QI Project FAQ

Frequently Asked Questions for Resident QI Project 2019-2020

What is the quality improvement project?
This is the annual GME-based quality improvement incentive project, in which each program develops a quality improvement project and submits it to the GME office. Once approved, we have a year to meet our defined goal. While the incentive portion is for residents, the entire department (i.e., all anesthesia providers) is actually involved in the data we will be collecting. That means: attendings, CRNAs, residents, and fellows who complete cases within the defined criteria will have those data collected for the incentive project. Prior projects you may be familiar with include neuromuscular blockade and ENMT use, as well as the previous year's delirium reduction campaign.

What is the issue our project addresses this year?
Our project this year involves the use of opioid-sparing, multimodal analgesia pre- and intra-operatively. Our goal is to increase our use of multimodal analgesia for general anesthesia cases in order to reduce opioid use and improve pain control with fewer side-effects related to opioid use. Even though our goal is to reduce opioid use through using other agents, we want to emphasize that our QI project is not prescriptive - we want all providers to continue to use their best judgment for their individual patients and cases. We imagine that we all have room for improvement, especially as more research comes out regarding multi-modal analgesia and even opioid-free cases!

What cases are included in the project?
OR cases by any provider (attending, CRNA, resident, or fellow) will are eligible for being included in our QI project data. Ultimately, the QI data will only be collected for OR cases which do not meet any of the following exclusion criteria:
-Case duration less than 3 hours
-Case not under general anesthesia
-Non-OR anesthetizing location
-Transplant and cardiac surgeries
-ICU patients going to the OR
-Patient age > 70 or < 18yo

What is the specific goal for the cases that are included?
Our goal is to increase multi-modal agent use by 10% in July 2019-June 2020 compared to our baseline (January-December 2018). In 2018, 56% of general anesthesia cases used a multi-modal approach as we are defining it for this project. Over the next academic year, we would like **at least 66% of cases** meeting criteria to use a multimodal approach. In our project, using a multi-modal approach is defined as:

-Administering two intra-operative medications or anesthetic techniques from the lists below; or
-Administering one pre-operative medication and one intra-operative medication or anesthetic technique from the lists below.
-NOTE: Pre-operative medications are counted if they are taken within 6 hours of a case starting, so this DOES include medications given as inpatients for those patients going to the OR who are already hospitalized (e.g., those on scheduled Tylenol or gabapentin).

Pre-operative medications:
-Acetaminophen (PO)
-Celecoxib
-Diclofenac
-Gabapentin

Anesthetic Techniques:
-Peripheral nerve block or catheter
-Epidural catheter
-Spinal

Intra-operative Medications:
-Acetaminophen (IV)
-Dexamethasone 8mg or greater
-Dexmedetomidine infusion or bolus
-Ketamine infusion or bolus
-Ketorolac
-Lidocaine Infusion
-Magnesium Infusion or bolus

What if a case would meet criteria for inclusion in the project but I feel that the patient should not receive these medications/techniques?
First and foremost, we believe in treating each patient individually, and want every provider to continue to use their best judgment for each case as they always would. We understand that there are many cases where these medications or techniques are not feasible and may even be contraindicated!

That said, we have intentionally made our list broad and inclusive. It is likely that most patients would benefit from some combination of these these medications and techniques, even if it is simply a pre-op medication and a bolus of decadron or ketamine (when not contraindicated!).

Interestingly, based on recent evidence, it seems that the incidence of persistent opioid use after minor and major surgeries in opioid-naive patients is actually very similar. This may suggest that the risk:benefit ratio in minor surgeries is higher and reducing opioid use in smaller cases is especially important. And as

mentioned, recent studies have demonstrated opioid-free surgeries, so multimodal approaches are certainly something to consider!

When should I start implementing multimodal analgesic techniques?

Do it today! Go forth and help our patients achieve multimodal analgesia! (And maybe do our part to bring us out of the opioid crisis!)

Who can I contact with questions about the QI Project?

Anthony Little (Anthony.Little@ucsf.edu) and Genevieve Manahan (Genevieve.Manahan@ucsf.edu) are our resident project leads and would be more than happy to answer any further questions or direct you to an appropriate person.