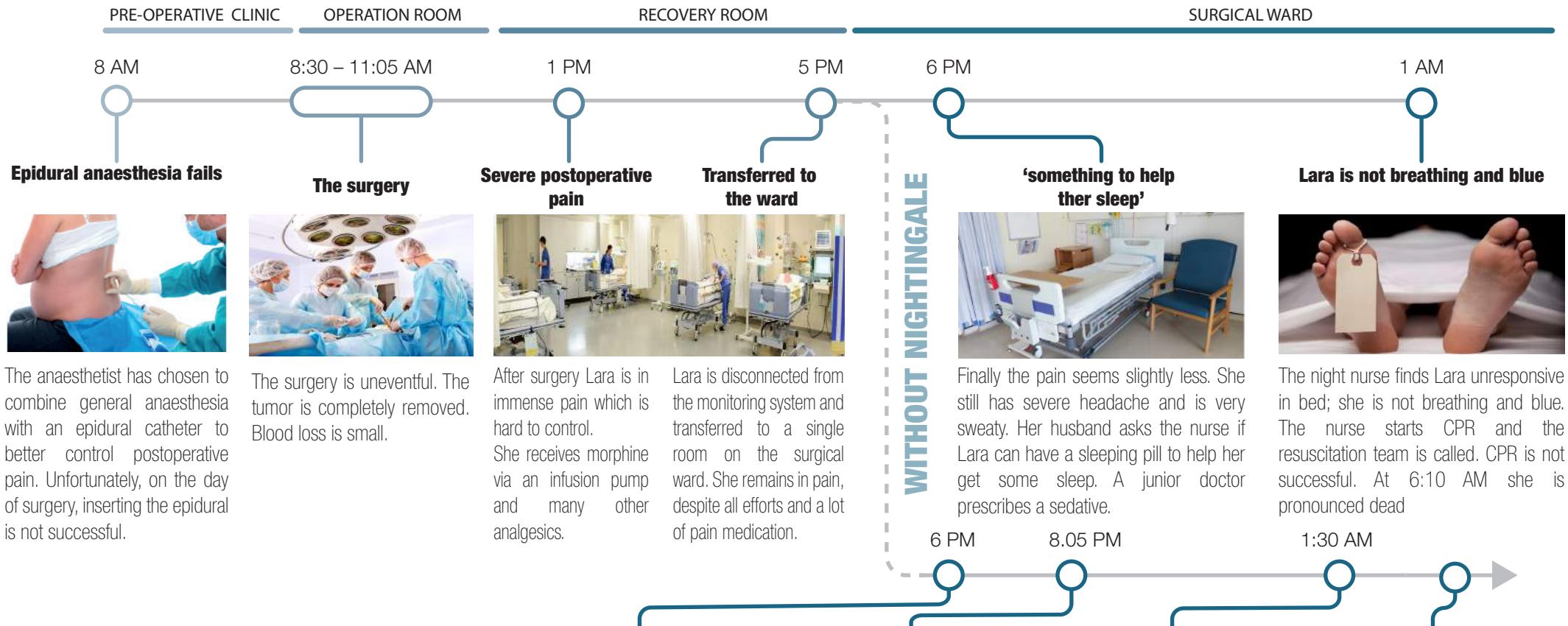


When a patient stops breathing...



My name is Lara, I'm 46 yr old. I work as a management consultant.... I'm recently diagnosed with a painful benign liver tumor. This is my story.



8 AM
Epidural anaesthesia fails



The anaesthetist has chosen to combine general anaesthesia with an epidural catheter to better control postoperative pain. Unfortunately, on the day of surgery, inserting the epidural is not successful.

8:30 – 11:05 AM
The surgery



The surgery is uneventful. The tumor is completely removed. Blood loss is small.

1 PM
Severe postoperative pain



After surgery Lara is in immense pain which is hard to control. She receives morphine via an infusion pump and many other analgesics.

5 PM
Transferred to the ward

Lara is disconnected from the monitoring system and transferred to a single room on the surgical ward. She remains in pain, despite all efforts and a lot of pain medication.

WITHOUT NIGHTINGALE

6 PM
'something to help her sleep'



Finally the pain seems slightly less. She still has severe headache and is very sweaty. Her husband asks the nurse if Lara can have a sleeping pill to help her get some sleep. A junior doctor prescribes a sedative.

1 AM
Lara is not breathing and blue



The night nurse finds Lara unresponsive in bed; she is not breathing and blue. The nurse starts CPR and the resuscitation team is called. CPR is not successful. At 6:10 AM she is pronounced dead

LESSONS LEARNED

Deterioration can be easily missed, especially at night in a dark patient room. The Nightingale system could potentially save lives, because it monitors the patient 24/7. Therefore deterioration can be detected earlier.

WITH NIGHTINGALE

Lara is transferred to the ward

Lara is transferred to a single room on the surgical ward. She wears a small sensor wirelessly connected with the Nightingale system. This allows the medical team to monitor her vital signs 24/7.

'something to help her sleep'

Finally the pain seems slightly less. She still has severe headache and is very sweaty. Her husband asks the nurse if she may have a sleeping pill to help her get some sleep. A junior doctor prescribes a sedative.

Slowing down of respiratory rate

The Nightingale system has detected a suspect vital signs pattern: progressive slowing of respiratory rate followed by a slight decrease in oxygen saturation. The system notifies the nurse and junior doctor on call and suggests to check Lara for opioid respiratory depression, a known side-effect of morphine.

Lara recovers well

The nurse finds Lara quite sedated. The doctor gives her naloxone, an antidote for morphine. Within minute she is clearheaded again. Respiratory rate and saturation are back to normal. She recovers fully and is discharged home in good condition on day 6.