# Specialist advice for primary care: an evaluation of a gastroenterology email advice service

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Communication between primary and secondary care physicians is often unreliable and one sided in the form of clinic letters. Alternatively, general practitioners (GPs) may have difficulty contacting an on-call specialist via outdated hospital paging services. At Imperial College Healthcare NHS Trust, a gastroenterology email advice line was set up to promote dialogue and potentially help GPs deal with issues within their practices. The service has been evaluated both objectively through analysis of enquiries and subjectively through a survey of GPs' views. Analysis showed a very high level of satisfaction among users of the service. There is also good evidence to suggest that the service has helped to streamline patient management and led to the avoidance of some outpatient appointments.

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# Introduction

Communication between primary and secondary care clinicians is often unsatisfactory. Letters take time to arrive and generally result in a very one-sided dialogue. Additionally, general practitioners (GPs) have difficulty contacting an oncall specialist via hospital paging services, and may receive hurried, unconsidered advice. A 2011 survey of 686 GPs found that 56% felt communication between primary and secondary care clinicians had deteriorated over the preceding 10 years. This is thought to be largely a result of expansion, both of GP practices and secondary/ tertiary centres. Nationalised referral systems like 'choose and book' further depersonalise communication. Primary and secondary care clinicians are now less likely to form a personal relationship. 1,2

Secure email is beginning to be used more extensively in some trusts for primary and secondary care communication.<sup>3</sup> At Imperial College Healthcare NHS Trust (ICHNT), a

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gastroenterology email advice line was set up in September 2012, initially as a pilot, prior to commissioning by the trust's charitable trustees in July 2013. The service is managed by two gastroenterology consultants who reply to the emails throughout the working week. All gastroenterology queries about new patients are answered or directed towards a more appropriate specialty. Queries about patients already under a gastroenterology consultant are forwarded to their lead physician. Email advice was promoted by the trust communications team via email correspondence to GPs in the Imperial catchment area from July 2013. This model has since been emulated by many other medical (and some surgical) specialties at ICHNT.

By using the service, GPs are quickly able to gain specialist advice and may be able to avoid making a referral to secondary care. This is important in an era in which commissioning groups are under significant financial constraint. GPs are under pressure to reduce unnecessary referrals and improve those that are needed. There are also substantial benefits for secondary care clinicians who avoid seeing patients unnecessarily and may have more efficient consultations with more information/investigations already done.

Email advice also fosters relationships between primary and secondary care physicians, which not only allows streamlining of care and increased efficiency, but also a valuable learning and development opportunity for all involved. Enhanced communication allows recognition of commonly occurring themes and development of strategies to overcome these.

There are few published evaluations of GP email advice services. The aim of this study was to evaluate the efficacy of an email advice service, both objectively through analysis of the correspondence and subjectively through an online survey of GP users' views.

### Methods

All emails sent and received between September 2012 and February 2014 were collated and recorded in a spreadsheet. Sender details and practice were also recorded.

Each correspondence was evaluated individually using the following five criteria, identified according to desired outcomes of the service:

- 1. enquiry replied to within two working days
- 2. outpatient appointment (OPA) avoided by the enquiry

- 3. patient referred direct to test (eg endoscopy)
- 4. patient referred to another, more appropriate, specialty
- 5. streamlining of patient management actions taken other than giving advice, to improve patient care.

'OPA avoided by the enquiry' encompassed enquiries resolved by email correspondence alone, as well as those enquiries achieving either criteria 3 or 4; OPA avoided by referring directly to test or via direction to another specialty. 'Streamlining of patient management' refers to further actions taken by hospital consultants such as advancing date of endoscopy/OPA appointment.

This evaluation was carried out by the clinical team at Imperial (AF, JH, LP, JS, HW).

GPs' views were analysed using an online survey accessed via an email hyperlink. This was sent to all GPs who had used the service during the evaluation period of September 2012 to February 2014. Questions were in a multiple choice format, with the opportunity to leave a free text comment. Data were collected over a 3-week period in February/March 2014.

Survey questions corresponded with the criteria used to analyse the email data. GPs were also asked about frequency and ease of use, recommendation of the service to others, formal commissioning and areas for improvement.

Data from the survey were collated and analysed using Microsoft Excel.

### Results

### Number of enquiries

There were 222 enquiries during the period evaluated (September 2012 to February 2014). Enquiry numbers show a continuing upward trend (Fig 1). Rate of enquiry quadrupled when the service was formally advertised by the ICHNT communications team (July 2013).

## Service users

119 GPs from 85 practices used the service. 45% of GP practices were from within the Imperial catchment area (north-west London) where the service was promoted. The majority of other enquiries were also from London.

### Measures of success

Of 222 enquiries, 89% received a reply within 2 working days. In 75% of enquiries, a possible OPA was avoided. Of

these, 40% were referred directly to a specific investigation. 38% were directed towards a more appropriate specialty. A hepatology email advice service has run alongside the gastroenterology advice line and many enquires were forwarded for review. There was a 3.6% overlap in enquiries that were both referred directly to a test and directed towards the most appropriate specialty, for example, it was suggested that GPs undertake a liver ultrasound before making a hepatology referral.

In 22% of enquiries resulting in referral avoidance, the problem was resolved with email advice alone.

In 35% of enquiries, the patient's management pathway was streamlined/accelerated by additional input such as forwarding an email to the appropriate specialist, arranging for a patient to be 'fast tracked' to endoscopy or seeking advice from other healthcare professionals (eg dieticians) on the behalf of the GP (Fig 2).

### GP feedback

The survey was sent to 119 GPs with a 46% response rate (n=56). The majority of users (45%) found out about the service via email correspondence from ICHNT; 16% learnt about the service via their practice (Fig 3).

When asked about speed of response, 91% of GPs answered 'Yes, satisfied with speed of response'. Respondents were asked to grade their satisfaction with the response they received on a scale of 1–10 with 1 meaning 'poor' and 10 being 'excellent.' The response was rated 'excellent' (10/10) by 45.2% of respondents. The mean satisfaction level attained was 9/10 (Fig 4). When asked if the service had improved patient management, 96.3% answered 'yes'.

We went on to ask if the service had helped to 'streamline referral to secondary care' and 90.4% of respondents answered 'yes'. 66.7% felt that a referral had been avoided by using the service.

77% of respondents had used the service on more than one occasion.

Recommendation of the service was widespread: 91% of respondents had recommended the service to colleagues at their practice; 57% had recommended the service to GPs at other practices. When asked if clinical commissioning groups should formally commission the service, 98.5% of respondents answered 'yes'.

At the end of the survey, GPs were asked for comments and recommendations. Of 14 comments, there were three



Fig 1. Number of emails received per month – September 2012 to February 2014.

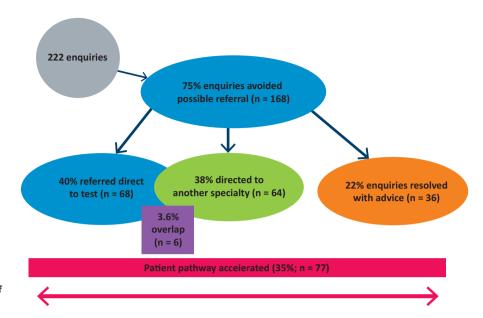


Fig 2. Diagrammatic representation of the objective analyses.

recommendations. Two GPs suggested that the service should be extended to all specialties:

Brilliant service. Should be extended to all specialties. Has improved communication between primary and secondary care.

More specialties needed, eg endocrine and haematology. I think this is a wonderful service – the ability to get a consultant opinion at short notice, in writing, is invaluable.

One suggested that recommendations given in emails should be acted on by secondary care rather than referred back to the GP:

Once a recommendation has been agreed on, it should be acted on from your end... ie does this patient need a gastroscopy... yes... you guys organise it without more paperwork from our end.

Nearly all comments were positive, although some mentioned long response times:

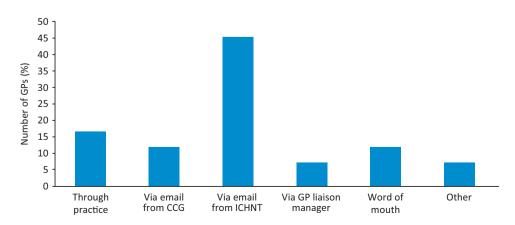
I emailed following a lengthy complaint and received an excellent and thorough response. I was able to share this information with colleagues. Much appreciated thanks!

It would be nice to have a quick response. I waited 5 days before I heard back.

It is a fantastic service. It means we can quickly get answers tailored to an individual from a specialist. It makes it much easier to know who to refer/who to monitor when unsure. It also helps with our own learning as doctors. I value the service tremendously. In the past I would have beeped the Grastro Spr, which can be a very lengthy process. Now I can send an email and this has much more details in it so the secondary care clinician can give much more informed advice.

### Discussion

The analysis demonstrates the success of the service, as evidenced by assessment of the specified criteria, with a persistent growth in use. The rate of growth has plateaued after a sharp rise since commissioning began. The service has been promoted solely in the Imperial catchment area. Only 45% of surveyed GPs found out about the service through an ICHNT email. This suggests that there is scope to increase use significantly with more investment in promotion.



**Fig 3. How GPs found out about the service.** CCG = clinical commissioning group; ICHNT =
Imperial College Healthcare NHS
Trust.

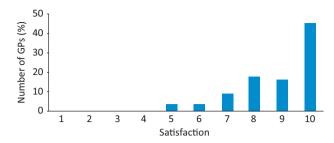


Fig 4. GP satisfaction with advice given through the service (1=poor, 10=excellent).

It is clear that GPs value the service highly. Increased use via word-of-mouth recommendation is demonstrated by the number of different postcodes represented, many of which are outside the Imperial catchment area.

The data shows that nearly 90% of enquiries are answered with 2 working days. Average wait for routine OPA at ICHNT is around 9 weeks, with a 4–6 week wait for urgent appointments that fall outside of 2 week wait. Although not a substitute for an OPA, the service provides GPs with management advice and direction that could be initiated within a week. This correlates with the percentage of surveyed GPs (91%) who said they were happy with the speed of response.

ICHNT analysis of enquiries suggested that secondary care OPA was avoided in 75% of email enquiries, whereas the survey question posed to GPs suggested that 66% thought the service had led to referral avoidance. This 9% discrepancy may be explained by several factors. The question posed to GPs was related to their experience of the service as a whole, whereas the objective assessment documented the outcome of every enquiry made (including those from GPs who had requested advice about more than one patient). In the objective assessment, referrals 'directly to test' and 'directed to other specialty' were included in the 'OPA avoided' group, as a potentially unnecessary appointment in gastroenterology clinic had been avoided. GPs may have chosen not to distinguish between patients referred to outpatients and those directed straight to test as a result of the advice.

90% of GPs thought the service had streamlined patient management and 96% felt the service had improved patient management. Many GPs used email advice on a number of occasions. These results indicate that the service has been successful in fostering mutually beneficial working relationships and has an important role in improving the efficiency of patient management.

The value of the service to GPs is most unquestionably demonstrated by the rate of recommendation (>90%) and almost unanimous (98.5%) agreement that the service should be formally commissioned by clinical commissioning groups.

# Limitations and recommendations for further work

This is a very small-scale analysis of an initiative that has provided some answers but also poses more questions. Most significantly, this work lacks comparison with data about actual OPA. It would be useful to compare waiting time, and analyse presentations/referral letters to outpatients. There may be differences in the type of problem GPs refer to OPA compared with those addressed via email. How many outpatients' appointments are generally required post referral?

It would also be useful to compare this data with data from other specialty advice services within the trust. This model may be more or less successful in different specialties.

A cost/savings analysis is required to validate findings.

### Conclusion

This analysis shows that an email advice line can improve the quality of communication between primary and secondary care clinicians. Such a service can have an important role in reducing referral to secondary care and streamlining patient management. It is a positive and valuable tool for both primary and secondary care doctors.

### References

- OnMedica. Primary and secondary care relationships. London:
   OnMedica, November 2011. Available online at www.onmedica.com/ getresource.aspx?resourceid=3c24dd73-7eb0-4a98-9739-1107719bd363 [Accessed 21 January 2016].
- 2 Kvamme OJ, Olsen F, Samuelsson M. Improving the interface between primary and secondary care: a statement from the European working party on quality in family practice (EQuiP). Qual Health Care 2001;10:33–9.
- 3 Lewis M. Enhancing communication between GPs and hospital consultants. HSJ, 24 May 2012. Available online at http://www.hsj.co.uk/resourcecentre/best-practice/it-e-health-and-emedicine-resources/enhancingcommunication-between-gps-and-hospitalconsultants/5044381.article# [Accessed 21 January 2016].
- 4 Imison C, Naylor C. Referral management: lessons for success. London: The Kings Fund, 2010.

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