Improving the efficiency of out-of-hours prescribing

ANGELA DOWDEN

GP out-of-hours services are part of a complex system of care available to patients when their GP surgery is closed and they urgently need a prescription. This article discusses how efficiency could be increased by improving integration of services and transfer of patient information, as well as educating patients about how to make optimal use of the services available.

In an ideal world, patients will see their regular doctor as and when needed, having their health concerns dealt with in a timely manner. The reality, of course, is sometimes different – people become suddenly ill at an inconvenient time, or forget to pick up a repeat prescription and run out of a crucial medication over the weekend.

With GP surgeries open from 8am to 6.30pm Monday to Friday, it leaves more than 115 hours every week when urgent primary care – including the issuing of emergency medicine – must be delivered by ‘out-of-hours’ teams.

In April 2004, GP practices were given the opportunity to opt out of providing round-the-clock care; an option that the vast majority of practices have taken up. It means the current responsibility for, and commissioning of, out-of-hours GP services falls largely instead to CCGs (England), NHS boards (Scotland), local health boards (Wales) and health and social services boards (Northern Ireland).

Models of care

There is no ‘one-size-fits-all’ approach to the out-of-hours GP services that can be commissioned and a number of different models are in operation. According to an April 2014 report carried out by Urgent Health UK,1 social enterprises (often former co-operatives of GPs) accounted for 56.1 per cent of the out-of-hours market in England, measured by population served. Commercial services run by private companies accounted for 22.6 per cent and services run by NHS bodies, eg ambulance services, accounted for 20.2 per cent; 2.4 per cent of the population in England were still served by opted-in GP practices, who provided their own after-hours care.

According to a 2014 report by the National Audit Office,2 out-of-hours GP services in England handled around 5.8 million cases in 2013–14, at an estimated cost of £400 million. Of these, 3.3 million were face-to-face consultations, including 800,000 home visits.

GP services are, however, just one part of a complex out-of-hours system...
that can include walk-in centres, urgent care centres, 24-hour pharmacies, the NHS 111 telephone line, and accident and emergency (see Table 1). It is therefore easy to see why the route to accessing services is not always particularly well understood by the public: according to the GP Patient Survey 2015, 44 per cent of people in England did not know how to contact their GP out-of-hours service. More worryingly, 26 per cent had not heard of out-of-hours GP services at all, according to a 2014 Ipsos MORI survey commissioned by the National Audit Office.2

In addition, patients may be confused by the varied nature and nomenclature of the community services on offer, meaning that they may visit accident and emergency – which does have high ‘brand awareness’ – unnecessarily.

**Information sharing**

It is not just patients but also clinicians that sometimes find the out-of-hours service is not a well joined up or integrated system. A particular frustration is inadequate information sharing, which can act as a significant barrier to continuity of care.

A 2008 Healthcare Commission publication documented that only 37 per cent of urgent care centres were able to transfer data electronically to local accident and emergency departments, and only 20 per cent of accident and emergency departments were able to receive electronic data from ambulance services. In addition, many local GPs were not able to receive summary information electronically. The National Programme for IT in the NHS was an attempt to create an electronic care record for patients in England and connect 30,000 GPs to 300 hospitals, but it was abandoned among much recrimination and overspend in 2011. The resulting situation is that in many cases, providers of out-of-hours GP services still routinely have to operate without access to patient notes, which can be a particular challenge to prescribers.

Professor Matt Griffiths, an advanced nurse practitioner and visiting professor of prescribing and medicines management, who is currently working out of hours in an urgent care centre in Bath,

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### Table 1. Consultation and treatment options for urgently ill people (Source: National Audit Office analysis of Department of Health information. Reproduced with kind permission of the National Audit Office)

<table>
<thead>
<tr>
<th>Services offered</th>
<th>Intended range of cases handled</th>
<th>Opening hours</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>NHS choices</strong></td>
<td>Information and advice</td>
<td>24 hours a day, 7 days a week</td>
</tr>
<tr>
<td><strong>NHS 111</strong></td>
<td>Information and advice, Triage, Referral to other services</td>
<td>24 hours a day, 7 days a week</td>
</tr>
<tr>
<td><strong>GP practices</strong></td>
<td>Triage, Diagnosis, Treatment, Referral to other services</td>
<td>Access typically by appointment during weekdays, 8am–6.30pm. Some evening and weekend opening at the discretion of individual practices</td>
</tr>
<tr>
<td><strong>Out-of-hours GP services</strong></td>
<td>Triage, Diagnosis, Treatment, Referral to other services</td>
<td>6.30pm–8am, weekdays. 24 hours a day, Saturdays, Sundays and bank holidays</td>
</tr>
<tr>
<td><strong>Walk-in centres</strong></td>
<td>Triage, Diagnosis, Treatment</td>
<td>Varies</td>
</tr>
<tr>
<td><strong>Minor injury units</strong></td>
<td>Triage, Diagnosis, Treatment</td>
<td>Varies</td>
</tr>
<tr>
<td><strong>Urgent care centres</strong></td>
<td>Triage, Diagnosis, Treatment</td>
<td>Varies</td>
</tr>
<tr>
<td><strong>Ambulance</strong></td>
<td>Transport, Diagnosis, Treatment</td>
<td>24 hours a day, 7 days a week</td>
</tr>
<tr>
<td><strong>Accident and emergency departments</strong></td>
<td>Triage, Diagnosis, Treatment</td>
<td>24 hours a day, 7 days a week</td>
</tr>
</tbody>
</table>

- Routine/nonurgent
- Urgent
- Emergency

**Notes**

- Not all these options are available in all parts of England.
- Routine cases include persistent coughs or colds. Urgent cases include infected wounds and broken bones. Emergency cases include loss of consciousness and suspected strokes.
- Accident and emergency departments include Type 1 (major centres) and Type 2 (single specialty centres)
notes: “In general practice I can look up a patient’s drugs and bloods, and history of what’s happened before. However, in the out-of-hours scenario, without access to all of the patient’s records, I have to go instead with what a patient is telling me, which is not always accurate.”

“It’s a very strange situation as we are seeing patients unknown to us in the vast majority of cases and being asked to come up with a diagnosis, when very often things have been going on for two, three or four years and we are just seeing them at a crisis point.

“Patients don’t always know the names of their drugs, nor do they bring a list of medications with them, and we may well not have access to that information, which can obviously impact on things like drug-drug interactions.”

NHS employees are supposed to be able to use their smart cards to access specific gateways, which in theory should include a patient’s medications. But in practice, the system does not seem to work in every scenario, explains Professor Griffiths: “I can only go on my own experience, but I am having to talk to IT about several failure issues and I think, therefore, that this system is not working as well as it should.”

Providing adequate qualified staff

Another potential frustration for those providing out-of-hours care is that some experienced nonmedical staff can prescribe, while some others in similar positions cannot. Paramedics who routinely work as emergency care practitioners are not able to qualify as prescribers currently; a situation the College of Paramedics is working to change.

When recently considering (and rejecting) the proposal that paramedics should be allowed to become independent prescribers, the Commission on Human Medicines (CHM) cited the concern that there was lack of clarity as to what constituted an advanced paramedic practitioner and how such a practitioner would be trained in the assessment and diagnosis of the conditions that they may encounter. The CHM also said they were worried about the wide range of conditions for which paramedics may be required to prescribe.

“I personally don’t understand this and I hope they will review and change this decision soon,” says Professor Griffiths. “As a nurse emergency care practitioner, I can prescribe any drug, but if my colleague who is a paramedic is on duty, they can still only work under patient group directions [PGDs] or using exemptions under the Medicines Act, which really limits what they can do for some patients.”

Finding the right number and blend of medical and other practitioner staff for out-of-hours care is an issue in general, especially as agency rates are being slashed following the government’s pledge last October to reduce NHS spend on agency staff by £1 billion over three years. While the majority are fully staffed, there have been some high-profile examples of out-of-hours services failing to recruit and retain enough GPs to provide adequate care. For example, Serco in Cornwall, which was subject to a National Audit Office report due in part to concerns over the level of staffing. Though agency rates for out-of-hours care can be generous, Professor Griffiths points out that this is set against the background of unsociable hours and the fact that staff have no holiday or sick pay and must make their own pension provisions.

Even when there are enough qualified GPs willing and able to work out of hours in the community, it has to be asked if competencies are equal to the job in hand, which can involve more acute situations than are encountered in the in-hours period, often working in relative isolation and without the ability to liaise fully with secondary care. A RCGPs position statement last year gave a policy recommendation that a longer four-year training period (rather than the current three-year one) should be implemented for all GPs as a means to produce a workforce with the correct competencies to provide good-quality out-of-hours care.

Role of pharmacies

Pharmacies and pharmacists also have a significant role to play in making sure out-of-hours services function properly. According to NHS England, a substantial 30 per cent of all calls to NHS 111 services on a Saturday are for urgent requests for repeat medication. In Kent, Surrey and Sussex, 3040 such requests were handled during April 2014, which resulted in 2199 being referred directly to GP out-of-hours services for an appointment within two hours to arrange a prescription, blocking appointments for patients in greater clinical need. To overcome the problem, NHS England now recommends that all out-of-hours providers commission urgent repeat medication supply service from a local pharmacy, which eligible patients or their carers can be referred to directly, without the need for a GP prescription and at no extra cost compared with in-hours transactions. However, NHS 111 call handlers need to be very clear in explaining this service to patients, and must inspire confidence in them that it will work. Otherwise, it has been shown that patients will just ring again and request to see an out-of-hours GP.

Another innovation with the potential to reduce the need for emergency dispensing of medication is the electronic prescription service (EPS), a national project masterminded by the Health and Social Care Information Centre (HSCIC).

As of June 2016, 81 per cent of GP practices and 98.8 per cent of pharmacies are live with the EPS and have the potential to offer it to most of their patients for routine repeat medications. Under the scheme, patients no longer need to have to collect a repeat prescription from their GP in working hours – hugely inconvenient for some – but instead can have their GP send their repeat prescriptions electronically directly to a nominated pharmacy without the need for the patient to go in with a paper FP10. If patients go on holiday or away on business and accidentally leave their medication behind, they can temporarily get a supply redirected to another pharmacy that uses EPS in the place they are staying.

However, for urgent care in the middle of the night, when medication needs to be started immediately rather than in the morning, there may not even be the luxury of a pharmacist to help out. “If I have a patient with a urinary infection at 2am...
and I want them to start taking antibiotics immediately and all the pharmacies are shut for miles around, I have to think, ‘do I have the right stock in, and do I have enough to give to the patient?’,“ says Professor Griffiths. “Also, because there are very strict rules for nonpharmacists issuing medicines, and I cannot split packs, I have to consider such things as what to do if I need to give only a three-day supply of trimethoprim (six tablets), for example, while all I have is a seven-day supply (14 tablets). “These are not insurmountable problems but they do bring with them particular challenges.”

Patient feedback
Despite the challenges, patients are generally positive about their experience of out-of-hours GP services. The GP Patient Survey 2015 found that 67 per cent of patients rated their overall experience as “very good” or “fairly good”, and 86 per cent said they had confidence and trust in their out-of-hours clinician. The lowest scores were for timeliness, with 31.8 per cent of patients considering that the time they had waited to receive care or advice was too long.

While improvements can be made in areas such as integration between providers, ensuring adequate availability of qualified staff and educating patients around what services they should access, it seems that for now, the prescribing out-of-hours structure is functional enough.

References

Declaration of interests
None to declare.

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**POEMs**

**Liraglutide reduces mortality in patients with type 2 diabetes and very high CV risk**

**Clinical question:** Does liraglutide improve outcomes in patients with type 2 diabetes mellitus (T2DM) who have cardiovascular disease or are at a very high risk of cardiovascular events?

**Bottom line:** In patients with T2DM and established vascular disease, adding liraglutide provides a small but clinically meaningful survival benefit. However, the cost of liraglutide is high and it requires a daily injection, which may be less appealing than oral alternatives. 

**Reference:**


**Study design:** Randomised controlled trial (double-blinded). **Funding source:** Industry. **Allocation:** Concealed.

**Setting:** Outpatient (any).

**Synopsis:** Liraglutide is a human glucagon-like peptide 1 (GLP-1) agonist that lowers blood sugar, and also slightly reduces weight and blood pressure. The trial authors recruited 7598 patients 50 years and older with T2DM and known cardiovascular, cerebrovascular or peripheral arterial disease, heart failure or chronic kidney disease, and 1742 patients who were at least 60 years old with a major cardiovascular disease risk factor. All had an HbA1c greater than 7.0 per cent. Their average age was 64 years, mean baseline HbA1c was 8.7 per cent, and mean body mass index was 32.5 kg/m². Approximately 75 per cent were taking metformin at baseline, and approximately half were taking a sulfonylurea. After a two-week run-in period with placebo, patients were randomised to receive the maximum tolerated dosage of liraglutide (range 0.6–1.8mg daily) or matching placebo. Other drugs could be used in either group to achieve the target HbA1c of 7.0 per cent. Analysis was by intention to treat. The authors did a noninferiority analysis first, and if noninferior, they did a more traditional superiority analysis.

After a median duration of 3.5 years, the primary composite outcome of cardiovascular death, nonfatal myocardial infarction, or nonfatal stroke was less likely in the liraglutide group (13.0 vs 14.9 per cent; p<0.01; number needed to treat [NNT] = 53 for 3.5 years). There was also a reduction in all-cause mortality with liraglutide (8.2 vs 9.6 per cent; p=0.02; NNT = 71 for 3.5 years). Regarding individual cardiovascular endpoints, only myocardial infarction was significantly reduced (6.3 vs 7.3 per cent; p=0.046; NNT = 100 for 3.5 years). Regarding harms, there was a nonsignificant increase in total neoplasms (10.1 vs 9.0 per cent), with the largest relative increase (also nonsignificant) in pancreatic, renal and melanoma skin cancers.