

Letters

UPTAKE OF THE USE OF PATIENT-DOCTOR E-MAIL IN AN ENDOCRINOLOGY OUTPATIENT SETTING

Editor

E-mail communication between doctor and patient is becoming increasingly popular, particularly because of the availability of electronic health care records (EHR) and ehealth resources such as 'Patient Portals'. E-mail can be utilized to enhance access to healthcare, health promotion, facilitating clinical management and in some settings, replacing the outpatient clinic visit.^{1,2} Perceived advantages include a rapid response time, usage outside of normal working hours, improved patient-doctor communication and the ability to initiate management plans at an earlier stage. However, implementation of e-mail appears to be under-utilized. Possible explanations include presumed increased workload for the clinician, matching patient expectations, issues of confidentiality and medico-legal implications.³ Against this background we aimed to assess the rate of uptake of e-mail at a weekly new-patient endocrinology clinic.

TABLE 1

Various reasons for e-mails being sent

Reason for e-mail	Number n=37
Medical advice	11
Test results sent by patient for advice	7
Test results sent by GP for advice	7
Clinical query	6
Advice on medication	3
Scheduling of appointments	1
Scheduling of investigations	1
Medication side effect reported by patient	1

Methods

All patients were advised at their initial clinic visit of the availability of e-mail communication. The consultant's hospital e-mail was provided on the clinic letter patients received after their appointment. All patients were reviewed by one endocrinology consultant. Upon receipt, all e-mails were documented in the patient's clinical notes. Data was collected prospectively over a 12 month period between 1st January and 31st December 2015.

Results

224 patients (146 female, 78 male) with a mean age of 47 years (range 14-90 years) were included in the study. 11/224 (5%) of patients utilized e-mail over the study period. Of the

11 patients, 9 were female and 2 male, with a mean age of 45 years (range 22-87 years). A total of 37 e-mails were received, 30 from patients and 7 from general practitioners (GP's), six patients and three GP's sent one e-mail, one patient sent two e-mails, two patients sent three e-mails, one GP sent four e-mails, one patient sent six e-mails, and one patient sent ten e-mails. The reasons for e-mail correspondence are outlined in Table 1 and included seeking medical advice, advice on test results and scheduling of appointments and investigations.

Discussion

Online communication by e-mail in the outpatient setting has the potential to be convenient for patients and efficient for doctors.⁴ This study's main finding is that uptake of e-mail between patient and doctor in an endocrine outpatient setting was low at 5%. Although the numbers were small it appeared that most users of e-mail were young and female and advice on test results and medical advice were the most frequent queries. The uptake of e-mail from some GP's shows a willingness to engage in using e-mail as a form of communication and has the potential to be explored further. Various factors correlating with the uptake of patient-doctor e-mail have been explored in other large series and have included age, access to internet, patient health status, doctor specialty and workload.⁵ However, the numbers were too small in this study to address these factors. Although the uptake of e-mail was low, the results are relevant and timely with the widespread use of electronic health care records in Northern Ireland and the potential for the development of an interactive multi-functional 'patient-portal' with the facilities for secure e-mail access to allow for more efficient communication between doctor and patient.

Anna Todd, Philip C Johnston

Regional Centre for Endocrinology and Diabetes, Royal Victoria Hospital, Belfast, UK

Correspondence to: Dr Philip Johnston E-mail: philip.johnston@belfasttrust.hscni.net

REFERENCES

1. Ronda MC, Dijkhorst-Oei LT, Rutten GE. Reasons and barriers for using a patient portal: survey among patients with diabetes mellitus. *J Med Internet Res.* 2014(Nov 25); 25;16(11):e263.
2. Menachemi N, Prickett CT, Brooks RG. The use of physician-patient email: a follow-up examination of adoption and best-practice adherence 2005-2008. *J Med Internet Res.* 2011(Feb 25);13(1):e23.
3. Moyer CA, Stern DT, Dobias KS, Cox DT, Katz SJ. Bridging the electronic divide: patient and provider perspectives on e-mail communication in primary care. *Am J Manag Care.* 2002;8(5):427-33.
4. Santana S, Lausen B, Bujnowska-Fedak M, Chronaki C, Kummervold PE, Rasmussen J, *et al.* Online communication between doctors and patients in europe: status and perspectives. *J Med Internet Res.* 2010(Jun15);12(2):e20.
5. Newhouse, N., Lupiáñez-Villanueva, F., Codagnone, C., & Atherton, H. Patient use of email for health care communication purposes across 14 european countries: an analysis of users according to demographic and health-related factors. *J Med Internet Res.* 2015(Mar 6);17(3), e58.



UMJ is an open access publication of the Ulster Medical Society (<http://www.ums.ac.uk>).

The Ulster Medical Society grants to all users on the basis of a Creative Commons Attribution-NonCommercial-ShareAlike 4.0 International Licence the right to alter or build upon the work non-commercially, as long as the author is credited and the new creation is licensed under identical terms.