

CHAPTER 2: DEMOGRAPHICS

The mean age of the study population was 58 years, ranging from 18-95 years (Figure 2.1), indicating that a large proportion of patients with critical illness may have many socially and economically productive years ahead if they make an uncomplicated, fully rehabilitated recovery.

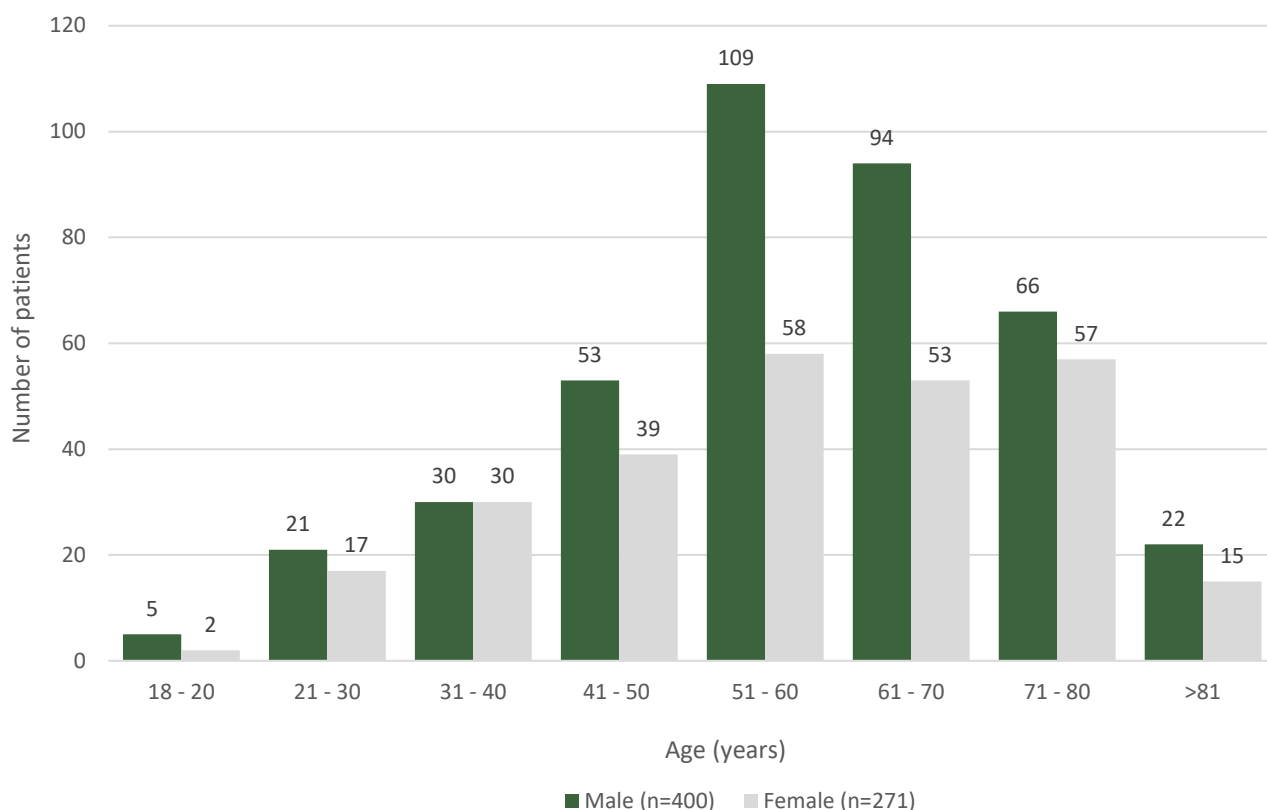


Figure 2.1 Age (years) and sex of the study population

Clinician questionnaire data

Ethnicity of the study population was in line with recent census data.^[6] Although the ethnicity of 65/671 (9.7%) patients was unknown, this was a similar finding to the recent Intensive Care National Audit and Research Centre (ICNARC) dataset (Table 2.1).^[7]

Table 2.1 Ethnicity of the study population

Ethnicity	Number of patients	%
White British/White other	532	79.3
Asian/Asian British (Indian, Pakistani, Bangladeshi, Chinese, other Asian)	46	6.9
Black/African/Caribbean/Black British	18	2.7
Other	6	<1
Mixed/multiple ethnic groups	4	<1
Unknown	65	9.7
Total	671	

Clinician questionnaire data

A total of 385/664 (58.0%) patients spent more than one week on an intensive care unit ICU (Table 2.2).

Table 2.2 Length of stay in the ICU (days)

Length of stay	Number of patients	%
4 days	99	14.9
5-7 days	180	27.1
8-14 days	233	35.1
15-21 days	65	9.8
22-30 days	41	6.2
31-60 days	36	5.4
>60 days	10	1.5
Subtotal	664	
Unknown	7	
Total	671	

Clinician questionnaire data

There were 505/671 (75.3%) patients admitted to the ICU due to a medical condition and 166/671 (24.7%) for a surgical condition. Only 56/671 (8.3%) patients had no pre-existing comorbidities, while 170/671 (25.3%) had a single comorbidity and 421/671 (62.7%) had two or more comorbidities (Table 2.3).

Table 2.3 Comorbidities of the study population

Comorbidity	Number of patients	%
Cardiovascular condition	296	44.1
Respiratory condition	197	29.4
Mental health condition	131	19.5
Neurological condition	115	17.1
Gastrointestinal condition	114	17.0
Alcohol	107	15.9
Diabetes	103	15.4
Musculoskeletal condition	97	14.5
Urinary condition	80	11.9
Cancer	62	9.2
None	56	8.3
Liver condition	43	6.4
Renal condition	36	5.4
Obesity	23	3.4
Other	67	10.0
Unknown	1	<1

Clinician questionnaire data: answers may be multiple; n=671

Table 2.4 shows the organ support provided to patients in the ICU, noting that some patients will have received multiple organ support. Respiratory support was the most common organ support (543/671; 80.9%), the majority of which was invasive mechanical ventilation (intubation) (451/543; 83.1%) (T2.5). It is well evidenced that patients receiving respiratory support are more likely to functionally deteriorate so early rehabilitation planning is essential.^[8,9]

Table 2.4 Type of organ support received

Organ support	Number of patients	%
Respiratory support	543	80.9
Cardiovascular support	468	69.7
Gastrointestinal support	234	34.9
Renal support	184	27.4
Neurological support	106	15.8
Dermatological support	17	2.5
Liver support	17	2.5
Other	43	6.4

Clinician questionnaire data: answers may be multiple; n=671

Table 2.5 Type of respiratory support received

Respiratory support	Number of patients	%
Non-invasive ventilation	132	24.3
Invasive mechanical ventilation - intubation	451	83.1
Invasive mechanical ventilation - tracheostomy	77	14.2

Clinician questionnaire data: answers may be multiple; n=543

Patients remained intubated was mean of 10 days, with the mode being five days and median six.

The grade of functional status on admission as determined by the Rockwood clinical frailty score is shown in Figure 2.2. Only 224/602 (37.2%) patients left hospital with the same level of function as on admission. Of the 378/602 (62.8%) patients who had a different level of function, 59/378 (15.6%) improved and 319/378 (84.4%) deteriorated. Within the group who deteriorated, 245/319 (76.8%) had received invasive ventilation.

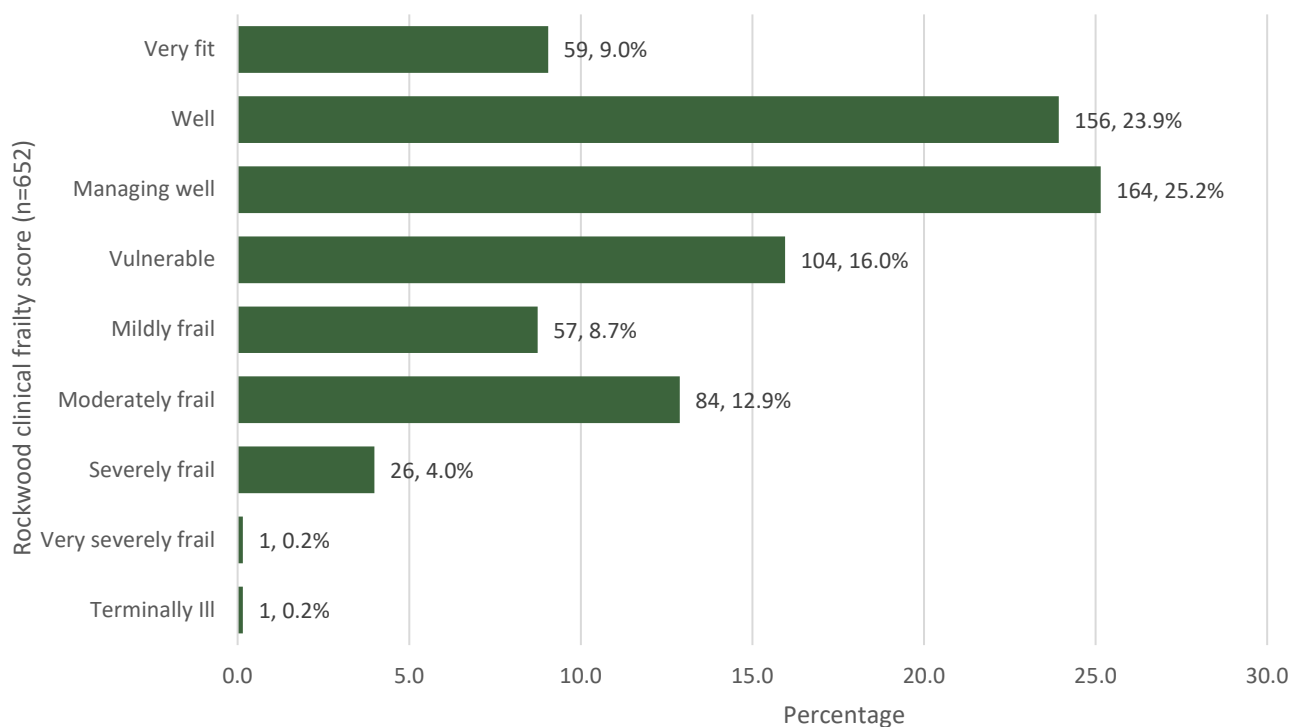


Figure 2.2 Rockwood Clinical Frailty Score for the study population

Clinician questionnaire data