

Patient Trajectories and the Coordination of Work

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Abstract

The concept of 'patient trajectory' has been proposed in order to address the actual flow of events in clinical reality, as a counterpart of concepts such as 'plan', 'guideline' and 'protocol'. When using the patient trajectory concept for designing computer support for coordination of work, the complexity and ambiguity of the concept is seldom questioned. The patient trajectory is frequently presented as merely 'the sequence of events', a rather uniform object without much internal structure. This is less problematic when the focus is on supporting inter-trajectory coordination (coordination of different trajectories), as coordinating them comes down to balancing overlap in time and pooled interdependencies with respect to the use of shared recourses. However, it breaks down when the focus is on intra-trajectory coordination (coordination of work within a trajectory) as different actors require different representations of the patient trajectories.

Keywords:

Patient trajectory, Coordination, Design, Awareness.

Methods and materials

A combination of methods has been used. We conducted a literature study to trace the origins of the concept, its evolution and application in different studies. After that we conducted observations of clinical work in the peri-operative domain in order to see which trajectory representations were used, how they were used and by whom. Three representations were analysed in greater detail (OpPlan, Picis and OpForm). Through interviews we obtained insight into how different health personnel interpret and use these representations differently.

Results

Our empirical data show that patient trajectories are fragmented, and multi-faceted. One can say that different health workers tell different, though related, stories about a patient's whereabouts. The *patient trajectory representations*, the artifacts reflecting patient trajectories, are likewise fragmented, and multi-faceted. 'The patient trajectory' is a synthetic construct combining the different views by different health workers that are reflected in the different representations in use.

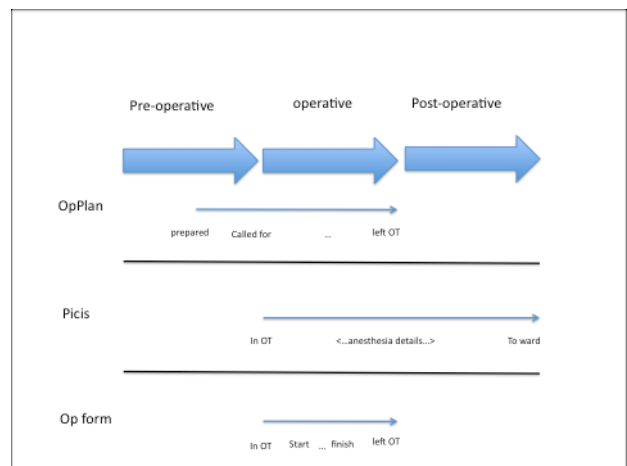


Figure 1-Patient trajectory representation

Conclusion

Different actors use different representations of the flow of events with respect to a specific patient. The representation of 'the' patient trajectory can be seen as a patchwork of these different representations. The different representations have an overlap in events included and it is this overlap that enables the different user groups (e.g. operation nurses, surgeons, anaesthesiologists, coordinators, etc) to coordinate their work.

When designing computer support for intra-trajectory coordination based on visualizing patient trajectories, two main design considerations must be taken into account:

1. Different actors involved in the management of a patient trajectory require different representations of the trajectory.
2. The different representations of the same trajectory must be connected.

We are currently working on detailing out which different representations are required for coordination in the peri-operative process.