

Undertaking a usability study on the information seeking behaviour of hospital library users

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Abstract

The Western Health Library Service undertook a usability study of its intranet site to determine users' habits and capacity in finding information. This follows an earlier usability study in 2014 that prompted significant changes to the site. The library service plays a critical role in providing access to the most relevant and current information to support medical, allied, and nursing staff. The changes to the intranet were designed to facilitate this, so content from the intranet could be retrieved quickly and efficiently. The most recent usability study aimed to discover how the functionality of the site was used, how users navigated it, and whether further changes needed to be made to improve its performance. Valuable feedback was retrieved during the testing process that has enabled the library to understand users' behaviour, and to implement further enhancements to aid searching and discovery.

Introduction

The key aim of any medical library is to ensure that end users – medical, nursing and allied health staff – are able to find information to support them in successfully providing the best possible care for their patients.

A usability study in the library's 2014 biennial Customer Satisfaction Survey of the Western Health Library Service intranet site recorded poor usage. Due to this outcome, major changes were made to improve the library intranet site in November 2015. These changes were designed to create a more user-friendly interface and streamline access to resources and services. The redesign featured the inclusion of a widget for the library's "Discovery" search tool, Summon, on the main page of the library's intranet site, along with fewer grouped links, more images, and the inclusion of a page detailing services provided by the Clinical Librarian.

This current usability study was undertaken to assess whether changes made to the library's intranet site allow Western Health staff to better navigate and access library resources, consequently assisting them in clinical decision-making, direct patient care and research, and quality projects.

The usability study also provides library staff with an opportunity of understanding of how the intranet site is currently being used by staff and can inform any further decisions on changes to

improve its usability (1).

The key outcomes measured were:

- Ease of navigation
- Layout of the website
- Readability of the website (Font, colours, text)
- Searching functionality
- Steps taken in accessing resources (e-books, e-journals, catalogue, databases)
- Additional resources not featured on the main page of the intranet that users may find useful

Methods

Research by Denton, Moody, and Bennett indicates that usability testing is a valuable method to refine a Health Sciences Library website (2). To effectively test the usability of a department website, Denton explains that usability testing only requires five participants to determine “80% of the issues” users have with any site (2).

Taking into account the small number of participants required for the usability study, the scope of disciplines accessing Western Health Library’s intranet site, and our end users being time poor, the decision was made to cap the number at 10 participants.

An initial invitation requesting involvement in the usability study was emailed to 52 users randomly selected from data collected via Serial Solutions. From this email, only two responses were received. The majority of the staff emailed were medical staff. It was presumed that the lack of response was due to medical staff being time-poor, as well as staff changes in medicine undertaken at the time of the usability study.

Due to the low response rate, a second invitation was sent to 40 allied health staff seeking volunteers to participate in the usability study. Although this population were not high users of the service (according to data retrieved from Serial Solutions), the response was positive, with around 20 allied health staff volunteering to participate.

The usability study was undertaken over a three-week period during February and March 2017 and was carried out by conducting one-on-one 30-minute sessions with 10 participants who were Western Health staff. The testing was conducted by the Assistant Librarian, with the Library Technician acting as a scribe. A series of 10 structured questions was developed to enable the participants to provide feedback as they navigated their way around the library intranet site.

During each session, participants were instructed to comment on their thoughts and experiences as they searched and tested the functions of the site. The verbal dialogue was recorded in writing and then transferred to an excel spreadsheet.

Results

The participants who took part in the usability study were either not users of the library service, rarely used the library intranet, only accessed the library when undertaking further study, quality projects, or research, and were inclined to physically visit the library if they required assistance with their information needs.

Although the majority of the participants were able to navigate around the library intranet site, some participants took a significant amount of time to locate links and overall, the participants' ability to seek and locate the exact information they required was suboptimal.

Participants were directed to locate a specific article and eBook held in the Western Health Library collection, as well as a book that was not available through the collection. Observing participants undertake this task assisted library staff in understanding the steps users take in finding and accessing resources held within the library's catalogue and databases.

During the study, participants were also asked to consider a topic in which they would need information and demonstrate how they would use the library intranet site to search for information on that topic. If they were unable to think of a topic they were provided with an example.

Nine of the participants clicked on the link to the libraries database page. Seven of the participants were able to identify specific databases they would use to conduct a search, however, only five participants clicked into a database link and attempted to conduct a search. Out of the five participants who conducted their searches via a database, only two of the participants used Boolean operators.

Two participants entered a search term into the discovery tool located on the database page for locating e-journals or books from the library collection. One participant attempted to search via the discovery tool Summon, whilst another participant said they would "Google" first before selecting a database.

Following the initial search, none of the participants were happy with their results. All indicated that as a result they would come to the library and ask for assistance, or identified that this is an area that they would need a refresher in.

Asking participants to seek specific topical information provided library staff with insight into search strategies used by participants. This also provided valuable feedback on the intranet's interface. Several participants voiced that they found the layout and functionality of the intranet site to be "too busy", with the location of links and the font size used too small for them to be able to locate online resources quickly.

A small portion of participants also found the terminology used on the intranet site to be confusing. New or non-frequent users were unsure of the acronym W.H.A.L.E.S (Western Health Access Libraries Electronic Service) and none of the participants understood the link titled

Subject Portal, which links to the subject guides. However, once participants were directed to click the link, all of them found the portal content useful in assisting them with their clinical roles.

Participants agreed that the library's discovery search tool (Summon) was appropriately located and would use it to find information.

Discussion

The information yielded from the usability study will enable library staff to make positive changes to the intranet site. These changes will assist end users to better navigate their way around the site, and to find the information they require in a timely and efficient manner (3).

The information gleaned also provides the opportunity to review education programs currently provided by the library. Changes to education and information sessions provided by the library service based on usability feedback can assist staff to improve their information seeking behaviour and enable increased and better use of the resources provided by the library service.

After changes have been made to the intranet have been implemented, participants will be asked to return on another date to repeat the same usability testing process to ensure the library service has taken the appropriate measures to meet the needs of our end users, as discovered by this study.

The current study limited participant selection to areas in allied health and pharmacy. User cohorts including medical, nursing, and non-clinical staff such as executives, clinical educators, project officers, and administration were not tested due to the timing of the study and the small number of participants required for the undertaking of the initial pilot.

For future usability studies undertaken by the library, it will be essential to ensure collaboration with a wider cohort. Involving a wider audience will enable the library service to engage with all the departments who access the library service within the Western Health network.

Conclusion

Undertaking a usability study of the Western Health Library Service intranet site has been a valuable lesson in understanding our users and the usability of the services we provide via an intranet site.

From this study, library staff plan to undertake further changes to the site, which will hopefully increase its functionality. This will enable clinical and non-clinical staff with a service which allows them to access the information they require to support them in the roles.

References

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