



Case description

The Piet Hein Hospital is a small town hospital. The hospital offers the whole spectrum of curative care. In practice, however, the hospital is particularly good at providing elective and chronic care. The volume of complex care is low and the quality is poor. Over the past two years, the hospital has experienced a slight decline in volume, despite beautiful renovated facilities and a growth in demand for care in the region. This is probably because the hospital's reputation is deteriorating. One of the causes of this is a malfunctioning emergency room (ER).

The emergency room also has a wide range of services: everything from children with diarrhea to multitrauma care. Due to the hospital's location in the city centre, the ER has a relatively high intake of patients with little urgent care.

The number of visitors to the ER has been increasing for years (see box 1). The department's budget and staff do not increase accordingly. Collaboration between staff at the ER has always been not so good, but this increasing scarcity has made the situation much worse. Communication between nurses and doctors is poor and cooperation between the different societies is difficult.

As a result of the above developments, the waiting times for the ER rise from the pan. More and more quality is also going wrong. Last week, a patient who came in after a fall by bike sat in the waiting room for fifteen minutes without triage. The patient was found to have internal bleeding and lost consciousness. Only after a few minutes did other patients, who thought she had fallen asleep, ring the bell. The patient barely survived this incident. All this is damaging the hospital's reputation.

At the same time, the two dominant health insurers in the region are increasing the pressure. The costs for acute care in the region are higher than elsewhere in the country. There are 2 other ER's within 20 minutes of the Piet Hein hospital. These ER's also have their problems. Vlijthof Medical Centre is also close to the centre, has reasonable facilities, a reputation for good complex care and a large multi-trauma centre. However, less urgent patients have to wait a long time for the ER and it is also not very customer friendly. Although the Achterland hospital has short waiting times for the Casualty department and is very customer-friendly, the accessibility of the hospital from the city is not very good (out of town, bad public transport). The Achterland hospital does see the ER as an important means to increase the flow to the hospital. They are working on improving the accessibility of the hospital, for example by realising more parking facilities close to the ER.

Finally, 9 months ago a general practitioner's post was opened in the city centre. This post is not very well known to the public yet and has a slight run-up. A large proportion of GPs in the region are also not waiting for a large increase in volume at the GP post. However, the post has just appointed a new director, who is keen to further develop the general practitioner's post.

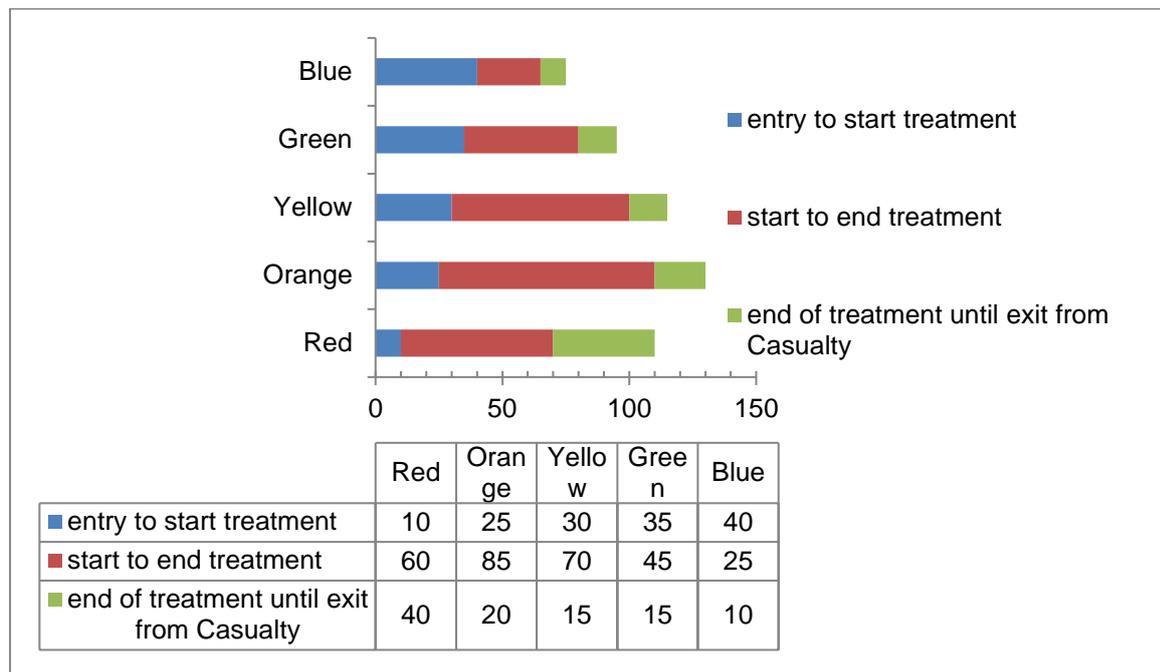
The two leading health insurers in the region are fed up with it and want to reduce the costs of acute care in the region and increase the quality. They even threaten to close one of the emergency locations.

The Piet Hein Hospital wants to take action. It can't go on like this. It is true that an important number of patients are currently entering the hospital via the ER. However, the financial loss of ER and the reputational damage caused by ER are now causing many problems. However, the Board of Directors still has many questions. Can we improve our ER? Or is it better to close it?

Box 1: Number of ER visits to the Piet Hein hospital per year, per emergency category. The ranking goes from least urgent (blue) to most urgent (red).

Emergency category	2014	2015	2016	2017	2018
Blue	449	463	485	523	576
Green	4095	4285	4484	4970	5472
Yellow	4264	4400	4727	5101	5616
Orange	2356	2432	2424	2354	2592
Red	112	116	121	131	144
TOTAL	11227	11580	12120	13080	14400

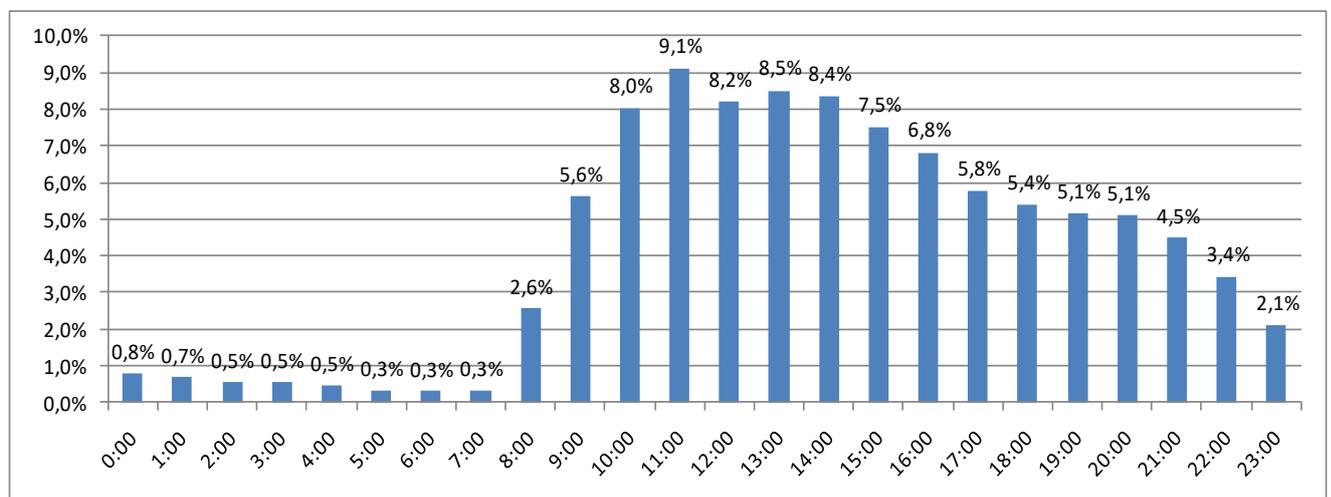
Box 2: Average turnaround times per visit at the Piet Hein ER per emergency category



Box 3: Average handling of ER visits by nurses (with ratio :doctor)

Emergency categories	Nurse involvement (% treatment minutes)	Involvement doctor(% treatment minutes)
Blue	90%	25%
Green	90%	40%
Yellow	90%	49%
Orange	90%	64%
Red	90%	75%

Box 4. Spread of the number of ER visits over the day



Assignment:

- 1. Are you expecting a large variation in influx at the ER? Can this variation be minimized? How can the remaining variation be absorbed organizationally?**
- 2. Do you expect a large variation in treatment process and duration at the ER? Can this variation be minimized? If so, what do you suggest**
- 3. What would you suggest the board of directors to do, improve the ER or close it? If improve, what should they do first to improve the situation? If closing, why?**