Implementation of WebGP and E-consultations in Wessex GP Practices

Interim Update Report
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Background

Various factors are leading to claims of a crisis in primary care in England and in the UK. These factors are: rise in A and E attendance, urgent care admissions; and demand for primary care in parallel with current shortfall of around 3,300 GPs in England and approximately 120 GPs in Wessex leading to unsustainable GP workload; poor access to GPs; and loss of continuity of care (See Clay and Stern, 2015; Roland, 2015).

Various interventions and models of care have been proposed to remedy this crisis and to decrease the GP workload while also increasing the accessibility of GPs to patients.

The first pilot study of e-consultations was that of Adamson and Bachman (2010). The original WebGP and e-consults model created by the Hurley Group was piloted by them in 20 GP practices (133,000 patients). The number of e-consultations in 6 months was 1,600 i.e. on average 61.5 per week or 0.71% of all consultations (Madan et al, 2010). If an e-consult is deemed to concern an urgent medical problem, it is diverted and the patient is advised to phone the GP practice, or 111 or go to A&E depending on what the red flag is. A model other than WebGP and e-consultations is askmyGP (See Longman and Diggines, 2015).

The e-consultation is not a Skype type interaction between patient and GP (offered by some private companies). The patient completes a questionnaire based on symptoms they are experiencing and then uploads it in the WegGP system for GP1. This is received at the GP practice and downloaded by administrative staff who tag the PDF with the patient' record and then pass them on to the GP with whom the patient is registered [i.e. their own GP as patients in GP1 are given appointments with their own GP and not just any GP]. The GP reads the PDF and responds as soon as possible, but always within the end of the next working day. GP response can be 1/pass a message to the patient by email via the admin staff e.g. make appointment with nurse or GP or change medication dosage etc., phone the patient for more information which can result in telling them what to do, asking them to make appointment with GP or with nurse.

Two GP practice are situated in Dorset and West Hampshire CCGs [GP1 and GP2]. They received funding by way of reduced cost for WebGP from £1 per patient to £0.75/£0.65 subsidised by Wessex AHSN to pilot WebGP. They are both average sized GP practices approximately 15,000-£18,000 patients.

At the same time as piloting WebGP and e-consults, GP 1 and GP2 are involved or potentially involved in various initiatives *re* new models of care (1/ a physiotherapist in the GP practice for two sessions per week who would see patients instead of GP and be able to issue prescriptions or get a nurse practitioner to issue prescriptions if the physiotherapist cannot issue prescriptions 2/patients offered the opportunity of having email consultations/e-consultations directly with a pharmacist who could issue prescriptions). GP1 would also like to look specifically at e consultations that can be managed by prescribing

clinical pharmacists (and possibly nurse practitioners and MSK physio) without needing GPs to be involved.]

GP1 started implementing WebGP in December 2015 and AP in February/March 2016. To date there is only implementation data from GP1 data about implementation. Discussions with GP2 about evaluating the implementation are on-going.

Aims
The aim was to monitor the implementation, assess the benefits and costs and make recommendations for possible uptake. A secondary aim was also to make recommendations in view of helping other GP practices involved in Vanguards with implementing WebGP and e-consults.

Objectives
The objectives were to determine
1. the patterns of usage of WebGP and e-consults and the outcomes of e-consultations
2. the impact on patient experience of care
3. the impact of the operationalisation of e-consults on all staff involved, including administrative staff
4. the barriers and drivers to the implementation or the extent to which WebGP and e-consults became embedded in the day to day work of the GP practices
5. the cost effectiveness of e-consultations

Methods and outcome measures
Data GP practices receive from the weekly WebGP and e-consults usage report was compiled and analysed (numerical data about re website hits, number of unique visitors, pharmacy self-help visits, call back provider visits, e-consults logged, e-consults diverted, attempts to save appointments and estimated appointments saved.

Data about patterns of usage of WebGP and e-consults and the outcomes of e-consultations were compiled and analysed.

Patients were surveyed via the WebGP website by way of pop-up survey when they go on symptom checks and they are asked if they are willing to be surveyed when they upload an e-consults and if they are, a link to an electronic survey is sent to them a few days later.

It was decided to evaluate the implementation by way of electronic survey of staff involved, focus groups/interviews with all or a sample of staff (GPs and administrative staff) involved. The survey included the 16 questions from the NPT questionnaire (May et al, 2010).

In April 2015, the population of GP1 was 16,500 with about 15,000 patients over 18 years 2% of patients suffering from long term conditions. GP1 had approximately 1,700 (from notes provided by CP) (or 752?) contacts per week: 77 urgent; 471 routine; 151 blood tests; 53 GP visits; and approximately 4,000 prescriptions per week. A small minority of patients

[how many?] were also emailing GPs with medical issues. It is not known and needs to be checked whether GP1 offered telephone appointments with GPs to patients.

The pilot is registered with Dorset CCG as a quality improvement initiative and according to the Health Research Authority qualifies as a service evaluation.

Initial results

WebGP and e-consults in GP1
GP1 started to offer the service in November 2015, but only to patients born from January to June for whom they had email addresses and who were invited to use the new service. . However, they found that other patients started using WebGP too. Approximately 20% of patients using WebGP in the first three months were not born between January and July. From February to June 2016, the proportion increased to 27%.

Hits on GP1 WebGP website and e-consults
Since they started in November 2015 until the beginning of June, GP1 have had approximately 806 visits on the WebGP website; 730 unique visitors; 141 self-help visits and 210 e-consults. The weekly average of e-consults is 7.5. The highest weekly number was 12 and the lowest 3. Approximately 0.04% of consultations (n=9) are diverted, none of which have so far resulted in a visit to A&E. E-consults made up 0.87% of all consultations (0.71% for the Hurley group pilot).

Trends in use of e-consults
The trends in use were 9am to 2pm but especially 11am to 1pm. The gender profile was two thirds women and one third men. (The same as for the Hurley group pilot (see Madan et al, 2014) or for the Mayo Clinic pilot (see Adamson and Bachman, 2010) or for askmyGP (see Longman and Diggines 2015 with). The age profile was: 59% of users are under the age of 61 and 41% over the age of 61 with 19% between 71 and 91. (In the Hurley group pilot 62% of users were aged between 25 and 44, 32% between 45-65 and 4% between 18-24 with only 2% over the age of 65.)

Approximately a quarter of e-consultations are about administrative only queries (n=48) (different from the Hurley group pilot) and general medical advice rather than condition specific medical advice (also different from the Hurley group pilot). Top medical conditions in GP1 were shoulder pain, earache, depression (for Madan et al (2014): cystitis, depression, contraception; for Adamson and Bachman (2010): sinusitis, depression, back pain; and for Longman and Diggines (2015) skin conditions, back pain, cough)

Outcome of e-consults
At this point, the outcomes are only available for 42 e-consults: 15% admin phone call; 23% GP phone call; 23% face to face appointment with GP; 3% face to face appointment with nurse, 12% email response on behalf of GP; 11% prescription issued; 6% tests ordered. Approximately 38% of e-consults were managed by way of the pdf alone *i.e* without a phone call from administrative staff or from a GP.

Initial ROI of e-consults

According to WebGP and the Hurley Group, ROI is driven by reduced cost per face to face consultation avoided quoted as £19 by the Hurley Group ROI Excel spreadsheet, but estimated to be between £31- £72 according to GP Access, n.d.). According to WebGP data provided to GP1 (from survey of samples of patients using website and e-consults) the approximate number of face to face consultations with GP saved is approximately 113. This provides savings of £2,147 if a GP consultations is costed at £19 (and of £8,136 if it is costed at £72).

If it is extrapolated from the fact that that 58 e-consults or 28% were administrative queries and 9 were diverted, leaving 148 e-consults, and that between one fifth and one quarter (30 to 37) resulted in a face to face appointment, leaving between 111 and 128 not requiring a face to face appointment, then if a face to face GP consultation is costed at £19, the 148 non administrative only e-consults resulted in savings of between £2,109 and £2,812 (as only approximately 48 necessitated a face to face appointment) (and savings of £7,881 and £9,216, if costed at £72).

However, according to ITV News (2014) and PSSRU (2013), a 11.7 minute visit to a GP costs the NHS £45. IC (2010, 2010a) suggests that including direct care staff costs, a GP face to face appointment lasting 11.7 minutes can be costed at between £28 and £36 while the cost of a GP clinic consultation lasting 17.2 minute can be costed between £47 and £53.

Taking an average of all these costings gives a figure of £35.75. Between 111 and 128 face to face GP consultations saved equals financial savings of between £3,968.25 and £4,576.00.

As 48 e-consults were administrative queries only, they were processed by administrative staff only who took on average 4 minutes (see below). This equates to 3.2 hours of administrative time. The remaining 162 e-consults took 10.8 hours to be processed by administrative staff. To this must be added the time for administrative staff to respond to patients, usually by email but this could also be by phone. Assuming 2 minutes to respond to admin only queries, the total amount of time is 1.6 hours. This gives overall 15.6 hours spent by administrative staff in relation to 48 administrative only e-consults (over a period of around 7 months).

(But for e-consults the patients would have phoned in or come to the desk to ask their administrative questions or emailed the practice directly, and it would also have taken time to read the queries and to act on them. Doing this may have taken administrative staff half or three quarters of the time, but it would still have taken time. This approach is certainly quicker and less frustrating for patients who don't have to spend time queuing or waiting for the phone to be answered and/or waiting for an answer to their emails.)

Just under a quarter of e-consults were followed by a phone call from administrative staff and just under a quarter by a phone call from a GP. This gives 2.25 hours [45 x3 mins] for administrative staff and 4.50 hours [45 x 6mins] for GPs (see below for details on time taken by GPs for follow-up phone calls). All these factors and some additional indicators will have to be taken into account in the final assessment of costs vs benefits, financial and otherwise.

Patients
Patients are surveyed a) by pop-up survey when they go on symptom checks and they are asked if they are willing to be surveyed when they log in an e-consults and if they are, a link to an electronic survey is sent to them: 89% strongly agree that the website is easy to use and 89% extremely likely to recommend e-consultations to friends and family. If e-consultations had not existed 56% would have requested a face to face appointment (79% for Hurley group pilot) and less than 22% would have gone to A&E or a walk-in-centre and 11% would have emailed their GP.

In the free text comments, e-consults were deemed convenient and easy to use and a very good idea for non-complicated conditions. In addition to this, three patients out of 15 indicated that they had to come in any way for a face to face appointment and three patients out of 15 complained that they had not been contacted within the pre-set timeframe, i.e. at the end of the next working day and one said that a question asked had not been responded to. Other suggestions for improvement were: that there are questions that are impossible to answer with yes or no and nowhere to explain the situation fully so the GP understands the issue completely; and inability to ask a particular question.

Staff involved in processing e-consults (GPs and administrative staff)
A total of 5 GP and 3 administrative staff responded to the survey. Only two GPs said they felt confident in processing e-consults (100% in Hurley group pilot). All the administrative staff were 100% confident (no reference to administrative staff in the Hurley group pilot).

Two GPs felt e-consults were useful in pre-consultation planning for those patients who did have to make a face to face appointment. Only one GP said they would encourage their patients to use e-consultation. Only 2 GPs would want their own GP practice to offer e-consults (78% in Hurley group). All three of the administrative staff said that they would want their GP to offer e-consults.

The average length of time for a GP to process e-consults was 6 mins (3.3 mins for 63% of the sample for the Hurley group pilot). One GP indicated 10 mins as average time to read the pdf (minimum 5 mins and maximum 10 mins) which brought the average up. Administrative staff took on average 4 mins to process an e-consult (upload, download, attach to patient notes, read and send to the patient's named GP if required). If they needed to email the patient with information re administrative query, this was time additional to the processing time.

Agreement and disagreement with the NPT statements mirrored the polarised views of GPs with both negative and positive agreements and lot of responses which were neither agree nor disagree. However, the response to NPT questions appeared overall more positive than negative.

- ☐ Two out of eight strongly agreed/agreed that key people were driving WebGP forward and were getting others involved [one GP and 1 admin].

- ☐ Five out of eight strongly agreed/agreed that participating in WebGP was a legitimate part of their role [3 admin and 2 GPs]
- ☐ Three out of eight strongly agree/agreed and one strongly disagreed with the statement I will continue to support WebGP [2GPs, 1 admin and 1 GP]
- ☐ Two out of eight out agreed that the staff agreed that WebGP is worthwhile and one disagreed [1 GP, 1 admin and 1 GP]
- ☐ Two strongly agree/agree and one strongly disagreed that they valued the effects that WebGP has had on their work [1GP, 1 admin and 1 GP]
- ☐ Two out of eight disagreed that sufficient resources were available to support WebGP [1 GP and 1 admin]
- ☐ Five out of eight strongly agreed/agreed that feedback about WebGP can be used to improve it in the future [2 GPs, 3 admin]
- ☐ Five strongly agreed/agreed and one disagreed that they could easily integrate WebGP into their existing work [2GPs, 3 admin and 1GP]
- ☐ Six out of eight agreed that work is assigned to those with skills appropriate to WebGP [3 GPs and 3 admin]
- ☐ Three strongly agreed/agreed that they would continue to support WebGP and one disagreed. [1 GP, 2 admin and 1GP]
- ☐ Four out of eight strongly disagreed/disagreed that WebGP disrupts relationships [2 admin and 2GPs]

Focus group with 7 members of staff (1 admin, 1 nurse, and 4 GPs *needs to be checked*) and interviews (1 admin and 2 GPs) indicate that GPs have polarised views about e-consultations. On the one hand, they are perceived to be very helpful in pre-consultation planning (if the patient has to make a face to face appointment). They are also perceived as making access to GPs easier as patients can access GPs without phoning in. Patients can also email their GP or email the GP practice. On the other hand, e-consults were perceived as creating more work for administrative staff. (However, if the queries were by email or by phone or in person at the GP practice, administrative staff and receptionist staff would also have to spend time dealing with them.)

E-consults were also perceived by some as clearly not used by patients as intended to by the Hurley group. Patients used e-consults for general administrative queries or general medical queries rather than specific medical problems, hence a greater burden on administrative staff in having not only to download the e-consults and attach them to patients' records, but also to process these administrative only queries.

Some of the staff thought that an email would be quicker and more efficient than filling in the e-consult pdf and it seems an established practice that patients have been emailing GP1 and GPs over the last year or two. However, others pointed out that the email was not as structured as the e-consult and from this perspective the e-consult pdf was better than an email, but more time consuming for patients to fill in and for staff to process. With free text and responding to specific questions, an e-consult can take up to 10 minutes if is used as intended. The processing of the e-consult is usually more time consuming for administrative staff and GPs than an email. That e-consults could not be directly linked to patients' notes without administrative staff input was perceived to be a major limitation of e-consults.

Conclusion

The patients had positive views about the WebGP website and e-consults, but they also made suggestions for improvement, not so much in the way the system was set up and the pdf that had to be filled in, but in the fact that staff that responses were not always within the end of the next working day. The views of staff were polarised from beneficial and helping with pre-consultation planning to not beneficial and creating more work for both GPs and more especially administrative staff. Trends in usage re time and gender profile as well as most frequent medical conditions were comparable with other pilots (Madan et al, 2014; Adamson and Bachman, 2010; Longman and Diggines, 2015). However, the age profile was much older with nearly of fifth of e-consults logged by patients aged over 71. Another difference was the fact that 28% of e-consults were about administrative only queries.
A limitation of the evaluation of the implementation is that not all staff filled in the survey and also that outcomes for e-consults were only available for 42 out of 210 e-consults. The survey is still open so those who have not responded could still do so. It is hoped to be able to retrospectively follow up on outcomes for a greater sample if not all patients.

Recommendations

The most resource intensive aspect of the evaluation of the implementation of WebGP and e-consults has been following up on the outcome of e-consults. A similar problem has been highlighted by those evaluating the implementation of WebGP and e-consults outwith Wessex with the consequence that additional resources had to be allocated for retrospective follow-up. It is recommended that additional resources should be allocated to follow-up on the outcome of e-consults in the present evaluation.

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