

ResearchSummary



Can primary care reform reduce demand on hospital outpatient departments?

This research summary examines the evidence for four different approaches to reducing demand for specialist outpatient treatment. Professor Martin Roland and colleagues at the National Primary Care Research and Development Centre at the University of Manchester carried out the scoping review (Roland, 2006), which was commissioned by the NHS Service Delivery and Organisation Research and Development Programme (SDO). The researchers identified proven and promising interventions but also evidence of ineffective or potentially harmful strategies where continued funding should be reviewed. There are common but unfounded assumptions about the effectiveness of some interventions.

Key messages

Transfer and professional behaviour change strategies are generally effective in reducing demand on outpatients. Relocation and liaison strategies are largely ineffective.

Transfer of outpatient services to primary care

- Effective strategies that maintain quality are: primary care clinics for chronic diseases; discharging hospital outpatients to no follow-up, patient-initiated follow-up or GP follow-up; and direct access by GPs to hospital-based diagnostic tests, investigations and treatments.
- The merits of GPs with Special Interests (GPSI) clinics require further investigation.
- GP minor surgery may reduce quality of care.

Relocating specialists into community settings

- This does not reduce outpatient demand but may improve access in remote areas.

Liaison between primary care and specialists

- This may improve service quality but does not reduce outpatient attendance.

Professional behaviour change

- Specialist educational outreach and structured referral sheets reduce GP referrals.
- 'In-house' second opinion before referral requires further investigation.
- Ineffective interventions include: passive dissemination of referral guidelines, audit-and-feedback of referral rates; discussion of referral rates with an independent medical advisor.
- Financial incentives to reduce referrals may also reduce the quality of care.

Practical findings



The NHS White Paper *Our health, our care, our say* (Department of Health, 2006) sets out novel plans for transferring health services from acute hospitals into the community, with greater use of community-based specialists as well as new diagnostic and treatment facilities.

This scoping review was commissioned by the SDO Programme to examine:

- the evidence underpinning this transfer of services
- ways to improve the efficiency and effectiveness of outpatient services.

Four types of intervention aimed at reducing demand on hospital outpatient services were reviewed:

- Transfer of services – traditionally delivered by hospital clinicians – to primary care practitioners
- Relocating specialist outpatient care to community premises
- Liaison between primary care practitioners and specialists
- Professional behaviour interventions to change GPs' referral behaviour.



Transfer

Minor surgery

Experience so far: Financial incentives introduced in the 1990 GP contract brought a significant increase in minor surgery undertaken in primary care.

Potential benefits: Shorter waiting times; lower costs; increased patient satisfaction; enhanced job satisfaction for GPs.

Potential risks: GPs may fail to diagnose serious conditions or maintain surgical skills and equipment; lack of back-up; higher risk of infection.

Research findings: There is little impact on hospital waiting times. Some studies show a reduction in quality of care.

Primary care clinics for chronic conditions

Experience so far: Structured clinics for a range of chronically ill patients were introduced following the 1990 GP contract. Most general practices now have clinics for managing asthma, diabetes and heart disease.

Potential benefits: Reduced demand on hospitals; better access for patients; overall reduction of costs.

Potential risks: Poorer quality care by GPs, resulting in worsening health outcomes; a reduction in treatment thresholds.

Research findings: Health outcomes are at least as good in primary care as in hospital outpatients; well-structured GP clinics can reduce outpatient visits while improving patient access to care. The cost of transferring care in this way is largely unknown.

Research priorities: There is scope for extending this model to other clinical areas. Investigation needs to include training requirements for GPs and the impact on primary care workload.

Intermediate care: General Practitioners with Special Interests (GPSIs)

Experience so far: This type of intermediate care was first outlined in the *NHS Plan* (Department of Health, 2000).

Potential benefits: Improved access to services; GPSIs addressing unmet need as well as diverting hospital referrals; potential to raise standards of care provided by GP colleagues.

Potential risks: GPs' referral threshold may be lowered; local GPs may become de-skilled; patients seen by GPSIs may still require hospital outpatient visits.

Research findings: Evidence suggests that GPSI clinics provide high-quality care with good health outcomes that is more accessible than hospital outpatients and involves shorter waiting times. However, the lack of uniformity in the GPSI model and in arrangements for monitoring GPSI services means that these findings are not robust. The cost of GPSI services varies widely and appears to be generally higher than the cost of specialist services. Some hospital consultants are hostile to the GPSI concept. GPSI services running without local consultant support may be unsafe.

Research priorities: It is important to add to the very limited current research to establish which GPSI models reduce demand on hospitals and are cost-effective.

Alternative outpatient discharge procedures with: no follow-up, patient-initiated follow-up or follow-up in primary care

Experience so far: In some clinical areas, regular outpatient follow-up has been shown to confer no clinical benefit.

Potential benefits: The avoidance of an inappropriate or badly timed hospital visit when follow-up care can be as effectively provided by primary care practitioners.

Potential risks: Reduction in quality of care; greater use of NHS resources in the long term; unacceptable increase in GP workload; unacceptable change to patients.

Research findings: Patient-initiated follow-up is the preferred option for patients with a range of diseases, including rheumatoid arthritis, cancer and inflammatory bowel disease. There are signs that patient-initiated follow-up may be as effective as a routine outpatient appointment. Patient-initiated access requires a major revision to hospital procedures.

Research priorities: There is a need to identify conditions for which follow-up confers little or no clinical benefit.

Direct access for GPs to hospital-based diagnostic tests, investigations or treatments without a prior outpatient consultation

Experience so far: GPs have direct access to an increasing range of diagnostic services and hospital-based therapies.

Potential benefits: Reduction of outpatient attendance and waiting time from presentation to testing and services; reduction of direct costs to hospitals.

Potential risks: Increase in demand for testing and treatment as a result of inappropriate referral.

Research findings: Direct access to hospital-based tests and treatments avoids a substantial proportion of outpatient appointments in several clinical specialties. It reduces waiting times, is preferred by patients and generally cuts costs without increasing GP workload.

Research priorities: Clinical trials to investigate the impact of extending direct access to a wider range of tests and services.

Relocation

Moving secondary services or specialists to primary care settings

Experience so far: Small-scale initiatives, mainly in the 1990s. Has become a part of recent NHS policy.

Potential benefits: Improved access to services; potential to address unmet need in the community; better interaction between specialists and GPs.

Potential risks: Inappropriate reduction in specialist referral threshold; increased costs of specialist services; patients requiring further hospital outpatient visits.

Research findings: Relocation improves access to specialist care and increases patient satisfaction. With the exception of the attachment of physiotherapists to primary care teams, this strategy has proved ineffective in reducing demand on outpatient services. It has brought no improvement in GP skills or reduction in GP workload. Due to economies of scale, specialists appear to be generally most efficient when working in hospital settings. Relocation may improve equity in care provision in remote rural areas.

Telemedicine consultations between GP and specialist

Experience so far: Small-scale initiatives mostly involving the GP or nurse sitting with the patient while presenting the case to the specialist. Most evaluations in highly rural countries.

Potential benefits: Saving outpatient visits.

Potential risks: Poor communication (e.g. in psychiatry) or difficulty making a diagnosis (e.g. in dermatology).

Research findings: Telemedicine and teledermatology in particular appear to be plausible strategies for populations with poor access to hospitals. NHS costs are generally greater than conventional hospital clinics.

Liaison

Experience so far: A variety of liaison arrangements include community clinics with on-site GPs and specialists; systems for regular communication between specialists and GPs; liaison meetings; shared record cards; computer-assisted shared care.

Potential benefits: Reduced need for outpatient attendances without compromising quality.

Potential risks: A lack of overall benefits at greater cost.

Research findings: Liaison models of working may improve the quality of primary care but have little impact on health outcomes. Reduction in outpatient attendances is occasionally, but not consistently, achieved. Successful delivery depends heavily on good communication between individual primary and secondary care clinicians.

Professional behaviour change

Referral guidelines, audit-and-feedback, educational interventions, organisational interventions and financial incentives

Experience so far: A large body of evidence suggests that the process of GP referral to specialists can be improved.

Potential benefits: More appropriate GP referral behaviour could reduce outpatient attendance.

Potential risks: GPs may fail to refer patients who would benefit from specialist opinion.

Research findings:

1. Interventions that can be effective in reducing inappropriate referrals are:
 - structured referral sheets, which prompt GPs to conduct any necessary pre-referral tests or treatments
 - educational outreach by specialists.
2. Using in-house second opinions before referral is a potentially promising strategy (evaluated in one study only).
3. Financial incentives to encourage GPs to reduce referral rates can be effective but there is a high risk that reductions may apply to both necessary and unnecessary referrals.
4. Ineffective interventions include: passive dissemination of referral guidelines; audit-and-feedback of referral rates; discussion of referral rates with an independent medical advisor.

Research priorities: Further investigation of in-house second opinion protocols.



Conclusions



A number of potentially effective strategies have been identified that may:

- reduce outpatient attendance
- maintain or improve quality of care
- increase convenience for patients.

These are summarised in the practical findings (see pages 2 to 4).

However, the evidence does not support some of the assumptions about hospital and community care that are commonly made within the NHS (see below).

Future research

The literature is dominated by studies with weak design, e.g. case reports and commentaries. Future evaluations should be robust and employ experimental designs such as randomised controlled trials or controlled before-and-after studies. New initiatives should be evaluated in terms of:

- quality of care and patient safety
- overall NHS costs in providing the new service
- overall effect on demand for care, whether from patients or GPs.

New initiatives may be staffed by enthusiastic 'early adopters'. Evaluation needs to include staff who are representative of those who will eventually be providing the service. This is especially important where complex new skills (e.g. GPSIs) are required.

No effective strategy involving primary care is without risk. Future research should assess unintended consequences and impacts on allied health sectors as well as identifying potential benefits of new policies.

A number of 'good ideas' may lack local management support for long-term sustainability or be over-dependent for their success on the calibre of local individuals. It is important that future evaluations take into account how local contextual factors affect the implementation of new interventions. Qualitative work therefore needs to be conducted alongside quantitative research.



Assumption	Comment
Care can safely be transferred from specialists to primary care practitioners	Not true of minor surgery and not necessarily true of GPSI services
Care in the community is cheaper than care in hospitals	Often not the case. Cost evaluation should not focus purely on NHS costs but also on prices charged by providers
Transferring care into the community will not increase overall demand	There is a serious risk that increasing provision may increase demand either because of increased demand from patients or increased referral from GPs
Care in the community is popular with patients and should therefore be encouraged	The general popularity of this policy would not necessarily survive loss of quality and efficiency

About the study

This was a scoping review of published research into each of the four models described in this summary. Nine major databases from 1980 onwards were searched. English language studies were included if they related to one of the four models and included usable information about: patient health or satisfaction; quality of care; impact on hospital services; impact on primary care services; and costs. The review was not intended to be a comprehensive systematic review and the search lacked sensitivity in some areas. Despite this limitation, the review is sufficiently robust to have identified the main potential strengths and weaknesses of the different models of care.

References

Department of Health. 2006. *Our health, our care, our say*. London: Department of Health.

Department of Health. 2000. *The NHS Plan: A plan for investment, a plan for reform*. London: The Stationery Office.

Roland M, McDonald R, Sibbald B, Boyd A, Fotaki M, Gravelle H, Smith L. 2006. *Outpatient services and primary care. A scoping review of research into strategies for improving outpatient effectiveness and efficiency*. Report for the NHS Service Delivery and Organisation R&D Programme. London.

Further information

The full report, this research summary and details of current SDO research in the field can be downloaded at: www.sdo.lshtm.ac.uk

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Feedback

The SDO Programme welcomes your feedback on this research summary. To tell us your views, please complete our online survey, available at: www.sdo.lshtm.ac.uk/researchsummaries.html

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