# Out-of-hours care: ensuring accessible high quality care for all groups of patients

TEN years ago, a typical week for most general practitioners (GPs) included evenings spent visiting patients in their homes and at least one night's sleep disturbed by a telephone call or a home visit. Although out-of-hours care was perceived as stressful,[1] this level of personal availability was viewed as characteristic of 'good' general practice. Indeed, providing all out-of-hours care within the practice was often an essential criterion for practices wishing to train GP registrars. Yet within a decade this form of care has become rare and most GPs now fulfil their out-of-hours responsibilities through large cooperatives or deputising services.

The principal cause for this change was the inability of traditional models of general practice to cope with the increasing demand for access to care at all times although other factors, such as changes in the medical workforce, were also important. Alongside the growth of cooperatives there has been an intense period of innovation and development of a range of other models of primary care, all seeking to improve access for patients. Someone seeking help with an acute illness over a weekend is now able to choose between contacting their doctor's cooperative or deputising service, seeking advice from NHS Direct by telephone, the Internet[2] or in written form,[3] attending a National Health Service (NHS) walk-in centre, going to an accident and emergency (A&E) department or a nurse-led minor injuries unit, calling an ambulance, or asking their local pharmacist. Increasing the accessibility of primary care has been achieved by increasing choices for patients — with less emphasis placed on general practice as the main point of entry to the NHS.

What are the advantages and disadvantages of these changes? Doctors certainly seem to have benefited from having fewer out-of-hours commitments,[4] and so have their families.[5] Most patients appear to be satisfied with the care they receive under the new arrangements;[6,7] for many people, quick and convenient access to help may be more important than seeing a doctor they know. In this month's *Journal*, Drummond *et al* suggest that men living in non-affluent areas tend to contact out-of-hours services because of perceived difficulties in accessing care during the day.[8]

On the other hand, among the plethora of organisations there is potential for confusion and duplication of services, leading to inconsistent responses, variable quality of care, and inefficiency. It is ironic, for example, that most cooperative-led primary care centres restrict access to people who have been previously triaged by telephone, yet patients with identical minor illnesses can walk into A&E departments (often next door to the primary care centre) to see a doctor with no training in primary care.

Despite the proliferation of services, for some patient groups important gaps in care remain. Improving access through large, less personal organisations has advantages for many people but may have disadvantages for those for whom personal care is important. Shipman *et al* highlight the challenge of improving out-of-hours care for the terminally ill.[9] Patients with mental health problems are another group who may need access to a doctor who knows them.[10]

These twin problems of gaps and overlaps in service provision demonstrate the need for better coordination. Much of the problem arises because new services have been developed independently within general practice, hospital emergency services, and ambulance trusts, each with different historical roots, organisational structures, and ideologies. Against this background, the United Kingdom (UK) government has announced a fundamental review of out-of-hours services with the aim of ensuring 'seamless' access to care.[11]

What issues should this review address? First, how can we ensure that patients receive a consistent, high quality response to their problem, whatever their route into the health care system? Secondly, at what level should the out-of-hours system be managed? We need to develop a whole-system approach based on getting the right care to the patient, not the care that happens to be available from the provider who is first contacted. Thirdly, we need to reach an explicit consensus between the public, policy makers, and providers about the extent to which the health service is aiming to provide routine care 24 hours a day, rather than offering only urgent care until day-time services are available.

These issues are faced by health care services throughout Europe as policy makers seek to devise a system to match the expectations of both patients and health professionals, providing affordable, high quality care that supports rather than detracts from day-time services. In particular, the experience of many European countries has demonstrated the difficulty of appropriately integrating primary care services and hospital emergency departments.[12]

In the UK, the answer to some of these problems may lie with the telephone helpline, NHS Direct. Rather than being one of many sources of advice, it could become the single point of access to the NHS when other services are closed. The role of NHS Direct is to offer advice or to help the caller make contact with the most appropriate source of help for their problem. Although NHS Direct is already working closely with general practice cooperatives in some areas, the entire panoply of NHS providers should be equally involved, particularly A&E departments. All calls from people with urgent health needs outside normal hours could be handled by NHS Direct, replacing the call-answering services currently provided by ambulance trusts and by general practice cooperatives. Those who need telephone advice would receive it from a nurse (as now), with support from a doctor when necessary. Those needing an ambulance would be sent one or the nurse would be able to arrange a home visit from a doctor or community nurse, or attendance at a primary care centre, emergency department or dentist as appropriate. Patients who attend a primary care centre, walk-in centre or A&E department without telephoning first would be assessed by a nurse in exactly the same way, using the same protocols, linked to the same wide network of providers, and offering the same response. Patients attending an A&E department would no longer automatically eventually see a casualty officer, unless this was appropriate.

This system offers simple and convenient access for patients and should ensure that callers receive the right care, quickly and efficiently, by making the best use of health professionals' skills. For this vision to become a reality, NHS Direct will have to demonstrate that it can cope with surges in demand at busy periods and will have to work more closely with other providers. In order to offer the most appropriate help, NHS Direct will also need to be able to call on a wider range of providers outside office hours than are currently available. At present, GPs and A&E departments, because they are the only accessible source of help, often provide care at night that, at other times, would not be their

responsibility. A more integrated service requires better provision, particularly of dentistry, specialist palliative care, community mental health care, community nursing, and social services.

The recent changes in out-of-hours care are having important effects on the development of general practice more broadly. The success of cooperatives in demonstrating that GPs can work together across practices was probably one factor that paved the way for primary care groups. As doctors from different practices work together within these groups to develop joint policies, look after each other's patients in cooperatives and, eventually, electronic health records enable better communication and coordination of care, many of the current assumptions about general practice will be questioned. Concepts such as the importance of continuity of care, the gatekeeper role, registration with one practice, and the doctor–patient relationship represent a mythology that some doctors themselves apparently no longer believe in.[13] Yet the central role of general practice within the NHS continues to be stressed. It is now important to dissect out the essential attributes of general practice that are vital to its success. Which of these concepts really matter, why, to whom, and what is the evidence? It is essential to determine the attributes of general practice that are of value and how they apply to the modernised NHS.

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# Why aromatherapy works (even if it doesn't) and why we need less research

IN this issue of the *Journal*, Cooke and Ernst[1] present a systematic review of aromatherapy — the use of essential oils extracted from plants for the treatment of ill-health. Although there is a general paucity of data, several trials have been conducted with anxiety scores as an endpoint. The reviewers conclude that 'the effects of aromatherapy are probably not strong enough' to be useful.

In all the reviewed papers with an anxiety endpoint, essential oils were added to the oil used as a lubricant during massage. This mirrors contemporary clinical practice where massage is a component of most aromatherapy sessions.[2] Few who have received a back rub would doubt that massage is relaxing. Indeed, there is considerable evidence from randomised trials that massage reduces anxiety scores.[3-5] If massage is effective then aromatherapy — massage plus essential oils — is also effective (unless essential oils are harmful, which seems unlikely). So aromatherapy works even if, according to Cooke and Ernst, it doesn't.

The hypothesis addressed in the reviewed trials concerns whether the addition of essential oils increases the effects of massage. There are two questions to ask about this hypothesis. First, is it important? Essential oils are not particularly expensive. Unless used with a gross lack of caution, they seem to be safe.[6] Moreover, it does not seem implausible that the use of a pleasant smelling oil might make a massage more relaxing, particularly given some basic research on olfaction.[6] If aromatherapists want to add essential oils to a massage then that should largely be their business. Clinical researchers should be no more exercised by this practice than by that of psychotherapists who enhance the ambience and comfort of the consulting room with plants, pictures, and cushions.

The second question concerns statistical power. If essential oils add to the value of a massage then it is unlikely that they do so to any great extent. Take the case of a randomised trial of massage versus no massage with the dichotomous endpoint of a clinically significant reduction in anxiety scores. Assuming a 50% response rate in the massage group and a 20% rate in controls, about 120 patients would be needed for a sufficiently powered study. Now imagine that addition of essential oils to massage increases the success rates to 60% which, though a small improvement, is clinically significant, especially given that aromatherapy is relatively safe and inexpensive. The problem is that an adequately powered

trial of massage versus aromatherapy would need well over 1000 patients. A difference between massage and aromatherapy of 5% would require a sample size of 4000.

Which brings me to my second point: perhaps we need less research.[7] It is clear that the trials reviewed by Cooke and Ernst were desperately underpowered (typical sample sizes were 50 or 100) and did not have much hope of showing differences between groups, even if they exist. The fact that many trials did show 'weakly positive' results is a probably a function of bias and poor methodology: the first author of each trial is a practising aromatherapist, often a high profile advocate (e.g. writes aromatherapy books; teaches nurses) and generally not an experienced researcher with a significant number of publications. Many of the aromatherapy trials have only one author, suggesting the absence of a research team, and no statistician seems to have been involved in any trial. Given this background, the complaint by Cooke and Ernst of 'methodological flaws' is unsurprising. The published research obscures clinical evaluation of aromatherapy and we might be better off had it never been conducted.

The review's value is that of re-emphasising the gap between current data and the therapeutic claims made by many aromatherapists. Authors of aromatherapy textbooks seem to feel comfortable making a large number of extraordinary (and sometimes contradictory[6]) claims in the absence of systematically collected data. For example, essential oil of 'geranium is very effective for menopausal problems, diabetes, blood disorders, throat infections … [it] has many applications, from frostbite to infertility';[8] 'Cypress ... reduces swelling in rheumatism … [it] can help to staunch a haemorrhage';[9] juniper oil is claimed to have 17 different properties (ranging from aphrodisiac to sedative) and over 30 indications (ranging from discharge of mucus to kidney stones)[1]. Though aromatherapy texts present these claims without data (or any form of explanation), many include a heavily scientific tone, talking of aldehydes and esters, 'experiments of considerable importance' and the 'head of test laboratories'[10] Concurrently, they include rather unscientific considerations, such the possibility that aeroplanes could have been used to build the pyramids[11] or the suggestion that rubbing fennel oil on the solar plexus chakra can help fend off 'psychic attack'.[12]

In conclusion; aromatherapy probably reduces anxiety because it usually involves massage, which is known to be of benefit; it is not of pressing scientific importance to know whether aromatherapy enhances the effects of massage, since the essential oils used in aromatherapy are not particularly toxic or expensive; poor quality, underpowered research conducted by inexperienced investigators benefits no-one; and there is little systematically collected evidence to support the many hundreds of therapeutic claims made by aromatherapists.

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