

Standardised protocol for measuring critically ill patient's height and weight

Height measurement

Supine length measurement

Lie the patient flat in the supine position, removing pillows if necessary.


Use a flexible measuring tape, measure the length between the vertex of the head and the patients heel. A two person technique may help improve accuracy.

Record the patients height on ICCA as measured height.

If the patients height **cannot be measured** please use the ulna length as an alternative measurement (see below) and record on ICCA as an estimated height.

The patients height should ideally be measured on admission when the patient is transferred over onto the ITU bed.

Ulna length measurement




BAPEN
www.bapen.org.uk

Alternative measurements: instructions and tables

If height cannot be obtained, use length of forearm (ulna) to calculate height using tables below.
(See The 'MUST' Explanatory Booklet for details of other alternative measurements (knee height and demispan) that can also be used to estimate height).

Estimating height from ulna length



Measure between the point of the elbow (olecranon process) and the midpoint of the prominent bone of the wrist (styloid process) (left side if possible).

Height (m)	men (<65 years)	1.94	1.93	1.91	1.89	1.87	1.85	1.84	1.82	1.80	1.78	1.76	1.75	1.73	1.71
	men (≥65 years)	1.87	1.86	1.84	1.82	1.81	1.79	1.78	1.76	1.75	1.73	1.71	1.70	1.68	1.67
Ulna length (cm)		32.0	31.5	31.0	30.5	30.0	29.5	29.0	28.5	28.0	27.5	27.0	26.5	26.0	25.5
Height (m)	Women (<65 years)	1.84	1.83	1.81	1.80	1.79	1.77	1.76	1.75	1.73	1.72	1.70	1.69	1.68	1.66
	Women (≥65 years)	1.84	1.83	1.81	1.79	1.78	1.76	1.75	1.73	1.71	1.70	1.68	1.66	1.65	1.63
Height (m)	men (<65 years)	1.69	1.67	1.66	1.64	1.62	1.60	1.58	1.57	1.55	1.53	1.51	1.49	1.48	1.46
	men (≥65 years)	1.65	1.63	1.62	1.60	1.59	1.57	1.56	1.54	1.52	1.51	1.49	1.48	1.46	1.45
Ulna length (cm)		25.0	24.5	24.0	23.5	23.0	22.5	22.0	21.5	21.0	20.5	20.0	19.5	19.0	18.5
Height (m)	Women (<65 years)	1.65	1.63	1.62	1.61	1.59	1.58	1.56	1.55	1.54	1.52	1.51	1.50	1.48	1.47
	Women (≥65 years)	1.61	1.60	1.58	1.56	1.55	1.53	1.52	1.50	1.48	1.47	1.45	1.44	1.42	1.40

Weight measurement

Standard for zeroing the bed prior to patients admission

The bed should be unoccupied.

Standard linens and items on the bed include: 2 x bed sheets, 2 x pillows, 2 x pillowcases.

Leave the mattress charger attached to the bed.

Zero the bed ready for admission.

Standard for weight measurement on admission/ at midnight for daily weights

The bed should be occupied with the standard linens and items on the bed including 2 x bed sheets, 2 x pillows, 2 x pillowcases.

Leave the mattress charger attached to the bed.

Empty all drains/ catheters / flexi-seal bags/ stoma bags ensuring this is inputted into ICCA.

Remove the patients flowtrons and pump from the bed.

Record the patients weight on ICCA as measured weight.