Feasibility of a digital patient-led hospital checklist to enhance safety in eye surgery

Jolet van der Steen¹, Stans Drossaert², AnneMarie Braakman², Kees Sol³, Dirk de Korne⁴
1 Netherlands Patient and Consumer Federation (NPCF), the Netherlands
2 University of Twente, the Netherlands
3 Rotterdam Eye Hospital, the Netherlands
4 Duke-NUS Medical School, Singapore

BACKGROUND
Handover of information from hospital to patient is critical for successful recovery after surgery and to prevent (post-surgical) iatrogenic harm. Surgical checklists have shown to be effective, however, patients are often not actively involved in these checklists.

THE “EYE-PAD” - checklist
A 19-item digital patient-led checklist was developed for patients who undergo cataract surgery. The list contains necessary information the patient should have received before or during the surgical preparation (8 items), before anaesthesia (2 items), and before discharge (9 items).

This “EYE-pad” checklist is distributed to patients and companions via an application on a tablet. Patients and their companions are invited to actively use the EYE-pad by marking the items and the information they have received, during their hospital visit.

FEASIBILITY STUDY
In the current study we investigated the feasibility of the EYE-Pad among patients and nurses.

Interviews with patients
Semi-structured interviews were conducted with 17 patients (age 58-88 years, 65% female) and their companions immediately after their discharge. Interview questions focused on use, appreciation and perceived impact of the EYEpad checklist.

Focusgroup with nurses
A 60 minute focusgroup session was conducted with 6 nurses (age 20-57 years, all female). The session focused on use, appreciation, an perceived impact of the EYE pad.

RESULTS
Patients
Almost all patients used the EYE-Pad, whether or not assisted by their companion (mostly their partner). Most patients appreciated the EYEpad and found it easy to use. Also patients and their companions mentioned they felt more involved during their hospital visit. Whereas some patients felt that the EYEpad could indeed increase patient safety, for the majority of patients it was not clear why they received the checklist.

Nurses
Although most nurses agreed that the EYE-pad was easy to use, and could be a useful tool to improve patient participation in improving safety, they felt that not all elderly patients are willing or capable of using it, and that the application interfered with the existing surgical process. Also they anticipated to spend more time to explain the purpose and use of the EYE-pad.

CONCLUSION
Our study shows that a digital patient-led checklist is a potentially valid way to increase patient participation in improving safety, even in this group of elderly patients. It also shows the crucial role that nursing play in the actual diffusion of technological innovations. Increased patient participation will only improve safety when both health care workers and patients feel empowered to share responsibility and balance power.

Further information
Stans Drossaert
c.h.c.drossaert@utwente.nl