

Statistics on hospitalisation times for patients with COVID-19

The National Board of Health and Welfare is continuously monitoring the development of the disease COVID-19. Many patients are receiving hospital treatment for the disease, both on regular wards and in special intensive care units. This fact sheet contains statistics from 15 regions on care periods for individuals confirmed infected and diagnosed with COVID-19 in hospitals.

About the statistics

The statistics have been produced by linked processing of specially gathered information from the regions on in-patient treatment, SmiNet (The Public Health Agency of Sweden), information on deaths (The Swedish Tax Agency), and the quality register Swedish Intensive Care Registry (SIR).

The fact sheet does not show the situation nationally, but describes the situation in the regions that voluntarily report hospitalisations on a weekly basis to the National Board of Health and Welfare (see appendix). Currently, 15 out of the 21 regions are reporting on a weekly basis. This includes Stockholm, Södermanland, and Östergötland, three of the four hardest hit regions during the measurement period in terms of number of COVID-19 cases according to the Public Health Agency.

In order to consider the lengthy care periods, the analysis has been limited to those patients who could be monitored for at least 30 days following the date of testing and who were diagnosed with COVID-19 through in-patient care. The patients included in the analysis tested positive for coro-navirus during the period 14 March until 15 April 2020. They have then been monitored with respect to who received in-patient treatment, intensive care, and who died until 15 May.

The in-patient care period has been calculated based on admittance and discharge date, and includes all in-patient treatment for COVID-19, including any intensive care. Thereby, the total, combined care period for a patient is described here.

COVID-19 patients receiving hospital care

In total, 4 487 individuals with laboratory-confirmed COVID-19 had received in-patient treatment in one of the 15 regions included in the analysis. Twelve percent of these patients (522 out of 4 487) received care in intensive care units (ICU) at some point during their hospitalisation.

The breakdown of men and women was nearly equal among the COVID-19 patients not receiving treatment in the ICU (56 percent men and 44 percent women). In the group that had received intensive care, the percentage of men was higher (70 percent). Patients treated in the ICU were often below 70 years of

age (77 percent compared to 54 percent in the group that had not received intensive care). Patients treated in the ICU were less likely to have a pre-existing cardiovascular disease (9 percent compared to 27 percent in the group that had not received intensive care). The percentage of patients with diabetes was, however, similar between the groups (23 percent among those that had received ICU treatment and 24 in the group that had not received intensive care). In total, four percent of the patients used the social service residential care and nineteen percent received home help services.

Table 1. Sex, age, comorbidity, and form of housing among hospitalised COVID-19 patients in any of the 15 regions that report hospitalisation on a weekly basis to the National Board of Health and Welfare.

	COVID-19 patients not having received intensive care	COVID-19 patients having received intensive care	Total
Total number	3965	522	4487
-of which have died during the hospitalisation period	724 (18)	185 (35)	909 (20)
Sex			
- Men (%)	2203 (56)	366 (70)	2569 (57)
- Women (%)	1762 (46)	156 (30)	1918 (43)
Age group			
- Under 70 (%)	2154 (54)	404 (77)	2558 (57)
- 70+ (%)	1811 (46)	118 (23)	1929 (43)
Comorbidity¹			
- Cardiovascular disease	1085 (27)	48 (9)	1133 (25)
- Hypertension	2217 (56)	228 (44)	2445 (54)
- Diabetes	963 (24)	119 (23)	1082 (24)
- Chronic pulmonary disease	487 (12)	38 (7)	525 (12)
Form of housing²			
- Residential care	x	x	173 (4)
- Ordinary housing with home help services	x	x	848 (19)
- Ordinary housing without home help services	2932 (74)	494 (95)	3426 (76)

1. A patient may have several comorbidities and therefore be included in several of the groups.

2. Cells marked with X has been checked for reasons of confidentiality due to low numbers.

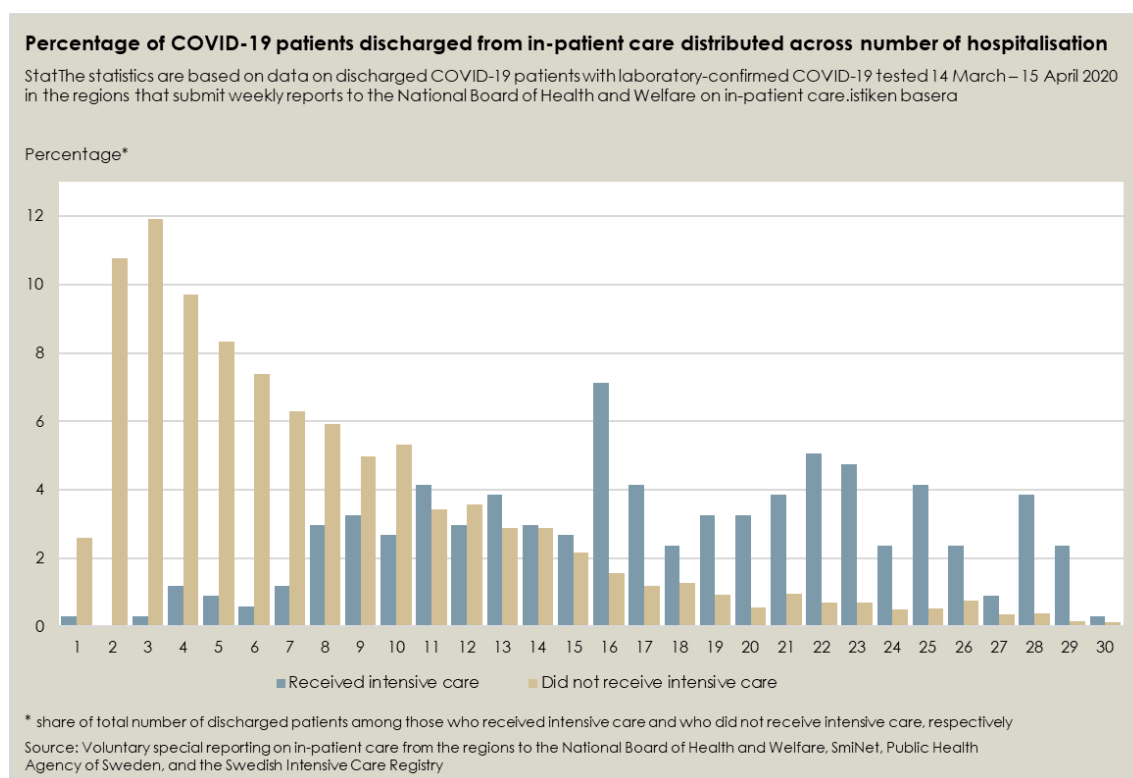
Source: Voluntary special reporting on in-patient care from the regions to the National Board of Health and Welfare, cause of death certificates received, Register for care and social services for the elderly and persons with impairments, National Board of Health and Welfare, SmiNet, Public Health Agency of Sweden, Swedish Intensive Care Registry.

In-patient care time for discharged COVID-19 patients

The median care time for COVID-19 patients discharged from hospital was a total of 7 days (*interquartile range*¹ 4-13 days). Those who had received ICU care during any period of their hospital stay had a longer total care period than patients who only stayed in a regular ward; Median care time for patients in intensive care was 20 days (*interquartile range* 14-28 days) compared to 6 days (*interquartile range* 3-11 days) for patients who had not received care in the ICU. The care time was the same for both men and women.

Almost all patients (97 percent; 3 468 out of 3 578) included in the data were discharged within 30 days, but among those who had received intensive care, 20 percent (67 out of 337) had a longer care period than that. In order to draw more reliable conclusions on how long patients in intensive care are hospitalised, this patient group needs to be monitored for longer than 30 days. There is no point in conducting this analysis yet as there are still relatively few patients with care times this long who have been discharged.

Fig. 1. Breakdown of total in-patient care time among COVID-19 patients discharged within 30 days.



¹ In order to describe the variation in care times, we have calculated hinges that split the variable hospitalisation days into four equal groups, quartiles. The median is the middle quartile. Interquartile range = lower quartile to the upper quartile, Read more: <https://www.scb.se/dokumentation/statistikguiden/grundlaggande-rakneregler-i-statistiken/standardavvikelse-och-kvartiler/>

COVID-19 patients dying in hospital

In total, twenty percent of the patients died during hospitalisation. Divided by type of treatment, the statistics show that 35 percent of patients who had received treatment in the ICU died during their hospitalisation. In the group who had not received intensive care, 18 percent died, see Table 1 above. More older patients died than younger; in the age group 70 years or above, a total of 37 percent died, and among patients younger than 70 years, 7 percent died. In total, 22 percent of men and 17 percent of women died during the care period.

The median care time for the patients who died in hospital was 8 days (*interquartile range 5-13 days*). The median care time for the patients who at some point during their hospital stay was registered in the ICU before dying was 12 days (*interquartile range 8-19 days*). The corresponding number for the deceased patients who had not received intensive care was 7 days (*interquartile range 5-11 days*)

Additional information

Read more about statistics on COVID-19 from the National Board of Health and Welfare:

www.socialstyrelsen.se/statistik-och-data/statistik/statistikdatabasen

Information on statistics on individuals who died due to COVID-19:

National Board of Health and Welfare, 2020. "Beskrivning av datakällor för avlidna i COVID-19". Published 2020-04-27. Fact sheet Reg.no. 6.7-14923/2020.

National Patient Register: <https://www.socialstyrelsen.se/statistik-och-data/register/alla-register/patientregistret/>

SmiNet: <https://www.folkhalsomyndigheten.se/smittskydd-beredskap/overvakning-och-rapportering/sminet/>

Swedish Intensive Care Registry: <https://www.icuregswe.org/>

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Appendix:

Regions included in the statistics

The statistics on care periods for hospital care for patients with COVID-19 is based on information from regions that have reported hospitalisation on a weekly basis to the National Board of Health and Welfare during the pandemic. More regions may be added to the statistics in the future. The following regions are included in the statistics reported in this fact sheet:

- Blekinge
 - Halland
 - Jämtland
 - Jönköping
 - Kalmar
 - Kronoberg
 - Skåne
 - Stockholm
 - Södermanland
 - Värmland
 - Västerbotten
 - Västernorrland
 - Västmanland
 - Örebro
 - Östergötland
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