

The Re-design and Evaluation of the Patient Gown for an Integrated Healthcare Organization

Linsey Gordon and Lucy Dunne, University of Minnesota, USA

Keywords: Design, healthcare, clinical evaluation

In 2009, the Center for Disease Control reported that 36.1 million people were discharged from inpatient hospital care, there were 48.0 million surgical procedures performed, 96.1 million people visited the hospital or clinic for an outpatient appointment, and 136.1 million people visited the emergency room. One thing that many of these individuals had in common was that they had to wear a patient hospital gown. The purpose of this study was to test the current hospital gown against a redesigned patient gown for improvements in modesty, ease-of-use and esteem within an integrated healthcare organization located in Minnesota.

A thorough literature review shows that there are major deficiencies in the current gown that range from the loss of dignity due to the lack of modesty, the basics functionality of the gown and the aesthetics (for example Cho, 2006; Walsh & Kowanko, 2002). Advancement of the patient gown design in terms of ease of use, modesty and overall satisfaction has the potential to dramatically improve the patient experience.

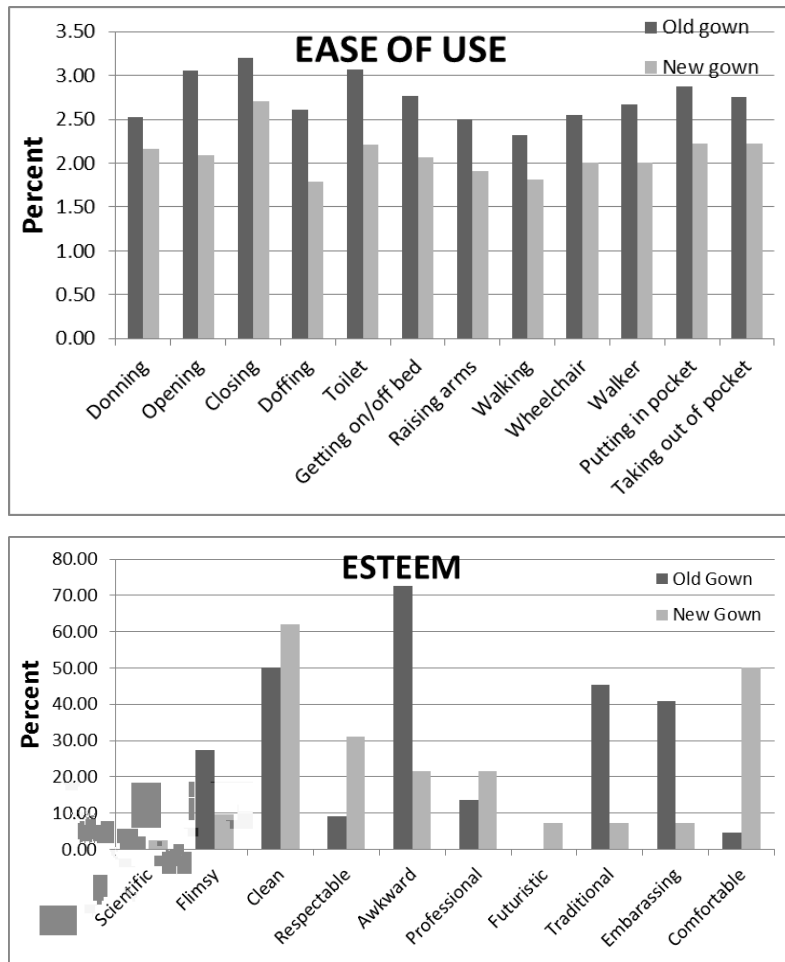
The current patient hospital gown used by the local hospital organization is depicted in Figures 1-2. This gown is worn in a variety of environments, including clinical and acute care settings by patients with a range of physical and cognitive abilities.



Figure 1 & 2: Front and Back view of current gown

Figure 3 & 4: Front and Back view of new gown

In 2010, the sponsoring healthcare organization performed a study of the patient experience within their facilities and developed requirements for a new hospital gown design that addressed the needs of both the patient and the hospital staff. Based on elements of evidence-based design, a new gown was developed through the use of design processes, needs



assessments, the requirements set forth by the hospital organization and user interviews (depicted in figures 3-4). The new design features an asymmetrical back with wrap-style adjustable side tie, a front pocket with hidden telemetry opening at waist, a telemetry opening at chest, snap sleeves, and an innovative snap-pull tab closure system at neck.

A questionnaire for

patients was developed based on the design requirements. 62 patients in clinical and acute care settings tested either the new gown (n=41) or the old gown (n=21). Patients varied in age and gender. Questions focused on ease of use as well as feelings of modesty and esteem. Participation in the study was voluntary.

Figure 5(top) & 6(bottom): Patient ratings of new and old gowns

Results showed improvement in ease of use of the new gown (Figure 5). 13.64% of patients described the old gown as making them feel “secure and confident”, versus 40.48% for the new gown. 26.19% felt “respected” (13.64% for old gown) and 40.48% felt “part of a well-run organization” (13.64% for old gown). 26.19% felt “dignified” (18.18% old gown) but fewer patients (66.67%) felt that they were easily identified as a patient compared to in the old gown (86.36%). When asked to indicate which of the words specified in Figure 6 applied to the gown they were wearing, an increase in positive-word responses and a decrease in negative-word responses were observed.

References:

Center for Disease Control, United States. (2009). Hospital Utilization. Retrieved from: <http://www.cdc.gov/nchs/fastats/hospital.htm>

Cho, K. (2006). Redesigning hospital gowns to enhance end users’ satisfaction. *Family and Consumer Sciences Research Journal*, 34 (4), 332-349.

Walsh, K. & Kowank, I. (2002). Nurses’ and patients’ perceptions of dignity. *International Journal of Nursing Practice*, 8: 143-151.