

**GiViTI**

Gruppo Italiano per la Valutazione degli Interventi In Terapia Intensiva

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**Report  
PROSAFE project**

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**Year 2020**

**National report for ICUs of other type (5 ICUs)**



**Description of hospitals (N=5) - Year 2020**

| Number of beds in hospital | N | %    |
|----------------------------|---|------|
| < 300 beds                 | 2 | 40.0 |
| 300 - 800 beds             | 2 | 40.0 |
| > 800 beds                 | 1 | 20.0 |
| Missing                    | 0 |      |

| Type of ICUs present in hospital | N | %    |
|----------------------------------|---|------|
| General                          | 1 | 20.0 |
| Medical                          | 4 | 80.0 |
| Surgical                         | 4 | 80.0 |
| Neurological/neurosurgical       | 1 | 20.0 |
| Cardiosurgical                   | 1 | 20.0 |
| Burns                            | 1 | 20.0 |
| Post-transplantations            | 0 | 0.0  |
| Other                            | 1 | 20.0 |

| Type of subICUs present in hospital | N | %    |
|-------------------------------------|---|------|
| General                             | 1 | 20.0 |
| Surgical                            | 3 | 60.0 |
| Cardiological                       | 1 | 20.0 |
| Respiratory                         | 0 | 0.0  |
| Neurological (stroke unit)          | 1 | 20.0 |
| Other                               | 2 | 40.0 |

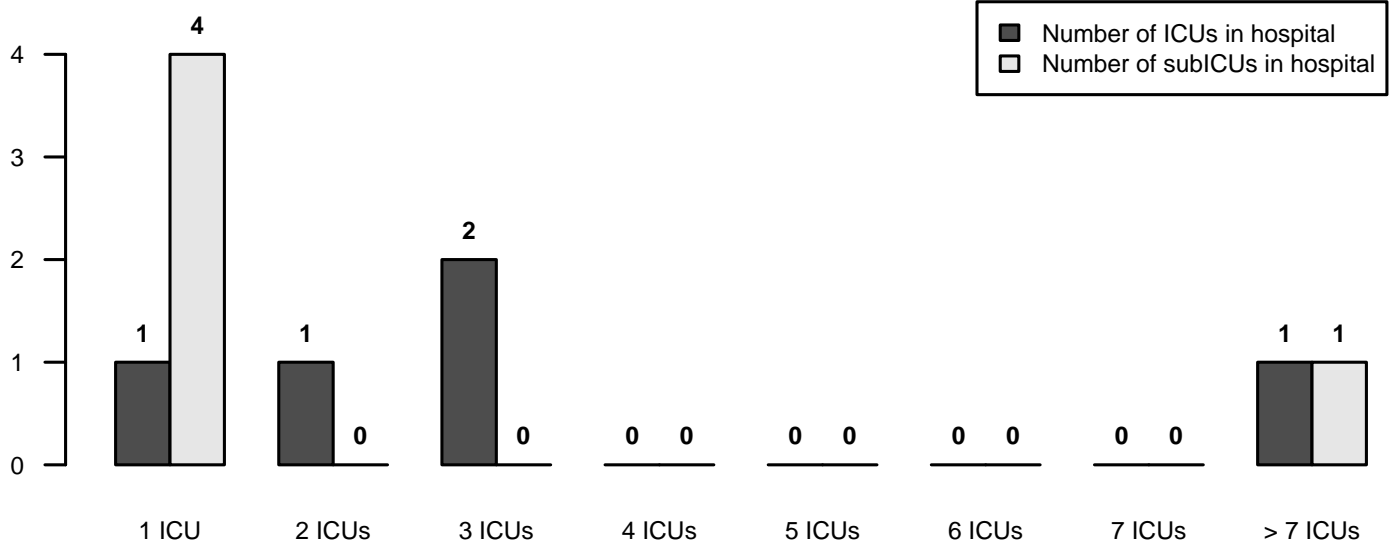
| Non surgical specialties | N | %    |
|--------------------------|---|------|
| Cardiology               | 4 | 80.0 |
| Pulmonology              | 3 | 60.0 |
| Nephrology               | 4 | 80.0 |
| Infection disease        | 2 | 40.0 |
| Pediatric                | 4 | 80.0 |
| Neonatology              | 1 | 20.0 |
| Neurology                | 4 | 80.0 |
| Haematology              | 3 | 60.0 |
| Emergency room           | 4 | 80.0 |
| Traumatology             | 3 | 60.0 |
| Emergency medical        | 3 | 60.0 |

| Surgical specialties (independent ward) | N | %    |
|-----------------------------------------|---|------|
| Neurosurgery                            | 1 | 20.0 |
| Cardiosurgery                           | 1 | 20.0 |
| Major vascular surgery                  | 3 | 60.0 |
| Thoracic surgery                        | 1 | 20.0 |
| Pediatric surgery                       | 1 | 20.0 |
| Transplantation activities              | 1 | 20.0 |

| Surgical specialties (procedures only) | N | %    |
|----------------------------------------|---|------|
| Neurosurgery                           | 4 | 80.0 |
| Cardiosurgery                          | 1 | 20.0 |
| Major vascular surgery                 | 1 | 20.0 |
| Thoracic surgery                       | 1 | 20.0 |
| Pediatric surgery                      | 4 | 80.0 |
| Transplantation activities             | 1 | 20.0 |

| Services/activities available in H (h24) | N | %     |
|------------------------------------------|---|-------|
| Neuroradiology                           | 3 | 60.0  |
| Interventional neuroradiology            | 2 | 40.0  |
| Interventional vascular radiology        | 2 | 40.0  |
| CT scan                                  | 5 | 100.0 |
| MRI                                      | 4 | 80.0  |
| Interventional hemodynamic               | 3 | 60.0  |
| Endoscopy                                | 5 | 100.0 |
| Bronchoscopy                             | 4 | 80.0  |
| Hyperbaric chamber                       | 0 | 0.0   |

| Services/activities available in H (rep.) | N | %    |
|-------------------------------------------|---|------|
| Neuroradiology                            | 1 | 20.0 |
| Interventional neuroradiology             | 0 | 0.0  |
| Interventional vascular radiology         | 2 | 40.0 |
| CT scan                                   | 0 | 0.0  |
| MRI                                       | 1 | 20.0 |
| Interventional hemodynamic                | 0 | 0.0  |
| Endoscopy                                 | 0 | 0.0  |
| Bronchoscopy                              | 1 | 20.0 |
| Hyperbaric chamber                        | 1 | 20.0 |



## Description of ICUs (N=5) - Year 2020

| Number of activable beds |      |        |
|--------------------------|------|--------|
| Mean (SD)                | 10.4 | (6.7)  |
| Median (Q1–Q3)           | 8    | (6–10) |
| Missing                  | 0    |        |

| Number of beds declared to hospital |      |        |
|-------------------------------------|------|--------|
| Mean (SD)                           | 10.4 | (6.7)  |
| Median (Q1–Q3)                      | 8    | (6–10) |
| Missing                             | 0    |        |

| University affiliation | N | %    |
|------------------------|---|------|
| Yes                    | 3 | 60.0 |
| No                     | 2 | 40.0 |
| Missing                | 0 |      |

| Square meter per bed |      |         |
|----------------------|------|---------|
| Mean (SD)            | 15.8 | (11.8)  |
| Median (Q1–Q3)       | 13   | (10–21) |
| Missing              | 0    |         |

| Clinical psychologist | N | %    |
|-----------------------|---|------|
| No                    | 2 | 40.0 |
| For relatives         | 1 | 20.0 |
| For patients          | 3 | 60.0 |
| For personnel         | 0 | 0.0  |

| ICU Structure         | N | %    |
|-----------------------|---|------|
| NON OPEN-SPACE        | 1 | 20.0 |
| OPEN-SPACE (or alike) | 4 | 80.0 |
| Missing               | 0 |      |

| Physicians                                    | N | %    |
|-----------------------------------------------|---|------|
| Dedicated to ICU only                         | 0 | 0.0  |
| Dedicated to ICU on a rotation basis          | 1 | 20.0 |
| Dedicated to ICU only and on a rotation basis | 4 | 80.0 |
| Missing                                       | 0 |      |

| Declared beds per physician (average) |     |           |
|---------------------------------------|-----|-----------|
| Mean (SD)                             | 5.2 | (2.9)     |
| Median (Q1–Q3)                        | 3.7 | (3.6–6.7) |
| Missing                               | 0   |           |

| Nurses                                        | N | %    |
|-----------------------------------------------|---|------|
| Dedicated to ICU only                         | 3 | 60.0 |
| Dedicated to ICU on a rotation basis          | 0 | 0.0  |
| Dedicated to ICU only and on a rotation basis | 2 | 40.0 |
| Missing                                       | 0 |      |

| Declared beds per nurse (average) |     |         |
|-----------------------------------|-----|---------|
| Mean (SD)                         | 1.8 | (0.2)   |
| Median (Q1–Q3)                    | 1.8 | (1.7–2) |
| Missing                           | 0   |         |

| Number of hours conceded for relatives' visits | N | %    |
|------------------------------------------------|---|------|
| 1                                              | 4 | 80.0 |
| 2                                              | 0 | 0.0  |
| 3-4                                            | 1 | 20.0 |
| 5-12                                           | 0 | 0.0  |
| 13-20                                          | 0 | 0.0  |
| >20                                            | 0 | 0.0  |
| Missing                                        | 0 |      |

| Maximum number of visitors per patient | N | %    |
|----------------------------------------|---|------|
| One                                    | 1 | 20.0 |
| Two                                    | 4 | 80.0 |
| Three or more                          | 0 | 0.0  |
| Missing                                | 0 |      |

| Biomedical devices per declared bed                                                                    | Median | Q1-Q3   | <5 Years (mean %) |
|--------------------------------------------------------------------------------------------------------|--------|---------|-------------------|
| Total available monitors (excluding those dedicated to transport)                                      | 1.3    | 1.3–1.3 | 25.0              |
| of which only for basic monitoring (without transducers detection of invasive pressure, pic, pvc, ...) | 0.0    | 0.0–0.0 | 0.0               |
| Invasive monitoring of cardiac output (Swan-Ganz)                                                      | 0.0    | 0.0–0.0 | 0.0               |
| Invasive monitoring of cardiac output (PiCCO)                                                          | 0.2    | 0.2–0.3 | 25.0              |
| Invasive monitoring of cardiac output (Vigileo)                                                        | 0.2    | 0.0–0.4 | 45.8              |
| Non-invasive monitoring of cardiac output (impedentiometry)                                            | 0.0    | 0.0–0.0 | 75.0              |
| Defibrillators                                                                                         | 0.1    | 0.1–0.2 | 0.0               |
| Both invasive and non invasive ventilators                                                             | 1.0    | 1.0–1.2 | 29.4              |
| Non invasive ventilators                                                                               | 0.3    | 0.1–0.4 | 33.4              |
| Syringe pumps                                                                                          | 5.5    | 4.4–6.0 | 36.6              |
| Peristaltic pumps                                                                                      | 0.3    | 0.0–1.0 | 66.7              |

| Biomedical equipment in ICU       | N | %     |
|-----------------------------------|---|-------|
| Transoesophageal echo             | 1 | 20.0  |
| Basic ultrasounds                 | 5 | 100.0 |
| Advanced ultrasounds              | 4 | 80.0  |
| Blood-gas analyzer                | 4 | 80.0  |
| Haemodialysis - Haemofiltration   | 4 | 80.0  |
| Transport ventilator              | 5 | 100.0 |
| Fiberscope                        | 5 | 100.0 |
| Extracorporeal circulation system | 1 | 20.0  |

| Routine microbiological surveillance cultures | N | %     |
|-----------------------------------------------|---|-------|
| Yes                                           | 5 | 100.0 |
| No                                            | 0 | 0.0   |
| Missing                                       | 0 |       |

## National report for ICUs of other type - Year 2020

## Characteristics on admission - Adult patients evaluated in the GiViTI model

Patients (N): 1288

| Sex     | N   | %    |
|---------|-----|------|
| Male    | 817 | 63.5 |
| Female  | 470 | 36.5 |
| Missing | 1   |      |

| Age (years) | N     | %    |
|-------------|-------|------|
| 17-45       | 140   | 10.9 |
| 46-65       | 430   | 33.4 |
| 66-75       | 342   | 26.6 |
| >75         | 376   | 29.2 |
| Missing     | 0     |      |
| Mean        | 65.7  |      |
| SD          | 15.4  |      |
| Median      | 68    |      |
| Q1–Q3       | 57–77 |      |
| Min–Max     | 17–96 |      |

| Body mass Index (BMI) | N   | %    |
|-----------------------|-----|------|
| Underweight           | 53  | 4.1  |
| Normal                | 467 | 36.3 |
| Overweight            | 472 | 36.7 |
| Obese                 | 295 | 22.9 |
| Missing               | 1   |      |

| Pregnancy status       | N   | %    |
|------------------------|-----|------|
| <b>Females (N=470)</b> |     |      |
| Not fertile            | 234 | 49.8 |
| Not pregnant/Unknown   | 232 | 49.4 |
| Currently pregnant     | 0   | 0.0  |
| Post partum            | 4   | 0.9  |
| Missing                | 0   |      |

| Comorbidities | N    | %    |
|---------------|------|------|
| No            | 166  | 12.9 |
| Yes           | 1122 | 87.1 |
| Missing       | 0    |      |

| Comorbidities (top 10)               | N   | %    |
|--------------------------------------|-----|------|
| Hypertension                         | 700 | 54.3 |
| Any tumour without metastasis        | 316 | 24.5 |
| Arrhythmia                           | 260 | 20.2 |
| NYHA class II-III                    | 194 | 15.1 |
| Metastatic cancer                    | 175 | 13.6 |
| Diabetes Type II without insulin tr. | 173 | 13.4 |
| Moderate or severe renal disease     | 129 | 10.0 |
| Peripheral vascular disease          | 124 | 9.6  |
| Endocrine-metabolic diseases         | 118 | 9.2  |
| Drug-induced coagulopathy            | 105 | 8.2  |
| Missing                              | 0   |      |

| Stay before ICU (days) | Mean | SD   | Median | Q1–Q3 | Missing |
|------------------------|------|------|--------|-------|---------|
|                        | 4.9  | 11.2 | 1      | 0–4   | 0       |

| Source of admission             | N    | %    |
|---------------------------------|------|------|
| Same hospital                   | 1203 | 93.4 |
| Other hospital                  | 85   | 6.6  |
| Long-term chronic care hospital | 0    | 0.0  |
| Directly from the community     | 0    | 0.0  |
| Missing                         | 0    |      |

| Ward of admission         | N   | %    |
|---------------------------|-----|------|
| <b>Hospital (N=1288)</b>  |     |      |
| Medical ward              | 112 | 8.7  |
| Surgical ward             | 786 | 61.0 |
| Emergency room            | 269 | 20.9 |
| Other ICU                 | 70  | 5.4  |
| High dependency care unit | 51  | 4.0  |
| Missing                   | 0   |      |

| Reason for transfer from          | N  | %    |
|-----------------------------------|----|------|
| <b>Other ICU (N=70)</b>           |    |      |
| Specialist expertise              | 15 | 21.4 |
| Step-up care                      | 20 | 28.6 |
| Logistical/organizational reasons | 27 | 38.6 |
| Step-down care                    | 8  | 11.4 |
| Missing                           | 0  |      |

| Ward of admission             | N   | %    |
|-------------------------------|-----|------|
| <b>Same hospital (N=1203)</b> |     |      |
| Medical ward                  | 106 | 8.8  |
| Surgical ward                 | 774 | 64.3 |
| Emergency room                | 242 | 20.1 |
| Other ICU                     | 38  | 3.2  |
| High dependency care unit     | 43  | 3.6  |
| Missing                       | 0   |      |

| Ward of admission            | N  | %    |
|------------------------------|----|------|
| <b>Other hospital (N=85)</b> |    |      |
| Medical ward                 | 6  | 7.1  |
| Surgical ward                | 12 | 14.1 |
| Emergency room               | 27 | 31.8 |
| Other ICU                    | 32 | 37.6 |
| High dependency care unit    | 8  | 9.4  |
| Missing                      | 0  |      |

| Scheduled admission | N   | %    |
|---------------------|-----|------|
| No                  | 874 | 67.9 |
| Yes                 | 414 | 32.1 |
| Missing             | 0   |      |

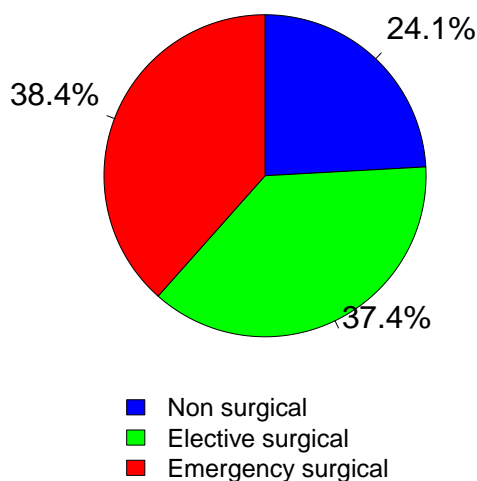
## National report for ICUs of other type - Year 2020

## Characteristics on admission - Adult patients evaluated in the GiViTI model

| Trauma          | N    | %    |
|-----------------|------|------|
| No              | 1046 | 81.2 |
| Yes             | 242  | 18.8 |
| Multiple trauma | 97   | 7.5  |
| Missing         | 0    |      |

| Surgical status    | N   | %    |
|--------------------|-----|------|
| Non surgical       | 311 | 24.1 |
| Elective surgical  | 482 | 37.4 |
| Emergency surgical | 495 | 38.4 |
| Missing            | 0   |      |

## Surgical status



| Source of admission                 | N   | %    |
|-------------------------------------|-----|------|
| <b>Surgical pt. (N=977)</b>         |     |      |
| Operating theatre of surgical ward  | 646 | 66.1 |
| Operating theatre of emergency room | 122 | 12.5 |
| Surgical ward                       | 71  | 7.3  |
| Other                               | 138 | 14.1 |
| Missing                             | 0   |      |

| Surgical interventions (top 10)  | N   | %    |
|----------------------------------|-----|------|
| <b>Elective surgical (N=482)</b> |     |      |
| Gastrointestinal surgery         | 297 | 61.6 |
| Nephro/Urological surgery        | 32  | 6.6  |
| Other surgery                    | 29  | 6.0  |
| Hepatic surgery                  | 27  | 5.6  |
| Abdominal vascular surgery       | 22  | 4.6  |
| Gynaecological surgery           | 20  | 4.1  |
| Orthopaedic surgery              | 17  | 3.5  |
| Thoracic surgery                 | 17  | 3.5  |
| Peripheral vascular surgery      | 14  | 2.9  |
| Pancreatic surgery               | 9   | 1.9  |
| Missing                          | 0   |      |

| Timing                           | N   | %    |
|----------------------------------|-----|------|
| <b>Elective surgical (N=482)</b> |     |      |
| From -7 to -3 days               | 15  | 3.1  |
| From -2 to -1 days               | 20  | 4.1  |
| On ICU admission day             | 478 | 99.2 |
| The day after ICU admission      | 9   | 1.9  |
| Missing                          | 0   |      |

| Surgical interventions (top 10)   | N   | %    |
|-----------------------------------|-----|------|
| <b>Emergency surgical (N=495)</b> |     |      |
| Gastrointestinal surgery          | 227 | 45.9 |
| Neurosurgery                      | 96  | 19.4 |
| Other surgery                     | 39  | 7.9  |
| Orthopaedic surgery               | 35  | 7.1  |
| Organ/s transplantation           | 19  | 3.8  |
| Nephro/Urological surgery         | 15  | 3.0  |
| Abdominal vascular surgery        | 15  | 3.0  |
| Thoracic surgery                  | 14  | 2.8  |
| Peripheral vascular surgery       | 14  | 2.8  |
| Hepatic surgery                   | 11  | 2.2  |
| Missing                           | 10  |      |

| Timing                            | N   | %    |
|-----------------------------------|-----|------|
| <b>Emergency surgical (N=495)</b> |     |      |
| From -7 to -3 days                | 28  | 5.7  |
| From -2 to -1 days                | 72  | 14.5 |
| On ICU admission day              | 426 | 86.1 |
| The day after ICU admission       | 29  | 5.9  |
| Missing                           | 1   |      |

| Non surgical interventions | N    | %    |
|----------------------------|------|------|
| None                       | 1225 | 95.1 |
| Elective                   | 8    | 0.6  |
| Emergency                  | 55   | 4.3  |
| Missing                    | 0    |      |

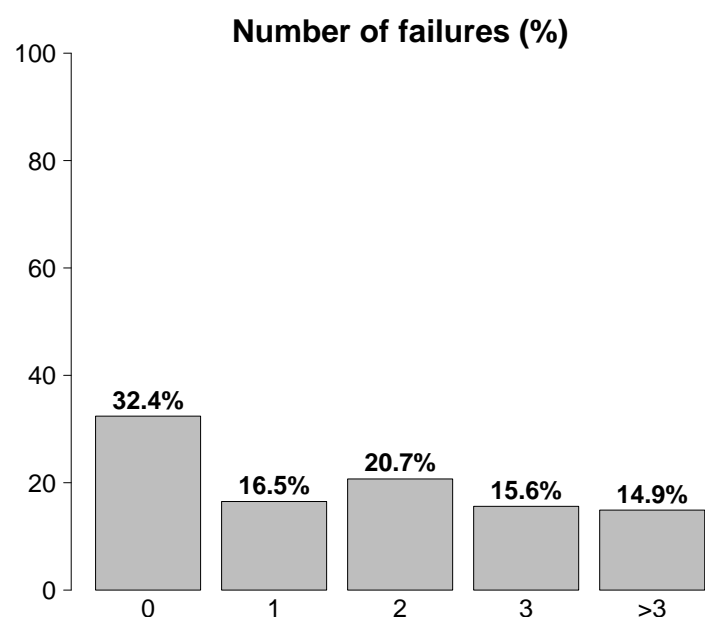
| Non surgical interventions    | N | %    |
|-------------------------------|---|------|
| <b>Elective (N=8)</b>         |   |      |
| Interventional radiology      | 3 | 37.5 |
| Interventional endoscopy      | 2 | 25.0 |
| Interventional cardiology     | 0 | 0.0  |
| Interventional neuroradiology | 0 | 0.0  |
| Missing                       | 3 |      |

| Non surgical interventions    | N  | %    |
|-------------------------------|----|------|
| <b>Emergency (N=55)</b>       |    |      |
| Interventional radiology      | 22 | 40.0 |
| Interventional endoscopy      | 18 | 32.7 |
| Interventional cardiology     | 6  | 10.9 |
| Interventional neuroradiology | 3  | 5.5  |
| Missing                       | 6  |      |

## National report for ICUs of other type - Year 2020

## Characteristics on admission - Adult patients evaluated in the GiViTI model

| Reason for admission                   | N   | %    |
|----------------------------------------|-----|------|
| Monitoring/Weaning                     | 562 | 43.6 |
| Post surgical weaning                  | 17  | 1.3  |
| Surgical monitoring                    | 451 | 35.1 |
| Post interventional weaning            | 1   | 0.1  |
| Interventional monitoring              | 11  | 0.9  |
| Non surgical monitoring                | 79  | 6.1  |
| Missing                                | 3   |      |
| Admission for procedures/treatments    | 0   | 0.0  |
| Intensive Treatment                    | 726 | 56.4 |
| Only ventilatory support               | 111 | 8.6  |
| Only cardiovascular support            | 132 | 10.2 |
| Ventilatory and cardiovascular support | 483 | 37.5 |
| Missing                                | 0   |      |
| Palliative Sedation                    | 0   | 0.0  |
| Diagnosis of death/Organ donation      | 0   | 0.0  |
| Missing                                | 0   |      |



| Failures on admission     | N   | %    |
|---------------------------|-----|------|
| No                        | 417 | 32.4 |
| Yes                       | 871 | 67.6 |
| A: Respiratory failure    | 594 | 46.1 |
| B: Cardiovascular failure | 615 | 47.7 |
| C: Neurological failure   | 73  | 5.7  |
| D: Hepatic failure        | 23  | 1.8  |
| E: Renal failure          | 467 | 36.3 |
| F: Acute skin failure     | 4   | 0.3  |
| G: Metabolic failure      | 342 | 26.6 |
| H: Coagulation failure    | 53  | 4.1  |
| Missing                   | 0   |      |

| Failures on admission (top 10) | N   | %    |
|--------------------------------|-----|------|
| AB                             | 155 | 12.0 |
| ABEG                           | 111 | 8.6  |
| ABE                            | 76  | 5.9  |
| E                              | 75  | 5.8  |
| A                              | 60  | 4.7  |
| ABG                            | 40  | 3.1  |
| BEG                            | 39  | 3.0  |
| BE                             | 38  | 3.0  |
| B                              | 37  | 2.9  |
| G                              | 33  | 2.6  |
| Missing                        | 0   |      |

| Respiratory failure          | N   | %    |
|------------------------------|-----|------|
| None                         | 694 | 53.9 |
| Only hypoxic failure         | 177 | 13.7 |
| Only hypercapnic failure     | 39  | 3.0  |
| Hypoxic-hypercapnic failure  | 55  | 4.3  |
| Intubation for airway maint. | 323 | 25.1 |
| Missing                      | 0   |      |

| Cardiovascular failure         | N   | %    |
|--------------------------------|-----|------|
| None                           | 673 | 52.3 |
| Without shock                  | 221 | 17.2 |
| Cardiogenic shock              | 23  | 1.8  |
| Septic shock                   | 198 | 15.4 |
| Haemorrhagic/hypovolemic shock | 80  | 6.2  |
| Hypovolemic shock              | 11  | 0.9  |
| Anaphylactic shock             | 5   | 0.4  |
| Neurogenic shock               | 15  | 1.2  |
| Other shock                    | 22  | 1.7  |
| Mixed shock                    | 40  | 3.1  |
| Missing                        | 0   |      |

| Neurologic failure       | N   | %    |
|--------------------------|-----|------|
| None                     | 972 | 93.0 |
| Cerebral coma            | 51  | 4.9  |
| Metabolic coma           | 8   | 0.8  |
| Postanoxic coma          | 10  | 1.0  |
| Toxic coma               | 4   | 0.4  |
| Missing or not evaluable | 243 |      |

| Renal failure (AKIN) | N   | %    |
|----------------------|-----|------|
| None                 | 821 | 63.7 |
| Mild                 | 228 | 17.7 |
| Moderate             | 133 | 10.3 |
| Severe               | 106 | 8.2  |
| Missing              | 0   |      |

| Metabolic failure                            | N   | %    |
|----------------------------------------------|-----|------|
| None                                         | 946 | 73.4 |
| pH $\leq$ 7.3, PaCO <sub>2</sub> < 45 mmHg   | 107 | 8.3  |
| Base deficit $\geq$ 5 mmol/L, lactate > 1.5x | 235 | 18.2 |
| Missing                                      | 0   |      |

## National report for ICUs of other type - Year 2020

## Characteristics on admission - Adult patients evaluated in the GiViTI model

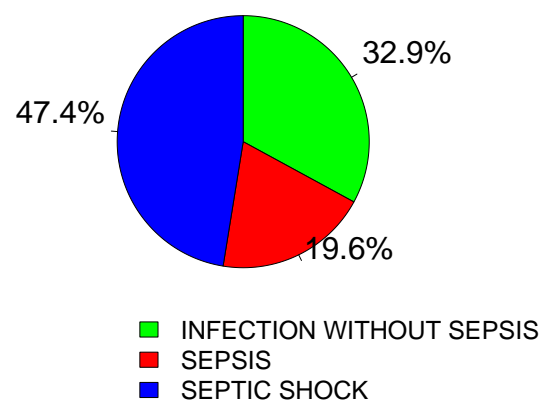
| Clinical conditions on admission         | N          | %           |
|------------------------------------------|------------|-------------|
| <b>Respiratory</b>                       | <b>235</b> | <b>18.2</b> |
| Pleural effusion                         | 83         | 6.4         |
| Aspiration pneumonia                     | 59         | 4.6         |
| Atelectasis                              | 34         | 2.6         |
| Lung cancer                              | 26         | 2.0         |
| Moderate ARDS                            | 22         | 1.7         |
| <b>Cardiovascular</b>                    | <b>210</b> | <b>16.3</b> |
| Acute severe arrhythmia: tachycardias    | 48         | 3.7         |
| Left heart failure without pulm. edema   | 38         | 3.0         |
| Cardiac arrest                           | 29         | 2.3         |
| Non-ruptured aneurysm                    | 27         | 2.1         |
| Left heart failure with pulmonary edema  | 24         | 1.9         |
| <b>Neurological</b>                      | <b>105</b> | <b>8.2</b>  |
| Brain tumour                             | 24         | 1.9         |
| Neuropathy/myopathy                      | 18         | 1.4         |
| Cerebral artery stroke                   | 16         | 1.2         |
| Seizures                                 | 15         | 1.2         |
| Non traumatic cerebral oedema            | 12         | 0.9         |
| <b>Gastrointestinal and hepatic</b>      | <b>538</b> | <b>41.8</b> |
| Digestive tract malignancy               | 289        | 22.4        |
| Intestinal occlusion                     | 72         | 5.6         |
| Gastrointestinal perforation             | 66         | 5.1         |
| Paralytic Ileus                          | 55         | 4.3         |
| Hepatic malignancy                       | 34         | 2.6         |
| <b>Trauma (anatomical districts)</b>     | <b>242</b> | <b>18.8</b> |
| Head                                     | 151        | 11.7        |
| Chest                                    | 85         | 6.6         |
| Spine                                    | 62         | 4.8         |
| Pelvis/bone/joint & muscle               | 61         | 4.7         |
| Abdomen                                  | 37         | 2.9         |
| Major vessels injury                     | 17         | 1.3         |
| Miscellaneous                            | 1          | 0.1         |
| <b>Other</b>                             | <b>359</b> | <b>27.9</b> |
| Other disease                            | 175        | 13.6        |
| Nephrourologic disease                   | 98         | 7.6         |
| Metabolic disorder                       | 53         | 4.1         |
| Coagulation disorder                     | 53         | 4.1         |
| Gynaecological disease                   | 27         | 2.1         |
| <b>Post transplantation</b>              | <b>46</b>  | <b>3.6</b>  |
| Liver transplantation                    | 25         | 1.9         |
| Lung transplantation                     | 13         | 1.0         |
| <b>Infections</b>                        | <b>489</b> | <b>38.0</b> |
| Pneumonia                                | 195        | 15.1        |
| Post-surgical peritonitis                | 63         | 4.9         |
| NON-surgical secondary peritonitis       | 62         | 4.8         |
| Clinical sepsis                          | 40         | 3.1         |
| NON-surgical urinary tract infection     | 38         | 3.0         |
| NON-surgical skin/soft tissue infection  | 35         | 2.7         |
| Primary peritonitis                      | 23         | 1.8         |
| Post-surgical skin/soft tissue infection | 21         | 1.6         |
| Cholecystitis/cholangitis                | 18         | 1.4         |
| Post-surgical urinary tract infection    | 9          | 0.7         |
| Missing                                  | 0          |             |

| Trauma (anatomical districts)         | N          | %           |
|---------------------------------------|------------|-------------|
| <b>Head</b>                           | <b>151</b> | <b>11.7</b> |
| Traumatic subarachnoid haemorrhage    | 96         | 7.5         |
| Traumatic Subdural haematoma          | 91         | 7.1         |
| Skull fracture                        | 77         | 6.0         |
| Cerebral contusion/laceration         | 74         | 5.7         |
| Maxillofacial fracture                | 58         | 4.5         |
| <b>Spine</b>                          | <b>62</b>  | <b>4.8</b>  |
| Vertebral fracture, without deficit   | 35         | 2.7         |
| Tetraplegia                           | 13         | 1.0         |
| Cervical injury, incomplete deficit   | 7          | 0.5         |
| <b>Chest</b>                          | <b>85</b>  | <b>6.6</b>  |
| Traum. haemothorax/pneumothorax       | 51         | 4.0         |
| Other injuries of the chest           | 42         | 3.3         |
| Severe lung contusion/laceration      | 36         | 2.8         |
| <b>Abdomen</b>                        | <b>37</b>  | <b>2.9</b>  |
| Spleen: Moderate-Severe laceration    | 13         | 1.0         |
| Minor injuries of the abdomen         | 13         | 1.0         |
| Liver: Moderate-Severe laceration     | 10         | 0.8         |
| <b>Pelvis/bone/joint &amp; muscle</b> | <b>61</b>  | <b>4.7</b>  |
| Long bone fracture                    | 51         | 4.0         |
| Multiple fracture of the pelvis       | 8          | 0.6         |
| Massive crush/amputation              | 4          | 0.3         |
| <b>Major vessels injury</b>           | <b>17</b>  | <b>1.3</b>  |
| Aorta: rupture/dissection             | 5          | 0.4         |
| Neck vessels: dissection/transection  | 4          | 0.3         |
| Proximal limbs vessels: transection   | 4          | 0.3         |
| <b>Miscellaneous</b>                  | <b>1</b>   | <b>0.1</b>  |
| Inhalation injury                     | 1          | 0.1         |
| -                                     | 0          | 0.0         |
| Missing                               | 0          |             |

| Infection severity on admission | N   | %    |
|---------------------------------|-----|------|
| None                            | 799 | 62.0 |
| INFECTION WITHOUT SEPSIS        | 161 | 12.5 |
| SEPSIS                          | 96  | 7.5  |
| SEPTIC SHOCK                    | 232 | 18.0 |
| Missing                         | 0   |      |

## Infection severity on admission

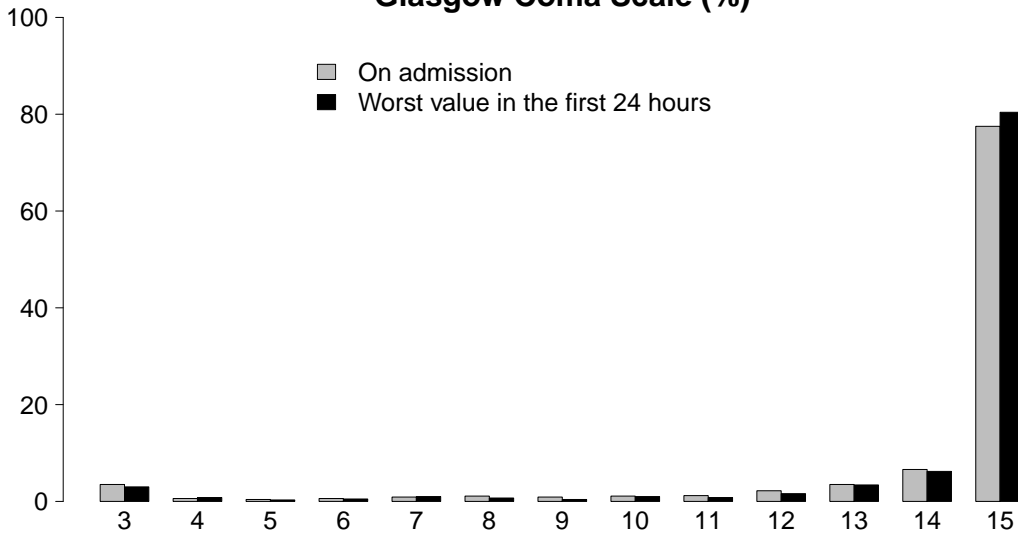
Patients infected (N=489)





**National report for ICUs of other type - Year 2020**  
**Severity scores - Adult patients evaluated in the GiViTI model**

**Glasgow Coma Scale (%)**



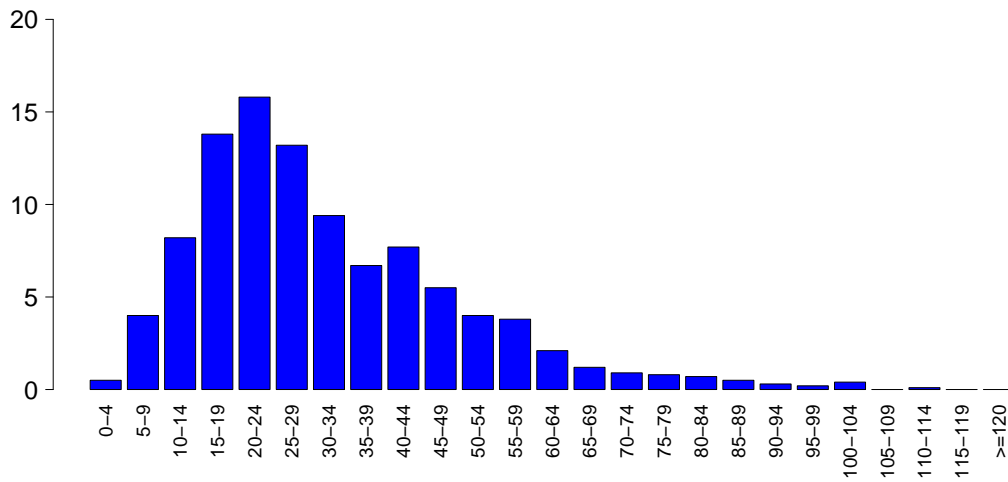
**GCS (admission)**

|               |       |
|---------------|-------|
| Median        | 15    |
| Q1–Q3         | 15–15 |
| Not evaluable | 243   |
| Missing       | 0     |

**GCS (first 24 hours)**

|               |       |
|---------------|-------|
| Median        | 15    |
| Q1–Q3         | 15–15 |
| Not evaluable | 366   |
| Missing       | 0     |

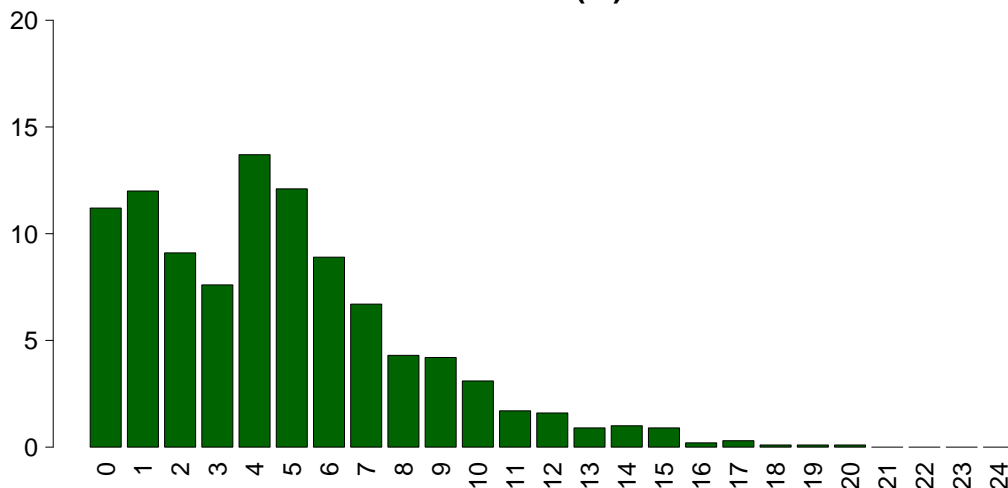
**SAPS II (%)**



**SAPSII**

|               |       |
|---------------|-------|
| Mean          | 31.6  |
| SD            | 17.9  |
| Median        | 27    |
| Q1–Q3         | 19–41 |
| Not evaluable | 366   |
| Missing       | 0     |

**SOFA (%)**



**SOFA**

|               |     |
|---------------|-----|
| Mean          | 4.6 |
| SD            | 3.6 |
| Median        | 4   |
| Q1–Q3         | 2–7 |
| Not evaluable | 366 |
| Missing       | 0   |

**National report for ICUs of other type - Year 2020****Characteristics during the stay - Adult patients evaluated in the GiViTI model**

| <b>Complications during the stay</b> | N   | %    |
|--------------------------------------|-----|------|
| No                                   | 612 | 47.5 |
| Yes                                  | 676 | 52.5 |
| Missing                              | 0   |      |

| <b>Failures during the stay</b> | N   | %    |
|---------------------------------|-----|------|
| No                              | 992 | 77.0 |
| Yes                             | 296 | 23.0 |

|                           |     |      |
|---------------------------|-----|------|
| A: Respiratory failure    | 99  | 7.7  |
| B: Cardiovascular failure | 108 | 8.4  |
| C: Neurological failure   | 42  | 3.3  |
| D: Hepatic failure        | 50  | 3.9  |
| E: Renal failure (AKIN)   | 153 | 11.9 |
| F: Acute skin failure     | 2   | 0.2  |
| G: Metabolic failure      | 71  | 5.5  |
| H: Coagulation failure    | 39  | 3.0  |
| Missing                   | 0   |      |

| <b>Failures during the stay (top 10)</b> | N  | %   |
|------------------------------------------|----|-----|
| E                                        | 54 | 4.2 |
| G                                        | 33 | 2.6 |
| A                                        | 24 | 1.9 |
| B                                        | 23 | 1.8 |
| AB                                       | 15 | 1.2 |
| AE                                       | 14 | 1.1 |
| BE                                       | 12 | 0.9 |
| D                                        | 11 | 0.9 |
| C                                        | 7  | 0.5 |
| ABE                                      | 6  | 0.5 |
| Missing                                  | 0  |     |

| <b>Respiratory failure occurred</b> | N    | %    |
|-------------------------------------|------|------|
| None                                | 1189 | 92.3 |
| Intubation for airway maint.        | 15   | 1.2  |
| Hypoxic failure                     | 71   | 5.5  |
| Hypercapnic failure                 | 32   | 2.5  |
| Missing                             | 0    |      |

| <b>Cardiovascular failure occurred</b> | N    | %    |
|----------------------------------------|------|------|
| None                                   | 1180 | 91.6 |
| Cardiogenic shock                      | 21   | 1.6  |
| Hypovolemic shock                      | 6    | 0.5  |
| Haemorrhagic/hypovolemic shock         | 12   | 0.9  |
| Septic shock                           | 64   | 5.0  |
| Anaphylactic shock                     | 1    | 0.1  |
| Neurogenic shock                       | 1    | 0.1  |
| Other shock                            | 13   | 1.0  |
| Missing                                | 0    |      |

| <b>Neurological failure occurred</b> | N    | %    |
|--------------------------------------|------|------|
| None                                 | 1246 | 96.7 |
| Cerebral coma                        | 24   | 1.9  |
| Metabolic coma                       | 17   | 1.3  |
| Postanoxic coma                      | 6    | 0.5  |
| Missing                              | 0    |      |

| <b>Renal failure occurred (AKIN)</b> | N    | %    |
|--------------------------------------|------|------|
| None                                 | 1135 | 88.1 |
| Mild                                 | 32   | 2.5  |
| Moderate                             | 40   | 3.1  |
| Severe                               | 81   | 6.3  |
| Missing                              | 0    |      |

| <b>Complications during the stay</b>           | N   | %    |
|------------------------------------------------|-----|------|
| <b>Respiratory</b>                             | 206 | 16.0 |
| Pleural effusion                               | 89  | 6.9  |
| Atelectasis                                    | 48  | 3.7  |
| Aspiration pneumonia                           | 46  | 3.6  |
| Pneumothorax/Pneumomediastinum                 | 20  | 1.6  |
| Moderate ARDS                                  | 18  | 1.4  |
| <b>Cardiovascular</b>                          | 173 | 13.4 |
| Acute severe arrhythmia: tachycardias          | 96  | 7.5  |
| Cardiac arrest                                 | 23  | 1.8  |
| Deep venous thrombosis                         | 23  | 1.8  |
| Pulmonary edema                                | 22  | 1.7  |
| Acute severe arrhythmia: bradycardias          | 20  | 1.6  |
| <b>Neurological</b>                            | 178 | 13.8 |
| Drowsiness/agitation/delirium                  | 125 | 9.7  |
| Brain edema                                    | 33  | 2.6  |
| Intracranial hypertension                      | 21  | 1.6  |
| CrIMyNe                                        | 19  | 1.5  |
| Seizures                                       | 14  | 1.1  |
| <b>Gastrointestinal and hepatic</b>            | 218 | 16.9 |
| Paralytic Ileus                                | 113 | 8.8  |
| Liver Dysfunction Syndrome                     | 43  | 3.3  |
| Gastrointestinal perforation                   | 30  | 2.3  |
| Anastomotic dehiscence                         | 24  | 1.9  |
| Bowel ischaemia                                | 24  | 1.9  |
| <b>Other</b>                                   | 183 | 14.2 |
| Other disease                                  | 85  | 6.6  |
| Metabolic disorder                             | 71  | 5.5  |
| Nephrourologic disease                         | 44  | 3.4  |
| Other skin and/or soft tissue pathology        | 10  | 0.8  |
| Category/Stage II: Partial Thickness Skin Loss | 6   | 0.5  |
| Blunt cerebral vessels trauma                  | 2   | 0.2  |
| Delayed spleen rupture                         | 2   | 0.2  |
| <b>Infections</b>                              | 301 | 23.4 |
| Pneumonia                                      | 147 | 11.4 |
| Post-surgical peritonitis                      | 58  | 4.5  |
| NON-surgical urinary tract infection           | 29  | 2.3  |
| Post-surgical skin/soft tissue infection       | 26  | 2.0  |
| Clinical sepsis                                | 17  | 1.3  |
| Other fungal infections                        | 16  | 1.2  |
| L.R.T.I. other than pneumonia                  | 13  | 1.0  |
| NON-surgical skin/soft tissue infection        | 11  | 0.9  |
| NON-surgical secondary peritonitis             | 10  | 0.8  |
| Tertiary peritonitis                           | 10  | 0.8  |
| Missing                                        | 0   |      |

## National report for ICUs of other type - Year 2020

## Characteristics during the stay - Adult patients evaluated in the GiViTI model

| Infections |                                  |     |      | Maximum severity of infection |                          |     |      |   |
|------------|----------------------------------|-----|------|-------------------------------|--------------------------|-----|------|---|
|            | N                                | %   |      | N                             | %                        |     | N    | % |
|            | None                             | 615 | 47.7 |                               | None                     | 615 | 47.7 |   |
|            | Only on admission                | 372 | 28.9 |                               | INFECTION WITHOUT SEPSIS | 253 | 19.6 |   |
|            | On admission and during ICU stay | 117 | 9.1  |                               | SEPSIS                   | 151 | 11.7 |   |
|            | Only during ICU stay             | 184 | 14.3 |                               | SEPTIC SHOCK             | 269 | 20.9 |   |
|            | Missing                          | 0   |      |                               | Missing                  | 0   |      |   |

## Severity evolution

| Severity evolution |                          | During the stay |             |                          |              |              |
|--------------------|--------------------------|-----------------|-------------|--------------------------|--------------|--------------|
|                    |                          | N (R %)         | None        | INFECTION WITHOUT SEPSIS | SEPSIS       | SEPTIC SHOCK |
| Admission          | None                     | 615 (77.0%)     | 110 (13.8%) | 50 (6.3%)                | 24 (3.0%)    | 799          |
|                    | INFECTION WITHOUT SEPSIS | -               | 143 (88.8%) | 13 (8.1%)                | 5 (3.1%)     | 161          |
|                    | SEPSIS                   | -               | -           | 88 (91.7%)               | 8 (8.3%)     | 96           |
|                    | SEPTIC SHOCK             | -               | -           | -                        | 232 (100.0%) | 232          |
|                    | TOT                      | 615             | 253         | 151                      | 269          | 1288         |

| Ventil. Associat. Pneumonia (VAP) | N    | %    |
|-----------------------------------|------|------|
| No                                | 1157 | 89.8 |
| Yes                               | 131  | 10.2 |
| Missing                           | 0    |      |

## Incidence of VAP

(Pts. with VAP/1000 days of VM pre-VAP)

|          |           |
|----------|-----------|
| Estimate | 30.5      |
| CI (95%) | 25.5–36.1 |

## Incidence of VAP

(Pts. with VAP/pts. ventilated for 8 days)

|          |           |
|----------|-----------|
| Estimate | 24.4%     |
| CI (95%) | 20.4–28.9 |

| Catheter Bacteraemia (CR-BSI) | N    | %    |
|-------------------------------|------|------|
| No                            | 1283 | 99.6 |
| Yes                           | 5    | 0.4  |
| Missing                       | 0    |      |

## Incidence of CR-BSI

(Pts. with CR-BSI/1000 days of CVC pre-CR-BSI)

|          |         |
|----------|---------|
| Estimate | 0.6     |
| CI (95%) | 0.2–1.3 |

## Incidence of CR-BSI

(Pts. with CR-BSI/pts. catheterized for 12 days)

|          |         |
|----------|---------|
| Estimate | 0.7%    |
| CI (95%) | 0.2–1.5 |

**National report for ICUs of other type - Year 2020**  
**Process indicators - Adult patients evaluated in the GiViTI model**

| Procedures and/or treatments (Missing=0)  | Use  |      | On admission |      | On discharge |      | Length (days) |       | Days from admission |        |       |         |
|-------------------------------------------|------|------|--------------|------|--------------|------|---------------|-------|---------------------|--------|-------|---------|
|                                           | N    | %    | N            | %    | N            | %    | Median        | Q1-Q3 | Missing             | Median | Q1-Q3 | Missing |
| <b>Procedures (antibiotics excluded)</b>  | 1266 | 98.3 |              |      |              |      |               |       |                     |        |       |         |
| Invasive ventilation                      | 640  | 49.7 | 500          | 38.8 | 158          | 12.3 | 4             | 1-13  | 0                   | 0      | 0-1   | 0       |
| Non invasive ventilation                  | 124  | 9.6  | 15           | 1.2  | 39           | 3    | 1             | 1-3   | 0                   | 1      | 0-6   | 0       |
| Tracheostomy                              | 117  | 9.1  | 11           | 0.9  | 89           | 6.9  | 7             | 2-15  | 0                   | 13     | 8-21  | 0       |
| iNO (inhaled nitric oxide)                | 45   | 3.5  | 18           | 1.4  | 2            | 0.2  | 3             | 2-7   | 0                   | 1      | 0-4   | 0       |
| Central Venous Catheter                   | 1116 | 86.6 | 878          | 68.2 | 935          | 72.6 | 4             | 2-10  | 0                   | 0      | 0-0   | 0       |
| PICC                                      | 76   | 5.9  | 27           | 2.1  | 51           | 4    | 3             | 1-5   | 0                   | 1      | 0-8   | 0       |
| Arterial Catheter                         | 1135 | 88.1 | 847          | 65.8 | 411          | 31.9 | 4             | 2-9   | 0                   | 0      | 0-0   | 0       |
| Vasoactive drugs                          | 908  | 70.5 | 609          | 47.3 | 110          | 8.5  | 2             | 1-6   | 0                   | 0      | 0-0   | 0       |
| Antiarrhythmics                           | 136  | 10.6 | 20           | 1.6  | 38           | 3    | 2             | 1-5   | 0                   | 2      | 0-5   | 0       |
| IABP                                      | 0    | 0.0  |              |      |              |      |               |       |                     |        |       |         |
| Invasive monitoring of C.O.               | 53   | 4.1  | 14           | 1.1  | 9            | 0.7  | 5             | 2-13  | 0                   | 0      | 0-2   | 0       |
| Continuous monitoring of ScVO2            | 7    | 0.5  | 6            | 0.5  | 0            | 0    | 4             | 2-4   | 0                   | 2      | 2-2   | 0       |
| Temporary pacing                          | 4    | 0.3  | 2            | 0.2  | 0            | 0    | 2             | 1-2   | 0                   | 0      | 0-1   | 0       |
| Ventricular assistance                    | 0    | 0.0  |              |      |              |      |               |       |                     |        |       |         |
| DC-shock                                  | 24   | 1.9  |              |      |              |      |               |       |                     | 2      | 2-4   | 0       |
| CPR                                       | 16   | 1.2  |              |      |              |      |               |       |                     | 0      | 0-2   | 0       |
| Massive blood transfusion                 | 18   | 1.4  |              |      |              |      |               |       |                     | 0      | 0-0   | 0       |
| ICP monitoring without CSF drainage       | 77   | 6.0  | 69           | 5.4  | 7            | 0.5  | 7             | 3-14  | 0                   | 0      | 0-0   | 0       |
| ICP monitoring with CSF drainage          | 14   | 1.1  | 9            | 0.7  | 7            | 0.5  | 16            | 8-22  | 0                   | 5      | 2-14  | 0       |
| External ventricular drainage without ICP | 13   | 1.0  | 7            | 0.5  | 6            | 0.5  | 7             | 3-14  | 0                   | 6      | 3-12  | 0       |
| Haemofiltration                           | 3    | 0.2  | 0            | 0    | 0            | 0    | 3             | 2-8   | 0                   | 1      | 0-1   | 0       |
| Haemodialysis                             | 99   | 7.7  | 22           | 1.7  | 29           | 2.3  | 5             | 1-12  | 0                   | 3      | 1-6   | 0       |
| ECMO                                      | 2    | 0.2  | 1            | 0.1  | 0            | 0    | 8             | 5-11  | 0                   | 1      | 1-1   | 0       |
| Hepatic clearance techniques              | 1    | 0.1  |              |      |              |      |               |       |                     |        |       |         |
| Clearance techniques during sepsis        | 5    | 0.4  | 0            | 0    | 1            | 0.1  | 1             | 1-1   | 0                   | 1      | 0-1   | 0       |
| IAP (intra-abdominal pressure)            | 164  | 12.7 |              |      |              |      |               |       |                     |        |       |         |
| Hypothermia                               | 16   | 1.2  | 7            | 0.5  | 0            | 0    | 1             | 1-1   | 0                   | 0      | 0-0   | 0       |
| Enteral nutrition                         | 644  | 50.0 | 73           | 5.7  | 435          | 33.8 | 5             | 2-13  | 0                   | 1      | 1-2   | 0       |
| Parenteral nutrition                      | 777  | 60.3 | 99           | 7.7  | 465          | 36.1 | 4             | 2-8   | 0                   | 1      | 1-1   | 0       |
| SDD (Topical, Topical and systemic)       | 0    | 0.0  |              |      |              |      |               |       |                     |        |       |         |
| Patient restraint                         | 31   | 2.4  |              |      |              |      |               |       |                     |        |       |         |
| Peridural catheter                        | 201  | 15.6 | 196          | 15.2 | 164          | 12.7 | 2             | 2-4   | 0                   | 0      | 0-0   | 0       |
| Electrical cardioversion                  | 8    | 0.6  |              |      |              |      |               |       |                     | 2      | 2-4   | 0       |
| Vacuum therapy                            | 24   | 1.9  |              |      |              |      |               |       |                     |        |       |         |

**National report for ICUs of other type - Year 2020**  
**Process indicators - Adult patients evaluated in the GiViTI model**

| Procedures and/or treatments (Missing=0)                       | Use  |      | On admission |      | On discharge |      | Length (days) |       |         | Days from admission |       |         |
|----------------------------------------------------------------|------|------|--------------|------|--------------|------|---------------|-------|---------|---------------------|-------|---------|
|                                                                | N    | %    | N            | %    | N            | %    | Median        | Q1-Q3 | Missing | Median              | Q1-Q3 | Missing |
| <b>Antibiotics</b>                                             | 1163 | 90.3 |              |      |              |      |               |       |         |                     |       |         |
| Antibiotic prophylaxis                                         | 554  | 43.0 | 422          | 32.8 | 172          | 13.4 | 1             | 0-2   | 0       | 0                   | 0-0   | 0       |
| Empirical antibiotic therapy (infection diagnosis confirmed)   | 407  | 31.6 | 218          | 16.9 | 88           | 6.8  | 3             | 1-4   | 0       | 0                   | 0-2   | 0       |
| Empirical antibiotic therapy (infection diagnosis unconfirmed) | 210  | 16.3 | 80           | 6.2  | 155          | 12   | 3             | 2-5   | 0       | 1                   | 0-2   | 0       |
| Targeted antibiotic therapy                                    | 452  | 35.1 | 103          | 8    | 304          | 23.6 | 7             | 3-14  | 0       | 3                   | 2-5   | 0       |
| Antifungal in empirical therapy                                | 79   | 6.1  | 24           | 1.9  | 24           | 1.9  | 4             | 2-8   | 0       | 1                   | 0-4   | 0       |
| Antifungal in targeted therapy                                 | 105  | 8.2  | 19           | 1.5  | 63           | 4.9  | 10            | 5-15  | 0       | 3                   | 1-8   | 0       |
| Pre-emptive antifungal                                         | 12   | 0.9  | 9            | 0.7  | 7            | 0.5  | 5             | 4-6   | 0       | 14                  | 8-16  | 0       |

**Antibiotic therapy**

| Pt. infected in ICU only (N=184) |    |      |
|----------------------------------|----|------|
|                                  | N  | %    |
| No therapy                       | 7  | 3.8  |
| Only empirical                   | 53 | 28.8 |
| Only targeted                    | 28 | 15.2 |
| Targeted after empirical         | 81 | 44.0 |
| Other                            | 15 | 8.2  |
| Missing                          | 0  |      |

**Antifungal therapy**

| Pt. infected in ICU only (N=184) |     |      |
|----------------------------------|-----|------|
|                                  | N   | %    |
| No therapy                       | 151 | 82.1 |
| Only empirical                   | 12  | 6.5  |
| Only targeted                    | 15  | 8.2  |
| Targeted after empirical         | 4   | 2.2  |
| Other                            | 2   | 1.1  |
| Missing                          | 0   |      |

**National report for ICUs of other type - Year 2020****Process indicators - Adult patients evaluated in the GiViTI model**

| Invasive ventilation (N=640) | N   | %    | Length (days) |      |        |        |         |
|------------------------------|-----|------|---------------|------|--------|--------|---------|
|                              |     |      | Mean          | SD   | Median | Q1-Q3  | Missing |
| Due to pulmonary failure     | 279 | 38.0 | 9.8           | 11.9 | 5      | 2–13   | 0       |
| For airway maintenance       | 315 | 42.9 | 8.4           | 9.7  | 4      | 1–13   | 0       |
| In weaning                   | 21  | 2.9  | 0.7           | 0.5  | 1      | 0–1    | 0       |
| Not evaluable                | 119 | 16.2 | 7.4           | 12.0 | 1      | 1–8    | 94      |
| Reintubation within 48 hours | 10  | 1.4  | 4.4           | 2.6  | 3.5    | 3–5.75 | 0       |

| Non invasive ventilation (N=124) | N  | %    |
|----------------------------------|----|------|
| Non invasive ventilation only    | 42 | 33.9 |
| Non invasive ventilation failed  | 18 | 14.5 |
| For weaning                      | 54 | 43.5 |
| Other                            | 10 | 8.1  |
| Missing                          | 0  |      |

| Tracheostomy not present on admission (N=106) | N  | %    |
|-----------------------------------------------|----|------|
| Surgical                                      | 25 | 23.6 |
| Percutwist                                    | 32 | 30.2 |
| Ciaglia                                       | 24 | 22.6 |
| Monodil. Ciaglia                              | 2  | 1.9  |
| Fantoni                                       | 0  | 0.0  |
| Griggs                                        | 5  | 4.7  |
| Other Kind                                    | 10 | 9.4  |
| Unknown                                       | 8  | 7.5  |
| Missing                                       | 0  |      |

**Tracheostomy - Days after the beginning of inv. vent. Not present on admission (N=106)**

|         |        |
|---------|--------|
| Mean    | 14.9   |
| SD      | 9.2    |
| Median  | 13     |
| Q1–Q3   | 8.2–21 |
| Missing | 0      |

| Invasive monitoring of C.O. (N=53) | N  | %    |
|------------------------------------|----|------|
| Swan Ganz                          | 7  | 13.2 |
| PICCO                              | 42 | 79.2 |
| LIDCO                              | 3  | 5.7  |
| Vigileo-PRAM                       | 0  | 0.0  |
| Other                              | 1  | 1.9  |
| Missing                            | 0  |      |

| SDD (N=0)            | N | %   |
|----------------------|---|-----|
| Topical              | 0 | 0.0 |
| Topical and systemic | 0 | 0.0 |
| Missing              | 0 |     |

| Surgical interventions | N    | %    |
|------------------------|------|------|
| No                     | 1132 | 87.9 |
| Yes                    | 156  | 12.1 |
| Missing                | 0    |      |

| Number of surgical interventions | N    | %    |
|----------------------------------|------|------|
| 0                                | 1132 | 87.9 |
| 1                                | 91   | 7.1  |
| 2                                | 36   | 2.8  |
| 3                                | 12   | 0.9  |
| >3                               | 17   | 1.3  |
| Missing                          | 0    |      |

**Surgical interventions****Days from admission**

|         |      |
|---------|------|
| Mean    | 9.6  |
| SD      | 9.3  |
| Median  | 7    |
| Q1–Q3   | 4–12 |
| Missing | 0    |

| Surgical interventions (top 10) | N   | %    |
|---------------------------------|-----|------|
| Gastrointestinal surgery        | 157 | 12.2 |
| Other surgery                   | 36  | 2.8  |
| Neurosurgery                    | 29  | 2.3  |
| Orthopaedic surgery             | 15  | 1.2  |
| Thoracic surgery                | 12  | 0.9  |
| ENT surgery                     | 9   | 0.7  |
| Nephro/Urological surgery       | 6   | 0.5  |
| Maxillo-Facial surgery          | 5   | 0.4  |
| Hepatic surgery                 | 2   | 0.2  |
| Gynaecological surgery          | 1   | 0.1  |
| Missing                         | 0   |      |

| Non surgical interventions | N    | %    |
|----------------------------|------|------|
| No                         | 1221 | 94.8 |
| Yes                        | 67   | 5.2  |
| Missing                    | 0    |      |

**Non surgical interventions****Days from admission**

|         |      |
|---------|------|
| Mean    | 13.0 |
| SD      | 10.4 |
| Median  | 10   |
| Q1–Q3   | 5–19 |
| Missing | 0    |

| Non surgical interventions    | N  | %   |
|-------------------------------|----|-----|
| Interventional endoscopy      | 37 | 2.9 |
| Interventional radiology      | 33 | 2.6 |
| Interventional cardiology     | 9  | 0.7 |
| Interventional neuroradiology | 2  | 0.2 |
| Missing                       | 0  |     |

**National report for ICUs of other type - Year 2020****Outcome indicators - Adult patients evaluated in the GiViTI model**

| ICU outcome                   | N    | %    |
|-------------------------------|------|------|
| Dead                          | 167  | 13.0 |
| Transferred to same hospital  | 1061 | 82.7 |
| Transferred to other hospital | 50   | 3.9  |
| Discharged home               | 5    | 0.4  |
| Disch. terminally ill         | 0    | 0.0  |
| Missing                       | 5    |      |

| Transferred to (N=1111)        | N   | %    |
|--------------------------------|-----|------|
| Ward                           | 707 | 63.6 |
| Other ICU                      | 121 | 10.9 |
| High dependency care unit      | 283 | 25.5 |
| Rehabilitation                 | 0   | 0.0  |
| Day hospital or Long-term care | 0   | 0.0  |
| Missing                        | 0   |      |

| Reason of transfer to Other ICU (N=121) | N  | %    |
|-----------------------------------------|----|------|
| Specialist expertise                    | 22 | 18.2 |
| Step-up care                            | 6  | 5.0  |
| Logistical/organizational reasons       | 81 | 66.9 |
| Step-down care                          | 12 | 9.9  |
| Missing                                 | 0  |      |

| Transferred to Same hospital (N=1061) | N   | %    |
|---------------------------------------|-----|------|
| Ward                                  | 699 | 65.9 |
| Other ICU                             | 89  | 8.4  |
| High dependency care unit             | 273 | 25.7 |
| Rehabilitation                        | 0   | 0.0  |
| Day hospital or Long-term care        | 0   | 0.0  |
| Missing                               | 0   |      |

| Transferred to Other hospital (N=50) | N  | %    |
|--------------------------------------|----|------|
| Ward                                 | 8  | 16.0 |
| Other ICU                            | 32 | 64.0 |
| High dependency care unit            | 10 | 20.0 |
| Rehabilitation                       | 0  | 0.0  |
| Day hospital or Long-term care       | 0  | 0.0  |
| Missing                              | 0  |      |

| ICU mortality | N    | %    |
|---------------|------|------|
| Alive         | 1116 | 87.0 |
| Dead          | 167  | 13.0 |
| Missing       | 5    |      |

| Timing of ICU mortality (N=167) | N   | %    |
|---------------------------------|-----|------|
| Daytime (08:00AM - 07:59PM)     | 93  | 55.7 |
| Nighttime (08:00PM - 07:59AM)   | 74  | 44.3 |
| Weekdays (Monday - Friday)      | 120 | 71.9 |
| Weekend (Saturday - Sunday)     | 47  | 28.1 |
| Missing                         | 0   |      |

| Hospital mortality | N   | %    |
|--------------------|-----|------|
| Alive              | 995 | 77.3 |
| Dead               | 293 | 22.7 |
| Missing            | 0   |      |

| Timing of hosp. mortality (N=293) | N   | %    |
|-----------------------------------|-----|------|
| In ICU                            | 167 | 57.0 |
| Within 24 hours after ICU         | 6   | 2.0  |
| 24-47 hours after ICU             | 14  | 4.8  |
| 48-71 hours after ICU             | 5   | 1.7  |
| 72-95 hours after ICU             | 4   | 1.4  |
| After 95 hours after ICU          | 97  | 33.1 |
| Missing                           | 0   |      |

| Timing of hosp. mortality (days from ICU disch.) Discharged alive from ICU (N=126) |  |        |
|------------------------------------------------------------------------------------|--|--------|
| Mean                                                                               |  | 28.2   |
| SD                                                                                 |  | 46.4   |
| Median                                                                             |  | 11     |
| Q1–Q3                                                                              |  | 4–30.8 |
| Missing                                                                            |  | 0      |

**National report for ICUs of other type - Year 2020****Outcome indicators - Adult patients evaluated in the GiViTI model**

| <b>Last hospital mortality</b> | N   | %    |
|--------------------------------|-----|------|
| Alive                          | 982 | 76.2 |
| Dead                           | 306 | 23.8 |
| Missing                        | 0   |      |

| <b>ICU stay (days)</b> |         |      |
|------------------------|---------|------|
|                        | Mean    | 7.6  |
|                        | SD      | 10.1 |
|                        | Median  | 4    |
|                        | Q1–Q3   | 2–9  |
|                        | Missing | 0    |

| <b>ICU stay (days)</b> |         |      |
|------------------------|---------|------|
| <b>Alive (N=1116)</b>  |         |      |
|                        | Mean    | 7.3  |
|                        | SD      | 10.0 |
|                        | Median  | 3    |
|                        | Q1–Q3   | 2–8  |
|                        | Missing | 0    |

| <b>ICU stay (days)</b> |         |      |
|------------------------|---------|------|
| <b>Dead (N=167)</b>    |         |      |
|                        | Mean    | 9.7  |
|                        | SD      | 10.2 |
|                        | Median  | 6    |
|                        | Q1–Q3   | 2–14 |
|                        | Missing | 0    |

| <b>Stay after ICU (days)</b> |         |        |
|------------------------------|---------|--------|
| <b>Alive (N=1116)</b>        |         |        |
|                              | Mean    | 17.2   |
|                              | SD      | 29.3   |
|                              | Median  | 8      |
|                              | Q1–Q3   | 4–18.2 |
|                              | Missing | 0      |

| <b>Hospital stay (days)</b> |         |        |
|-----------------------------|---------|--------|
|                             | Mean    | 26.8   |
|                             | SD      | 33.8   |
|                             | Median  | 16     |
|                             | Q1–Q3   | 8–31.2 |
|                             | Missing | 0      |

| <b>Hospital stay (days)</b> |         |      |
|-----------------------------|---------|------|
| <b>Alive (N=995)</b>        |         |      |
|                             | Mean    | 26.2 |
|                             | SD      | 32.5 |
|                             | Median  | 16   |
|                             | Q1–Q3   | 9–31 |
|                             | Missing | 0    |

| <b>Hospital stay (days)</b> |         |      |
|-----------------------------|---------|------|
| <b>Dead (N=293)</b>         |         |      |
|                             | Mean    | 29.0 |
|                             | SD      | 38.0 |
|                             | Median  | 17   |
|                             | Q1–Q3   | 7–36 |
|                             | Missing | 0    |



## National report for ICUs of other type - Year 2020

## Characteristics on admission - Adult non surgical patients evaluated in the GiViTI model

Patients (N): 311

| Sex     | N   | %    |
|---------|-----|------|
| Male    | 208 | 66.9 |
| Female  | 103 | 33.1 |
| Missing | 0   |      |

| Age (years) | N     | %    |
|-------------|-------|------|
| 17-45       | 35    | 11.3 |
| 46-65       | 104   | 33.4 |
| 66-75       | 75    | 24.1 |
| >75         | 97    | 31.2 |
| Missing     | 0     |      |
| Mean        | 66.2  |      |
| SD          | 15.7  |      |
| Median      | 68    |      |
| Q1–Q3       | 58–78 |      |
| Min–Max     | 19–92 |      |

| Body mass Index (BMI) | N   | %    |
|-----------------------|-----|------|
| Underweight           | 13  | 4.2  |
| Normal                | 108 | 34.7 |
| Overweight            | 125 | 40.2 |
| Obese                 | 65  | 20.9 |
| Missing               | 0   |      |

| Pregnancy status       | N  | %    |
|------------------------|----|------|
| <b>Females (N=103)</b> |    |      |
| Not fertile            | 62 | 60.2 |
| Not pregnant/Unknown   | 41 | 39.8 |
| Currently pregnant     | 0  | 0.0  |
| Post partum            | 0  | 0.0  |
| Missing                | 0  |      |

| Comorbidities | N   | %    |
|---------------|-----|------|
| No            | 40  | 12.9 |
| Yes           | 271 | 87.1 |
| Missing       | 0   |      |

| Comorbidities (top 10)               | N   | %    |
|--------------------------------------|-----|------|
| Hypertension                         | 165 | 53.1 |
| Arrhythmia                           | 75  | 24.1 |
| NYHA class II-III                    | 57  | 18.3 |
| Metastatic cancer                    | 48  | 15.4 |
| Moderate or severe renal disease     | 44  | 14.1 |
| Diabetes Type II without insulin tr. | 38  | 12.2 |
| Malignant haematological disease     | 38  | 12.2 |
| Any tumour without metastasis        | 33  | 10.6 |
| Endocrine-metabolic diseases         | 33  | 10.6 |
| Drug-induced coagulopathy            | 30  | 9.6  |
| Missing                              | 0   |      |

| Stay before ICU (days) | Mean | SD   | Median | Q1–Q3 | Missing |
|------------------------|------|------|--------|-------|---------|
|                        | 7.6  | 15.6 | 1      | 0–8   | 0       |

| Source of admission             | N   | %    |
|---------------------------------|-----|------|
| Same hospital                   | 264 | 84.9 |
| Other hospital                  | 47  | 15.1 |
| Long-term chronic care hospital | 0   | 0.0  |
| Directly from the community     | 0   | 0.0  |
| Missing                         | 0   |      |

| Ward of admission         | N   | %    |
|---------------------------|-----|------|
| <b>Hospital (N=311)</b>   |     |      |
| Medical ward              | 68  | 21.9 |
| Surgical ward             | 69  | 22.2 |
| Emergency room            | 120 | 38.6 |
| Other ICU                 | 32  | 10.3 |
| High dependency care unit | 22  | 7.1  |
| Missing                   | 0   |      |

| Reason for transfer from          | N  | %    |
|-----------------------------------|----|------|
| <b>Other ICU (N=32)</b>           |    |      |
| Specialist expertise              | 3  | 9.4  |
| Step-up care                      | 6  | 18.8 |
| Logistical/organizational reasons | 18 | 56.2 |
| Step-down care                    | 5  | 15.6 |
| Missing                           | 0  |      |

| Ward of admission            | N   | %    |
|------------------------------|-----|------|
| <b>Same hospital (N=264)</b> |     |      |
| Medical ward                 | 63  | 23.9 |
| Surgical ward                | 65  | 24.6 |
| Emergency room               | 111 | 42.0 |
| Other ICU                    | 11  | 4.2  |
| High dependency care unit    | 14  | 5.3  |
| Missing                      | 0   |      |

| Ward of admission            | N  | %    |
|------------------------------|----|------|
| <b>Other hospital (N=47)</b> |    |      |
| Medical ward                 | 5  | 10.6 |
| Surgical ward                | 4  | 8.5  |
| Emergency room               | 9  | 19.1 |
| Other ICU                    | 21 | 44.7 |
| High dependency care unit    | 8  | 17.0 |
| Missing                      | 0  |      |

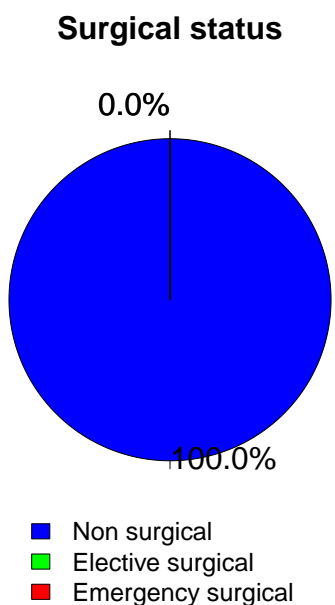
| Scheduled admission | N   | %    |
|---------------------|-----|------|
| No                  | 310 | 99.7 |
| Yes                 | 1   | 0.3  |
| Missing             | 0   |      |

**National report for ICUs of other type - Year 2020**

**Characteristics on admission - Adult non surgical patients evaluated in the GiViTI model**

| Trauma          | N   | %    |
|-----------------|-----|------|
| No              | 212 | 68.2 |
| Yes             | 99  | 31.8 |
| Multiple trauma | 38  | 12.2 |
| Missing         | 0   |      |

| Surgical status    | N   | %     |
|--------------------|-----|-------|
| Non surgical       | 311 | 100.0 |
| Elective surgical  | 0   | 0.0   |
| Emergency surgical | 0   | 0.0   |
| Missing            | 0   |       |



| Timing                      | N | %   |
|-----------------------------|---|-----|
| Elective surgical (N=0)     |   |     |
| From -7 to -3 days          | 0 | 0.0 |
| From -2 to -1 days          | 0 | 0.0 |
| On ICU admission day        | 0 | 0.0 |
| The day after ICU admission | 0 | 0.0 |
| Missing                     | 0 |     |

| Surgical interventions (top 10) | N | %   |
|---------------------------------|---|-----|
| Emergency surgical (N=0)        |   |     |
| -                               | 0 | 0.0 |
| -                               | 0 | 0.0 |
| -                               | 0 | 0.0 |
| -                               | 0 | 0.0 |
| -                               | 0 | 0.0 |
| -                               | 0 | 0.0 |
| -                               | 0 | 0.0 |
| -                               | 0 | 0.0 |
| -                               | 0 | 0.0 |
| Missing                         | 0 |     |

| Timing                      | N | %   |
|-----------------------------|---|-----|
| Emergency surgical (N=0)    |   |     |
| From -7 to -3 days          | 0 | 0.0 |
| From -2 to -1 days          | 0 | 0.0 |
| On ICU admission day        | 0 | 0.0 |
| The day after ICU admission | 0 | 0.0 |
| Missing                     | 0 |     |

| Source of admission                 | N | %   |
|-------------------------------------|---|-----|
| Surgical pt. (N=0)                  |   |     |
| Operating theatre of surgical ward  | 0 | 0.0 |
| Operating theatre of emergency room | 0 | 0.0 |
| Surgical ward                       | 0 | 0.0 |
| Other                               | 0 | 0.0 |
| Missing                             | 0 |     |

| Non surgical interventions | N   | %    |
|----------------------------|-----|------|
| None                       | 280 | 90.0 |
| Elective                   | 2   | 0.6  |
| Emergency                  | 29  | 9.3  |
| Missing                    | 0   |      |

| Surgical interventions (top 10) | N | %   |
|---------------------------------|---|-----|
| Elective surgical (N=0)         |   |     |
| -                               | 0 | 0.0 |
| -                               | 0 | 0.0 |
| -                               | 0 | 0.0 |
| -                               | 0 | 0.0 |
| -                               | 0 | 0.0 |
| -                               | 0 | 0.0 |
| -                               | 0 | 0.0 |
| -                               | 0 | 0.0 |
| -                               | 0 | 0.0 |
| Missing                         | 0 |     |

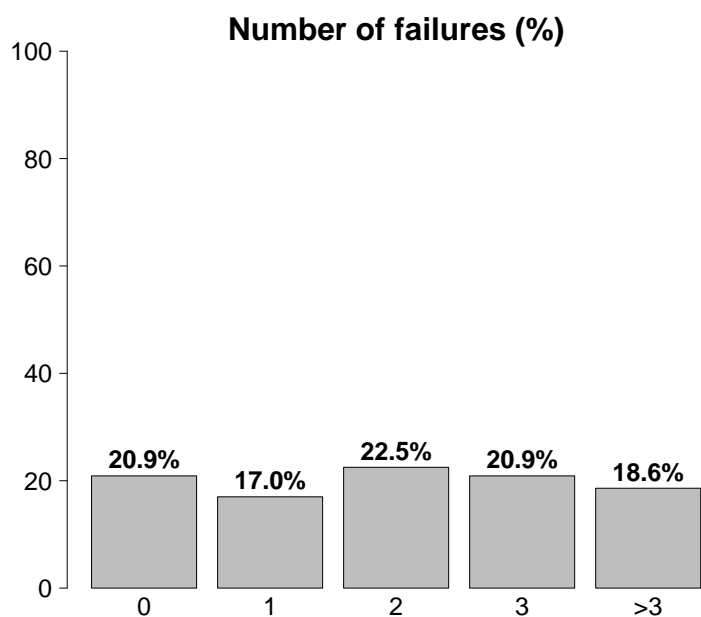
| Non surgical interventions    | N | %     |
|-------------------------------|---|-------|
| Elective (N=2)                |   |       |
| Interventional radiology      | 2 | 100.0 |
| Interventional cardiology     | 0 | 0.0   |
| Interventional neuroradiology | 0 | 0.0   |
| Interventional endoscopy      | 0 | 0.0   |
| Missing                       | 0 |       |

| Non surgical interventions    | N  | %    |
|-------------------------------|----|------|
| Emergency (N=29)              |    |      |
| Interventional radiology      | 11 | 37.9 |
| Interventional endoscopy      | 11 | 37.9 |
| Interventional cardiology     | 5  | 17.2 |
| Interventional neuroradiology | 2  | 6.9  |
| Missing                       | 0  |      |

## National report for ICUs of other type - Year 2020

## Characteristics on admission - Adult non surgical patients evaluated in the GiViTI model

| Reason for admission                   | N   | %    |
|----------------------------------------|-----|------|
| Monitoring/Weaning                     | 93  | 29.9 |
| Post surgical weaning                  | 0   | 0.0  |
| Surgical monitoring                    | 0   | 0.0  |
| Post interventional weaning            | 1   | 0.3  |
| Interventional monitoring              | 11  | 3.6  |
| Non surgical monitoring                | 79  | 25.6 |
| Missing                                | 2   |      |
| Admission for procedures/treatments    | 0   | 0.0  |
| Intensive Treatment                    | 218 | 70.1 |
| Only ventilatory support               | 49  | 15.8 |
| Only cardiovascular support            | 45  | 14.5 |
| Ventilatory and cardiovascular support | 124 | 39.9 |
| Missing                                | 0   |      |
| Palliative Sedation                    | 0   | 0.0  |
| Diagnosis of death/Organ donation      | 0   | 0.0  |
| Missing                                | 0   |      |



| Failures on admission     | N   | %    |
|---------------------------|-----|------|
| No                        | 65  | 20.9 |
| Yes                       | 246 | 79.1 |
| A: Respiratory failure    | 173 | 55.6 |
| B: Cardiovascular failure | 169 | 54.3 |
| C: Neurological failure   | 34  | 10.9 |
| D: Hepatic failure        | 7   | 2.3  |
| E: Renal failure          | 141 | 45.3 |
| F: Acute skin failure     | 0   | 0.0  |
| G: Metabolic failure      | 104 | 33.4 |
| H: Coagulation failure    | 14  | 4.5  |
| Missing                   | 0   |      |

| Failures on admission (top 10) | N  | %    |
|--------------------------------|----|------|
| AB                             | 32 | 10.3 |
| ABEG                           | 30 | 9.6  |
| A                              | 25 | 8.0  |
| ABE                            | 19 | 6.1  |
| E                              | 18 | 5.8  |
| BEG                            | 17 | 5.5  |
| BE                             | 15 | 4.8  |
| ABG                            | 12 | 3.9  |
| ABCEG                          | 9  | 2.9  |
| AC                             | 6  | 1.9  |
| Missing                        | 0  |      |

| Respiratory failure          | N   | %    |
|------------------------------|-----|------|
| None                         | 138 | 44.4 |
| Only hypoxic failure         | 57  | 18.3 |
| Only hypercapnic failure     | 14  | 4.5  |
| Hypoxic-hypercapnic failure  | 23  | 7.4  |
| Intubation for airway maint. | 79  | 25.4 |
| Missing                      | 0   |      |

| Cardiovascular failure         | N   | %    |
|--------------------------------|-----|------|
| None                           | 142 | 45.7 |
| Without shock                  | 58  | 18.6 |
| Cardiogenic shock              | 16  | 5.1  |
| Septic shock                   | 60  | 19.3 |
| Haemorrhagic/hypovolemic shock | 7   | 2.3  |
| Hypovolemic shock              | 3   | 1.0  |
| Anaphylactic shock             | 0   | 0.0  |
| Neurogenic shock               | 7   | 2.3  |
| Other shock                    | 6   | 1.9  |
| Mixed shock                    | 12  | 3.9  |
| Missing                        | 0   |      |

| Neurologic failure       | N   | %    |
|--------------------------|-----|------|
| None                     | 208 | 86.0 |
| Cerebral coma            | 20  | 8.3  |
| Metabolic coma           | 3   | 1.2  |
| Postanoxic coma          | 9   | 3.7  |
| Toxic coma               | 2   | 0.8  |
| Missing or not evaluable | 69  |      |

| Renal failure (AKIN) | N   | %    |
|----------------------|-----|------|
| None                 | 170 | 54.7 |
| Mild                 | 58  | 18.6 |
| Moderate             | 43  | 13.8 |
| Severe               | 40  | 12.9 |
| Missing              | 0   |      |

| Metabolic failure                            | N   | %    |
|----------------------------------------------|-----|------|
| None                                         | 207 | 66.6 |
| pH $\leq$ 7.3, PaCO <sub>2</sub> < 45 mmHg   | 28  | 9.0  |
| Base deficit $\geq$ 5 mmol/L, lactate > 1.5x | 76  | 24.4 |
| Missing                                      | 0   |      |

**National report for ICUs of other type - Year 2020**

**Characteristics on admission - Adult non surgical patients evaluated in the GiViTI model**

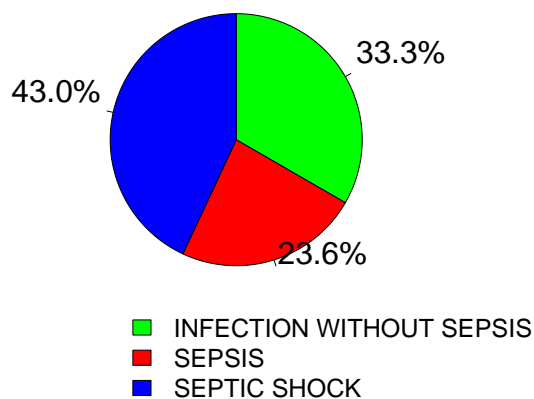
| Clinical conditions on admission         | N   | %    |
|------------------------------------------|-----|------|
| Respiratory                              | 95  | 30.5 |
| Pleural effusion                         | 34  | 10.9 |
| Aspiration pneumonia                     | 21  | 6.8  |
| Atelectasis                              | 16  | 5.1  |
| Lung cancer                              | 14  | 4.5  |
| Moderate ARDS                            | 14  | 4.5  |
| Cardiovascular                           | 79  | 25.4 |
| Left heart failure with pulmonary edema  | 18  | 5.8  |
| Acute severe arrhythmia: tachycardias    | 17  | 5.5  |
| Cardiac arrest                           | 15  | 4.8  |
| Left heart failure without pulm. edema   | 14  | 4.5  |
| Deep venous thrombosis                   | 10  | 3.2  |
| Neurological                             | 59  | 19.0 |
| Cerebral artery stroke                   | 14  | 4.5  |
| Neuropathy/myopathy                      | 14  | 4.5  |
| Brain tumour                             | 13  | 4.2  |
| Seizures                                 | 10  | 3.2  |
| Metabolic/postanoxic encephalopathy      | 7   | 2.3  |
| Gastrointestinal and hepatic             | 46  | 14.8 |
| Paralytic Ileus                          | 12  | 3.9  |
| Gastrointestinal bleeding: upper tract   | 7   | 2.3  |
| Ascites                                  | 7   | 2.3  |
| Liver Dysfunction Syndrome               | 6   | 1.9  |
| Digestive tract malignancy               | 5   | 1.6  |
| Trauma (anatomical districts)            | 99  | 31.8 |
| Head                                     | 64  | 20.6 |
| Chest                                    | 34  | 10.9 |
| Spine                                    | 21  | 6.8  |
| Pelvis/bone/joint & muscle               | 21  | 6.8  |
| Abdomen                                  | 15  | 4.8  |
| Major vessels injury                     | 7   | 2.3  |
| -                                        | 0   | 0.0  |
| Other                                    | 85  | 27.3 |
| Other disease                            | 39  | 12.5 |
| Nephrourologic disease                   | 30  | 9.6  |
| Metabolic disorder                       | 21  | 6.8  |
| Coagulation disorder                     | 14  | 4.5  |
| Haematological disease                   | 8   | 2.6  |
| Post transplantation                     | 3   | 1.0  |
| Liver transplantation                    | 2   | 0.6  |
| Heart transplantation                    | 1   | 0.3  |
| Infections                               | 165 | 53.1 |
| Pneumonia                                | 99  | 31.8 |
| NON-surgical urinary tract infection     | 24  | 7.7  |
| Clinical sepsis                          | 15  | 4.8  |
| NON-surgical skin/soft tissue infection  | 8   | 2.6  |
| NON-surgical secondary peritonitis       | 5   | 1.6  |
| Post-surgical skin/soft tissue infection | 5   | 1.6  |
| Cholecystitis/cholangitis                | 4   | 1.3  |
| Gastroenteritis                          | 4   | 1.3  |
| NON-surgical bone and joint infection    | 3   | 1.0  |
| Other fungal infections                  | 3   | 1.0  |
| Missing                                  | 0   |      |

| Trauma (anatomical districts)        | N  | %    |
|--------------------------------------|----|------|
| Head                                 | 64 | 20.6 |
| Traumatic subarachnoid haemorrhage   | 42 | 13.5 |
| Cerebral contusion/laceration        | 33 | 10.6 |
| Traumatic Subdural haematoma         | 32 | 10.3 |
| Skull fracture                       | 31 | 10.0 |
| Traumatic intraparenchymal bleeding  | 25 | 8.0  |
| Spine                                | 21 | 6.8  |
| Vertebral fracture, without deficit  | 11 | 3.5  |
| Cervical injury, incomplete deficit  | 4  | 1.3  |
| Tetraplegia                          | 4  | 1.3  |
| Chest                                | 34 | 10.9 |
| Traum. haemothorax/pneumothorax      | 22 | 7.1  |
| Other injuries of the chest          | 15 | 4.8  |
| Severe lung contusion/laceration     | 14 | 4.5  |
| Abdomen                              | 15 | 4.8  |
| Spleen: Moderate-Severe laceration   | 7  | 2.3  |
| Minor injuries of the abdomen        | 6  | 1.9  |
| Liver: Moderate-Severe laceration    | 4  | 1.3  |
| Pelvis/bone/joint & muscle           | 21 | 6.8  |
| Long bone fracture                   | 18 | 5.8  |
| Multiple fracture of the pelvis      | 3  | 1.0  |
| -                                    | 0  | 0.0  |
| Major vessels injury                 | 7  | 2.3  |
| Aorta: rupture/dissection            | 4  | 1.3  |
| Neck vessels: dissection/transection | 2  | 0.6  |
| Major thoracic vessels: transection  | 1  | 0.3  |
| Miscellaneous                        | 0  | 0.0  |
| -                                    | 0  | 0.0  |
| -                                    | 0  | 0.0  |
| Missing                              | 0  |      |

| Infection severity on admission | N   | %    |
|---------------------------------|-----|------|
| None                            | 146 | 46.9 |
| INFECTION WITHOUT SEPSIS        | 55  | 17.7 |
| SEPSIS                          | 39  | 12.5 |
| SEPTIC SHOCK                    | 71  | 22.8 |
| Missing                         | 0   |      |

**Infection severity on admission**

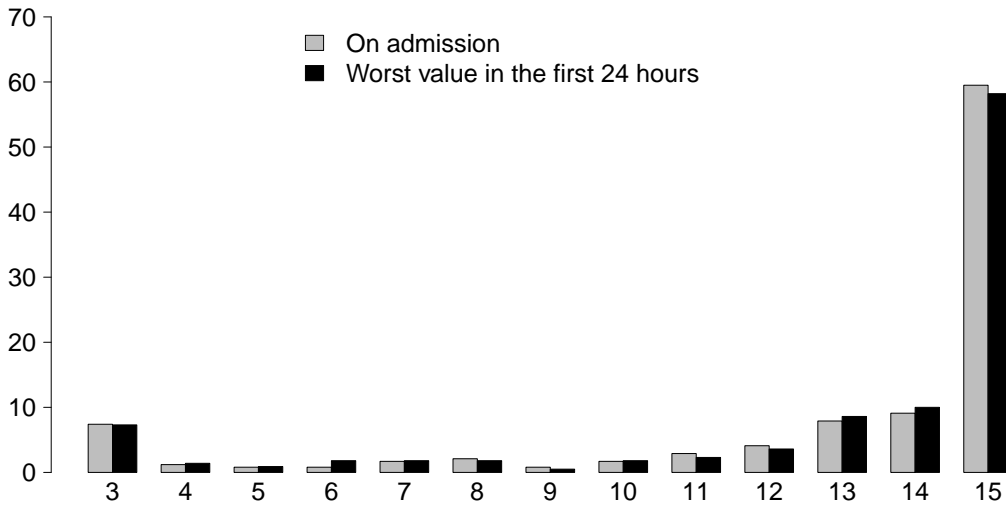
Patients infected (N=165)



**National report for ICUs of other type - Year 2020**

**Severity scores - Adult non surgical patients evaluated in the GiViTI model**

**Glasgow Coma Scale (%)**



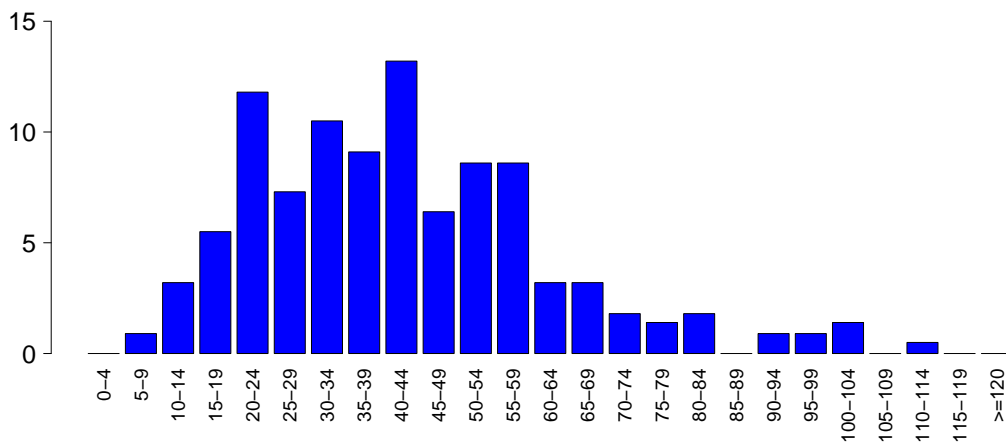
**GCS (admission)**

|               |       |
|---------------|-------|
| Median        | 15    |
| Q1–Q3         | 13–15 |
| Not evaluable | 69    |
| Missing       | 0     |

**GCS (first 24 hours)**

|               |       |
|---------------|-------|
| Median        | 15    |
| Q1–Q3         | 13–15 |
| Not evaluable | 91    |
| Missing       | 0     |

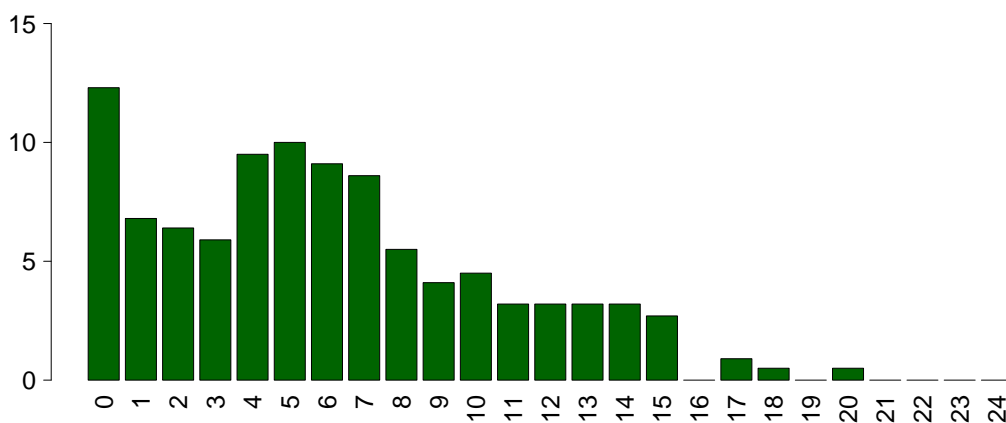
**SAPS II (%)**



**SAPSII**

|               |       |
|---------------|-------|
| Mean          | 42.2  |
| SD            | 19.7  |
| Median        | 40.5  |
| Q1–Q3         | 27–54 |
| Not evaluable | 91    |
| Missing       | 0     |

**SOFA (%)**



**SOFA**

|               |     |
|---------------|-----|
| Mean          | 6.0 |
| SD            | 4.5 |
| Median        | 5   |
| Q1–Q3         | 2–9 |
| Not evaluable | 91  |
| Missing       | 0   |

**National report for ICUs of other type - Year 2020****Characteristics during the stay - Adult non surgical patients evaluated in the GiViTI model**

| <b>Complications during the stay</b> | N   | %    |
|--------------------------------------|-----|------|
| No                                   | 125 | 40.2 |
| Yes                                  | 186 | 59.8 |
| Missing                              | 0   |      |

| <b>Failures during the stay</b> | N   | %    |
|---------------------------------|-----|------|
| No                              | 221 | 71.1 |
| Yes                             | 90  | 28.9 |
| A: Respiratory failure          | 39  | 12.5 |
| B: Cardiovascular failure       | 36  | 11.6 |
| C: Neurological failure         | 17  | 5.5  |
| D: Hepatic failure              | 16  | 5.1  |
| E: Renal failure (AKIN)         | 41  | 13.2 |
| F: Acute skin failure           | 0   | 0.0  |
| G: Metabolic failure            | 13  | 4.2  |
| H: Coagulation failure          | 11  | 3.5  |
| Missing                         | 0   |      |

| <b>Failures during the stay (top 10)</b> | N  | %   |
|------------------------------------------|----|-----|
| E                                        | 15 | 4.8 |
| A                                        | 10 | 3.2 |
| AB                                       | 8  | 2.6 |
| G                                        | 7  | 2.3 |
| B                                        | 6  | 1.9 |
| ABE                                      | 4  | 1.3 |
| C                                        | 4  | 1.3 |
| ABC                                      | 3  | 1.0 |
| D                                        | 3  | 1.0 |
| ACE                                      | 2  | 0.6 |
| Missing                                  | 0  |     |

| <b>Respiratory failure occurred</b> | N   | %    |
|-------------------------------------|-----|------|
| None                                | 272 | 87.5 |
| Intubation for airway maint.        | 5   | 1.6  |
| Hypoxic failure                     | 29  | 9.3  |
| Hypercapnic failure                 | 14  | 4.5  |
| Missing                             | 0   |      |

| <b>Cardiovascular failure occurred</b> | N   | %    |
|----------------------------------------|-----|------|
| None                                   | 275 | 88.4 |
| Cardiogenic shock                      | 7   | 2.3  |
| Hypovolemic shock                      | 2   | 0.6  |
| Haemorrhagic/hypovolemic shock         | 3   | 1.0  |
| Septic shock                           | 17  | 5.5  |
| Anaphylactic shock                     | 0   | 0.0  |
| Neurogenic shock                       | 1   | 0.3  |
| Other shock                            | 9   | 2.9  |
| Missing                                | 0   |      |

| <b>Neurological failure occurred</b> | N   | %    |
|--------------------------------------|-----|------|
| None                                 | 294 | 94.5 |
| Cerebral coma                        | 12  | 3.9  |
| Metabolic coma                       | 5   | 1.6  |
| Postanoxic coma                      | 1   | 0.3  |
| Missing                              | 0   |      |

| <b>Renal failure occurred (AKIN)</b> | N   | %    |
|--------------------------------------|-----|------|
| None                                 | 270 | 86.8 |
| Mild                                 | 7   | 2.3  |
| Moderate                             | 13  | 4.2  |
| Severe                               | 21  | 6.8  |
| Missing                              | 0   |      |

| <b>Complications during the stay</b>           | N  | %    |
|------------------------------------------------|----|------|
| <b>Respiratory</b>                             | 57 | 18.3 |
| Pleural effusion                               | 23 | 7.4  |
| Aspiration pneumonia                           | 11 | 3.5  |
| Atelectasis                                    | 11 | 3.5  |
| Pneumothorax/Pneumomediastinum                 | 8  | 2.6  |
| Severe ARDS                                    | 5  | 1.6  |
| <b>Cardiovascular</b>                          | 56 | 18.0 |
| Acute severe arrhythmia: tachycardias          | 29 | 9.3  |
| Cardiac arrest                                 | 10 | 3.2  |
| Pulmonary edema                                | 9  | 2.9  |
| Acute severe arrhythmia: bradycardias          | 8  | 2.6  |
| Hypertensive crisis                            | 3  | 1.0  |
| <b>Neurological</b>                            | 51 | 16.4 |
| Drowsiness/agitation/delirium                  | 38 | 12.2 |
| Brain edema                                    | 9  | 2.9  |
| Intracranial hypertension                      | 6  | 1.9  |
| Seizures                                       | 6  | 1.9  |
| CrIMyNe                                        | 4  | 1.3  |
| <b>Gastrointestinal and hepatic</b>            | 41 | 13.2 |
| Paralytic Ileus                                | 17 | 5.5  |
| Liver Dysfunction Syndrome                     | 15 | 4.8  |
| Gastrointestinal bleeding: upper tract         | 8  | 2.6  |
| Gastrointestinal perforation                   | 5  | 1.6  |
| Bowel ischaemia                                | 4  | 1.3  |
| <b>Other</b>                                   | 36 | 11.6 |
| Other disease                                  | 16 | 5.1  |
| Metabolic disorder                             | 13 | 4.2  |
| Nephrourologic disease                         | 8  | 2.6  |
| Category/Stage II: Partial Thickness Skin Loss | 2  | 0.6  |
| Other skin and/or soft tissue pathology        | 2  | 0.6  |
| Category/Stage I: Nonblanchable Erythema       | 1  | 0.3  |
| Category/Stage III: Full Thickness Skin Loss   | 1  | 0.3  |
| <b>Infections</b>                              | 72 | 23.2 |
| Pneumonia                                      | 40 | 12.9 |
| NON-surgical urinary tract infection           | 9  | 2.9  |
| Other fungal infections                        | 5  | 1.6  |
| Clinical sepsis                                | 4  | 1.3  |
| L.R.T.I. other than pneumonia                  | 4  | 1.3  |
| NON-surgical skin/soft tissue infection        | 4  | 1.3  |
| Catheter-related bacteremia (CR-BSI)           | 3  | 1.0  |
| NON-surgical secondary peritonitis             | 3  | 1.0  |
| Tertiary peritonitis                           | 3  | 1.0  |
| Primary bacteraemia of unknown origin          | 2  | 0.6  |
| Missing                                        | 0  |      |

**National report for ICUs of other type - Year 2020****Characteristics during the stay** - Adult non surgical patients evaluated in the GiViTI model

| <b>Infections</b>                | N   | %    | <b>Maximum severity of infection</b> | N   | %    |
|----------------------------------|-----|------|--------------------------------------|-----|------|
| None                             | 105 | 33.8 | None                                 | 105 | 33.8 |
| Only on admission                | 134 | 43.1 | INFECTION WITHOUT SEPSIS             | 76  | 24.4 |
| On admission and during ICU stay | 31  | 10.0 | SEPSIS                               | 50  | 16.1 |
| Only during ICU stay             | 41  | 13.2 | SEPTIC SHOCK                         | 80  | 25.7 |
| Missing                          | 0   |      | Missing                              | 0   |      |

**Severity evolution**

|                  |                          | <b>During the stay</b> |                          |            |              |     |
|------------------|--------------------------|------------------------|--------------------------|------------|--------------|-----|
|                  |                          | None                   | INFECTION WITHOUT SEPSIS | SEPSIS     | SEPTIC SHOCK | TOT |
| <b>Admission</b> | None                     | 105 (71.9%)            | 28 (19.2%)               | 10 (6.8%)  | 3 (2.1%)     | 146 |
|                  | INFECTION WITHOUT SEPSIS | -                      | 48 (87.3%)               | 5 (9.1%)   | 2 (3.6%)     | 55  |
|                  | SEPSIS                   | -                      | -                        | 35 (89.7%) | 4 (10.3%)    | 39  |
|                  | SEPTIC SHOCK             | -                      | -                        | -          | 71 (100.0%)  | 71  |
|                  | TOT                      | 105                    | 76                       | 50         | 80           | 311 |

| <b>Ventil. Associat. Pneumonia (VAP)</b> | N   | %    |
|------------------------------------------|-----|------|
| No                                       | 277 | 89.1 |
| Yes                                      | 34  | 10.9 |
| Missing                                  | 0   |      |

**Incidence of VAP***(Pts. with VAP/1000 days of VM pre-VAP)*

|          |           |
|----------|-----------|
| Estimate | 28.3      |
| CI (95%) | 19.6–39.6 |

**Incidence of VAP***(Pts. with VAP/pts. ventilated for 8 days)*

|          |           |
|----------|-----------|
| Estimate | 22.7%     |
| CI (95%) | 15.7–31.7 |

| <b>Catheter Bacteraemia (CR-BSI)</b> | N   | %    |
|--------------------------------------|-----|------|
| No                                   | 308 | 99.0 |
| Yes                                  | 3   | 1.0  |
| Missing                              | 0   |      |

**Incidence of CR-BSI***(Pts. with CR-BSI/1000 days of CVC pre-CR-BSI)*

|          |         |
|----------|---------|
| Estimate | 1.4     |
| CI (95%) | 0.3–4.1 |

**Incidence of CR-BSI***(Pts. with CR-BSI/pts. catheterized for 12 days)*

|          |         |
|----------|---------|
| Estimate | 1.7%    |
| CI (95%) | 0.3–4.9 |

**National report for ICUs of other type - Year 2020**  
**Process indicators - Adult non surgical patients evaluated in the GiViTI model**

| Procedures and/or treatments (Missing=0)  | Use |      | On admission |      | On discharge |      | Length (days) |       | Days from admission |        |       |         |
|-------------------------------------------|-----|------|--------------|------|--------------|------|---------------|-------|---------------------|--------|-------|---------|
|                                           | N   | %    | N            | %    | N            | %    | Median        | Q1-Q3 | Missing             | Median | Q1-Q3 | Missing |
| <b>Procedures (antibiotics excluded)</b>  | 295 | 94.9 |              |      |              |      |               |       |                     |        |       |         |
| Invasive ventilation                      | 185 | 59.5 | 121          | 38.9 | 74           | 23.8 | 5             | 2-11  | 0                   | 0      | 0-1   | 0       |
| Non invasive ventilation                  | 38  | 12.2 | 7            | 2.3  | 8            | 2.6  | 1             | 0-2   | 0                   | 1      | 0-6   | 0       |
| Tracheostomy                              | 36  | 11.6 | 6            | 1.9  | 27           | 8.7  | 6             | 2-10  | 0                   | 12     | 6-16  | 0       |
| iNO (inhaled nitric oxide)                | 12  | 3.9  | 3            | 1    | 2            | 0.6  | 5             | 3-8   | 0                   | 1      | 0-3   | 0       |
| Central Venous Catheter                   | 250 | 80.4 | 133          | 42.8 | 210          | 67.5 | 6             | 3-11  | 0                   | 0      | 0-0   | 0       |
| PICC                                      | 22  | 7.1  | 10           | 3.2  | 15           | 4.8  | 3             | 1-4   | 0                   | 0      | 0-5   | 0       |
| Arterial Catheter                         | 278 | 89.4 | 139          | 44.7 | 126          | 40.5 | 5             | 2-10  | 0                   | 0      | 0-0   | 0       |
| Vasoactive drugs                          | 209 | 67.2 | 100          | 32.2 | 54           | 17.4 | 3             | 1-7   | 0                   | 0      | 0-0   | 0       |
| Antiarrhythmics                           | 48  | 15.4 | 8            | 2.6  | 17           | 5.5  | 3             | 1-6   | 0                   | 1      | 0-3   | 0       |
| IABP                                      | 0   | 0.0  |              |      |              |      |               |       |                     |        |       |         |
| Invasive monitoring of C.O.               | 13  | 4.2  | 0            | 0    | 3            | 1    | 6             | 2-13  | 0                   | 0      | 0-1   | 0       |
| Continuous monitoring of ScVO2            | 0   | 0.0  |              |      |              |      |               |       |                     |        |       |         |
| Temporary pacing                          | 1   | 0.3  | 0            | 0    | 0            | 0    | 2             | 2-2   | 0                   | 1      | 1-1   | 0       |
| Ventricular assistance                    | 0   | 0.0  |              |      |              |      |               |       |                     |        |       |         |
| DC-shock                                  | 6   | 1.9  |              |      |              |      |               |       |                     | 4      | 2-4   | 0       |
| CPR                                       | 7   | 2.3  |              |      |              |      |               |       |                     | 0      | 0-0   | 0       |
| Massive blood transfusion                 | 4   | 1.3  |              |      |              |      |               |       |                     | 0      | 0-0   | 0       |
| ICP monitoring without CSF drainage       | 8   | 2.6  | 7            | 2.3  | 1            | 0.3  | 9             | 7-15  | 0                   | 0      | 0-0   | 0       |
| ICP monitoring with CSF drainage          | 2   | 0.6  | 2            | 0.6  | 1            | 0.3  | 6             | 4-9   | 0                   | 0      | 0-0   | 0       |
| External ventricular drainage without ICP | 5   | 1.6  | 3            | 1    | 3            | 1    | 11            | 3-14  | 0                   | 4      | 3-6   | 0       |
| Haemofiltration                           | 0   | 0.0  |              |      |              |      |               |       |                     |        |       |         |
| Haemodialysis                             | 31  | 10.0 | 6            | 1.9  | 10           | 3.2  | 5             | 2-12  | 0                   | 1      | 0-3   | 0       |
| ECMO                                      | 1   | 0.3  | 0            | 0    | 0            | 0    | 14            | 14-14 | 0                   | 1      | 1-1   | 0       |
| Hepatic clearance techniques              | 0   | 0.0  |              |      |              |      |               |       |                     |        |       |         |
| Clearance techniques during sepsis        | 1   | 0.3  | 0            | 0    | 0            | 0    | 1             | 1-1   | 0                   | 0      | 0-0   | 0       |
| IAP (intra-abdominal pressure)            | 29  | 9.3  |              |      |              |      |               |       |                     |        |       |         |
| Hypothermia                               | 6   | 1.9  | 3            | 1    | 0            | 0    | 1             | 1-1   | 0                   | 0      | 0-0   | 0       |
| Enteral nutrition                         | 169 | 54.3 | 42           | 13.5 | 107          | 34.4 | 6             | 3-14  | 0                   | 1      | 1-2   | 0       |
| Parenteral nutrition                      | 173 | 55.6 | 33           | 10.6 | 85           | 27.3 | 5             | 2-8   | 0                   | 1      | 0-1   | 0       |
| SDD (Topical, Topical and systemic)       | 0   | 0.0  |              |      |              |      |               |       |                     |        |       |         |
| Patient restraint                         | 12  | 3.9  |              |      |              |      |               |       |                     |        |       |         |
| Peridural catheter                        | 0   | 0.0  |              |      |              |      |               |       |                     |        |       |         |
| Electrical cardioversion                  | 1   | 0.3  |              |      |              |      |               |       |                     | 3      | 3-3   | 0       |
| Vacuum therapy                            | 0   | 0.0  |              |      |              |      |               |       |                     |        |       |         |



**National report for ICUs of other type - Year 2020**  
**Process indicators - Adult non surgical patients evaluated in the GiViTI model**

| Procedures and/or treatments (Missing=0)                       | Use |      | On admission |      | On discharge |      | Length (days) |       |         | Days from admission |       |         |
|----------------------------------------------------------------|-----|------|--------------|------|--------------|------|---------------|-------|---------|---------------------|-------|---------|
|                                                                | N   | %    | N            | %    | N            | %    | Median        | Q1-Q3 | Missing | Median              | Q1-Q3 | Missing |
| <b>Antibiotics</b>                                             | 246 | 79.1 |              |      |              |      |               |       |         |                     |       |         |
| Antibiotic prophylaxis                                         | 44  | 14.1 | 14           | 4.5  | 18           | 5.8  | 2             | 1-4   | 0       | 0                   | 0-0   | 0       |
| Empirical antibiotic therapy (infection diagnosis confirmed)   | 125 | 40.2 | 62           | 19.9 | 32           | 10.3 | 2             | 1-4   | 0       | 0                   | 0-1   | 0       |
| Empirical antibiotic therapy (infection diagnosis unconfirmed) | 53  | 17.0 | 20           | 6.4  | 34           | 10.9 | 3             | 2-5   | 0       | 0                   | 0-1   | 0       |
| Targeted antibiotic therapy                                    | 142 | 45.7 | 37           | 11.9 | 92           | 29.6 | 6             | 3-9   | 0       | 3                   | 2-4   | 0       |
| Antifungal in empirical therapy                                | 28  | 9.0  | 11           | 3.5  | 8            | 2.6  | 3             | 1-4   | 0       | 2                   | 0-3   | 0       |
| Antifungal in targeted therapy                                 | 34  | 10.9 | 8            | 2.6  | 23           | 7.4  | 7             | 4-10  | 0       | 3                   | 1-5   | 0       |
| Pre-emptive antifungal                                         | 4   | 1.3  | 4            | 1.3  | 4            | 1.3  | 4             | 3-12  | 0       |                     |       |         |

**Antibiotic therapy**

| Pt. infected in ICU only (N=41) | N  | %    |
|---------------------------------|----|------|
| No therapy                      | 1  | 2.4  |
| Only empirical                  | 10 | 24.4 |
| Only targeted                   | 4  | 9.8  |
| Targeted after empirical        | 21 | 51.2 |
| Other                           | 5  | 12.2 |
| Missing                         | 0  |      |

**Antifungal therapy**

| Pt. infected in ICU only (N=41) | N  | %    |
|---------------------------------|----|------|
| No therapy                      | 34 | 82.9 |
| Only empirical                  | 2  | 4.9  |
| Only targeted                   | 3  | 7.3  |
| Targeted after empirical        | 1  | 2.4  |
| Other                           | 1  | 2.4  |
| Missing                         | 0  |      |

**National report for ICUs of other type - Year 2020****Process indicators** - Adult non surgical patients evaluated in the GiViTI model

|                                     |    |      | Length (days) |      |        |          |         |
|-------------------------------------|----|------|---------------|------|--------|----------|---------|
| <b>Invasive ventilation (N=185)</b> | N  | %    | Mean          | SD   | Median | Q1-Q3    | Missing |
| Due to pulmonary failure            | 96 | 46.2 | 9.4           | 9.5  | 6      | 3–13.5   | 0       |
| For airway maintenance              | 80 | 38.5 | 6.0           | 6.1  | 3.5    | 1–9      | 0       |
| In weaning                          | 3  | 1.4  | 1.0           | 0.0  | 1      | 1–1      | 0       |
| Not evaluable                       | 29 | 13.9 | 17.5          | 16.6 | 13.5   | 7.8–18.5 | 23      |
| Reintubation within 48 hours        | 3  | 1.4  | 5.3           | 3.2  | 4      | 3.5–6.5  | 0       |

| <b>Non invasive ventilation (N=38)</b> | N  | %    |
|----------------------------------------|----|------|
| Non invasive ventilation only          | 12 | 31.6 |
| Non invasive ventilation failed        | 7  | 18.4 |
| For weaning                            | 16 | 42.1 |
| Other                                  | 3  | 7.9  |
| Missing                                | 0  |      |

| <b>Tracheostomy not present on admission (N=30)</b> | N  | %    |
|-----------------------------------------------------|----|------|
| Surgical                                            | 10 | 33.3 |
| Percutwist                                          | 8  | 26.7 |
| Ciaglia                                             | 6  | 20.0 |
| Monodil. Ciaglia                                    | 0  | 0.0  |
| Fantoni                                             | 0  | 0.0  |
| Griggs                                              | 1  | 3.3  |
| Other Kind                                          | 4  | 13.3 |
| Unknown                                             | 1  | 3.3  |
| Missing                                             | 0  |      |

| <b>Tracheostomy - Days after the beginning of inv. vent. Not present on admission (N=30)</b> | Mean | SD  | Median | Q1–Q3    | Missing |
|----------------------------------------------------------------------------------------------|------|-----|--------|----------|---------|
|                                                                                              | 11.9 | 7.0 | 11.5   | 6.2–14.8 | 0       |

| <b>Invasive monitoring of C.O. (N=13)</b> | N  | %    |
|-------------------------------------------|----|------|
| Swan Ganz                                 | 0  | 0.0  |
| PICCO                                     | 12 | 92.3 |
| LIDCO                                     | 1  | 7.7  |
| Vigileo-PRAM                              | 0  | 0.0  |
| Other                                     | 0  | 0.0  |
| Missing                                   | 0  |      |

| <b>SDD (N=0)</b>     | N | %   |
|----------------------|---|-----|
| Topical              | 0 | 0.0 |
| Topical and systemic | 0 | 0.0 |
| Missing              | 0 |     |

| <b>Surgical interventions</b> | N   | %    |
|-------------------------------|-----|------|
| No                            | 280 | 90.0 |
| Yes                           | 31  | 10.0 |
| Missing                       | 0   |      |

| <b>Number of surgical interventions</b> | N   | %    |
|-----------------------------------------|-----|------|
| 0                                       | 280 | 90.0 |
| 1                                       | 26  | 8.4  |
| 2                                       | 4   | 1.3  |
| 3                                       | 1   | 0.3  |
| >3                                      | 0   | 0.0  |
| Missing                                 | 0   |      |

| <b>Surgical interventions Days from admission</b> | Mean | SD  | Median | Q1–Q3 | Missing |
|---------------------------------------------------|------|-----|--------|-------|---------|
|                                                   | 5.3  | 3.7 | 4      | 3–6   | 0       |

| <b>Surgical interventions (top 10)</b> | N  | %   |
|----------------------------------------|----|-----|
| Other surgery                          | 12 | 3.9 |
| Gastrointestinal surgery               | 9  | 2.9 |
| Neurosurgery                           | 5  | 1.6 |
| ENT surgery                            | 4  | 1.3 |
| Orthopaedic surgery                    | 4  | 1.3 |
| Gynaecological surgery                 | 1  | 0.3 |
| Maxillo-Facial surgery                 | 1  | 0.3 |
| Thoracic surgery                       | 1  | 0.3 |
| -                                      | 0  | 0.0 |
| -                                      | 0  | 0.0 |
| Missing                                | 0  |     |

| <b>Non surgical interventions</b> | N   | %    |
|-----------------------------------|-----|------|
| No                                | 297 | 95.5 |
| Yes                               | 14  | 4.5  |
| Missing                           | 0   |      |

| <b>Non surgical interventions Days from admission</b> | Mean | SD  | Median | Q1–Q3 | Missing |
|-------------------------------------------------------|------|-----|--------|-------|---------|
|                                                       | 6.5  | 4.9 | 5      | 3–7   | 0       |

| <b>Non surgical interventions</b> | N | %   |
|-----------------------------------|---|-----|
| Interventional radiology          | 6 | 1.9 |
| Interventional endoscopy          | 6 | 1.9 |
| Interventional cardiology         | 3 | 1.0 |
| Interventional neuroradiology     | 2 | 0.6 |
| Missing                           | 0 |     |

**National report for ICUs of other type - Year 2020****Outcome indicators - Adult non surgical patients evaluated in the GiViTI model**

| <b>ICU outcome</b>            | <b>N</b> | <b>%</b> |
|-------------------------------|----------|----------|
| Dead                          | 66       | 21.3     |
| Transferred to same hospital  | 220      | 71.0     |
| Transferred to other hospital | 24       | 7.7      |
| Discharged home               | 0        | 0.0      |
| Disch. terminally ill         | 0        | 0.0      |
| Missing                       | 1        |          |

| <b>Transferred to (N=244)</b>  | <b>N</b> | <b>%</b> |
|--------------------------------|----------|----------|
| Ward                           | 148      | 60.7     |
| Other ICU                      | 42       | 17.2     |
| High dependency care unit      | 54       | 22.1     |
| Rehabilitation                 | 0        | 0.0      |
| Day hospital or Long-term care | 0        | 0.0      |
| Missing                        | 0        |          |

| <b>Reason of transfer to Other ICU (N=42)</b> | <b>N</b> | <b>%</b> |
|-----------------------------------------------|----------|----------|
| Specialist expertise                          | 8        | 19.0     |
| Step-up care                                  | 2        | 4.8      |
| Logistical/organizational reasons             | 28       | 66.7     |
| Step-down care                                | 4        | 9.5      |
| Missing                                       | 0        |          |

| <b>Transferred to Same hospital (N=220)</b> | <b>N</b> | <b>%</b> |
|---------------------------------------------|----------|----------|
| Ward                                        | 144      | 65.5     |
| Other ICU                                   | 29       | 13.2     |
| High dependency care unit                   | 47       | 21.4     |
| Rehabilitation                              | 0        | 0.0      |
| Day hospital or Long-term care              | 0        | 0.0      |
| Missing                                     | 0        |          |

| <b>Transferred to Other hospital (N=24)</b> | <b>N</b> | <b>%</b> |
|---------------------------------------------|----------|----------|
| Ward                                        | 4        | 16.7     |
| Other ICU                                   | 13       | 54.2     |
| High dependency care unit                   | 7        | 29.2     |
| Rehabilitation                              | 0        | 0.0      |
| Day hospital or Long-term care              | 0        | 0.0      |
| Missing                                     | 0        |          |

| <b>ICU mortality</b> | <b>N</b> | <b>%</b> |
|----------------------|----------|----------|
| Alive                | 244      | 78.7     |
| Dead                 | 66       | 21.3     |
| Missing              | 1        |          |

| <b>Timing of ICU mortality (N=66)</b> | <b>N</b> | <b>%</b> |
|---------------------------------------|----------|----------|
| Daytime (08:00AM - 07:59PM)           | 37       | 56.1     |
| Nighttime (08:00PM - 07:59AM)         | 29       | 43.9     |
| Weekdays (Monday - Friday)            | 52       | 78.8     |
| Weekend (Saturday - Sunday)           | 14       | 21.2     |
| Missing                               | 0        |          |

| <b>Hospital mortality</b> | <b>N</b> | <b>%</b> |
|---------------------------|----------|----------|
| Alive                     | 190      | 61.1     |
| Dead                      | 121      | 38.9     |
| Missing                   | 0        |          |

| <b>Timing of hosp. mortality (N=121)</b> | <b>N</b> | <b>%</b> |
|------------------------------------------|----------|----------|
| In ICU                                   | 66       | 54.5     |
| Within 24 hours after ICU                | 1        | 0.8      |
| 24-47 hours after ICU                    | 5        | 4.1      |
| 48-71 hours after ICU                    | 4        | 3.3      |
| 72-95 hours after ICU                    | 3        | 2.5      |
| After 95 hours after ICU                 | 42       | 34.7     |
| Missing                                  | 0        |          |

| <b>Timing of hosp. mortality (days from ICU disch.) Discharged alive from ICU (N=55)</b> |  |      |
|------------------------------------------------------------------------------------------|--|------|
| Mean                                                                                     |  | 36.8 |
| SD                                                                                       |  | 57.5 |
| Median                                                                                   |  | 15   |
| Q1–Q3                                                                                    |  | 4–51 |
| Missing                                                                                  |  | 0    |

**National report for ICUs of other type - Year 2020****Outcome indicators - Adult non surgical patients evaluated in the GiViTI model**

| <b>Last hospital mortality</b> | N   | %    |
|--------------------------------|-----|------|
| Alive                          | 187 | 60.1 |
| Dead                           | 124 | 39.9 |
| Missing                        | 0   |      |

| <b>ICU stay (days)</b> |         |      |
|------------------------|---------|------|
|                        | Mean    | 7.8  |
|                        | SD      | 8.6  |
|                        | Median  | 5    |
|                        | Q1–Q3   | 2–10 |
|                        | Missing | 0    |

| <b>ICU stay (days)</b> |         |      |
|------------------------|---------|------|
| <b>Alive (N=244)</b>   |         |      |
|                        | Mean    | 7.7  |
|                        | SD      | 8.9  |
|                        | Median  | 4.5  |
|                        | Q1–Q3   | 2–10 |
|                        | Missing | 0    |

| <b>ICU stay (days)</b> |         |      |
|------------------------|---------|------|
| <b>Dead (N=66)</b>     |         |      |
|                        | Mean    | 8.0  |
|                        | SD      | 7.9  |
|                        | Median  | 5    |
|                        | Q1–Q3   | 3–11 |
|                        | Missing | 0    |

| <b>Stay after ICU (days)</b> |         |      |
|------------------------------|---------|------|
| <b>Alive (N=244)</b>         |         |      |
|                              | Mean    | 20.1 |
|                              | SD      | 32.9 |
|                              | Median  | 10   |
|                              | Q1–Q3   | 3–24 |
|                              | Missing | 0    |

| <b>Hospital stay (days)</b> |         |      |
|-----------------------------|---------|------|
|                             | Mean    | 29.0 |
|                             | SD      | 36.0 |
|                             | Median  | 18   |
|                             | Q1–Q3   | 8–34 |
|                             | Missing | 0    |

| <b>Hospital stay (days)</b> |         |      |
|-----------------------------|---------|------|
| <b>Alive (N=190)</b>        |         |      |
|                             | Mean    | 26.7 |
|                             | SD      | 27.2 |
|                             | Median  | 18.5 |
|                             | Q1–Q3   | 8–33 |
|                             | Missing | 0    |

| <b>Hospital stay (days)</b> |         |      |
|-----------------------------|---------|------|
| <b>Dead (N=121)</b>         |         |      |
|                             | Mean    | 32.6 |
|                             | SD      | 46.6 |
|                             | Median  | 17   |
|                             | Q1–Q3   | 7–38 |
|                             | Missing | 0    |

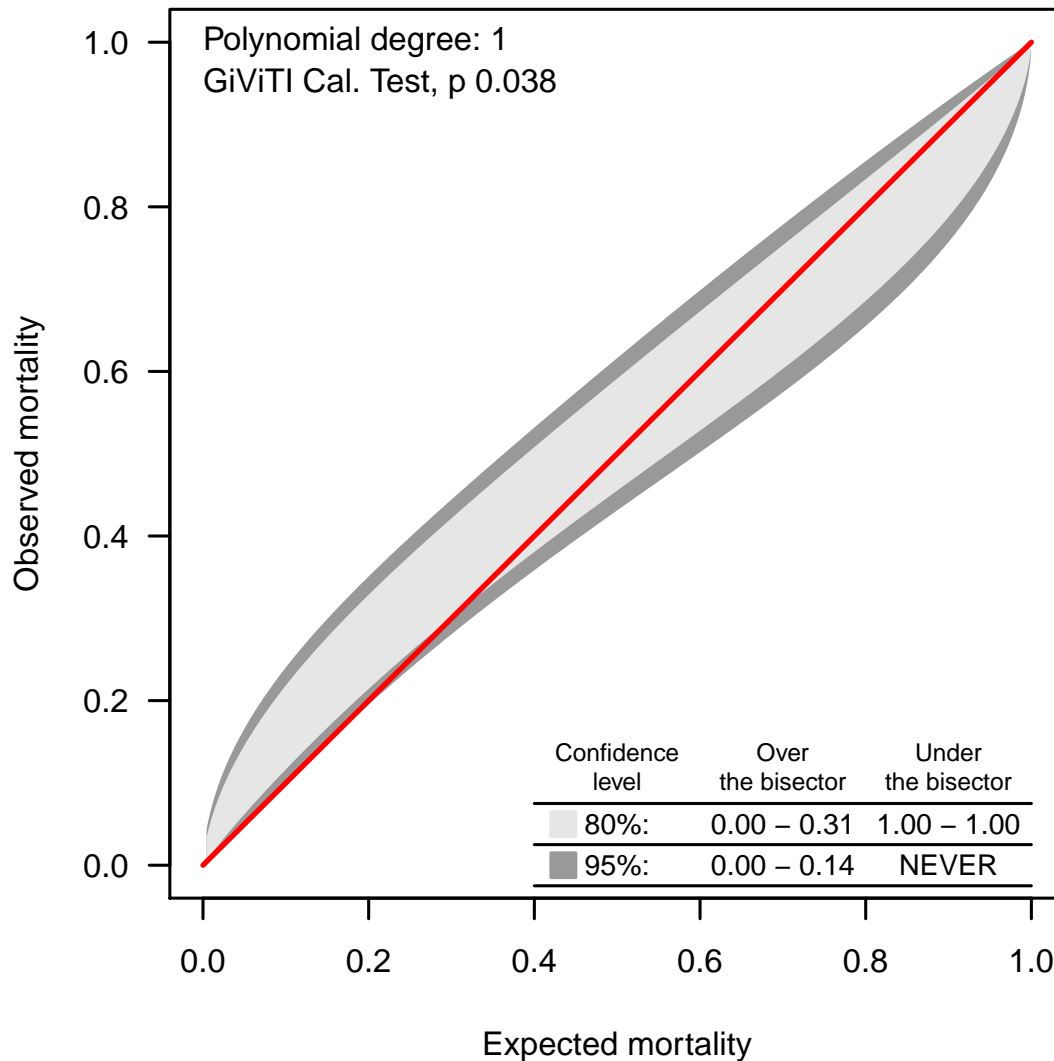
## National report for ICUs of other type - Year 2020

## Analysis of hospital mortality - Adult non surgical patients evaluated in the GiViTI model

Predictive model: **GiViTI 2019**

Total patients = 311  
**Total expected deaths (E) = 115.3**  
**Total observed deaths (O) = 124**

**Ratio O/E = 1.08**  
 Confidence interval O/E (95%) = (0.97,1.18)

**Calibration belt**

The calibration belt allows to compare the observed mortality with the expected one (predictive model: GiViTI 2019). Two different belts are presented: the 80% confidence level belt (in light gray) and the 95% confidence level belt (in dark gray). The belt above the bisector denotes an observed mortality greater than the expected one; vice versa, the belt under the bisector denotes an observed mortality lower than the expected one. As the polynomial degree increases the relation between expected and observed mortality becomes more complex. A significant GiViTI calibration test ( $p < 0.05$ ) denotes a statistically relevant difference between observed and expected mortality. The belt is plotted in the expected mortality range values. For further informations please look at [PLoS ONE 6(2): e16110].



## National report for ICUs of other type - Year 2020

## Characteristics on admission - Adult elective surgical patients evaluated in the GiViTI model

Patients (N): 482

| Sex     | N   | %    |
|---------|-----|------|
| Male    | 290 | 60.2 |
| Female  | 192 | 39.8 |
| Missing | 0   |      |

| Age (years) | N     | %    |
|-------------|-------|------|
| 17-45       | 32    | 6.6  |
| 46-65       | 173   | 35.9 |
| 66-75       | 154   | 32.0 |
| >75         | 123   | 25.5 |
| Missing     | 0     |      |
| Mean        | 66.4  |      |
| SD          | 12.9  |      |
| Median      | 67    |      |
| Q1–Q3       | 60–76 |      |
| Min–Max     | 24–96 |      |

| Body mass Index (BMI) | N   | %    |
|-----------------------|-----|------|
| Underweight           | 19  | 3.9  |
| Normal                | 154 | 32.0 |
| Overweight            | 183 | 38.0 |
| Obese                 | 126 | 26.1 |
| Missing               | 0   |      |

| Pregnancy status       | N   | %    |
|------------------------|-----|------|
| <b>Females (N=192)</b> |     |      |
| Not fertile            | 78  | 40.6 |
| Not pregnant/Unknown   | 114 | 59.4 |
| Currently pregnant     | 0   | 0.0  |
| Post partum            | 0   | 0.0  |
| Missing                | 0   |      |

| Comorbidities | N   | %    |
|---------------|-----|------|
| No            | 42  | 8.7  |
| Yes           | 440 | 91.3 |
| Missing       | 0   |      |

| Comorbidities (top 10)               | N   | %    |
|--------------------------------------|-----|------|
| Hypertension                         | 271 | 56.2 |
| Any tumour without metastasis        | 201 | 41.7 |
| Metastatic cancer                    | 86  | 17.8 |
| Arrhythmia                           | 80  | 16.6 |
| Diabetes Type II without insulin tr. | 65  | 13.5 |
| NYHA class II-III                    | 54  | 11.2 |
| Moderate COPD                        | 40  | 8.3  |
| Peripheral vascular disease          | 39  | 8.1  |
| Severe malnutrition                  | 35  | 7.3  |
| Endocrine-metabolic diseases         | 33  | 6.8  |
| Missing                              | 0   |      |

| Stay before ICU (days) | Mean | SD  | Median | Q1–Q3 | Missing |
|------------------------|------|-----|--------|-------|---------|
|                        | 3.7  | 6.3 | 1      | 1–3   | 0       |

| Source of admission             | N   | %    |
|---------------------------------|-----|------|
| Same hospital                   | 476 | 98.8 |
| Other hospital                  | 6   | 1.2  |
| Long-term chronic care hospital | 0   | 0.0  |
| Directly from the community     | 0   | 0.0  |
| Missing                         | 0   |      |

| Ward of admission         | N   | %    |
|---------------------------|-----|------|
| <b>Hospital (N=482)</b>   |     |      |
| Medical ward              | 10  | 2.1  |
| Surgical ward             | 458 | 95.0 |
| Emergency room            | 2   | 0.4  |
| Other ICU                 | 8   | 1.7  |
| High dependency care unit | 4   | 0.8  |
| Missing                   | 0   |      |

| Reason for transfer from          | N | %    |
|-----------------------------------|---|------|
| <b>Other ICU (N=8)</b>            |   |      |
| Specialist expertise              | 0 | 0.0  |
| Step-up care                      | 4 | 50.0 |
| Logistical/organizational reasons | 3 | 37.5 |
| Step-down care                    | 1 | 12.5 |
| Missing                           | 0 |      |

| Ward of admission            | N   | %    |
|------------------------------|-----|------|
| <b>Same hospital (N=476)</b> |     |      |
| Medical ward                 | 9   | 1.9  |
| Surgical ward                | 457 | 96.0 |
| Emergency room               | 1   | 0.2  |
| Other ICU                    | 5   | 1.1  |
| High dependency care unit    | 4   | 0.8  |
| Missing                      | 0   |      |

| Ward of admission           | N | %    |
|-----------------------------|---|------|
| <b>Other hospital (N=6)</b> |   |      |
| Medical ward                | 1 | 16.7 |
| Surgical ward               | 1 | 16.7 |
| Emergency room              | 1 | 16.7 |
| Other ICU                   | 3 | 50.0 |
| High dependency care unit   | 0 | 0.0  |
| Missing                     | 0 |      |

| Scheduled admission | N   | %    |
|---------------------|-----|------|
| No                  | 70  | 14.5 |
| Yes                 | 412 | 85.5 |
| Missing             | 0   |      |

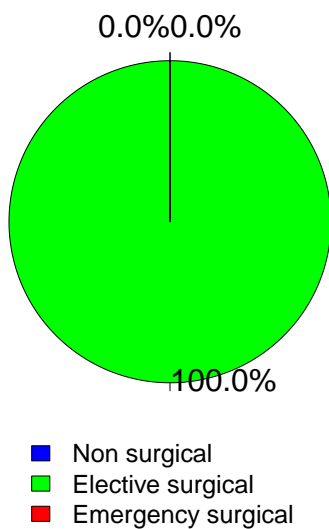
## National report for ICUs of other type - Year 2020

## Characteristics on admission - Adult elective surgical patients evaluated in the GiViTI model

| Trauma          | N   | %    |
|-----------------|-----|------|
| No              | 474 | 98.3 |
| Yes             | 8   | 1.7  |
| Multiple trauma | 1   | 0.2  |
| Missing         | 0   |      |

| Surgical status    | N   | %     |
|--------------------|-----|-------|
| Non surgical       | 0   | 0.0   |
| Elective surgical  | 482 | 100.0 |
| Emergency surgical | 0   | 0.0   |
| Missing            | 0   |       |

## Surgical status



| Timing                      | N   | %    |
|-----------------------------|-----|------|
| Elective surgical (N=482)   |     |      |
| From -7 to -3 days          | 15  | 3.1  |
| From -2 to -1 days          | 20  | 4.1  |
| On ICU admission day        | 478 | 99.2 |
| The day after ICU admission | 9   | 1.9  |
| Missing                     | 0   |      |

## Surgical interventions (top 10)

| Emergency surgical (N=0) | N | %   |
|--------------------------|---|-----|
| -                        | 0 | 0.0 |
| -                        | 0 | 0.0 |
| -                        | 0 | 0.0 |
| -                        | 0 | 0.0 |
| -                        | 0 | 0.0 |
| -                        | 0 | 0.0 |
| -                        | 0 | 0.0 |
| -                        | 0 | 0.0 |
| -                        | 0 | 0.0 |
| -                        | 0 | 0.0 |
| -                        | 0 | 0.0 |
| Missing                  | 0 |     |

## Timing

| Emergency surgical (N=0)    | N | %   |
|-----------------------------|---|-----|
| From -7 to -3 days          | 0 | 0.0 |
| From -2 to -1 days          | 0 | 0.0 |
| On ICU admission day        | 0 | 0.0 |
| The day after ICU admission | 0 | 0.0 |
| Missing                     | 0 |     |

## Source of admission

| Surgical pt. (N=482)                | N   | %    |
|-------------------------------------|-----|------|
| Operating theatre of surgical ward  | 440 | 91.3 |
| Operating theatre of emergency room | 1   | 0.2  |
| Surgical ward                       | 18  | 3.7  |
| Other                               | 23  | 4.8  |
| Missing                             | 0   |      |

## Surgical interventions (top 10)

| Elective surgical (N=482)   | N   | %    |
|-----------------------------|-----|------|
| Gastrointestinal surgery    | 297 | 61.6 |
| Nephro/Urological surgery   | 32  | 6.6  |
| Other surgery               | 29  | 6.0  |
| Hepatic surgery             | 27  | 5.6  |
| Abdominal vascular surgery  | 22  | 4.6  |
| Gynaecological surgery      | 20  | 4.1  |
| Orthopaedic surgery         | 17  | 3.5  |
| Thoracic surgery            | 17  | 3.5  |
| Peripheral vascular surgery | 14  | 2.9  |
| Pancreatic surgery          | 9   | 1.9  |
| Missing                     | 0   |      |

## Non surgical interventions

|           | N   | %    |
|-----------|-----|------|
| None      | 472 | 97.9 |
| Elective  | 5   | 1.0  |
| Emergency | 5   | 1.0  |
| Missing   | 0   |      |

## Non surgical interventions

| Elective (N=5)                | N | %    |
|-------------------------------|---|------|
| Interventional radiology      | 1 | 20.0 |
| Interventional endoscopy      | 1 | 20.0 |
| Interventional cardiology     | 0 | 0.0  |
| Interventional neuroradiology | 0 | 0.0  |
| Missing                       | 3 |      |

## Non surgical interventions

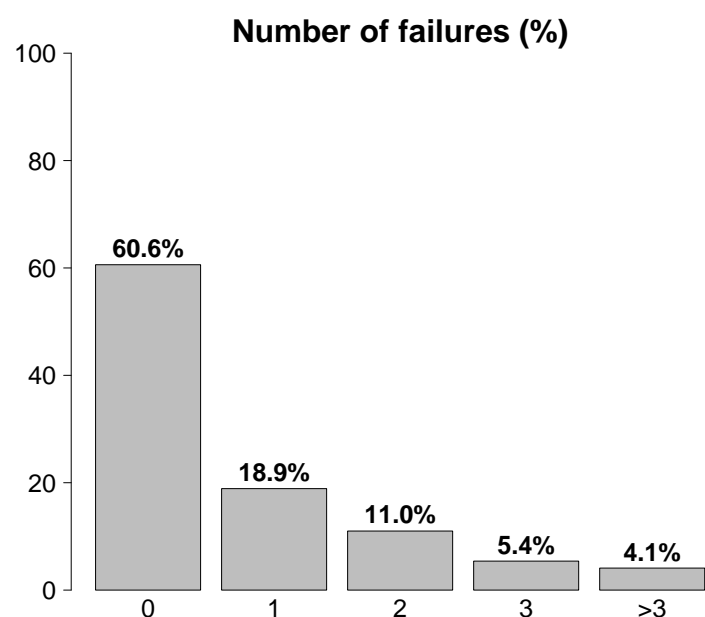
| Emergency (N=5)               | N | %    |
|-------------------------------|---|------|
| Interventional endoscopy      | 2 | 40.0 |
| Interventional radiology      | 1 | 20.0 |
| Interventional neuroradiology | 1 | 20.0 |
| Interventional cardiology     | 0 | 0.0  |
| Missing                       | 1 |      |



## National report for ICUs of other type - Year 2020

## Characteristics on admission - Adult elective surgical patients evaluated in the GiViTI model

| Reason for admission                   | N   | %    |
|----------------------------------------|-----|------|
| Monitoring/Weaning                     | 378 | 78.4 |
| Post surgical weaning                  | 8   | 1.7  |
| Surgical monitoring                    | 369 | 76.7 |
| Post interventional weaning            | 0   | 0.0  |
| Interventional monitoring              | 0   | 0.0  |
| Non surgical monitoring                | 0   | 0.0  |
| Missing                                | 1   |      |
| Admission for procedures/treatments    | 0   | 0.0  |
| Intensive Treatment                    | 104 | 21.6 |
| Only ventilatory support               | 15  | 3.1  |
| Only cardiovascular support            | 30  | 6.2  |
| Ventilatory and cardiovascular support | 59  | 12.2 |
| Missing                                | 0   |      |
| Palliative Sedation                    | 0   | 0.0  |
| Diagnosis of death/Organ donation      | 0   | 0.0  |
| Missing                                | 0   |      |



| Failures on admission     | N   | %    |
|---------------------------|-----|------|
| No                        | 292 | 60.6 |
| Yes                       | 190 | 39.4 |
| A: Respiratory failure    | 74  | 15.4 |
| B: Cardiovascular failure | 89  | 18.5 |
| C: Neurological failure   | 2   | 0.4  |
| D: Hepatic failure        | 2   | 0.4  |
| E: Renal failure          | 99  | 20.5 |
| F: Acute skin failure     | 1   | 0.2  |
| G: Metabolic failure      | 87  | 18.0 |
| H: Coagulation failure    | 7   | 1.5  |
| Missing                   | 0   |      |

| Failures on admission (top 10) | N  | %   |
|--------------------------------|----|-----|
| E                              | 38 | 7.9 |
| G                              | 27 | 5.6 |
| AB                             | 24 | 5.0 |
| EG                             | 17 | 3.5 |
| ABEG                           | 13 | 2.7 |
| B                              | 13 | 2.7 |
| A                              | 10 | 2.1 |
| ABE                            | 8  | 1.7 |
| ABG                            | 8  | 1.7 |
| BEG                            | 7  | 1.5 |
| Missing                        | 0  |     |

| Respiratory failure          | N   | %    |
|------------------------------|-----|------|
| None                         | 408 | 84.6 |
| Only hypoxic failure         | 26  | 5.4  |
| Only hypercapnic failure     | 8   | 1.7  |
| Hypoxic-hypercapnic failure  | 5   | 1.0  |
| Intubation for airway maint. | 35  | 7.3  |
| Missing                      | 0   |      |

| Cardiovascular failure         | N   | %    |
|--------------------------------|-----|------|
| None                           | 393 | 81.5 |
| Without shock                  | 33  | 6.8  |
| Cardiogenic shock              | 3   | 0.6  |
| Septic shock                   | 13  | 2.7  |
| Haemorrhagic/hypovolemic shock | 17  | 3.5  |
| Hypovolemic shock              | 2   | 0.4  |
| Anaphylactic shock             | 5   | 1.0  |
| Neurogenic shock               | 1   | 0.2  |
| Other shock                    | 8   | 1.7  |
| Mixed shock                    | 7   | 1.5  |
| Missing                        | 0   |      |

| Neurologic failure       | N   | %    |
|--------------------------|-----|------|
| None                     | 452 | 99.6 |
| Cerebral coma            | 0   | 0.0  |
| Metabolic coma           | 0   | 0.0  |
| Postanoxic coma          | 0   | 0.0  |
| Toxic coma               | 2   | 0.4  |
| Missing or not evaluable | 28  |      |

| Renal failure (AKIN) | N   | %    |
|----------------------|-----|------|
| None                 | 383 | 79.5 |
| Mild                 | 62  | 12.9 |
| Moderate             | 26  | 5.4  |
| Severe               | 11  | 2.3  |
| Missing              | 0   |      |

| Metabolic failure                              | N   | %    |
|------------------------------------------------|-----|------|
| None                                           | 395 | 82.0 |
| pH $\leq$ 7.3, PaCO <sub>2</sub> $<$ 45 mmHg   | 26  | 5.4  |
| Base deficit $\geq$ 5 mmol/L, lactate $>$ 1.5x | 61  | 12.7 |
| Missing                                        | 0   |      |

## National report for ICUs of other type - Year 2020

## Characteristics on admission - Adult elective surgical patients evaluated in the GiViTI model

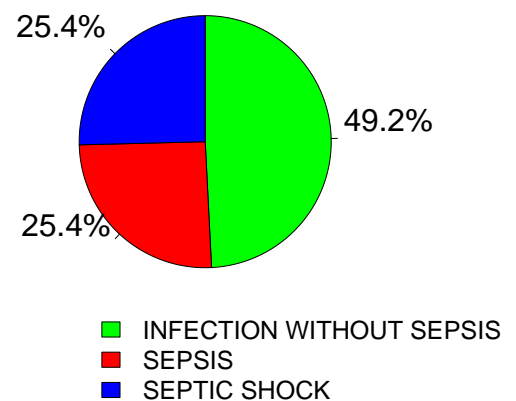
| Clinical conditions on admission         | N   | %    |
|------------------------------------------|-----|------|
| Respiratory                              | 40  | 8.3  |
| Pleural effusion                         | 17  | 3.5  |
| Pneumothorax/Pneumomediastinum           | 7   | 1.5  |
| Lung cancer                              | 6   | 1.2  |
| Atelectasis                              | 4   | 0.8  |
| Acute asthma/bronchospasm                | 3   | 0.6  |
| Cardiovascular                           | 62  | 12.9 |
| Non-ruptured aneurysm                    | 19  | 3.9  |
| Acute severe arrhythmia: tachycardias    | 10  | 2.1  |
| Peripheral vascular disease              | 9   | 1.9  |
| Left heart failure without pulm. edema   | 6   | 1.2  |
| Pulmonary hypertension                   | 6   | 1.2  |
| Neurological                             | 17  | 3.5  |
| Brain tumour                             | 4   | 0.8  |
| Non traumatic cerebral oedema            | 2   | 0.4  |
| Metabolic/postanoxic encephalopathy      | 2   | 0.4  |
| Seizures                                 | 2   | 0.4  |
| CNS degenerative disease                 | 2   | 0.4  |
| Gastrointestinal and hepatic             | 288 | 59.8 |
| Digestive tract malignancy               | 245 | 50.8 |
| Hepatic malignancy                       | 27  | 5.6  |
| Intestinal occlusion                     | 13  | 2.7  |
| Pancreatic malignancy                    | 11  | 2.3  |
| Paralytic Ileus                          | 8   | 1.7  |
| Trauma (anatomical districts)            | 8   | 1.7  |
| Pelvis/bone/joint & muscle               | 5   | 1.0  |
| Chest                                    | 3   | 0.6  |
| Spine                                    | 2   | 0.4  |
| -                                        | 0   | 0.0  |
| -                                        | 0   | 0.0  |
| -                                        | 0   | 0.0  |
| -                                        | 0   | 0.0  |
| -                                        | 0   | 0.0  |
| -                                        | 0   | 0.0  |
| Other                                    | 158 | 32.8 |
| Other disease                            | 98  | 20.3 |
| Nephrourologic disease                   | 33  | 6.8  |
| Gynaecological disease                   | 17  | 3.5  |
| Metabolic disorder                       | 12  | 2.5  |
| Coagulation disorder                     | 7   | 1.5  |
| Post transplantation                     | 14  | 2.9  |
| Liver transplantation                    | 9   | 1.9  |
| Lung transplantation                     | 4   | 0.8  |
| Infections                               | 63  | 13.1 |
| Post-surgical peritonitis                | 24  | 5.0  |
| Pneumonia                                | 13  | 2.7  |
| Primary peritonitis                      | 6   | 1.2  |
| Post-surgical skin/soft tissue infection | 5   | 1.0  |
| NON-surgical urinary tract infection     | 5   | 1.0  |
| NON-surgical secondary peritonitis       | 3   | 0.6  |
| NON-surgical skin/soft tissue infection  | 3   | 0.6  |
| Post-surgical urinary tract infection    | 2   | 0.4  |
| Cholecystitis/cholangitis                | 1   | 0.2  |
| Clinical sepsis                          | 1   | 0.2  |
| Missing                                  | 0   |      |

| Trauma (anatomical districts)       | N | %   |
|-------------------------------------|---|-----|
| Head                                | 0 | 0.0 |
| -                                   | 0 | 0.0 |
| -                                   | 0 | 0.0 |
| -                                   | 0 | 0.0 |
| -                                   | 0 | 0.0 |
| -                                   | 0 | 0.0 |
| Spine                               | 2 | 0.4 |
| Cervical injury, incomplete deficit | 1 | 0.2 |
| Tetraplegia                         | 1 | 0.2 |
| -                                   | 0 | 0.0 |
| Chest                               | 3 | 0.6 |
| Severe lung contusion/laceration    | 3 | 0.6 |
| Traum. haemothorax/pneumothorax     | 2 | 0.4 |
| Flail chest                         | 2 | 0.4 |
| Abdomen                             | 0 | 0.0 |
| -                                   | 0 | 0.0 |
| -                                   | 0 | 0.0 |
| -                                   | 0 | 0.0 |
| Pelvis/bone/joint & muscle          | 5 | 1.0 |
| Long bone fracture                  | 5 | 1.0 |
| -                                   | 0 | 0.0 |
| -                                   | 0 | 0.0 |
| Major vessels injury                | 0 | 0.0 |
| -                                   | 0 | 0.0 |
| -                                   | 0 | 0.0 |
| -                                   | 0 | 0.0 |
| Miscellaneous                       | 0 | 0.0 |
| -                                   | 0 | 0.0 |
| -                                   | 0 | 0.0 |
| Missing                             | 0 |     |

| Infection severity on admission | N   | %    |
|---------------------------------|-----|------|
| None                            | 419 | 86.9 |
| INFECTION WITHOUT SEPSIS        | 31  | 6.4  |
| SEPSIS                          | 16  | 3.3  |
| SEPTIC SHOCK                    | 16  | 3.3  |
| Missing                         | 0   |      |

## Infection severity on admission

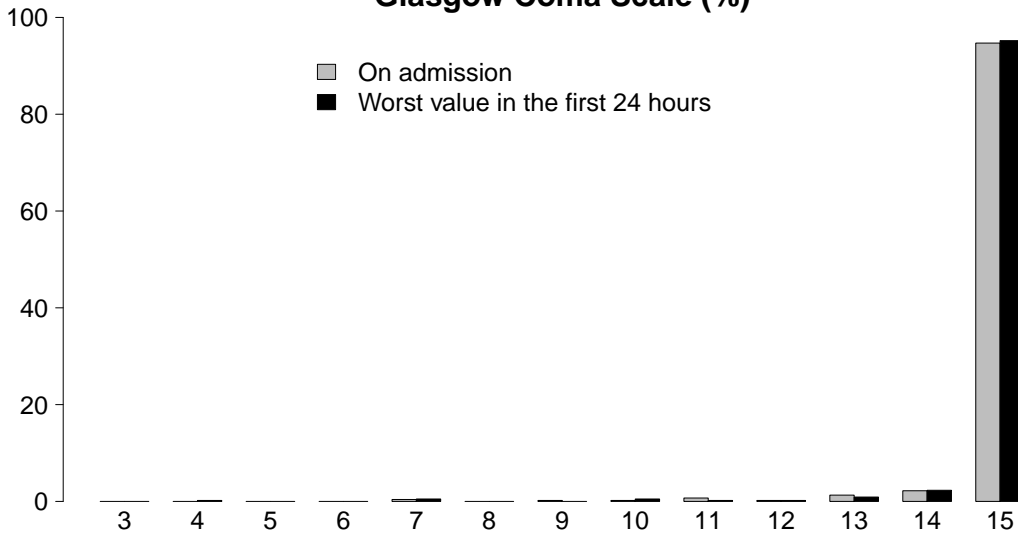
Patients infected (N=63)



**National report for ICUs of other type - Year 2020**

**Severity scores - Adult elective surgical patients evaluated in the GiViTI model**

**Glasgow Coma Scale (%)**



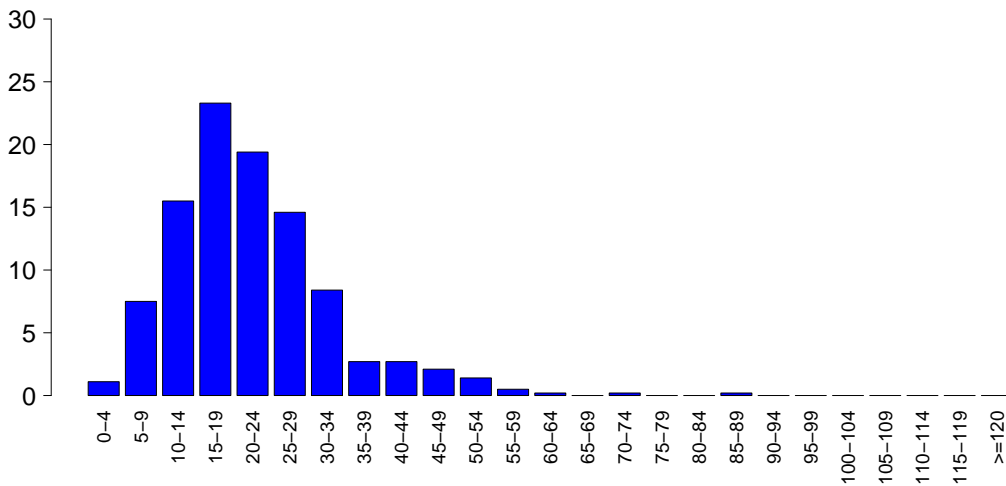
**GCS (admission)**

|               |       |
|---------------|-------|
| Median        | 15    |
| Q1–Q3         | 15–15 |
| Not evaluable | 28    |
| Missing       | 0     |

**GCS (first 24 hours)**

|               |       |
|---------------|-------|
| Median        | 15    |
| Q1–Q3         | 15–15 |
| Not evaluable | 44    |
| Missing       | 0     |

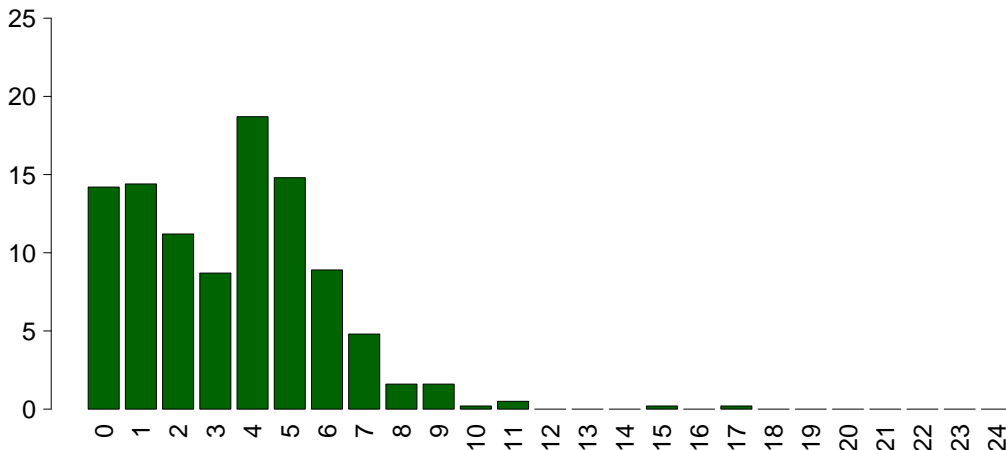
**SAPS II (%)**



**SAPSII**

|               |       |
|---------------|-------|
| Mean          | 21.8  |
| SD            | 10.9  |
| Median        | 20    |
| Q1–Q3         | 15–27 |
| Not evaluable | 44    |
| Missing       | 0     |

**SOFA (%)**



**SOFA**

|               |     |
|---------------|-----|
| Mean          | 3.4 |
| SD            | 2.5 |
| Median        | 4   |
| Q1–Q3         | 1–5 |
| Not evaluable | 44  |
| Missing       | 0   |

**National report for ICUs of other type - Year 2020****Characteristics during the stay - Adult elective surgical patients evaluated in the GiViTI model**

| <b>Complications during the stay</b> | N   | %    |
|--------------------------------------|-----|------|
| No                                   | 310 | 64.3 |
| Yes                                  | 172 | 35.7 |
| Missing                              | 0   |      |

| <b>Failures during the stay</b> | N   | %    |
|---------------------------------|-----|------|
| No                              | 439 | 91.1 |
| Yes                             | 43  | 8.9  |
| A: Respiratory failure          | 9   | 1.9  |
| B: Cardiovascular failure       | 15  | 3.1  |
| C: Neurological failure         | 2   | 0.4  |
| D: Hepatic failure              | 6   | 1.2  |
| E: Renal failure (AKIN)         | 19  | 3.9  |
| F: Acute skin failure           | 1   | 0.2  |
| G: Metabolic failure            | 10  | 2.1  |
| H: Coagulation failure          | 7   | 1.5  |
| Missing                         | 0   |      |

| <b>Failures during the stay (top 10)</b> | N | %   |
|------------------------------------------|---|-----|
| E                                        | 9 | 1.9 |
| B                                        | 5 | 1.0 |
| G                                        | 5 | 1.0 |
| D                                        | 4 | 0.8 |
| A                                        | 3 | 0.6 |
| BE                                       | 3 | 0.6 |
| AB                                       | 2 | 0.4 |
| ABEFH                                    | 1 | 0.2 |
| ABG                                      | 1 | 0.2 |
| ACD                                      | 1 | 0.2 |
| Missing                                  | 0 |     |

| <b>Respiratory failure occurred</b> | N   | %    |
|-------------------------------------|-----|------|
| None                                | 473 | 98.1 |
| Intubation for airway maint.        | 3   | 0.6  |
| Hypoxic failure                     | 6   | 1.2  |
| Hypercapnic failure                 | 1   | 0.2  |
| Missing                             | 0   |      |

| <b>Cardiovascular failure occurred</b> | N   | %    |
|----------------------------------------|-----|------|
| None                                   | 467 | 96.9 |
| Cardiogenic shock                      | 0   | 0.0  |
| Hypovolemic shock                      | 1   | 0.2  |
| Haemorrhagic/hypovolemic shock         | 2   | 0.4  |
| Septic shock                           | 12  | 2.5  |
| Anaphylactic shock                     | 0   | 0.0  |
| Neurogenic shock                       | 0   | 0.0  |
| Other shock                            | 1   | 0.2  |
| Missing                                | 0   |      |

| <b>Neurological failure occurred</b> | N   | %    |
|--------------------------------------|-----|------|
| None                                 | 480 | 99.6 |
| Cerebral coma                        | 1   | 0.2  |
| Metabolic coma                       | 0   | 0.0  |
| Postanoxic coma                      | 1   | 0.2  |
| Missing                              | 0   |      |

| <b>Renal failure occurred (AKIN)</b> | N   | %    |
|--------------------------------------|-----|------|
| None                                 | 463 | 96.1 |
| Mild                                 | 5   | 1.0  |
| Moderate                             | 4   | 0.8  |
| Severe                               | 10  | 2.1  |
| Missing                              | 0   |      |

| <b>Complications during the stay</b>     | N  | %    |
|------------------------------------------|----|------|
| <b>Respiratory</b>                       | 34 | 7.1  |
| Pleural effusion                         | 18 | 3.7  |
| Atelectasis                              | 7  | 1.5  |
| Aspiration pneumonia                     | 4  | 0.8  |
| Mild ARDS                                | 3  | 0.6  |
| Moderate ARDS                            | 3  | 0.6  |
| <b>Cardiovascular</b>                    | 28 | 5.8  |
| Acute severe arrhythmia: tachycardias    | 17 | 3.5  |
| Acute severe arrhythmia: bradycardias    | 8  | 1.7  |
| Pulmonary edema                          | 4  | 0.8  |
| Pulmonary hypertension                   | 2  | 0.4  |
| Cardiac arrest                           | 1  | 0.2  |
| <b>Neurological</b>                      | 32 | 6.6  |
| Drowsiness/agitation/delirium            | 27 | 5.6  |
| Post-surgical intracranial bleeding      | 3  | 0.6  |
| CriMyNe                                  | 2  | 0.4  |
| Brain edema                              | 1  | 0.2  |
| Hydrocephalus                            | 1  | 0.2  |
| <b>Gastrointestinal and hepatic</b>      | 64 | 13.3 |
| Paralytic Ileus                          | 39 | 8.1  |
| Anastomotic dehiscence                   | 12 | 2.5  |
| Intrabdominal bleeding                   | 7  | 1.5  |
| Liver Dysfunction Syndrome               | 6  | 1.2  |
| Gastrointestinal bleeding: lower tract   | 5  | 1.0  |
| <b>Other</b>                             | 57 | 11.8 |
| Other disease                            | 42 | 8.7  |
| Metabolic disorder                       | 10 | 2.1  |
| Nephrourologic disease                   | 8  | 1.7  |
| Iatrogenic major vessels injury          | 1  | 0.2  |
| Other skin and/or soft tissue pathology  | 1  | 0.2  |
| -                                        | 0  | 0.0  |
| -                                        | 0  | 0.0  |
| <b>Infections</b>                        | 73 | 15.1 |
| Post-surgical peritonitis                | 38 | 7.9  |
| Pneumonia                                | 14 | 2.9  |
| Post-surgical skin/soft tissue infection | 7  | 1.5  |
| Clinical sepsis                          | 4  | 0.8  |
| L.R.T.I. other than pneumonia            | 3  | 0.6  |
| NON-surgical urinary tract infection     | 3  | 0.6  |
| Other fungal infections                  | 2  | 0.4  |
| NON-surgical skin/soft tissue infection  | 2  | 0.4  |
| Post-surgical urinary tract infection    | 2  | 0.4  |
| Artery or vein infection                 | 1  | 0.2  |
| Missing                                  | 0  |      |

## National report for ICUs of other type - Year 2020

## Characteristics during the stay - Adult elective surgical patients evaluated in the GiViTI model

| Infections                       |     |      |                          | Maximum severity of infection |      |  |  |
|----------------------------------|-----|------|--------------------------|-------------------------------|------|--|--|
|                                  | N   | %    |                          | N                             | %    |  |  |
| None                             | 359 | 74.5 | None                     | 359                           | 74.5 |  |  |
| Only on admission                | 50  | 10.4 | INFECTION WITHOUT SEPSIS | 55                            | 11.4 |  |  |
| On admission and during ICU stay | 13  | 2.7  | SEPSIS                   | 41                            | 8.5  |  |  |
| Only during ICU stay             | 60  | 12.4 | SEPTIC SHOCK             | 27                            | 5.6  |  |  |
| Missing                          | 0   |      | Missing                  | 0                             |      |  |  |

## Severity evolution

| Severity evolution |                          | During the stay |            |                          |             |              |
|--------------------|--------------------------|-----------------|------------|--------------------------|-------------|--------------|
|                    |                          | N (R %)         | None       | INFECTION WITHOUT SEPSIS | SEPSIS      | SEPTIC SHOCK |
| Admission          | None                     | 359 (85.7%)     | 29 (6.9%)  | 23 (5.5%)                | 8 (1.9%)    | 419          |
|                    | INFECTION WITHOUT SEPSIS | -               | 26 (83.9%) | 3 (9.7%)                 | 2 (6.5%)    | 31           |
|                    | SEPSIS                   | -               | -          | 15 (93.8%)               | 1 (6.2%)    | 16           |
|                    | SEPTIC SHOCK             | -               | -          | -                        | 16 (100.0%) | 16           |
|                    | TOT                      | 359             | 55         | 41                       | 27          | 482          |

| Ventil. Associat. Pneumonia (VAP) | N   | %    |
|-----------------------------------|-----|------|
| No                                | 472 | 97.9 |
| Yes                               | 10  | 2.1  |
| Missing                           | 0   |      |

## Incidence of VAP

(Pts. with VAP/1000 days of VM pre-VAP)

|          |           |
|----------|-----------|
| Estimate | 25.9      |
| CI (95%) | 12.4–47.6 |

## Incidence of VAP

(Pts. with VAP/pts. ventilated for 8 days)

|          |          |
|----------|----------|
| Estimate | 20.7%    |
| CI (95%) | 9.9–38.1 |

| Catheter Bacteraemia (CR-BSI) | N   | %    |
|-------------------------------|-----|------|
| No                            | 481 | 99.8 |
| Yes                           | 1   | 0.2  |
| Missing                       | 0   |      |

## Incidence of CR-BSI

(Pts. with CR-BSI/1000 days of CVC pre-CR-BSI)

|          |         |
|----------|---------|
| Estimate | 0.5     |
| CI (95%) | 0.0–3.0 |

## Incidence of CR-BSI

(Pts. with CR-BSI/pts. catheterized for 12 days)

|          |         |
|----------|---------|
| Estimate | 0.6%    |
| CI (95%) | 0.0–3.6 |

**National report for ICUs of other type - Year 2020**  
**Process indicators - Adult elective surgical patients evaluated in the GiViTI model**

| Procedures and/or treatments (Missing=0)  | Use        |             | On admission |      | On discharge |      | Length (days) |       | Days from admission |        |       |         |
|-------------------------------------------|------------|-------------|--------------|------|--------------|------|---------------|-------|---------------------|--------|-------|---------|
|                                           | N          | %           | N            | %    | N            | %    | Median        | Q1-Q3 | Missing             | Median | Q1-Q3 | Missing |
| <b>Procedures (antibiotics excluded)</b>  | <b>478</b> | <b>99.2</b> |              |      |              |      |               |       |                     |        |       |         |
| Invasive ventilation                      | 87         | 18.0        | 71           | 14.7 | 12           | 2.5  | 2             | 1-7   | 0                   | 0      | 0-0   | 0       |
| Non invasive ventilation                  | 25         | 5.2         | 2            | 0.4  | 8            | 1.7  | 2             | 1-4   | 0                   | 0      | 0-1   | 0       |
| Tracheostomy                              | 9          | 1.9         | 0            | 0    | 8            | 1.7  | 8             | 7-14  | 0                   | 9      | 8-11  | 0       |
| iNO (inhaled nitric oxide)                | 9          | 1.9         | 5            | 1    | 0            | 0    | 3             | 2-6   | 0                   | 2      | 1-2   | 0       |
| Central Venous Catheter                   | 426        | 88.4        | 391          | 81.1 | 389          | 80.7 | 3             | 2-5   | 0                   | 0      | 0-0   | 0       |
| PICC                                      | 13         | 2.7         | 6            | 1.2  | 10           | 2.1  | 2             | 1-4   | 0                   | 0      | 0-0   | 0       |
| Arterial Catheter                         | 388        | 80.5        | 337          | 69.9 | 59           | 12.2 | 3             | 2-5   | 0                   | 0      | 0-0   | 0       |
| Vasoactive drugs                          | 292        | 60.6        | 211          | 43.8 | 14           | 2.9  | 2             | 1-3   | 0                   | 0      | 0-0   | 0       |
| Antiarrhythmics                           | 17         | 3.5         | 0            | 0    | 3            | 0.6  | 1             | 1-2   | 0                   | 1      | 1-4   | 0       |
| IABP                                      | 0          | 0.0         |              |      |              |      |               |       |                     |        |       |         |
| Invasive monitoring of C.O.               | 10         | 2.1         | 4            | 0.8  | 1            | 0.2  | 7             | 2-15  | 0                   | 0      | 0-2   | 0       |
| Continuous monitoring of ScVO2            | 3          | 0.6         | 3            | 0.6  | 0            | 0    | 4             | 4-7   | 0                   |        |       |         |
| Temporary pacing                          | 3          | 0.6         | 2            | 0.4  | 0            | 0    | 1             | 0-2   | 0                   | 0      | 0-0   | 0       |
| Ventricular assistance                    | 0          | 0.0         |              |      |              |      |               |       |                     |        |       |         |
| DC-shock                                  | 3          | 0.6         |              |      |              |      |               |       |                     | 2      | 2-3   | 0       |
| CPR                                       | 1          | 0.2         |              |      |              |      |               |       |                     | 4      | 4-4   | 0       |
| Massive blood transfusion                 | 8          | 1.7         |              |      |              |      |               |       |                     | 0      | 0-0   | 0       |
| ICP monitoring without CSF drainage       | 0          | 0.0         |              |      |              |      |               |       |                     |        |       |         |
| ICP monitoring with CSF drainage          | 2          | 0.4         | 2            | 0.4  | 1            | 0.2  | 17            | 12-22 | 0                   |        |       |         |
| External ventricular drainage without ICP | 1          | 0.2         | 0            | 0    | 1            | 0.2  | 0             | 0-0   | 0                   | 14     | 14-14 | 0       |
| Haemofiltration                           | 2          | 0.4         | 0            | 0    | 0            | 0    | 8             | 4-11  | 0                   | 0      | 0-1   | 0       |
| Haemodialysis                             | 12         | 2.5         | 0            | 0    | 2            | 0.4  | 4             | 1-11  | 0                   | 4      | 2-7   | 0       |
| ECMO                                      | 0          | 0.0         |              |      |              |      |               |       |                     |        |       |         |
| Hepatic clearance techniques              | 0          | 0.0         |              |      |              |      |               |       |                     |        |       |         |
| Clearance techniques during sepsis        | 1          | 0.2         | 0            | 0    | 0            | 0    | 1             | 1-1   | 0                   | 0      | 0-0   | 0       |
| IAP (intra-abdominal pressure)            | 26         | 5.4         |              |      |              |      |               |       |                     |        |       |         |
| Hypothermia                               | 0          | 0.0         |              |      |              |      |               |       |                     |        |       |         |
| Enteral nutrition                         | 183        | 38.0        | 14           | 2.9  | 157          | 32.6 | 2             | 1-4   | 0                   | 1      | 1-2   | 0       |
| Parenteral nutrition                      | 268        | 55.6        | 22           | 4.6  | 228          | 47.3 | 2             | 1-5   | 0                   | 1      | 1-1   | 0       |
| SDD (Topical, Topical and systemic)       | 0          | 0.0         |              |      |              |      |               |       |                     |        |       |         |
| Patient restraint                         | 3          | 0.6         |              |      |              |      |               |       |                     |        |       |         |
| Peridural catheter                        | 198        | 41.1        | 193          | 40   | 162          | 33.6 | 2             | 2-4   | 0                   | 0      | 0-0   | 0       |
| Electrical cardioversion                  | 2          | 0.4         |              |      |              |      |               |       |                     | 0      | 0-1   | 0       |
| Vacuum therapy                            | 3          | 0.6         |              |      |              |      |               |       |                     |        |       |         |

**National report for ICUs of other type - Year 2020**  
**Process indicators - Adult elective surgical patients evaluated in the GiViTI model**

| Procedures and/or treatments (Missing=0)                       | Use |      | On admission |      | On discharge |      | Length (days) |       |         | Days from admission |       |         |
|----------------------------------------------------------------|-----|------|--------------|------|--------------|------|---------------|-------|---------|---------------------|-------|---------|
|                                                                | N   | %    | N            | %    | N            | %    | Median        | Q1-Q3 | Missing | Median              | Q1-Q3 | Missing |
| <b>Antibiotics</b>                                             | 443 | 91.9 |              |      |              |      |               |       |         |                     |       |         |
| Antibiotic prophylaxis                                         | 365 | 75.7 | 306          | 63.5 | 112          | 23.2 | 1             | 0-2   | 0       | 0                   | 0-0   | 0       |
| Empirical antibiotic therapy (infection diagnosis confirmed)   | 61  | 12.7 | 20           | 4.1  | 18           | 3.7  | 2             | 1-4   | 0       | 1                   | 1-2   | 0       |
| Empirical antibiotic therapy (infection diagnosis unconfirmed) | 64  | 13.3 | 13           | 2.7  | 51           | 10.6 | 2             | 1-4   | 0       | 1                   | 1-2   | 0       |
| Targeted antibiotic therapy                                    | 70  | 14.5 | 20           | 4.1  | 59           | 12.2 | 5             | 2-11  | 0       | 3                   | 2-4   | 0       |
| Antifungal in empirical therapy                                | 10  | 2.1  | 0            | 0    | 7            | 1.5  | 2             | 1-6   | 0       | 2                   | 0-4   | 0       |
| Antifungal in targeted therapy                                 | 17  | 3.5  | 1            | 0.2  | 8            | 1.7  | 11            | 3-15  | 0       | 2                   | 0-5   | 0       |
| Pre-emptive antifungal                                         | 2   | 0.4  | 1            | 0.2  | 1            | 0.2  | 5             | 5-5   | 0       | 2                   | 2-2   | 0       |

**Antibiotic therapy**

| Pt. infected in ICU only (N=60) | N  | %    |
|---------------------------------|----|------|
| No therapy                      | 4  | 6.7  |
| Only empirical                  | 28 | 46.7 |
| Only targeted                   | 9  | 15.0 |
| Targeted after empirical        | 18 | 30.0 |
| Other                           | 1  | 1.7  |
| Missing                         | 0  |      |

**Antifungal therapy**

| Pt. infected in ICU only (N=60) | N  | %    |
|---------------------------------|----|------|
| No therapy                      | 50 | 83.3 |
| Only empirical                  | 6  | 10.0 |
| Only targeted                   | 4  | 6.7  |
| Targeted after empirical        | 0  | 0.0  |
| Other                           | 0  | 0.0  |
| Missing                         | 0  |      |

**National report for ICUs of other type - Year 2020****Process indicators** - Adult elective surgical patients evaluated in the GiViTI model

|                                    |    | Length (days) |      |      |        |       |         |
|------------------------------------|----|---------------|------|------|--------|-------|---------|
| <b>Invasive ventilation (N=87)</b> | N  | %             | Mean | SD   | Median | Q1-Q3 | Missing |
| Due to pulmonary failure           | 38 | 33.3          | 8.8  | 10.4 | 3      | 1–15  | 0       |
| For airway maintenance             | 33 | 28.9          | 4.5  | 7.0  | 1      | 0–4   | 0       |
| In weaning                         | 9  | 7.9           | 0.7  | 0.5  | 1      | 0–1   | 0       |
| Not evaluable                      | 34 | 29.8          | 1.6  | 1.6  | 1      | 1–1.5 | 27      |
| Reintubation within 48 hours       | 0  | 0.0           |      |      |        |       |         |

| <b>Non invasive ventilation (N=25)</b> | N  | %    |
|----------------------------------------|----|------|
| Non invasive ventilation only          | 15 | 60.0 |
| Non invasive ventilation failed        | 3  | 12.0 |
| For weaning                            | 7  | 28.0 |
| Other                                  | 0  | 0.0  |
| Missing                                | 0  |      |

| <b>Tracheostomy not present on admission (N=9)</b> | N | %    |
|----------------------------------------------------|---|------|
| Surgical                                           | 2 | 22.2 |
| Percutwist                                         | 3 | 33.3 |
| Ciaglia                                            | 1 | 11.1 |
| Monodil. Ciaglia                                   | 1 | 11.1 |
| Fantoni                                            | 0 | 0.0  |
| Griggs                                             | 0 | 0.0  |
| Other Kind                                         | 1 | 11.1 |
| Unknown                                            | 1 | 11.1 |
| Missing                                            | 0 |      |

| <b>Tracheostomy - Days after the beginning of inv. vent. Not present on admission (N=9)</b> | Mean | SD  | Median | Q1–Q3 | Missing |
|---------------------------------------------------------------------------------------------|------|-----|--------|-------|---------|
|                                                                                             | 9.8  | 5.5 | 9      | 8–11  | 0       |

| <b>Invasive monitoring of C.O. (N=10)</b> | N | %    |
|-------------------------------------------|---|------|
| Swan Ganz                                 | 3 | 30.0 |
| PICCO                                     | 6 | 60.0 |
| LIDCO                                     | 1 | 10.0 |
| Vigileo-PRAM                              | 0 | 0.0  |
| Other                                     | 0 | 0.0  |
| Missing                                   | 0 |      |

| <b>SDD (N=0)</b>     | N | %   |
|----------------------|---|-----|
| Topical              | 0 | 0.0 |
| Topical and systemic | 0 | 0.0 |
| Missing              | 0 |     |

| <b>Surgical interventions</b> | N   | %    |
|-------------------------------|-----|------|
| No                            | 459 | 95.2 |
| Yes                           | 23  | 4.8  |
| Missing                       | 0   |      |

| <b>Number of surgical interventions</b> | N   | %    |
|-----------------------------------------|-----|------|
| 0                                       | 459 | 95.2 |
| 1                                       | 14  | 2.9  |
| 2                                       | 5   | 1.0  |
| 3                                       | 2   | 0.4  |
| >3                                      | 2   | 0.4  |
| Missing                                 | 0   |      |

| <b>Surgical interventions Days from admission</b> | Mean | SD  | Median | Q1–Q3 | Missing |
|---------------------------------------------------|------|-----|--------|-------|---------|
|                                                   | 7.6  | 5.5 | 6      | 4–10  | 0       |

| <b>Surgical interventions (top 10)</b> | N  | %   |
|----------------------------------------|----|-----|
| Gastrointestinal surgery               | 29 | 6.0 |
| Other surgery                          | 4  | 0.8 |
| Neurosurgery                           | 2  | 0.4 |
| Hepatic surgery                        | 1  | 0.2 |
| Orthopaedic surgery                    | 1  | 0.2 |
| Thoracic surgery                       | 1  | 0.2 |
| -                                      | 0  | 0.0 |
| -                                      | 0  | 0.0 |
| -                                      | 0  | 0.0 |
| -                                      | 0  | 0.0 |
| Missing                                | 0  |     |

| <b>Non surgical interventions</b> | N   | %    |
|-----------------------------------|-----|------|
| No                                | 471 | 97.7 |
| Yes                               | 11  | 2.3  |
| Missing                           | 0   |      |

| <b>Non surgical interventions Days from admission</b> | Mean | SD  | Median | Q1–Q3   | Missing |
|-------------------------------------------------------|------|-----|--------|---------|---------|
|                                                       | 7.5  | 5.2 | 5      | 4.8–9.5 | 0       |

| <b>Non surgical interventions</b> | N | %   |
|-----------------------------------|---|-----|
| Interventional radiology          | 5 | 1.0 |
| Interventional endoscopy          | 4 | 0.8 |
| Interventional cardiology         | 3 | 0.6 |
| Interventional neuroradiology     | 0 | 0.0 |
| Missing                           | 0 |     |



**National report for ICUs of other type - Year 2020****Outcome indicators - Adult elective surgical patients evaluated in the GiViTI model**

| ICU outcome                   | N   | %    |
|-------------------------------|-----|------|
| Dead                          | 14  | 2.9  |
| Transferred to same hospital  | 457 | 95.4 |
| Transferred to other hospital | 4   | 0.8  |
| Discharged home               | 4   | 0.8  |
| Disch. terminally ill         | 0   | 0.0  |
| Missing                       | 3   |      |

| Transferred to (N=461)         | N   | %    |
|--------------------------------|-----|------|
| Ward                           | 382 | 82.9 |
| Other ICU                      | 18  | 3.9  |
| High dependency care unit      | 61  | 13.2 |
| Rehabilitation                 | 0   | 0.0  |
| Day hospital or Long-term care | 0   | 0.0  |
| Missing                        | 0   |      |

| Reason of transfer to Other ICU (N=18) | N  | %    |
|----------------------------------------|----|------|
| Specialist expertise                   | 3  | 16.7 |
| Step-up care                           | 0  | 0.0  |
| Logistical/organizational reasons      | 11 | 61.1 |
| Step-down care                         | 4  | 22.2 |
| Missing                                | 0  |      |

| Transferred to Same hospital (N=457) | N   | %    |
|--------------------------------------|-----|------|
| Ward                                 | 382 | 83.6 |
| Other ICU                            | 14  | 3.1  |
| High dependency care unit            | 61  | 13.3 |
| Rehabilitation                       | 0   | 0.0  |
| Day hospital or Long-term care       | 0   | 0.0  |
| Missing                              | 0   |      |

| Transferred to Other hospital (N=4) | N | %     |
|-------------------------------------|---|-------|
| Ward                                | 0 | 0.0   |
| Other ICU                           | 4 | 100.0 |
| High dependency care unit           | 0 | 0.0   |
| Rehabilitation                      | 0 | 0.0   |
| Day hospital or Long-term care      | 0 | 0.0   |
| Missing                             | 0 |       |

| ICU mortality | N   | %    |
|---------------|-----|------|
| Alive         | 465 | 97.1 |
| Dead          | 14  | 2.9  |
| Missing       | 3   |      |

| Timing of ICU mortality (N=14) | N  | %    |
|--------------------------------|----|------|
| Daytime (08:00AM - 07:59PM)    | 8  | 57.1 |
| Nighttime (08:00PM - 07:59AM)  | 6  | 42.9 |
| Weekdays (Monday - Friday)     | 11 | 78.6 |
| Weekend (Saturday - Sunday)    | 3  | 21.4 |
| Missing                        | 0  |      |

| Hospital mortality | N   | %    |
|--------------------|-----|------|
| Alive              | 455 | 94.4 |
| Dead               | 27  | 5.6  |
| Missing            | 0   |      |

| Timing of hosp. mortality (N=27) | N  | %    |
|----------------------------------|----|------|
| In ICU                           | 14 | 51.9 |
| Within 24 hours after ICU        | 1  | 3.7  |
| 24-47 hours after ICU            | 0  | 0.0  |
| 48-71 hours after ICU            | 0  | 0.0  |
| 72-95 hours after ICU            | 0  | 0.0  |
| After 95 hours after ICU         | 12 | 44.4 |
| Missing                          | 0  |      |

| Timing of hosp. mortality (days from ICU disch.) Discharged alive from ICU (N=13) |  |      |
|-----------------------------------------------------------------------------------|--|------|
| Mean                                                                              |  | 18.4 |
| SD                                                                                |  | 19.5 |
| Median                                                                            |  | 13   |
| Q1–Q3                                                                             |  | 9–21 |
| Missing                                                                           |  | 0    |

**National report for ICUs of other type - Year 2020****Outcome indicators - Adult elective surgical patients evaluated in the GiViTI model**

| <b>Last hospital mortality</b> | N   | %    |
|--------------------------------|-----|------|
| Alive                          | 454 | 94.2 |
| Dead                           | 28  | 5.8  |
| Missing                        | 0   |      |

| <b>ICU stay (days)</b> |         |     |
|------------------------|---------|-----|
|                        | Mean    | 3.9 |
|                        | SD      | 5.1 |
|                        | Median  | 2   |
|                        | Q1–Q3   | 1–4 |
|                        | Missing | 0   |

| <b>ICU stay (days)</b> |         |     |
|------------------------|---------|-----|
| <b>Alive (N=465)</b>   |         |     |
|                        | Mean    | 3.7 |
|                        | SD      | 4.7 |
|                        | Median  | 2   |
|                        | Q1–Q3   | 1–4 |
|                        | Missing | 0   |

| <b>ICU stay (days)</b> |         |        |
|------------------------|---------|--------|
| <b>Dead (N=14)</b>     |         |        |
|                        | Mean    | 11.9   |
|                        | SD      | 10.6   |
|                        | Median  | 12     |
|                        | Q1–Q3   | 2–19.8 |
|                        | Missing | 0      |

| <b>Stay after ICU (days)</b> |         |      |
|------------------------------|---------|------|
| <b>Alive (N=465)</b>         |         |      |
|                              | Mean    | 10.6 |
|                              | SD      | 19.1 |
|                              | Median  | 6    |
|                              | Q1–Q3   | 4–11 |
|                              | Missing | 0    |

| <b>Hospital stay (days)</b> |         |      |
|-----------------------------|---------|------|
|                             | Mean    | 18.0 |
|                             | SD      | 21.8 |
|                             | Median  | 12   |
|                             | Q1–Q3   | 8–20 |
|                             | Missing | 0    |

| <b>Hospital stay (days)</b> |         |      |
|-----------------------------|---------|------|
| <b>Alive (N=455)</b>        |         |      |
|                             | Mean    | 17.4 |
|                             | SD      | 21.7 |
|                             | Median  | 12   |
|                             | Q1–Q3   | 8–19 |
|                             | Missing | 0    |

| <b>Hospital stay (days)</b> |         |         |
|-----------------------------|---------|---------|
| <b>Dead (N=27)</b>          |         |         |
|                             | Mean    | 27.6    |
|                             | SD      | 20.4    |
|                             | Median  | 24      |
|                             | Q1–Q3   | 14.5–37 |
|                             | Missing | 0       |

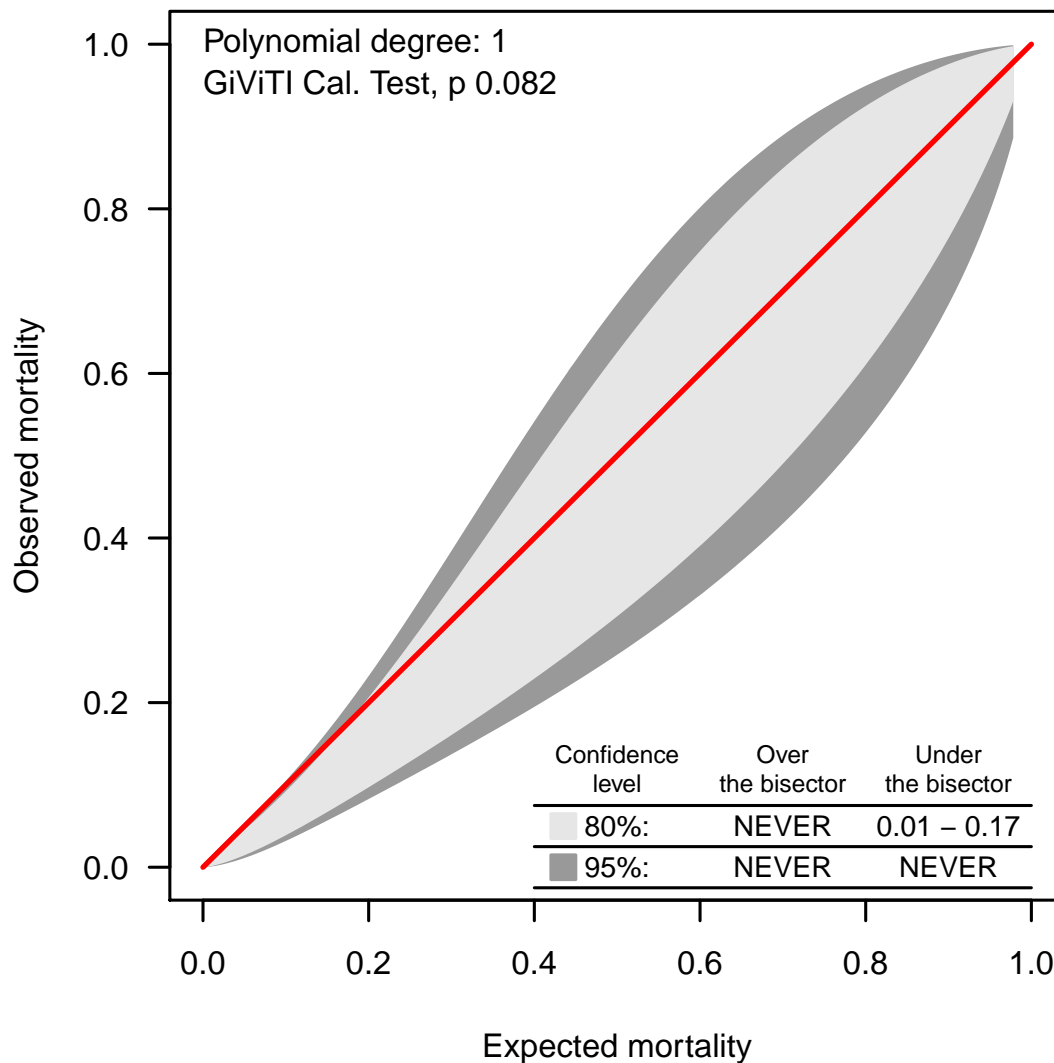
## National report for ICUs of other type - Year 2020

## Analysis of hospital mortality - Adult elective surgical patients evaluated in the GiViTI model

Predictive model: GiViTI 2019

Total patients = 482  
**Total expected deaths (E) = 37.7**  
**Total observed deaths (O) = 28**

**Ratio O/E = 0.74**  
 Confidence interval O/E (95%) = (0.48,1)

**Calibration belt**

The calibration belt allows to compare the observed mortality with the expected one (predictive model: GiViTI 2019). Two different belts are presented: the 80% confidence level belt (in light gray) and the 95% confidence level belt (in dark gray). The belt above the bisector denotes an observed mortality greater than the expected one; vice versa, the belt under the bisector denotes an observed mortality lower than the expected one. As the polynomial degree increases the relation between expected and observed mortality becomes more complex. A significant GiViTI calibration test ( $p < 0.05$ ) denotes a statistically relevant difference between observed and expected mortality. The belt is plotted in the expected mortality range values. For further informations please look at [PLoS ONE 6(2): e16110].



## National report for ICUs of other type - Year 2020

## Characteristics on admission - Adult emergency surgical patients evaluated in the GiViTI model

Patients (N): 495

| Sex     | N   | %    |
|---------|-----|------|
| Male    | 319 | 64.6 |
| Female  | 175 | 35.4 |
| Missing | 1   |      |

| Age (years) | N       | %    |
|-------------|---------|------|
| 17-45       | 73      | 14.7 |
| 46-65       | 153     | 30.9 |
| 66-75       | 113     | 22.8 |
| >75         | 156     | 31.5 |
| Missing     | 0       |      |
| Mean        | 64.7    |      |
| SD          | 17.2    |      |
| Median      | 68      |      |
| Q1–Q3       | 54.5–78 |      |
| Min–Max     | 17–95   |      |

| Body mass Index (BMI) | N   | %    |
|-----------------------|-----|------|
| Underweight           | 21  | 4.3  |
| Normal                | 205 | 41.5 |
| Overweight            | 164 | 33.2 |
| Obese                 | 104 | 21.1 |
| Missing               | 1   |      |

| Pregnancy status       | N  | %    |
|------------------------|----|------|
| <b>Females (N=175)</b> |    |      |
| Not fertile            | 94 | 53.7 |
| Not pregnant/Unknown   | 77 | 44.0 |
| Currently pregnant     | 0  | 0.0  |
| Post partum            | 4  | 2.3  |
| Missing                | 0  |      |

| Comorbidities | N   | %    |
|---------------|-----|------|
| No            | 84  | 17.0 |
| Yes           | 411 | 83.0 |
| Missing       | 0   |      |

| Comorbidities (top 10)               | N   | %    |
|--------------------------------------|-----|------|
| Hypertension                         | 264 | 53.3 |
| Arrhythmia                           | 105 | 21.2 |
| NYHA class II-III                    | 83  | 16.8 |
| Any tumour without metastasis        | 82  | 16.6 |
| Diabetes Type II without insulin tr. | 70  | 14.1 |
| Peripheral vascular disease          | 56  | 11.3 |
| Moderate or severe renal disease     | 55  | 11.1 |
| Endocrine-metabolic diseases         | 52  | 10.5 |
| Drug-induced coagulopathy            | 48  | 9.7  |
| Metastatic cancer                    | 41  | 8.3  |
| Missing                              | 0   |      |

| Stay before ICU (days) | Mean | SD   | Median | Q1–Q3 | Missing |
|------------------------|------|------|--------|-------|---------|
|                        | 4.4  | 11.4 | 1      | 0–4   | 0       |

| Source of admission             | N   | %    |
|---------------------------------|-----|------|
| Same hospital                   | 463 | 93.5 |
| Other hospital                  | 32  | 6.5  |
| Long-term chronic care hospital | 0   | 0.0  |
| Directly from the community     | 0   | 0.0  |
| Missing                         | 0   |      |

| Ward of admission         | N   | %    |
|---------------------------|-----|------|
| <b>Hospital (N=495)</b>   |     |      |
| Medical ward              | 34  | 6.9  |
| Surgical ward             | 259 | 52.3 |
| Emergency room            | 147 | 29.7 |
| Other ICU                 | 30  | 6.1  |
| High dependency care unit | 25  | 5.1  |
| Missing                   | 0   |      |

| Reason for transfer from          | N  | %    |
|-----------------------------------|----|------|
| <b>Other ICU (N=30)</b>           |    |      |
| Specialist expertise              | 12 | 40.0 |
| Step-up care                      | 10 | 33.3 |
| Logistical/organizational reasons | 6  | 20.0 |
| Step-down care                    | 2  | 6.7  |
| Missing                           | 0  |      |

| Ward of admission            | N   | %    |
|------------------------------|-----|------|
| <b>Same hospital (N=463)</b> |     |      |
| Medical ward                 | 34  | 7.3  |
| Surgical ward                | 252 | 54.4 |
| Emergency room               | 130 | 28.1 |
| Other ICU                    | 22  | 4.8  |
| High dependency care unit    | 25  | 5.4  |
| Missing                      | 0   |      |

| Ward of admission            | N  | %    |
|------------------------------|----|------|
| <b>Other hospital (N=32)</b> |    |      |
| Medical ward                 | 0  | 0.0  |
| Surgical ward                | 7  | 21.9 |
| Emergency room               | 17 | 53.1 |
| Other ICU                    | 8  | 25.0 |
| High dependency care unit    | 0  | 0.0  |
| Missing                      | 0  |      |

| Scheduled admission | N   | %    |
|---------------------|-----|------|
| No                  | 494 | 99.8 |
| Yes                 | 1   | 0.2  |
| Missing             | 0   |      |

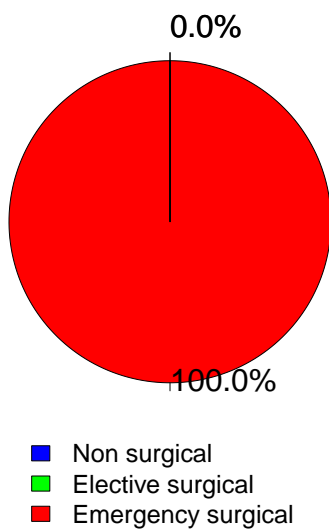
## National report for ICUs of other type - Year 2020

## Characteristics on admission - Adult emergency surgical patients evaluated in the GiViTI model

| Trauma          | N   | %    |
|-----------------|-----|------|
| No              | 360 | 72.7 |
| Yes             | 135 | 27.3 |
| Multiple trauma | 58  | 11.7 |
| Missing         | 0   |      |

| Surgical status    | N   | %     |
|--------------------|-----|-------|
| Non surgical       | 0   | 0.0   |
| Elective surgical  | 0   | 0.0   |
| Emergency surgical | 495 | 100.0 |
| Missing            | 0   |       |

## Surgical status



| Source of admission                 | N   | %    |
|-------------------------------------|-----|------|
| <b>Surgical pt. (N=495)</b>         |     |      |
| Operating theatre of surgical ward  | 206 | 41.6 |
| Operating theatre of emergency room | 121 | 24.4 |
| Surgical ward                       | 53  | 10.7 |
| Other                               | 115 | 23.2 |
| Missing                             | 0   |      |

| Surgical interventions (top 10) | N | %   |
|---------------------------------|---|-----|
| <b>Elective surgical (N=0)</b>  |   |     |
| -                               | 0 | 0.0 |
| -                               | 0 | 0.0 |
| -                               | 0 | 0.0 |
| -                               | 0 | 0.0 |
| -                               | 0 | 0.0 |
| -                               | 0 | 0.0 |
| -                               | 0 | 0.0 |
| -                               | 0 | 0.0 |
| -                               | 0 | 0.0 |
| Missing                         | 0 |     |

| Timing                         | N | %   |
|--------------------------------|---|-----|
| <b>Elective surgical (N=0)</b> |   |     |
| From -7 to -3 days             | 0 | 0.0 |
| From -2 to -1 days             | 0 | 0.0 |
| On ICU admission day           | 0 | 0.0 |
| The day after ICU admission    | 0 | 0.0 |
| Missing                        | 0 |     |

| Surgical interventions (top 10)   | N   | %    |
|-----------------------------------|-----|------|
| <b>Emergency surgical (N=495)</b> |     |      |
| Gastrointestinal surgery          | 227 | 45.9 |
| Neurosurgery                      | 96  | 19.4 |
| Other surgery                     | 39  | 7.9  |
| Orthopaedic surgery               | 35  | 7.1  |
| Organ/s transplantation           | 19  | 3.8  |
| Nephro/Urological surgery         | 15  | 3.0  |
| Abdominal vascular surgery        | 15  | 3.0  |
| Thoracic surgery                  | 14  | 2.8  |
| Peripheral vascular surgery       | 14  | 2.8  |
| Hepatic surgery                   | 11  | 2.2  |
| Missing                           | 10  |      |

| Timing                            | N   | %    |
|-----------------------------------|-----|------|
| <b>Emergency surgical (N=495)</b> |     |      |
| From -7 to -3 days                | 28  | 5.7  |
| From -2 to -1 days                | 72  | 14.5 |
| On ICU admission day              | 426 | 86.1 |
| The day after ICU admission       | 29  | 5.9  |
| Missing                           | 1   |      |

| Non surgical interventions | N   | %    |
|----------------------------|-----|------|
| None                       | 473 | 95.6 |
| Elective                   | 1   | 0.2  |
| Emergency                  | 21  | 4.2  |
| Missing                    | 0   |      |

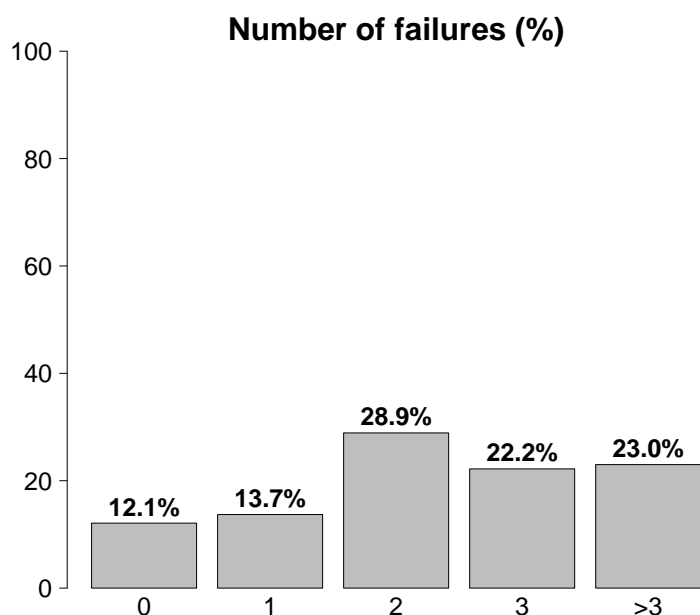
| Non surgical interventions    | N | %     |
|-------------------------------|---|-------|
| <b>Elective (N=1)</b>         |   |       |
| Interventional endoscopy      | 1 | 100.0 |
| Interventional radiology      | 0 | 0.0   |
| Interventional cardiology     | 0 | 0.0   |
| Interventional neuroradiology | 0 | 0.0   |
| Missing                       | 0 |       |

| Non surgical interventions    | N  | %    |
|-------------------------------|----|------|
| <b>Emergency (N=21)</b>       |    |      |
| Interventional radiology      | 10 | 47.6 |
| Interventional endoscopy      | 5  | 23.8 |
| Interventional cardiology     | 1  | 4.8  |
| Interventional neuroradiology | 0  | 0.0  |
| Missing                       | 5  |      |

## National report for ICUs of other type - Year 2020

## Characteristics on admission - Adult emergency surgical patients evaluated in the GiViTI model

| Reason for admission                   | N   | %    |
|----------------------------------------|-----|------|
| Monitoring/Weaning                     | 91  | 18.4 |
| Post surgical weaning                  | 9   | 1.8  |
| Surgical monitoring                    | 82  | 16.6 |
| Post interventional weaning            | 0   | 0.0  |
| Interventional monitoring              | 0   | 0.0  |
| Non surgical monitoring                | 0   | 0.0  |
| Missing                                | 0   |      |
| Admission for procedures/treatments    | 0   | 0.0  |
| Intensive Treatment                    | 404 | 81.6 |
| Only ventilatory support               | 47  | 9.5  |
| Only cardiovascular support            | 57  | 11.5 |
| Ventilatory and cardiovascular support | 300 | 60.6 |
| Missing                                | 0   |      |
| Palliative Sedation                    | 0   | 0.0  |
| Diagnosis of death/Organ donation      | 0   | 0.0  |
| Missing                                | 0   |      |



| Failures on admission     | N   | %    |
|---------------------------|-----|------|
| No                        | 60  | 12.1 |
| Yes                       | 435 | 87.9 |
| A: Respiratory failure    | 347 | 70.1 |
| B: Cardiovascular failure | 357 | 72.1 |
| C: Neurological failure   | 37  | 7.5  |
| D: Hepatic failure        | 14  | 2.8  |
| E: Renal failure          | 227 | 45.9 |
| F: Acute skin failure     | 3   | 0.6  |
| G: Metabolic failure      | 151 | 30.5 |
| H: Coagulation failure    | 32  | 6.5  |
| Missing                   | 0   |      |

| Failures on admission (top 10) | N  | %    |
|--------------------------------|----|------|
| AB                             | 99 | 20.0 |
| ABEG                           | 68 | 13.7 |
| ABE                            | 49 | 9.9  |
| A                              | 25 | 5.1  |
| ABG                            | 20 | 4.0  |
| BE                             | 19 | 3.8  |
| E                              | 19 | 3.8  |
| B                              | 18 | 3.6  |
| BEG                            | 15 | 3.0  |
| ABC                            | 13 | 2.6  |
| Missing                        | 0  |      |

| Respiratory failure          | N   | %    |
|------------------------------|-----|------|
| None                         | 148 | 29.9 |
| Only hypoxic failure         | 94  | 19.0 |
| Only hypercapnic failure     | 17  | 3.4  |
| Hypoxic-hypercapnic failure  | 27  | 5.5  |
| Intubation for airway maint. | 209 | 42.2 |
| Missing                      | 0   |      |

| Cardiovascular failure         | N   | %    |
|--------------------------------|-----|------|
| None                           | 138 | 27.9 |
| Without shock                  | 130 | 26.3 |
| Cardiogenic shock              | 4   | 0.8  |
| Septic shock                   | 125 | 25.3 |
| Haemorrhagic/hypovolemic shock | 56  | 11.3 |
| Hypovolemic shock              | 6   | 1.2  |
| Anaphylactic shock             | 0   | 0.0  |
| Neurogenic shock               | 7   | 1.4  |
| Other shock                    | 8   | 1.6  |
| Mixed shock                    | 21  | 4.2  |
| Missing                        | 0   |      |

| Neurologic failure       | N   | %    |
|--------------------------|-----|------|
| None                     | 312 | 89.4 |
| Cerebral coma            | 31  | 8.9  |
| Metabolic coma           | 5   | 1.4  |
| Postanoxic coma          | 1   | 0.3  |
| Toxic coma               | 0   | 0.0  |
| Missing or not evaluable | 146 |      |

| Renal failure (AKIN) | N   | %    |
|----------------------|-----|------|
| None                 | 268 | 54.1 |
| Mild                 | 108 | 21.8 |
| Moderate             | 64  | 12.9 |
| Severe               | 55  | 11.1 |
| Missing              | 0   |      |

| Metabolic failure                       | N   | %    |
|-----------------------------------------|-----|------|
| None                                    | 344 | 69.5 |
| pH ≤ 7.3, PaCO <sub>2</sub> < 45 mmHg   | 53  | 10.7 |
| Base deficit ≥ 5 mmol/L, lactate > 1.5x | 98  | 19.8 |
| Missing                                 | 0   |      |

**National report for ICUs of other type - Year 2020**

**Characteristics on admission - Adult emergency surgical patients evaluated in the GiViTI model**

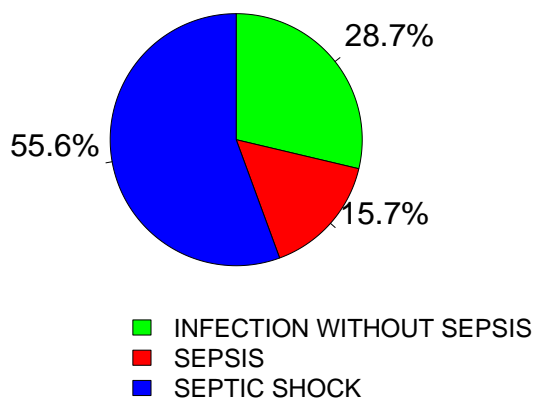
| Clinical conditions on admission         | N   | %    |
|------------------------------------------|-----|------|
| Respiratory                              | 100 | 20.2 |
| Aspiration pneumonia                     | 36  | 7.3  |
| Pleural effusion                         | 32  | 6.5  |
| Atelectasis                              | 14  | 2.8  |
| Mild ARDS                                | 9   | 1.8  |
| Pneumothorax/Pneumomediastinum           | 8   | 1.6  |
| Cardiovascular                           | 69  | 13.9 |
| Acute severe arrhythmia: tachycardias    | 21  | 4.2  |
| Left heart failure without pulm. edema   | 18  | 3.6  |
| Pulmonary hypertension                   | 11  | 2.2  |
| Peripheral vascular disease              | 10  | 2.0  |
| Cardiac arrest                           | 9   | 1.8  |
| Neurological                             | 29  | 5.9  |
| Brain tumour                             | 7   | 1.4  |
| Spontaneous Intraparenchymal bleeding    | 6   | 1.2  |
| Non traumatic cerebral oedema            | 5   | 1.0  |
| Intracranial hypertension                | 4   | 0.8  |
| Seizures                                 | 3   | 0.6  |
| Gastrointestinal and hepatic             | 204 | 41.2 |
| Gastrointestinal perforation             | 59  | 11.9 |
| Intestinal occlusion                     | 57  | 11.5 |
| Digestive tract malignancy               | 39  | 7.9  |
| Paralytic Ileus                          | 35  | 7.1  |
| Bowel ischaemia                          | 26  | 5.3  |
| Trauma (anatomical districts)            | 135 | 27.3 |
| Head                                     | 87  | 17.6 |
| Chest                                    | 48  | 9.7  |
| Spine                                    | 39  | 7.9  |
| Pelvis/bone/joint & muscle               | 35  | 7.1  |
| Abdomen                                  | 22  | 4.4  |
| Major vessels injury                     | 10  | 2.0  |
| Miscellaneous                            | 1   | 0.2  |
| Other                                    | 116 | 23.4 |
| Other disease                            | 38  | 7.7  |
| Nephrourologic disease                   | 35  | 7.1  |
| Coagulation disorder                     | 32  | 6.5  |
| Metabolic disorder                       | 20  | 4.0  |
| Haematological disease                   | 11  | 2.2  |
| Post transplantation                     | 29  | 5.9  |
| Liver transplantation                    | 14  | 2.8  |
| Lung transplantation                     | 9   | 1.8  |
| Infections                               | 261 | 52.7 |
| Pneumonia                                | 83  | 16.8 |
| NON-surgical secondary peritonitis       | 54  | 10.9 |
| Post-surgical peritonitis                | 38  | 7.7  |
| Clinical sepsis                          | 24  | 4.8  |
| NON-surgical skin/soft tissue infection  | 24  | 4.8  |
| Primary peritonitis                      | 17  | 3.4  |
| Cholecystitis/choolangitis               | 13  | 2.6  |
| Post-surgical skin/soft tissue infection | 11  | 2.2  |
| NON-surgical urinary tract infection     | 9   | 1.8  |
| Tertiary peritonitis                     | 5   | 1.0  |
| Missing                                  | 0   |      |

| Trauma (anatomical districts)        | N  | %    |
|--------------------------------------|----|------|
| Head                                 | 87 | 17.6 |
| Traumatic Subdural haematoma         | 59 | 11.9 |
| Traumatic subarachnoid haemorrhage   | 54 | 10.9 |
| Skull fracture                       | 46 | 9.3  |
| Cerebral contusion/laceration        | 41 | 8.3  |
| Maxillofacial fracture               | 35 | 7.1  |
| Spine                                | 39 | 7.9  |
| Vertebral fracture, without deficit  | 24 | 4.8  |
| Tetraplegia                          | 8  | 1.6  |
| Lumbar injury, incomplete deficit    | 3  | 0.6  |
| Chest                                | 48 | 9.7  |
| Traum. haemothorax/pneumothorax      | 27 | 5.5  |
| Other injuries of the chest          | 26 | 5.3  |
| Severe lung contusion/laceration     | 19 | 3.8  |
| Abdomen                              | 22 | 4.4  |
| Minor injuries of the abdomen        | 7  | 1.4  |
| Bowel transection/perforation        | 6  | 1.2  |
| Liver: Moderate-Severe laceration    | 6  | 1.2  |
| Pelvis/bone/joint & muscle           | 35 | 7.1  |
| Long bone fracture                   | 28 | 5.7  |
| Multiple fracture of the pelvis      | 5  | 1.0  |
| Massive crush/amputation             | 4  | 0.8  |
| Major vessels injury                 | 10 | 2.0  |
| Proximal limbs vessels: transection  | 4  | 0.8  |
| Major abdominal vessels: transection | 3  | 0.6  |
| Neck vessels: dissection/transection | 2  | 0.4  |
| Miscellaneous                        | 1  | 0.2  |
| Inhalation injury                    | 1  | 0.2  |
| -                                    | 0  | 0.0  |
| Missing                              | 0  |      |

| Infection severity on admission | N   | %    |
|---------------------------------|-----|------|
| None                            | 234 | 47.3 |
| INFECTION WITHOUT SEPSIS        | 75  | 15.2 |
| SEPSIS                          | 41  | 8.3  |
| SEPTIC SHOCK                    | 145 | 29.3 |
| Missing                         | 0   |      |

**Infection severity on admission**

Patients infected (N=261)

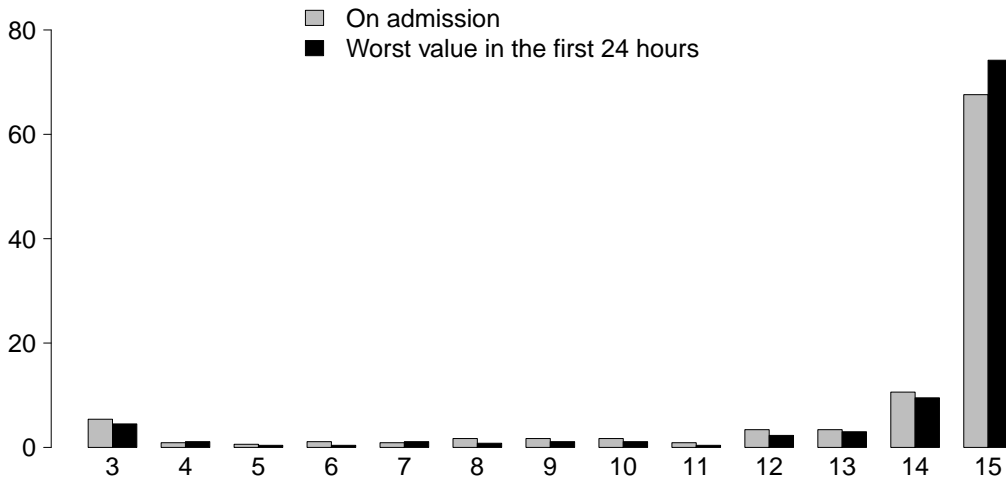




**National report for ICUs of other type - Year 2020**

**Severity scores - Adult emergency surgical patients evaluated in the GiViTI model**

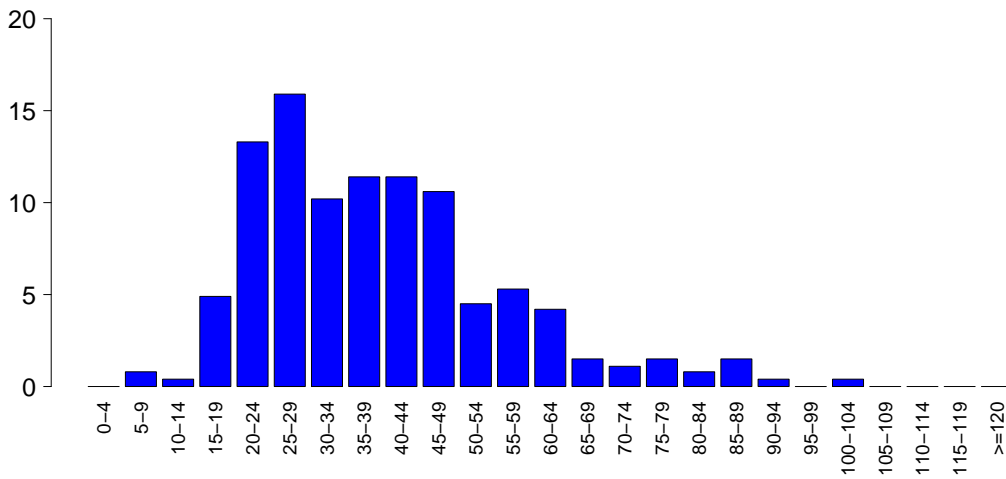
**Glasgow Coma Scale (%)**



| GCS (admission) |       |
|-----------------|-------|
| Median          | 15    |
| Q1–Q3           | 14–15 |
| Not evaluable   | 146   |
| Missing         | 0     |

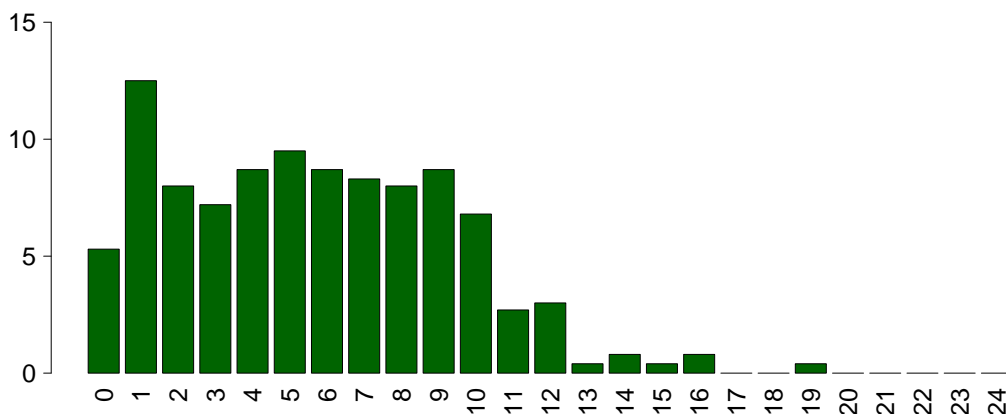
| GCS (first 24 hours) |       |
|----------------------|-------|
| Median               | 15    |
| Q1–Q3                | 14–15 |
| Not evaluable        | 231   |
| Missing              | 0     |

**SAPS II (%)**



| SAPSII        |       |
|---------------|-------|
| Mean          | 39.0  |
| SD            | 16.9  |
| Median        | 37    |
| Q1–Q3         | 26–48 |
| Not evaluable | 231   |
| Missing       | 0     |

**SOFA (%)**



| SOFA          |     |
|---------------|-----|
| Mean          | 5.6 |
| SD            | 3.7 |
| Median        | 5   |
| Q1–Q3         | 2–8 |
| Not evaluable | 231 |
| Missing       | 0   |

**National report for ICUs of other type - Year 2020****Characteristics during the stay - Adult emergency surgical patients evaluated in the GiViTI model**

| <b>Complications during the stay</b> | N   | %    |
|--------------------------------------|-----|------|
| No                                   | 177 | 35.8 |
| Yes                                  | 318 | 64.2 |
| Missing                              | 0   |      |

| <b>Failures during the stay</b> | N   | %    |
|---------------------------------|-----|------|
| No                              | 332 | 67.1 |
| Yes                             | 163 | 32.9 |

|                           |    |      |
|---------------------------|----|------|
| A: Respiratory failure    | 51 | 10.3 |
| B: Cardiovascular failure | 57 | 11.5 |
| C: Neurological failure   | 23 | 4.6  |
| D: Hepatic failure        | 28 | 5.7  |
| E: Renal failure (AKIN)   | 93 | 18.8 |
| F: Acute skin failure     | 1  | 0.2  |
| G: Metabolic failure      | 48 | 9.7  |
| H: Coagulation failure    | 21 | 4.2  |
| Missing                   | 0  |      |

| <b>Failures during the stay (top 10)</b> | N  | %   |
|------------------------------------------|----|-----|
| E                                        | 30 | 6.1 |
| G                                        | 21 | 4.2 |
| AE                                       | 12 | 2.4 |
| B                                        | 12 | 2.4 |
| A                                        | 11 | 2.2 |
| BE                                       | 8  | 1.6 |
| AB                                       | 5  | 1.0 |
| DEG                                      | 5  | 1.0 |
| ABCE                                     | 4  | 0.8 |
| D                                        | 4  | 0.8 |
| Missing                                  | 0  |     |

| <b>Respiratory failure occurred</b> | N   | %    |
|-------------------------------------|-----|------|
| None                                | 444 | 89.7 |
| Intubation for airway maint.        | 7   | 1.4  |
| Hypoxic failure                     | 36  | 7.3  |
| Hypercapnic failure                 | 17  | 3.4  |
| Missing                             | 0   |      |

| <b>Cardiovascular failure occurred</b> | N   | %    |
|----------------------------------------|-----|------|
| None                                   | 438 | 88.5 |
| Cardiogenic shock                      | 14  | 2.8  |
| Hypovolemic shock                      | 3   | 0.6  |
| Haemorrhagic/hypovolemic shock         | 7   | 1.4  |
| Septic shock                           | 35  | 7.1  |
| Anaphylactic shock                     | 1   | 0.2  |
| Neurogenic shock                       | 0   | 0.0  |
| Other shock                            | 3   | 0.6  |
| Missing                                | 0   |      |

| <b>Neurological failure occurred</b> | N   | %    |
|--------------------------------------|-----|------|
| None                                 | 472 | 95.4 |
| Cerebral coma                        | 11  | 2.2  |
| Metabolic coma                       | 12  | 2.4  |
| Postanoxic coma                      | 4   | 0.8  |
| Missing                              | 0   |      |

| <b>Renal failure occurred (AKIN)</b> | N   | %    |
|--------------------------------------|-----|------|
| None                                 | 402 | 81.2 |
| Mild                                 | 20  | 4.0  |
| Moderate                             | 23  | 4.6  |
| Severe                               | 50  | 10.1 |
| Missing                              | 0   |      |

| <b>Complications during the stay</b>           | N          | %           |
|------------------------------------------------|------------|-------------|
| <b>Respiratory</b>                             | <b>115</b> | <b>23.2</b> |
| Pleural effusion                               | 48         | 9.7         |
| Aspiration pneumonia                           | 31         | 6.3         |
| Atelectasis                                    | 30         | 6.1         |
| Moderate ARDS                                  | 13         | 2.6         |
| Pneumothorax/Pneumomediastinum                 | 10         | 2.0         |
| <b>Cardiovascular</b>                          | <b>89</b>  | <b>18.0</b> |
| Acute severe arrhythmia: tachycardias          | 50         | 10.1        |
| Deep venous thrombosis                         | 21         | 4.2         |
| Cardiac arrest                                 | 12         | 2.4         |
| Pulmonary edema                                | 9          | 1.8         |
| Left heart failure w/o pulm. edema             | 7          | 1.4         |
| <b>Neurological</b>                            | <b>95</b>  | <b>19.2</b> |
| Drowsiness/agitation/delirium                  | 60         | 12.1        |
| Brain edema                                    | 23         | 4.6         |
| Intracranial hypertension                      | 14         | 2.8         |
| CrIMyNe                                        | 13         | 2.6         |
| New ischaemic stroke                           | 9          | 1.8         |
| <b>Gastrointestinal and hepatic</b>            | <b>113</b> | <b>22.8</b> |
| Paralytic Ileus                                | 57         | 11.5        |
| Liver Dysfunction Syndrome                     | 22         | 4.4         |
| Gastrointestinal perforation                   | 21         | 4.2         |
| Bowel ischaemia                                | 18         | 3.6         |
| Ascites                                        | 14         | 2.8         |
| <b>Other</b>                                   | <b>90</b>  | <b>18.2</b> |
| Metabolic disorder                             | 48         | 9.7         |
| Nephrourologic disease                         | 28         | 5.7         |
| Other disease                                  | 27         | 5.5         |
| Other skin and/or soft tissue pathology        | 7          | 1.4         |
| Category/Stage II: Partial Thickness Skin Loss | 4          | 0.8         |
| Blunt cerebral vessels trauma                  | 2          | 0.4         |
| Delayed spleen rupture                         | 2          | 0.4         |
| <b>Infections</b>                              | <b>156</b> | <b>31.5</b> |
| Pneumonia                                      | 93         | 18.8        |
| Post-surgical peritonitis                      | 19         | 3.8         |
| Post-surgical skin/soft tissue infection       | 17         | 3.4         |
| NON-surgical urinary tract infection           | 17         | 3.4         |
| Clinical sepsis                                | 9          | 1.8         |
| Other fungal infections                        | 9          | 1.8         |
| L.R.T.I. other than pneumonia                  | 6          | 1.2         |
| NON-surgical secondary peritonitis             | 6          | 1.2         |
| Tertiary peritonitis                           | 6          | 1.2         |
| Cholecystitis/cholangitis                      | 5          | 1.0         |
| Missing                                        | 0          |             |

## National report for ICUs of other type - Year 2020

## Characteristics during the stay - Adult emergency surgical patients evaluated in the GiViTI model

| Infections                       |     |      | Maximum severity of infection |     |      |
|----------------------------------|-----|------|-------------------------------|-----|------|
|                                  | N   | %    |                               | N   | %    |
| None                             | 151 | 30.5 | None                          | 151 | 30.5 |
| Only on admission                | 188 | 38.0 | INFECTION WITHOUT SEPSIS      | 122 | 24.6 |
| On admission and during ICU stay | 73  | 14.7 | SEPSIS                        | 60  | 12.1 |
| Only during ICU stay             | 83  | 16.8 | SEPTIC SHOCK                  | 162 | 32.7 |
| Missing                          | 0   |      | Missing                       | 0   |      |

## Severity evolution

| Severity evolution |                          | During the stay |            |                          |              |              |
|--------------------|--------------------------|-----------------|------------|--------------------------|--------------|--------------|
|                    |                          | N (R %)         | None       | INFECTION WITHOUT SEPSIS | SEPSIS       | SEPTIC SHOCK |
| Admission          | None                     | 151 (64.5%)     | 53 (22.6%) | 17 (7.3%)                | 13 (5.6%)    | 234          |
|                    | INFECTION WITHOUT SEPSIS | -               | 69 (92.0%) | 5 (6.7%)                 | 1 (1.3%)     | 75           |
|                    | SEPSIS                   | -               | -          | 38 (92.7%)               | 3 (7.3%)     | 41           |
|                    | SEPTIC SHOCK             | -               | -          | -                        | 145 (100.0%) | 145          |
|                    | TOT                      | 151             | 122        | 60                       | 162          | 495          |

| Ventil. Associat. Pneumonia (VAP) | N   | %    |
|-----------------------------------|-----|------|
| No                                | 408 | 82.4 |
| Yes                               | 87  | 17.6 |
| Missing                           | 0   |      |

## Incidence of VAP

(Pts. with VAP/1000 days of VM pre-VAP)

|          |           |
|----------|-----------|
| Estimate | 32.1      |
| CI (95%) | 25.7–39.5 |

## Incidence of VAP

(Pts. with VAP/pts. ventilated for 8 days)

|          |           |
|----------|-----------|
| Estimate | 25.6%     |
| CI (95%) | 20.5–31.6 |

| Catheter Bacteraemia (CR-BSI) | N   | %    |
|-------------------------------|-----|------|
| No                            | 494 | 99.8 |
| Yes                           | 1   | 0.2  |
| Missing                       | 0   |      |

## Incidence of CR-BSI

(Pts. with CR-BSI/1000 days of CVC pre-CR-BSI)

|          |         |
|----------|---------|
| Estimate | 0.2     |
| CI (95%) | 0.0–1.1 |

## Incidence of CR-BSI

(Pts. with CR-BSI/pts. catheterized for 12 days)

|          |         |
|----------|---------|
| Estimate | 0.2%    |
| CI (95%) | 0.0–1.3 |

**National report for ICUs of other type - Year 2020**  
**Process indicators - Adult emergency surgical patients evaluated in the GiViTI model**

| Procedures and/or treatments (Missing=0)  | Use |      | On admission |      | On discharge |      | Length (days) |       | Days from admission |        |       |         |
|-------------------------------------------|-----|------|--------------|------|--------------|------|---------------|-------|---------------------|--------|-------|---------|
|                                           | N   | %    | N            | %    | N            | %    | Median        | Q1-Q3 | Missing             | Median | Q1-Q3 | Missing |
| <b>Procedures (antibiotics excluded)</b>  | 493 | 99.6 |              |      |              |      |               |       |                     |        |       |         |
| Invasive ventilation                      | 368 | 74.3 | 308          | 62.2 | 72           | 14.5 | 5             | 2-14  | 0                   | 0      | 0-1   | 0       |
| Non invasive ventilation                  | 61  | 12.3 | 6            | 1.2  | 23           | 4.6  | 2             | 1-4   | 0                   | 4      | 0-10  | 0       |
| Tracheostomy                              | 72  | 14.5 | 5            | 1    | 54           | 10.9 | 8             | 3-18  | 0                   | 15     | 10-23 | 0       |
| iNO (inhaled nitric oxide)                | 24  | 4.8  | 10           | 2    | 0            | 0    | 3             | 2-6   | 0                   | 4      | 0-8   | 0       |
| Central Venous Catheter                   | 440 | 88.9 | 354          | 71.5 | 336          | 67.9 | 7             | 3-15  | 0                   | 0      | 0-0   | 0       |
| PICC                                      | 41  | 8.3  | 11           | 2.2  | 26           | 5.3  | 3             | 1-6   | 0                   | 2      | 0-16  | 0       |
| Arterial Catheter                         | 469 | 94.7 | 371          | 74.9 | 226          | 45.7 | 6             | 3-14  | 0                   | 0      | 0-0   | 0       |
| Vasoactive drugs                          | 407 | 82.2 | 298          | 60.2 | 42           | 8.5  | 3             | 1-9   | 0                   | 0      | 0-0   | 0       |
| Antiarrhythmics                           | 71  | 14.3 | 12           | 2.4  | 18           | 3.6  | 2             | 1-5   | 0                   | 3      | 1-8   | 0       |
| IABP                                      | 0   | 0.0  |              |      |              |      |               |       |                     |        |       |         |
| Invasive monitoring of C.O.               | 30  | 6.1  | 10           | 2    | 5            | 1    | 4             | 3-8   | 0                   | 1      | 0-3   | 0       |
| Continuous monitoring of ScVO2            | 4   | 0.8  | 3            | 0.6  | 0            | 0    | 2             | 2-3   | 0                   | 2      | 2-2   | 0       |
| Temporary pacing                          | 0   | 0.0  |              |      |              |      |               |       |                     |        |       |         |
| Ventricular assistance                    | 0   | 0.0  |              |      |              |      |               |       |                     |        |       |         |
| DC-shock                                  | 15  | 3.0  |              |      |              |      |               |       |                     | 2      | 2-4   | 0       |
| CPR                                       | 8   | 1.6  |              |      |              |      |               |       |                     | 0      | 0-3   | 0       |
| Massive blood transfusion                 | 6   | 1.2  |              |      |              |      |               |       |                     | 0      | 0-0   | 0       |
| ICP monitoring without CSF drainage       | 69  | 13.9 | 62           | 12.5 | 6            | 1.2  | 7             | 3-14  | 0                   | 0      | 0-0   | 0       |
| ICP monitoring with CSF drainage          | 10  | 2.0  | 5            | 1    | 5            | 1    | 18            | 11-22 | 0                   | 5      | 2-14  | 0       |
| External ventricular drainage without ICP | 7   | 1.4  | 4            | 0.8  | 2            | 0.4  | 7             | 4-14  | 0                   | 4      | 4-14  | 0       |
| Haemofiltration                           | 1   | 0.2  | 0            | 0    | 0            | 0    | 3             | 3-3   | 0                   | 1      | 1-1   | 0       |
| Haemodialysis                             | 56  | 11.3 | 16           | 3.2  | 17           | 3.4  | 5             | 1-15  | 0                   | 4      | 1-7   | 0       |
| ECMO                                      | 1   | 0.2  | 1            | 0.2  | 0            | 0    | 2             | 2-2   | 0                   |        |       |         |
| Hepatic clearance techniques              | 1   | 0.2  |              |      |              |      |               |       |                     |        |       |         |
| Clearance techniques during sepsis        | 3   | 0.6  | 0            | 0    | 1            | 0.2  | 1             | 0-1   | 0                   | 1      | 1-3   | 0       |
| IAP (intra-abdominal pressure)            | 109 | 22.0 |              |      |              |      |               |       |                     |        |       |         |
| Hypothermia                               | 10  | 2.0  | 4            | 0.8  | 0            | 0    | 1             | 1-2   | 0                   | 0      | 0-1   | 0       |
| Enteral nutrition                         | 292 | 59.0 | 17           | 3.4  | 171          | 34.5 | 8             | 3-17  | 0                   | 1      | 1-2   | 0       |
| Parenteral nutrition                      | 336 | 67.9 | 44           | 8.9  | 152          | 30.7 | 4             | 2-11  | 0                   | 1      | 1-2   | 0       |
| SDD (Topical, Topical and systemic)       | 0   | 0.0  |              |      |              |      |               |       |                     |        |       |         |
| Patient restraint                         | 16  | 3.2  |              |      |              |      |               |       |                     |        |       |         |
| Peridural catheter                        | 3   | 0.6  | 3            | 0.6  | 2            | 0.4  | 4             | 2-5   | 0                   |        |       |         |
| Electrical cardioversion                  | 5   | 1.0  |              |      |              |      |               |       |                     | 2      | 2-5   | 0       |
| Vacuum therapy                            | 21  | 4.2  |              |      |              |      |               |       |                     |        |       |         |

**National report for ICUs of other type - Year 2020**  
**Process indicators - Adult emergency surgical patients evaluated in the GiViTI model**

| Procedures and/or treatments (Missing=0)                       | Use |      | On admission |      | On discharge |      | Length (days) |       |         | Days from admission |       |         |
|----------------------------------------------------------------|-----|------|--------------|------|--------------|------|---------------|-------|---------|---------------------|-------|---------|
|                                                                | N   | %    | N            | %    | N            | %    | Median        | Q1-Q3 | Missing | Median              | Q1-Q3 | Missing |
| <b>Antibiotics</b>                                             | 474 | 95.8 |              |      |              |      |               |       |         |                     |       |         |
| Antibiotic prophylaxis                                         | 145 | 29.3 | 102          | 20.6 | 42           | 8.5  | 2             | 1-3   | 0       | 0                   | 0-0   | 0       |
| Empirical antibiotic therapy (infection diagnosis confirmed)   | 221 | 44.6 | 136          | 27.5 | 38           | 7.7  | 3             | 2-5   | 0       | 0                   | 0-2   | 0       |
| Empirical antibiotic therapy (infection diagnosis unconfirmed) | 93  | 18.8 | 47           | 9.5  | 70           | 14.1 | 4             | 2-5   | 0       | 0                   | 0-1   | 0       |
| Targeted antibiotic therapy                                    | 240 | 48.5 | 46           | 9.3  | 153          | 30.9 | 9             | 4-17  | 0       | 3                   | 2-5   | 0       |
| Antifungal in empirical therapy                                | 41  | 8.3  | 13           | 2.6  | 9            | 1.8  | 5             | 3-11  | 0       | 1                   | 0-6   | 0       |
| Antifungal in targeted therapy                                 | 54  | 10.9 | 10           | 2    | 32           | 6.5  | 12            | 7-23  | 0       | 6                   | 2-12  | 0       |
| Pre-emptive antifungal                                         | 6   | 1.2  | 4            | 0.8  | 2            | 0.4  | 5             | 5-8   | 0       | 16                  | 15-16 | 0       |

**Antibiotic therapy**

| Pt. infected in ICU only (N=83) | N  | %    |
|---------------------------------|----|------|
| No therapy                      | 2  | 2.4  |
| Only empirical                  | 15 | 18.1 |
| Only targeted                   | 15 | 18.1 |
| Targeted after empirical        | 42 | 50.6 |
| Other                           | 9  | 10.8 |
| Missing                         | 0  |      |

**Antifungal therapy**

| Pt. infected in ICU only (N=83) | N  | %    |
|---------------------------------|----|------|
| No therapy                      | 67 | 80.7 |
| Only empirical                  | 4  | 4.8  |
| Only targeted                   | 8  | 9.6  |
| Targeted after empirical        | 3  | 3.6  |
| Other                           | 1  | 1.2  |
| Missing                         | 0  |      |

**National report for ICUs of other type - Year 2020****Process indicators** - Adult emergency surgical patients evaluated in the GiViTI model  
Length (days)

| Invasive ventilation (N=368) | N   | %    | Mean | SD   | Median | Q1-Q3   | Missing |
|------------------------------|-----|------|------|------|--------|---------|---------|
| Due to pulmonary failure     | 145 | 35.2 | 10.3 | 13.6 | 5      | 2–13    | 0       |
| For airway maintenance       | 202 | 49.0 | 10.0 | 10.7 | 6      | 2–15    | 0       |
| In weaning                   | 9   | 2.2  | 0.6  | 0.5  | 1      | 0–1     | 0       |
| Not evaluable                | 56  | 13.6 | 5.8  | 10.5 | 1      | 0.8–7.2 | 44      |
| Reintubation within 48 hours | 7   | 1.7  | 4.0  | 2.4  | 3      | 2.5–5.5 | 0       |

| Non invasive ventilation (N=61) | N  | %    |
|---------------------------------|----|------|
| Non invasive ventilation only   | 15 | 24.6 |
| Non invasive ventilation failed | 8  | 13.1 |
| For weaning                     | 31 | 50.8 |
| Other                           | 7  | 11.5 |
| Missing                         | 0  |      |

| Tracheostomy not present on admission (N=67) | N  | %    |
|----------------------------------------------|----|------|
| Surgical                                     | 13 | 19.4 |
| Percutwist                                   | 21 | 31.3 |
| Ciaglia                                      | 17 | 25.4 |
| Monodil. Ciaglia                             | 1  | 1.5  |
| Fantoni                                      | 0  | 0.0  |
| Griggs                                       | 4  | 6.0  |
| Other Kind                                   | 5  | 7.5  |
| Unknown                                      | 6  | 9.0  |
| Missing                                      | 0  |      |

**Tracheostomy - Days after the beginning of inv. vent. Not present on admission (N=67)**

|         |         |
|---------|---------|
| Mean    | 17.0    |
| SD      | 9.9     |
| Median  | 15      |
| Q1–Q3   | 10–22.5 |
| Missing | 0       |

| Invasive monitoring of C.O. (N=30) | N  | %    |
|------------------------------------|----|------|
| Swan Ganz                          | 4  | 13.3 |
| PICCO                              | 24 | 80.0 |
| LIDCO                              | 1  | 3.3  |
| Vigileo-PRAM                       | 0  | 0.0  |
| Other                              | 1  | 3.3  |
| Missing                            | 0  |      |

| SDD (N=0)            | N | %   |
|----------------------|---|-----|
| Topical              | 0 | 0.0 |
| Topical and systemic | 0 | 0.0 |
| Missing              | 0 |     |

| Surgical interventions | N   | %    |
|------------------------|-----|------|
| No                     | 393 | 79.4 |
| Yes                    | 102 | 20.6 |
| Missing                | 0   |      |

| Number of surgical interventions | N   | %    |
|----------------------------------|-----|------|
| 0                                | 393 | 79.4 |
| 1                                | 51  | 10.3 |
| 2                                | 27  | 5.5  |
| 3                                | 9   | 1.8  |
| >3                               | 15  | 3.0  |
| Missing                          | 0   |      |

**Surgical interventions****Days from admission**

|         |      |
|---------|------|
| Mean    | 10.8 |
| SD      | 10.2 |
| Median  | 7    |
| Q1–Q3   | 4–14 |
| Missing | 0    |

**Surgical interventions (top 10)**

|                           | N   | %    |
|---------------------------|-----|------|
| Gastrointestinal surgery  | 119 | 24.0 |
| Neurosurgery              | 22  | 4.4  |
| Other surgery             | 20  | 4.0  |
| Orthopaedic surgery       | 10  | 2.0  |
| Thoracic surgery          | 10  | 2.0  |
| Nephro/Urological surgery | 6   | 1.2  |
| ENT surgery               | 5   | 1.0  |
| Maxillo-Facial surgery    | 4   | 0.8  |
| Hepatic surgery           | 1   | 0.2  |
| Plastic surgery           | 1   | 0.2  |
| Missing                   | 0   |      |

**Non surgical interventions**

|         | N   | %    |
|---------|-----|------|
| No      | 453 | 91.5 |
| Yes     | 42  | 8.5  |
| Missing | 0   |      |

**Non surgical interventions****Days from admission**

|         |        |
|---------|--------|
| Mean    | 16.3   |
| SD      | 11.1   |
| Median  | 12     |
| Q1–Q3   | 9–22.5 |
| Missing | 0      |

**Non surgical interventions**

|                               | N  | %   |
|-------------------------------|----|-----|
| Interventional endoscopy      | 27 | 5.5 |
| Interventional radiology      | 22 | 4.4 |
| Interventional cardiology     | 3  | 0.6 |
| Interventional neuroradiology | 0  | 0.0 |
| Missing                       | 0  |     |

**National report for ICUs of other type - Year 2020****Outcome indicators - Adult emergency surgical patients evaluated in the GiViTI model**

| <b>ICU outcome</b>            | <b>N</b> | <b>%</b> |
|-------------------------------|----------|----------|
| Dead                          | 87       | 17.6     |
| Transferred to same hospital  | 384      | 77.7     |
| Transferred to other hospital | 22       | 4.5      |
| Discharged home               | 1        | 0.2      |
| Disch. terminally ill         | 0        | 0.0      |
| Missing                       | 1        |          |

| <b>Transferred to (N=406)</b>  | <b>N</b> | <b>%</b> |
|--------------------------------|----------|----------|
| Ward                           | 177      | 43.6     |
| Other ICU                      | 61       | 15.0     |
| High dependency care unit      | 168      | 41.4     |
| Rehabilitation                 | 0        | 0.0      |
| Day hospital or Long-term care | 0        | 0.0      |
| Missing                        | 0        |          |

| <b>Reason of transfer to Other ICU (N=61)</b> | <b>N</b> | <b>%</b> |
|-----------------------------------------------|----------|----------|
| Specialist expertise                          | 11       | 18.0     |
| Step-up care                                  | 4        | 6.6      |
| Logistical/organizational reasons             | 42       | 68.9     |
| Step-down care                                | 4        | 6.6      |
| Missing                                       | 0        |          |

| <b>Transferred to Same hospital (N=384)</b> | <b>N</b> | <b>%</b> |
|---------------------------------------------|----------|----------|
| Ward                                        | 173      | 45.1     |
| Other ICU                                   | 46       | 12.0     |
| High dependency care unit                   | 165      | 43.0     |
| Rehabilitation                              | 0        | 0.0      |
| Day hospital or Long-term care              | 0        | 0.0      |
| Missing                                     | 0        |          |

| <b>Transferred to Other hospital (N=22)</b> | <b>N</b> | <b>%</b> |
|---------------------------------------------|----------|----------|
| Ward                                        | 4        | 18.2     |
| Other ICU                                   | 15       | 68.2     |
| High dependency care unit                   | 3        | 13.6     |
| Rehabilitation                              | 0        | 0.0      |
| Day hospital or Long-term care              | 0        | 0.0      |
| Missing                                     | 0        |          |

| <b>ICU mortality</b> | <b>N</b> | <b>%</b> |
|----------------------|----------|----------|
| Alive                | 407      | 82.4     |
| Dead                 | 87       | 17.6     |
| Missing              | 1        |          |

| <b>Timing of ICU mortality (N=87)</b> | <b>N</b> | <b>%</b> |
|---------------------------------------|----------|----------|
| Daytime (08:00AM - 07:59PM)           | 48       | 55.2     |
| Nighttime (08:00PM - 07:59AM)         | 39       | 44.8     |
| Weekdays (Monday - Friday)            | 57       | 65.5     |
| Weekend (Saturday - Sunday)           | 30       | 34.5     |
| Missing                               | 0        |          |

| <b>Hospital mortality</b> | <b>N</b> | <b>%</b> |
|---------------------------|----------|----------|
| Alive                     | 350      | 70.7     |
| Dead                      | 145      | 29.3     |
| Missing                   | 0        |          |

| <b>Timing of hosp. mortality (N=145)</b> | <b>N</b> | <b>%</b> |
|------------------------------------------|----------|----------|
| In ICU                                   | 87       | 60.0     |
| Within 24 hours after ICU                | 4        | 2.8      |
| 24-47 hours after ICU                    | 9        | 6.2      |
| 48-71 hours after ICU                    | 1        | 0.7      |
| 72-95 hours after ICU                    | 1        | 0.7      |
| After 95 hours after ICU                 | 43       | 29.7     |
| Missing                                  | 0        |          |

| <b>Timing of hosp. mortality (days from ICU disch.) Discharged alive from ICU (N=58)</b> |  |          |
|------------------------------------------------------------------------------------------|--|----------|
| Mean                                                                                     |  | 22.2     |
| SD                                                                                       |  | 37.2     |
| Median                                                                                   |  | 10       |
| Q1–Q3                                                                                    |  | 3.2–19.2 |
| Missing                                                                                  |  | 0        |

**National report for ICUs of other type - Year 2020****Outcome indicators - Adult emergency surgical patients evaluated in the GiViTI model**

| <b>Last hospital mortality</b> | N   | %    |
|--------------------------------|-----|------|
| Alive                          | 341 | 68.9 |
| Dead                           | 154 | 31.1 |
| Missing                        | 0   |      |

| <b>ICU stay (days)</b> |      |
|------------------------|------|
| Mean                   | 11.0 |
| SD                     | 13.0 |
| Median                 | 6    |
| Q1–Q3                  | 2–15 |
| Missing                | 0    |

| <b>ICU stay (days)</b> |        |
|------------------------|--------|
| <b>Alive (N=407)</b>   |        |
| Mean                   | 11.1   |
| SD                     | 13.3   |
| Median                 | 6      |
| Q1–Q3                  | 3–15.5 |
| Missing                | 0      |

| <b>ICU stay (days)</b> |        |
|------------------------|--------|
| <b>Dead (N=87)</b>     |        |
| Mean                   | 10.7   |
| SD                     | 11.6   |
| Median                 | 8      |
| Q1–Q3                  | 2–14.5 |
| Missing                | 0      |

| <b>Stay after ICU (days)</b> |      |
|------------------------------|------|
| <b>Alive (N=407)</b>         |      |
| Mean                         | 23.2 |
| SD                           | 34.7 |
| Median                       | 12   |
| Q1–Q3                        | 5–25 |
| Missing                      | 0    |

| <b>Hospital stay (days)</b> |       |
|-----------------------------|-------|
| Mean                        | 34.1  |
| SD                          | 39.7  |
| Median                      | 21    |
| Q1–Q3                       | 12–41 |
| Missing                     | 0     |

| <b>Hospital stay (days)</b> |         |
|-----------------------------|---------|
| <b>Alive (N=350)</b>        |         |
| Mean                        | 37.3    |
| SD                          | 42.0    |
| Median                      | 23      |
| Q1–Q3                       | 14–42.8 |
| Missing                     | 0       |

| <b>Hospital stay (days)</b> |      |
|-----------------------------|------|
| <b>Dead (N=145)</b>         |      |
| Mean                        | 26.2 |
| SD                          | 32.0 |
| Median                      | 16   |
| Q1–Q3                       | 6–34 |
| Missing                     | 0    |



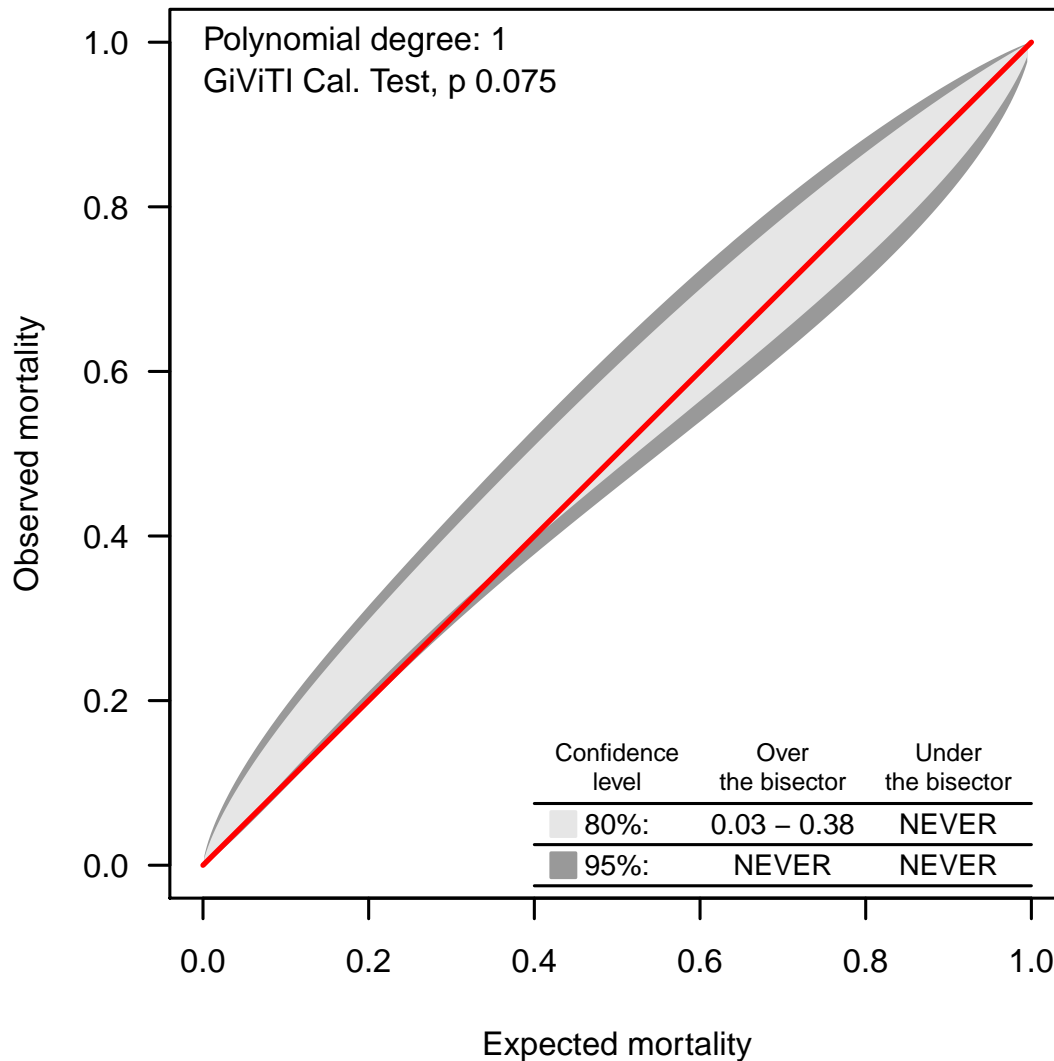
## National report for ICUs of other type - Year 2020

## Analysis of hospital mortality - Adult emergency surgical patients evaluated in the GiViTI model

Predictive model: **GiViTI 2019**

Total patients = 495  
**Total expected deaths (E) = 137.8**  
**Total observed deaths (O) = 154**

**Ratio O/E = 1.12**  
 Confidence interval O/E (95%) = (1.01,1.23)

**Calibration belt**

The calibration belt allows to compare the observed mortality with the expected one (predictive model: GiViTI 2019). Two different belts are presented: the 80% confidence level belt (in light gray) and the 95% confidence level belt (in dark gray). The belt above the bisector denotes an observed mortality greater than the expected one; vice versa, the belt under the bisector denotes an observed mortality lower than the expected one. As the polynomial degree increases the relation between expected and observed mortality becomes more complex. A significant GiViTI calibration test ( $p < 0.05$ ) denotes a statistically relevant difference between observed and expected mortality. The belt is plotted in the expected mortality range values. For further informations please look at [PLoS ONE 6(2): e16110].



**National report for ICUs of other type - Year 2020**  
**Characteristics on admission - COVID adult patients**

**Patients (N): 21**

| <b>Sex</b> | N  | %    |
|------------|----|------|
| Male       | 14 | 66.7 |
| Female     | 7  | 33.3 |
| Missing    | 0  |      |

| <b>Age (years)</b> | N     | %    |
|--------------------|-------|------|
| 17-45              | 2     | 9.5  |
| 46-65              | 7     | 33.3 |
| 66-75              | 2     | 9.5  |
| >75                | 10    | 47.6 |
| Missing            | 0     |      |
| Mean               | 68.0  |      |
| SD                 | 14.5  |      |
| Median             | 68    |      |
| Q1–Q3              | 60–79 |      |
| Min–Max            | 34–89 |      |

| <b>Body mass Index (BMI)</b> | N | %    |
|------------------------------|---|------|
| Underweight                  | 0 | 0.0  |
| Normal                       | 7 | 33.3 |
| Overweight                   | 6 | 28.6 |
| Obese                        | 8 | 38.1 |
| Missing                      | 0 |      |

| <b>Pregnancy status</b> | N | %    |
|-------------------------|---|------|
| <b>Females (N=7)</b>    |   |      |
| Not fertile             | 4 | 57.1 |
| Not pregnant/Unknown    | 3 | 42.9 |
| Currently pregnant      | 0 | 0.0  |
| Post partum             | 0 | 0.0  |
| Missing                 | 0 |      |

| <b>Comorbidities</b> | N  | %    |
|----------------------|----|------|
| No                   | 1  | 4.8  |
| Yes                  | 20 | 95.2 |
| Missing              | 0  |      |

| <b>Comorbidities (top 10)</b>           | N  | %    |
|-----------------------------------------|----|------|
| Hypertension                            | 15 | 71.4 |
| Arrhythmia                              | 9  | 42.9 |
| Diabetes Type II with insulin treatment | 5  | 23.8 |
| Any tumour without metastasis           | 4  | 19.0 |
| Coagulation disorder                    | 4  | 19.0 |
| Diabetes Type II without insulin tr.    | 4  | 19.0 |
| Moderate COPD                           | 4  | 19.0 |
| Antiplatelet therapy                    | 3  | 14.3 |
| Asthma                                  | 3  | 14.3 |
| Dementia                                | 3  | 14.3 |
| Missing                                 | 0  |      |

| <b>Stay before ICU (days)</b> | Mean | SD   | Median | Q1–Q3 | Missing |
|-------------------------------|------|------|--------|-------|---------|
|                               | 15.3 | 22.0 | 5      | 0–25  | 0       |

| <b>Source of admission</b>      | N  | %    |
|---------------------------------|----|------|
| Same hospital                   | 17 | 81.0 |
| Other hospital                  | 4  | 19.0 |
| Long-term chronic care hospital | 0  | 0.0  |
| Directly from the community     | 0  | 0.0  |
| Missing                         | 0  |      |

| <b>Ward of admission</b>  | N | %    |
|---------------------------|---|------|
| <b>Hospital (N=21)</b>    |   |      |
| Medical ward              | 2 | 9.5  |
| Surgical ward             | 4 | 19.0 |
| Emergency room            | 4 | 19.0 |
| Other ICU                 | 9 | 42.9 |
| High dependency care unit | 2 | 9.5  |
| Missing                   | 0 |      |

| <b>Reason for transfer from</b>   | N | %    |
|-----------------------------------|---|------|
| <b>Other ICU (N=9)</b>            |   |      |
| Specialist expertise              | 7 | 77.8 |
| Step-up care                      | 0 | 0.0  |
| Logistical/organizational reasons | 2 | 22.2 |
| Step-down care                    | 0 | 0.0  |
| Missing                           | 0 |      |

| <b>Ward of admission</b>    | N | %    |
|-----------------------------|---|------|
| <b>Same hospital (N=17)</b> |   |      |
| Medical ward                | 2 | 11.8 |
| Surgical ward               | 4 | 23.5 |
| Emergency room              | 3 | 17.6 |
| Other ICU                   | 6 | 35.3 |
| High dependency care unit   | 2 | 11.8 |
| Missing                     | 0 |      |

| <b>Ward of admission</b>    | N | %    |
|-----------------------------|---|------|
| <b>Other hospital (N=4)</b> |   |      |
| Medical ward                | 0 | 0.0  |
| Surgical ward               | 0 | 0.0  |
| Emergency room              | 1 | 25.0 |
| Other ICU                   | 3 | 75.0 |
| High dependency care unit   | 0 | 0.0  |
| Missing                     | 0 |      |

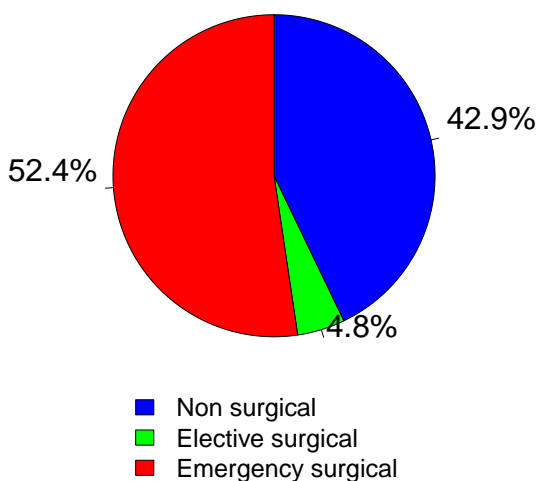
| <b>Scheduled admission</b> | N  | %     |
|----------------------------|----|-------|
| No                         | 21 | 100.0 |
| Yes                        | 0  | 0.0   |
| Missing                    | 0  |       |

**National report for ICUs of other type - Year 2020**  
**Characteristics on admission - COVID adult patients**

| Trauma          | N  | %    |
|-----------------|----|------|
| No              | 18 | 85.7 |
| Yes             | 3  | 14.3 |
| Multiple trauma | 0  | 0.0  |
| Missing         | 0  |      |

| Surgical status    | N  | %    |
|--------------------|----|------|
| Non surgical       | 9  | 42.9 |
| Elective surgical  | 1  | 4.8  |
| Emergency surgical | 11 | 52.4 |
| Missing            | 0  |      |

**Surgical status**



| Source of admission                 | N | %    |
|-------------------------------------|---|------|
| <b>Surgical pt. (N=12)</b>          |   |      |
| Operating theatre of surgical ward  | 2 | 16.7 |
| Operating theatre of emergency room | 2 | 16.7 |
| Surgical ward                       | 2 | 16.7 |
| Other                               | 6 | 50.0 |
| Missing                             | 0 |      |

| Surgical interventions (top 10) | N | %     |
|---------------------------------|---|-------|
| <b>Elective surgical (N=1)</b>  |   |       |
| Gastrointestinal surgery        | 1 | 100.0 |
| -                               | 0 | 0.0   |
| -                               | 0 | 0.0   |
| -                               | 0 | 0.0   |
| -                               | 0 | 0.0   |
| -                               | 0 | 0.0   |
| -                               | 0 | 0.0   |
| -                               | 0 | 0.0   |
| -                               | 0 | 0.0   |
| -                               | 0 | 0.0   |
| Missing                         | 0 |       |

| Timing                         | N | %     |
|--------------------------------|---|-------|
| <b>Elective surgical (N=1)</b> |   |       |
| From -7 to -3 days             | 1 | 100.0 |
| From -2 to -1 days             | 0 | 0.0   |
| On ICU admission day           | 0 | 0.0   |
| The day after ICU admission    | 0 | 0.0   |
| Missing                        | 0 |       |

| Surgical interventions (top 10)  | N | %    |
|----------------------------------|---|------|
| <b>Emergency surgical (N=11)</b> |   |      |
| Gastrointestinal surgery         | 2 | 18.2 |
| Peripheral vascular surgery      | 2 | 18.2 |
| Organ/s transplantation          | 2 | 18.2 |
| Hepatic surgery                  | 1 | 9.1  |
| Plastic surgery                  | 1 | 9.1  |
| Thoracic surgery                 | 1 | 9.1  |
| Abdominal vascular surgery       | 1 | 9.1  |
| Splenectomy                      | 1 | 9.1  |
| Other surgery                    | 1 | 9.1  |
| Liver transplantation            | 1 | 9.1  |
| Missing                          | 0 |      |

| Timing                           | N  | %     |
|----------------------------------|----|-------|
| <b>Emergency surgical (N=11)</b> |    |       |
| From -7 to -3 days               | 2  | 18.2  |
| From -2 to -1 days               | 0  | 0.0   |
| On ICU admission day             | 12 | 109.1 |
| The day after ICU admission      | 0  | 0.0   |
| Missing                          | 1  |       |

| Non surgical interventions | N  | %     |
|----------------------------|----|-------|
| None                       | 21 | 100.0 |
| Elective                   | 0  | 0.0   |
| Emergency                  | 0  | 0.0   |
| Missing                    | 0  |       |

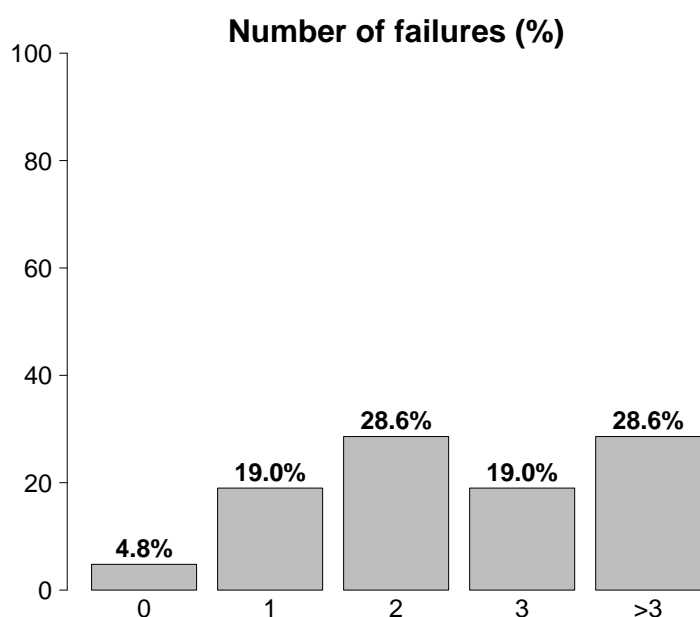
| Non surgical interventions    | N | %   |
|-------------------------------|---|-----|
| <b>Elective (N=0)</b>         |   |     |
| Interventional radiology      | 0 | 0.0 |
| Interventional cardiology     | 0 | 0.0 |
| Interventional neuroradiology | 0 | 0.0 |
| Interventional endoscopy      | 0 | 0.0 |
| Missing                       | 0 |     |

| Non surgical interventions    | N | %   |
|-------------------------------|---|-----|
| <b>Emergency (N=0)</b>        |   |     |
| Interventional radiology      | 0 | 0.0 |
| Interventional cardiology     | 0 | 0.0 |
| Interventional neuroradiology | 0 | 0.0 |
| Interventional endoscopy      | 0 | 0.0 |
| Missing                       | 0 |     |

## National report for ICUs of other type - Year 2020

### Characteristics on admission - COVID adult patients

| Reason for admission                   | N  | %    |
|----------------------------------------|----|------|
| Monitoring/Weaning                     | 1  | 4.8  |
| Post surgical weaning                  | 0  | 0.0  |
| Surgical monitoring                    | 0  | 0.0  |
| Post interventional weaning            | 0  | 0.0  |
| Interventional monitoring              | 0  | 0.0  |
| Non surgical monitoring                | 1  | 4.8  |
| Missing                                | 0  |      |
| Admission for procedures/treatments    | 0  | 0.0  |
| Intensive Treatment                    | 20 | 95.2 |
| Only ventilatory support               | 8  | 38.1 |
| Only cardiovascular support            | 2  | 9.5  |
| Ventilatory and cardiovascular support | 10 | 47.6 |
| Missing                                | 0  |      |
| Palliative Sedation                    | 0  | 0.0  |
| Diagnosis of death/Organ donation      | 0  | 0.0  |
| Missing                                | 0  |      |



| Failures on admission     | N  | %    |
|---------------------------|----|------|
| No                        | 1  | 4.8  |
| Yes                       | 20 | 95.2 |
| A: Respiratory failure    | 18 | 85.7 |
| B: Cardiovascular failure | 12 | 57.1 |
| C: Neurological failure   | 1  | 4.8  |
| D: Hepatic failure        | 2  | 9.5  |
| E: Renal failure          | 11 | 52.4 |
| F: Acute skin failure     | 0  | 0.0  |
| G: Metabolic failure      | 8  | 38.1 |
| H: Coagulation failure    | 3  | 14.3 |
| Missing                   | 0  |      |

| Failures on admission (top 10) | N | %    |
|--------------------------------|---|------|
| A                              | 4 | 19.0 |
| AB                             | 3 | 14.3 |
| ABEH                           | 2 | 9.5  |
| AG                             | 2 | 9.5  |
| BEG                            | 2 | 9.5  |
| ABCEG                          | 1 | 4.8  |
| ABDEG                          | 1 | 4.8  |
| ABDEH                          | 1 | 4.8  |
| ABE                            | 1 | 4.8  |
| ABEG                           | 1 | 4.8  |
| Missing                        | 0 |      |

| Respiratory failure          | N  | %    |
|------------------------------|----|------|
| None                         | 3  | 14.3 |
| Only hypoxic failure         | 10 | 47.6 |
| Only hypercapnic failure     | 0  | 0.0  |
| Hypoxic-hypercapnic failure  | 4  | 19.0 |
| Intubation for airway maint. | 4  | 19.0 |
| Missing                      | 0  |      |

| Cardiovascular failure         | N | %    |
|--------------------------------|---|------|
| None                           | 9 | 42.9 |
| Without shock                  | 8 | 38.1 |
| Cardiogenic shock              | 1 | 4.8  |
| Septic shock                   | 2 | 9.5  |
| Haemorrhagic/hypovolemic shock | 1 | 4.8  |
| Hypovolemic shock              | 0 | 0.0  |
| Anaphylactic shock             | 0 | 0.0  |
| Neurogenic shock               | 0 | 0.0  |
| Other shock                    | 0 | 0.0  |
| Mixed shock                    | 0 | 0.0  |
| Missing                        | 0 |      |

| Neurologic failure       | N  | %    |
|--------------------------|----|------|
| None                     | 7  | 87.5 |
| Cerebral coma            | 0  | 0.0  |
| Metabolic coma           | 0  | 0.0  |
| Postanoxic coma          | 1  | 12.5 |
| Toxic coma               | 0  | 0.0  |
| Missing or not evaluable | 13 |      |

| Renal failure (AKIN) | N | %    |
|----------------------|---|------|
| None                 | 9 | 45.0 |
| Mild                 | 2 | 10.0 |
| Moderate             | 4 | 20.0 |
| Severe               | 5 | 25.0 |
| Missing              | 1 |      |

| Metabolic failure                       | N  | %    |
|-----------------------------------------|----|------|
| None                                    | 12 | 60.0 |
| pH ≤ 7.3, PaCO <sub>2</sub> < 45 mmHg   | 3  | 15.0 |
| Base deficit ≥ 5 mmol/L, lactate > 1.5x | 5  | 25.0 |
| Missing                                 | 1  |      |

**National report for ICUs of other type - Year 2020**  
**Characteristics on admission - COVID adult patients**

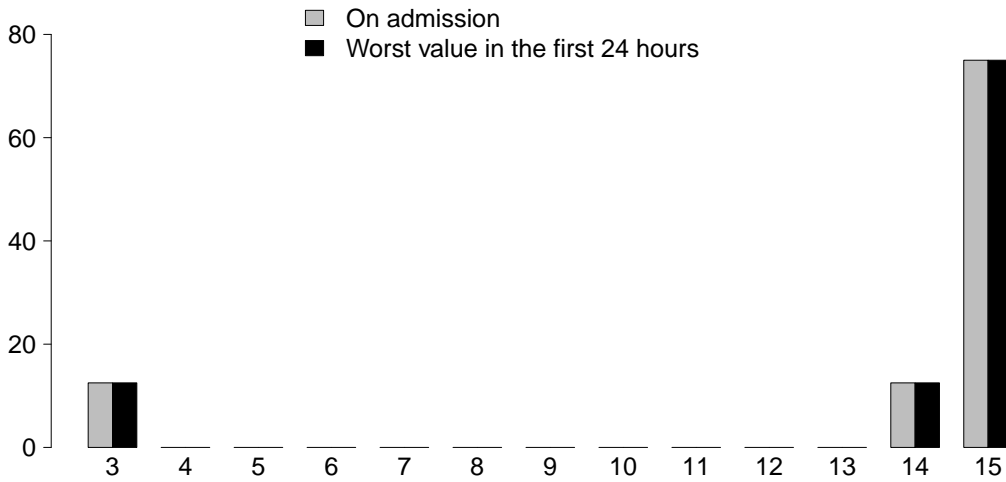
| Clinical conditions on admission        | N  | %     |
|-----------------------------------------|----|-------|
| Respiratory                             | 6  | 28.6  |
| Pleural effusion                        | 2  | 9.5   |
| Pulmonary embolism                      | 2  | 9.5   |
| Pneumothorax/Pneumomediastinum          | 1  | 4.8   |
| Severe ARDS                             | 1  | 4.8   |
| -                                       | 0  | 0.0   |
| Cardiovascular                          | 5  | 23.8  |
| Cardiac arrest                          | 2  | 9.5   |
| Peripheral vascular disease             | 2  | 9.5   |
| Acute severe arrhythmia: tachycardias   | 1  | 4.8   |
| Acute ischaemia                         | 1  | 4.8   |
| Deep venous thrombosis                  | 1  | 4.8   |
| Neurological                            | 1  | 4.8   |
| Metabolic/postanoxic encephalopathy     | 1  | 4.8   |
| Seizures                                | 1  | 4.8   |
| -                                       | 0  | 0.0   |
| -                                       | 0  | 0.0   |
| -                                       | 0  | 0.0   |
| Gastrointestinal and hepatic            | 8  | 38.1  |
| Paralytic Ileus                         | 3  | 14.3  |
| Digestive tract malignancy              | 2  | 9.5   |
| Hepatic malignancy                      | 2  | 9.5   |
| Bowel ischaemia                         | 1  | 4.8   |
| Intrabdominal bleeding (non traumatic)  | 1  | 4.8   |
| Trauma (anatomical districts)           | 3  | 14.3  |
| Head                                    | 1  | 4.8   |
| Chest                                   | 1  | 4.8   |
| Miscellaneous                           | 1  | 4.8   |
| -                                       | 0  | 0.0   |
| -                                       | 0  | 0.0   |
| -                                       | 0  | 0.0   |
| -                                       | 0  | 0.0   |
| -                                       | 0  | 0.0   |
| Other                                   | 6  | 28.6  |
| Nephrourologic disease                  | 4  | 19.0  |
| Coagulation disorder                    | 3  | 14.3  |
| Other disease                           | 1  | 4.8   |
| Gynaecological disease                  | 1  | 4.8   |
| -                                       | 0  | 0.0   |
| Post transplantation                    | 2  | 9.5   |
| Liver transplantation                   | 1  | 4.8   |
| Lung transplantation                    | 1  | 4.8   |
| Infections                              | 21 | 100.0 |
| COVID-19                                | 21 | 100.0 |
| Pneumonia                               | 11 | 52.4  |
| Post-surgical peritonitis               | 2  | 9.5   |
| NON-surgical urinary tract infection    | 2  | 9.5   |
| L.R.T.I. other than pneumonia           | 1  | 4.8   |
| Other fungal infections                 | 1  | 4.8   |
| Pleurisy/Pleural empyema                | 1  | 4.8   |
| NON-surgical secondary peritonitis      | 1  | 4.8   |
| NON-surgical skin/soft tissue infection | 1  | 4.8   |
| -                                       | 0  | 0.0   |
| Missing                                 | 0  |       |

| Trauma (anatomical districts)      | N | %   |
|------------------------------------|---|-----|
| Head                               | 1 | 4.8 |
| Cerebral contusion/laceration      | 1 | 4.8 |
| Extradural/epidural haematoma      | 1 | 4.8 |
| Traumatic subarachnoid haemorrhage | 1 | 4.8 |
| Skull fracture                     | 1 | 4.8 |
| -                                  | 0 | 0.0 |
| Spine                              | 0 | 0.0 |
| -                                  | 0 | 0.0 |
| -                                  | 0 | 0.0 |
| -                                  | 0 | 0.0 |
| Chest                              | 1 | 4.8 |
| Traum. haemothorax/pneumothorax    | 1 | 4.8 |
| -                                  | 0 | 0.0 |
| -                                  | 0 | 0.0 |
| Abdomen                            | 0 | 0.0 |
| -                                  | 0 | 0.0 |
| -                                  | 0 | 0.0 |
| -                                  | 0 | 0.0 |
| -                                  | 0 | 0.0 |
| Pelvis/bone/joint & muscle         | 0 | 0.0 |
| -                                  | 0 | 0.0 |
| -                                  | 0 | 0.0 |
| -                                  | 0 | 0.0 |
| Major vessels injury               | 0 | 0.0 |
| -                                  | 0 | 0.0 |
| -                                  | 0 | 0.0 |
| -                                  | 0 | 0.0 |
| Miscellaneous                      | 1 | 4.8 |
| Inhalation injury                  | 1 | 4.8 |
| -                                  | 0 | 0.0 |
| Missing                            | 0 |     |

| PaO <sub>2</sub> /FiO <sub>2</sub> (100*mmHg%) (prime 24h) | N | %    |
|------------------------------------------------------------|---|------|
| >=400 >=53.2 (0)                                           | 4 | 20.0 |
| 300-399 39.9-53.1 (1)                                      | 4 | 20.0 |
| 200-299 26.6-39.8 (2)                                      | 5 | 25.0 |
| 100-199 13.3-26.5 (3)                                      | 5 | 25.0 |
| <100 <13.3 (4)                                             | 2 | 10.0 |
| Missing                                                    | 1 |      |

**National report for ICUs of other type - Year 2020**  
**Severity scores - COVID adult patients**

**Glasgow Coma Scale (%)**



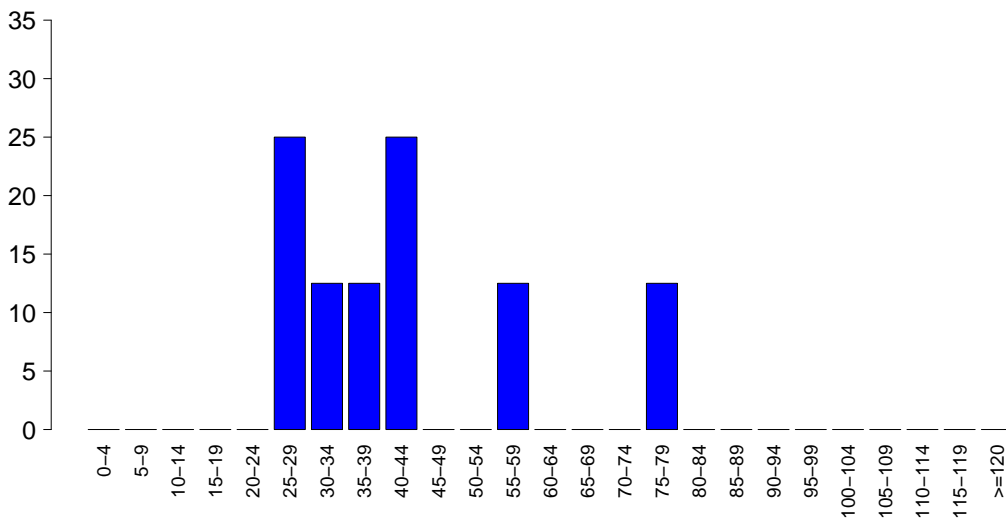
**GCS (admission)**

|               |         |
|---------------|---------|
| Median        | 15      |
| Q1–Q3         | 14.8–15 |
| Not evaluable | 12      |
| Missing       | 1       |

**GCS (first 24 hours)**

|               |         |
|---------------|---------|
| Median        | 15      |
| Q1–Q3         | 14.8–15 |
| Not evaluable | 12      |
| Missing       | 1       |

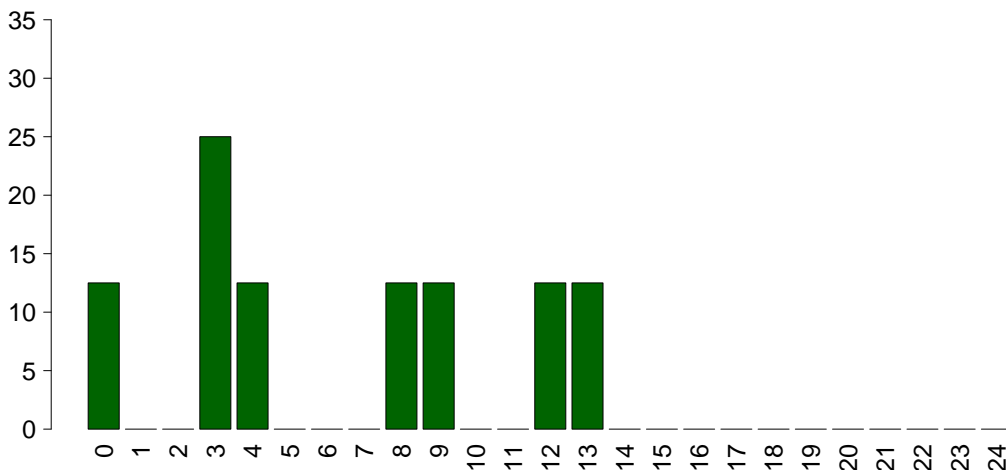
**SAPS II (%)**



**SAPSII**

|               |         |
|---------------|---------|
| Mean          | 42.5    |
| SD            | 16.9    |
| Median        | 38.5    |
| Q1–Q3         | 29.8–46 |
| Not evaluable | 12      |
| Missing       | 1       |

**SOFA (%)**



**SOFA**

|               |       |
|---------------|-------|
| Mean          | 6.5   |
| SD            | 4.7   |
| Median        | 6     |
| Q1–Q3         | 3–9.8 |
| Not evaluable | 12    |
| Missing       | 1     |

**National report for ICUs of other type - Year 2020**  
**Characteristics during the stay - COVID adult patients**

| <b>Complications during the stay</b> | N  | %    |
|--------------------------------------|----|------|
| No                                   | 7  | 33.3 |
| Yes                                  | 14 | 66.7 |
| Missing                              | 0  |      |

| <b>Failures during the stay</b> | N  | %    |
|---------------------------------|----|------|
| No                              | 14 | 66.7 |
| Yes                             | 7  | 33.3 |
| A: Respiratory failure          | 2  | 9.5  |
| B: Cardiovascular failure       | 2  | 9.5  |
| C: Neurological failure         | 1  | 4.8  |
| D: Hepatic failure              | 2  | 9.5  |
| E: Renal failure (AKIN)         | 5  | 23.8 |
| F: Acute skin failure           | 0  | 0.0  |
| G: Metabolic failure            | 4  | 19.0 |
| H: Coagulation failure          | 0  | 0.0  |
| Missing                         | 0  |      |

| <b>Failures during the stay (top 10)</b> | N | %   |
|------------------------------------------|---|-----|
| G                                        | 2 | 9.5 |
| ABCE                                     | 1 | 4.8 |
| AE                                       | 1 | 4.8 |
| BDE                                      | 1 | 4.8 |
| DEG                                      | 1 | 4.8 |
| EG                                       | 1 | 4.8 |
| -                                        | 0 | 0.0 |
| -                                        | 0 | 0.0 |
| -                                        | 0 | 0.0 |
| -                                        | 0 | 0.0 |
| Missing                                  | 0 |     |

| <b>Respiratory failure occurred</b> | N  | %    |
|-------------------------------------|----|------|
| None                                | 19 | 90.5 |
| Intubation for airway maint.        | 1  | 4.8  |
| Hypoxic failure                     | 2  | 9.5  |
| Hypercapnic failure                 | 0  | 0.0  |
| Missing                             | 0  |      |

| <b>Cardiovascular failure occurred</b> | N  | %    |
|----------------------------------------|----|------|
| None                                   | 19 | 90.5 |
| Cardiogenic shock                      | 0  | 0.0  |
| Hypovolemic shock                      | 0  | 0.0  |
| Haemorrhagic/hypovolemic shock         | 0  | 0.0  |
| Septic shock                           | 1  | 4.8  |
| Anaphylactic shock                     | 0  | 0.0  |
| Neurogenic shock                       | 0  | 0.0  |
| Other shock                            | 1  | 4.8  |
| Missing                                | 0  |      |

| <b>Neurological failure occurred</b> | N  | %    |
|--------------------------------------|----|------|
| None                                 | 20 | 95.2 |
| Cerebral coma                        | 1  | 4.8  |
| Metabolic coma                       | 0  | 0.0  |
| Postanoxic coma                      | 0  | 0.0  |
| Missing                              | 0  |      |

| <b>Renal failure occurred (AKIN)</b> | N  | %    |
|--------------------------------------|----|------|
| None                                 | 16 | 76.2 |
| Mild                                 | 0  | 0.0  |
| Moderate                             | 1  | 4.8  |
| Severe                               | 4  | 19.0 |
| Missing                              | 0  |      |

| <b>Complications during the stay</b>         | N | %    |
|----------------------------------------------|---|------|
| <b>Respiratory</b>                           | 2 | 9.5  |
| Atelectasis                                  | 2 | 9.5  |
| Pleural effusion                             | 2 | 9.5  |
| -                                            | 0 | 0.0  |
| -                                            | 0 | 0.0  |
| -                                            | 0 | 0.0  |
| <b>Cardiovascular</b>                        | 7 | 33.3 |
| Deep venous thrombosis                       | 3 | 14.3 |
| Acute severe arrhythmia: tachycardias        | 3 | 14.3 |
| Acute severe arrhythmia: bradycardias        | 1 | 4.8  |
| Peripheral vascular disease                  | 1 | 4.8  |
| -                                            | 0 | 0.0  |
| <b>Neurological</b>                          | 3 | 14.3 |
| Drowsiness/agitation/delirium                | 3 | 14.3 |
| CrIMyNe                                      | 2 | 9.5  |
| -                                            | 0 | 0.0  |
| -                                            | 0 | 0.0  |
| -                                            | 0 | 0.0  |
| <b>Gastrointestinal and hepatic</b>          | 6 | 28.6 |
| Intestinal occlusion                         | 2 | 9.5  |
| Liver Dysfunction Syndrome                   | 2 | 9.5  |
| Acute bile-duct disease                      | 1 | 4.8  |
| Abdominal compartment syndrome               | 1 | 4.8  |
| Ascites                                      | 1 | 4.8  |
| <b>Other</b>                                 | 8 | 38.1 |
| Nephrourologic disease                       | 5 | 23.8 |
| Metabolic disorder                           | 4 | 19.0 |
| Other skin and/or soft tissue pathology      | 2 | 9.5  |
| Category/Stage III: Full Thickness Skin Loss | 1 | 4.8  |
| Extremity compartment syndrome (severe)      | 1 | 4.8  |
| Other disease                                | 1 | 4.8  |
| -                                            | 0 | 0.0  |
| <b>Infections</b>                            | 8 | 38.1 |
| Pneumonia                                    | 4 | 19.0 |
| NON-surgical urinary tract infection         | 3 | 14.3 |
| Burn infection                               | 1 | 4.8  |
| L.R.T.I. other than pneumonia                | 1 | 4.8  |
| Other fungal infections                      | 1 | 4.8  |
| Post-surgical peritonitis                    | 1 | 4.8  |
| Post-surgical skin/soft tissue infection     | 1 | 4.8  |
| COVID-19                                     | 1 | 4.8  |
| -                                            | 0 | 0.0  |
| -                                            | 0 | 0.0  |
| Missing                                      | 0 |      |



**National report for ICUs of other type - Year 2020**  
**Characteristics during the stay - COVID adult patients**

| <b>Infections</b>                | <b>N</b> | <b>%</b> |
|----------------------------------|----------|----------|
| None                             | 0        | 0.0      |
| Only on admission                | 13       | 61.9     |
| On admission and during ICU stay | 8        | 38.1     |
| Only during ICU stay             | 0        | 0.0      |
| Missing                          | 0        |          |

| <b>Ventil. Associat. Pneumonia (VAP)</b> | <b>N</b> | <b>%</b> |
|------------------------------------------|----------|----------|
| No                                       | 17       | 85.0     |
| Yes                                      | 3        | 15.0     |
| Missing                                  | 1        |          |

**Incidence of VAP**

*(Pts. with VAP/1000 days of VM pre-VAP)*

|          |          |
|----------|----------|
| Estimate | 11.5     |
| CI (95%) | 2.4–33.7 |

**Incidence of VAP**

*(Pts. with VAP/pts. ventilated for 8 days)*

|          |          |
|----------|----------|
| Estimate | 9.2%     |
| CI (95%) | 1.9–27.0 |

| <b>Catheter Bacteraemia (CR-BSI)</b> | <b>N</b> | <b>%</b> |
|--------------------------------------|----------|----------|
| No                                   | 21       | 100.0    |
| Yes                                  | 0        | 0.0      |
| Missing                              | 0        |          |

**Incidence of CR-BSI**

*(Pts. with CR-BSI/1000 days of CVC pre-CR-BSI)*

|          |          |
|----------|----------|
| Estimate | 0.0      |
| CI (95%) | 0.0–15.0 |

**Incidence of CR-BSI**

*(Pts. with CR-BSI/pts. catheterized for 12 days)*

|          |          |
|----------|----------|
| Estimate | 0.0%     |
| CI (95%) | 0.0–18.0 |

**National report for ICUs of other type - Year 2020**  
**Process indicators - COVID adult patients**

| Procedures and/or treatments (Missing=0)<br><b>Procedures (antibiotics excluded)</b> | Use |       | On admission |      | On discharge |      | Length (days) |       | Days from admission |        |       |         |
|--------------------------------------------------------------------------------------|-----|-------|--------------|------|--------------|------|---------------|-------|---------------------|--------|-------|---------|
|                                                                                      | N   | %     | N            | %    | N            | %    | Median        | Q1-Q3 | Missing             | Median | Q1-Q3 | Missing |
|                                                                                      | 21  | 100.0 |              |      |              |      |               |       |                     |        |       |         |
| Invasive ventilation                                                                 | 18  | 85.7  | 14           | 66.7 | 11           | 52.4 | 10            | 3-22  | 0                   | 0      | 0-2   | 0       |
| Non invasive ventilation                                                             | 7   | 33.3  | 2            | 9.5  | 3            | 14.3 | 1             | 0-1   | 1                   | 0      | 0-1   | 1       |
| Tracheostomy                                                                         | 7   | 33.3  | 2            | 9.5  | 5            | 23.8 | 14            | 9-26  | 0                   | 17     | 6-21  | 0       |
| iNO (inhaled nitric oxide)                                                           | 5   | 23.8  | 1            | 4.8  | 0            | 0    | 8             | 8-11  | 1                   | 0      | 0-1   | 1       |
| Central Venous Catheter                                                              | 18  | 85.7  | 14           | 66.7 | 15           | 71.4 | 10            | 3-18  | 1                   | 0      | 0-0   | 1       |
| PICC                                                                                 | 1   | 4.8   | 1            | 4.8  | 1            | 4.8  | 14            | 14-14 | 0                   |        |       |         |
| Arterial Catheter                                                                    | 20  | 95.2  | 16           | 76.2 | 15           | 71.4 | 10            | 3-16  | 1                   | 0      | 0-0   | 1       |
| Vasoactive drugs                                                                     | 16  | 76.2  | 9            | 42.9 | 3            | 14.3 | 6             | 2-10  | 1                   | 0      | 0-0   | 1       |
| Antiarrhythmics                                                                      | 5   | 23.8  | 0            | 0    | 1            | 4.8  | 6             | 2-6   | 0                   | 3      | 0-4   | 0       |
| IABP                                                                                 | 0   | 0.0   |              |      |              |      |               |       |                     |        |       |         |
| Invasive monitoring of C.O.                                                          | 3   | 14.3  | 1            | 4.8  | 1            | 4.8  | 10            | 7-14  | 0                   | 0      | 0-0   | 0       |
| Continuous monitoring of ScVO2                                                       | 0   | 0.0   |              |      |              |      |               |       |                     |        |       |         |
| Temporary pacing                                                                     | 0   | 0.0   |              |      |              |      |               |       |                     |        |       |         |
| Ventricular assistance                                                               | 0   | 0.0   |              |      |              |      |               |       |                     |        |       |         |
| DC-shock                                                                             | 1   | 4.8   |              |      |              |      |               |       |                     | 4      | 4-4   | 0       |
| CPR                                                                                  | 0   | 0.0   |              |      |              |      |               |       |                     |        |       |         |
| Massive blood transfusion                                                            | 0   | 0.0   |              |      |              |      |               |       |                     |        |       |         |
| ICP monitoring without CSF drainage                                                  | 0   | 0.0   |              |      |              |      |               |       |                     |        |       |         |
| ICP monitoring with CSF drainage                                                     | 0   | 0.0   |              |      |              |      |               |       |                     |        |       |         |
| External ventricular drainage without ICP                                            | 0   | 0.0   |              |      |              |      |               |       |                     |        |       |         |
| Haemofiltration                                                                      | 0   | 0.0   |              |      |              |      |               |       |                     |        |       |         |
| Haemodialysis                                                                        | 5   | 23.8  | 2            | 9.5  | 1            | 4.8  | 13            | 10-26 | 0                   | 2      | 2-4   | 0       |
| ECMO                                                                                 | 0   | 0.0   |              |      |              |      |               |       |                     |        |       |         |
| Hepatic clearance techniques                                                         | 0   | 0.0   |              |      |              |      |               |       |                     |        |       |         |
| Clearance techniques during sepsis                                                   | 1   | 4.8   | 0            | 0    | 0            | 0    | 1             | 1-1   | 0                   | 1      | 1-1   | 0       |
| IAP (intra-abdominal pressure)                                                       | 5   | 23.8  |              |      |              |      |               |       |                     |        |       |         |
| Hypothermia                                                                          | 1   | 4.8   | 0            | 0    | 0            | 0    | 1             | 1-1   | 0                   | 0      | 0-0   | 0       |
| Enteral nutrition                                                                    | 14  | 66.7  | 4            | 19   | 8            | 38.1 | 7             | 5-24  | 1                   | 1      | 1-3   | 1       |
| Parenteral nutrition                                                                 | 10  | 47.6  | 3            | 14.3 | 7            | 33.3 | 10            | 2-16  | 1                   | 2      | 2-4   | 1       |
| SDD (Topical, Topical and systemic)                                                  | 0   | 0.0   |              |      |              |      |               |       |                     |        |       |         |
| Patient restraint                                                                    | 1   | 4.8   |              |      |              |      |               |       |                     |        |       |         |
| Peridural catheter                                                                   | 0   | 0.0   |              |      |              |      |               |       |                     |        |       |         |
| Electrical cardioversion                                                             | 0   | 0.0   |              |      |              |      |               |       |                     |        |       |         |
| Vacuum therapy                                                                       | 2   | 9.5   |              |      |              |      |               |       |                     |        |       |         |

**National report for ICUs of other type - Year 2020**  
**Process indicators - COVID adult patients**

| Procedures and/or treatments (Missing=0)                       | Use |      | On admission |      | On discharge |      | Length (days) |       |         | Days from admission |       |         |
|----------------------------------------------------------------|-----|------|--------------|------|--------------|------|---------------|-------|---------|---------------------|-------|---------|
|                                                                | N   | %    | N            | %    | N            | %    | Median        | Q1-Q3 | Missing | Median              | Q1-Q3 | Missing |
| <b>Antibiotics</b>                                             | 16  | 76.2 |              |      |              |      |               |       |         |                     |       |         |
| Antibiotic prophylaxis                                         | 3   | 14.3 | 3            | 14.3 | 2            | 9.5  | 2             | 2-34  | 0       |                     |       |         |
| Empirical antibiotic therapy (infection diagnosis confirmed)   | 6   | 28.6 | 2            | 9.5  | 0            | 0    | 2             | 2-4   | 1       | 2                   | 1-2   | 1       |
| Empirical antibiotic therapy (infection diagnosis unconfirmed) | 0   | 0.0  |              |      |              |      |               |       |         |                     |       |         |
| Targeted antibiotic therapy                                    | 15  | 71.4 | 8            | 38.1 | 10           | 47.6 | 10            | 8-22  | 1       | 2                   | 1-5   | 1       |
| Antifungal in empirical therapy                                | 4   | 19.0 | 2            | 9.5  | 0            | 0    | 8             | 2-14  | 0       | 14                  | 8-19  | 0       |
| Antifungal in targeted therapy                                 | 7   | 33.3 | 2            | 9.5  | 3            | 14.3 | 8             | 6-12  | 1       | 2                   | 2-7   | 1       |
| Pre-emptive antifungal                                         | 0   | 0.0  |              |      |              |      |               |       |         |                     |       |         |

| Antibiotic therapy             |   |     |  |
|--------------------------------|---|-----|--|
| Pt. infected in ICU only (N=0) | N | %   |  |
| No therapy                     | 0 | 0.0 |  |
| Only empirical                 | 0 | 0.0 |  |
| Only targeted                  | 0 | 0.0 |  |
| Targeted after empirical       | 0 | 0.0 |  |
| Other                          | 0 | 0.0 |  |
| Missing                        | 0 |     |  |

| Antifungal therapy             |   |     |  |
|--------------------------------|---|-----|--|
| Pt. infected in ICU only (N=0) | N | %   |  |
| No therapy                     | 0 | 0.0 |  |
| Only empirical                 | 0 | 0.0 |  |
| Only targeted                  | 0 | 0.0 |  |
| Targeted after empirical       | 0 | 0.0 |  |
| Other                          | 0 | 0.0 |  |
| Missing                        | 0 |     |  |

## National report for ICUs of other type - Year 2020

## Process indicators - COVID adult patients

| Invasive ventilation (N=18)  | N  | %    | Length (days) |      |        |       |         |
|------------------------------|----|------|---------------|------|--------|-------|---------|
|                              |    |      | Mean          | SD   | Median | Q1-Q3 | Missing |
| Due to pulmonary failure     | 13 | 68.4 | 20.9          | 19.2 | 14     | 8–31  | 0       |
| For airway maintenance       | 4  | 21.1 | 1.8           | 2.2  | 1      | 0.8–2 | 0       |
| In weaning                   | 0  | 0.0  |               |      |        |       |         |
| Not evaluable                | 2  | 10.5 | 9.0           |      | 9      | 9–9   | 1       |
| Reintubation within 48 hours | 1  | 5.3  | 37.0          |      | 37     | 37–37 | 0       |

| Non invasive ventilation (N=7)  | N | %    | Number of surgical interventions |    |      |
|---------------------------------|---|------|----------------------------------|----|------|
| Non invasive ventilation only   | 2 | 28.6 | 0                                | 17 | 85.0 |
| Non invasive ventilation failed | 2 | 28.6 | 1                                | 1  | 5.0  |
| For weaning                     | 2 | 28.6 | 2                                | 0  | 0.0  |
| Other                           | 1 | 14.3 | 3                                | 1  | 5.0  |
| Missing                         | 0 |      | >3                               | 1  | 5.0  |
|                                 |   |      | Missing                          | 1  |      |

| Tracheostomy not present on admission (N=5) | N | %    | Surgical interventions          |          |  |
|---------------------------------------------|---|------|---------------------------------|----------|--|
| Surgical                                    | 2 | 40.0 | Days from admission             |          |  |
| Percutwist                                  | 0 | 0.0  | Mean                            | 15.7     |  |
| Ciaglia                                     | 1 | 20.0 | SD                              | 16.4     |  |
| Monodil. Ciaglia                            | 0 | 0.0  | Median                          | 10.5     |  |
| Fantoni                                     | 0 | 0.0  | Q1–Q3                           | 6.5–17.8 |  |
| Griggs                                      | 0 | 0.0  | Missing                         | 0        |  |
| Other Kind                                  | 1 | 20.0 | Surgical interventions (top 10) |          |  |
| Unknown                                     | 1 | 20.0 | N                               |          |  |
| Missing                                     | 0 |      | %                               |          |  |

| Tracheostomy - Days after the beginning of inv. vent. Not present on admission (N=5) | Mean | SD  | Median | Q1–Q3 | Missing |
|--------------------------------------------------------------------------------------|------|-----|--------|-------|---------|
|                                                                                      | 13.0 | 9.5 | 17     | 6–20  | 0       |

| Invasive monitoring of C.O. (N=3) | N | %    | Non surgical interventions |    |      |
|-----------------------------------|---|------|----------------------------|----|------|
| Swan Ganz                         | 1 | 33.3 | N                          |    |      |
| PICCO                             | 2 | 66.7 | %                          |    |      |
| LIDCO                             | 0 | 0.0  | No                         | 19 | 95.0 |
| Vigileo-PRAM                      | 0 | 0.0  | Yes                        | 1  | 5.0  |
| Other                             | 0 | 0.0  | Missing                    | 1  |      |
| Missing                           | 0 |      | Non surgical interventions |    |      |

| SDD (N=0)            | N | %   | Days from admission |       |  |
|----------------------|---|-----|---------------------|-------|--|
| Topical              | 0 | 0.0 | Mean                | 13.0  |  |
| Topical and systemic | 0 | 0.0 | SD                  |       |  |
| Missing              | 0 |     | Median              | 13    |  |
|                      |   |     | Q1–Q3               | 13–13 |  |
|                      |   |     | Missing             | 0     |  |

| Surgical interventions | N  | %    | Non surgical interventions    |   |     |
|------------------------|----|------|-------------------------------|---|-----|
| No                     | 17 | 85.0 | N                             |   |     |
| Yes                    | 3  | 15.0 | %                             |   |     |
| Missing                | 1  |      | Interventional radiology      | 1 | 5.0 |
|                        |    |      | Interventional cardiology     | 0 | 0.0 |
|                        |    |      | Interventional neuroradiology | 0 | 0.0 |
|                        |    |      | Interventional endoscopy      | 0 | 0.0 |
|                        |    |      | Missing                       | 1 |     |

## National report for ICUs of other type - Year 2020

## Outcome indicators - COVID adult patients

| ICU outcome                   | N  | %    |
|-------------------------------|----|------|
| Dead                          | 5  | 25.0 |
| Transferred to same hospital  | 15 | 75.0 |
| Transferred to other hospital | 0  | 0.0  |
| Discharged home               | 0  | 0.0  |
| Disch. terminally ill         | 0  | 0.0  |
| Missing                       | 1  |      |

| Transferred to (N=15)          | N | %    |
|--------------------------------|---|------|
| Ward                           | 5 | 33.3 |
| Other ICU                      | 5 | 33.3 |
| High dependency care unit      | 5 | 33.3 |
| Rehabilitation                 | 0 | 0.0  |
| Day hospital or Long-term care | 0 | 0.0  |
| Missing                        | 0 |      |

| Reason of transfer to Other ICU (N=5) | N | %    |
|---------------------------------------|---|------|
| Specialist expertise                  | 1 | 20.0 |
| Step-up care                          | 0 | 0.0  |
| Logistical/organizational reasons     | 4 | 80.0 |
| Step-down care                        | 0 | 0.0  |
| Missing                               | 0 |      |

| Transferred to Same hospital (N=15) | N | %    |
|-------------------------------------|---|------|
| Ward                                | 5 | 33.3 |
| Other ICU                           | 5 | 33.3 |
| High dependency care unit           | 5 | 33.3 |
| Rehabilitation                      | 0 | 0.0  |
| Day hospital or Long-term care      | 0 | 0.0  |
| Missing                             | 0 |      |

| Transferred to Other hospital (N=0) | N | %   |
|-------------------------------------|---|-----|
| Ward                                | 0 | 0.0 |
| Other ICU                           | 0 | 0.0 |
| High dependency care unit           | 0 | 0.0 |
| Rehabilitation                      | 0 | 0.0 |
| Day hospital or Long-term care      | 0 | 0.0 |
| Missing                             | 0 |     |

| ICU mortality | N  | %    |
|---------------|----|------|
| Alive         | 15 | 75.0 |
| Dead          | 5  | 25.0 |
| Missing       | 1  |      |

| Timing of ICU mortality (N=5) | N | %     |
|-------------------------------|---|-------|
| Daytime (08:00AM - 07:59PM)   | 5 | 100.0 |
| Nighttime (08:00PM - 07:59AM) | 0 | 0.0   |
| Weekdays (Monday - Friday)    | 4 | 80.0  |
| Weekend (Saturday - Sunday)   | 1 | 20.0  |
| Missing                       | 0 |       |

| Hospital mortality | N  | %    |
|--------------------|----|------|
| Alive              | 11 | 57.9 |
| Dead               | 8  | 42.1 |
| Missing            | 2  |      |

| Timing of hosp. mortality (N=8) | N | %    |
|---------------------------------|---|------|
| In ICU                          | 5 | 62.5 |
| Within 24 hours after ICU       | 0 | 0.0  |
| 24-47 hours after ICU           | 0 | 0.0  |
| 48-71 hours after ICU           | 0 | 0.0  |
| 72-95 hours after ICU           | 1 | 12.5 |
| After 95 hours after ICU        | 2 | 25.0 |
| Missing                         | 0 |      |

| Timing of hosp. mortality (days from ICU disch.)<br>Discharged alive from ICU (N=3) |  |        |
|-------------------------------------------------------------------------------------|--|--------|
| Mean                                                                                |  | 11.0   |
| SD                                                                                  |  | 11.4   |
| Median                                                                              |  | 6      |
| Q1–Q3                                                                               |  | 4.5–15 |
| Missing                                                                             |  | 0      |

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## Outcome indicators - COVID adult patients

| Last hospital mortality | N  | %    |
|-------------------------|----|------|
| Alive                   | 11 | 57.9 |
| Dead                    | 8  | 42.1 |
| Missing                 | 2  |      |

| Readmission from ward | N  | %     |
|-----------------------|----|-------|
| No                    | 21 | 100.0 |
| Yes                   | 0  | 0.0   |
| Missing               | 0  |       |

| Number of readmissions (N=0) | N | %   |
|------------------------------|---|-----|
| 1                            | 0 | 0.0 |
| 2                            | 0 | 0.0 |
| >2                           | 0 | 0.0 |
| Missing                      | 0 |     |

| Timing of readmission (N=0) | N | %   |
|-----------------------------|---|-----|
| Within 48 hours             | 0 | 0.0 |
| 48-71 hours                 | 0 | 0.0 |
| 72-95 hours                 | 0 | 0.0 |
| After 95 hours              | 0 | 0.0 |
| Missing                     | 0 |     |

| Timing readmission (days) | N | % |
|---------------------------|---|---|
| Mean                      | 0 |   |
| SD                        |   |   |
| Median                    |   |   |
| Q1–Q3                     |   |   |

| ICU stay (days) | Mean | SD   | Median | Q1–Q3 | Missing |
|-----------------|------|------|--------|-------|---------|
|                 | 16.9 | 19.4 | 10     | 3–25  | 0       |

| ICU stay (days)<br>Alive (N=15) | Mean | SD   | Median | Q1–Q3  | Missing |
|---------------------------------|------|------|--------|--------|---------|
|                                 | 13.0 | 20.2 | 6      | 1.5–12 | 0       |

| ICU stay (days)<br>Dead (N=5) | Mean | SD   | Median | Q1–Q3 | Missing |
|-------------------------------|------|------|--------|-------|---------|
|                               | 23.0 | 12.9 | 25     | 10–31 | 0       |

| Stay after ICU (days)<br>Alive (N=15) | Mean | SD   | Median | Q1–Q3    | Missing |
|---------------------------------------|------|------|--------|----------|---------|
|                                       | 20.8 | 21.8 | 18     | 6.2–25.5 | 1       |

| Hospital stay (days) | Mean | SD   | Median | Q1–Q3   | Missing |
|----------------------|------|------|--------|---------|---------|
|                      | 37.3 | 32.6 | 31     | 15.5–47 | 2       |

| Hospital stay (days)<br>Alive (N=11) | Mean | SD   | Median | Q1–Q3     | Missing |
|--------------------------------------|------|------|--------|-----------|---------|
|                                      | 39.6 | 40.3 | 26     | 15.5–42.5 | 0       |

| Hospital stay (days)<br>Dead (N=8) | Mean | SD   | Median | Q1–Q3     | Missing |
|------------------------------------|------|------|--------|-----------|---------|
|                                    | 34.1 | 19.9 | 36     | 24.2–46.5 | 0       |