Worked Example 1

Hospital and Health Board/Trust Arrangement

NHS Lothian is a health board in South East Scotland. It has a number of anaesthetic departments (some even on the same hospital site).

In this example, I am going to be site lead for the main Royal Infirmary of Edinburgh (RIE) Anaesthetic Department. This is a large department with 24 theatres, an ED, an ITU, cath labs etc. The department is also responsible for anaesthetic services for ECT in the Royal Edinburgh Hospital. Also, physically on the same hospital site as the Royal Infirmary of Edinburgh, is the children's hospital. This is a **separate anaesthetic department** with its own clinical director. It therefore **cannot** be included with the data for the Royal Infirmary as there is a different governance structure. If I wanted, I could also be site lead for the children's hospital and organise a team for submitting its data, or I can leave it to a colleague.

As site lead for RIE, I put together a team to help me interrogate all of the CO2 waveforms. We must now define the areas within our hospital(s) for data collection.

For this hospital, the areas we have identified are:

1. Main theatre anaesthetic rooms
2. Main theatre theatre rooms
3. Main recovery
4. Cardiac recovery
5. Obstetric recovery
6. Cardiac ICU
7. Main ICU
8. Emergency department
9. Cath Labs
10. Interventional radiology
11. ECT Suite in the Royal Edinburgh Hospital
12. Transfer equipment

A note on clinical areas:

A clinical area is defined by you and your team within your hospital. These will be specific areas that are for a similar purpose (eg all anaesthetic rooms in your theatre suite or all bed spaces in your ITU). If you have two different ITUs, it will be up to you whether to group them as one area called ITU or two different areas (eg main ITU and cardiac ITU) depending on how different you think they are. Here, you will see that all 24 theatres are grouped as one area, but the recovery areas are split (cardiac, obstetric and main) as, in this hospital, the theatres all run very similarly but the recovery areas are each quite different. It would be rare for each individual anaesthetic room or ITU bedspace to be its own area, but that might be appropriate in some rare situations.

If your department is run over more than one hospital, then you will need different areas for each hospital. **An area cannot span two hospitals.** Similarly, if you have two theatre suites (see worked example 2), we expect these would be different "areas".

We will need to submit 12 copies of the main data collection form.

For each of the areas, we will interrogate all of the machines.

Even though the ECT suite is just one room, with one machine, it **cannot** be included in another area as

1. It has its own distinct purpose
2. More importantly, it is in a different hospital. **Areas cannot span two hospital sites.**

Worked example for one area

As an example for main theatres anaesthetic rooms, we found:

1. A total of 24 machines
2. 20 machines where the CO2 was a white line waveform at the bottom of the screen
3. 5 workspaces where the CO2 was also on a different monitor screen as a yellow line in the middle.
4. 4 machines where the CO2 was a blue area waveform at the top of the screen
5. 4 machines where another waveform on the screen was the same format (blue area) as the CO2 trace.
6. The equipment we found displaying capnographs was: 20 GE Aisys CS2 machines and 4 Drager Primus machines and 5 Mindray DPM7 Patient Monitors.

On the following pages is an example of how I will fill out the form with this information. The codes for the description of the waveforms are explained in the SOP Document.

My team and I will repeat this exercise for each area that we have identified and submit **a form for each area**.

CAVAuk Area Form

Form to fill for each area in your department.

Area Location and Type

1. Trust or Health Board

NHS Lothian

2. Hospital Site

Royal Infirmary of Edinburgh

3. Area Name

Main Theatres Anaesthetic Rooms

4. Clinical Area Type

Anaesthetic Room

Next

CAVAuk Area Form

Capnography Used

Where two variants are used at the same station please use the ventilator display as Variant 1 and duplication should then be logged in the screen d

5. Variant 1: (e.g 32 RAB)

20WLB

6. Variant 2: (e.g. 21 CLT or N/A)

5YLM

7. Variant 3: (e.g. 5 GrAM or N/A)

4BAT

8. Other Variants: (please state numbers of machines and waveform code or NA)

N/A

9. How many machines display waveforms identical in morphology to the CO2 waveform? (e.g Pressure/ Volume/Agent) (none = 0)

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CAVAuk Area Form

Capnography Display Equipment Log

To better understand the hardware and software limitations across the UK please include the names of machines used in this location and whether they can be modified to the SALG standard.

10. Capnography Display Equipment and numbers used (e.g.) 12DraegerPrimus

20GEAisysCS2
4DraegerPrimus
5MindrayDPM7