

Usability and utility evaluation of the web-based "Should I Start Insulin?" patient decision aid for patients with type 2 diabetes among older people

ABSTRACT

This study aimed to evaluate the usability (ease of use) and utility (impact on user's decision-making process) of a web-based patient decision aid (PDA) among older-age users. A pragmatic, qualitative research design was used. We recruited patients with type 2 diabetes who were at the point of making a decision about starting insulin from a tertiary teaching hospital in Malaysia in 2014. Computer screen recording software was used to record the website browsing session and in-depth interviews were conducted while playing back the website recording. The interviews were analyzed using the framework approach to identify usability and utility issues. Three cycles of iteration were conducted until no more major issues emerged. Thirteen patients participated: median age 65 years old, 10 men, and nine had secondary education/diploma, four were graduates/had postgraduate degree. Four usability issues were identified (navigation between pages and sections, a layout with open display, simple language, and equipment preferences). For utility, participants commented that the website influenced their decision about insulin in three ways: it had provided information about insulin, it helped them deliberate choices using the option-attribute matrix, and it allowed them to involve others in their decision making by sharing the PDA summary printout.

Keyword: Diabetes; Insulin; Patient decision aids; Usability; Utility; Website