Incident Details:	
Date incident occurred:	28/03/2020
Time incident occurred:	12.00
Location of incident:	I&S
Date incident detected (if different):	14/07/2022
How incident was detected:	Concern raised by family
Actual severity of incident (harm):	Severe

A message to the patient's family from the investigation team

In writing this report on the findings of our investigation, the investigation team has had to remain detached and analytical. As a result, the language we have used may appear technical. We would like to convey our sincere apologies for any distress the findings of this report cause, we know that we can never understand what you have been through over the past three years.

We have sought to determine whether there were any deficiencies in your daughter's care and treatment and if so, how we can learn from these. Most importantly, we have sought to undertake the investigation and present the findings in an open and transparent manner. We recognise that you want answers about what happened and why, and our aim has been to evaluate the available evidence so we can, as far as the evidence allows us to, provide you with these answers.

Summary of incident and consequences for patient/staff/service	
Incident Description	56 year old female admitted to I&S Emergency Department on 27 March 2020 with breathing difficulties. The patient died the following day.
What happened?	The patient was admitted during the early stages of the first wave of the covid-19 pandemic. Following a chest x-ray a clinical diagnosis of covid pneumonia was made and the patient was given high flow oxygen via a face mask. The patient was discussed with the intensive care unit but considered not suitable for admission. Within 18 hours of transfer to hospital by ambulance the patient had begun to clinically deteriorate, and a decision was made for ward-based ceiling of care. The patient died at 15:10 on 28 March 2020.
Why did it happen? ***Contributory Factors***	• All clinical decision making was made in the context of the early stages of the covid pandemic i.e., optimal management was not known and extremely limited, pressures on hospital infrastructure and staff were unprecedented • Covid clinical decision making groups were not well established at this stage • Communication failures resulting in the patient not being discussed in either the newly formed covid huddles or ITU decision support group
Action(s) planned *in bullet points*	• This SI to be used/referenced in junior doctor end of life care decision making training • Raise the profile of the Trust LD team through posters, talks, signposting, Freenet, safety huddles • Relaunch ITU referral guidance across medical and nursing internal networks and standardise ITU decision making outputs

I&S

The medical registrar reviewed the patient again at 15:36 and recorded within the patient's medical records that she had been declined ITU admission due to cardiac comorbidities and Down's Syndrome. The investigating team have been unable to find any documented evidence of an ITU review taking place and can conclude that the patient was not reviewed face-to-face by ITU staff. A contemporaneous record of conversations held between the admitting ITU consultants on 27 March 2020 and any reasons for declining ITU admission does not show that the patient was discussed for consensus opinion for ITU suitability, as was the recognised process at the time. This led the review team to conclude that either the patient was not discussed at a consultant level or that the discussion was not recorded.

The reviewing team considered the degree to which the patient's cardiac comorbidities would be a reason for not admitting to ITU and agreed that the presence of moderate to severe mitral and aortic regurgitation and a cardiac pacemaker would not be exclusion factors for ITU on their own but that they could certainly adversely affect patient outcomes from Covid-19. The reference to Down's Syndrome as a reason for not admitting to ITU was also reviewed and again agreed that this is not a reason for declining ITU admission however there was a recognition that in a cohort study of 8.26 million adults, as part of the wider Covid-19 risk prediction project commissioned by the U.K. government, Down Syndrome presented an estimated 10-fold increased risk for covid-19 related death. As part of the investigation process all ITU consultants interviewed confirmed that neither the presence of a cardiac pacemaker or Down's Syndrome are considered exclusion criteria for ITU review or possible admission.

It is recognised that intensive care units were having to clinically prioritise patients for admission to ITU at this time. Occupancy data for the I&S ITU for 27 March was 27 level 3 patients (an increase from 21 patients on 26 March) [Level 3 patients are those requiring two or more organ support or needing mechanical ventilation with 1-to-1 nursing and access to a doctor 24 hours per day]. The I&S ITU baseline capacity was 23 beds (normally staffed for 9 level 3 patients and 14 level 2 patients) and on 27 March 2020 had already exceeded this. In response to the pandemic, ITU had expanded into a neighbouring ward however, by 5 April 2020 it had reached its maximum surge capacity of 40 patients.

The patient's observations at 15:36 were within the target range of 94-98% on oxygen and may therefore not have been considered to be the most critically urgent patient for ITU admission at this time. The reviewing team were made aware that on 27 March 2020 ITU was admitting patients that were clinically desaturating despite receiving high flow oxygen.

In the afternoon of 27 March, the patient was transferred to I&S ward and was at that time for full escalation of treatment despite not being considered suitable for ITU.

At approximately 20.16 the medical registrar informed the patient's brother that she had made some improvement, but that this was dependant on the patient keeping her oxygen mask on. The registrar handed over at the end of their shift that the patient's escalation status should be kept under review and to discuss again with ITU if oxygen saturation levels dropped below 90% on 60% oxygen and to encourage the patient to keep the oxygen mask on.

On Saturday 28 March 2020 at 04:10, nursing notes document that the patient was alert and that her vital signs were stable.

At 06:45, a medical specialist registrar (SpR) was asked to review the patient as her blood pressure had dropped and her oxygen levels had started to desaturate. Evidence pertaining to this time suggests that the patient was able to maintain higher oxygen saturations whilst her oxygen mask was worn but that desaturation occurred whenever this was removed. The medical SpR arranged with the nurse in charge for the patient to be moved into an open bay and to have 1-to-1 support to aid and encourage the patient to keep her face mask on. The SpR called the patient's brother, stating that the medical team would re-discuss the patient's treatment with the ITU team.