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A survey of GP attitudes to and experiences of email consultations

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ABSTRACT

Email is an accepted part of modern communication in business and education. The use of email could benefit communication between patients and healthcare professionals. Use of email within health care has been hampered by concerns about privacy, technical barriers, perceived fear of change and increased workload.

Sixty-two general practitioners within Dundee in east Scotland responded to a questionnaire and indicated that they regularly used email for communication within their practices and with outside agencies, but rarely with patients. Many perceived a need to provide an email service for clinical enquiries and repeat prescription requests but felt constrained from doing so by a lack of an accepted system and workload concerns.

Keywords: communication, consultations, email

Background

Email communication is established in business, science and education. Email dialogue between healthcare professionals is common practice, but email dialogue between patients and healthcare professionals is a new area. Government policy is to promote better patient access to healthcare professionals. There will be a relentless pressure on practices to respond to patient demand for email access for booking appointments, ordering prescriptions and asking for advice.1–3

There are a number of arguments for an email dialogue between patients and professionals:

• convenience
• an exact record of dialogue is kept
• asynchronous communication is possible
• attachments with web-links can be used to disseminate information
• opportunities to save unnecessary face-to-face contacts
• a chance to achieve equity of decision making between patient and healthcare advisor.

Arguments against email include:
• concerns about the 'dangers of the internet'
• confidentiality
• social exclusion of the technically illiterate and those without easy access to information technology (IT)
• intrusion into the lives and work patterns of busy general practitioners (GPs)
• fears about security.4–7

Anecdotal evidence suggests that some GPs already have experience of replying to emails from patients despite the policy of some primary care organisations opposing this. Most practices now have access to the internet and an email facility; many practices will thus have the capacity and technical skill to allow communication with patients by email. Individual GP email addresses are relatively easy to obtain via health authority or individual practice websites or practice notepaper. Despite an emerging body of literature from the USA there has been little published work to evaluate the impact of email service for patients within UK general practice.4–10 There may be unmet demand from patients to use email in communicating with their GPs for routine matters such as making appointments, repeat prescription requests, and asking simple questions to determine whether a face-to-face consultation is necessary. Before advocating more widespread use of email between doctors and patients, however, it is important to explore the attitudes to and experiences of email consultations in modern general practice.

Method

We developed and piloted paper and electronic forms of a questionnaire for GPs examining current usage of and attitudes towards email (see Appendix 1). We sent the electronic version as an attachment to an email to all 122 GPs in Dundee together with instructions in how to save, attach and send completed replies back to us. We wished to explore GPs’ own views and experiences and thus did not make specific mention of pre-existing health authority policy regarding emails from patients.

Seventeen completed electronic replies were returned and a further one returned by post in printed form. A further three electronic replies were rejected by our virus scanner suggesting the respondents did not have functioning anti-virus software. We then sent a postal version to non-responders and received a further 41 printed replies. There were thus a total of 62 (51%) usable replies.

Results

Current usage of computers and email

All respondents said they had computers on a practice network and had internet access. Most GPs (55, 89% of respondents) had exclusive use of a computer and most (48, 77%) reported having a practice intranet. Nine GPs either did not respond or did not know if they had an intranet. Twenty-five (40%) had received formal training in the use of email and a further 15 reported a desire for such training.

Fifty-six GPs replied to questions concerning the use of email; the majority of these used email to communicate with other GPs within the practice (46, 82% of respondents), with GPs in other practices (44, 79%), and with their own practice administrative staff (50, 89%). Email communication with practice attached staff was less common with only 18 (32%) reported. Communication with hospital staff was uncommon with emails to consultants (14, 25%) and hospital administrative staff (9, 16%) reported. Fifteen (27%) used email for referrals (presumably using the local electronic referral system). Twenty-six (46%) GPs reported using email to communicate with the health authority and 47 (84%) used email for personal correspondence.

Attitudes to use of email with patients

The majority of respondents expressed concern about the security of email as a means of communicating with patients, exemplified by 39 (63%) expressing disagreement or strong disagreement with the statement ‘email is a secure way of communicating’. Opinion was divided on whether email is a convenient way for patients and GPs to communicate, but nearly all GPs thought email would be used much more in future.

Replies to questions about concerns with email emphasised worries about confidentiality with 40 (65%) agreeing or strongly agreeing that this was a major issue. The difficulties of making a diagnosis by email and a preference for face-to-face contact were emphasised. The majority expressed the view that there was insufficient time to respond to all emails (45, 73%), and email would erode time available for seeing patients (40, 65%) and place an additional burden on an already onerous job (38, 58%).

Despite these misgivings, 32 (52%) respondents said they would be willing to provide an email service to patients. Twenty-five (40%) GPs expressed a willingness to use email to request repeat prescriptions,
and 17 (27%) to make appointments, but only 14 (23%) for consultations.

**Actual experience of using email to communicate with patients**

Twenty-three (37%) respondents had already received one or more emails from patients. Repeat prescription and appointment requests were the commonest reasons, although nine reported ‘consultation’ requests. Most GPs chose not to answer our questions about whether they replied to patient emails but the ten who did reported having used email to answer a patient enquiry.

**Discussion**

All the practices we surveyed were equipped with computers attached to the internet and had an email facility. GPs appeared comfortable with email as a communication medium between themselves and their colleagues within and outside their practices. The questionnaire highlighted a training need and the difficulties our GP colleagues experienced in attempting to reply to our electronic questionnaire confirmed this. The lack of virus protection in some practice systems is a concern.

Low response rates of around 50% are now the norm in primary care research. It is noteworthy that the majority of our responders chose to use paper rather than electronic media. We appear to be some way off an era where electronic communication is the optimum way to canvass GP opinion. These findings echo those of Houghton et al when considering the use of email as a research tool in general practice.11

The majority of GPs accepted that use of email has potential advantages and is set to expand. Many are willing to embrace change and use email with patients but genuine concerns about confidentiality and workload issues need to be addressed. Email communication is already an accepted part of some GPs’ working routine and is set to become more common. Our respondents faced an awkward dilemma of whether to admit to already having used email to communicate with patients in contravention of health authority policy, or to admit to not replying to patient requests in contravention of basic politeness and a duty of care towards patients. This reflects the actual clinical dilemma our colleagues face every time they receive an email from a patient. There is a need for clear leadership, training and technical support to resolve this issue and thus help GPs cope with patient demand for an email service. Revisions to primary care organisation guidelines on communication need to reflect the reality of actual clinical practice.

**ACKNOWLEDGEMENTS**

We wish to thank all our GP colleagues for their helpful replies to our questionnaire and the Dundee Local Health Care Co-operative for funding this project through the Primary Care Development Fund.

**REFERENCES**


**CONFLICTS OF INTEREST**

None.

**ADDRESS FOR CORRESPONDENCE**

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Accepted September 2004
### Appendix 1

**GP questionnaire**

#### SECTION I

1. Do you use email?
   - If yes – please continue this section. If no – please go to question 14 in Section II.
   - To complete the questionnaire please type x in the relevant box

<table>
<thead>
<tr>
<th>YES</th>
<th>NO</th>
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<tbody>
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</table>

2. Do you have exclusive use of a computer in the practice?
   - Is the computer on a network?
   - Is the computer connected to the internet?
   - Is the computer connected to an intranet?

3. Do you use email to correspond with:
   - GPs within the practice
   - GPs outside the practice
   - Administrative staff within the practice
   - Practice attached staff
   - Colleagues in secondary care
   - Consultants
   - Secondary care administrative staff
   - Local Health Care Co-operative
   - Personal correspondence

4. Do you use email for:
   - Referrals
   - Test results
   - Other – please specify

5. Have you ever received an email request from a patient?
   - For a repeat prescription
   - To make an appointment
   - Consultation
   - Information on a medical condition
   - Other – please specify

6. How do you reply to an email from a patient?
   - I don’t reply to email
   - I sometimes reply to an email
   - I always reply by email
   - I reply, but not by email

7. Have you ever emailed a patient:
   - To respond to a question
   - To provide information
   - To suggest an appointment
   - To suggest a phone call
   - To decline to respond to email

8. Would you use email in your practice:
   - To consult
   - To make appointments
   - For repeat prescriptions
   - To provide medical information

9. Have you had training in how to use email?

10. Do you want training in how to use email?

11. What do you think about using email for consultation?
    - (1=agree strongly, 5=disagree strongly)
    - Email is a secure way of communicating
    - It is a convenient method of communication between patients and GPs
    - Email will be used much more in the future
    - Most of my patients have access to email

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<th>1</th>
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12. Do you have concerns about using email for consultation?
    - (1=agree strongly, 5=disagree strongly)
    - There is a risk to confidentiality
    - I prefer to see patients
    - It is difficult to make a diagnosis using email
    - There is not enough time to respond to all emails
    - Emailing will use up time for seeing patients
    - Email is an additional burden in an already onerous job

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13. Do you have any other comments?

Thank you very much for completing Section I.
### SECTION II

*Please complete section II only if you have answered 'No' to question 1.*

<table>
<thead>
<tr>
<th>Question</th>
<th>YES</th>
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<tbody>
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<td>14 Do you have use of a computer in the practice?</td>
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<td>Is the computer on a network?</td>
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<td>Is the computer connected to an intranet?</td>
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<td>15 Have you had training in how to use email?</td>
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<tr>
<td>16 Do you want training in how to use email?</td>
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<td>17 Assuming that you have access to email and the training to use it:</td>
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<td>(a) would you use it for patient consultation?</td>
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<td>Yes, definitely</td>
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<td>(b) would you use it for patient consultation if there were guidelines?</td>
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<td>Yes, definitely</td>
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<td>Perhaps</td>
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<td>Never</td>
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<td>18 What do you think about using email for consultation?</td>
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<td>(1=agree strongly, 5=disagree strongly)</td>
<td>1</td>
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<tr>
<td>Email is a secure way of communicating</td>
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<td>It is a convenient method of communication between patients and GPs</td>
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<td>5</td>
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<tr>
<td>Email will be used much more in the future</td>
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<tr>
<td>Most of my patients have access to email</td>
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<tr>
<td>19 Do you have concerns about using email for consultation?</td>
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<tr>
<td>(1=agree strongly, 5=disagree strongly)</td>
<td>1</td>
<td>2</td>
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<tr>
<td>There is a risk to confidentiality</td>
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<tr>
<td>I prefer to see patients</td>
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<td>20 Do you have any other comments?</td>
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Thank you very much for completing Section II.