

Key statistics for the relevant period (1 March 2020 – 30 June 2022)

This section provides absolute numbers for the relevant period, along with percentages and rates per million population to support comparisons between nations and regions. Comparisons of the relevant period with pre-pandemic (1 April 2018 – 29 February 2020) are provided in [the next section](#).

Delivery of critical care services

During the relevant period (1 March 2020 to 30 June 2022), there were a total of 419,309 patients admitted to critical care units participating in the Case Mix Programme (England 392,377; Wales 19,179; Northern Ireland 7,753) (Table 1), corresponding to 6,413 patients admitted per million population (England 6,252; Wales 5,910; Northern Ireland 3,865). Of these, 11.6% (742 per million population) were admitted primarily for COVID-19 (England 11.7%, 760 per million population; Wales 9.4%, 558 per million population; Northern Ireland 12.5%, 483 per million population).

Of the remaining patients, not admitted primarily for COVID-19, one third of patients admitted in England were for elective reasons (114,882 patients, 29.3% of all patients) and two thirds for non-elective reasons (231,781 patients, 59.1% of all patients). The split was similar in Wales (5,368, 28.0% vs 12,000, 62.6%) but in Northern Ireland the proportion of elective patients was substantially lower (840, 10.8% vs 5,945, 76.7%).

A total of 915 currently or recently pregnant women were admitted for COVID-19 in England, representing 0.2% of all patients or 2.0% of patients admitted for COVID-19 (Wales 24, 0.1% of all patients, 1.3% of COVID-19; Northern Ireland 25, 0.3% of all patients, 2.6% of COVID-19). This compares with a total of 20,313 patients in England (5.2% of all patients) admitted for direct pregnancy-related disorders (Wales 945, 4.9%; Northern Ireland 280, 3.6%). The rate of patients admitted for pregnancy-related disorders was similar in England and Wales (338 and 291 per million population, respectively) but lower in Northern Ireland (140 per million population).

There were 10,198 patients admitted for acute myocardial infarction in England (2.6% of all patients, 170 per million population). The rate of admissions per million population was about half this in both Wales (66 per million population) and Northern Ireland (81 per million population).

There were 13,740 patients admitted for colorectal cancer in England (3.5% of all patients, 229 per million population). The rate of admissions per million population was higher in Wales (418 per million population) but lower in Northern Ireland (110 per million population).

A breakdown of the numbers of patients admitted by regions of England is shown in Table 2. Rates of admission per million population varied almost two-fold, from 5,328 per million population in the Midlands to 9,877 per million population in the North West. Note that some of this variation may be due to geographical catchment areas of healthcare providers, such that patients do not receive care in the same region in which they are resident. The variation was even greater among patients admitted for COVID-19, ranging from 448 per million population in the South West to 1,255 per million population in the North West.

Table 1 *Patients admitted to critical care during the relevant period in England, Wales and Northern Ireland, by reason for admission*

	England	Wales	Northern Ireland	Combined
Patients admitted to critical care during the relevant period, n (% of all patients)	392,377	19,179	7,753	419,309
Patients admitted for COVID-19	45,714 (11.7)	1,811 (9.4)	968 (12.5)	48,493 (11.6)
Pregnant or recently pregnant women admitted for COVID-19	915 (0.2)	24 (0.1)	25 (0.3)	964 (0.2)
All other patients (non-elective)	231,781 (59.1)	12,000 (62.6)	5,945 (76.7)	249,726 (59.6)
All other patients (elective)	114,882 (29.3)	5,368 (28.0)	840 (10.8)	121,090 (28.9)
Selected other reasons for admission:				
Pregnancy-related disorders	20,313 (5.2)	945 (4.9)	280 (3.6)	21,538 (5.1)
Acute myocardial infarction	10,198 (2.6)	214 (1.1)	163 (2.1)	10,575 (2.5)
Colorectal cancer	13,740 (3.5)	1,356 (7.1)	220 (2.8)	15,316 (3.7)
Patients admitted to critical care during the relevant period <i>per million population</i>	6,525	5,910	3,865	6,413
Patients admitted for COVID-19	760	558	483	742
Pregnant or recently pregnant women admitted for COVID-19	15	7	12	15
All other patients (non-elective)	3,854	3,698	2,964	3,819
All other patients (elective)	1,910	1,654	419	1,852
Selected other reasons for admission:				
Pregnancy-related disorders	338	291	140	329
Acute myocardial infarction	170	66	81	162
Colorectal cancer	228	418	110	234

Relevant period: 1 March 2020 to 30 June 2022.

Comparisons of the relevant period (1 March 2020 – 30 June 2022) with pre-pandemic (1 April 2018 – 29 February 2020)

This section provides comparisons of the relevant period (1 March 2020 – 30 June 2022) with pre-pandemic (1 April 2018 – 29 February 2020), focusing on rates (e.g. mean daily patients) and percentages to provide fair comparisons between periods of differing length.

Delivery of critical care services

Compared with pre-pandemic, the mean daily number of patients admitted to critical care for reasons other than COVID-19 fell by approximately 14% during the relevant period (492 vs 575 patients admitted per day; Table 7). As a result of this, despite the additional 57 patients per day admitted for COVID-19, the mean number of new patients admitted to critical care each day was lower during the relevant period and did not exceed typical levels even during the peak of each pandemic wave (Figure 3). The reduction was pronounced for elective admissions (e.g. non-urgent surgery) and was offset by longer lengths of stay for patients with COVID-19 compared with other patients (see Figure 11 and Table 15). The net result was that the mean number of patients being treated in critical care each day was, on average, greater during the relevant period compared with pre-pandemic (Table 8) but with extreme fluctuations following the waves of the pandemic (Figures 11 and 12).

Similar reductions were observed in each nation during pandemic waves but, by the end of the relevant period, some differences between nations were apparent: Wales had returned to pre-pandemic norms in overall admission rates, and greater than pre-pandemic norms for elective admissions, whereas England and Northern Ireland remained below pre-pandemic norms with respect to both (Figure 4).

The numbers of patients admitted with pregnancy-related disorders, acute myocardial infarction and colorectal cancer dipped markedly during the first wave of the pandemic in April 2020, to a lesser extent in the second wave in January 2021, and to a lesser extent again in the third wave in the latter part of 2021 (Figures 5 to 10), following the same pattern seen among all patients admitted for reasons other than COVID-19 (Figure 3). By the end of the relevant period, the numbers of patients admitted with pregnancy related disorders and colorectal cancer had returned to pre-pandemic norms or higher in Wales but remained below pre-pandemic norms in England and Northern Ireland (Figures 6 and 10 respectively); and the number of patients admitted with acute myocardial infarction had returned to pre-pandemic norms in each nation (Figure 8).

The mean daily number of interhospital transfers of patients between critical care units increased from 20 per day in the pre-pandemic period to an average of 26 per day in the relevant period (Table 9). Transfer activity was particularly increased around the peaks of the pandemic waves, especially the second wave where transfers peaked at over 60 per day in January 2021 (Figure 13). This increase was driven by transfers for “comparable care”, i.e. care that could have been delivered in the original critical care unit and therefore where the transfer is likely to be for capacity reasons (Table 9), with other types of transfer (for more specialist care or repatriation) decreasing slightly. There was substantial variation between nations, with the average rate of interhospital transfers between critical care units for comparable critical care increasing in England (from 2.0 to 4.1 per 1,000 patients in care) and Northern Ireland (from 4.7 to 7.4 per 1,000 patients in care), but remaining constant in Wales (at 2.0 per 1,000 patients in care). Mean daily interhospital transfers from outside critical care increased in Northern Ireland (from 13.2 to 17.0 per 1,000 patients in care) but decreased in England (from 4.4 to 3.6 per 1,000 patients in care) and Wales (from 2.6 to 2.0 per 1,000 patients in care). Interhospital transfers from

Figure 13 Mean daily transfers between critical care units in England, Wales and Northern Ireland combined, by reason for transfer and month

The average daily number of patients transferred between critical care units in different hospitals in England, Wales and Northern Ireland combined, increased substantially during pandemic waves. This mostly reflected increases in the number of patients being transferred for comparable care (for example, for capacity reasons).

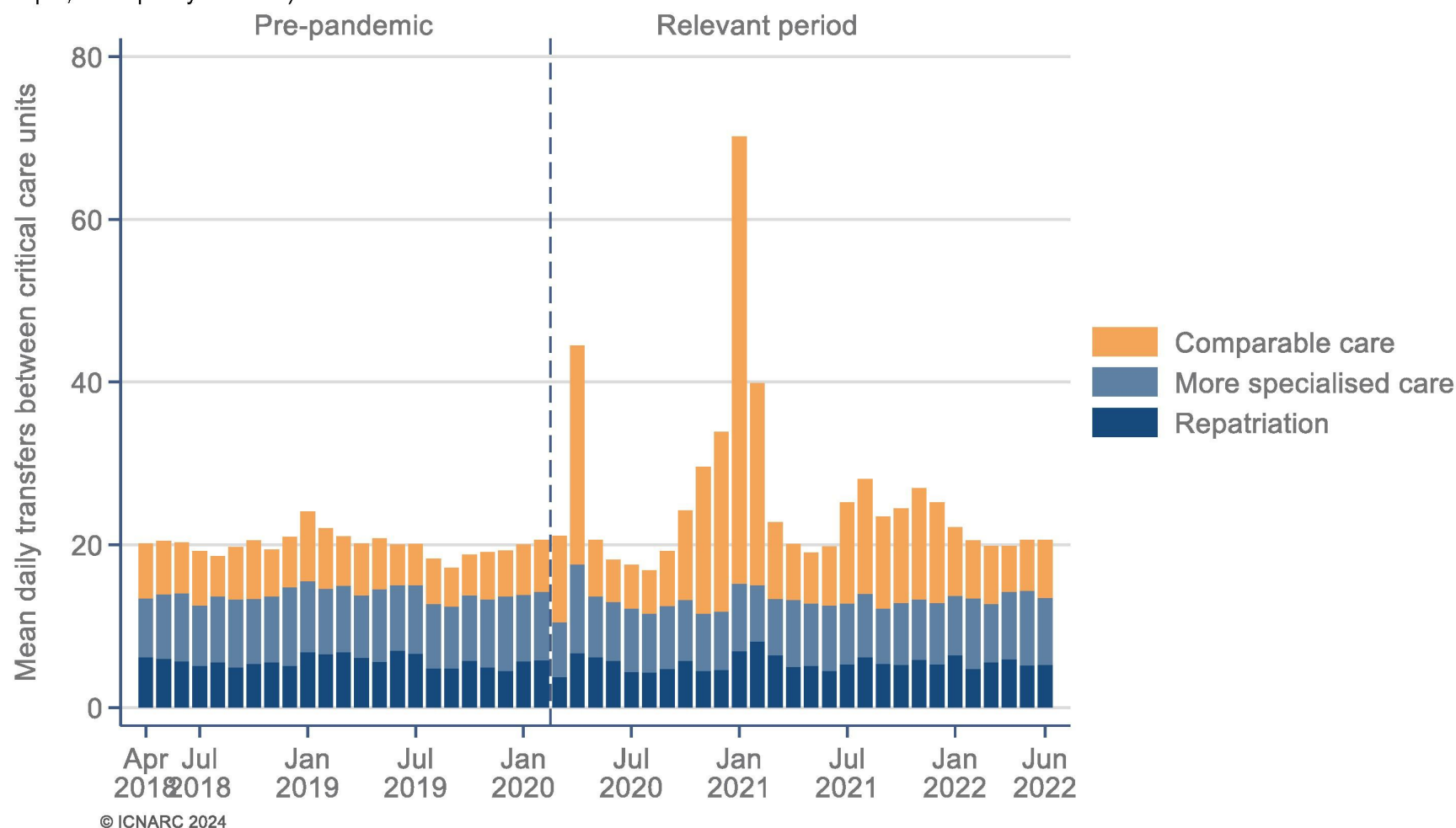
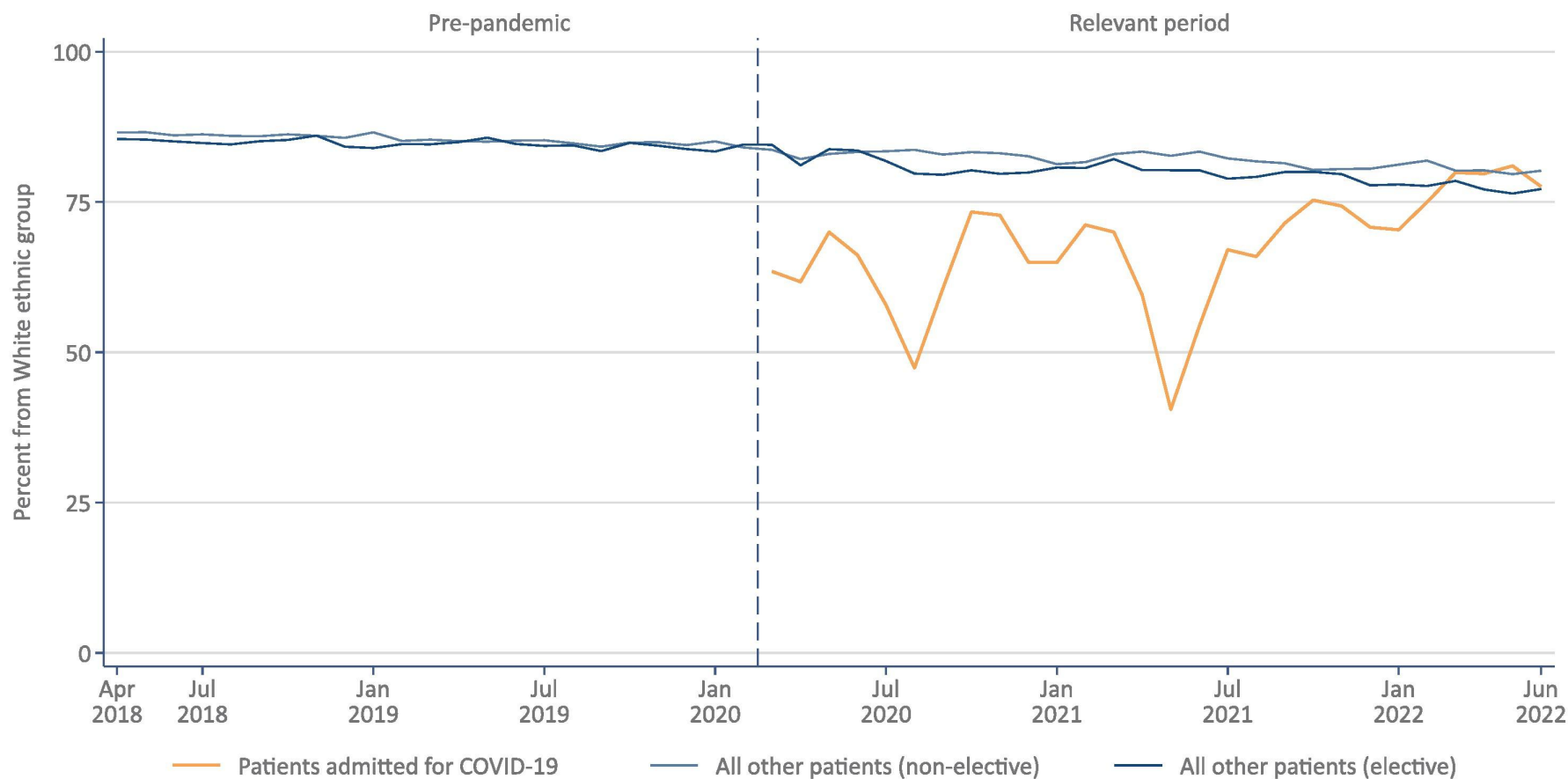


Figure 29 Percentage of patients from White ethnic groups in England, Wales and Northern Ireland combined, by reason for admission and month

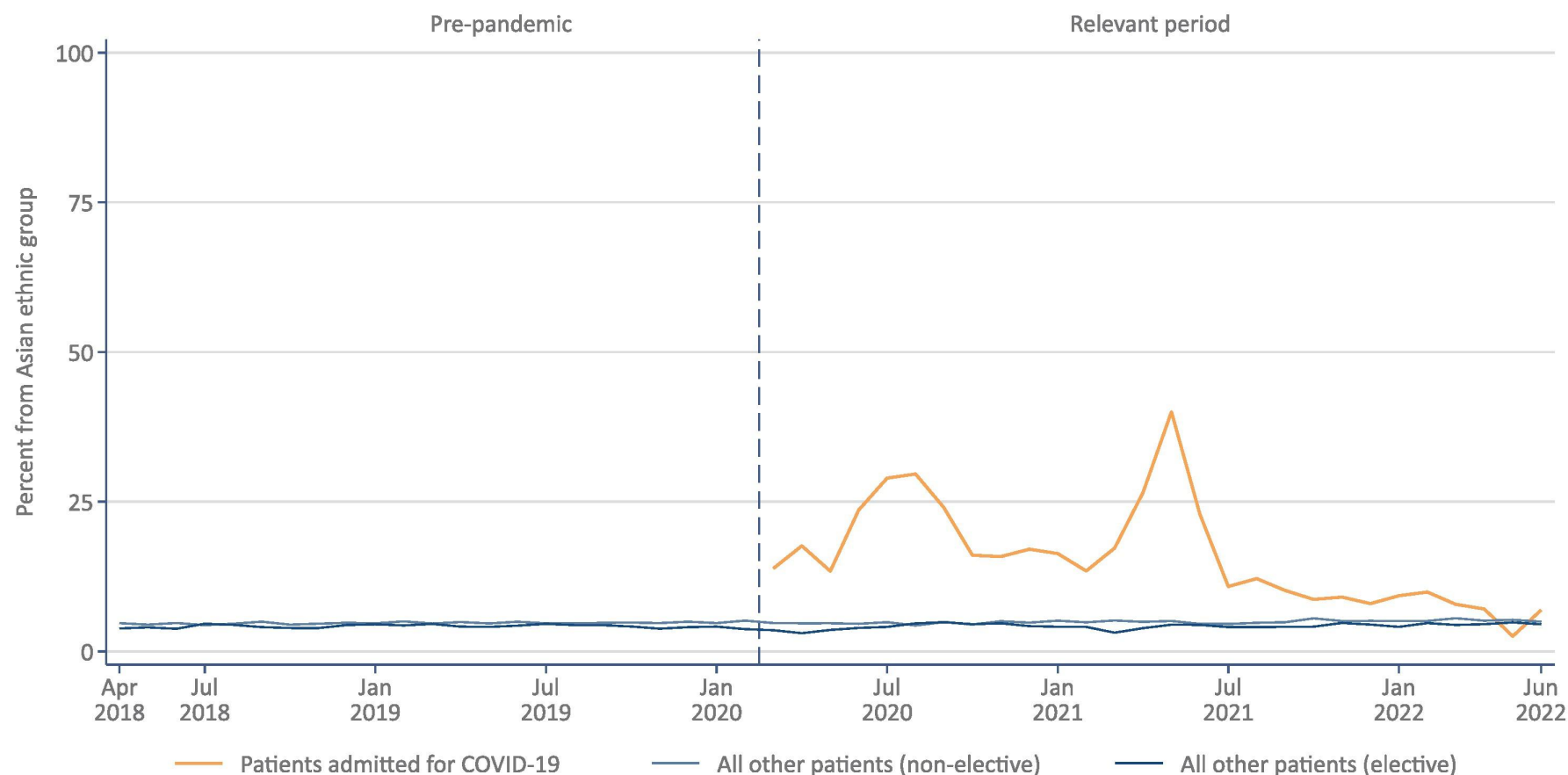
In England, Wales and Northern Ireland combined, the percentage of patients from White ethnic groups was lower for patients admitted for COVID-19 than for patients admitted for other reasons, until the Omicron variant became dominant in December 2021.



© ICNARC 2024

Figure 33 Percentage of patients from Asian ethnic groups in England, Wales and Northern Ireland combined, by reason for admission and month

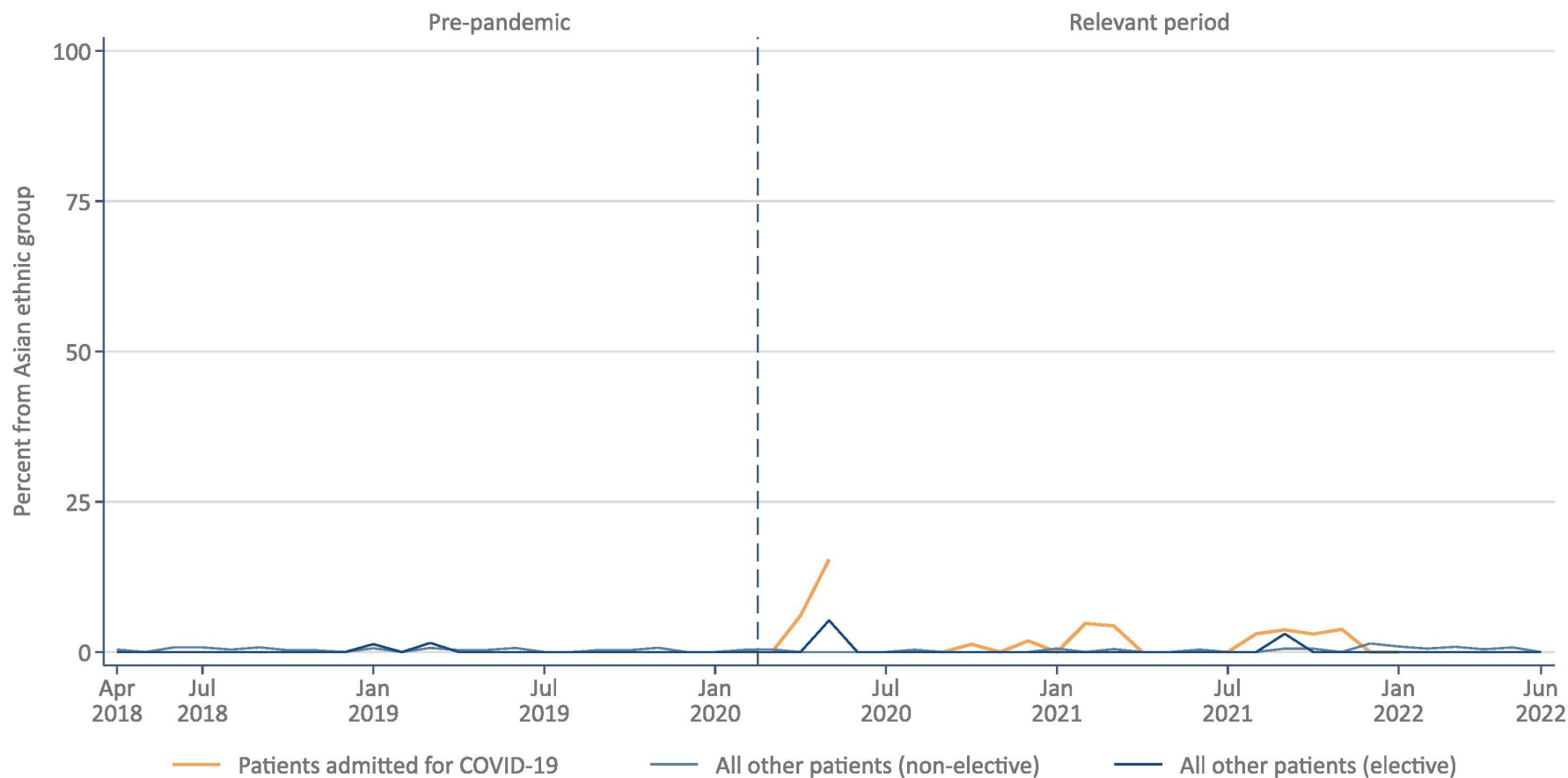
In England, Wales and Northern Ireland combined, the percentage of patients from Asian ethnic groups was higher for patients admitted for COVID-19 than for patients admitted for other reasons but this difference diminished in late 2021 and disappeared altogether as the Omicron variant became dominant in December 2021.



© ICNARC 2024

Figure 36 *Percentage of patients from Asian ethnic groups in Northern Ireland, by reason for admission and month*

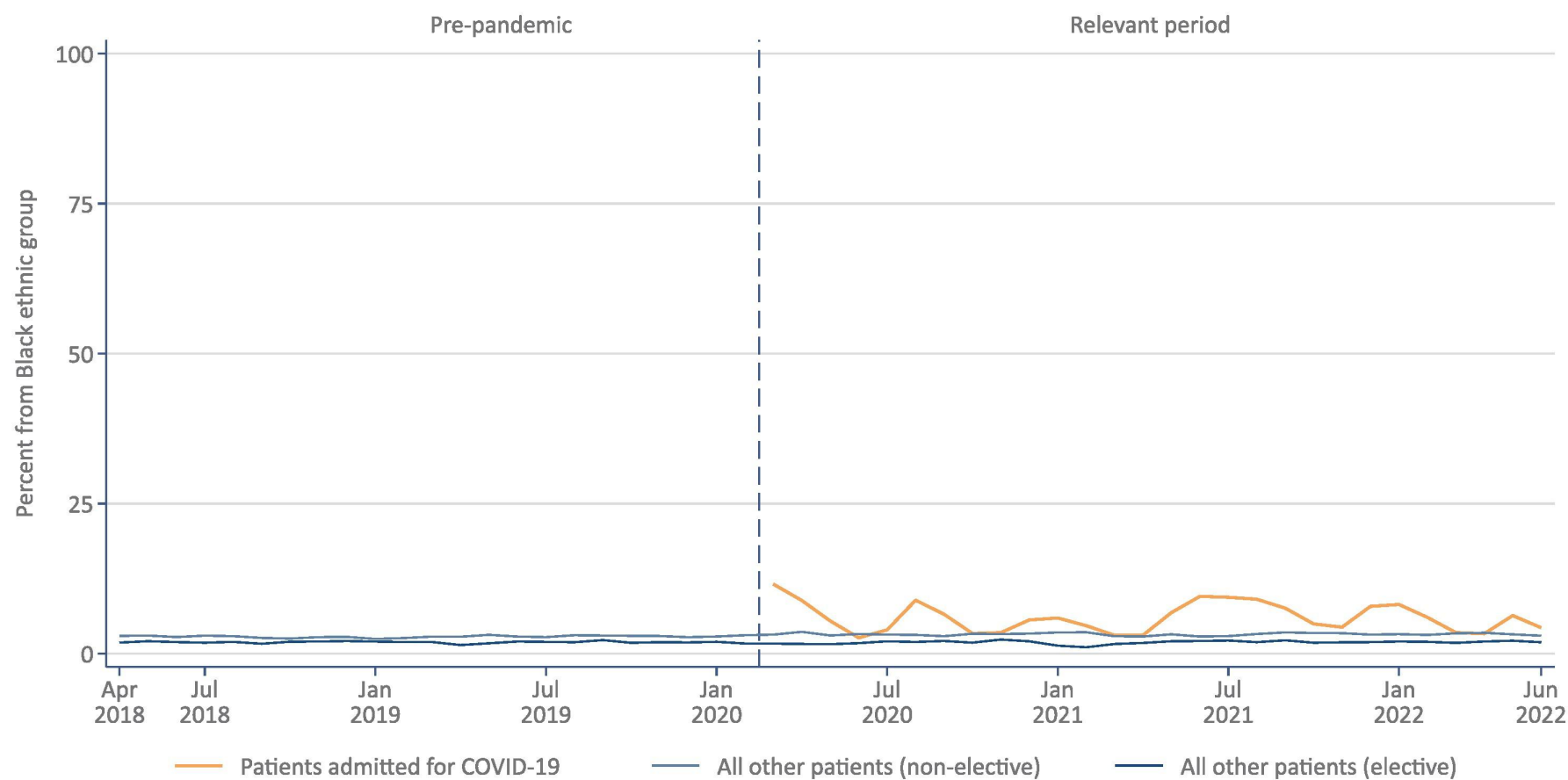
In Northern Ireland, the percentage of patients from Asian ethnic groups was higher for patients admitted for COVID-19 than for patients admitted for other reasons but the size of this demographic is small. Months with fewer than 10 admissions not shown.



© ICNARC 2024

Figure 37 Percentage of patients from Black ethnic groups in England, Wales and Northern Ireland combined, by reason for admission and month

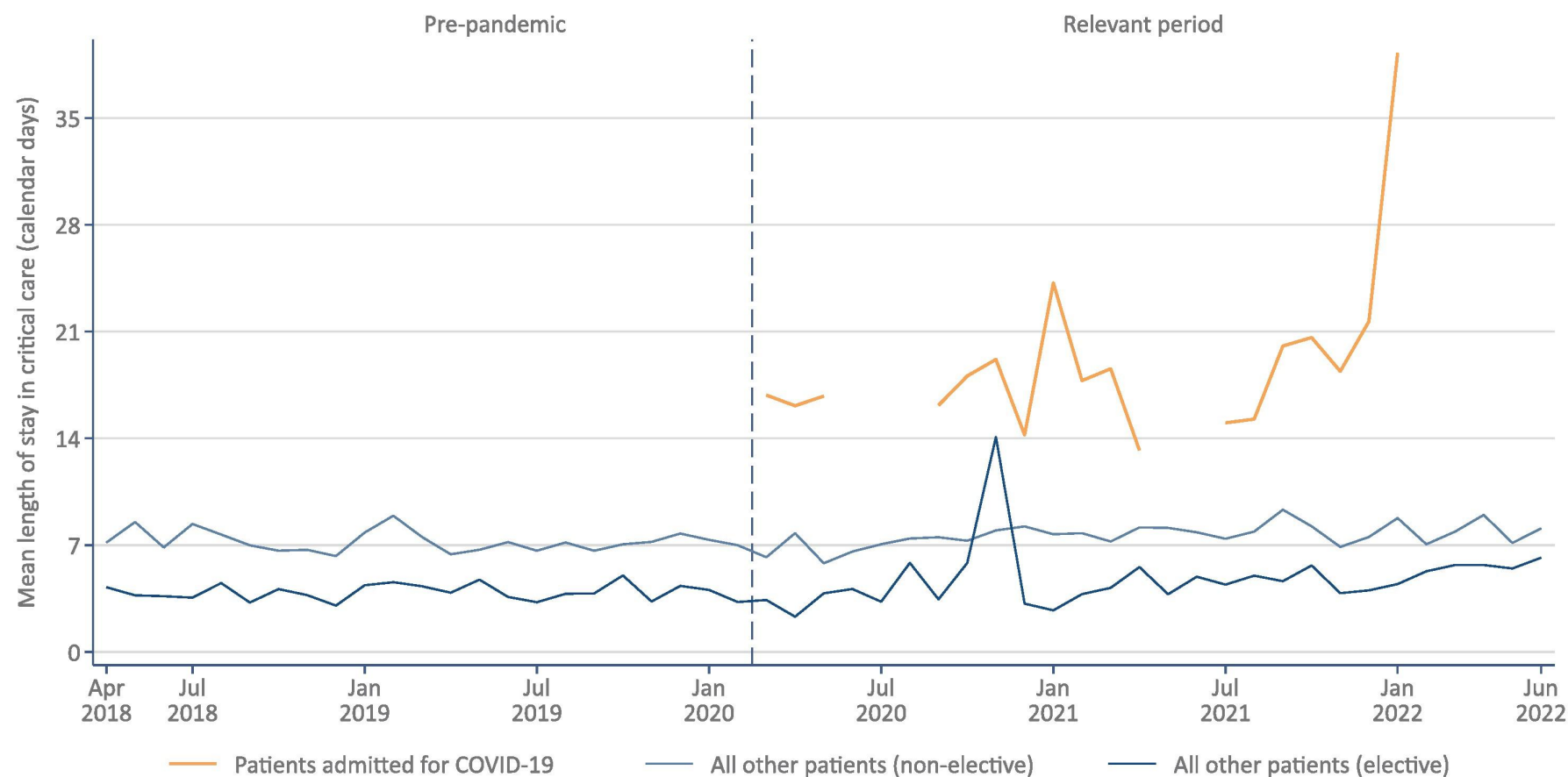
In England, Wales and Northern Ireland combined, the percentage of patients from Black ethnic groups was higher for patients admitted for COVID-19 than for patients admitted for other reasons.



© ICNARC 2024

Figure 96 Mean length of stay in critical care (calendar days) in Northern Ireland, by reason for admission and month

In Northern Ireland, the average length of stay in critical care of patients admitted with COVID-19 was around 19 days (considerably longer than for non-elective patients admitted for other reasons). The apparent spike in January 2022 is influenced by a small number of patients with very long stays in critical care. Months with fewer than 10 admissions not shown.



© ICNARC 2024