**Supplemental Digital Content 3**

Sample Fresh Gas Flow Personalized E-mail Report

This is the format of the monthly email reports sent to all supervising anesthesiologists following the change to the LiCl absorbent. The email sent to anesthesia providers was the same, except the phrase “cases you supervised” was replaced with “cases you performed”. For reporting purposes, only cases in which one anesthesia provider (for provider reports) or one anesthesiologist (for supervisory reports) were included. Cases less than 15 minutes in duration were excluded, as were cesarean sections. Only the interval from surgery begin to surgery end was included. During the period prior to the absorbent switch, targets were 2.0 L/minfor sevoflurane and 1.0 L/minfor desflurane and isoflurane.

To: Richard Epstein

Report Date: 2014-05-06

\*\*\* Your personalized FGF report is at the bottom of this email \*\*\*

Note: We are now using litholyme in all locations. Because this CO2 absorbent does not produce Compound A or Carbon Monoxide when administering Sevoflurane, FGF can be run at 1 L/min throughout maintenance rather than increasing the flow rate after 2 MAC hours. This report now incorporates the new SEV target of 1.25 l/min.

We are trying to reduce the environmental impact of excessive fresh gas flows, as such flows result in large amounts of volatile anesthetics being vented into the atmosphere. Another benefit of this effort will be a modest reduction in our volatile agent cost.

We are therefore asking everyone to reduce their total fresh gas flows during the interval from Surgery Begin to Surgery End to result in the following average FGF:

Desflurane 0.50 L/min

Sevoflurane 1.25 L/min

Isoflurane 1.00 L/min

Please note that these targets exclude induction and emergence, times when higher flows are likely. Also excluded are cases where the duration of volatile agent administration was 15 minutes or less.

We would also like to reduce our DES FGF to <0.5 L/minas the life cycle greenhouse gas impact per MAC hour is 20x greater than SEV.

When running low flows, be sure to pay attention to the vaporizer setting and the ET gas concentration, as the latter may be substantially below the vaporizer setting until equilibration occurs. This is affected by agent solubility and the internal mechanics of the Apollo anesthesia machine.

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Personalized FGF report for Richard Epstein for Sevoflurane

During the last 10 cases you supervised with SEV, your supervisees' average FGF during the interval from Surgery Begin to End was 1.84 L/min

Your flow rate was 47.0% higher than our target of 1.25 L/min. Please try to reduce the flow rates during maintenance for your subsequent SEV cases.

This report reflects cases done between 2014-02-11 and 2014-05-06

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