districts about a million women and 100 000 men in the United Kingdom are living with easily treatable regular incontinence.

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The Future of General Practice

Caring for larger lists

G N Marsh

There is no reason why the average number of patients on the list of each general practitioner should not be about 4000. At the moment the average is well under 2000 and tending to fall. The new general practice contract contains incentives for list sizes to grow, and the government is interested that they should do so to contain expenditure on the health service. But larger lists can also make good professional sense.

Caring for 4000 patients obviously depends on good organisation and well developed teams, and the first advantage of large lists is that patients will receive care from team members more skilled than general practitioners in various types of care. Thus why should a general practitioner spend time providing marriage guidance when this can be done more competently (and more cheaply) by a counsellor? Or why should general practitioners run well person clinics when this can be done efficiently by nurses trained to do that task. Similarly it is sensible for practice management to be carried out by managers, leaving doctors to get on with the tasks for which their training particularly suits them.

The other important professional advantage to large lists is that the general practitioners see the various manifestations of disease more often. Thus they may be better able than practitioners with smaller lists to maintain their skills at diagnosing and treating emergencies like myocardial infarction and abdominal pain, dealing with rarer clinical appearances, as well as becoming more experienced in the commoner chronic illnesses.

This paper looks at how general practitioners can manage large lists and reviews the now considerable body of evidence on how this may bring benefits.

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Primary health care team

Since the 1966 family doctor's charter[1] the grouping of doctors and formation of teams has gathered momentum.[2,3] Sharing care with fellow professionals in a primary health care team is the main way of reducing doctors' work. The new contract stipulates that doctors must provide adequate, daily, access to their patients; nevertheless, one of their main functions is to direct patients to other members of their team. Psychological and social problems can be shared with fellow carers better informed in these areas.[4] Even for physical illness, once the diagnosis has been established and management organised, much of the continued care can be done by nurses.[5-8] Patients must also have direct access to team members who are not doctors. Each member of the team has an important role in running an efficient practice.

ADMINISTRATIVE AND MANAGEMENT STAFF

Efficient trained receptionists and clerks should ensure a steady flow of patients to the doctors, and provide them with instant access to well ordered records on paper or computer.[9] Informed receptionists can answer many patients' queries, advise them who to see, and convey messages to and from the doctor. The practice manager coordinates the team, and by working with the family health services authority, accountants, architects, and solicitors, can relieve doctors of most of their administrative work.[10,11] It is the manager who should have taken on the work resulting from the new contract and fundholding.[12] Extra money is being paid to fundholding practices for more management staff.

NURSING TEAM

The nurses are the clinical powerhouse of the team. Effective traditional community nursing can reduce the doctors' load[5-8] and information gained during home visits, particularly to elderly and chronically sick patients, can be shared with doctors, thus reducing the need for doctors to visit. Practical nursing can be delegated to less highly trained assistants, in theory

Work of practice nurse, Norton Medical Centre, 1989

Type of work	No of patients	% Of workload
Preventive:		
Well woman clinic	5541	69
Cervical smears	1046	
Well man clinic	301	
Tetanus and travel injections	1199	
Immunisation	890	
Diagnostic	445	8
Therapeutic work:		
Medical extra	220	24
Surgical extra	180	
Miscellaneous injections	378	
Diabetes clinic	276	
Vascular clinic	117	
Minor operations	251	
Total	5817	

providing time for preventive and therapeutic clinics. Shortage of community nurses, however, means that doctors need to employ practice nurses for these clinics.

About two thirds of the workload of a practice nurse is preventive and a quarter therapeutic (table). In both aspects, nurses work to protocols and aim at more comprehensive and detailed care with less doctor involvement. Unlike nurse practitioners, they do not diagnose but this is an area capable of expansion.[6-10] A nurse responsible for advising on minor illnesses—for example self care of coughs, colds, diarrhoea, and aches and pains—could reduce doctors' work considerably. This role requires further experimentation and development.

Community midwives can provide continuing care of normal pregnancies,[13] although a doctor needs to be available to deal with diagnostic problems, deviations from normal course, prescribing, and as occasional psychological support for the midwife and the mother.[14] Trained family planning nurses can advise and assess women starting contraception and supervise its continuation[2] and may also give preconception counselling and advice on the menopause and hormone replacement therapy.

Given consulting rooms and space for clinics and preventive groups, health visitors can monitor children's development as well as advising on and following up children's health problems.[15] MacMillan nurses, who specialise in care of the dying, can mobilise community supporting services and liaise with hospices.[16] Community psychiatric nurses can supervise their progress, monitor and modify treatment, and provide guidance and counselling for patients with acute and chronic psychiatric illness,[17,18] and psychogeriatric nurses can give similar care to patients aged over 65, many of them with dementia.

Drug and alcohol misuse counsellors can supervise the continuing care of patients with these problems.

OTHER TEAM MEMBERS

Analyses of consultations have shown that general practitioners deal with numerous social problems. Such problems often envelop and aggravate clinical ones, but sometimes patients will consult about purely social matters. Having a social worker as part of the team to deal with problems of housing, finance, loneliness, grants, home helps, aids for the disabled, etc, reduces doctors' consultations. Concern and care about such problems by informed people also lessens morbidity.

Dietitians working with patients with diabetes, other conditions responsive to diet, and organic diseases aggravated by excess weight increase caring and reduce doctors' work.[19]

Annual assessments of the over 75s can be done by an elderly care visitor[20,21] who is aware of the patient's recorded clinical problems and works to a social protocol.

Unhappy patients who are experiencing marital disharmony, other interpersonal conflict, or self image problems often produce long, difficult, and emotionally charged consultations. They may be more expertly handled by trained counsellors.[22]

Physiotherapy facilities speed recovery from acute musculoskeletal disease and reduce treatment.[23] A liaising optician can report on retinas of diabetic and hypertensive patients and assess squint.

Fundholding practices may wish to expand care by linking with acupuncturists, hypnotists, etc. Their training, expertise, and protocols would have to be scrutinised as problems of responsibility might arise. Another area for experimentation.

Working as a team

Shared premises and a comprehensive team record facilitate communication and the provision of team care.[24] Day to day sharing of patients' clinical problems bonds team members, coordinates their work, and minimises duplication. Thus formal opportunities for communication are essential.

Most important is the daily get together of the doctors, nurses, health visitors, midwife, and practice manager. Counsellors, dietitians, social workers, etc may also attend these sessions occasionally.

Weekly multidisplinary lunch time clinical meetings (approved by the Postgraduate Education Authority), monthly team meetings, and occasional single discipline meetings are also helpful. When working with independent professional colleagues, it is more appropriate for general practitioners to act as coordinators rather than leaders. The patient's problem is paramount and those primarily responsible for that problem should lead the team in dealing with it.[2]

Home visits

Although British general practice can be justifiably proud of home visiting, only three or four patients an hour can be seen at home compared with eight to 12 in the surgery. Between 1969 and 1980 the average number of home visits in the Northern region fell from nine to five a day.[24] New visits fell by 32% and follow up visits for chronically ill patients by 50%. The falls were attributed to sick people attending surgery more, more people having cars, and self certification. The increasing proportion of elderly people and the lack of use of nurses for visiting militated against greater falls. General practitioners felt that a quarter of the visits were unnecessary, and large interdoctor variations existed in visiting rates within the same area, same population, and even the same practice. For efficient care, patients must attend the surgery whenever possible so trained receptionists should offer immediate appointments, choice of team members, and, increasingly importantly, telephone consultations. Convenient parking for handicapped people and corridors, doors, and toilets adequate for wheelchairs are necessary. Tightly drawn practice boundaries minimise time spent driving cars for all team members.

Only 7% of home visits in 1980 were followed up by nurses, yet ongoing assessment of illness is totally appropriate for them. Similarly, health visitors can assess the care of sick children and midwives that of pregnant or puerperal mothers. Telephone assessment by the doctor can replace some visiting. Community nurses and midwives are not trained to diagnose so their role in new visits is limited, but with trained receptionists collecting information on the telephone, they can follow up patients discharged from hospital and confirm diagnoses of previously recorded acute illness.

Despite the rise in the number of elderly people

Primary health care team, Norton Medical Centre, surrounding one of the families in their care

between 1969 and 1980, visits initiated by doctors fell by 39%. During that time, home helps, warden supervised accommodation, nursing homes, day hospitals, day centres, clubs, and workshops increased and the social value of a general practitioner's regular visit fell. Visiting of chronically sick housebound people can be shared by doctors, community nursing sisters, elderly care visitors, and psychogeriatric and community psychiatric nurses. With more time available, doctors can increase visits to patients who are seriously ill or dying and those in whom diagnosis is problematic. Such intensive home care can reduce referral rates to hospital.

Most people requesting late visits can receive telephone advice from the doctor.[26]

Efficient management of clinical conditions

Accurate diagnosis, appropriate treatment, and rapid cure are efficient ways of managing problems. Telling patients the course of the illness and the time needed for its resolution minimises repeat consultations. Many illnesses recur and the earlier notes can expedite the consultation. Empirical treatment is increasingly acceptable.[27] Unnecessary referral to hospital, with aggrandisement of illness, should be avoided.[28]

Many chronic illnesses—thyroid deficiency, pernicious anaemia, epilepsy, asthma, hypertension—can be managed by nurses using protocols, and this often results in better care.[29-32] Doctors have a large role at the onset of these illnesses but continuing supervision can be done mainly by nurses.

For the many recurring illnesses—urinary tract infection, vaginal discharge, napkin rash, eczema, varicose ulcers, warts—protocols for ongoing nursing care have not yet been developed. Nurse prescribing will facilitate this. Doctors and nurses must work to establish protocols and organise and audit the clinics. It also takes time to change patients' consulting habits but, once achieved, doctor consultations will decrease and overall standards improve.

Not prescribing and prevention of iatrogenic disease

Reassurance and health education are important components of the efficient response to self limiting minor illnesses. A common example is viral upper respiratory tract infections, for which doctors often prescribe inappropriate antibiotics, particularly in childhood.[34] A prescription implicitly sanctions further consultation if the condition recurs. The high workload caused by epidemics of virus infections can be reduced by promoting self care. Recourse to pharmacists should be encouraged.[35,36]

In patients with minor psychiatric conditions diagnosing worry rather than anxiety state, unhappiness rather than depression, overconscientiousness rather than obsession, and fear rather than phobia might restrain doctors from treating. Patients with these conditions can be supported and cared for by other members of the primary health care team. Side effects, iatrogenic disease, addiction, and overdose from inappropriate prescription can produce considerable yet avoidable workload for doctors.

Practice formularies should include a "minicoepia"—a list of about 30 drugs which can treat about 80% of illnesses.[37-39] By using it, mental effort is reduced, drug familiarity increased, dosages and side effects become familiar, and generic names can be used; this system is not only efficient but also inexpensive.

Repeat prescribing

Speedy availability of drugs by repeat prescription for continuing or recurrent episodes of illness is popular with many patients.[40] Long term conditions (such as hypertension and epilepsy), remitting and exacerbating illnesses (hay fever and eczema), and illnesses characterised by repeated episodes (vaginal discharge, backache, sciatica) are appropriate. Once the diagnosis has been established, understood by the patient, and effective treatment established repeat prescription rather than consultation is adequate for continuing care or further episodes. Controls on number, frequency, and amount of drugs prescribed are essential.[41] The repeat prescription system allows patients to take greater responsibility for the care of their own illnesses.

Preventive care

Most preventive care can be, and is, implemented by staff other than doctors.[42,43] Vaccinations for children, foreign travellers, influenza, and reaching immunisation targets in the new contract are the task of practice nurses and practice managers. Well person clinics and new patient checks can be run by practice nurses,[46] and yearly screening of elderly people, either at home or in the surgery, by elderly care visitors.[20,21] The protocols used should arise from discussions between doctors and the team members implementing them. The doctor is responsible for their accuracy and for ensuring that the care is properly given and plays an occasional part (for example—physical examination of the newborn).

Appropriate training for all team members is essential, as are legal safeguards. Coordination and auditing should be organised by the practice manager. Desktop computers available to all team members at consultations can highlight deficiencies in preventive care and so facilitate opportunistic screening. Special efforts by all team members can improve the care of socially deprived and handicapped patients.[45]

Personal lists

Continued care by one doctor of one patient, and ideally one family, over many years facilitates efficiency.[46,47] A doctor in a large group cannot know all the patients, but he or she can know some of them well. The patients also know their doctor and how he or she works—for example, antibiotics are not prescribed for virus infections and why consultation for self limiting

illness is discouraged. Doctors with personal lists can record how they want, use their own diagnostic parameters, be consistent with therapy, and share care with team colleagues in ways their patients understand. Personal lists facilitate repeat prescriptions and, increasingly importantly, telephone consultations. Duplication of care is also avoided.

Personal lists mean that patients must have adequate access to their doctor, as insisted on in the new contract. One danger of a personal list is that the doctor can become out of date as there is little day to day peer review. Nevertheless, rota cover, interaction with trainees, meetings to discuss care, educational sessions, analysis of videoed consultations, establishment of protocols, increasing use of audit (including doctor to doctor comparisons) all serve to expose each doctor's care.

Efficient records

A comprehensive record available at each consultation is vital for efficient care. The Department of Health preventive care sheet contains a record of immunisation, cervical smear testing, blood pressure, and weight. Serial data on smoking, alcohol consumption, hobbies, exercise, can be added.[24] A concise family history, including diabetes, thyroid disease, glaucoma, etc, and a summary of important illnesses and operations should be kept opposite the clinical record.

The preparation, overall condition, and auditing of records should be the responsibility of lay staff. Attendance at clinics should be noted and put in the folder as well as records of health visitors, elderly care visitors, etc.

Some practices have already computerised parts of their manual records, and many more are doing so.[48,49] Computerisation of repeat prescribing has saved much in clerical time.[50] Many doctors now have desktop computers and a printer for issuing prescriptions. The practice formulary can be built into the computer as well as programs to preclude prescribing interacting drugs, those to which patients are allergic, or those that have side effects. Special programs are becoming available for use in vascular, diabetic, and other clinics.

Efficient consulting room

Doctors should sit in their consulting rooms so that they can watch the patient's entry, demeanor, and movements. Consultation across the desk corner gives access to the patient with one hand and to his "office facilities" with the other. History, pulse, examining limbs and throats, and listening to hearts can be done without leaving the chair.

Clinical equipment—pen torch, tongue depressors, auriscope, stethoscope, peak flow meter, sphygmomanometer, magnifying glass, scales, etc—should be kept by the general practitioner's desk and by the examination couch, and trays for gynaecological, proctoscopic, and eye examinations should be immediately available. Growth charts, height and weight data, and anatomical charts for explaining illness can be put on the walls.

Working fast

Frequent, short surgeries throughout the day are cost effective in time and energy. The six to seven minute average consultation time means that many consultations are three to five minutes and are usually for minor illness. Some opportunistic preventive care can be provided, although the numbers attending clinics run by nurses and recognised by family health services authorities suggest that the more structured and comprehensive care provided at them is becoming popular with patients.

In many consultations the patient is not examined, so taking a history over the telephone with comprehensive records available can be both efficient and accurate. Studies in countries where there is little or no home visiting are encouraging.[51-53] All team members can set time aside to receive or return calls. Follow up consultations, communication with chronically sick and housebound patients, giving results of tests, discussing a recurrence of illness can all be done on the telephone. Many out of hours emergencies, which mostly concern patients already on treatment, can also be dealt with by telephone.[26]

Involving patients

Well informed patients will use their practice more efficiently.[3] The practice brochure should be a guide to the use of the primary health care team.[54,55] Little information is needed about doctors but a great deal about the role of receptionists, nurses, midwives, health visitors, counsellors, etc, as well as accounts of the clinics they run. The brochure can reinforce the practice philosophy of self care of minor illness, use of pharmacists, limited need for drugs, avoidance of home visits, and encouraging use of the telephone. It can inform patients about self help groups for smokers, people with asthma, psoriasis, eczema, etc; such meetings expand patients' knowledge and decrease their need to consult. Practice newsletters and annual reports can supplement this information.

From greater efficiency to larger lists

If all the above ideas were implemented general practitioners should have time to expand services as well as to increase numbers on their lists. Between 1960 and 1990 list sizes fell from about 3000 patients to 2000.[56] Whether doctors with smaller lists give better care has been debated, but the arguments have been confused as there are few parameters of quality.[57-59] Doctors with smaller lists seem to do more preventive care, but this could be done by nurses.[60]

But has a personal list of 4000 patients any merits in itself? Apart from the greater return on the cost of medical education it provides more clinical experience. Seeing more patients increases knowledge resulting in fewer patients requiring hospital care. Surgeries and the many clinics provide a concentration of clinical cases currently only found in hospital wards and outpatient departments. Student and postgraduate teaching could move into the community. There could be population based research.

But if the average number of patient-doctor consultations fell from the current three to six a year to around two a year would patient satisfaction be less? Reductions in attendance for minor self limiting illness would probably have little effect. Patients with serious illness would initially be seen just as often but perhaps less in their convalescence and other team members would share in their continuing care. The average number of consultations with a health worker might be higher than it is now, and this could increase overall satisfaction. The increased financial return for doctors that might ensue from larger lists is of minor importance compared with these other benefits.

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MATERIA NON MEDICA

When the wind blows

"They've called it Brendan," said my Irish radiologist colleague as we sat on the Tuesday morning shuttle bus to work. "What a daft name for a typhoon. If it's an Irish typhoon there's no telling what it will do."

"Strong Wind Signal Three" was hoisted that afternoon. By the end of the clinic it was rumoured that "Storm Signal Eight" would be hoisted at 9 pm. Friends telephoned my wife to ensure that we had a good supply of food in our flat. My colleagues informed me that once Signal Eight had been declared the hospital would effectively close to all but emergencies. It would be potentially dangerous to go out, so only those on call would be expected to go to work (but I was on call).

The radio news at 9 pm said that Storm Signal Eight had just been hoisted. On the midnight news a Royal Observatory spokesman sounded quite excited. Brendan was now 100 km to the south east, and was heading north west directly for the Pearl River Estuary at about 22 km an hour. It was expected to arrive at Hong Kong at about 5 am. People should put up storm shutters if they had them, turn off their air conditioners (to lessen the risk of their being sucked out of the wall), keep away from windows, and be ready to enter their prepared shelter (where was that?). Storm Signal Ten would be hoisted, and hurricane force winds with gusts up to 220 km an hour could be expected. It was now quite cool and raining hard. The wind was very noisy, with trees swinging viciously. Could it get worse? We moved the children's beds away from the windows and debated why we had ever come to Hong Kong.

The predicted further deterioration in the weather never occurred. At 7 am it was announced that Signal Eight was still in operation. During the night Brendan had changed direction to the west, and was now 110 km south west of Hong Kong and crossing the coast of mainland China near Macau. The mean wind speed in Hong Kong was still greater than 63 km an hour, and people were still advised not to go outdoors. So far 16 people had attended hospital because of injuries sustained by flying objects, and 40 people had been evacuated from their homes.

By 10 am Brendan had been downgraded back to Signal Three, and from our windows we could see the traffic on the Tolo Highway increase almost immediately. Numerous fallen trees hindered my journey to work. It was now an unusually cool 27°C, with 92% humidity, and life was returning to normal.

The lunchtime news said that two people had been killed in Macau. "That was just a small one," my colleagues said.—GARETH JOHN, *visiting lecturer in oto-laryngology, Hong Kong*