Notes for AORTIC site submitting to the ANZPIC (paediatric) Registry.

The paediatric data collection fields are based on 2 forms – the main Data Collection Form, and the Episodes Collection Form (samples attached). Note that while these fields have been programmed into the AORTIC paediatric screens, these forms are attached as there may be additional text on them which help in understanding the options available for each field when presented on the data entry screen.

1. **Setting up AORTIC to collect and export paediatric data fields.** Under the "Hospitals" tab there is a box which can be ticked to indicate that you are collecting paediatric data. If you tick this, then, when you enter a date of admission for a patient <16yo, AORTIC will automatically generate "paediatric" screens for data entry, rather than the ones used for the APD. See the document
Paediatric AORTIC - extract 9.2.5manualpdf.pdf
for a complete description of setting up and entering paediatric data entry in AORTIC.

2. **Notable differences in paediatric vs adult registry data.**
(i) One of the main differences between the adult & paeds data collection is the mortality prediction model and the timing of the measurements for that model. The ANZPIC Registry uses the PIM model for mortality prediction. The most currently published model is PIM3, and is used in our reporting. Our risk of death (PIM) is generated from fields collected from the <u>first measurements taken in the time between ICU staff taking over management of the patient up until the first hour in ICU</u> (so is different to APACHE where it is based on the worst measurement in the first 24 hours). Please refer to the accompanying document *PIM2/PIM3 Information Booklet* for detailed instructions on collecting these fields. Note in particular the field "MechVent" which indicates whether the patient received any form of mechanical ventilation within the first hour of their ICU admission.

(ii) W also collect episodes of intubations & ventilations, and the "interventions" screen needs to be set up to collect the interventions we require – see the accompanying doc *Steps in AORTIC to add HFNC to Interventions list for paediatric data entry.pdf*. The final screen shot in this doc shows all of the interventions which need to be available for selection in your interventions table. There are also a few rules around the collection of the ventilation episodes – see the Episodes Collection Form. Note the definition on this form of High Flow where the rate has to be >1L/Kg/min or >30L/min to qualify for inclusion. Note however that HFNC does not qualify as "mechanical" ventilation when answering the MechVent field – ie if the patient received only HFNC within the first hour of ICU admission, then MechVent would be "no".

3. **Data submission process.** The ANZPIC Registry has 6-monthly submissions of data (as opposed to the APD's 3-monthly), although submissions can be made more often if it is easier at your end to do all submissions at the same time. At the moment, our data submission dates are 1st September for January to June data, and 1st March for July to December data, and submitted to -
anzpic.data@anzics.com.au
The accompanying document entitled *Exporting Data from AORTIC to Paediatric Registry.pdf* gives more details on exporting. Note that the export creates **2 files**, and that both of these need to be sent through to us.
Note also that AORTIC assumes that you have already set up a subdirectory called "anzpic" on your C: drive and this is where it will automatically put the two export files which are to be emailed.

4. Data cleaning process. Our data cleaning process is different to the APD's. After your initial submission, you are sent a list of queries generated by our checking program. You are then asked to resolve all queries, make any changes to your data, and resubmit your data again. It is only when all queries are resolved that we upload your data into our main database. Sometimes this can involve several data submission versions from each site. Please bear with us in the data cleaning process; the number of data queries will probably be quite lengthy to start with as most of our fields are mandatory and we have many range and logic checks. You will appreciate the paucity of numbers in paediatric ICU admissions in ANZ, so we like to think that what we lack in quantity we make up for in quality!

5. Some common errors.
➢ If a weight is unknown, then its value should be entered as 999.
➢ If a patient is from overseas, then their postcode should be entered as 9990.
➢ When collecting episode dates and times, we are only interested in the times during the ICU episode. So if a child is already ventilated prior to their ICU admission, then please use the time of ICU admission as the start time. (and the same applies if they are discharged ventilated - the end of the episode should be the time of ICU discharge).
➢ Inconsistency between the code for MechVent and the episodes of ventilation from the Interventions screen.   Once a "yes" code has been encountered for MechVent, the checking program will then compare the start time for the first ventilation episode (either invasive or non-invasive) against the time of ICU admission to make sure there isn't a difference of more than 1 hour between the two. If this difference is greater than 1 hour, or if there are no ventilation times, then an error will be generated. Note that an intubation episode is separate to a ventilation episode, and that the MechVent field is being read in conjunction with the first ventilation episode only.
➢ If a patient is both intubated and ventilated, then both episodes must be recorded in the Interventions screen. Every intubation episode is to be separately entered, while multiple successive ventilation episodes might qualify to be merged into a longer single episode, depending on the rules listed on the Episode Collection Form.
➢ The attached document entitled *Q&As for other fields_1Sep11.pdf* covers queries on some of the other non-PIM fields, especially diagnoses.

ANZPIC Registry
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