"CommunicAid"

How IoT can improve the ambulance service in the Netherlands







Design goal

Design an IoT based logistic concept that improves the collaboration between reporting room, ambulance staff, and emergency departments (EDs) by giving the ambulance staff direct insight in patient stops set by EDs and the EDs insight in arriving ambulances.

IoT is required for the information flows between the different devices.

EFFICIENCY CAN SAFE LIVES

'The CommunicAid improves the communication flows, and therefore the collaboration in acute healthcare'



'Creating insight in arriving ambulances will

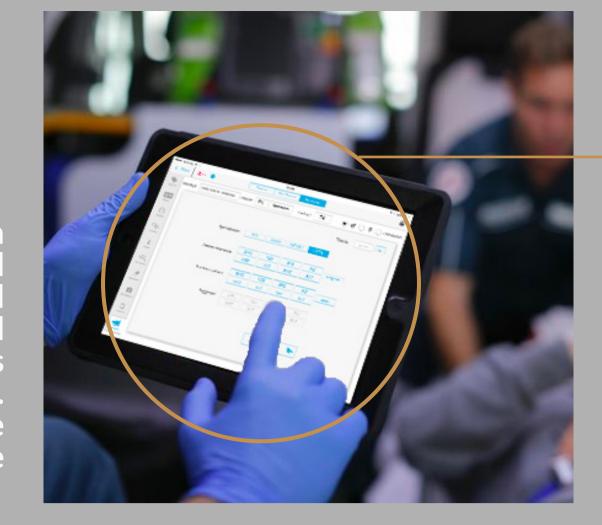
increase the efficiency at

the ED enormously'

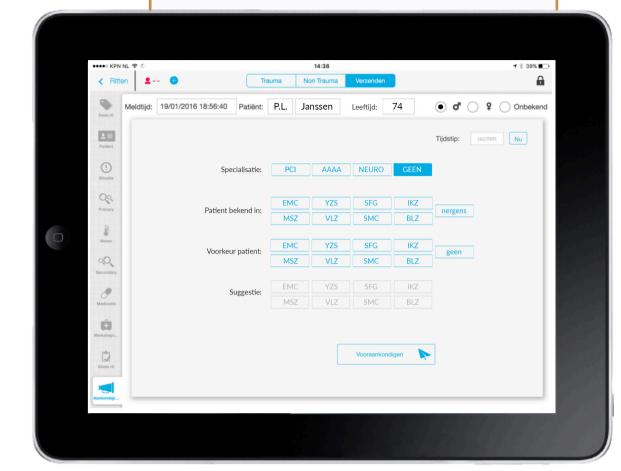
Leo - Ambulance

AMBULANCE

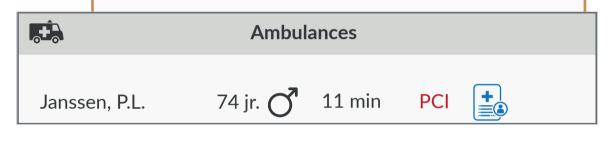
The ambulance nurse fills in three fields in the 'digitaal ritformulier' (DRF). Based on this and a few externa factors, the system decides which ED is most eligible. Real time information will be shared with the ED and the reporting room.



Patient announcement via DRF. Real time of arrival will be shared with the ED and the reporting room.



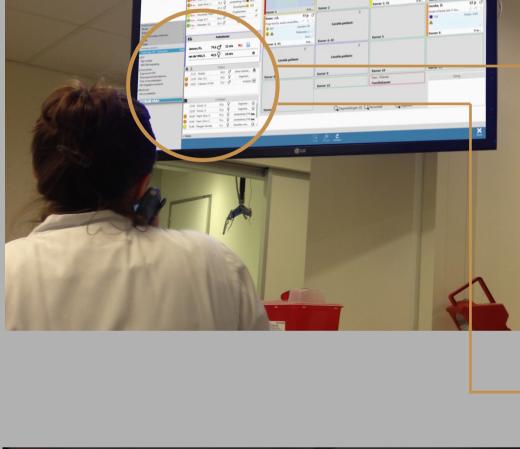
receives patient announcement from DRF. First patient information and real time of arrival is visible.





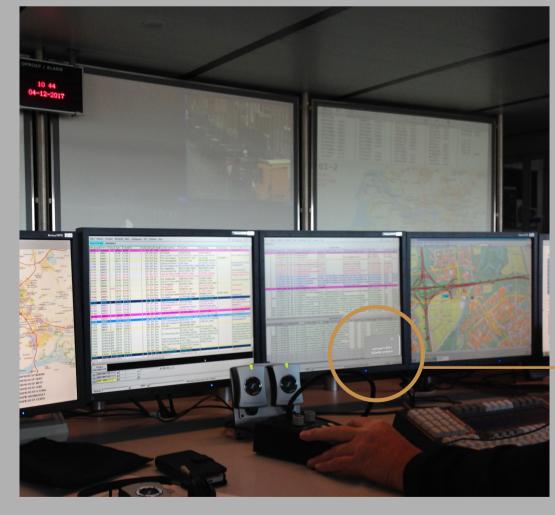
EMERGENCY DEPARTMENT

Besides receiving the patient announcement from the arriving ambulances, the ED is able to set patient stops digitally if the ED is too crowded. The reporting room gets an announcement and the DRF notifies it (one of the external factors mentioned above). Then, the certain ED is not available anymore. One hour later, the patient stop is canceled automatically.



SEH tijdelijk ontzien

Digital patient stop; the DRF and reporting receive announcement.



EMC activeert SEH

tijdelijk ontzien

The reporting room receives pop ups about patient stops from EDs, and ED destinations the DRF.

'The CommunicAid will definitely save time and reduce the work pressure in the reporting room'



REPORTING ROOM

The patient stops set by the EDs are communicated digitally. The reporting room employees do not have to take action for this but still be informed. The same goes for the ED destination of the ambulance. Instead of communicating this verbally, it is done via the DRF.



TUDelft

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