

*The NIHR Southampton Biomedical Research Centre (BRC) has a tight quality assurance system for the writing, reviewing and updating of Standard Operating Procedures. As such, version-controlled and QA authorised Standard Operating Procedures are internal to the BRC.*

*The Standard Operating Procedure from which information in this document has been extracted, is a version controlled document, managed within a Quality Management System. However, extracts that document the technical aspects can be made more widely available. Standard Operating Procedures are more than a set of detailed instructions; they also provide a necessary record of their origination, amendment and usage within the setting in which they are used. They are an important component of any Quality Assurance Framework, but in themselves are insufficient and need to be used and interpreted with care.*

*Alongside the extracts from our Standard Operating Procedures, we have also made available here an example Standard Operating Procedure and a word version of a Standard Operating Procedure template. Using the example and the Standard Operating Procedure template, institutions can generate their own Standard Operating Procedures and customise them, in line with their own institutions.*

*Simply offering a list of instructions to follow does not assure that the user is able to generate a value that is either accurate or precise so here in the BRC we require that Standard Operating Procedures are accompanied by face-to-face training. This is provided by someone with a qualification in the area or by someone with extensive experience in making the measurements. Training is followed by a short competency assessment and performance is monitored and maintained using annual refresher sessions. If you require any extra information, clarification or are interested in attending a training session, please contact Dr Kesta Durkin ([k.l.durkin@soton.ac.uk](mailto:k.l.durkin@soton.ac.uk)).*

*This document has been prepared from Version 4 of the BRC Standard Operating Procedure for using the Seca electronic baby scales (model no. 717) with length measure attachment. It was last reviewed in May 2014 and the next review date is set for May 2016. The version number only changes if any amendments are made when the document is reviewed.*

## NIHR Southampton Biomedical Research Centre

### Procedure for using the SECA ELECTRONIC BABY SCALES (model no. 717) WITH LENGTH MEASURE

#### **BACKGROUND**

Monitoring growth of infants from birth through weight and length measurements can serve to quickly identify current and future health problems. The Seca Electronic Baby Scales, model number 717, are the preferred choice of scales for making accurate measurements of infant weight. This set of baby scales can be adapted by purchasing a measuring rod that attaches to the scales, giving them the added function of also being able to measure length.

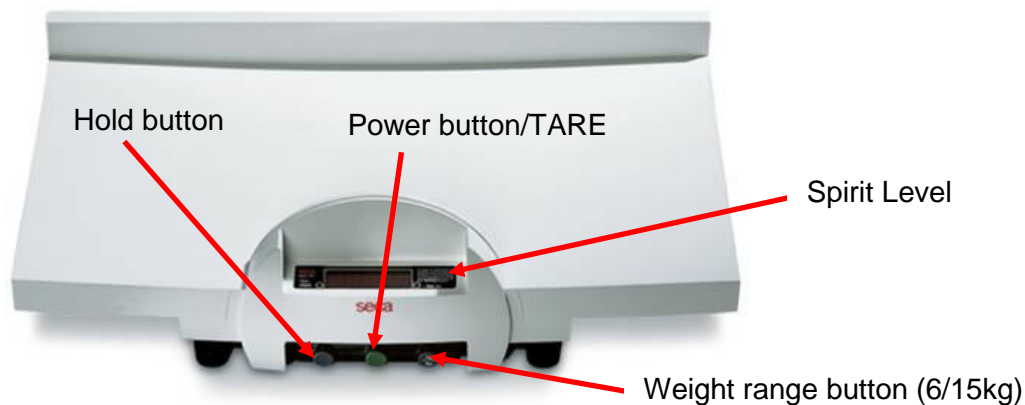
#### **PURPOSE**

To ensure correct and uniform use of the Seca Electronic Baby Scales-length measurer, when measuring the weight or weight and length of infants.

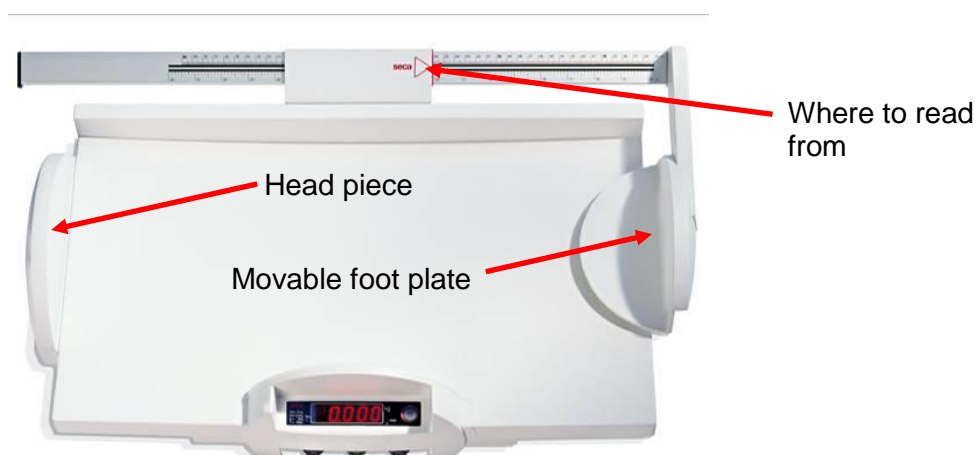
#### **SCOPE**

This procedure applies to any study requiring making weight or both weight and length measurements of infants using Seca Electronic Baby Scales, model number 717, within the BRC portfolio. This equipment is based and used in the Neonatal Unit of the Princess Anne Hospital.

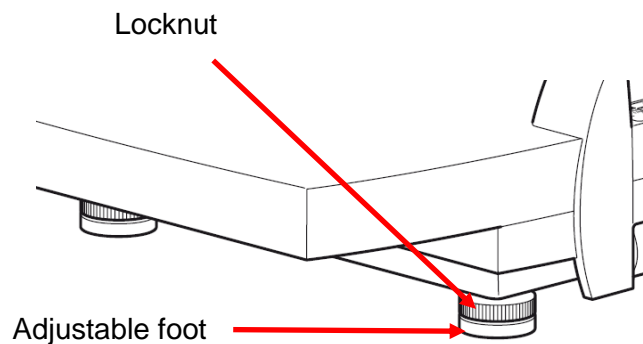
## RESPONSIBILITIES



**Figure 1.** Seca Electronic Baby Scales, model number 717



**Figure 2.** Seca Electronic Baby Scales, model number 717 with length measure attachment



**Figure 3.** Identification of feet and locknuts

### Points to note

- a. Before using the equipment, you must make sure that it is level. To do this, you must alter the feet until the spirit level bubble (identified in Figure 1) sits in the centre circle. If you move the equipment, the position of the bubble will most likely change so will require re-adjustment. To adjust the feet, turn the screw-feet clockwise to raise, and anticlockwise to lower. When in the correct position, such that the bubble is in the centre circle, lock in place by screwing the locknuts up to the top, anticlockwise.
- b. When the scales are switched on, the 15kg weight range is automatically selected. The 15kg range displays the weight to within 5g. If the infant weighs less than 6kg, the weight range can be altered by pressing the weight range button (identified in Figure 1) and its selection is indicated by a red light. In this weighing range, the weight is displayed to within 2g.
- c. If no load is placed on the scales for 10 minutes, they will automatically switch off.
- d. If you exceed the weight range, the word "STOP" appears on the display.
- e. The tare button (identified in Figure 1) can be used to minus the weight of blankets or pads: Place these on the scales alone, then press the green "ON/TARE" button to set back to zero and then place the baby on the scale.
- f. Obtain the baby's weight, ensuring that the displayed result remains steady and then press the "hold" button. This fixes the displayed value so that the baby can be put down safely before noting the weight.
- g. Clean the equipment using Trust-approved disinfectants. Do not over-rub the printed measuring scale of the length rod that attaches to the scales.

## METHOD

1. If parents are present, explain the procedure.
2. Two members of staff are required to make the measurements.
3. Ensure that the equipment is clean before use.
4. Switch on the scales by pressing the green "ON/TARE" button
5. Select the appropriate weight range for the infant to be measured. If they are below 6kg press the weight range button until it lights up, indicating that 6kg (2g resolution) is selected. If the weight of the infant is over 6kg, then press the button so that the light is off, indicating that 15kg (5g resolution) is selected.
6. If the display is registering a weight and/or you have added blankets or pads, press the "ON/TARE" button before placing the baby onto the scales.
7. If you are measuring length at the same time, one person should stand at the end of the equipment and ensure that the baby's head is touching the "head piece" (identified in Figure 2) of the length measuring attachment. From their current position, this person should place their hand on the baby's knees in order to straighten the legs as much as is possible. A second measurer should stand at the side of the equipment (opposite side to the measuring rod attachment) and position the feet in the dorsiflexed position.
8. When the baby is in this position, the second measurer should bring the moveable foot plate up to the heels and take the reading at the level of the red line and arrow (identified in Figure 2). ***Keep the baby's arms out of the way of the measuring rod.***
9. Ensure that the equipment is cleaned after use.