

PAINT-2 Study

The Procedural Access IN Training (PAINT-2) study is a multi-centre prospective observational study of procedures performed by learners and associated levels of supervision. It is a follow-up to the PAINT-1 study published in 2020 ([Pearce, Sidhu, et al. BJA 2020; 124\(3\):e70-6](#)).

The PAINT-2 study is an observational study that requires no change to your daily practice with patients. It will involve collecting information from both supervisors and learners on procedures performed and levels of supervision, at the end of each list where a supervisor is paired with a learner.

Our ultimate goal is to evaluate access to procedures in training and, if required, make recommendations to improve teaching and learning.

Data collection:

- Prior to the study period, you will be sent a survey link. If you are on a list paired with a supervisor/learner during the two-week study period, we ask that you complete the brief survey. We estimate that 1-2 min is all that is required.
- This survey will require information on demographics (personnel, date), type of procedure, level of supervision, and procedure complexity (supervisor only). When an individual completes the survey for the first time, two additional demographic questions included.
- If a completed survey is not submitted, you will be sent a reminder email with a link to the survey. If we still don't receive a reply, we may phone you to collect that information.
- All individual personal information and dates is kept confidential. The local Site Investigator will not have access to survey results. They will however be provided feedback on compliance in order to contact non-responders. Data will not be attributed to individual hospital sites in the final multi-centre analysis.

Important Note:

If using a phone to complete the survey, the display requires you to scroll right to see all columns. Alternatively, turn your phone to landscape orientation.

Inclusion Criteria:

- All weekday lists with a named supervisor and learner where specific procedures are performed during the study period.
- The specific procedures are:
 - Anticipated difficult airway management (steps/procedures to manage an anticipated difficult airway)
 - Neuraxial blocks (i.e. spinals and epidurals)
 - Peripheral nerve blocks
 - Central venous cannulation (including PICCs)
 - Point-of-care ultrasound (e.g. cardiac, lung, gastric)

- For the purposes of this study, provisional fellows (including those in post-FANZCA fellowships), registrars, SHOs (training and non-training, including from other specialties) are categorised as learners.

Exclusion Criteria:

- Procedures that are excluded from data collection, i.e.
 - Routine airway management in patients with no anticipated difficulty
 - Peripheral venous cannulation (except PICCs)
 - Arterial cannulation
 - Off-the-floor procedures (i.e. those in the labour ward or in ED)
 - Procedures performed while on call (i.e. not a named list)
- Solo lists, i.e. no paired supervisor-learner
- After-hours lists, i.e. evenings, nights, weekends
- Lists where supervisors are paired with medical students as the only learner

Frequently asked questions

1. How do I recall all this information?

The survey will include the relevant information and definitions. The survey options are all in drop-down menu format, so you only need to select from the options that are available. Some screenshots are shown in the final pages of this information sheet.

2. What is meant by ‘airway management’ as a procedure?

We acknowledge that ‘airway management’ is a broad term and often a range of discrete steps is required to manage a difficult airway (e.g. appropriate positioning, bag-mask ventilation, different tracheal intubation techniques, etc). For the purposes of this study, ‘anticipated difficult airway management’ will encompass all steps taken to manage the airway.

3. How do we determine if an airway is anticipated to be difficult?

This is a subjective determination. We have defined ‘anticipated difficult airway’ as *‘an airway predicted to be non-routine for any reason, as subjectively assessed by either the supervisor or learner, and communicated to each other as such.’*

4. What if multiple procedures are performed to manage an anticipated difficult airway? Do I include a separate entry for each procedure?

Only a single entry is required for each airway managed. For example, if an anticipated difficult airway included positioning for bag-mask ventilation and an asleep fibre-optic intubation, it would still be classed as a single airway management procedure and the overall level of supervision should take into account all these steps.

5. What if I am on a list in which multiple similar procedures are performed. For example, an elective obstetric list with three spinal.

You would then record an entry for each procedure, in the same survey. One survey is to be completed for each list, and each survey has space for up to 12 procedures. If more space is required, please let us know.

6. How are the levels of supervision defined?

These have been adapted from a previous study and are defined below. These definitions are also included in the survey for your reference

- Learner Watching – *supervisor performs procedure while explaining steps to learner*
- Active Help – *learner performs procedure with supervisor actively guiding learner through critical steps*
- Passive Help – *learner performs critical steps of procedure independently while supervisor passively observes, intervening only if necessary to make an important teaching point or to optimise patient safety*
- Learner Independent – *learner performs procedure independently without input from supervisor during procedure, who may or may not be present. A discussion on technique/plan may have taken place prior to the procedure*

7. How are procedures rated for complexity?

This information is only required of supervisors, who are asked to rate the complexity of each procedure relative to their overall experience with the procedure and any relevant patient factors. Only three options are presented: least complex one-third, average complexity, and most complex one-third.

8. Does the supervisor and learner each submit a survey after a list?

Yes, both the supervisor and learner each submit one survey after a list, using their own survey links. The aim is to determine what level of supervision was applied from the perspective of the respondent – this may differ between supervisor and learner.

9. Can the supervisor and learner discuss their responses prior to the survey?

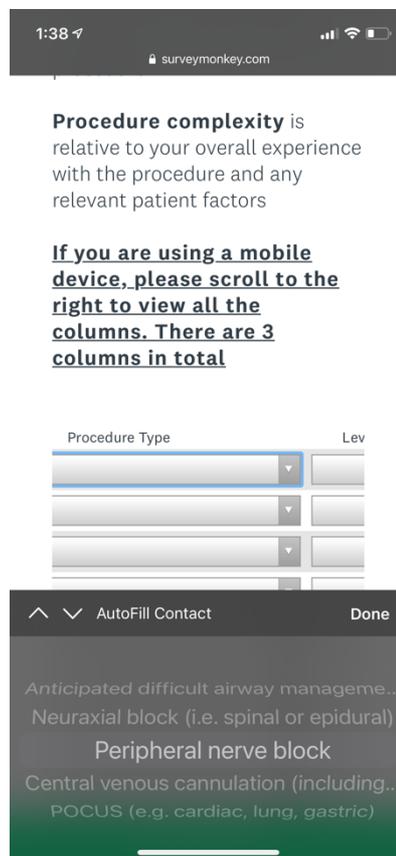
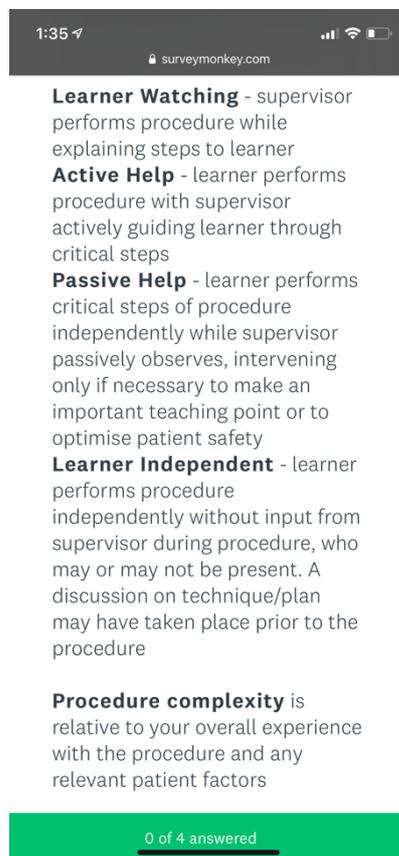
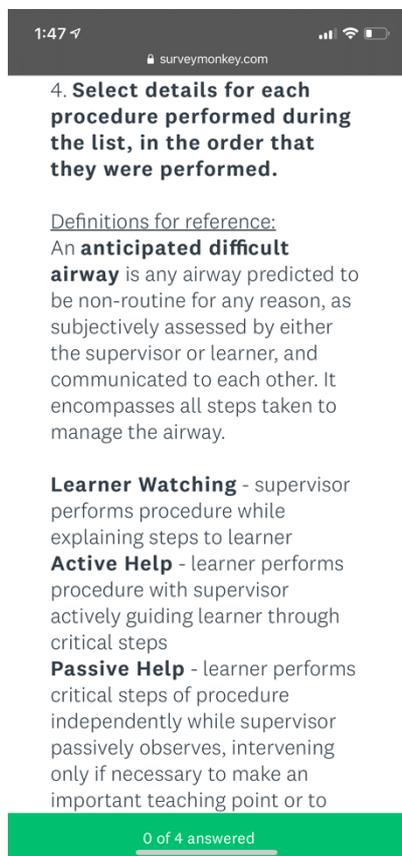
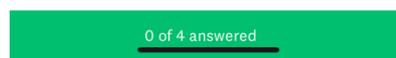
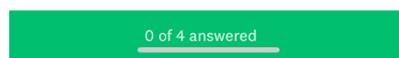
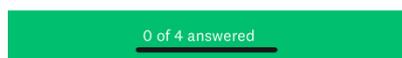
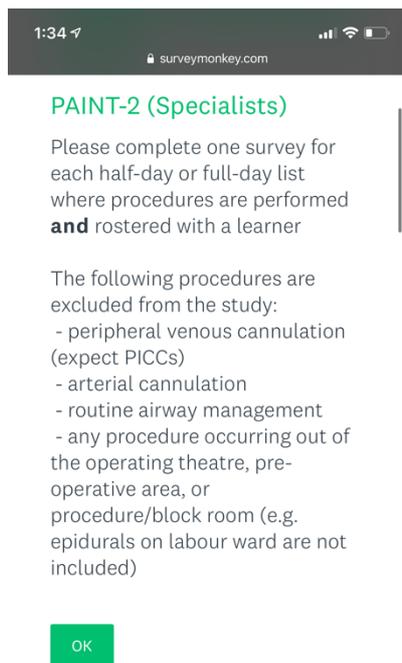
Please avoid discussion on what level of supervision was applied in order to complete the survey. However, we encourage discussion to clarify what procedures were performed in what order, and their eligibility.

10. In what order should procedures be entered?

These should be entered in chronological order for each list, with the procedure done first listed first.

11. Can I decline to participate?

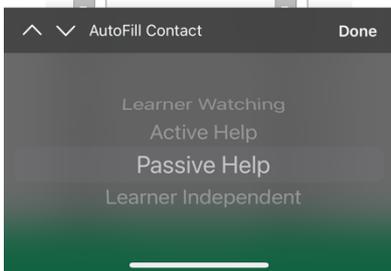
Yes, any individual can decline to participate at any time. Please inform your local Site Investigator if you intend to decline participation.





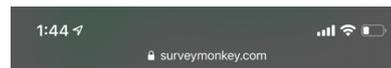
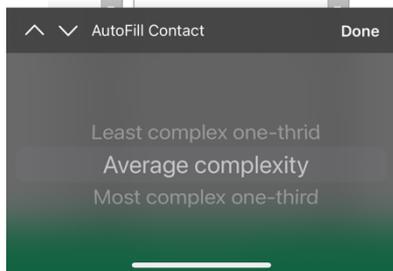
Procedure complexity is relative to your overall experience with the procedure and any relevant patient factors

If you are using a mobile device, please scroll to the right to view all the columns. There are 3 columns in total



Procedure complexity is relative to your overall experience with the procedure and any relevant patient factors

If you are using a mobile device, please scroll to the right to view all the columns. There are 3 columns in total



PAINT-2 (Learners)

Please complete one survey for each half-day or full-day list where procedures are performed **and** rostered with a supervising clinician

The following procedures are excluded from the study:
 - peripheral venous cannulation (except PICCs)
 - arterial cannulation
 - routine airway management
 - any procedure occurring out of the operating theatre, pre-operative area, or procedure/block room (e.g. epidurals on labour ward are not included)

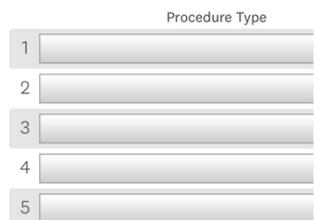
OK

0 of 4 answered



Learner Independent - learner performs procedure independently without input from supervisor during procedure, who may or may not be present. A discussion on technique/plan may have taken place prior to the procedure

If you are using a mobile device, please scroll to the right to view all the columns. Alternatively, turn your device sideways to view in landscape mode. There are 2 columns in total.



0 of 4 answered

If you are using a mobile device, please scroll to the right to view all the columns. Alternatively, turn your device sideways to view in landscape mode. There are 2 columns in total.



0 of 4 answered

The following questions are included in each survey (one for supervisors and one for learners) but only need to be completed once – i.e. the first time an individual completes a survey.

5. The following two questions only need to be answered once during the study period. If you have already completed the survey once, you may skip this question and press 'DONE' below.

If you are using a mobile device, please scroll to the right to view all columns. Alternatively, turn your device sideways to view in landscape mode. There are 2 columns in total.

	Gender	Years as Consultant
Gender & Experience	<input type="text"/>	<input type="text"/>

5. The following two questions only need to be answered once during the study period. If you have already completed the survey once, you may skip this question and press 'DONE' below.

If you are using a mobile device, please scroll to the right to view all columns. Alternatively, turn your device sideways to view in landscape mode. There are 2 columns in total.

	Gender	Training Level
Gender & Experience	<input type="text"/>	<input type="text"/>

0 of 5 answered 

DONE