

IMPROVING HEALTH AND CARE FOR PATIENTS BY REDESIGNING SERVICES: THE DEVELOPMENT AND IMPLEMENTATION OF A CLINICAL ASSESSMENT SERVICE IN HARROW PRIMARY CARE TRUST

Maxine Offredy PhD
Reader in Primary Healthcare, CRIPACC, University of Hertfordshire, UK

Mary Cleary BA, PGDip
Acting Head of Continuing Care, Harrow Primary Healthcare Trust, Harrow, UK

Andrew Bland MSc, BA
Acting Director of Commissioning, Harrow Primary Healthcare Trust, Harrow, UK

Anna Donovan
Head of Practice Based Commissioning, Harrow Primary Healthcare Trust, Harrow, UK

Amol Kelshiker BSc MBChB FRCGP
General Practitioner, Pinn Medical Centre, Harrow, UK

For correspondence
Dr Maxine Offredy
CRIPACC
University of Hertfordshire
College Lane
Hatfield
Herts
AL10 9AB.

Abstract

The redesign of healthcare services in Harrow Primary Care Trust is due to a number of drivers including: centrally imposed targets as outlined in a number of policy documents; shifting the balance of care; service delivery in a challenging financial climate; response to national consultations which indicate patients wanting services nearer to home and local and national knowledge of providing different types of services. A local enhanced scheme was devised by the Trust to support general practitioners to follow care pathways using evidence-based literature, best practice and discussions with clinicians, nurses and patient representatives. The result was an ambitious and innovative service which has attracted attention from neighbouring London Primary Care Trusts who are seeking to replicate the model.

Key words: service redesign, cost containment, patients, multidisciplinary working.

How this fits with quality in primary care

What do we know?

Evidence-based discussions, consultations with patients, staff and clinicians are important in implementing government directed change of service provision.

What this paper adds

The paper describes some of the practical issues associated with service redesign and outlines the evidence-based steps taken to introduce the service. The significant contributions of cardiac nurses are highlighted as are the principles adopted for Harrow Clinical Assessment Service which align with guidance suggested by the British Medical Association for referral management schemes.

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INTRODUCTION

Key strategies in the vision of Harrow Primary Care Trust (PCT) include improving the population's health and providing high quality healthcare services. These twin goals accord with current government policies to modernise healthcare, place patients at the centre of healthcare, contain costs and redesign services¹⁻⁶. The concept of redesigning services means that the organisation of health services should align with the required resources so that these are available in the right place and at the right time. It also means that the government's policies are designed to ensure that services are proactively shifted away from secondary care into primary care and that the cost of care is also reduced. Since 2000, policies¹⁻⁶ have emphasised the need to introduce greater plurality and diversity of healthcare provision within England. The national target to achieve an 18 week maximum wait from referral to commencement of treatment by December 2008⁵ means that the NHS has to be creative in both providing capacity and improving efficiency in key clinical disciplines. An additional challenge for the NHS within the target is to give patients a choice of where they wish to be treated whilst simultaneously improving their experience of healthcare.

This paper outlines the processes undertaken to provide a new type of service – a clinical assessment service (CAS) – to the borough's population. It focuses on the reasons for, and processes of, the introduction of the service. Issues relating to multi disciplinary working - particularly the contribution of nurses, equity of service and value for money are addressed. Lessons learned are highlighted.

RATIONALE FOR DEVELOPING A CLINICAL ASSESSMENT SERVICE (CAS)

The evidence-base for the development of a redesigned service began in August 2005, as a result of feedback from patient surveys about long waiting times – approximately 10 months - for neurology appointments. It was apparent from reviewing the case mix of patients that were being referred that a large number were

on long waiting times for hospital based outpatients services when they could have been treated quicker and more appropriately in primary care using general practitioners (GPs) with expertise in headache management.

Discussions were held with PCT staff and clinicians of the service redesign and implementation team (SRIT)) where it was decided to proceed with the modernisation of care pathways in a community setting for patients with headache. It was fortunate that there was a Harrow GP with expertise in this area who was willing and available to develop this service within the community. Discussions at this initial stage about the development of a Headache service were held with local hospital consultants and the relevant GP. These discussions were led by the SRIT and a key concern for them was to endeavour to get cost-effective, high quality evidence-based healthcare nearer to patients' homes as well as meeting government targets⁵. In tandem with these developments, the PCT facilitated additional access to computed tomography (CT) scan which could be used for primary care patients, thus reducing waiting time for this procedure. This would be available to all GPs following the development of referral protocols thereby ensuring that the investigation was performed on the most appropriate patients and therefore minimising unnecessary referrals to the neurology service. Care pathways were also developed to improve management of patients by their own GPs prior to referring to specialist care, thereby reducing the need for repeated follow-up appointments.

The discussions led to the development of a Headache service, including the production of a patient information leaflet about the service (Appendix 1). The service was initially located within the local hospital where there was a consultant neurologist. A GP with special interest (GPwSI) worked alongside the consultant neurologist who triaged patients to be seen by the GPwSI. The idea of GPwSI was first mentioned in the *NHS Plan*¹ which envisaged that GPs with an interest in a clinical discipline would take referrals from fellow GPs, hence reducing patients' waiting time for appointment and healthcare, provide a more holistic experience for the patient as well as contributing to cost containment.

Development and piloting of CAS

The Headache service was introduced as a three-month pilot, located in the local hospital. The result of the arrangement to locate the service in the local hospital under the tutelage of the consultant neurologist was an under-utilisation of the GPwSI's skills as only limited cases were being referred to him, thus this arrangement was inappropriate for both the GP and the PCT. At the conclusion of the pilot, a questionnaire regarding accessibility and quality of service was sent to each patient seen under the new arrangement. Content and descriptive analyses of patient feedback showed a high degree of satisfaction with the service (Figure 1), although from the PCT's perspective the service was not cost-effective and was still based in the hospital as opposed to being in the community. These issues are echoed in the literature on GPwSI^{7, 8}. The analysis of the patient surveys strongly reinforced the original premise that patients wished to be treated more quickly and more locally and the SRIT were keen to find a way of providing services closer to the patient's home in a cost-effective way. At this juncture the identification exercise for clinical expertise in Harrow and the specialities to be introduced took place; Cardiology and Dermatology were the first two identified. Given the high incidence of cardiovascular illness in Harrow, very long waits for hospital outpatients, investigations and high follow-up ratio, it was particularly important and appropriate that services provided to patients could, and had to be, modernised. The advances in technology enabled a number of previously hospital-based cardiological investigations to be carried out more locally and closer to patients' homes, thus reducing dependence on hospital settings. Furthermore, skin complaints account for up to one-fifth of all GP consultations in the UK⁹. In addition, the growing elderly population, both locally and nationally, for whom skin complaints are an important cause of morbidity, necessitates the development of a community dermatology service. Such a community-based service has been identified as having the potential to improve services for patients and reduce waiting time and implicitly, cost of treatment^{9,10}. The development of these community-based services makes access for patients easier.

Lessons learned

As part of Harrow PCT's financial recovery plan, the SRIT reviewed various models of referral management¹¹⁻¹³ and undertook visits to PCTs which had introduced

management referral centres. These centres accepted referrals from GPs and screened them for the levels of information provided and the suitability of the referral. The review of referrals was undertaken by nurses or GPs. These models have had variable success in that they may have introduced an element of 'peer review' into the referral system which led to a reduction in out-patient attendances, but had been receiving poor publicity from GPs and patients because they were perceived as a means to delay referral for further care.

Harrow PCT's Professional Executive Committee (PEC) were determined that any changes implemented must lead to an improvement in the care delivered to patients by providing more timely access to evidence-based specialist care closer to patients' homes. They also stipulated that any service delivery change must lead to an improvement in the training and education of all primary care professionals in that speciality by implementation of care pathways and care protocols.

Harrow GPs were keen to have a model of referral which utilised the multi-professional skills in the community. The view of the PEC and the SRIT was that referral management should only be introduced where skills were available to ensure a practitioner with specialist skills undertook the triage of referrals and where an appropriate alternative to a hospital appointment could be offered. Their belief was that this type of system would add value to the patient's journey and offer the potential to make the most effective use of the skills and knowledge of practitioners with special interest. Thus, evidence from patient feedback from the Headache pilot, referral management centre visits and the literature¹¹⁻¹⁴ resulted in the development of Harrow's specific type of CAS. A decision was made by a multi-disciplinary team to provide alternative community services in high demand specialities. The SRIT, in collaboration with relevant GPs and other healthcare personnel, combined their knowledge of the literature on service redesign¹⁵⁻¹⁷ with a pragmatic approach to developing a new service for patients registered with a Harrow GP. The drivers contributing to the PCT's decision to redesign services were:

- Centrally imposed targets as outlined in a number of policy documents^{1,5,18,19}
- Shifting the balance of care
- Service delivery in a challenging financial climate

- Response to national consultations which indicate patients wanting services nearer to home, and
- Local and national knowledge of providing different types of services.

In tandem with the redesign of services, a local enhanced scheme was devised by the PCT to support GPs to follow care pathways. All care pathways were developed using evidence-based literature and best practice, for example Dermatology^{9,20,21} was developed in conjunction with discussions with GPs, nurses, secondary care clinicians and patient representatives. The service model was changed from that used under the pilot scheme (discussed above) to one which allowed the GPwSI to undertake the triage and to operate from a community setting supported by consultant mentorship. The principles adopted for Harrow CAS meet the guidance suggested by the British Medical Association for referral management schemes²². A five-step structured approach¹⁷ to the redesign of service was employed and these are outlined next.

Service redesign steps

- 1. Process mapping:** This was undertaken to capture the patient's journey of care. Bottlenecks and unnecessary journeys were identified. This procedure is patient-focused and helps understanding of the patient's experience of care delivery.
- 2. Involvement of key stakeholders and visioning:** This included clinical staff, e.g. PEC commissioning group, which has a patient representative as a member, GP forum, senior management from secondary care and from the PCT, patient representatives and support staff. The SRIT also communicated by email and letters to GPs and nurses. Personal visits by members of the SRIT were made to all general practices in the borough to get their engagement in the new service.

The involvement of appropriate clinical and management views in redesigning of the service is in line with government recommendations as outlined in *Commissioning a patient-led NHS*⁴. A presentation was made to Practice Managers' Forum to inform them about the new service and to incorporate their views in the implementation of the service.

3. Redesign of service: This was a patient-focused, clinically-led endeavour with facilitation and assistance from clinical and support staff. The purpose of the service is twofold: (i) to accept GP referrals for specialities where alternatives to hospitals services exist, and (ii) to provide a means whereby these referrals can be triaged by appropriate clinicians to the most apposite service. Box 1 provides a summary of the outcomes of the service. A strong feature of Harrow's health economy is the high quality of their GPs, many of whom have additional qualifications in the relevant specialities on offer in the redesigned services; others have worked as clinical assistant in hospitals.

The PCT advertised and recruited GPwSI from the local GP population. Mentoring arrangements for the GPwSI were arranged with the local hospital consultants. This ensures that Harrow always has a local resource of expertise upon which to draw.

4. Introducing the new service: The CAS office started accepting patient referrals from 5 December 2005, with bookings for the initial GPwSI clinics starting in January 2006, i.e. cardiology and dermatology. The initial view of the SRIT was to run the service for three months as a pilot. Patients seen by a GPwSI during the three months were surveyed; Box 1 highlight extracts from some of their comments.

Leaflets were printed about the service including access information about CAS in the 10 most frequently spoken languages in the borough (Appendix 1). The SRIT also have a number of staff who can communicate in French, Gujarati, Hindi, Kutchi, Punjabi, Swahili and Urdu. This is advantageous given the high ethnic mix in the population. The leaflets were distributed to all healthcare facilities in Harrow, advertised in patient forum newsletters, the local newspapers as well as posting on the PCT's website. The wide publicity endeavoured to inform patients and the public. Patients were given a choice of areas where they could be seen.

5. Implementation: This stage included the continued provision of support, monitoring the benefits of the service to patients, clinicians and community staff, the

development of further redesigned service innovations and sustainability of the benefits of those innovations.

Although the PCT was experiencing significant financial challenges, given the success of the CAS pilot, the PCT decided to fund a 'spend to save' scheme and to make the CAS a key element of its financial recovery and demand management plans in 2006/7. Simultaneously, the PCT voluntarily entered into a recovery plan with an external body in 2006/07 and the CAS was fundamental to its plan. The purpose of the arrangement with the external body was to (i) improve the organisational effectiveness by creating an organisational financial strategy; and (ii) to ensure that the PCT will be able to successfully manage future change programmes by implementing effective management structures, processes, training and support.

As part of the work programme for the recovery plan, it was decided to extend the numbers of specialities covered by the CAS. The areas chosen were ones where the data showed long waiting lists and high demand. It was part of the consideration that the extension of services to be offered would be ones where the PCT had evidence to show that they could appropriately divert patients to community services.

The new services that were implemented in 2006/07, in addition to cardiology, dermatology and neurology (headache), were ophthalmology, gynaecology, and minor surgery. It is planned that another three specialities will be added to the list of community-provided services by December 2007. These are rheumatology, paediatrics and ear, nose and throat. At the end of 2007, this would give a total of 9 specialities offered to patients nearer to their home.

ISSUES CONSIDERED IN THE DEVELOPMENT OF CAS

Equity of the service

It is emphasised that all Harrow registered patients meeting the clinical criteria, developed by the SRIT and approved by GPwSI, may be referred to the service. The clinical criteria are guidelines for referring patients to GPwSI for a particular clinical discipline and include referral procedures; conditions which should not be referred to the service; practicalities of the service and advice about prescriptions. The CAS receives all routine referrals for the specialities discussed in this paper and patients

are able to make a choice of GPwSI and practitioners with special interests (PwSI) appointment across several locations in the borough. The service has female and male GPwSI for patients who prefer particular gender, e.g. as in the case of gynaecology. This respects choice and potentially cultural issues. The PCT also endeavour to offer early morning and late evening appointments to meet the needs of commuters. The PCT believes that the provision of local services, near to patients' homes will enhance equitable access to high quality, clinically effective service and reduce costs.

The PCT makes use of several interpreting services: UK Asian Women's Conference, Out-of-hours language line, which is a telephone interpreting service; and emergency service accessible 24 hours. The service can also arrange face-to-face interpretation.

Critics of CAS or referral management service argue that it is unclear how these schemes which decide where patients will be treated following referral, fit in with the government's central plank that patients should have a choice of a hospital²³. Further, it is argued that the financial destabilisation of some secondary care disciplines will remove any incentive for secondary care specialists to support the GPwSI role²⁴. Thus the choice agenda and referral services may sit uncomfortably in some PCTs, particularly if services are developed with little consultation or input from clinicians.

Contribution of a multi-disciplinary team

In addition to GPwSIs, there is a range of professionals involved in triaging referral and delivering community-based services, depending on the specialty. The initial triage and some treatment for ophthalmology are undertaken by optometrists. The PCT has a skilled mobile cardiac task force team of healthcare personnel working in a primary care diagnostic service for patients with coronary heart disease (CHD). These include nurse consultants and nurse specialists in cardiology, GPwSIs, allied health professionals, pharmacists and healthcare assistants who are supported by cardiologists from secondary care. The work and significant contributions of nursing staff to the success of CAS cardiology, and thereby assisting with meeting the government's challenging target of 18 weeks from referral to treatment, are

presented in Table 1. The nursing staff are multi-skilled and are able to work across all integrated CHD services: senior nurses with specialist qualifications conduct CAS clinics and see their own patients (six patients per session) alongside GPwSI and outreach cardiologist. Patients have access to CHD services either as separate units or as integrated care packages (Figure 2).

In the year from January 2006- December 2006, over 600 patients were referred to the CAS cardiology; this represented a 40% reduction in outpatient visits.

Value for money

The development of the CAS as a 'spend to save' scheme cost £241K in 2006/07 and has led to significant reduction in outpatient referrals, giving the PCT a saving of £1.2 million in its first year (2006/07); net resources freed up for alternative reinvestment for the same period was £919K and the number of patients using the service was 5640. NHS Better Care, Better Values Indicatorsⁱ¹ show that Harrow was the 12th best performing PCT in London for reducing outpatient appointments and was in the national top quartile for performance²⁵, thus confirming the success of CAS. In addition to the benefits outlined in cardiology, 70% of dermatology activity has been transferred from hospital to community services. The costing for each of the community services are benchmarked against the tariffs for the relevant speciality. All redesigned services are established to ensure that the services are delivered at less than tariff price. There are disincentives for general practices that send less than 90% of their referrals through the CAS. This was agreed with practices in the practice-based commissioning designated enhanced services 2006/07.

Harrow has seen a reduction in referrals across clinical disciplines as GPs become more confident in following pathways and practices have improved on referral management. This represents a significant shift in how secondary services are delivered in Harrow.

¹The Better Care Better Value Indicators were launched by the NHS Institute for Innovation and Improvement in October 2006, publishing 13 indicators nationally. The purpose of the indicators is to highlight the variation in performance across the NHS; identify savings and opportunities from improving performance in key areas and to inform local improvement planning and monitoring.

CONCLUSIONS

The CAS in Harrow began its operation in December 2005 based on patient feedback and involvement with a range of stakeholders in the light of operating within a challenging financial climate and in an effort to meet government targets.

The Harrow CAS is an ambitious and innovative development and has already attracted attention from neighbouring London PCTs, a number of whom are seeking to replicate the model. The SRIT is confident that there is great potential for this model to be widely used. It also has the potential to be established as a shared service across a number of PCTs which would deliver even greater cost benefits and value for money by sharing the overheads attached to the administration and management of the service. It should also be borne in mind that a key driver for the redesign of services is cost containment. Harrow's CAS was among six case studies used by NHS London in their Strategic Health Authority Annual Report 2006/7 on service redesign to demonstrate "some of the best and most innovative pieces of work." ²⁶. The key to its success has been the whole system approach to its implementation in that stakeholders have been involved with the service redesign work. The expertise and close partnership working between clinicians, nurses and management has been pivotal in its success.

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Box 1 Summary of outcomes of the Clinical Assessment Service

- The best use is made of available community-based services
- Identification of the most cost-effective community-based services
- Provision of care in a non threatening environment
- Patients are offered appointments and treatment closer to home
- Reduction in patient waiting time
- Greater access to appropriate, timely care in both community and secondary health sectors
- Patient satisfaction with the service
- Improvement in patients' and carers' journey, management and experience of health service and care
- Equity of service
- Reduction of dependence on secondary health settings
- Avoidance/reduction of inappropriate referrals
- Cost containment
- Value for money
- Identification of savings achieved from diversion of referrals which would have otherwise gone to the acute trust
- Provide up-to-date information to the PCT on numbers, types and quality of GP referrals
- Innovative working practices
- Offer development opportunities to GPs to increase their skills, and
- Facilitation peer education.

Table 1 Contribution of the Coronary heart disease nursing team

Nursing staff	Services provided by nurses	Support for nurses
Cardiac nurse consultant Cardiac nurse specialists Cardiac rehabilitation nurses (Health care assistants)	Cardiac rehabilitation and exercise classes Home visits Telephone monitoring Community-based education Dedicated nurse for health failure patients Case management and co-ordinated care Clinical governance Community based diagnostic-based services Tests available: 24-hour blood pressure monitoring Electrocardiogram (ECG) 24-hour ECG monitoring 7-day event monitoring Review and act upon abnormal results Provide advice for GPs on the management of patients	GPwSI GPs Practice and Community nurses Outreach cardiologists Local specialist cardiologists Local geriatricians Hospital-based cardiac nurses Pharmacists

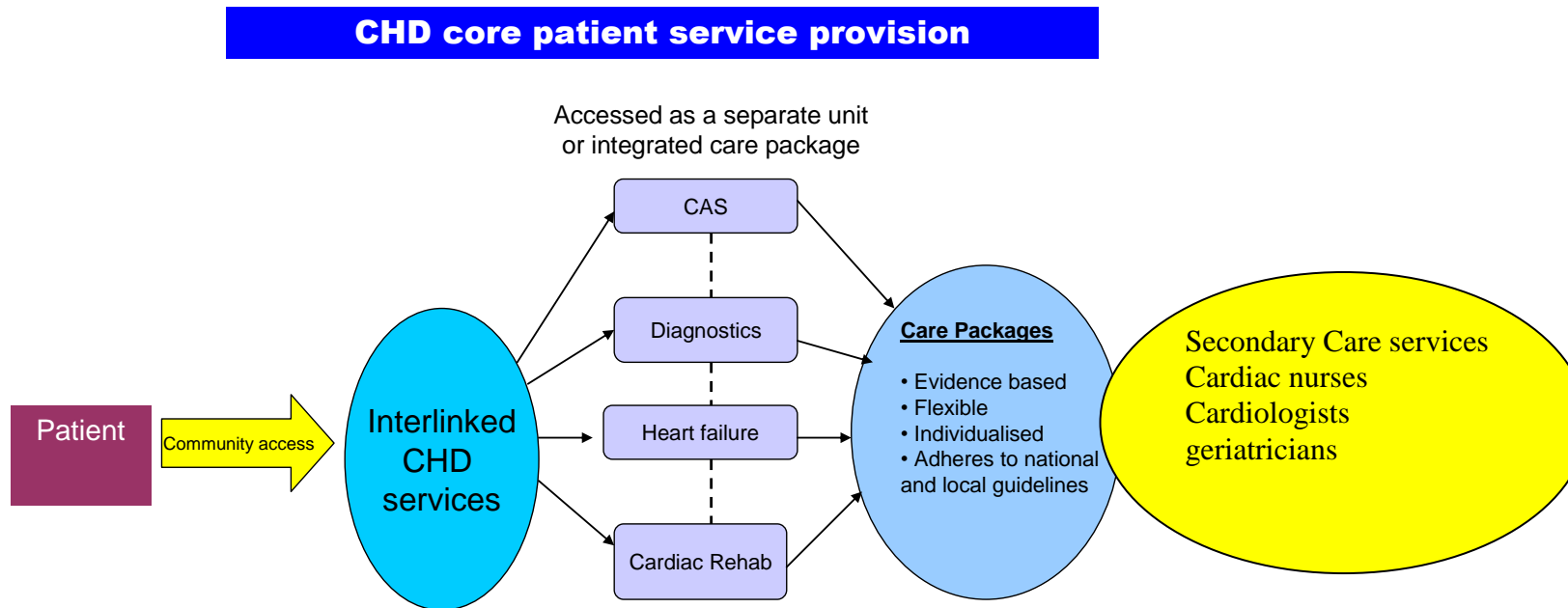


Figure 2. Coronary heart disease (CHD) core patient service provision

References

1. Department of Health. *The NHS Plan: a plan for investment, a plan for reform*. London: The Stationery Office, 2000.
2. Department of Health. *The NHS improvement plan: putting people at the heart of public services*. London: The Stationery Office, 2004a.
3. Department of Health. *Choosing health: making healthier choices easier*. London: The Stationery Office, 2004b.
4. Department of Health. *Commissioning a patient-led NHS*. London: The Stationery Office, 2005.
5. Department of Health. *Our health, our care, our say: a new direction for community services*. London: The Stationery Office, 2006.
6. Department of Health. *Our NHS our future: NHS next stage interim review*. London: Department of Health, 2007.
7. Salisbury C, Noble A, Horrocks S, Crosby Z, Harrison V, Coast J, de Berker D, and Peters T. Evaluation of a general practitioner with special interest service for dermatology: randomised controlled trial. *BMJ* 2005; 331:1441-1446.
8. Horrocks S and Coast J. Patient choice: An exploration of primary care dermatology patients' values and expectation of care. *Quality in Primary Care*. 2007;15:185-93.
9. Rosen R, Stevens R and Jones R. General practitioners with special interests. *BMJ* 2003; 327:460-2.
10. NHS Modernisation Agency. *Action on Dermatology: good practice guide*. London: NHS Modernisation Agency, 2003.
11. Grimshaw JM, Wilkens RAG, Shirran L, Cunningham C, Mayhew A, Thomas R, et al. Interventions to improve outpatient referrals from primary care to secondary care. 2005; *Cochrane Database Systematic Review* 3: CD005471.
12. Rogers A, Entwistle V, and Pencheon D. A patient-led NHS: managing demand at the interface between lay and primary care. *BMJ* 1998; 316:1816-1819.
13. Pencheon D. Matching demand and supply fairly and efficiently. *BMJ* 1998; 316:1665-1667.

14. Department of Health and Royal College of General Practitioners. *Guidelines for the Appointment of GPs with Special Interests in the Delivery of Clinical Services: dermatology*. London: Department of Health, 2003.
15. Department of Health and Royal College of General Practitioners. *Implementing a scheme for general practitioners with special interests*. London: Department of Health, 2002. www.doh.gov.uk/pricare/gp-specialinterests
16. NHS Modernisation Agency. *Practitioners with special interests: a step by step guide to setting up a general practitioner with special interest (GPwSI) Service*. London: Department of Health, 2003. www.natpact.nhs.uk/special_interests
17. Numerof R, Abrams M, and Ott B. Align process with mission and maintain a contented workforce: healthcare financial managers have felt steadily increasing pressures over the past decade to reduce costs. *Healthcare Financial Management*. 2004; 58(9):114-116.
18. Department of Health. *Securing our future health: taking a long-term view*, London: Department of Health, 2002.
19. Department of Health. *New Ways of Working*. London: NHS Modernisation Agency, 2003.
20. UniverSRITy of Nottingham. *Centre for Evidence Based Dermatology: Annual Report 2005-2006*. Nottingham: University of Nottingham.
21. Hemmingway H, and Marmot M. Psychological factors in the aetiology and prognosis of coronary heart disease: systematic review of prospective cohort studies. *BMJ* 1999; 318 (7196):1460-1467.
22. British Medical Association. *Caring for the NHS: referral management principles*. BMA.2007.
23. British Medical Association. *BMA condemns rationing by referral management schemes*. BMA Press Release. February 28 2006.
24. Skin Care Campaign. *Referral Management Schemes: Tier two clinical assessment and treatment services: Implications for dermatology services*. June 2006.
25. NHS Better Care Better Value Indicators. *Managing variation in outpatient appointments. Clinical productivity – PCTs 2006/7*. http://www.productivity.nhs.uk/Form_PCT_2.3_ReferralRates.
26. NHS Strategic Health Authority. *SHA PBC Implementation progress report*. Leeds. SHA.2006/7.

