Dental Information on a Web-based Patient Health Portal: A Pilot Survey

Andrea Mahnke, B.S.¹, Jennifer Ciske, B.S.² and Amit Acharya¹, B.D.S., M.S., Ph.D.

¹. Biomedical Informatics Research Center, Marshfield Clinic Research Foundation
². School of Medicine and Public Health, University of Wisconsin, Madison

Purpose
The primary aim of the study was to assess and collect the different types of dental information that patients would want made available to them via the 'My Marshfield Clinic' patient health portal. The study also wanted to learn how patients are currently using the patient health portal, where they use it, how often and for what reasons. Aside from learning what dental information to offer through the patient education portal, the survey also revealed other areas that could be improved to increase patient use of it.

Introduction
Beginning in 2002 Marshfield Clinic partnered with Family Health Center of Marshfield, Inc. to provide dental services to rural communities throughout central and northwestern Wisconsin. Seven dental centers serve residents who come from all over Wisconsin. Two additional sites are schedule to open in 2011. Between November 2002 and May 2010, 47,861 unique patients were treated at these dental centers.

Background
Healthcare delivery systems are moving towards a ‘patient-centric’ approach. As part of this paradigm more and more patients are moving towards the use of patient health portals for managing their health care needs. Patient health portals are online applications mostly made available by individual healthcare organizations or service providers through which the patients interact and communicate with their health care providers. They can also keep track of their health history, medication history, test results, historical vitals, immunizations, billing, future and past appointments, and access educational materials. Based on the latest understanding of the correlation between oral and systemic health, it seems apparent for a need to integrate medical and dental health records in order to provide the greatest quality of care possible for patients.

To further advocate the idea of integrated approach to healthcare, Marshfield Clinic, with support from Delta Dental of Wisconsin and Family Health Center, recently developed an integrated medical-dental electronic health record (iEHR) environment. Currently Marshfield Clinic also provides access to patient’s personal health information through a secure online health portal called My Marshfield Clinic. However, the health portal only houses patients' medical information and not the dental information. As the next logical step to providing both medical and dental health services using an iEHR environment, Marshfield Clinic is working toward making appropriate dental information available to patients as part of their overall health information through the health portal. As part of this effort, a pilot survey was conducted to assess and collect the different types of dental information that patients would want made available to them via the health portal.

Methods
A 17 question paper survey was designed and administered in five Marshfield Clinic...
dental centers. A research coordinator worked with dental center managers to determine the best way to administer the survey. The survey was administered by appointment coordinators at the patient check-in desk over a three-week period. Based on average patient visits in that timeframe, each center received 250 blank surveys. An instruction sheet including a sample script and frequently asked questions and answers and contact information was included with the packet of surveys. Patients between the ages of 18-89 were eligible to complete the survey. Patients returned completed surveys back to the appointment coordinators. The survey consisted of 17 questions. Three questions addressed demographics. Six questions addressed current patient portal use. Two questions addressed where patients would like to access the patient portal. Six questions addressed interest in accessing dental information and dental education through the patient portal. The research coordinator’s contact information was included on the survey in the event patients had questions about the survey. The study protocol was submitted to the Institutional Review Board and approved as exempt under 45CFR46.101 (b) (Marshfield Clinic Research Foundation IRB number ACH10310).

Results
At the end of three week period, a total of 49 surveys were completed. Of the completed surveys, 32.7% were male and 67.3% female. The majority 70.2%, had internet access at home, with work 27.7%, being the second most popular place they had Internet access. Only 32.7% had previously access My Marshfield Clinic. The main features used by those accessing My Marshfield Clinic was viewing their health summary 66.7%, reviewing a test result 58.3%, appointments 41.7% and health education information 41.7%. When asked if they would feel comfortable accessing My Marshfield Clinic at a kiosk in a waiting area, 60.9% responded positively.

When asked if they would like the My Marshfield Clinic to provide access to their dental information, 71.1% responded positively. Dental appointments 86.7%, routine dental appointment reminders 80%, date of last dental visit 62.2%, previous dental procedures 55.6% and dental history were top areas of dental information that respondents would like to be able to view. A majority of patients 77.3% said they would access dental information through My Marshfield Clinic. Also 60.9% of respondents said they would like as much dental information included in My Marshfield Clinic as possible. Finally respondents indicated roughly equally that they would like dental educational materials presented in video 61.4%, diagram 65.9% and text 63.6% formats.

Conclusions
The majority of respondents were not only interested in viewing their dental data through the My Marshfield Clinic patient health portal, but were also interested in having access to as much of their dental information as possible. Based on the experiences through administering the pilot survey, a larger survey is planned in the near future. The survey responses will help steer development to include dental information in the patient health portal. The responses will also be used to make any general improvements to the patient health portal.

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