematic review and meta-analysis BMJ Open 2016;6:e009509. doi: 10.1136/bmjopen-2015-009509)

24. Isn't the current guideline to have temperature recorded for all cases greater than 1hr? Why the 120 min cutoff?

Both 60 min and 120 min cut offs were considered. However, after a feedback from report users 120 minutes was felt to be preferred at the current time due to controversy regarding the 60 minute time in the guidelines.

25. What cases are included in temperature monitoring data? What about cases performed under spinal, or local anesthesia?

Temperature data includes only cases performed under general anesthesia. Cases performed under sedation, spinal or regional anesthesia are excluded from this data in the report.



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