Grigorios Anagnostopoulos, Michel Dériaz, Jean-Michel Gaspoz, Dimitri Konstantas, Idris Guessous

Title: "Getting lost" in hospital is a source of stress among staff members

Background:

Navigating around large hospitals has been shown to be a stressful and time-consuming experience for all users of the hospital, including staff members. In addition, navigation difficulties in a hospital highlight suboptimal organisation. When staff encounters navigation difficulties this can lead to cost and efficiency issues and potentially put patient safety at risk. Despite the provision of an array of in-hospital navigational aids, 'getting lost' continues to be an everyday problem in these large complex environments. Within the framework of developing a navigation mobile app for the largest university hospital of Switzerland (Geneva University Hospitals), we aimed to identify the navigational needs of, problems encountered by, and consequences to primary care staff.

Methods:

A questionnaire was developed by a primary care physician and an indoor navigation specialist (both from Geneva University) based on factors identified through a review of the literature. The questionnaire was constructed to reflect all professional activities encountered in the primary care division and was sent in 2016 to both physicians and non-physician healthcare providers. The questionnaire includes the identification of current problems in way finding inside the hospital (stationary and ambulatory) and their impacts on the staff's work.

Results:

Out of 169 eligible collaborators, 111 (65.7%) answered the questionnaire, 61.3% were completed by physicians, 56.7% of collaborators had >5 years of work at Geneva University Hospitals, 70.5 were female, mean age was 39.5 years (SD 10.3). The majority (52.3%) of the participants answered that they had faced difficulties in finding their destination in the hospital (36.9% occasionally; 14.4% often, 0.9% all the time). Only 9.9% answered "never" and 37.8% "rarely". On average, participants estimated that they spent 11.7 minutes per week on searching for their destination or answering questions of others trying to reach their destinations. About 70% of the participants reported that the difficulty of finding one's way in the hospital could be a source of stress for staff members. The participants expressed a very

positive view over the prospect of the creation of an application for mobile phones that would guide staff to their destination in the hospital.

Conclusion:

These results show that even for staff members of a large hospital, finding their destination is difficult, consumes time, and might be a source of stress. Improving wayfinding could contribute to pursuing organizational change, improve efficiency, and decrease stress.