

Orthotic Pathfinder

A patient focused strategy and proven implementation plan to improve and expand access to orthotic care services and transform the quality of care delivered

July 2004



Business Solutions

Contents

Forward		5
	Business Solutions	5 & 6
Executive summary		6
Introduction		
Chapter 1	Background to pathfinders	13
1.1	Orthotic services: the real ‘Cinderella service’?	13
1.2	Why pathfinder?	14
Chapter 2	Pathfinder process	17
2.1	Pathfinder sites	17
2.1.1	Selection of pathfinder sites	17
2.1.2	Descriptions and status pre pathfinder	18
2.1.3	A profile of the orthotic pathfinder clinics	18
2.1.4	Referral pathways	20
2.1.5	Management and reporting	20
2.1.6	Conclusions – the problems to be addressed	21
2.2	What did we do?	22
2.2.1	Phase 1: analysis	22
2.2.2	Phase 2: implementation	23
2.2.3	Phase 3: Following through in pursuit of level 3 benefits	23
2.3	Creating clinical information	25
2.3.1	The “hole in the data”	25
2.3.2	A catalyst for change	26
Chapter 3	Improving orthotic services	27
3.1	Top ten tips for improving orthotic services	27
3.2	Local clinical staff reaction to proposed changes	35
3.2.1	Orthotists	35
3.2.2	Orthopaedic consultants	35
3.2.3	GPs	35
3.2.4	Physiotherapists	36
3.2.5	Podiatrists	36
3.2.6	Nurses	36
3.2.7	Conclusions	37

Chapter 4	The consequences of poor care provision in pathfinder clinics	38
4.1	For patients	38
4.1.1	Level 1 – poor care provision within the clinic	38
4.1.2	Level 2 – poor access	41
4.1.3	Level 3 - changes in budgetary/structuring of orthotic clinics	43
4.2	For the NHS	43
4.2.1	Level 2 - Wasted primary care clinician time	44
4.2.2	Level 2 - Wasted consultant time	44
4.2.3	Level 3 - Increased orthopaedic problems and falls	45
4.2.4	Level 3 - Economic consequences of poor care provision	45
4.2.5	The Quality Problem	46
Chapter 5	Local response to proposed changes	47
5.1	The dilemma of a chronic care specialism in an acute setting	47
5.2	Acute trusts	47
5.3	Primary care trusts	49
5.4	Social care	50
Chapter 6	Conclusions on likely implementation from a local perspective	51
Chapter 7	Is the service situation in the pathfinders widespread?	53
Chapter 8	The consequences of poor care provision - a national perspective	54
8.1	For Patients	54
8.1.1	Lack of patient review	54
8.1.2	Delayed care – patients stuck in queues	55
8.1.3	Patient not receiving care	55
8.2	For the NHS	55
8.2.1	Wasted primary care and acute care clinician time	55
8.2.2	Increased orthopaedic problems and falls	55
8.2.3	Increase whole life care costs	57
8.3	For the commercial sector	58
Chapter 9	Conclusions – why has nothing happened?	59

Chapter 10	So what is needed and how can it be done?	60
10.1	What is needed?	60
10.2	How can it be done?	61
10.3	Who needs to do what?	69
10.3	What does this mean for the commercial sector?	71
10.4	Is change optional?	72
10.5	Summary of recommendations	73
	Contacts	76

Appendices:

1	Age profile of pathfinder patients	77
2	Orthotic patient sample analysis	78
3	Sample pathfinder site – detailed change summary	81
4	Patient condition analysis	83
5	Condition protocol for direct referral (Burton)	84
6	Sample of patient notes (Burton)	87
7	Detail of changes proposed	88
8	Extracts from the national model	101
9	Clinical reporting – sample outputs from Rapport	110
10	Membership of original working party	111

Figures and tables:

Figures

1	The <i>hole in the data</i>	25
2	Model for local steering group	64
3	Developing the commissioning-led approach	66

Tables

1	Patient numbers and referrals	18
2	Clinics provided and waiting times	19
3	Treatment speed and quality	20
4	Level 1: Patient benefits	38
5	Level 2: Patient benefits	41
6	Typical pathfinder clinician hours saved per annum	44
7	Level 3 benefits	46
8	National impact – who pays the cost and secures the benefit?	57

Foreword

The NHS is undergoing radical change to become a more modern, patient-focused service. This is in order to meet the Government's vision, where patients are seen promptly, in the right place, and by a clinician with the right skills. This report summarises the work of the orthotic services pathfinder project, jointly funded by the NHS Modernisation Agency and the NHS Purchasing and Supply Agency. It demonstrates the benefits that can be achieved when the NHS thinks differently about how it delivers care to patients.

The report establishes that there is a clear and attainable opportunity not only for patients but also for the NHS and social care to rethink their services to achieve significant benefits. For patients, speeding up access to orthotic care by ensuring appropriate care is given at the right time has a dramatic effect, particularly with elderly patients, in keeping them mobile and independent. This has the additional benefit of reducing the probability of falls in the elderly population. For the NHS, this better care means fewer patients will require orthopaedic care and expensive post-fall treatments, releasing valuable consultant resources. For social care, fewer people will require expensive supported care in the community.

People directly involved in the delivery of orthotic care to patients are fully signed-up to the changes needed. However, those who hold the purse strings are unable to move the funds around the NHS and between the NHS and social care in order to make the changes happen. The proposals therefore advocate a whole system approach to change that requires acute trusts, primary care trusts, strategic health authorities and local social care services to work effectively together to deliver improved services to patients.

The report raises some serious issues around how the NHS treats patients with chronic conditions. The report proves that the ongoing nature of care required by orthotic patients is better suited to a primary care led service, but it is buried in the acute care system. To change this requires a whole system, step-change approach – an approach that may well apply to many other services providing care to chronic patients. The report contains examples of good practice achieved in the six pathfinder trusts, sets out how these changes can be delivered across the NHS and signposts the way to delivering better, more timely orthotic care for the circa 1.2 million patients who depend on the service for their well-being.

The six Pathfinder Orthotic Services were reviewed 12 months after the pathfinder support teams left. The structural, organisational and budgeting pressures, which prior to pathfinder restricted the orthotic services re-emerged and crushed much of the pathfinder improvement. It is clear that without sustainable structural change to service delivery, the orthotic service cannot benefit from the major improvements identified and orthotic patients generally will be condemned to either no care or poor care. (see page 11-12 for details)

We worked in the orthotic service for 3 years to produce this report with committed, dedicated front line clinical and administrative staff. The key improvements in patient care would not have been possible without their efforts - often in difficult circumstances, in the face of resistance from "the system" and with little thanks – other than from patients. This report is dedicated to them.

Philip Boxer & Tom Flynn, Business Solutions

Executive summary

Introduction

For many years NHS orthotic services have been a poor relation in healthcare delivery, hidden away in the secondary healthcare system and behind the 'commercial wall' that results from being a largely outsourced clinical service. Patients have rarely complained and those most closely associated with delivering the service (orthotists) are unable to challenge the situation for fear of losing their commercial contracts. As a result the service has come under increasing pressure to both survive and deliver quality care to patients and is simply not acknowledged for what it can do for patients.

Periodically, the problems have been forced into the limelight through a series of reports, all of which were heavily critical of the service but none were able to recommend viable solutions. As a result the problems have continued to worsen. Despite the best efforts of clinical staff and some managers to improve things, usually in the face of adversity, the statement that, "*NHS orthotics services are rudderless and one in which informed management, service audit and strategic planning have little place*", is as true today as it was when the 'Salford Report'¹ was published over ten years ago. The report by the Audit Commission² (2000) further highlighted the inadequacies of the service and despite making a number of recommendations; little had changed by the time the report was followed up in 2002. Ministers have also taken an interest in the service from time to time and have been equally critical of the service being provided to patients. ***So why is it that change is not happening? And what is the real value that orthotic services can bring to patient care?***

This report differs from previous reports in that it describes a project that was designed to deliver the changes necessary to improve patient care rather than merely comment on the state of existing services. The outputs of the project are reflected in this report, which describes the experiences of six trusts as they went through a process of change and the benefits that can be achieved if these changes are rolled out across the rest of the NHS. However, the report also highlights the structural changes that are needed to modernise the service, which proved difficult and in most cases impossible to implement in the pathfinder sites. The report, as well as highlighting operational changes, recommends that structural and financial changes are essential to improving care for patients. ***Without these structural and financial changes the pathfinders have demonstrated that the service improvements cannot be delivered.***

The report is intended not only to force the debate for change, but also to demonstrate the benefits of change and to serve as a resource for those working to develop local solutions to local problems. We hope the information it contains can be widely shared, explored and evaluated both within and beyond the orthotic community.

¹ Salford Report

² Audit Commission (2000) Fully Equipped

The project commenced in February 2002. For the next 12 months, the project team worked with six pathfinder sites to modernise and improve access to orthotic services, by delivering a series of changes aimed at redesigning the service around patients. The objective was to improve the provision of orthotic care services for patients, with a key priority to improve access. Pathfinder services achieved this objective and greatly improved patient care. However, as the work evolved, it became clear that the budgetary constraints and lack of referral access to orthotic care in many regions by primary care clinicians, combined with the limited GP awareness as to what the orthotic service can provide, was resulting in the *underuse*³ of the service, with many elderly patients not receiving essential orthotic clinical care. It is believed that this lack of treatment is a contributor to partial or total loss of mobility for a significant number of people, particularly people with diabetes and the elderly. A step-change is needed in the approach to providing orthotic care in order to address this *underuse*.

The report details the specific changes made to improve the *access* to and *clinical effectiveness* of orthotic clinics. The report recommends a mechanism under which *targeted transitional funding* should be made available through strategic health authorities to enable them to introduce the step-changes needed. Delivering the changes will mean an expansion in orthotic care that requires budget revisions between health and social care.

What is the problem?

- Orthotic care is a predominantly primary care service for chronic conditions located usually within acute trusts.
- Orthotics does not contribute directly to current acute care key performance indicators and has been severely budget constrained for many years as a result.
- There has been little management focus on the orthotic service.

The orthotic service has consequently suffered from being a low priority service deprived of resources and has struggled to deliver a clinically effective and high quality service in the face of growing demand. The result has been *underuse* of orthotic care provision, lack of development of referral relationships between clinicians, but most notably a lack of service access to GPs, and their primarily elderly patients. As a result, patients do not receive appropriate orthotic care at the right time, and many patients who could have been stabilised by orthotists, suffer serious loss of mobility. In particular, the elderly suffer more problems, rapidly lose mobility and often end up requiring more acute intervention for mobility problems (for example, hip replacements) and frequently for falls. Additionally, lack of referral access for podiatrists for appropriate footwear results in delayed referral, which, if avoided would reduce acute care, in-patient stays, drugs, amputations etc. and podiatry, nursing and social support in the community. Ultimately, many elderly patients lose their mobility and require expensive social care services. Not providing access to orthotic care in a timely manner also has the effect of wasting scarce and valuable clinical resources such as those provided by orthopaedic consultants.

³ *Underuse* is the failure to provide a health care service when it would have produced a favourable outcome for a patient. It contrasts with *overuse*, which is the provision of a health care service under circumstances in which its potential for harm exceeds the possible benefit; and with *misuse*, where an appropriate service is provided, but a preventable complication occurs, and the patient does not receive the full potential benefit of the service. Definitions taken from *Crossing the Quality Chasm*, National Academy Press 2003, p192)

The poor service provision has been recognised by the NHS for many years and numerous reports written highlighting patient problems, the most recent being *Fully Equipped*⁴. These reports have accurately highlighted the service problems patients face, but not their root cause. Nor have they addressed how/what changes are required, nor most importantly how these changes can be implemented given the fragmented nature of the service. So the difficulties in the service have continued despite their publication.

This report identifies the root cause of these continuing problems as structural and financial, caused by the difficulties of making the budgetary changes needed between primary care trusts, acute trusts and social care to correct for this *underuse*, through altering the funding trade-offs between acute and prophylactic forms of intervention.

What are the benefits of resolving this problem?

For many patients, particularly the elderly, improved orthotic services will have a huge impact on quality of life by enabling them to maintain themselves as independently mobile citizens. More specifically, patients will have improved access to care with an estimated 24,000 additional chronic orthotic referrals per annum and an additional 300,000 chronic patients being under orthotic care within ten years.

For acute trusts, many patients currently being referred to consultants will be treated in primary care. This will free a significant amount of clinical resource for patients who truly need acute care (saving c 54,000 orthopaedic consultant appointments). Improved mobility provision will have a major impact on falls, which will also reduce demand for orthopaedic care.

The greatest impact both financially and in terms of quality will be on social care, as the number of elderly patients requiring residential care through loss of mobility and related factors will be greatly reduced. Additionally, better orthotic provision will mean that people who ultimately do require residential care will remain independent and enjoy a greater quality of life for longer. For the Government, with the proposed co-ordinated health and social care approach, the quality of delivered care will be improved and the 'health of the nation', particularly of the elderly, will benefit. In addition, there will be a major net annual saving to the Exchequer of approximately £40 million after five years rising to £390 million in ten years. As primary care trusts significantly expand the level of provision of orthotic care, they will reduce the number of patients referred for acute procedures. This expansion will lead to increases in orthotic budgets, estimated nationally, to be around £15million per annum after five years – a small cost to achieve the significant social and financial benefits available.

Why change?

The pathfinders have identified that significant improvements can be made by delivering care to patients promptly, in the right place, and by the right clinician with the right skills. The recommended changes are very much in accord with the Government's reforms for the NHS. For example:

⁴ Audit Commission (2000) *Fully Equipped*

- The need to redesign services around patients rather than organisations (*Delivering the NHS Plan, April 2002*)
- Reducing waiting times for outpatient appointments (*Delivering the NHS Plan, April 2002*)
- Reducing the waiting times for hospital operations (*Delivering the NHS Plan, April 2002*)
- Extending intermediate, home care and residential care provision to offer alternatives to unnecessary hospital admissions and reduce delayed discharges (*Delivering the NHS Plan, April 2002*)
- Patients, particularly older people, need health and social services to work together. They rely on good integration between the two to deliver the care they need, when they need it. If patients are to receive the best care then the old divisions between health and social care need to be overcome (*Delivering the NHS Plan, April 2002*)
- The NHS, working in partnership with councils, needs to take action to prevent falls and reduce resultant fractures or other injuries in their populations for older people (*Standard six: National Services Framework for Older People*)
- Integrated strategies for older people aimed at promoting good health and quality of life, and to prevent or delay frailty and disability can have significant benefits for the individual and society (*Standard eight: National Services Framework for Older People*)
- The implementation of the new financial regime *Payment by Results* means that orthotic care delivered to outpatients can no longer be buried in the inpatient costs of delivering specialty interventions. It will be in the interests of acute trusts to disentangle the cost of ongoing orthotic care to ensure their HRG costs are efficient and to enable them to focus on making surpluses. As yet HRGs for AHP services are underdeveloped but they will need to be resolved by 2008.

What is needed to achieve change?

Delivering the necessary change is about addressing the issue of how a chronic service is funded and managed. There is a *double challenge*, not only to manage a chronic service in a way that can be held accountable in relation to the impact on whole life costs of patients' care, but also to provide adequate commissioning mechanisms for this kind of approach.

The report recommends that:

- earmarked finance should be made available for five years, channelled through the strategic health authorities, enabling primary care trusts either to take over the orthotic service from acute trusts, or to institute direct funding of the primary care element of their acute orthotic service (dual funding);
- a restructuring of longer-term budgets to reflect the change in service provision and reduced demand for mobility care in social services;

- a dedicated and appropriately skilled resource to support primary care trusts in implementing the commissioning-led processes needed for instituting dual funding, or transferring the services under their control where appropriate; and in improving service effectiveness in orthotic clinics, building more effective links with acute trust consultants and other primary care clinicians to increase patient access to the service.
- Given the lack of orthotists and increasingly number of female orthotists, who will in many cases have career breaks for families etc expanding the service will require a marked expansion in the training of orthotists, to ensure that there are sufficient trained staff.

The project team believe that systemic changes of this kind will not be prioritised by primary care trusts unless they sit within the larger context of strategic health authority plans for chronic services, of which orthotics is just one part. Approached through the strategic health authorities, however, orthotics can be used to establish new commissioning and IT infrastructure and processes that can be extended across all chronic services.

Top Ten Tips

The report recommends ten key areas of change. These are identified in chapter three of this report. The pathfinder experience has shown that it is difficult to implement some of these changes without addressing the re-structuring of longer-term budgets.

What will happen if there is no Structural Change to current service provision

Two approaches had been taken with PCTs by the pathfinders. Where the service had been relatively small, it could be transferred directly to the PCT, providing a service back to the Acute Trust. Where larger, it could use dual funding to ensure that the primary care element of its service was properly funded alongside its acute role, which continued to be funded as normal. Although the greatest difficulties had been encountered where transfer of the service had been attempted, there had been some progress in securing dual funding in two cases. Here different funding arrangements had begun to be negotiated for primary care patients to the benefit of both the Acute Trust's waiting lists and the PCT's costs, as well as to the patients.

During Pathfinder implementation, the orthotic service in the six pathfinder trusts greatly improved quality of care, raised awareness among referring clinicians and consequently made a better service available to an increased number of referred patients. When the orthotic services were left to continue the service development, post pathfinder, they all ran into similar difficulties.

1. Increased referral rates were maintained as other clinicians were more aware of what the orthotic service could do for patients. Referral rates increased between 15–30% and additional clinics were set up to respond to the increased patient demand.
2. Budgets remained fixed in all the Pathfinder orthotic services between 2003/04 and 2004/05. Many of these budgets had already been frozen for several years and were woefully inadequate for the level of demand pre-Pathfinder. These budgets and the mechanisms for setting them do not reflect inflation and certainly do not recognise the great increase in demand for the service.

3. The increased level of referrals and consequent increased costs, although small by the levels of Acute Trusts, were a problem. Trust management in all cases refused to increase Budgets and responded to increased patient demand by:
 - Making new patients wait much longer as orthotic queues do not count in acute managers KPI performance measures – **but budget deficits do.**
 - Waiting time for new patients:
 - clinic A : 2 weeks => 16 weeks
 - clinic B : 4 weeks => 26 weeks
 - clinic C : 7 weeks => 28 weeks.
 - Instructing clinical staff not to use new pathfinder clinic facilities, which would allow them to treat more patients and make better use of their clinical time. This prevented clinicians prescribing orthoses to patients and kept down cost
 - Refusing to accept referrals from clinicians, on administrative grounds, to keep patients out of the service and keep costs down. e.g.
 - acute trust orthotic services refused to accept PCT clinician referrals – **simply send them back.**
 - Acute trust orthotic services refused to accept out of area GP's referrals for whom this was the only route to securing orthotic care. These referrals had been previously accepted but there was a need to reduce patient demand.
4. Pressure on front line clinical staff increased, as they were expected simply to cope with the increased workload. Front line clinical staff are being abused by their managers (expected to cope somehow) and are demotivated to see the improvements they worked so hard to achieve reversed because chronic care is simply not a management priority.
5. Service improvements were rolled back to respond to pressure on the service. E.g.
 - Patient reviews for all were stopped – restricted only to diabetic/ rheumatoid.
 - Clinical protocols as to what could be delegated were stretched as staff tried to respond to the needs of patients in a situation made increasingly more pressured.
6. PCT's with the many other demands put upon them have not become more involved in what is essentially a primary care service. Where the PCT's were:
 - Talking about taking over a service, nothing has happened.
 - Planning to increase the budget allocated to a service, nothing has happened.
 - In some instances there remains talk, 12 months later, but little action.

In some instances referring clinicians, especially consultants, wrote to managers complaining about the worsening situation in the Orthotic Service, as their patients are have to wait longer and receive less effective care, but this has had little effect. Other clinicians are reallocating some of their own hard pressed clinical budget to the Orthotic Service, as the orthotic delays are causing such a problem to their patients – **particularly true for paediatric services.**

Patient complaints increased greatly as waiting lists have been systematically increased. In one service, this resulted in patients' complaints increasing to such a level that they have complaint forms prominently displayed. Formal patient complaint forms are being completed by 20% of patients, with this percentage increasing steadily as queues get longer. To quote one patient:

“To keep me waiting 6 months for an insole seems a crime”

Chapter 1: Background to the pathfinders

1.1 Orthotic services: the real ‘Cinderella service’?

Over 1.2 million people (2% of the UK population) suffer from chronic diseases for which they are currently receiving orthotic care, and yet the service has historically had a very low profile within the NHS. As mortality rates are generally low with chronic diseases, orthotic services suffer from not being a key performance target. In line with other largely outpatient based services it does not occupy a high profile in acute trusts or amongst service commissioners – if indeed commissioners are even aware that the service exists. However, orthotic services can play a significant role in keeping people mobile and independent, deferring the need for expensive surgery or social care services, but awareness and access to the service are poorly developed.

Clinician awareness of the service is generally relatively poor. Having such a low clinical profile is compounded further by the fact that the majority of orthotists are commercially employed and are therefore viewed as private contractors by hospitals, so the clinical benefits of orthotic services are rarely championed.

Orthotic budgets are rarely separately identified and management tends to be hands-off with managers only intervening if problems arise - usually because the budget is perceived to be running out of control. Commissioners tend to be unaware of the service's existence as it is funded through specialty service level agreements such as those for orthopaedics and rheumatology.

Demand for the service is growing largely because of changing demographics (the majority of orthotic patients are elderly - see Appendices 1 and 2)

The poor service provision has been recognised by the NHS for many years and numerous reports written highlighting patient problems, the most recent being *Fully Equipped*⁵. These reports have highlighted the service problems, but the difficulties have continued despite their publication. This report concludes that the root cause of these continuing problems is systemic. Budgetary changes are required between primary care trusts (PCTs), acute trusts and social care to fund the trade-off between acute and prophylactic forms of intervention to correct the *underuse* of the service.

These service problems spill into the commercial sector. Commercial providers of orthotists and orthotic products have struggled to cope with the situation and have tended to be viewed with

Box 1

Access problem: in one pathfinder trust it was established that a patient waited 24 weeks to see an orthopaedic consultant after being referred to an outpatient clinic by her GP, and a further 12 weeks to see an orthotist after the consultant referred her to the orthotic clinic. This represents a wait of 36 weeks when all that was prescribed and needed was an insole for her shoe

⁵ Audit Commission (2000) *Fully Equipped*

distrust by the NHS and an easy target for savings. Commercial contracts have tended to be based on inputs rather than on outputs reflecting the lack of management data that is needed to deliver improved health outcomes for patients. The result has been commercial sector instability and very low margins, which in turn results in a lack of innovation and research.

Difficulties in establishing orthotics in its rightful place are a consequence of its history. Orthotists have practised both within and contracted to the NHS for over 50 years. They were one of the first of the allied health professions to have an honours degree qualification and became state registered in 1997. Despite this, the profession suffers from a lack of recognition throughout the NHS. Whilst this is changing, the 'commercial contractor' status of the majority of orthotists precludes them from being fully integrated into NHS healthcare delivery and thus the pace of change is slow. Primary care clinicians are only just becoming aware of the potential of the service but the vast majority of GPs are simply unaware of what the service can do.

Other more established Allied Health Professions (AHPs) are also unaware of the possibilities and many of them have delivered aspects of orthotic care without appropriate training. The boundaries between orthotics and podiatry are also unclear and there have been many instances where patients are passed from one service to the other with interventions not being co-ordinated. The reality is that the pathfinders have unearthed an unmet need for orthotic care, arising from its systematic underuse, and all AHPs will struggle to cope with the extra demand. The professions should work more closely together to ensure that scarce resources are used efficiently and effectively.

1.2 Why pathfinder?

The initial impetus for the pathfinder project was from the NHS Purchasing and Supply Agency (PASA) who suspected that the way in which the services were contracted from the commercial sector could be potentially damaging to healthcare delivery but, seemingly, nothing could be done to improve the situation unless the NHS gained a better understanding of demand to enable it to become a more 'intelligent customer'.

This implied that the NHS needed to reconsider the way it delivered the service to patients so that the commercial providers could respond more appropriately. However, the Agency recognised that it was not best placed to help deliver these changes. The Agency recruited a team of business consultants in 2000 (Business Solutions Ltd) and a small working party (see Appendix 12) was gathered to map out the problems and to identify possible opportunities for improving the service.

This preliminary work highlighted a number of issues. For example, the work established that:

- access to orthotic Services is primarily through consultant referral, resulting in heavy consultant workload and long patient waiting lists – particularly orthopaedic;
- the majority of service users are elderly (over 60) and demand will grow as the population ages, putting steadily increasing pressure on scarce consultant resource;

- 85% of treatments are 'simple' and involve little orthotic clinical time and cost;
- there are no nationally defined conditions or treatment protocols to provide a basis for managing the service, resulting in large variations in service quality and difficulty in benchmarking performance;
- key performance data to manage the service is usually missing or limited at clinic level.

The work also identified significant improvement opportunities and potential benefits for patients and the NHS. For example:

- improving referral paths and/or relocating orthotic clinics could directly reduce consultant waiting times and provide faster patient access to orthotic care;
- agreed standard conditions could enable services to be better managed and national protocols (referral, clinical and service) are likely to result in better, more consistent care;
- up to a 30% improvement in the overall efficiency of service delivery is possible through effective use of protocols. The savings would make it possible to significantly increase throughput;
- there is significant scope for restructuring orthotic services to integrate more with primary care services within the context of the emerging strategies for the provision of primary care;
- use of hub-and-spoke service configurations could deliver major service improvements for the elderly and some chronic conditions, and bring service provision closer to the patient;
- significant improvements are possible in product and service quality by adopting long term, demand-driven, transparent contracting processes with suppliers, which become possible with changed clinical management processes.

The pathfinder project team established that these opportunities could be categorised into three different levels of benefit:

Level 1 – changes within the clinic – for example, anticipated efficiency improvement of orthotic clinic slots of some 30% is achievable through changing processes within the clinic.

Level 2 – changes outside the clinic – for example, the potential to free consultant outpatient clinic slots by introducing direct referrals from primary care clinicians for an agreed set of patient conditions.

Level 3 – changes outside the acute trust – for example, relocating the service to primary care (or introducing dual funding) to create a primary care service environment.

Following the identification of these opportunities, PASA linked up with the Modernisation Agency to develop the Orthotics Pathfinder Project with the aim of testing the realisation of these benefits in a selected number of trusts. These Pathfinder Projects were set up to deliver the level 1 and level 2 benefits, with the pursuit of level 3 benefits being explicitly excluded from the overall process. However, it will become clear to readers of this report that a key issue for the pathfinder team was the realisation that **Level 2** benefits could not be achieved without having to address the **structural and budgetary** problems that become dominant in the approach to **Level 3**. As a result, work continued with most of the pathfinder projects beyond the implementation stage to establish how these level 3 benefits could be secured.

Chapter 2: Pathfinder process

2.1 Pathfinder sites

2.1.1 Selection of pathfinder sites

In September 2001, the NHS Purchasing and Supply Agency (PASA) secured the support of the Modernisation Agency (MA) to jointly fund the orthotic pathfinders as initial work in the previous twelve months had identified potential major benefits in orthopaedics. The MA and PASA agreed the pathfinder trusts should be selected from the seventeen trusts already participating in the Action on Orthopaedics programme as they were already implementing change in the orthopaedics area, had change managers in place and provided a good geographic spread.

A formal selection process followed, involving:

an initial briefing meeting to which all seventeen trusts were invited (November 2001).

- *Trusts then applied to join the project (November 2001). Eleven trusts applied and were asked to prepare a detailed service questionnaire prior to a visit;*
- *full day visits to trusts by the pathfinder project team to assess current service/potential for improvement (December 2001). These visits involved clinical staff, the relevant service manager, orthopaedic consultants and the trust chief executive. The focus was on gaining a firm grasp of the current service and how the pathfinder process was expected to impact upon it;*
- *level of commitment to implement change, at all levels in the trust, was also assessed.*

Six pathfinder sites were selected in January 2002. The selected trusts were:

Burton Hospitals NHS Trust
Stockport NHS Trust
Ipswich Hospital NHS Trust
North Tees and Hartlepool NHS Trust
King's College Hospital NHS Trust⁶
Luton and Dunstable NHS Trust

⁶ Kings College Hospital NHS Trust was not an Action on Orthopaedics site but was chosen to ensure an 'in-house' service was included.

2.1.2 Descriptions and status pre pathfinder

All six pathfinder services were located in acute trusts and all were in facilities in need of upgrade to some degree. Orthotists were contracted from the private sector in five of the six trusts – only Kings had an in-house service. The service was not seen as a priority in each of the trusts as it was not a critical service and therefore not subject to the trusts' key performance indicators (KPIs). In all cases, orthotic clinicians were highly committed and typically had extensive experience. Orthotic clinic support staff had typically been in post for many years and were strongly committed to the service. Services had little formal clinical communications with referrers due to time pressure and poor IT in clinics, which tended to focus on tracking costs rather than supporting clinical activity.

2.1.3 A profile of the orthotic pathfinder clinics

Referrals and orthotic patient base

In all cases clinic information was relatively limited but during the visits the project team were able to build a picture of patient numbers and referrals by clinic. Patient numbers averaged over 2% of the local population, with significant variation (1.0 to 2.3%). Understanding the reasons for this variation would be a key pathfinder issue.

Similarly, referral numbers per head of the population varied by a factor of two, with lower referrals resulting in lower patient base numbers. Referrals were primarily from acute consultants, with only three trusts allowing GP referral access and in each case with restrictions.

Orthotic Service - Patient Numbers & Referrals			Ipswich	Burton	Stockport	Hartlepool	Luton	Kings	Average
Catchment	Population	000's	340	260	330	350	300	1000	316
Referrals	New Referrals p.a.	patients	1040	680	780	650	640	1445	758
Patient Numbers	Orthotic Patients (note 2)	patients	6800	4800	6000	8100	8160	10078	6772
	Patients / head of population	%	2.0%	1.8%	1.8%	2.3%	2.7%	1.0%	2.1%
	Referrals / head of population	%	0.31%	0.26%	0.24%	0.19%	0.21%	0.14%	0.24%
Referrals	Direct referral		N	N	N	N	Y	Y	
	%age of all referrals	GP		25%			29%	20%	
	%age of all referrals	AC AHP					15%	16%	
	% from orthopaedics		50%	65%	72%	67%	35%	18%	

Table 1

Clinics provided and waiting time

The number of half-day clinics per week varied between four and eight – with Kings providing an exceptional 25 clinics per week because of the specialist role of their in-house service to other trusts. Population per clinic varied significantly.

Orthotic Service - Clinics provided & waiting Time			Ipswich	Burton	Stockport	Hartlepool	Luton	Kings	Average
Orthotic sessions	sessions / week (3 hrs)	clinics	5.5	4	4	8	8	25	6
	Population / annual clinic		1189	1250	1587	841	721	769	1030
Wait for care	orthotic clinic wait	weeks	10	4	3	3	5	7	5
	Additional referral wait								
	Consultant	%referral	100%	75%	72%	100%	54%	76%	
	Waiting time	weeks	26	20	16	19	29	30	
	GP & PC AHP	%referral	0	25%	28%		46%	24%	
	Waiting time	weeks	1	1	1		6	30	
Average total waiting time		weeks	36	19	15	22	23	37	

Table 2

The fewer clinics and shorter waiting times in Stockport were later explained by the presence of a second clinic located and funded by the PCT. Patient waiting time (once their referral was received by the orthotic clinic) varied from three to ten weeks, however, in some clinics GP referred patients waited very much longer than this (c30 weeks) as they were not considered urgent and acute trusts were keen not to encourage more GP referrals.

Total patient waiting time to receive orthotic care (after being referred by a GP) was much longer due to the extensive queuing for consultants - typically twenty weeks. **Total patient wait for orthotic care (including the consultant delay) ranged between fifteen and thirty-six weeks. A wait of this magnitude is a major issue, as many of the patients did not require consultant care. This would prove to be a major focus for the pathfinder project.** (see Table 2 above).

Treatment speed and quality

None of the clinics measured patient episode duration – the time between first coming to the orthotic clinic and completing treatment. Clinicians estimated average duration, reflecting both condition complexity mix and supply delays.

Patient condition was not formally assessed and recorded, so clinics had no formal record of patient condition mix. Condition based referral would be central to enabling GP direct referral and **so addressing this would be a major pathfinder focus.** Patient notes, only recently commenced in some of the clinics, were all maintained manually and were consequently inaccessible to other clinicians. This helped reinforce the poor clinical communications between orthotists and their clinical colleagues. **Improving communications would be a major pathfinder focus.**

Orthotic Service - Treatment Speed and Quality			Ipswich	Burton	Stockport	Hartlepool	Luton	Kings	Average
Speed of care	Episode duration	weeks	6	4	2	2	7	~8	4.2
	Patients treated in 1 apptmt	%	8%	10%	10%	20%	23%	2%	12%
Quality	Patients reviewed	%	15%	10%	10%	15%	29%	30%	17%
	Conditions managed		N	N	N	N	N	Y	
	Patient notes kept		Manual	Manual	Manual	Manual	Manual	Manual	

Table 3

2.1.4 Referral pathways (see Appendix 8)

All of the clinics focused on providing a service to acute care referrals with the major referring group being orthopaedic consultants (40 to 60% of referrals). Three of the six clinics did not accept referrals from GPs. If any such referrals were received they would be returned and the GP advised to refer to a consultant – most typically orthopaedic. In Trusts accepting GP referrals there was a concern that referral numbers were growing, resulting in budgetary problems and queuing.

There was little or no feedback from the clinic to referrers because of time pressure and there were no regular meetings with referrers to discuss the service, again due to time pressure both on orthotists and referrers. This suggested there could be major improvement opportunities here, which had simply not been addressed.

2.1.5 Management and reporting

Clinics relied heavily on the leadership of the clinic administrators, who tended to be the only acute trust member of staff focused on the clinic. Administrators typically reported to orthopaedic service managers, for whom orthotics was not a high priority in comparison with their acute clinical responsibilities, for example, orthopaedics and accident and emergency. Orthopaedic managers typically only got involved in orthotics to deal with problems; thus management attention was largely reactive.

In several cases, orthotic staff had not met with their manager for months and in one case the manager had passed responsibility for orthotics to her secretary. Lack of priority resulted in there being no regular meetings with orthotic administrators and orthotists and no impetus to develop the service. This lack of management reporting has resulted in there being very poor IT systems in orthotics with little information available. Service managers' key requirement was to receive financial information on service spend to ensure the service remained within budget. In all cases this was the only regular report produced in the orthotic clinic.

Box 2

On considering transferring their service to the PCT an orthopaedic Service Manager commented:

“ I know I shouldn't say this but to be frank, I simply don't have the time to manage the service and it will be much better for the ACT and the Orthotic Service when it is transferred to the PCT, where it belongs”

Box 3

Service manager discussing pathfinder recommendations:

“ This is the first time we have put the time into the service to get a clear picture of what is going on and to be able to argue the case for vital service improvements.”

The lack of information (on the service, on patients, on demand, on condition mix, and on episodes) combined with poor clinical links meant that the service had a very low profile in all trusts and was operating in an environment where budgets were under severe pressure. Orthotic budgets were rarely increased, resulting in compromises in patient care quality, referral rationing and pressure on staff. These decisions have been taken without information and without an appreciation of the consequences of providing poor orthotic care. A key opportunity arising from pathfinder is to review the situation in the light of better information and understand the consequences of these decisions

2.1.6 Conclusions – the problems to be addressed in undertaking and implementing pathfinder change

As early as the initial visits with the pathfinder sites, the project team was able to recognise the following problems:

- poor patient access to the service,
- lack of information,
- poor administration systems.
- poor clinical communications and relationships,
- lack of orthotist time to work on the change activity,
- lack of available analytical management skills,
- lack of budget in the service.

2.2 What did we do?

Each Pathfinder consisted of two phases of activity.

2.2.1 Phase 1: analysis

Phase 1 involved a period of analysis whereby the project team worked with local staff to form a local 'orthotic change team' to identify the opportunities for improving the service. The objective was to agree a series of clinical changes and administrative changes, which would be signed off by the line manager and financed by the pathfinder project. The benefits (and cost) of each change would be specified and the orthotic team would be responsible for ensuring the benefits were delivered.

The initial meetings with trust staff focused on understanding how the clinic was operating using analysis tools such as process maps and value management tools. This work typically identified a number of improvements and each of these was quantified as to the benefit in service quality, clinic time or cost. The team attended clinic sessions for several days analysing patient appointments and discussing opportunities to improve the service provided with the clinician.

The team also analysed the administration systems and processes in considerable detail and improvements were identified either from eliminating irrelevant activity, improving systems use or improving processes and co-ordination.

Because data was generally not available, a sample of around 100 patients was extracted from the manual patient records. Clinicians were then asked to: clinically assess the referral; confirm each patient's condition; and confirm any clinical treatment provided by the referrer. This enabled the workload of the clinic to be determined and provided the basis for informed discussion with referrers. The information also facilitated analysis of the mix of orthoses provided, which in turn enabled discussions on which products could be stocked in the clinic to optimise clinic time.

The team then proceeded with interviews and discussions with the major referrers to the orthotic clinic to consider: how referral pathways could be improved? Which clinician is best placed to address the patient's need? And how to co-ordinate patient reviews to improve the quality of care provided?

During these discussions the results from the patient sample were discussed, with the condition mix of referrals proving to be particularly interesting to referring clinicians. The prospect of direct referral by GPs to the orthotic clinic proved to be a key issue for orthopaedic consultants as it became clear that it could potentially save them time and speed up patient care. Identifying patient conditions was essential in this process because clinicians were able to consider which patients would benefit from direct GP access and consequently agree plans for implementation. Subsequent to these meetings and in preparation for implementation, the orthotist prepared a 'GP information pack' (see appendix 5) specifying the referral process to the orthotic service, which conditions could be referred and the likely treatment to be provided.

Clinicians responded positively to these meetings and felt they were extremely valuable. Communication subsequently improved as joint clinics were organised to develop both awareness of the orthotics service and the orthotist's awareness of referring services.

This period of analysis took eight weeks in each of the trusts and at the end a set of recommendations was presented to the trust board or Professional Executive Committee. Board approval paved the way for pathfinder funds to be released to pay for the improvements and to ensure the support from the team in the implementation phase. In most cases board approval was often subject to additional approval by finance directors.

A detailed list of the changes that were put forward in one pathfinder is shown in Appendix 3.

2.2.2 Phase 2: implementation

Phase 2 was concerned with implementation of the recommendations over a period of six months, thus equating to eight months duration in total for each pathfinder. In view of the intensive support needed to identify and drive the changes, the pathfinders commenced at different times to ensure the resource was used effectively. The first wave of two trusts commenced in February 2002, followed by a second wave in April 2002, with the final two trusts commencing in July of the same year. Thus all pathfinders were completed by February 2003.

By the end of this implementation phase, however, it had become clear that it would not be possible to deliver on many of the level 2 benefits without tackling the challenges associated with securing level 3 benefits.

2.2.3 Phase 3: Following through in pursuit of level 3 benefits

Some of the proposed changes from phase 1 could be (and were) implemented without change to the budgetary context within which the orthotic clinic was operating. For example a saving in orthopaedics costs within an acute trust set against an increased cost in orthotics.

However, the changes bringing the greatest benefits to patients, required significant structural changes to budgets. Thus even the introduction of condition-based direct referral from GPs had a tendency to open up the clinic to higher overall levels of referral. As a result, these changes were held back until the funding mechanisms were established for them, whether by dual funding, or the more radical transfer of the clinic itself under a primary care trust.

Examples of these structural budgetary problems were:

- acute trust cost verses PCT saving; the increased acute care cost of expanding orthotic clinic care saves primary care clinician time and reduces acute consultant referrals, saving money for the PCT;
- PCT cost verses social care saving; where primary care trusts expand the provision of orthotic care (incurring increased costs) there is a saving to social care resulting from the improved mobility in the elderly population;

- although orthotic care provision could be greatly improved and expanded, and total costs reduced as a consequence, the acute and primary care finance departments found it hard to reach constructive and collective agreement, whether through a dual funding approach for the service within the acute trust, or through transfer of the service as a whole under a PCT.

These budgetary changes proved to be the greatest barrier to successful pathfinder implementation and served ultimately to block full implementation in four out of the six trusts – particularly blocking improved access to patients and the necessary expansion of orthotic service provision.

The local 'orthotic change team' led the implementation, but support proved vital in certain areas such as: system and administrative changes, improved communications and documentation, financial issues and reporting on the impact of the changes. As the recommended changes were implemented it was noticeable that the orthotic change team's capacity and confidence to identify and effect change increased and this resulted in many other improvements being introduced over and above those approved by the board.

2.3 Creating clinical information

2.3.1 The hole in the data

It was obvious from the pathfinders that information management in orthotics clinics was very poor. There was very little demand for information from service managers, systems were poor and did not capture essential information thus clinic information reporting capability was virtually non-existent. This was compounded by the low profile of the service within the trusts that resulted in little IT support and very little (if any) training for orthotic staff.

The impact of this combination of factors was that there was no clinical reporting of outputs by episode or referral analysis by condition in any of the pathfinder clinics. The only reporting was on the cost of the clinic and even this was generally poor. Consequently, there was no shared understanding or information base to support clinical improvements to the service or to justify investment.

Furthermore, there was no data on the cumulative impact on the clinic of providing multiple episodes, given the chronic nature of the conditions being treated. If the initial information base in the pathfinder clinics was considered there were in fact clear *holes in the data*, shown in the diagram below by the red boxes. In addition to the inaccessibility of patient records, these were: episode-defining conditions, referral pathways and episode characteristics.

The hole in the Data

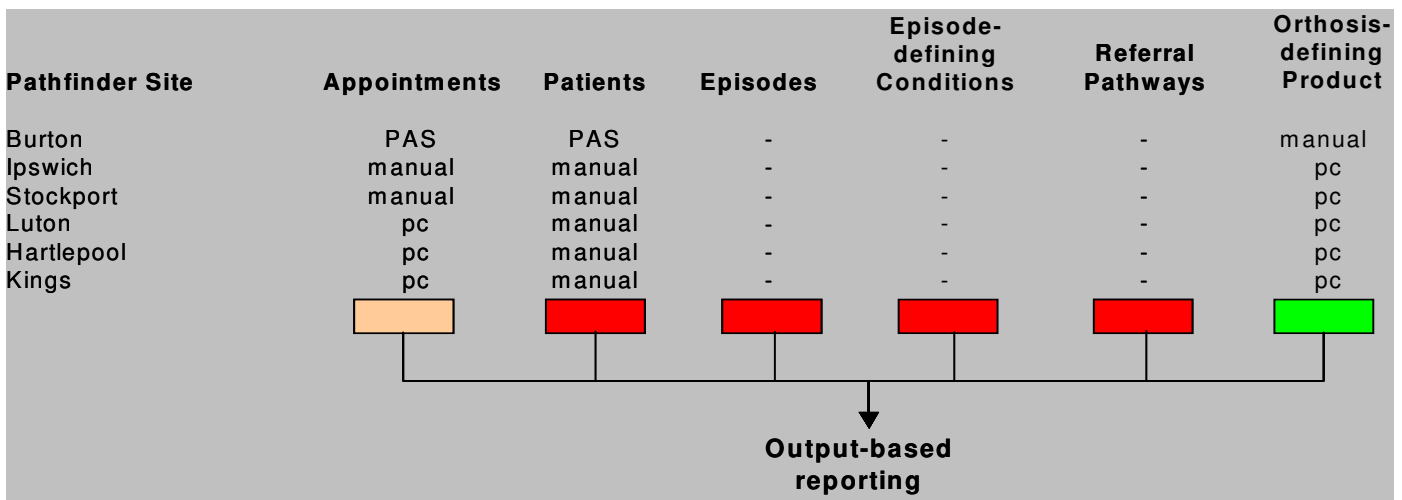


Figure 1

The project team was therefore forced to use a patient sampling approach and manual data extraction to collect and analyse information to enable an informed discussion between clinicians, and also between clinicians and their managers. ***The picture emerging from the samples in the pathfinder trusts, although reflecting local factors, was remarkably consistent in its shape.***

Following this, a data platform was needed to collect this data on a routine basis and integrate it with current operational sources of data within the clinic, in order that the changes introduced could be subject to continuing review and quality improvement at the level of the patient.

2.3.2 Clinical information – a catalyst for change?

Clinical notes contain a wealth of information. However, as they are typically hand written or free format electronic information, directly analysing clinical notes is not possible. To produce an information base in support of making changes, information needs to be extracted and collated from a number of sources:

- appointment system
- patient referrals
- patient clinical notes
- purchasing system

The orthotist then brings this data together around the episode-defining orthotic condition, based on clinical judgement. The resulting database enables: significant analysis of the clinic's workload, facilitates discussion with referrers, and forms the basis for an output-based approach to managing the clinic. This form of collated data and the resulting analysis provides key information for the discussion with other clinicians (for example, assisting in the discussion of which patients could benefit from changes in referral path and treatment protocols); and providing a basis for clinical review. It also provides an objective basis for agreeing a new output-based means for the PCTs to manage commissioning.

Chapter 3: Improving orthotic services

This section summarises the key changes the pathfinder project team believes are essential to modernising the delivery of NHS orthotic services. These changes are drawn from the pathfinder experiences and have been written in a **top ten tip** style to help NHS services focus on the issues. The tips are not intended as a definitive template for all orthotic services. Some of the ideas may be old news, others may not be appropriate within a particular trust, but they are all grounded in reality, being derived from the experience of clinicians and managers involved with the pathfinder project. Prior to commencing to introduce any of these changes, managers are strongly advised to consider the financial implications. – see 4.2.1 for detail.

3.1 Top ten tips for improving orthotic services

1 *Improved clinic facilities and a minimum of two clinic rooms*

Some clinics have features which reduce the quality of patients' experience: there is little privacy in the clinic and consultations can be clearly heard by patients in the waiting room and/or the office area; or the patient waiting area can be located 20 yards from the clinic – a long distance for an elderly person with reduced mobility.

Equally, the clinic environment often does not reflect a professional environment to patients: clinic couches may be inadequate (for example, not height adjustable), there is no place to store clinical notes and orthoses for patients attending clinic, and/or there are battered filing and storage cabinets everywhere.

A second clinic room can help orthotists achieve much better use of their time (for example, with casting or to enable a patient to get ready) and reduce the level of pressure both they and their patients are under if there is only one clinic room. A second clinic room can be particularly valuable when working with an assistant (see tip 4) where delegated or supervised treatment can occur. This enables two patients to be seen simultaneously, significantly improving clinic throughput.

- These changes are best communicated by changing the name of the clinic from 'Surgical Appliances' (often found in a cupboard!) to 'Orthotics Service', underlining its clinical role.

2 ***Improved administration and Information Technology***

Administration processes in pathfinder trusts varied greatly but the following were consistent themes:

- poor provision of computers and IT training leading to poor use of IT⁷;
- absence of any clinical IT systems or IT systems that are configured to produce management information only;
- handling of large amounts of hard copy data much of which could be scrapped;
- major opportunities to simplify administration internally and with suppliers.

This situation reflected the lack of investment and management focus on the service. The consequences are:

- administrative staff providing poor support to clinicians;
- reducing patient care quality;
- increased stress for staff.

To emphasise this point, staff in two of the pathfinder trusts had recently taken sick leave for stress. There is a major opportunity to remedy this situation with a detailed review of current processes – which in Pathfinder Trusts saved 20 – 40% of administration time. Detailed Clinic changes are contained in Appendix 3.

The IT systems in clinics were typically stand alone, contained little clinical information and focused on costing. There is a need for a clinic management system in clinic to:

- support the clinician and provide clinical information to manage/change the clinic
- enable the orthotist to communicate meaningfully with other clinicians (for example, consultants, AHPs, other healthcare professionals and GPs) to discuss and win support for changes to improve care.
- support the essential budgetary changes to improve the service. Without the information, condition based referral and many other changes requiring an output based approach and a more joined-up approach between the PCTs and acute trusts will simply not work.

Paperwork can be further reduced by the introduction of electronic patient records. The benefits of this are:

- clinical notes available to hospital staff. (integrates orthotist into hospital clinical team);
- clinical notes are now available to GPs if required;
- results in a significant saving in orthotist's time.

This demands orthotists to change their routine in relation to patient episodes, but it improves patient care, as more time is available for treatment. The orthotist needs a

⁷ Computers at Work Survey – Positive thoughts, negative experiences
Dr Gary Latchford - NHSIA – 2002-IA-1167

computer terminal in clinic to access any clinical notes from EPCR. The change to electronic records depends greatly on the capability of the Trust EPCR system.

3 Provide adequate stock to support the Orthotic Clinic

Some 30% of patients attending orthotic clinics are provided with off-the-shelf orthoses. If these orthoses were supplied from stock, the patient would receive a more efficient service. The Trust benefits from reduced appointments leading to reduced administration and supply costs. This will also lead to some inpatients being discharged earlier.

Conventional supplies and finance strategies suggest that stocks should be reduced to a minimum to avoid valuable resources tied-up in stockholding. This may be valid in a less clinical environment. The pathfinder experience showed that the impact cost of not having stock available far out-weighed any benefit from minimising stock levels. The type and level of stock will be dependant on the needs of each service and the lead orthotist should be responsible for providing advice on this.

4 Utilise support staff as Health Care and Orthotic Assistants

The gap between one patient leaving and the next entering clinic can be several minutes. Using support staff more appropriately to speed up this process can free up valuable clinic time. Elderly patients can be slow to enter/leave the clinic and it can take time for change-overs to occur. Sometimes patients fail to ask questions of qualified staff despite encouragement, as they feel that the question is too trivial. Support staff can help bridge this gap. It is good practice to protect the patient and practitioner by using chaperones. Health care assistants can usefully fulfil this role.

Tasks, which could be carried out by a Health Care Assistant , include:

- bringing patients into and out of clinic
- checking and amending the patients details
- preparing patients for casting and other procedures
- cleaning patients after casting and other procedures
- assisting patients with donning and doffing
- reviewing and reaffirming instructions given to the patient by the qualified staff
- providing routine information
- applying or replacing dressings
- chaperoning
- providing toileting assistance
- arranging refreshments when needed (for example, for patients with diabetes)

With appropriate additional training a wider range of duties may be delegated. Orthotic

Assistants could work under the supervision of an orthotist providing direct orthotic patient care within clearly defined protocols. The range of pathologies treated, scope of the interventions undertaken and handover points to qualified staff would be dependant on the level of training received, competencies demonstrated and degree of supervision.

It is important to note that the orthotist will remain legally accountable for patients treated this way so the orthotist must be satisfied that the degree of supervision is appropriate.

5 *Implement referral triage and forward booking*

Patient-centred care requires a focus on episodes of care rather than appointments. Orthotic conditions are typically chronic, so a patient will normally require multiple appointments within that episode of care. The time spent in clinic will be driven by the nature of the episode, making standard appointment times wasteful.

Referrals should be triaged by an orthotist. This task can be delegated under an agreed protocol, leaving only the complex referrals to be triaged by the Orthotist. A duration for the appointment can now be set.

Forward booking of appointments and agreeing appointments with patients makes better use of clinic and administrative time as well as reducing DNAs. Sessions can be loaded with a mix of appointments so as to best cope with variations in duration. For this to be effective there must be agreed timescales for suppliers to deliver orthoses to the clinic. Systems must be put in place to flag-up situations where the suppliers are unable to provide orthoses in time for the appointment. This allows support staff to rebook the patient and reuse the slot.

6 *Appropriate delegation of care and improved pathways*

Delegation by orthotists to other healthcare professionals

This will require clearly agreed objectives. The knowledge and awareness among staff of the contribution made to patient care by the orthotics department is low, equally the orthotist's knowledge and awareness of the work of the other health care teams is also low. This lack of understanding and profile is partly driven by the pressure to use the orthotist's time "exclusively" to treat patients. There is therefore a need to educate orthotists and other healthcare professionals. Spending some time on communication will improve patient care. It will promote teamwork and increase the scope for delegating treatments thus releasing the orthotist's time for the more complex treatments.

- All staff including contracted staff should undergo an induction program, which includes visiting other clinics. This experience contributes significantly to “professional bridge building.”

If care is subsequently delegated to other health care professionals it is important that they receive training to the standard required. The minimum quality standard (the “rule of negligence”) requires a health professional who takes on the role or task previously performed by another health professional, to perform that role or task to the same standard as that health professional. It is essential that health professionals taking on new roles are aware of the legal boundaries relating to their role, and that they have sufficient training and preparation to ensure that they can perform the role to the required standard⁸. In short, their training must equip them to know when they have reached the safe limit of their expertise and should refer on to a qualified orthotist.

Delegation to orthotists by other healthcare professionals

Currently referrals to the orthotic service are often made for specific items; this is inappropriate. There is often a large element of custom and practice involved. With the many developments and changes in orthotic care, referring practitioners are usually not aware of the full range of orthotic treatment options available.

- All referrals should be made on the basis of desired treatment outcome and there should be condition-based criteria for referring the patient back to the referring clinician.
- As with any state registered professional, responsibility for any orthotic care given by the orthotist rests with the orthotist.
- Providing information on the orthotic service and making new referral pathways available to other AHPs can greatly reduce the waiting times experienced by patients. Many of these patients are currently being referred from AHPs via consultants. Direct referral helps unblock pathways.
- Administrative referral is a practice where the patient is referred to, but not seen by a consultant for authorisation to see the Orthotist. **This should be stopped.** This is purely administrative and wastes time. In the worst cases this is deliberately used to introduce delays and arbitrarily ration healthcare. This keeps a short-term lid on finance but stores up health problems for later. Orthotic care, like all other health care, must continue once commenced.

By delegating the orthotic clinical care responsibility to the orthotist, consultants will achieve a better clinical outcome for their patients. This change will raise the orthotic profile, emphasising and supporting the orthotist’s role as a member of the clinical team.

⁸ DH Publication 33691 1p1kNov03(RIC) Page 27 appendix A

7 *Introduce universal review and reporting to the referring practitioner*

Universal review is needed to close the audit loop and establish minimum clinical governance standards. It is often needed to comply with requirements of the Trust's indemnity programme. There should be formal patient review protocols but for the great majority this is simply not happening – eighty to ninety percent of patients are not being reviewed. There is therefore little formal clinical control over the effectiveness of the orthosis after supply and it is left to the patient to notify the orthotist if there is a problem. This reactive approach is not conducive to providing quality healthcare. **Ensuring patient care after prescribing an orthosis is essential.** The exact impact of the resulting review appointments will only become clear through experience and will depend on local implementation protocols, however, the extra clinical time needed can often be generated by the improved use of clinical time resulting from many of the pathfinder changes (for example, increased stock holding, having two clinic rooms and improved support in clinic).

The investment here is essential and can be offset by the improvement in patient care and long-term mobility.

8 *Implement condition-based direct GP Access*

The majority of patients (typically 60%) have musculoskeletal problems, which do not require surgical intervention. In many cases, these conditions can be identified by GPs. The current system forces GPs to refer patients to orthopaedic consultants, to be subsequently referred to the Orthotist. This is slow (patients often waiting 6 months to see a consultant), provides a poor response to patient need, and wastes GP and consultant time.

- GPs should be able to direct refer for specified conditions. These should be determined locally within a protocol agreed between the acute care consultants, orthotist and GPs (see Appendices 5 and 6 – Burton GP Information Pack and patient notes). The effect of direct referrals will be to reduce new patient waiting time by about six months (not being queued for consultants) and save orthopaedic consultant time.

The most dramatic effect of opening direct GP referral is to increase patient referrals to orthotics (average increase around 20%). This results from GPs receiving information from the clinic on the service provided and most importantly having feedback on their patients' treatments and effectiveness, as well as knowing their patients will not have to endure long waits.

- Orthotic departments should issue guidance notes to all GPs on the conditions which can be directly referred, the likely clinical response patients will receive and the

process they will go through in the orthotic clinic. GPs should also have notes available to them, which can be issued to patients to provide them with information on the orthotics service.

9 *Improve communications to clinicians and managers*

Communications to clinicians (clinical reporting)

Presently, most referring practitioners rely on the patient reporting back about their orthotic management at their next visit to the referrer if one has been arranged. This is inadequate and inappropriate. At the end of an orthotic clinical episode, it is vital to communicate with the referrer to confirm what the clinical response was and advise on the nature of ongoing clinical involvement. This ensures clinical communications are closed professionally. It is central to building awareness among both acute and primary care clinicians of the clinical contribution orthotics can make to their patients. This closed loop will encourage delegation/transfer of care responsibility and direct referrals from primary care.

Communications to managers (management reporting)

A monthly orthotic package should be produced and serve as a review package for monthly meetings between department staff and the service manager. This review should focus on operational performance parameters associated with episode characteristics by condition, including patient quality measures, but additionally should contain financial information. A key aspect should be to encourage the process of audit and review, to support change and improvement to the quality of care given. The pack should reflect the benefit of these and should support the trusts clinical governance strategy.

10 *Restructure budgets to meet patient demand*

Currently, if a GP decides the patient needs orthotic care and sends a referral to orthotics, most departments cannot accept this referral. The reason for this clinically inappropriate and patient unfriendly approach, which is wasteful of administrators' and clinicians' time, is to do with the orthotic budget. The orthotic budget is delegated from other clinical budgets (for example, orthopaedics or paediatrics), and from an administrative perspective every orthotic patient must be accepted from a budget holder. Therefore a GP referral cannot be accepted unless the referral goes through a consultant.

Although GP direct referral protocols can be agreed by acute and primary care clinicians as being the most effective way to provide patient care, GP direct referral gets blocked due to the inability of senior managers / financial managers to agree how the essential restructuring of budgets should be done. As a result, neither trusts nor patients are able to realise the major benefits that are achievable. Furthermore, by the consultant delegating the orthotic treatment to the orthotist, cost is no longer controlled or decided on by the referrer, so the current budget approach does not match responsibility and authority.

It is therefore vital the orthotic service has its own budget for which it can be held accountable:

- to support primary care referrals;
- to reflect the different referral sources of its patients; and
- to align its use of resources with its clinical responsibilities.

For this to enable a more effective patient centred approach, this budget will have to be set not only on the basis of the previous year's spend, adjusted slightly up or down, but on the basis of the clinic's outputs, expressed in terms of episode characteristics by patient condition.

3.2 Local Clinical staff reaction to proposed changes

3.2.1 Orthotists

All of the orthotists were operating within administrative guidelines for appointment duration and within varying levels of budgetary constraint on product expenditure. The pathfinder introduced a focus on episodes, forward appointing by orthotists on the basis of variable duration, universal patient reviews and peer clinical review. This shift from an administration-driven to a clinician-led response to the patient was universally welcomed.

For many orthotists this was the first time that data had been put together describing the work of the clinic and the particular challenges it faced in sustaining a chronic care service.

3.2.2 Consultants

The overriding concerns of the consultants were to ensure appropriate forms of care responsibility, within the framework of which they were prepared to consider condition-based direct referral to orthotists by GPs and physiotherapists, as well as delegation of aspects of patient care responsibility through agreed treatment protocols. The ability of the pathfinders to produce data about the nature of patient caseloads facilitated this process, and developed confidence that the changes in care responsibility and referral pathway could be reviewed and improved over time.

Generally, the ability of the pathfinders to release consultant time for more complex cases, and provide more care options for the consultant, was welcomed.

3.2.3 GPs

Acute trusts were very reluctant to open their services up to condition-based direct GP referral, as this could not be restricted to those patients who would otherwise be referred via consultants. Rather, it exposed the acute trust to supporting a level of demand for chronic services that was currently not only being suppressed by existing referral mechanisms, but also was growing with an ageing population.

Where acute trusts accepted this risk in the short term with the support of pathfinder funding, the GPs were provided with referral guidelines as well as patient information (see Appendix – 5 and 6).

This was enthusiastically welcomed by GPs since it saved them time as well as providing a more effective referral route for many of their patients.

3.2.4 Physiotherapists

Physiotherapists were used to working with the orthotists within paediatric services. During the pathfinder, orthotists and physiotherapists worked together to develop formal protocols for the fitting of simple orthoses by physiotherapists. .

Physiotherapists were supportive of the pathfinder developments, particularly improved referral access and protocols which helped improved co-operation between clinicians' development, seeing them as making orthotics function in a way that paralleled the development of their own service.

3.2.5 Podiatrists

Podiatrists were typically operating within the primary care environment, and suffering the same lack of integration into the larger referral context as orthotists. Being greater in number, but addressing a narrower range of conditions, the podiatrists were ideally positioned to team with the orthotists.

Podiatrists were initially concerned about the unclear boundary between the professions. This concern was greatly reduced when both orthotists and podiatrists attended one another's' clinics. The realisation that both professions were facing sharp growth in patient demand further reduced concerns. By the end of the pathfinder, podiatrists were very supportive of the recommended changes.

3.2.6 Nurses

Prior to the pathfinders, nurses fitted simple orthoses often with little training. The pathfinders sought to clarify treatment protocols for certain conditions and to encourage orthotists to train nurses to enable the appropriate delegation of orthotic care.

Nurses in the pathfinder trusts welcomed the training and delegation of care as they could see the improvement in the delivery, speed and quality of care provided to their patients.

3.2.7 Conclusions

The overall conclusion from this is that all the clinical stakeholders were generally enthusiastic about the changes from a clinical perspective. The following are a selection of quotations the project team witnessed during the pathfinder work.

Box 4

"Your GP pack has streamlined my referrals to the orthotic department. I have recently used the service increasingly & find it to be excellent. My patients are pleased with the service and I am very happy with the clinical feedback we are now receiving from the orthotists themselves.

Dr R Follows
GP, Swadlincote, Derbyshire

Box 5

"If we could direct refer, that would be brilliant".

"Making shoes and insole stock available has greatly improved the service to patients"

Chris Horley
Head of Paediatric Physiotherapy,
Ipswich Hospital

Box 6

"I have been proposing these changes (referral by condition) for the last 10 years, but have never had the information to support this. I have now...."

Mr Hallett
Orthopaedic Consultant,
Ipswich Hospital

Box 7

"I agree with these changes... they will greatly improve patient care and save significant consultant time."

Mr Turner
Orthopaedic Consultant
Stepping Hill Hospital, Stockport

Chapter 4: The consequences of poor care provision in pathfinder clinics

4.1 For patients

The previous section focused on some of the key changes made and their impact on the clinics, clinical staff and the service provided. This section summarises the major areas of poor care encountered in pathfinder sites from a patient perspective, which were remedied by the changes.

The effect on patient care is considered for:

Level 1: changes made within the orthotic clinic

Level 2: changes made in relationships with other clinicians and referral protocols

Level 3: changes in the budgeting and structuring of orthotic clinics in support of improved referral pathways.

4.1.1 Level 1 – poor care provision within the clinic

The major Level 1 pathfinder changes that improved patient care are summarised in the table below. The table lists these changes in order of importance of the benefit to the patient and highlights:

- the percentage of current orthotic patients benefiting from each change;
- the type and scale of patient benefit gained from each change;
- an assessment of the overall patient benefit from each change.

Key Level 1 - Patient Benefits

Change Description	Patients Benefitting	Key Impact Area	Smaller Orth queue	Faster Treatment	Fewer Visits	Improved Quality	More Informed	More choice	Total Effect
Universal Review Sessions	90%	More frequent care	-	-	-	V High	High	-	V high
Clinical system to support clinician	100%	More clinican time for patient	-	medium	-	high	-	-	high
Increased orthosis stock	25%	Reduced patient visits	V High	-	V high	medium	medium	medium	High
Orthotist to have support in Clinic	100%	Reduces orthotic queue	high	medium	-	-	-	-	High
Restructure clinic for better quality care	100%	Improved quality of care	-	-	-	medium	-	-	medium
2 clinic rooms => better use of clinical time	10%	Reduces orthotic queue	high	medium	-	low	-	-	medium

Table 4

Each change is discussed to indicate the situation before the change and the problems resulting for patients.

Universal review sessions:

In the pathfinder clinics, only a small proportion of patients (about 10 to 20% who were usually children and high-risk patients) were proactively reviewed after an episode was completed. The remaining patients were simply left to contact the clinic if there was a problem – **a reactive approach**. This led to a variety of patient problems some of which were minor and some of which were very serious. The following two cases demonstrate this:

Box 8

Case 1: A middle aged lady who was prescribed insoles, experienced increasing pain in her legs and lower back until after three months, during which she initially took paracetamol and subsequently was prescribed painkillers by her GP, made an appointment at the clinic. On assessment, the orthotist immediately identified the problem. The patient was provided with temporary insoles and new orthoses were ordered. The patient was in tears at the relief of having the problem addressed at source. Seven days later, the patient was reviewed by when she was off the painkillers.

Box 9

Case 2: An elderly diabetic patient was prescribed footwear by a clinic. The patient was not subsequently reviewed by the orthotist. Nine months after the footwear was provided the patient re-presented to her diabetic consultant with serious ulceration on the sole of one foot. The patient required the amputation of that foot and is now taking legal action against the hospital involved on the basis that the orthosis had been causal in the patient's problem and that the hospital did not provide proper care in ensuring that the orthosis met the patient's need by failing to review her

The main reason trusts have not provided reviews to all patients is to save money. Yet this saving causes many patients' conditions to deteriorate, and patients suffer from discontinuity of care, poorer episode outcomes and slower identification of changes in their condition. This is a huge care quality problem and a potential source of serious clinical negligence claims (the claim in Case 2 above is greater than the clinic's annual budget!).

Clinical system to support the clinician:

Until recently, it was not mandatory for orthotists to keep clinical notes, although some have. At the formal inception of the Health Professions Council (regulatory body for all Allied Health Professions) in July 2003, keeping clinical notes became mandatory. The majority of clinical notes are manual, relatively unstructured, and therefore cannot be analysed or communicated to other clinicians. Manual note taking is also extremely time consuming. Ideally, orthotists should have access to a clinical system that will encourage better clinic care and help to convince clinical colleagues to proceed with level 2 and 3 changes. ***The main reasons for orthotists not having access to such systems were to save money and because of a lack of IT focus.***

An increased off-the-shelf orthosis stock:

If a patient receives an off-the-shelf orthosis then they can frequently complete their treatment in a single appointment rather than return when the orthosis has been ordered and received. Typically, pathfinder clinics held very low stocks, forcing patients to attend clinics for a second visit. This is not only wasteful but is also inconvenient for patients as they are often elderly and have mobility difficulties. Stock in the pathfinder clinics was increased significantly enabling some 30% of patients to be treated in one visit, compared with less than 10% before the changes. ***The main reason for not having stock was again to save money despite the fact that holding stock resulted in bulk ordering to secure volume discounts and a freeing up of 10% of appointments both of which represent a clear economic saving!***

Orthotists to have support in clinic:

It was evident from the pathfinder clinics that orthotic support staff were fully occupied with managing cumbersome, fragmented and repetitive administrative systems, and were therefore unable to provide support to the orthotist in clinic. This results in orthotists having to do non clinical work such as completing paperwork, collecting patients and cleaning, thus wasting valuable clinical time. ***The main reasons for not having better administration systems was (1) lack of priority of orthotics in the acute trust (resulting in lack of input from managers and IT support staff) and (2) wanting to save money.***

Restructure clinic to provide a better quality of care:

It has been expressed numerous times throughout this report that orthotic clinics are a low priority in acute care trusts, but this has had a significant effect on the orthotic accommodation. Orthotic accommodation is often poorly situated, has poor clinical facilities and waiting rooms. This has a major effect on the quality of care provided to patients. The following two examples demonstrate this:

Having 2 clinic Rooms: Pathfinder clinics generally had a single treatment room because of space constraints. With elderly, often immobile patients much of the clinician's time could not be used in clinical activity since it took considerable time for patients to enter the room and be prepared for treatment and having had their treatment completed to leave the room. E.g.

Box 10

Clinic 1: The clinic room was separated from a busy waiting room only by a curtain, so patients waiting to go into clinic could hear the examination and confidential discussion between clinician and patient. A clinic room with privacy was provided. In the same clinic there was inadequate storage space so the clinic and administration areas were a mess and not welcoming. Administration improvements and low cost storage transformed the "feel" of the clinic. ***The main reason for not having a "good" clinic facility is wanting to save money.***

Box 11

Clinic 2: Following analysis of a number of clinic sessions and discussion with the orthotists it was clear that the provision of a second clinic room would enable an additional 15% of patients to be treated in the same clinician time. The Trust accepted the case (and the logic) and agreed that the room would be built (using pathfinder funding) but provided it was not used for treating patients, as this would mean using more orthoses and increasing the budget! **Main reasons for not having 2 clinic rooms were cost (of building) and cost of treating more patients**

Level 1 Conclusion: Pre pathfinder, these changes were not addressed by Trust because of the lack of priority of orthotic care in acute trusts and the desire to save money.

4.1.2 Level 2 – poor care access (referral protocols/clinician coordination)

The major Level 2 pathfinder changes improving patient care are summarised in the table below. The table lists these changes in order of importance of the benefit to the patient and highlights:

- the percentage of current orthotic patients benefiting from each change;
- the type and scale of patient benefit gained from each change;
- an assessment of the overall patient benefit from each change.

Summary of Key Level 2 - Patient Benefits

Change Description	Patients Benefitting	Key Impact Area	Smaller Orth queue	Faster Treatment	Fewer Visits	Improved Quality	More Informed	More choice	Quality Effect
Direct GP Referrals :specific conditions	variable	Saves consultant visit & delay	VV high	-	V high	-	high	-	V high
Direct Referral by Physios	variable	Saves delay for approval	medium	medium	-	-	-	-	medium
Delegate clinical decision to Orthotist	100%	Better treatment response	medium	Low	medium	-	-	-	medium
Delegate some orthoses to colleagues	10%	Earlier treatment	medium	High	medium	-	-	-	medium

Table 5

Direct GP referral of specific conditions:

Direct referral by GPs to the orthotic clinic was not allowed in the majority of the pathfinder trusts with all referrals having to come from acute trust consultants (mainly orthopaedic). This resulted in many patients unnecessarily having to wait between 14 and 26 weeks to see a consultant before onward referral to the orthotic clinic. Patients could therefore be waiting some 20 to 30 weeks to see the orthotist. In many cases, there was no clinical need to see the consultant but this was the only way the service could be accessed. To add further inconvenience to patients, most consultants would then have to see the patient again after orthotic treatment to close the consultant episode - adding a further unnecessary hospital visit for patients. Ridiculously, if a

direct GP referral was received by orthotic staff, they were usually instructed to send these back to the GP and ask the GP to refer to a consultant.

Trusts explained their reason for insisting on consultant referrals was not clinical but budgetary, as they wanted to be able to charge orthotic costs to acute clinical departments. This finance driven approach is not only damaging patient care but also wastes significant amounts of precious GP and consultant time. Trusts were also concerned that if GPs had access to the service they would refer more patients.

Direct referrals by other healthcare professionals:

All the issues raised for direct GP referral above equally apply to direct referral by other health care professions.

Delegate clinical decisions to orthotists:

Both consultants and orthotists were under constant time pressure in all the pathfinder clinics. This resulted in little time to work on improving protocols and communication for the benefit of patients. For example, consultants often specify orthoses to the orthotist and in some cases the product specified was not the optimal solution for the patient, but some orthotists felt obliged to supply as instructed. Also, patients awaiting surgery often receive orthotic care and they consequently attend both consultant and orthotist review appointments where for many patients both reviews are unnecessary. ***The reason for the lack of development of protocols is lack of clinician and management time, yet this failure is providing a poor service to patients and wasting clinician time.***

Improved communications with GPs:

The majority of orthotic patients had been technically 'discharged' by their consultant as their episodes of 'acute care' had been completed and so the GP should have been their main focus of clinical care. However, in pathfinder clinics there was typically no reporting from the orthotic clinic to the GPs, as patients were considered to be still under the care of the acute consultants because the budget for their ongoing care sat within the acute trust. This lack of GP communication means patients are not receiving joined-up care, as their GPs are not informed of the orthotic treatment. ***The reasons for poor communication are poor referral pathways and poor orthotic systems.***

4.1.3 Level 3 changes – changes in budgetary/structuring of orthotic clinics in support of improved referral pathways

Patients deprived of the orthotic care they need:

Nearly all pathfinder clinics are located in acute trusts and suffer from poor access by primary care clinicians. This has resulted in significant under-referral of patients who genuinely need orthotic care. Pathfinder evidence suggests that these patients, who are mainly elderly, are deprived of the essential care they need to help maintain their mobility, and as a result they are likely to:

- lose their mobility more rapidly
- suffer from increased falls and the consequent injuries;
- be at risk of losing their independence and needing social care support or residential care.

Pathfinder evidence suggests that the combination of (1) better communications between orthotic clinics and GPs and, (2) allowing GP referrals, will increase the number of patients referred to orthotics by as much as 20%. These patients are currently being denied health care due to the current systems and are consequently suffering the problems highlighted above. The majority of the consequences of these problems fall on social care, although some affect the NHS. A lack of “joined up thinking” means the NHS, when deciding on the level of orthotic care provision, does not consider these consequences.

The reason for not opening up direct GP is purely financial. Most orthotic department budgets are under pressure and are therefore seen as a short-term problem for finance directors in acute and primary trusts. Social care finance directors are equally trying to cut costs and are therefore generally unwilling to support healthcare provision in the short-term, even though they benefit significantly in the longer term.

4.2 For the NHS

Poor communication, co-ordination and referral pathways in the pathfinder trusts resulted in patients not receiving orthotic treatment when they needed it with the following consequences for the NHS:

- a waste of primary care clinician time as patients receive unnecessary care because alternative orthotic care is difficult and perceived as too costly to access;
- a waste of valuable consultant time as patients are unnecessarily referred;
- further wasted NHS resources in dealing with falls and fractures that could have been avoided.

Based on analysis of current patient referrals, the project team developed a model to determine the impact of pathfinder changes on PCTs, acute trusts and social care departments. The model clearly exposed the effects of wasted resources and the lost opportunity costs of not delivering care in an appropriate and timely manner. The model is shown in table 7 and explained in paragraph 4.2.4. The following table shows how NHS clinician resources are being wasted in a typical pathfinder trust.

Typical Pathfinder Clinician Hours saved / annum						
<i>as the orthopaedic waiting list is cleared out of orthotic direct referral pa</i>						
Source of saving	ACT's		PCT's		Total	
	Consultants	Physio	GP's	Physio	%	Hours
Direct referral by PC - GP & Physios	105		40	180	97%	325
Direct Referral by AC - AHP's	2	7			3%	10
Delegated review Consultants to orthotists	0				0%	0
Admin - No Episode reapproval	0				0%	0
Orthoses stock - paed/other physios		0			0%	0
Total Hours saved	107	7	40	180	100%	335
Plus 5 years later						
Reduced orthopaedic procedures	12	12				

Table 6

4.2.1 Wasted primary care clinician time

If GPs cannot refer directly to orthotics and are forced to refer to consultants, they will be aware of the delays their patients can expect and will therefore seek alternative speedier care. Usually, where patients are suffering mobility problems, the alternative care is primary care physiotherapy. Whilst this route may resolve muscular problems and alleviate pain in the short-term, patients typically end up returning to their GP because the underlying problem is to do with the skeletal structure. GPs then re-refer back to physiotherapy for another course of treatment and this cycle can go on three or four times until the problem worsens and the GP has no choice but to refer the patient to a consultant. These episodes of physiotherapy care may be inappropriate for some patients and are therefore wasting primary care clinician time.

4.2.2 Wasted consultant time

Where GP direct access is not allowed, patients have to see a consultant to access the orthotic service. Consultants often refer patients to the orthotic service without adding any value to the patients' care and so time is wasted. It was evident from the pathfinder trusts that consultants are very aware of this problem but are equally keen to ensure patients who genuinely need to see a consultant are not missed. The answer therefore lies in creating a thorough understanding of which conditions are appropriate for direct referral and which need the attention of consultants. Clinicians in the pathfinders spent considerable time identifying and

agreeing conditions for direct referral and it was noticeable that the 'agreed list' (see appendix 5) did not differ greatly between each of the pathfinder sites. The agreement also ensured orthotists were able to pass inappropriate referrals back to GPs to satisfy consultants' concerns. The experience in the pathfinders has shown that the quality of direct referrals has been very high (that is, there has not been a need to refer on to consultants) and that significant consultant time has been saved as a result, not to mention the significant improvement in patient care.

4.2.3 Increased orthopaedic problems and falls

As stated earlier in this report, poor access to orthotic care combined with the lack of clinician awareness of what the service can do has resulted in many patients being deprived of care – particularly older people. But what are the consequences of being denied care? The project team sought to answer this question.

The team analysed a sample of patients in pathfinder clinics where GP access has been opened up and referral numbers have consequently increased. A number of GP referrals were reviewed by orthotists and physiotherapists to assess what would have happened to the additional patient referrals had they not received orthotic care. A key finding was that patients' mobility was likely to decline much more rapidly (rather than being stabilised), resulting in a greatly increased likelihood of falls and consequent injury. Reducing falls for older people is a Government priority and denying access to orthotic care is just adding to the problem when a simple and effective solution is available. Nationally, there are 75,000 falls per annum resulting in hospital admission, consuming expensive and scarce NHS resources. Allowing speedier access to orthotic services should help to reduce the number of falls thus saving valuable consultant time.

4.2.4 Economic consequences of poor care provision

The project team modelled the economic effects of poor care provision. A summary is shown in the table below. The model assesses the costs and benefits of introducing improved orthotic care and clearly demonstrates that the benefits of providing good care far outweigh the costs needed to deliver it. However, this is only so if the costs and benefits to social care are considered in addition to those of the NHS.

The model shows how low initial costs for starting the change achieve break even within three years, but the benefits really begin to escalate after ten years. ***The corollary of not making the pathfinder improvements is that in a typical catchment area, public bodies (NHS trusts and social care) will continue to suffer an unnecessary increased cost of £882k because they are providing poor health care and compromising the quality of life of their older citizens; preventing 1,200 mainly elderly people from receiving care who need it. The project team believes that serious consideration should be given to changing the health and social care policies that cause this situation.***

Level 3 Benefit - for Pathfinder Area 5

	Years after initial change launched						10	15	L/run
	1	2	3	4	5	1 - 5			
	£ k	£ k	£ k	£ k	£ k	£ k	£ k	£ k	£ k
ACT									
Cost reduction fewer orthopaedic procedures - resulting from improved provision of orthotic care (10%)	0	0	12	24	48	84	48	48	48
ACT - Total impact of the changes	0	0	12	24	48	84	48	48	48
PCT									
Cost of additional orthotic care	-14	-29	-43	-58	-72	-216	-144	-216	-216
Benefit of reducing acute mobility problems (33%)	0	0	10	20	30	60	180	300	300
Benefit of reducing lower level mobility problems (33%)	0	0	3	7	10	20	50	50	50
PCT - Total impact of the changes	-14	-29	-30	-31	-32	-136	86	134	134
S/Services									
Benefit of reducing acute mobility problems (66%)	0	0	20	40	60	120	360	600	600
Benefit of reducing lower level mobility problems (66%)	0	0	7	13	20	40	100	100	100
S/Services - Total impact of the changes	0	0	27	53	80	160	460	700	700
Total all organisations	-14	-29	9	46	96	108	594	882	882

Table 7

4.2.5 The quality problem

The committee on the Quality of Health Care in America (2001)⁹ proposed that quality problems can be grouped in three categories:

- “**overuse** is the provision of a health care service under circumstances in which its potential for harm exceeds the possible benefit;”
- “**underuse** is the failure to provide a health care service when it would have produced a favourable outcome for a patient”; and
- “**misuse**, an appropriate service is provided, but a preventable complication occurs, and the patient does not receive the full potential benefit of the service”

Orthotists’ experience in the pathfinders was one of consistent **underuse** of the service because of the budgetary situation the service is in. This budgetary restraint also created the conditions for potential **overuse** of other acute treatments (for example, A&E) as a result of not using orthotic services appropriately.

Local clinical staff were very aware of these quality problems as they affected orthotics and other clinical services, and their reactions to the changes introduced by the pathfinders were uniformly positive (see paragraph 3.2), as long as this did not involve shifting a quality problem from one place to another without resolving it.

⁹ Crossing the Quality Chasm, National Academy Press.

Chapter 5: Local response to proposed changes

5.1 The dilemma of a chronic care specialism in an acute setting

The vast majority of orthotic patients have chronic conditions. This means that they require orthotic care for the remainder of their lives and they experience a series of care episodes to respond to their condition, and they depend on the quality of care to stabilise and help manage their condition. ***Orthotic care is therefore critical in managing their chronic conditions for the long term.***

All six clinics were managed by acute trusts but analysis within the pathfinders showed that some 80% of current orthotic patients have their GP as their primary carer (see appendix 8). This is because, either the GP has referred the patient to the orthotic clinic, or the patient has been referred to the orthotic clinic by a consultant but has been 'discharged' back to the GP at the conclusion of the acute episode. These patients typically have a chronic condition managed by their GP, and return to the orthotic clinic for ongoing orthotic care. However, from the acute trusts' perspective, these patients remain the consultant's patients and remain on the consultant's budget despite the fact that he or she has no further interest in their care.

The conclusion from this is that the orthotic service is a chronic care service but is managed in an acute care organisation. It supports patients whose healthcare lead is usually a GP. Yet GPs are typically denied direct access or communication. This mismatch of having a predominantly primary, chronic care service as part of an acute trust has dysfunctional effects for patients and all the organisations involved in delivering orthotic care to patients. These effects are described in paragraphs 5.2, 5.3 and 5.4 below.

5.2 Acute trusts

The priority problem

Acute trusts primary function is to provide a broad range of acute services. To monitor their effectiveness in this role, they are set targets or key performance indicators (KPIs) such as waiting times, completed consultant care episodes, morbidity rates and financial targets, all of which contribute to trusts' star ratings. These performance measures determine trusts' priorities.

Not surprisingly, managers' attention is focused on the priority acute areas. Non-acute areas such as orthotics are largely ignored, receiving little management time, except when they cause problems. The result is that orthotic care is low priority and budgets are either frozen or plundered for savings.

The reaction of acute care clinical managers to pathfinder changes was generally enthusiastic. This was because it enabled a review of the clinic that offered significant improvements when local management time was not normally available for such reviews. It also enabled investment in the clinic to improve care quality when local funding would simply not have been available. Finally, it allowed additional orthotist clinical time to improve clinical protocols when again local resources could not have afforded this 'luxury'.

Local clinic managers also largely supported the level 2 and 3 changes to allow direct GP referral as they recognised the impact it could have on their orthopaedic waiting times, however, the financial problem described below tempered this enthusiasm.

The financial problem

The increase in patient numbers resulting from direct GP referral proved a major barrier to acute trusts. Finance directors were frequently unwilling to approve direct access, as more patients would be treated costing more money and budget problems. To put this into context, the pathfinder team was informed on several occasions by trust finance staff that if they had additional money they would not spend it on orthotics as they had other priorities. Furthermore, saving consultant time through referral improvements was of no financial benefit since the consultant would simply treat someone else in their queue and so there would be no cost saving. Perhaps most disturbing of all, the project team was told by finance staff that it wasn't important that patients had to wait for orthotic care, as the orthotic queue was not part of trusts' performance criteria.

Having said this, attitudes changed dramatically if PCTs could promise earmarked ongoing funding to cover the costs of treating the additional patients.

Other problems – orthotic care is difficult

The pathfinders unearthed a number of further difficulties that present barriers to change from an acute trust perspective. For example, some 80% of orthotic care in England is outsourced to private companies and there is a low level of trust in the NHS of the private sector.

Orthotic services are often fragmented. In one pathfinder an orthotic service was unaware of the existence of another orthotic service on the same acute site. In a second pathfinder, the PCT had already set up their own orthotic clinic to overcome problems with access to the acute orthotic service. This fragmentation leads to uneconomic and irregular clinics, communication problems and variations in standards.

The pathfinders also exposed poor orthotic clinical communications that was exacerbated by the lack of information, thus perpetuating the low profile of the service and to it being poorly understood.

5.3 Primary care trusts (PCTs)

The priority problem

Although PCTs' function is to ensure the health of their local population they appear to be measured in much the same way as acute trusts with a heavy focus on acute KPIs. This inevitably leads the PCT view of the world to be skewed towards acute care. This may change in time, but PCTs are still relatively new organisations and are therefore finding it very difficult to manage the challenge they have been set of delivering major improvements in healthcare.

In this context, the attention of PCT managers is very much focused on priority acute areas. Non-acute areas such as orthotics receive little management time – indeed if PCTs are even aware the service exists! The lack of awareness is exacerbated by the service:

- not being part of the PCT and therefore not being a direct PCT responsibility,
- being treated by acute trusts and PCTs as an overhead to acute services (for example, orthopaedics, rheumatology) and,
- consequently not featuring directly in service level or clinical service discussions between the acute trust and PCT.

The financial problem

The service is paid for through the commissioning arrangements for specialties – often unbeknown to PCTs. In none of the pathfinders were there separate commissioning arrangements for the service even though it is mainly a primary care chronic service. As the project team began to engage PCTs in the pathfinders, it also emerged that they had very little budget flexibility to fund the increase in patient numbers resulting from direct GP referral. PCT finance directors said they simply did not have the money as budgets were tied up with service level agreements with acute trusts, and in any case if they did have additional money they would not spend it on orthotics, as they had other priorities.

As with acute trusts, PCT finance staff attitudes would change dramatically if there were:

- a promise of extra funding to cover the costs of treating the additional patients (the question is where this extra funding should come from? Should it be social care as they would receive the majority of benefits?) and/or,
- if the orthotic service – and chronic services more generally – was a key part of a strategic health authority plan and objectives for the PCT, so that chronic care became a key performance area .

Pathfinder recommendations propose action in both these areas

5.4 Social care

The project team engaged local social care services late in the pathfinder, when it became clear that failure to provide effective orthotic care to patients was resulting in increased demand for expensive social care services. Social care staff involved in care for older people are working with NHS colleagues to deal with people with mobility problems. However, they felt they had little control over the growing number of people who are losing their mobility (either wholly or partly). They were simply doing the best to meet the consequent growing demand for social care resulting from immobility, within the finite resources they have at their disposal. It became apparent that the cost of social care can be very expensive with residential care costing in excess of £12,000 per person per annum.

Social care managers were very interested at the prospect of managing some of the demand for their services by providing orthotic care to more older people to stabilise their mobility so they remained independent. Such an approach clearly improves people's quality of life and reduces social care residential and mobility support costs. In one pathfinder, social care managers offered to fully fund the additional patients treated by introducing GP direct referral. ***However, despite this, GP direct referral has not been introduced as the primary and acute care finance directors are unable to reach agreement on how to manage the service. The result is that patients are still waiting to receive improved care.***

Chapter 6: Conclusions on likely implementation from a local perspective

It is the project team's belief that:

- without implementing level 1 changes, level 2 changes will be difficult to sustain;
- Level 2 and 3 changes are interdependent, thus level 2 changes cannot be implemented without level 3;
- the most significant benefits to patients arise from the implementation of level 2 and 3 changes;
- a clinical information system is essential for successful implementation of level 2 and 3 changes; and
- ***The biggest barrier to improving and extending access to (and provision of) orthotic care is the restructuring of budgets and responsibility required to recognise and reflect the primary and chronic care nature of the service.***

This final point has not been specifically recognised and addressed in previous reviews of the service, which focused on operational and clinical improvements without addressing the underlying organisational dilemma and the difficulty the NHS has in providing services to chronic patients.

It is clear from the pathfinders that major structural changes are necessary to deliver the benefits of improved care to patients. However, such systemic changes are impossible to achieve without changing the disposition of budgets to accompany them. The local data produced by the pathfinders provided the means for arguing the case for these changes in budgets, but then ran up against the relative unimportance of the service within the larger healthcare context. This was dispiriting for all the local clinicians involved in the pathfinder process.

The depressing conclusion from all of this is that the likelihood of primary care and acute care trusts finding the will and where-with-all to overcome all of these barriers, and successfully implement the pathfinder improvements, is extremely low.

Unless these structural changes are made a priority either by strategic health authorities or the Department of Health, there is little prospect of improving the access and quality of care for people suffering chronic structural mobility problems. These citizens will then continue to receive poor quality care, or worse, not receive the care they need at all, and be condemned to prematurely reduced mobility and in many cases total loss of mobility and independence.

This is hardly designing care around the needs of patients!

Chapter 7: Is the service situation widespread?

The project team was keen to establish whether the problems found in the pathfinders were typical of the English NHS orthotic service. The following perspectives seem to confirm that this is the case.

Previous reports

Over the past twenty years, various studies have reported on the state of orthotic care in the NHS. These reports have highlighted many of the same operational and quality problems identified in the pathfinder project and have made numerous recommendations to resolve them. Despite the high profile of some of these reports things have not changed. The pathfinder project team believes that this is because of the local structural and organisational problems highlighted in chapter 4 of this report.

Whilst these problems are mirrored across the six pathfinder sites, previous reports suggest the problems are endemic across the NHS.

Orthotists' experience

Orthotists involved in the pathfinder work confirmed that the pathfinder sites were typical of the majority of NHS orthotic clinics from their experiences with other trusts. If anything, they hinted that the pathfinder trusts were at the better end of a spectrum.

Enquiries from other primary care and acute trusts

As news of the pathfinder work spread around the NHS, service managers from other trusts approached the pathfinder team to learn about the knowledge gained. These managers were able to confirm that the pathfinder trusts were typical and that pressure was being applied to reduce cost and service provision rather than expand orthotic care in their own trusts.

Chapter 8: The consequences of poor care provision – a national perspective

The pathfinder clinics have yielded significant information allowing a national picture to emerge. Data, both from sampling and from the installed clinical information systems was:

- **consistent between pathfinder areas:** statistics on issues like demand and condition mix were consistent across the six clinics (see Appendix 4 – condition mix);
- **statistically significant in size:** the catchment population covered by the pathfinder clinics is 2.5million;
- **consistent over time:** clinical information systems have now been in place for more than a year in some sites;

all of which enable us to predict with reasonable confidence, the impact the proposed changes can have from a national perspective.

This national picture is based on the very detailed service and economic model developed during the pathfinder to understand the local situation, and various parties (including Department of Health economists) have reviewed the model, commenting that it is robust and, if anything, the benefits are understated.

Results and conclusions from the model are:

8.1 For patients

8.1.1 Lack of patient review

Currently, there are some 1.2 million patients receiving orthotic care in England. All these patients will benefit from the proposed clinical improvements proposed in this report, transforming the quality of their care.

The biggest challenge in clinical practice is to move from a situation where just 15% of patients are proactively reviewed to ensuring **all** patients are followed up. This means over one million patients will need to be reviewed in some form to ensure the benefits of **universal review** are achieved. This challenge should not be underestimated.

8.1.2 Delayed care – patients stuck in queues

As described earlier in this report, patients are usually denied direct access to orthotic care. GPs are therefore forced to refer patients to consultants wasting valuable clinical time and lengthening treatment time for patients. From a national perspective, this means that of the 120,000 new referrals per year to orthotic clinics just 18,000 are referred directly by GPs. Opening up direct GP access will mean that some 48,000 patients can be referred directly by GPs thus benefiting some 30,000 patients per year that are currently having to wait 20 weeks for a consultant appointment.

In addition to this, both new and existing patients can be subject to significant delays in the orthotic queue as managers often allow queues to develop because they are not “counted” in their performance measures. It is difficult to estimate how many patients are in orthotic queues as they can vary greatly, with some waiting up to two years. Assuming an average queue of 12 weeks being reduced to 2 weeks, suggests that some 240,000 patients (a mix of new and repeat) are waiting today in orthotic queues – often unnecessarily.

8.1.3 Patients not receiving care

As stated earlier, older people who do not receive timely care experience mobility and independency problems. We now know that some 20% of patients (30,000 per year) are simply denied access to the care they need, condemning them to an early loss of mobility, independence and quality of life. From a national perspective, it is estimated that if access was improved, at least 300,000 more people would be in orthotic care within ten years. That is, 300,000 people who could expect to retain better mobility and enjoy a significantly better quality of life.

8.2 For the NHS

8.2.1 Wasted primary care and acute care clinician time

Scaling up the wasted clinical time described in chapter 4 to a national perspective, means that in acute care trusts some 36,000 hours of orthopaedic consultant time is wasted. Furthermore, in primary care trusts, some 45,000 hours of GP time and 180,000 hours of physiotherapists' time is wasted.

8.2.2 Increased orthopaedic problems and falls

Denying timely treatment for older patients results in a higher propensity for falls. It is estimated that today some 300,000 people have mobility problems and potentially could have benefited from orthotic care but were denied access. These people are consequently at higher risk of falling.

Using the sample of patients (referred by GPs) in discussion with specialists (physiotherapists and orthotists) it was estimated that the number of falls that would of occurred had the patients not had orthotic care was estimated at 2% per annum of the 300,000, which equates to some 6,000 patients would suffer falls annually. This estimate appears reasonable – and perhaps a little cautious – in the context of total serious elderly falls of 75,000 per annum, which are mainly due to mobility and vision problems (NSF for Older People).

In addition to falls, patients who are denied orthotic care are likely to suffer mobility loss through skeletal deterioration. This results in an increased need for orthopaedic procedures and through the same sampling approach as for falls, it is estimated that this generates an estimated 6,000 orthopaedic procedures per annum.

The impact of this reduction in falls and orthopaedic procedures through improved orthotic care will be dramatic in accident and emergency departments and orthopaedic clinics:

- NHS acute admissions are increased by some 12,000 per annum because of poor access to orthotic care;
- this increased demand for acute care subsequently results in unnecessary use of 48,000 orthopaedic consultant hours per year and;
- a high occupancy of acute care beds, as older patients require longer to recover from traumatic fall problems;
- this adds to increased queuing for patients requiring these services.

8.2.3 Increase whole life care costs

The economic and social consequences of denying patients orthotic care are significant. The cost of providing support for people who suffer premature loss of mobility for the rest of their lives combined with the subsequent reduced quality of life are immense. The pathfinders identified that the cost of this is some £390m per annum. This is shown in the table below.

National Impact - who pays the cost & secures the benefit (all values indexed to 2003 costs)									
	Years after implementing improved healthcare					Total	2014	2019	2024
	2004	2005	2006	2007	2008				
	£ m	£ m	£ m	£ m	£ m	£ m	£ m	£ m	£ m
ACT									
Orthotic clinic	-13.9	-5.2	-8.5	-11.7	-14.9	-54.2	-31.1	-31.1	-31.1
Orthopaedic clinic	5.2	5.2	5.2	5.2	8.6	29.4	25.9	39.7	39.7
Total	-8.7	0.0	-3.3	-6.5	-6.3	-24.8	-5.2	8.6	8.6
PCT									
GP's & physio improved effectiveness	5	5	5	5	5	26	5	5	5
Improved mobility benefits	0	0	0	0	3	3	16	27	27
Total	5	5	5	5	8	29	21	32	32
Social Services									
Benefit of fewer mobility problems	0	0	0	0	35	35	211	351	351
All Services	-3	5	2	-1	37	39	227	392	392

Notes
 All numbers denote the change impact by organisation of implementing all the proposed changes to dramatically improve mobility care. Negative numbers are increased cost / positive numbers reduced cost.
 The analysis demonstrates that Social Services is the major beneficiary / while health care mobility budgets need to increase short term. This analysis does not attribute any value to patient benefit but just looks at the current costs & the benefit of providing better care. The economic & social argument is significantly understated and has been accepted by Government analysts.

Table 8

It should be noted that these costs exclude any benefit attributed to people who benefit from improved quality of life, and therefore solely reflect the cash costs falling on public sector organisations. This quality of life cost is anticipated to be of a similar scale to the extra public sector cost.

These costs, their causes and potential solutions are not immediately obvious to Government, the NHS or social care as the effects occur over many years and are spread across many organisations. Social care suffers the greatest cost from poor health care provision and is disempowered from doing anything about it. A more holistic view is needed to improve the current poor mobility healthcare provision and realise the economic and social benefits for the UK Government and the health and quality of life benefits for citizens.

8.3 For commercial sector

In the English NHS the orthotic service has traditionally been provided by the private sector, where services are broken down into a number of half-day clinical sessions. With this contracting arrangement the company is simply required to provide an orthotist to cover these clinics and has little or no involvement with how the service is structured or delivered.

In line with previous DH policy, HSG95(47)¹⁰, contracts were supposed to be let on a service only basis and trusts were encouraged to separate an element of their budget to support the service provision (30%). Trusts were also encouraged to consider the product and service aspects of the orthotic service in isolation and try to avoid any cross over. This was never effectively implemented or policed and led to subsidisation of the service element. Most companies were offering below cost clinical sessions, and some even free clinical sessions in an effort to acquire the lucrative supply business. Where trusts did implement the policy effectively, some companies gained the service element and not the supply element. Some of them later withdrew from these contracts. Cross subsidisation is acknowledged industry wide practice. One area where this policy can be seen to work well is where the orthotist really is separated from the product supply ie working for the NHS but still purchasing products from the commercial sector. In this area budgetary savings can be seen to be substantial. It is perfectly possible for the commercial sector to provide both the clinical service and the supply element but this would require a complete change of contract style to be outcome based and with a focus on the quality of that outcome. Current contracts do not allow this to be done effectively.

In addition the relationship with the commercial sector has provided trusts with an artificial means of elevating their financial problems in the short term. The commercial sector is reliant on the NHS as its biggest customer and therefore is often likely to conform to any requests however damaging they may be on their own business. This is hardly 'payment-by-results'. Commercial providers are given a fee with very little information (if any) on what they are expected to do for it. This does not make commercial sense for the commercial providers or for the NHS and has led to accusations of impropriety in the past. It can be argued that this is unfair on commercial providers. If the NHS cannot clarify what it wants from them, how can they be expected to deliver efficient and quality services?

As data on these services has not been available we have little understanding as to the level of demand the services faced and orthotic service managers were not given an appropriate budget to deal with these patients.

¹⁰ HSG95(47)

Chapter 9: Conclusions – why has nothing happened?

The pathfinders have proved that significant benefits can be realised through modernising NHS orthotic services, and many previous reports have attested to this fact. But still nothing has happened to resolve the situation, despite the fact that many aspects of the Government's reforms for the NHS can be delivered by improving NHS orthotic care (see Why change? in the Executive Summary to this report). Why is this?

The project team believe it is because focusing on chronic care represents a structural challenge to the NHS. The growing importance and difficulty in managing chronic conditions is not unique to the NHS. It is a problem faced by healthcare systems around the world. Orthotic services respond to chronic conditions but unfortunately they currently sit in an acute system that is designed to deliver treatments to patients with acute conditions. Managing chronic conditions requires a transition to delivering health promotion rather than healthcare – a major challenge for the NHS.

The Department of Health recognise this problem (The Expert Patient¹¹) but there is a need to deliver tangible changes that can pathfind the way to more integrated care. The orthotics pathfinder project represents such an opportunity to develop a model for managing chronic conditions that speeds up access to initial healthcare intervention (preventative care) and manages the subsequent stabilisation of patients' conditions.

Unfortunately the pathfinder project cuts across a number of reforms that are in progress within the DH and NHS and it is therefore difficult to establish an 'owner' for the problem and responsibility for delivering change across the NHS. The work is of interest to a number of policy groups within the DH, for example DH policy teams engaged with the "NSF for Older People", the "Health and Social Care Joint Unit", the "Access, Capacity and Choice team", and Modernisation Agency initiatives such as "National and Primary Care Trust Development Programme" (NatPaCT) and "GPs with Special Interest" (GPwSI). **It is *strongly recommended* that the Department of Health identify a lead for considering how the benefits described in this report can be taken forward for the whole of the NHS and social care.**

¹¹ The Expert Patient

Chapter 10: So what is needed and how can it be done?

As outlined at the beginning of this report, change in the NHS does not come easy, particularly when such change requires the NHS to reconfigure long-established and entrenched structures around the needs of patients, and when such structures cross the three boundaries of primary, secondary and social care.

From the experiences within the six pathfinder sites, the pathfinder working group firmly believe that without the recommended structural changes the NHS will struggle to deliver all of the *top ten tips* outlined in this report – especially universal review and direct GP referral. The structural changes will themselves be difficult to implement, both because of the budgetary changes they require and because of the initial cost of improving care.

10.1 What is needed?

Delivering the necessary change is about addressing the issue of how a chronic service is funded and managed. There is a *double challenge*, not only to manage a chronic service in a way that can be held accountable in relation to the impact on whole life cost of patients' care, but also to provide adequate commissioning mechanisms for this kind of approach. To achieve this requires co-ordinated action from strategic health authorities, primary care trusts and the sponsorship of the Department of Health, with support from acute trusts and social care.

The report recommends that:

- earmarked finance should be made available for five years, channelled through the strategic health authorities, enabling primary care trusts either to take over the orthotic service from acute trusts, or to institute direct funding of the primary care element of their acute orthotic service (dual funding);
- a restructuring of longer-term budgets to reflect the increase in orthotic service provision and reduced demand for mobility care in social services;
- a dedicated and appropriately skilled resource to support primary care trusts in implementing the commissioning-led processes needed for instituting dual funding, or transferring the services under their control where appropriate; and in improving service effectiveness in orthotic clinics, building more effective links with acute trust consultants and other primary care clinicians to increase patient access to the service.

The project team estimate that funding of £50 - 60 million (see section 8.2.3) over a period of five years is needed to expand and improve the orthotic service nationally, to ensure the benefits described in this report are secured across the NHS. The project team recommend that such funding should come from the Department of Health and be allocated to strategic health

authorities, clearly earmarked for the purpose of modernising the service. This way, PCTs can be safe in the knowledge that delivering the changes is sustainable.

10.2 How can it be done?

There are seven key areas of activity that are needed to deliver the changes. These are:

1. Setting the strategic priority and context
2. Creating a 'central' multi-disciplinary implementation team
3. Engaging and supporting strategic health authorities
4. Securing local senior management commitment and creating the environment for change
5. Creating a 'local' multi-skilled implementation team
6. Changing funding flows, commissioning and budget processes
7. Creating a clinical data platform

1. Setting the strategic priority and context

Systemic changes of this kind will not be prioritised by primary care trusts unless they sit within the larger context of strategic health authority (SHA) plans for chronic services, of which orthotics is just one part. There is therefore a need to create the strategic priority and context at all levels to ensure the changes are firmly embedded in SHA and PCT strategic planning and to ensure performance measures are in place to encourage acute trusts to take action.

This needs to start with the Department of Health encouraging the strategic agenda for change at the highest level. SHAs need to be the main drivers for change by establishing a more effective approach to commissioning and by establishing the right environment. Ideally they should do this in a 'chronic care' context, emphasising that delivering change in orthotic care is a precursor to new approaches to managing and commissioning chronic care services.

The Department of Health is currently working with independent providers of chronic disease management to better understand how integrated working between primary and secondary care clinicians can: positively impact on the patient experience, support the secondary to primary care shift, and make more effective use of scarce resources. The Department's view is that primary care practitioners will need to have a broader strategic role in the commissioning and provision of chronic diseases and the Modernisation Agency's NatPaCT is piloting this work in the NHS. The project team believe the pathfinder changes should be integrated into this work to ensure it receives the appropriate strategic recognition.

2. Creating a 'central' multi-disciplinary implementation team

The pathfinders showed that a central multi-disciplinary implementation team (i.e. the pathfinder project team) supporting local taskforces, ensured delivery and focus by:

- gaining commitment at all levels, particularly senior management, for a change programme specific to the local situation.
- improving the speed and quality of implementation, prevented reinventions of the wheel (saving considerable local time)
- sharing previous learning and approaches with local taskforces (improving consistency and quality of local change implementation) and
- more generally acting as a focal point to ensure momentum was maintained and problems were resolved.

Learning from this experience, the project team recommend that a 'national implementation team' should be established to provide specific support in three key areas:

- *Clinical leadership* – enabling clinicians to develop an output-based approach for the clinic, manage it using data, and develop a clinical peer review process that can manage the quality of patient outcomes;
- *Commissioning-led change* – enabling primary care staff to commission on the basis of condition mix, clinic loading, episode characteristics, and the service level agreements appropriate to securing this performance from clinics. This requires modelling the likely impacts (operational and economic) in the orthotic service to ensure service level agreements are based on robust information. Crucial to this is the ability to manage clinics through data, and to understand and predict economic consequences;
- *Implementation of a platform-based clinical reporting* – enabling clinicians to define the data sampling and information support they need to plan and sustain changes at the level of the clinic; and enabling PCT and SHA staff to derive the analyses and aggregations of performance data they need to manage chronic services on a systemic basis.

The project team believe that the Modernisation Agency is best placed to facilitate the proposed central implementation team – particularly in view of NatPaCT's work on chronic disease management and their close ties to strategic health authorities.

3. Engaging and supporting strategic health authorities

As stated above, strategic health authorities are ideally placed to sponsor the systemic changes in chronic care provision across their primary care trusts, but to do so they need to ensure commissioning processes both between primary and acute care trusts and between health and social care are redesigned. The project team suggest that SHAs will need support from the central implementation team proposed above to help them deliver and lead these changes.

4. Securing local senior management commitment and creating the environment for change

The overall change is systemic in nature, requiring a realignment of services to demand. This major organisational change needs the prior commitment of key stakeholders in the primary care and acute trusts affected – particularly from chief executives. Without their support systemic change will not happen.

This report describes a number of changes that should be relatively easy to deliver at clinic level (Level 1 benefits). However, the biggest patient and service benefits will not come from these changes, but from the more difficult to deliver Level 2 and Level 3 referral and structural changes.

Here, delivering 'better access' and 'increased access' are interdependent because of the underlying *underuse* of orthotics brought about by its current funding. This *underuse* means:

- increased access will require funding
- clinical relationships will be significantly changed (changes affecting the clinical role of orthotists and their referral relationships with GPs, AHPs and consultants will introduce systemic changes to the use of orthotics as a better-integrated part of the larger healthcare system providing chronic care).

This will require budget changes, redesigning commissioning processes, service restructuring and improved IT, and pathfinder experience has shown a local implementation team is vital – all of which is addressed below. The project team believes that chief executives and finance directors should be made aware of the consequences of change so they can create the right environment to encourage implementation.

5. Creating a 'local' multi-skilled implementation team

The challenge of implementing the different levels of change requires different kinds of intervention and skills. Pathfinders have demonstrated that if this is to be successfully done then a local implementation **steering group** needs to be established, which is responsible to the PEC for the overall delivery of the change programme. Steering group members can then lead a number of subgroups, which take responsibility for delivering specific elements of the change programme in a co-ordinated way.

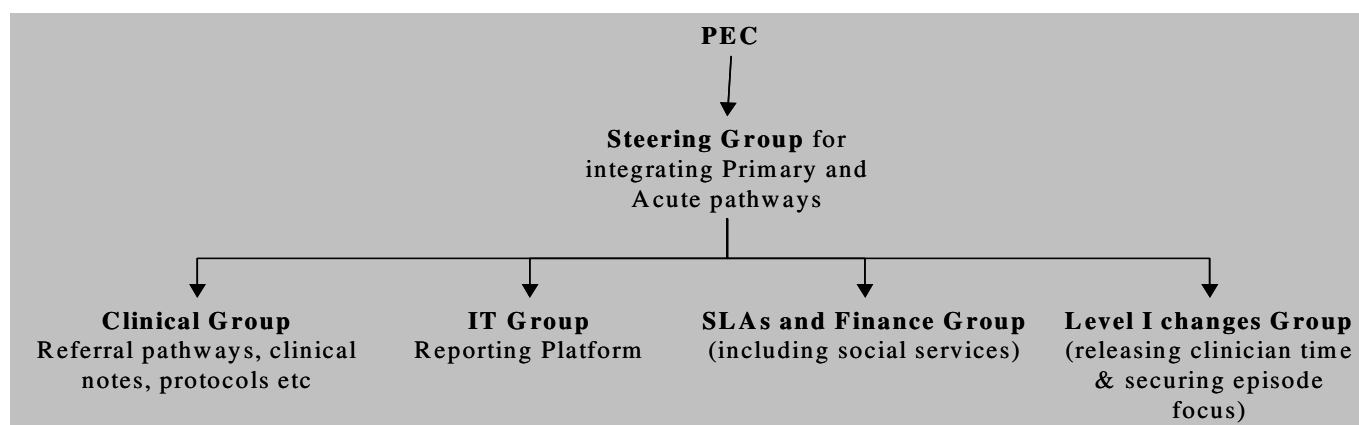


Figure 2

The specific work to be undertaken by each of the workgroups is not detailed in this report and will depend on local circumstances. However, the following is a list of key activities that will need to be undertaken by the various groups:

- Initial work to:
 - review the running of the clinic and its relationships with other clinical groups.
 - conclude and gain agreement from referring clinicians on a change programme, and
 - secure PEC and chief executive (PCT and acute trust) agreement to the change programme.
- This initial work needs 2-3 months to complete
- Following this, conclusions and recommendations that reflect local conditions and requirements need to be developed
- Ensure that significant orthotist time is made available to contribute to the work groups and to support the changes.
- Ensure implementation is based on local clinician involvement and agreement.
- Ensure the steering group obtains strong support from clinicians and service managers, and from Finance and IT at the highest level.
- The local orthotics group needs 2–3 months to complete its work and secure agreement and,
- Allow 3 months to implement the clinic changes including data platform and to complete the service level agreements.

The project team believe that without properly resourced and funded local taskforces, supported by an experienced central team, the redesign of commissioning processes and the other essential underpinning will prove difficult in an environment, where there are many demands on local staff and where the changes themselves are “difficult”. To emphasise this it is worth relating the experiences of one of the pathfinders:

In one pathfinder primary care trust, the economic model was accepted by the PEC and the acute trust. The project team was tasked by the PEC to work with local clinicians, finance managers and social care to put into place a structure to support and expand the provision of orthotic care.

The approach was agreed with the primary care and acute trusts and implementation commenced in February 2003 and with the intention of completing the improvements within three months. Local staff in taskforces supported by a central implementation team undertook the implementation. The clinical group agreed the new referral protocols, review processes and so forth, and these were fully documented within one month. Level 1 changes were made so the operational efficiency of the clinic was improved and completed within three months.

Social care reviewed the economic model and the current service for the area and within six weeks had agreed to finance the cost of additional patients referred when GP direct referral was introduced (in year one they expected to pay £15,000). A service level agreement was subsequently drawn up between the primary care trust and social care, with the latter agreeing to pay all the costs of additional patients as soon as direct referral was introduced. A further service level agreement was then drawn up between the primary care and acute trusts and agreed by the operational managers within four weeks. However, this agreement then had to be signed off by the respective finance departments, and six months on they have still not been able to resolve the matter of how to address the historic overspend and so consequently nothing has happened.

The pathfinder project team was, and still is, extremely disappointed by this situation. We believe that the respective trusts and social care managers are being frustrated by the failure of finance teams to be able to respond to the needs of patients and restructure their budgets to support a more effective service. What's more, patients are continuing to receive a poor and inconvenient service as a result. This appears to fly in the face of government's wishes.

6. Changing funding flows, commissioning and budget processes

The project team recommends that there needs to be changes to the way funds flow between all the organisations and internally within trusts:

Between PCTs and social care

A mechanism needs to be created for agreeing shifts in funding between health and social care to support the increased orthotic healthcare costs which produce longer term benefits through reduced or delayed onset of mobility loss. This requires payment mechanisms that relate funding to the clinical outputs of the orthotic service. An appropriate IT reporting platform embedded in the practices of the clinic is crucial to supporting such mechanisms.

Between PCTs and acute trusts

Commissioning processes need to be redesigned between PCTs and acute trusts. Commissioning should be demand-led and driven by patient’s chronic needs, holding clinics accountable for their outputs and quality of service. To this end, good practice guidelines, resource support and funding are necessary, but not sufficient. The key to ensuring that the changes made can be sustained in the long term is a commissioning process that supports the demand led approach and outcome focus to quality of care.

To put all this together, redesigning commissioning has to be synchronised with managing the changes in the supporting clinics that enable them to satisfy this different way of working.

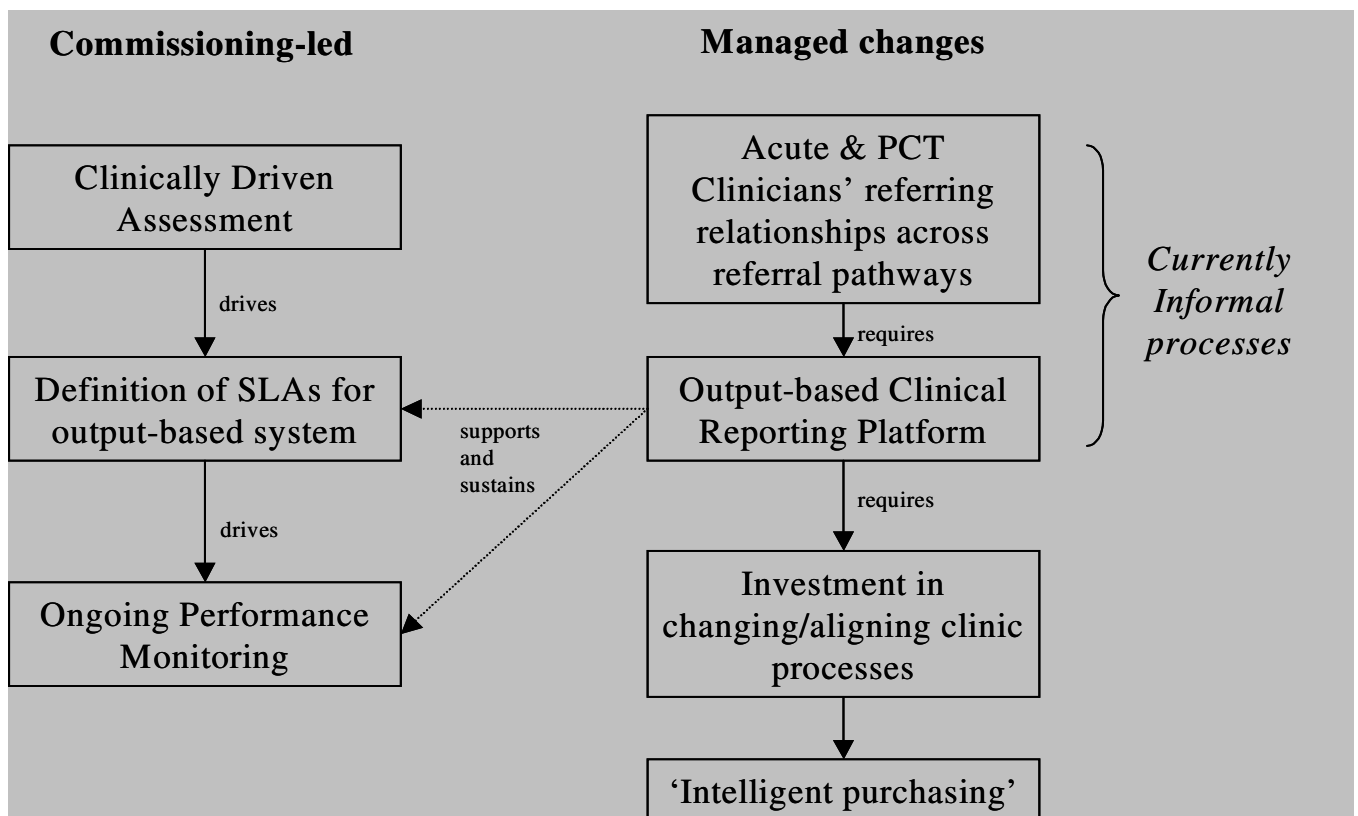


Figure 3

This approach will ensure SLAs are designed around clinically driven assessments and reflect the clinical imperatives and the level of patient demand for the service. Performance management will ensure the clinical service quality is being delivered, monitoring the level and mix of service demand, so the service can respond accordingly. A reporting platform is key to this, and without which it would not be possible to have closed loop control or an informed view of either clinical quality or service mix.

The referring relationship changes can only happen and be formally managed if there is an SLA reflecting these changes and providing the funding to support these. Equally importantly the volume and mix effects of referral relationship changes need to be understood and managed and this is only possible with the reporting platform.

When these changes proceed, and trusts have a better grasp and tighter management of the service, they will be in a position to purchase more intelligently – benefiting both the Trusts and commercial providers (see paragraph 10.4).

Internal charging of orthotics services within acute trusts

Once demand-led commissioning processes are in place they should allow more transparent budgeting processes within acute trusts – where services remain in acute settings in the short-term – or for treating ‘in-patients’ in the longer term.

Between the NHS and commercial providers

There is no reason why demand-led commissioning processes cannot be extended to the NHS contracts with the private sector (see paragraph 10.4).

The development of demand-led commissioning requires a rethink on how the service should be ‘priced’. HRGs are not yet developed to cover orthotics and so ‘payment-by-results’ will be difficult to implement in the short-term (see paragraph 10.5), however, one trust has already begun to work on new commissioning payment mechanisms for orthotics. The project team believe this is an important development and one that will inform SLAs at all levels in the future (that is, PCT to acute trust, NHS to commercial provider, and for internal charging in acute trusts). Box 12 explains this work.

Box 12

The orthotic service at Oxford is located in the acute trust, however the majority of patients who access the service are chronic patients whose ongoing care programme sit with the PCT.

Due to the growing demand of the service the acute budget is under considerable strain and with the current block contracting arrangements the service has no mechanism to increase the funding from the PCT's inline with their increased activity.

In order to prepare the commissioners for activity based funding in line with Reforming Financial Flows and to ensure the PCTs are adequately funding the needs of their patients the Nuffield Orthopaedic Centre in Oxford has produced a set of HRGs for orthotic services.

<p>A Simple (1)</p> <p>Single visit for assessment and supply of an item Includes annual review; or Follow-up of previously supplied item minor adjustment while patient waits other than maintenance</p> <p>Simple (2)</p> <p>Would include provision of equipment off the shelf simple items e.g. fabric wrist supports, silicon heel pads, stock insoles; or Problem follow up of item previously supplied where an adjustment can be made to the Orthoses at the appointment, e.g. easing an orthosis over pressure area, replacing padding, covers or strapping.</p>	<p>B Standard</p> <p>Initial assessment appointment - single professional Fit appointment Supply appointment of manufactured or purchased item Follow up appointment</p> <p>Maintenance annual</p>
<p>C Complex</p> <p>Assessment appointment – single professional Trial fit appointment Supply appointment Follow up appointment</p> <p>Maintenance bi-annual</p> <p>or</p> <p>Follow up where adjustment required entails some reworking of orthosis in workshop facility and re-fitting following adjustment.</p>	<p>D Specialist</p> <p>Assessment - may consist of more than one professional Trial Fit appointment Supply appointment Follow-up appointment</p> <p>Maintenance quarterly</p>

7. Creating a clinical data platform

For the proposed changes to be successful and sustainable, it is critical that a data platform is provided that can fill the 'hole in the data' (see 2.3.1). This is essential to:

- provide information of the level of and mix of patient demand for the service;
- to support condition based GP referral and report on the impact of this – volume and mix;
- to understand how referral changes are affecting each of the key clinical groups;
- to support clinicians and service development, in a range of ways but particularly through protocol development and assisting with peer clinical review;
- to provide primary care trusts with operational information on quality and demand;
- to provide feedback to Social Services to confirm the benefits they are securing and their service funding;
- to allow aggregation of information at SHA level to ensure strategic objectives are met.

In conclusion, the data platform is a key hub of the whole change programme.

10.3 Who needs to do what?

The report recommends that **strategic health authorities** should:

- encourage PCTs and social care services to embed orthotic services (and indeed other chronic care services) in their local health care delivery plans;
- provide earmarked finance available for five years, enabling primary care trusts to implement the proposed changes and provide better and expanded access to orthotic care;
- support PCTs in restructuring longer-term budgets to reflect the change in service provision and reduced demand for mobility care in social services;
- encourage dual funding, or transferring of the services between PCTs and acute trusts as appropriate.

The report recommends that **PCTs** should:

structurally

- embed orthotic services in their local healthcare delivery plans;
- transfer the orthotic service from acute trusts to PCTs or provide dual funding to enable the acute trust to pay for additional referrals resulting from better / expanded access;.
- have service level agreements with acute trusts to support a demand led, quality, payment-by-results imperative;.

- have service level agreements with social care to ensure funding for expanded orthotic care, which will reduce the need for expensive social care.

operationally

- set up working groups to implement the operational and structural changes;
- encourage implementation of the proposed clinic improvement changes;
- implement the proposed referral changes;
- encourage implementation of a clinical information system to support the changes.

The report recommends that **acute trusts** should:

structurally

- transfer the orthotic service to PCTs or ensure dual funding is in place to pay for additional referrals resulting from better / expanded access;
- ensure they have service level agreements with PCTs to support a demand led, quality, payment-by-results imperative.

operationally

- set up working groups to implement the operational and structural changes;
- implement the proposed clinic improvement changes;
- implement the pathfinder proposed referral changes;
- implement a clinical information system to support the changes.

Finally, the report recommends that the **Department of Health** should:

- clearly establish chronic care as a national priority for SHAs and PCTs;
- ensure SHAs are encouraged to recognise and respond to this chronic need;
- ensure that SHA priorities and financial resources are such that they are strongly encouraged to channel funds towards improving their chronic response – and as a first step to proving this approach to improving orthotic care.

10.3 What does this mean for commercial sector?

When the NHS Purchasing and Supply Agency originally began this work, a key objective was to develop new models for relationships with the commercial sector – the primary employers of orthotists. To do this, it was necessary to understand demand for the service in the NHS and then to translate this demand into the outcomes necessary to deliver clinically and cost-effective care to patients. This is very much in line with the Government's desire to engage the private and independent sector to deliver NHS services. However, such desire requires the NHS to behave intelligently in contracting for services.

It has become evident from the pathfinders that developing new models with the commercial sector cannot be achieved unless the NHS itself commissions the service appropriately. How can the NHS contract intelligently with the commercial sector if it cannot commission intelligently between primary and acute care?

We have focused on improving commissioning between primary and acute trusts to solve many of the problems that exist with orthotic services, however, if the service was moved to primary care such attention to commissioning processes shifts from the historical relationship between NHS organisations, to designing outcome focused contracts between primary care trusts and private sector providers – assuming primary care trusts continue the theme of the NHS generally 'contracting out' the service. If this was the case redesigning the relationship with commercial sector could be the catalyst for change, but this can only happen if the service was moved to primary care.

Should the service continue to be embedded in the acute care system, the project team can see no way of improving the relationship with the commercial sector without delivering the recommendations described in this report. Ironically, because the majority of the service is contracted out to the private sector, this should make it easier to transfer the service to the primary care sector. The major difficulty is the need for finance departments to agree on what the budget is that needs to be transferred with it. As we have described in this report, finance departments struggle to reach agreement.

If, however, either the changes recommended in this report were delivered or the service was transferred to primary care, there would be a need to redesign 'contracts' with the private sector in line with our suggestions for redesigning commissioning agreements. This is what we are referring to as 'intelligent purchasing' in figure 3 above. Designing such contracts could also become a useful model for primary care trusts to use as plurality begins to unfold – particularly as 'contracting' for chronic disease management is poorly developed.

The project team recommends that the NHS Purchasing and Supply Agency should work with BAPO and the commercial sector to develop new models of contracting for orthotic services, building on the work started by Oxford.

10.4 Is change optional?

Although we have stated throughout this report that the changes will not happen unless the Department of Health and strategic health authorities take ownership, the project team believe that in the long run the NHS will have no option but to deliver the changes proposed. The reasons for this are:

- the growth of patients with chronic conditions as the population continues to age will result in increasing pressure from citizens for a more effective healthcare response;
- the sharply increasing cost of the current disconnected approach will itself be a major attraction to Government to embrace these improvements. The cost to the NHS of delaying implementing of these changes is £390m per annum.(£1.1million per day) so delay seems to make little sense; and
- the proposed approach fits perfectly with three of the key strategic tenets of the new NHS: the introduction of 'Payment-By-Results', plurality and patient choice.

Payment By Results (PBR)

There are some real issues around the introduction of PBR and how AHP care for chronic diseases will be funded. The assumption is that acute trusts will ensure the cost of orthotic care provided to an in-patient episode will be covered by the national tariff for the primary HRG for which the patient was admitted, for example, H02 a primary hip replacement. The difficulty will come when an acute trust has to cover the costs of ongoing outpatient care. At the time of writing, HRGs for outpatient episodes provided by AHPs are poorly developed and simply do not exist for orthotic interventions. Those that do exist for services such as physiotherapy are merely costed on an appointment basis. This may be appropriate for physiotherapy where there are little product costs involved, but they would be inappropriate for orthotics, as the product costs tend to outweigh the costs of the orthotist.

It is therefore recommend that the National Information Authority consider options for developing HRGs for outpatient orthotic services as a matter of urgency.

Plurality

As the NHS enters into partnerships with the private/independent healthcare sector, new 'contracting' models are being developed, for example, those currently being developed for the new independent sector treatment centres. It will be necessary for any 'sub-contracted' health services to develop similar models of contacting to ensure the NHS acts as an intelligent customer. As yet, best practice is still being developed but it is clear that the NHS cannot behave intelligently without good demand data. Sooner or later this will impact on orthotic service contracting.

Choice

Patient choice pilots in the NHS are still in development but early findings are already suggesting that the majority of patients who are given a choice of provider (after waiting for six months) take up the option to have their treatment elsewhere. The primary reason for this appears to be speed of treatment. It is logical to assume that as patients become more aware

of their need for orthotic care, they are likely to seek speedier routes to clinics. Under pressure from patients, it is possible that primary care trusts will seek to use the private sector directly to meet this demand.

10.5 Summary of recommendations

Recommendation 1

The Department of Health should identify a 'lead' for considering how the benefits described in the report can be taken forward for the whole of the NHS and social care (Chapter 9)

Recommendation 2

The Department of Health/Treasury should earmark funding of £50 - £60 million over five years to deliver the changes proposed in this report (para. 10.1)

Recommendation 3

The Department of Health should encourage the strategic agenda for change by emphasising the need for new approaches to delivering chronic care services (para. 10.2 – 1)

Recommendation 4

The Department of Health and Modernisation Agency should embrace the findings of this report into NatPaCT's work on piloting new approaches to the commissioning and provision of chronic care services (Chapter 9)

Recommendation 5

The Modernisation Agency should create and facilitate a 'central' multi-disciplinary implementation team to provide focus and support for delivering change – particularly in the areas of clinical leadership, new approaches to commissioning, and the development of a platform for clinically-based reporting (para. 10.2 – 2). Such a team should provide support for strategic health authorities to guide them through the change process (para. 10.2 – 3)

Recommendation 6

The central implementation team should 'educate' chief executives of strategic health authorities, PCTs, trusts and social care on the benefits and reason for change, to ensure they demonstrate their commitment (para. 10.2 – 3)

Recommendation 7

Strategic health authorities should facilitate the development of a local multi-skilled implementation team or steering group, to coordinate change across the local organisations involved (para. 10.2 –5)

Recommendation 8

The central implementation team should guide the local implementation steering group in the key areas of: redesigning referral pathways, developing IT reporting platforms, redesigning

commissioning arrangements (service level agreements), and delivering clinic efficiency changes (level 1 changes) (para. 10.2 – 5)

Recommendation 9

PCTs and social care services should agree new service level agreements that allow payment mechanisms between them to reflect the shift in minimal increased healthcare costs to allow significant longer term benefits to social care (para. 10.2 – 6)

Recommendation 10

PCTs should design new demand-led commissioning arrangements (service level agreements) that are driven by patients' chronic needs and hold clinics accountable for their 'outputs' and quality of service. Such arrangements should be in line with 'payment-by-results' (para. 10.2 – 6)

Recommendation 11

Trusts (and PCTs where the service has been transferred to primary care) should design new budgetary arrangements for 'internal charging' of the service. Such arrangements should be in line with 'payment-by-results' (para. 10.2 – 6)

Recommendation 12

The NHS Purchasing and Supply Agency should work with BAPO and commercial sector to develop new models of contracting for orthotic services (para. 10.3). Such contracts should be driven by patients' chronic needs and hold clinics accountable for their 'outputs' and quality of service. Such arrangements should be in line with 'payment-by-results' (para. 10.2 – 6)

Recommendation 13

PCTs and strategic health authorities should embed orthotic services on the local healthcare delivery plans (para. 10.3)

Recommendation 14

The National Information Authority should consider options for developing HRGs for outpatient based orthotic services as a matter of urgency (para. 10.4)

Recommendation 15

PCTs should consider transferring the service to primary care or at least creating 'dual-funding' arrangements to reflect the mainly primary care nature of the service (para. 10.3)

Recommendation 16

Trusts (and PCTs if the service is moved to primary care) should improve clinical facilities and change the name from 'surgical' or 'patients' appliances' to 'orthotic services' (para. 3.1)

Recommendation 17

Trusts (and PCTs if the service is moved to primary care) should improve their administration processes and IT systems (para. 3.1)

Recommendation 18

Trusts (and PCTs if the service is moved to primary care) should provide adequate 'off-the-shelf' stock to support the orthotic clinic (para. 3.1)

Recommendation 19

Trusts (and PCTs if the service is moved to primary care) should utilise support staff as Healthcare and Orthotic Assistants (para. 3.1)

Recommendation 20

Trusts (and PCTs if the service is moved to primary care) should implement referral triage and forward booking systems (para. 3.1)

Recommendation 21

Orthotists should delegate aspects of orthotic care to other healthcare professionals and provide appropriate training to support this (para. 3.1)

Recommendation 22

Consultants and other healthcare professionals should delegate orthotic care to orthotists (para. 3.1)

Recommendation 23

Trusts (and PCTs if the service is moved to primary care) should introduce universal review of patients as the norm,

Recommendation 24

PCTs and trusts should implement 'condition-based direct GP access' to allow GPs to refer patients directly to orthotic services for certain conditions, rather than referring them to consultants (para. 3.1)

Recommendation 25

Trusts and PCTs should ensure mechanisms and systems are in place for 'clinical reporting' back to referring practitioners (para. 3.1)

Recommendation 26

Trusts and PCTs should ensure mechanisms and systems are in place for 'management reporting' on the performance of the orthotic service (para. 3.1)

Recommendation 27

Trusts and PCTs should ensure that the orthotic service has its own budget for which it can be held accountable (para. 3.1)

Recommendation 28

Strategic health authorities, PCTs, trusts and social care should develop a mechanism for restructuring longer-term budgets to reflect the change in service provision and reduced demand for mobility care in social services (para. 10.1)

Contacts

British Association of Prosthetists and Orthotists

Ken Andrew
Executive Professional Officer

Chris Rowley,
Chairman

British Association of Prosthetists and Orthotists
Sir James Clark Building
Abbey Mill Business centre
Paisley PA1 1TJ

Tel: 0845 166 8490
Fax: 0141 561 7218

Business Solutions Consultancy

Tom Flynn

Philip Boxer

Business Solutions Consultancy
59 Doneraile Street
London SW6 6EW

Tel: 0207 371 8156
Fax: 0207 371 8157

E-mail: tomflynn.businesssolutions@dsl.pipex.com

Appendix 1: Age Profile of Pathfinder Patients

(see Page 14)

New Referrals to the Orthotic Service By Age

Referrals By Age Group

	Ipswich %	Burton %	Stockport %	Hartlepool %	Luton %	Kings %	Average Trust %
Paediatric < 20	10	11	15	12	29	24	17
Young adult 20 - 50	19	21	25	34	31	24	26
Older adult 51+	71	68	60	54	40	52	58
Total	100	100	100	100	100	100	100

Note

Due to the chronic nature of most orthotic conditions, the orthotic patient base is much more strongly skewed to the older age groups.

Appendix 2: Orthotic Patient Sample Analysis

(see page 14)

Clinic A - Patient sample by age band (1 of 3)

Patients By Age				
Age Band		Total	Acute	PC
< 5	Paediatric	0		
5 - 10	11%	5	2	3
11 - 15		4	3	1
16 - 20		2	1	1
21 - 25	Young adult	2	1	1
26 - 30	20 - 50	4	4	0
31 - 35	21%	4	3	1
36 - 40		4	1	3
41 - 45		3	2	1
46 - 50		4	3	1
51 - 55	Older adult	14	10	4
56 - 60	51+	8	7	1
61 - 65	67%	7	5	2
66 - 70		8	7	1
71 - 75		9	8	1
76 - 80		11	9	2
81 - 85		3	2	1
> 85		6	5	1
Total		98	73	25

Appendix 2 continued: Orthotic Patient Sample Analysis

Clinic A - Patient sample by referring clinician / department (2 of 3)

Patients By Acute Trust Referrer				Patients By PCT Referrer			
Discipline	Referrer	Number	In sole		GP	Referrals	
			No	%			
Ortho	A	14	10	71%	1	2	
Ortho	B	11	10	91%	2	2	
Ortho	C	9	4	44%	3	2	
Ortho	D	8	6	75%	4	1	
Ortho	E	5	4	80%	5	1	
Ortho	F	2	0		6	1	
Rheumatology	G	11	11	100%	7	1	
Geriatric	H	2	0		8	1	
Geriatric	I	1	0		9	1	
Geriatric	J	1	0		10	1	
Diabetic	K	2	1	50%	11	1	
Medical	L	1	0		12	1	
Medical	M	2	0		13	1	
Medical	N	1	0		14	1	
Medical	O	1	0		15	1	
Paediatric	P	1	0		16	1	
Surgical	Q	2	0		17	1	
Surgical	R	1	0		18	1	
Total Acute Referrals		75	46	61%	19	1	
Referrer names not disclosed					20	1	
					21	1	
					22	3	
Department Summary					Total PCT	27	
Ortho		49	65%		GP referrer names not disclosed		
Rheumatology		11	15%		No of Patients		
Medical		5	7%				
Geriatric		4	5%				
Diabetic		2	3%				
Surgical		3	4%				
Paediatric		1	1%				
Total Acute Referrals		75	100%				
						Patients	
						Number	%
Acute Referrals						75	74
PCT Referrals						27	26
Total Referrals						102	100

Appendix 2 continued: Orthotic Patient Sample Analysis

Clinic A - Patient sample by episode defining condition (3 of 3)

	Consultant Intervention		Possibility of no consultant intervention
	Surgical	Stabilising	Natural
Surgical	19		
LLD	10		
Others	9		
Stabilising acute problem		4	
Stabilising fractures		3	
Others		1	
Natural			76
Flat / Cavus feet			16
Metatarsalgia			8
Rheumatoid arthritis			8
Osteo arthritis			5
Plantar Fasciatis			6
Foot deformity			4
Lower back pain			4
Foot drop			4
Hernia			2
Others			19

Appendix 3: Ipswich Change Summary (1 of 2)_

Summary of Clinic Benefits (& costs) Arising from Proposed Changes

Change No	Description	Benefits realised within the orthotic clinic				Other clinician Impact		
		saving £K	Orthotist appts/wk	Admin hrs/wk	Stock Hours	Physios Appts/wk	Consultant hrs/week	Nurses appts/wk
B1	Extra clinic room to increase capacity	-	-	-	-	-	-	-
B2	Electronic Clinical Notes	-	3	-	-	-	-	-
B3	Mix new / fitting adults => cast in one	-	1	-	-	-	-	-
B4	Child cast - 2 rooms/ 2 clinicians	-	6	-	-	-	-	-
B5	Orthotist to have support in clinic	-	15	-10	-	-	-	-
B6	Insole Stocking	£5.6	6	-	£2.8	-	-	-
B7	Orthotist assess all campsalite(stock)	£0.0	-4.5	-	£2.4	Adult 3	-	-
B8	Stock Malleloc / Aircast	£0.0	4	-	£2.0	Adult 3	-	-
B9	Patients purchasing extra orthoses	£10.7	2	-	-	-	-	-
B10	Robust ladies LFO protocols	£5.0	2	-	-	-	-	-
B11	Paediatric Insole stocking	£0.0	1	-	£1.2	Children 15	-	-
B12	Promotion of clinical Capabilities	-	-	-	-	-	-	-
B13	Delegate clinical decision to orthotist	-	1.5	-	-	-	1	-
B15	Direct Referral by Physios	-	-	-	-	-	-	-
B16	Direct GP Referral -specific conds	-	-	4	-	-	4	-
B17	Communicate to GP @ episode end	-	-	-	-	-	-	-
B18	Provide Nurse Training	-	-1	-	-	-	-	-
B19	Delegate Pressure Stockings	-	2	-	-	-	-	-
B20	Increase & Formalise delegation	-	2	-	-	-	-	-2
B21	Improve Written Orthoses Notes	+	-	-	-	-	-	-
	Total Clinical Benefit	£21.3	40.0	-6.0	£8.4	21.0	5.0	-2.0
B14	Universal Review Sessions	-£14.4	-36	-	-	-	-	-
	Net clinic Benefit	£6.9	4.0	-6.0	£8.4	21.0	5.0	-2.0

Appendix 3 continued: Ipswich Change Summary (2 of 2)_

Key Level 1 - Patient Benefits

Change Description	Patients Benefitting	Key Impact Area	Smaller Orth queue	Faster Treatment	Fewer Visits	Improved Quality	More Informed	More choice	Total Effect
Universal Review Sessions	90%	More frequent care	-	-	-	VV High	High	-	VV high
Clinical system to support clinician	100%	More clinican time for patient	-	medium	-	high	-	-	high
Increased orthosis stock	25%	Reduced patient visits	V High	-	V high	medium	medium	medium	High
Orthotist to have support in Clinic	100%	Reduces orthotic queue	high	medium	-	-	-	-	High
Restructure clinic for better quality care	100%	Improved quality of care	-	-	-	medium	-	-	medium
2 clinic rooms => better use of clinical time	10%	Reduces orthotic queue	high	medium	-	low	-	-	medium

Summary of Key Level 2 - Patient Benefits

Change Description	Patients Benefitting	Key Impact Area	Smaller Orth queue	Faster Treatment	Fewer Visits	Improved Quality	More Informed	More choice	Quality Effect
Direct GP Referrals :specific conditions	variable	Saves consultant visit & delay	VV high	-	V high	-	high	-	V high
Direct Referral by Physios	variable	Saves delay for approval	medium	medium	-	-	-	-	medium
Delegate clinical decision to Orthotist	100%	Better treatment response	medium	Low	medium	-	-	-	medium
Delegate some orthoses to colleagues	10%	Earlier treatment	medium	High	medium	-	-	-	medium

Appendix 4: Patient Condition Analysis

(nb direct referrals are the patients clinicians assessed could be direct referred, rather than are)

Orthotic Patient Conditions (sample of c 600 referrals across 6 Trusts)		Ipswich	Burton	Stockport	Hartlepool	Luton	Kings	Average Trust
		%	%	%	%	%	%	%
Surgical		14	19	5	3	9	5	9
	LLD	6	10	5	3	7	5	6
	Others	8	9	0	0	0	0	3
Stabilising acute problem		2	4	3	10	3	3	4
	Stabilising fractures	2	3	3	9	1	3	3
	Others	0	1	0	1	2		1
Natural	84	84	77	92	88	88	92	87
Direct Referral		37	41	50	41	47	44	43
	Flat / Cavus feet	22	16	16	15	14	18	17
	Metatarsalgia	2	8	14	7	4	7	7
	Plantar Fasciitis	2	6	6	5	5	5	5
	Lower back pain	2	4	3	2	4	2	3
	Bunion	5	4	4	5	4	5	5
	Others	4	3	7	7	16	7	7
Acute Referral		37	29	37	39	30	37	35
	Rheumatoid arthritis	6	8	3	5	1	4	5
	Osteo arthritis	2	5	1	7	5	3	4
	Hernia	6	2	8	3	3	2	4
	Foot deformity Orthopaedic	5	4	6	5	7	14	7
	Foot drop Orthopaedic	6	4	2	6	10	7	6
	Talipes Orthopaedic			3		3	1	1
	Ankle Orthopaedic			3				1
	Neck Orthopaedic			4	1		2	1
	Knee Orthopaedic			4	12	1	4	4
	Vascular	12	6	3				4
Others		10	7	5	11	9	11	9
Direct Referral	%	41	44	52	45	53	48	

Appendix 5: Condition Protocol for Direct Referral (Burton)

Orthotics Department *Queens Hospital – Burton on Trent*

Information for Health Professionals

Telephone – 01283 566333 x 5077

Fax – 01283 593007

Clinic Timing

Monday	1.30pm – 5.00pm
Wednesday	9.00am – 12.30pm 1.30pm - 5.00pm
Friday	9.30am - 1.00pm

All clinic attendance is by appointment only

The department is open	Monday, Tuesday, Wednesday	9.00 – 5.00
	Friday	9.00 – 2.00

Direct referral Facility

General Practitioners have the facility to refer patients directly to the Orthotics Department for assessment & treatment by the orthotist.

At the GP’s discretion, the following conditions may be referred directly to the orthotics Department:

Foot Conditions	Other Conditions
Metatarsalgia	Carpal Tunnel Syndrome*
Asymptomatic Flat Feet	Tennis Elbow
Bunions (not requiring surgery)	Leg Length Discrepancy
Chronic Foot Drop	Achilles Tendonitis **
Plantar Fasciitis **	

* in the early stages this may be treated with a wrist brace.

** combined physiotherapy & orthotic treatment is often the most effective response

A brief description of each of the above conditions and the typical Orthotic response is contained in the accompanying patient information note – which can be copied and passed to patients.

The initial clinical response to chronic lower back pain & neck pain is physiotherapy. When physiotherapy treatment does not provide relief, then orthotic treatment may be beneficial in supporting the physiotherapy treatment.

By completing an Orthotic referral form and forwarding to the orthotics department. The department will then contact your patient and make an initial appointment.

It is helpful when the GP states clearly on the form what problem the patient needs to have addressed by Orthotic treatment. The orthotist, on examining the patient, can then decide on the most appropriate Orthotic device.

- The initial patient session will consist of:
 an assessment & examination of the patient.
 A discussion with the patient as to their condition & the proposed Orthotic treatment.
 Appropriate measurements taken to make the orthosis.
 Arranging a follow up appointment if necessary.
- Follow Up Appointment (sometimes more than 1) will consist of:
 Fitting of the orthosis.
 Assessment of the function of the orthosis.
 Acceptance by the patient.
- Review Appointment will consist of:
 Re-assessing the patient condition for any changes.
 Checking the condition of the orthosis.
 Review treatment & revise if necessary

Speed of Treatment

Receipt of GP Referral		
Initial appointment	2 – 4 weeks	
Follow appointments	2 – 4 weeks	
Review Appointment	4 – 26 weeks	

The rapid treatment response is particularly important for patients who are in pain and may have to wait some time for surgical / other treatment

The orthotist may, if necessary:

- Refer the patient on to other clinical services.
(Physiotherapy, Occupational Therapy)
- Refer the patient on to the Orthopaedic consultants.
- Refer the patient back to you with recommendations.

At the end of the initial session, we will send a letter to the GP detailing the orthotic assessment and actions proposed. After any subsequent review where there was a significant change in the patient's condition or Orthotic treatment, we will send a further letter to the GP.

They should contact the orthotic department directly – see contact information below.

Most orthoses are prescribed free of charge. The only orthoses subject to prescription charges (with exemptions applying) are:

Spinal & abdominal Supports (Made to measure only)	£ 31.50
Elastic Hosiery	£ 12.40

Recent changes made to improve the service in Burton are:

Clinical facilities are being improved

Significant stock will be maintained to enable faster patient treatment.

An additional clinic will be provided each Friday.

We welcome any other suggestions you may have that will help us to improve the service.

Elaine Banton, Orthotics Department, Queens Hospital

Tel - 01283 566333 ext 5077

Appendix 6: Sample of Patient Notes (Burton)

Treatment of Conditions Affecting Joints

(Prepared by Orthotics Department – Queens Hospital Burton)

There are some conditions affecting different joints that can primarily treated by the use of orthoses. Some of these conditions and the benefits an orthosis offers are:

Carpal Tunnel Syndrome

What is it? Compression of the nerve passing through the wrist causing pain, numbness & tingling in the hand

Benefits of orthosis Typical orthosis would be a wrist brace to position the wrist so as to relieve the compression of the nerve & allow the nerve to heal.

Tennis Elbow

What is it? Pain on the outer part of the elbow due to inflammation of the tendon.

Benefits of orthosis Typical orthosis would be a tennis elbow clasp to relieve the tension of the tendon to enable the tendon to heal.

Neck Pain

What is it? Pain in the neck area caused by conditions like arthritis or injury.

Benefits of orthosis Typical orthosis is a collar, which can be either soft, semi-rigid or rigid depending on symptoms.

Chronic Low Back Pain

What is it? This can be cause by conditions like slipped disc, arthritis, muscle weakness etc of by injury.

Benefits of orthosis Typical orthosis would be a fabric back support (corset) to help stabilise the condition and reduce pain.

Leg Length Discrepancy

What is it? When one leg is shorter than the other, either naturally or due to hip or knee surgery, causing back pain.

Benefits of orthosis Typical orthosis would be to raise one shoe so as to make the leg lengths equal.

Visiting The Orthotic Clinic

- The 1st visit will include assessment of the patient's condition. Where a patient requires a standard orthosis this may be supplied on the same visit.
- If a customised orthosis is more appropriate for the patient's needs all the necessary measurements will be taken on the 1st visit & a follow up appointment(s) made for the provision of the orthosis.

Patient Review

- After provision of an orthosis, a review appointment will be made to assess the effectiveness of the orthosis.

Appendix 7: Detail of changes proposed

Proposed changes were agreed for each pathfinder site and for each change the following were estimated with supporting information:

- Patient benefit - numbers of patients benefiting and relative importance
- Time benefit – clinical and administrative time saved – or additional time needed
- Cost saving or increase as a consequence of the change.

Each pathfinder site developed its own specific set of changes reflecting local factors. To fully grasp the breadth and depth of the changes for an individual site it is essential to consider the detailed site recommendations. These recommendations were split into clinical and administrative changes, numbering in total 30 – 60 and all the changes summarised. (see Appendix 3). The Ipswich Summary of Patient Benefits (see below) highlights the relative importance to patients in terms of the area and scale of impact.

Ipswich Hospital – patient benefit high level summary

Summary of Patient Benefits

Change No	Description	Key Impact Area	Smaller Orth queue	Faster Treatment	Fewer Visits	Improved Quality	More Informed	More choice	Quality Effect
B1	Relocate clinic to increase capacity	Reduces orthotic queue	V High	-	-	-	-	-	High
B3	Mix new & fitting Adult => cast in one	less visits	-	Low	Low	-	-	-	Low
B4	Child cast - 2 rooms/ 2 clinicians	Reduces orthotic queue	High	-	-	-	-	-	High
B5	Orthotist to Have support in Clinic	Reduces orthotic queue	V High	-	-	-	-	-	High
B6	Insole Stocking	Reduced patient visits / episode	High	High	-	-	Medium	Medium	High
B7	Orthotist assess all Campsolite(stock)	Clinical negligence risk reduced	-	-	-	High	Medium	Medium	Medium
B8	Stock Malleloc / Aircast	Reduced visits	Medium	Medium	Medium	-	Medium	Medium	Medium
B9	Patients purchasing extra orthoses	More patient choice	-	-	-	-	Medium	High	Medium
B11	Paediatric Insole stocking	Reduced patient visits / episode	-	High	High	-	Medium	Medium	high
B13	Delegate clinical decision to Orthotist	Need to refer back	Medium	Low	Medium	-	-	-	Medium
B14	Universal Review Sessions	More frequent care	-	-	-	VV High	High	-	VV high
B15	Direct Referral by Physios	Saves 2 weeks approval	Medium	Medium	-	-	-	-	Medium
B16	Direct GP Referrals :specif Conditions	Saves consultant visit	V high	-	High	-	High	-	V high
B19	Delegate Pressure Stockings	Care in wards	Medium	High	Medium	-	-	-	Medium

The key pathfinder changes are outlined below, This section aims to indicate the nature and scope of the changes rather than provide an exhaustive list of all changes from all Trusts. Clinical changes, the key to transforming the service, are considered in some detail in 4.3.2. Administrative changes are considered in less detail, as these are mainly operational rather than strategic in 4.3.3.

Changes are classed as either “General” (applied to most sites) or “Local” (applied to a specific site)

Pathfinder clinical changes

(the benefits highlighted are indicative and varied from clinic to clinic)

C.1 Orthotist to have support in clinic and two clinic rooms

With pressure on administrative staff, orthotists often have little support in clinic. If orthotists had support in clinic, some tasks currently done by them could be done by administrators, reducing appointment length or allowing more clinical time with patients. Tasks, which could be delegated, include:

- Bringing patients into (taking patients from) clinic.
- Assisting patients in getting ready in / after clinic.
- Preparing patients for casting/cleaning patients after casting.
- Doing more of the paperwork.

The gap between one patient leaving & the next entering clinic can be several minutes. By simply reducing this, support staff free valuable clinic time. Elderly patients can be slow to enter/leave clinic & it can be a serious problem for the clinician to end an appointment where clinical activity has finished, but where the patient is still discussing more general matters. Administrator clinic support & a 2nd clinic room can help orthotists achieve much better use of their time & reduce the level of pressure both they & patients are under if there is only 1 clinic room. A 2nd clinic room can be particularly valuable in a joint clinic (e.g. with a physiotherapist), as for much of the time a 2nd patient can be seen. (see also C.4)

Freeing clinic support staff to provide in clinic support is of the highest priorities

Impact	Effect of the change
Quality	Improved patient support. Reduced patient wait as clinic capacity increased.
Cost	No impact – redirects administrative effort to be more centred on the patient Capital cost of 2 nd clinic room c £ 5,000
Time	Increase patient appointment by c 15+ apptmts / wk

C.2 Improve the clinic facilities to provide better patient care

Some clinics have features, which reduce the quality of patients' clinical sessions:

- There is little privacy in the clinic (screened only by a curtain) & consultations can be clearly heard by patients in the waiting room and in the office area.
- The patient waiting area can be located 20 yards from the clinic – along distance for an elderly person with reduced mobility

The clinic environment does not reflect a professional environment to patients:

- Clinic couches may be inadequate
- There is no place to store clinical notes & orthoses for patients attending clinic – clutter.
- There are battered filing / storage cabinet everywhere.

C.3 Book a mix of appointments in each session to best accommodate uncertainty

Pathfinder clinics are adopting an approach where they load sessions with a mix of appointments so as to best cope with uncertainty, particularly likely to arise in 1st appointments (casting?). Sessions will often have a maximum number of first appointments, interim/final appointments & reviews. In this way it is more likely when a cast arises, the orthotist can accommodate this in that first session rather than having to book the patient an additional appointment.

Impact	Effect of the change
Quality	New patients cast in 1 st appointment – saves patients returning.
Cost	No impact
Time	No 2nd cast appointments frees orthotist sessions

C.4 Increasing Clinic capacity in joint paediatric clinics

Local

Currently, most children’s clinics have a physiotherapist in attendance. When casting is in process (regular) the physiotherapist has no active role in the casting process & is inactive for 20 minutes.

If a 2nd clinic room is available, the physiotherapist could “fit” the next child. Having completed casting, the orthotist can confirm the fitting. This fully uses the clinical skills available & sharply increases the “paediatric orthotic” clinic capacity. This requires physiotherapy agreement & a 2nd clinic room. Both physiotherapists and orthotists were happy with this as it directly increases the joint clinic capacity and reduces patient wait.

Impact	Effect of the change
Quality	Children seen more quickly for fitting.
Cost	No impact
Time	Creates an extra 6 child appointments / week (Ipswich)

C.5 Stock commonly used products to maximise completion of patient treatment in 1st session & ensure patients can see their orthosis

General

Pathfinder clinics all held stock of orthoses, but the amount held varied greatly & was low. The prime reason for low stockholding was that Finance Depts wanted to minimise stock to save cost. However, there was no analysis in any Trusts of the benefits of additional stockholding. After considering the patient sample & reviewing orthosis usage, the question of stock holding was re-considered in detail and the benefits quantified: The major benefits of stock are:

Patient Benefits

- If a patient receives an orthosis from stock they need 1 appointment rather than 2, and receive their orthosis more quickly.
- Patients can see their orthosis on their 1st visit even if they cannot have it. This helps them make decisions & have clearer expectations of the outcome early.

Trust Benefits (in addition to improving patient care quality)

- Stock supply halves the number of clinical sessions needed, saving time and money.
- Stock reduced administration, with volume rather than single ordering. (fewer orders)
- Discount from suppliers as actual supply cost reduced. (5 – 15%)

Orthoses stocked as a result of the pathfinder included children's insoles, adult stock insoles, adult modular insoles, heel pads, diabetic footwear, AFO's, knee braces, hip braces etc. Pathfinder clinics are now achieving c30% of patients receiving stock orthoses.

Impact	Effect of the change
Quality	Patient care quality improved – faster treatment, fewer visits, ability to see orthoses
Cost	Purchase cost reduction of £ 5,000 p.a. Stockholding of £ 8 – 15,000
Time	Reduces orthotist appointments required by 6 - 15 / week.

C.6 Stock Hip Braces To Accelerate Patient Release - Burton

Local

Hip braces are used c 1/week usually with patients recovering from hip replacement. The hip brace is a critical element in rehabilitation. If there is a delay in supplying the hip brace, the patient may have a delayed discharge. Stocking hip braces ensures more rapid discharge. Hip braces will be stocked for immediate fitting. The economics of stocking hip braces offers huge payback for Trusts.

Impact	Effect of the change
Quality	Improves speed of clinical response to hip replacement patients.
Cost	Saving - frees (2.8 bed days / week x £ 300 x 52) £ 43,700. Stockholding £ 2,400
Time	Orthotist makes only 1 visit to in patient rather than 2

C.7 Improved Communication with Other Clinicians to ensure better use of the orthotic service and more holistic care provision

General

The knowledge & awareness among clinical & other staff of the skills, competency & ability to contribute to patient care of the orthotics department is low. To a large degree, responsibility for this lack of awareness must rest with the department itself, which has not promoted its capabilities to other clinical staff. This lack of promotion is partly driven by the pressure to use the orthotist's time exclusively to treat patients with few exceptions – e.g. orthopaedic nurse training etc.

By increasing time spent on development & communication, the effectiveness of the Orthotic Dept – teaming with other clinicians – will improve and contribute to better patient care. This will require clear agreed objectives & additional orthotist time. The following improvements depend on this:

Direct referral by physiotherapists & increasing their awareness of orthotics

Prior to pathfinder, physiotherapists in all Trusts had to obtain consultant approval to refer patients to orthotics. As no request was ever turned down, approval added no value, wasted consultant time & delayed patient treatment. Direct physiotherapy referral was proposed by physiotherapists & consultants. A leap in physiotherapy referrals was expected – but this has not been large.

This suggests there is a need to raise the orthotic profile & provide information to physiotherapists as well as to make available new referral pathways – if these changes are to be used to best effect.

Provide more training to support nurses using orthoses from their stock cupboards

Orthotists provide training to orthopaedic nurses but there are gaps where they have not received training. In addition, new nurse arrivals on the ward require training. The main orthoses nurses fit & need to receive training on include: back supports, hosiery, foot supports, knee braces, wrist braces, etc. Regular training will ensure patient clinical care quality is kept high.

Encouraging other Clinicians to “sit in” on Orthotic Clinics

It can be of great benefit to nurses/other clinicians to attend an Orthotic clinic session, so they gain first hand awareness of what the orthotist does. This experience significantly contributes to “building professional bridges”.

Change the Department name to Orthotics

If the Department is promoting its clinical capability & focusing on its core competence of skeletal structure correction, its name should fit with its aspiration of being a major clinical contributor. The name “Surgical Appliances” suggests an object rather than a clinical service. The days of “handing out objects” may be long gone & orthotists may be highly trained, skilled AHP’s, yet some staff still refer to them as “fitters” & are unaware of their clinical input. Although it may take time to change the mindset of all colleagues, the sooner all signals point in the correct direction the better.

C.8 Clinical Notes maintained Electronically on Main Hospital IT System General

Pre-pathfinder, clinical notes were made manually by the orthotist. Clinic notes are now dictated by the orthotist, put on the main PAS & are accessible to all clinical staff (Burton). The benefits of this are:

- Clinical notes available to hospital staff. (integrates orthotist into hospital clinical team)
- Clinical notes are now available to GP’s if required.
- Results in a significant saving in orthotist’s time

This demands orthotists change their routine but improves patient care, as more time is available for treatment. The orthotist needs a screen in clinic to access any clinician notes from PAS. This change depends greatly on the capability of the Trust PAS system.

Impact	Effect of the change
Quality	Enables orthotist assessment, orthoses diagnosed to be viewed by other clinical staff – doctors, nurses and PAMS. More time focused on clinical care & less on admin.
Cost	Dictaphone and tapes required once off – c £ 50.
Time	Saves c20 minutes orthotist’s time / 3 hour session

C.9 Referral forms to delegate clinical responsibility for deciding the most appropriate orthotic treatment to the orthotist **General**

Orthotic referral forms typically specify both the type of orthosis required & the assumed treatment duration (for a consultant usually 5 years) – after which a patient is referred back to the referrer. With the many changes in orthotic care and the ever expanding range of treatment options, consultants are not aware of the full range of orthotic options - & indeed this would be an unreasonable expectation, with the many other requirements on their time. By delegating the orthotic clinical decision to the orthotist, consultants will achieve a better clinical outcome for their patients – particularly in footwear requests.

BAPO have recently produced a recommended referral form to achieve these objectives. **This change again emphasises & supports the orthotist’s role as a member of the clinical team.**

Impact	Effect of the change
Quality	Most appropriate orthoses provided to patients. Improved patient care.
Cost	Reduces orthotic costs as over specified orthoses are sometimes provided
Time	Saves orthotist time

C.10 Institute Universal Reviews **General**

The patient review protocol within all the Orthotic Departments was informal. The majority of patients were not being reviewed but certain groups were reviewed:

- Children & Complex patients.
- Patients whose condition was likely to change – e.g. degenerative
- New patients where orthotic response needed confirmation – e.g. concern over use.

Consequently, the great majority of patients were not reviewed. There was therefore little formal clinical control over the effectiveness of the orthosis after supply and it was the patient’s responsibility to notify the orthotist if there was a problem. This reactive approach, where many patients were elderly is not “best care”, which could be provided. Ensuring patient care after prescribing an orthosis will become an even more key factor when:

- Referring clinicians delegate the decision on orthotic response to the orthotist.
- Increasing number of patient are directly referred by GP’s.

To provide the essential, highest standards of patient care and clinical governance, orthotic clinics should adopt universal review. The exact impact of the resulting review appointments will only become clear through experience and will depend on local implementation protocols. However, it is expected to require an extra 15-30% clinical time, if the review frequency is a maximum 12 months.

Impact	Effect of the change
Quality	Significant patient care quality improvement. Improved clinical governance Patient problems identified faster by this proactive approach & remedied early.
Cost	Cost of clinical time – but reduces litigation risk/cost dramatically
Time	Increased orthotist time needed – protocols are vital for effectiveness

C.11 Paediatric Insole Stocking in Physiotherapy**Local**

Currently, physiotherapy supply c15 Globotech & Shine insoles / week – and with no stock all insoles are ordered individually. Patients therefore need 2 physiotherapy clinic visits. It is proposed to stock these items saving significant clinical time & greatly improving the service to patients.

Impact	Effect of the change
Quality	Physiotherapy patient care greatly improved – visits halved
Cost	There should be some reduction in cost thro' volume ordering – c10%
Time	Eliminates 15 physiotherapy appts / wk

C.12 Delegating Orthotic Provision to Other Clinicians to Improve Patient Care**General****Pressure Stockings Delegation to General Medicine/Varicose Vein Nurses**

Orthotists' core competence is the correction of structural defects of the skeleton. Orthotists therefore adds "little / no value" fitting standard pressure stockings where there is no structural aspect. The training given to nurses on these products is often poor, requiring them to refer patients to the orthotist. Clinicians involved agree that patient care would be improved if varicose vein & general medical clinics stock & fit these orthoses. Orthotists should have no involvement in the supply of standard stockings but should still fit custom stockings where greater measurement skill is needed.

Impact	Effect of the change
Quality	Patient care provided at 1 st contact, faster response, fewer visits, less fragmented patient care. Better trained staff are responding to patient need
Cost	None
Time	Reduces orthotic patient appointments

Wigs Provided by the Oncology Department

For historic reasons in some Trusts, wigs are provided by the orthotics Dept. This provides patients with fragmented care as their wig requirements could be met in the ward where they are treated. It is recommended that provision of wigs by orthotic Departments ceases.

Impact	Effect of the change
Quality	Improved, consistent quality for patients requiring wigs Orthotic Department can focus more on its core skill
Cost	None

C.13 Improve and standardise written notes to go with orthoses**General**

Trusts varied in the information they provide to patients. Ideally these written notes should either be put on the main hospital system or a word processing package for ease of access. Prior to a clinic, as well as looking out the orthoses and patient notes for a clinic a copy of the relevant guidance notes should also be left ready for the patients. Guidance notes are an opportunity to talk about patient responsibility for maintenance etc. as well as the specifics of product usage.

Impact	Effect of the change
Quality	Provides the patient with more relevant information – better service quality. Should enable better patient use of orthoses.
Cost	Little cost addition – will this extend orthosis life/ increase effectiveness?
Time	Little time overhead once set up.

C.14 Allow patients to Purchase additional orthoses - & promote this service Local

There was considerable variation in the number of orthoses provided by pathfinder Trusts to patients (e.g. patients, with identical conditions, receive either 1 pair of insoles or 2 depending on where they live), with economic reasons being the primary justification for restricting supply. Currently, some patients request additional orthoses & offer to pay for these. But frequently the Trusts decline to meet these patient requests. The Trusts were not able to explain sensibly why they refused to provide patients with what they required other than to claim this required extra administration.

It is proposed that patients be advised additional orthoses can be purchased. Where patients wish to purchase these, this will be provided at the initial session. Patients will benefit through greater flexibility & being better covered for breakage. The NHS will reduce the patient visit frequency & orthotic cost, as patients are choosing to pay part of their orthotic cost.

Impact	Effect of the change
Quality	Less patient clinic visits. More patient flexibility / cover in case of breakage
Cost	Saving of £ 5 k / annum (soft estimate)
Time	Should reduce appointments required by 2 / week

C.15 Protocols to ensure orthoses supplied only to patients willing to wear these General

Patients presenting with a lower limb problem may require – shoes, AFO's, FFO's. They are assessed & would derive a clinical benefit from the orthosis. However, the orthosis requires "comfortable shoes" to accommodate it &/or may make the patient look cosmetically "different". Regardless of the psychological element, the orthosis is currently supplied. Many patients (most frequently ladies) will either not purchase the necessary "comfortable" footwear &/or simply do not wear the orthosis, a clear resource waste. In these cases, it is better not to supply the orthosis or to supply a less obtrusive orthosis, which though not providing the full orthotic benefit, does provides some patient benefit.

Impact	Effect of the change
Quality	Orthotic response appropriate to the patient lifestyle
Cost	Saving of £ 5 k / annum (soft estimate)
Time	Should reduce appointments required by 2 / week.

C.16 Direct GP Referrals – for specified Conditions

General

Currently, if a GP decides his patient needs orthotic care & sends a referral to Orthotics, most Departments cannot accept this referral.

The reason for this clinically inappropriate, patient unfriendly, administratively & clinician time wasteful approach is to do with the orthotic budget. The orthotic budget is delegated from other clinical budgets (e.g. orthopaedics, paediatrics, etc) & from an administrative perspective every orthotic patient must be accepted by a budget holder – therefore a GP referral cannot be accepted unless the referral goes through a consultant.

The majority of patients (60%) have naturally occurring skeletal problems, which do not require surgical intervention. (based on samples from each pathfinder – see Appendix 4) In many cases, these conditions can be identified by GP’s. The Orthotic clinic’s first priority must be to provide a clinical service to patients – not other clinical Departments. The current system forces GP’s to refer patients to orthopaedic consultants, so they can be referred on to orthotics & is a slow (patients often waiting 6 months to see a consultant), poor response to patient need & wastes GP & consultant time.

Additionally, as the orthotic response is now delegated to the orthotist (see C8), cost is not controlled /decided on by the referrer, so the current budget approach does not match responsibility & authority. It is therefore vital Orthotics has its own budget to support primary care referrals to reflect the source of its patients & clinical responsibility. This will enable more effective patient centred approach.

GP’s should be able to direct refer (for specified conditions – see Appendix 5) The effect of direct referrals will be to:

- Reduce new patient waiting time by c 26 weeks (not being queued for consultants)
- Save orthopaedic consultant time. (c 10 hrs/month – 14 referrals @ 0.7 hour for referral/review)
- The most dramatic effect of opening direct GP referral, is to increase patient referrals to orthotics. This results from GP’s receiving information from the clinic on the service provided & most importantly having feedback on their patients’ treatments and effectiveness, as well as knowing their patients will not having long waits, (average increase c 20%)

Impact	Effect of the change
Quality	Reduces current new patient waiting time from 40 weeks => 13 weeks. (av) Stops patients wasting time attending inappropriate appointments. Reduce orthopaedic waiting list by 84 patients (14 x 6 months) Increases the number of patients referred and receiving care
Cost	Nil
Time	Saves c 10 consultant clinical hours / mth Saves c 2 hours consultant admin hours / mth Saves c 4 hours / mth orthotic admin time (Local) Saves c 4 hours / mth of medical records admin time. (Local)

Although GP direct referral protocols have been agreed in all pathfinder trust by ACT & PCT clinician as being the most effective way to provide patient care, GP direct referral has been blocked in four of the six pathfinder clinics due to the inability of senior managers / financial managers to agree how the essential restructuring of budgets should be done. As a result, neither these Trusts nor their patients have realised the major benefits that are achievable.

C.17 Improve Communication with GP’s & their patients pre referral and at the end of clinical episodes General

Orthotic Departments should issue guidance notes to all GP’s on the conditions, which can be directly referred, the likely clinical response patients will receive & the process they will go through in the orthotic clinic. GP’s should also have notes available to them, which can be issued to patients to provide them with information on the orthotics service. (see Appendix 6) At the end of an orthotic clinical episode (resulting from a direct GP referral), it is vital to communicate with the GP to confirm what the clinical response was & advise the GP of ongoing clinical involvement. This ensures GP communications are closed professionally & is a central plank in building awareness among primary care clinicians of the clinical contribution orthotics can make to their patients. This closed loop will encourage direct referrals – especially if supported by communication & promotion.

Impact	Effect of the change
Quality	Improves link with primary care GP’s – encourages increased direct referrals
Cost	None
Time	Little

Where direct GP referral was blocked (see C16) improved GP communication was also blocked.

C.18 Produce a Monthly Orthotic Department reporting package General

A monthly orthotic package should be produced & serve as a review package for monthly meetings for between Department staff and the service manager. This review should focus on operational performance parameters, including patient quality measures, but additionally contain financial information.

A key aspect of the pack should be that review meetings should encourage and review changes / improvements & the pack should reflect the benefit of these. (see attachment MM – sample)

Administration Improvements

Orthotic Clinic Administration – a summary

Administration systems in Pathfinder Trusts varied greatly but the following were consistent themes:

- Poor provision of computers & IT training => poor use of IT
- Absence of any clinical systems/clinical reporting with only cost reported on
- Large amounts of paper handled – much of which could be scrapped.
- Opportunities to simplify administration with suppliers / other hospital departments.

This situation reflects the lack not only of investment and but also of management focus on Orthotics. There is a major opportunity to reduce wasted time and use this to better support orthotists to improve patient care and clinician communications. Typically pathfinder administration time savings were c 20 - 40%.

The following illustrate the initial situation and improvements made in each theme areas.

A.1 Poor provision of computers & staff training

General

- Every pathfinder trust needed to upgrade their PC's, which were old (> 4 years). Slow older equipment wasted considerable staff time.
- Ipswich's PC was so old it could not receive e-mail despite e-mail being sent to the Dept.
- Stockport's PC was provided by a supplier, so couldn't be connected to the hospital system.
- Burton had an old machine with no printer, so could not produce communications.
- Most trusts shared computers between administration staff, so PC access was a bottleneck.
- Clinicians had little access to clinical notes, patient records etc due to lack of equipment.
- Staff had in most cases received no training in basic Microsoft Office, e-mail etc
- Staff frequently had little training on the software they used and consequently were wasting considerable time & not using the functionality available.

Actions taken

- **Pathfinder invested in new (& more) equipment and networked this.** **General**
- **Staff supported in learning how to use IT effectively to support the clinic.** **General**
- *Burton patient communications had all been manually done or informal.* **Local**
With staff increasingly confident in using systems the following standard letters were automated on the Meditec System:
 - Patient appointment letter.
 - Patient record file sheet
 - Patient initial appointment form and information note.
 - Patient subsequent appointment form.
 - Advice to patient that repair is available for collection.

A.2 Absence of clinical systems/clinical reporting**General**

- No Trusts had any clinical information system at the start of Pathfinder.
- Orthotic Depts therefore developed a “hole in their data”, (see 4.2.1)
- Service managers were focused only on operating costs – reported usually by accounts.
- Consequently, there was no clinical reporting, no ability to develop the service, justify investment or communicate effectively with clinical colleagues.

Actions Taken

- **installed Rapport (a clinical system used by orthotists & administration staff) in 4 of the 6 pathfinder clinics with plans to install in the others.**

A.2 Large amounts of paper handled – much of which could be scrapped**General**

Little management time had been spent supporting staff in improving processes and developing effective administration systems. This led to significant duplication, irrelevant paperwork and processes in all the clinics, which wasted time, confused staff, complicated activity and filled the clinic with paper.

Typical Action Taken (Local)

Ipswich administration system was fragmented, time consuming and overloaded with redundant paper. Pathfinder restructured all the paper filing systems eliminating approximately half the paper in clinic to form a single, simpler system.

A.2 Opportunities to simplify administration with suppliers/hospital depts**General****Actions Taken**

- **Eliminate Provision of Irrelevant Information:** (Burton) Burton recorded on each order patient name, hospital number and in addition the patient’s full address. Supplier did not use this address information. Providing this information unnecessarily means more patient information outside Queens. Additionally, this was time consuming, as it required staff to access the system, extract address information & manually copy it onto orders. **This unnecessary work stopped. Local**
- **Stop requiring repeat prescription requisition approval by consultants: (Ipswich)** When a patient needs a repeat orthosis, a requisition is prepared & sent to the consultant for approval with clinical notes. As most patients referred for orthotic care are chronic, consultants believe there is no benefit “signing! – **& indeed these are always signed.** Repeat orthoses should not require consultant approval as this wastes valuable consultant and administration time. If patients do not require a repeat orthosis, the orthotist (through universal review) will either stop providing the orthosis or refer back to the consultant to make a decision. **This unnecessary work continues at the insistence of finance Local**
- **Stop duplication of physiotherapy patient records: (Ipswich)** When Paediatric Physiotherapy patients need orthoses, orthoses are sourced from orthotics and the physiotherapist maintains a patient record. Historically, orthotics have also created a

duplicate patient record even though they do not see the patient. (these are physio patients & not orthotic patients) Both departments agreed this duplication should stop and that this had happened because orthotics & physiotherapy simply had not had time to talk. (Ipswich)

Duplication stopped saving significant time/duplicated records scrapped

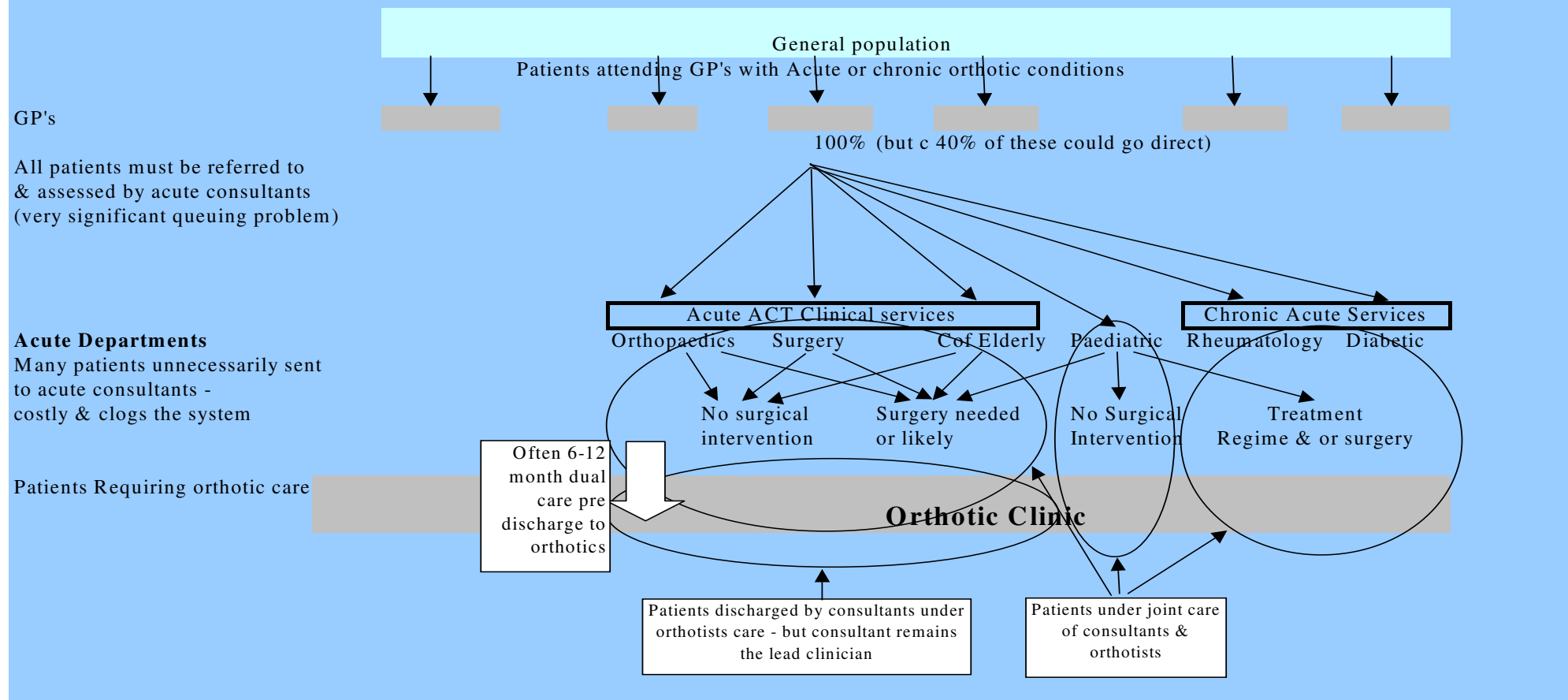
Local

- **Physiotherapy Orthoses Ordered in Bulk: (Ipswich)** Currently, all physiotherapy orders are placed and delivered individually, creating a huge amount of work for physiotherapy (requisitions), orthotics (orders, delivery notes & invoices) & suppliers. (typically 25 items / week)

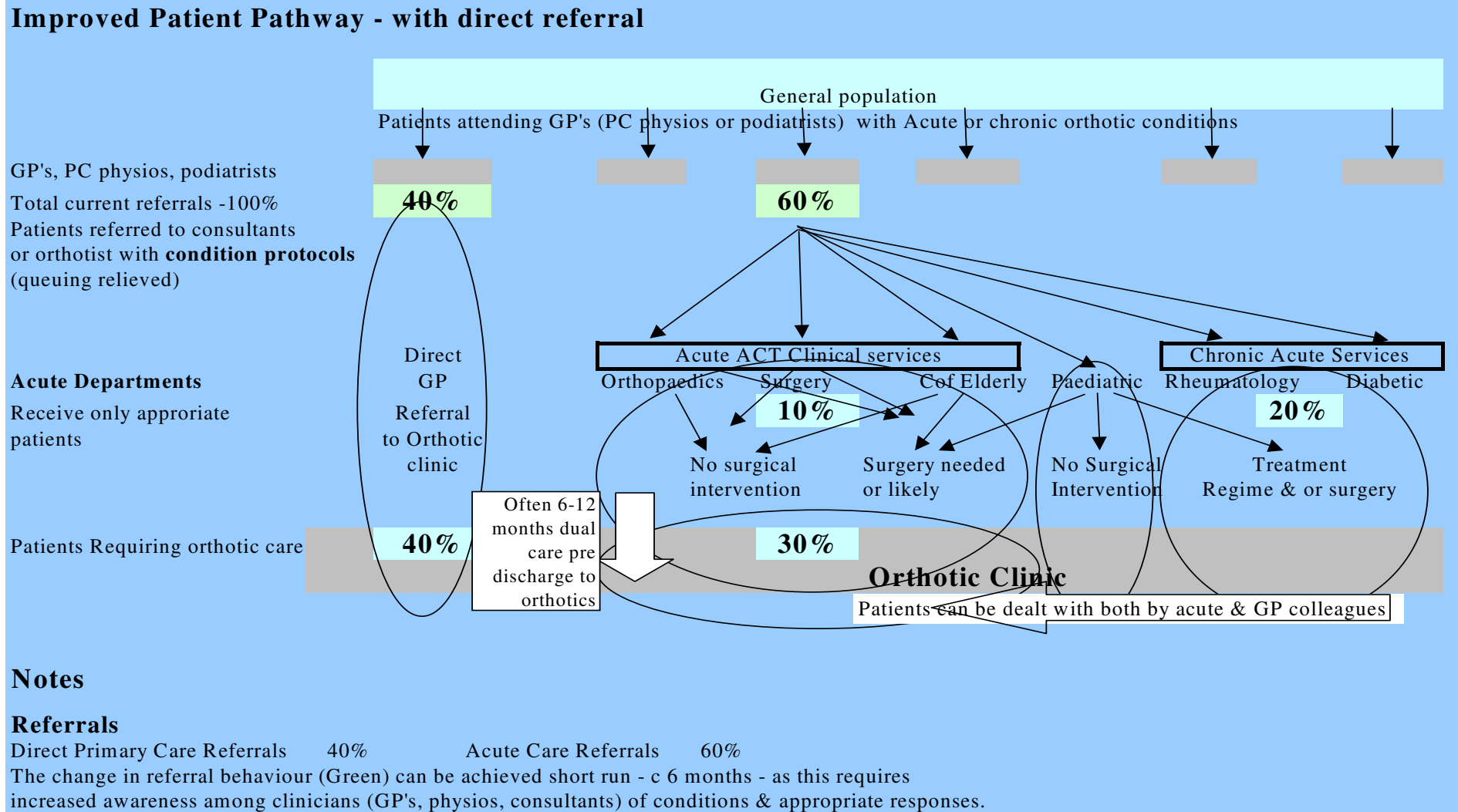
Stock placed in physiotherapy & a single bulk order placed/week, eliminated 95% of physio/orthotic time spent. Supplier discount of 10% due to his saving. (£ 5k p.a.) Local

Appendix 8: Extracts from the National Model

Typical Current Position of the Orthotic Service - without direct Referral



Appendix 8: Extracts from the National Model (continued)



Appendix 8: Extracts from the National Model (continued)

When the pathfinder team identified from samples of GP referrals that there were large numbers of elderly patients at risk of total mobility loss, due to being deprived access to orthotic care, this suggested there should be very large numbers of elderly people in wheelchairs – more than we could envisage. We checked the wheelchair statistics by age (initially for one PCT, then for 3 more) and found a consistent pattern showing large numbers of elderly people in wheelchairs. The objective of expanding orthotic care would be to reduce the size of this elderly wheelchair population, which comprises about 0.7 - 0.8% of English population -

Permanent Wheelchair Patient Population By Age Band

(excludes temporary wheelchair users which are c 3% of total permanent wheelchair users)

	PCT 1 %	PCT 2 %	PCT 3 %	Average Trust %
Paediatric < 20	8%	7%	6%	7
Young adult 20 - 50	13%	9%	13%	12
Older adult 51+	79%	84%	81%	81
Total	100%	100%	100%	100

Note

Permanent wheelchair population is totally dominated by older patients > 50

Wheelchair patients are a reflection of acute mobility problems & frequently require a high level of medical / social support. A poor, rationed & inaccessible orthotic service for this same age group of patients will result in increased numbers of patients having mobility problems and requiring wheelchairs etc

Appendix 8: Extracts from the National Model (continued)

This wheelchair information suggests there are 432,000 permanent wheelchair patients over the age of 50. Provision of expanded orthotic care in the future is planned to bring a further 240,000 primarily elderly patients into orthotic care. The intention is to use early orthotic intervention to prevent some of these additional patients from requiring wheelchairs or delaying the time when they will require a wheelchair. The model assumes that long run this expansion of orthotic care reduces the wheelchair population by 24,000 from 432,000 to 408,000 – a cautious estimate and reduction of only 5.5%.

Permanent Wheelchair Patient Population By Age Band

(excludes temporary wheelchair users which are c 3% of total permanent wheelchair users)

Age Band	PCT 1 no	PCT 2 no	PCT 3 no	PCT 1 %	PCT 2 %	PCT 3 %	Average Trust %
< 10	125	43	42	4%	3%	3%	6
10 - 20	128	63	45	4%	4%	3%	6
20 - 30	96	41	35	3%	3%	2%	3
30 - 40	124	39	66	4%	3%	5%	8
40 - 50	186	59	80	6%	4%	6%	10
50 - 60	321	134	107	10%	9%	8%	21
60 - 70	443	194	205	14%	13%	14%	18
70 - 80	649	342	319	20%	22%	22%	20
80 - 90	779	425	392	24%	28%	28%	6
>90	365	204	129	11%	13%	9%	2
Total Patients	3216	1544	1420	100%	100%	100%	100
Catchment	000's	330	330				
Wheelchair Patients	%population	0.97%	0.90%				

Appendix 8: Extracts from the National Model (continued)

Orthopaedic Referral Reduction Resulting from Direct GP Referral Access to Orthotics

Through discussion consultants, orthotists and GP's agreed the conditions they felt should be direct referred by GP's. When this change is made these patients, who are currently typically referred to orthopaedics will no longer be referred to consultants and hence consultant referrals will fall. Based on a detailed analysis of 3 months referrals to orthotics it is possible to estimate the resulting reduction in referrals which orthopaedics will see from GP's. This reduction will be 5 – 7%.

Impacts on Orthopaedics

	Reference	Ipswich	Burton	Stockport	Hartlepool	
Total orthopaedic Referrals / annum	1	6100	4200	7000	4086	
Orthopaedic referrals to orthotics						
Patients referred / annum	2	no	520	442	562	436
Patients referred / annum	1 / 2	%age of orthopaedic Referrals	9%	11%	8%	11%
Potential Benefit of direct GP referrals by condition to orthopaedics						
Current orthopaedic referrals who could have been direct referred by GP's (based on sample analysis by condition)	3	292	296	402	289	
% of total orthopaedics referrals to orthotics	3 / 2	56%	67%	72%	66%	
Reduction in GP referrals to orthopaedic resulting from direct GP referral to orthotics		4.8%	7.0%	5.7%	7.1%	

Appendix 8: Extracts from the National Model (continued)

Orthopaedic Referral waiting List Reduction & Capacity Increase Resulting from Direct GP Referral Access to Orthotics

Analysis from a number of pathfinder clinics suggests that direct GP referral will reduce waiting lists by c 5%. The typical orthopaedic wait of c 20 weeks would be expected to reduce by c 3 weeks. Additionally, with fewer patients being referred orthopaedic clinical time would be freed – typically 2% of orthopaedic consultant time would be freed by these referral changes.

Impacts on Orthopaedics

Referrals

Direct referrals to orthotics will reduce patient numbers referred to orthopaedics	Patients p.a.	360
Total referrals into the orthopaedic department	patients p.a.	6000
Reduction in orthopaedic referrals (in perpetuity)	%	6%

Waiting List

Current orthopaedic waiting time	weeks	20
Total patients on waiting list	patients	2308
Reduction in patients waiting due to orthotic improvements	Patients	360
Orthopaedic waiting list after improvements implemented	Patients	1948
	Weeks	17
Improvement in orthopaedic waiting list	Weeks	3

Orthopaedic capacity Improvement

Number of orthopaedic consultant		7
Clinical hours / consultant	hours	2000
Total clinical hours available	hours	14000
Clinical hours saved by improved orthotic referral / processess	Hours	240
Orthopaedic capacity freed by orthotic improvements	%	1.7%

Appendix 8: Extracts from the National Model (continued)

Improvement in Patient Care Achieved in Burton

Orthotic Service Improvement - Burton (May 2002 - August 2003)

		Burton Before	Burton After	
Referrals	Direct referral	Y	Y	
	%age of all referrals	all referrers 25%	50%	GP referrals commenced November / PC physios in July 2002
	%age of all referrals	GP 25%		
	%age of all referrals	AC AHP 0%	5%	
	%age of all referrals	PC AHP 0%		
% from orthopaedics	65%	50%	Impact of clearing the orthopaedic waiting list will show in Mar/Apr 2003	
Referrals / month	50	70	Referrals increasing due to more GP awareness. (L/term), teaming with other AHP's. (l/term) Referrals increasing due to falling orthopaedic waiting list. (s/term) Increased referrals is the barrier causing finance dept resistance to change	
Service Provided				
Orthotic sessions	sessions / week (3 hrs)	3	5	
Wait for care	orthotic clinic wait	weeks 4	3	
	Additional referral wait			
	Consultant	% referral 65%	50%	
	Waiting time	weeks 20	20	
	GP & PC AHP	% referral 35%	50%	
Waiting time	weeks 1	0.2		
Average total waiting time	weeks 17	13		
Speed of care	Episode duration	weeks 4	3	
	Patients treated in 1 apptmt	% 10%	25%	
Quality	Patients reviewed	% 10%	100%	
	Conditions managed	N	Y	
	Patient notes kept	Manual	electronic	orthotic notes available to all clinicians
	Improved clinic facilities		Y	privacy, equipment etc improved
Communications	GP letters sent after episode	N	Y	GP communications have been dramatically improved
Other clinicians	GP orthotic info pack	N	Y	GP communications have been dramatically improved
	Clinicians attend Orthotic clinic	N	Y	A number of physios, podiatrists & OT's have attended (& continue to attend) the clinic, improving communications

Appendix 8: Extracts from the National Model (continued)

Pathfinder Improvement in a Typical Clinic

This analysis shows (1) an economic saving of £ 27k in the clinic (on a budget of c £ 250k) although £ 10k of this is used to finance additional clinic sessions for the universal review, (2) a saving in appointments / week of 32 slots (10 minute slots) although all these slots are subsequently used to provide universal reviews. The investment in the clinic to support these changes is £ 33,000 including the cost of undertaking the change.

5.1 Level 1 Benefit : For a typical Acute Trust

Scope of these changes primarily impacts on orthotic clinic resource & quality.

No	Change	Description	£ k p.a.	Apptmts per wk	Investment £ k
1.1	2 clinic rooms	Better use of orthotist time, assistant tops/ tails appointments Exact impact depends on the patient mix.		10	10.0
1.2	Increased orthosis Stock	Each stock item used saves a patient appointment	1.5	10	11.0
	Bulk purchasing	Bulk stock replacement orders gain discounts - 10-20%	2.0		
	Hip brace stocking	Frees orthopaedic beds if needed by ward patient			
1.3	Increase orthotic delegation	stocking & other simple products delegated to nurses, etc		4	-
1.4	Electronic Clinical Notes	dictated notes (as other clinicians) saves orthotist time	-	3	-
1.5	Referral Discretion	Orthotist can use appropriate orthoses rather than having this specified by consultants.	7.5	2	-
1.6	Make repeat bookings in clinic	Reduces the number of DNA's		3	
1.7	Raise private patient charges	PP charges are usually low & not always applied	6.0		
1.8	Allow patients additional purchases	Patients regularly wish to purchase additional orthoses but frequently are not allowed to do so .	5.0		
1.9	Effective ladies footwear protocols	Ladies must have suitable footwear for orthoses	5.0		
	Total Clinical Benefit		27.0	32.0	21.0
1.10	Universal Review Sessions	use the time saved in the improvements		-32	
	Implementation cost	Cost of team implementing changes			12.0
	Universal Review Sessions	experience shows additional time required	-10	-12	
	Total Impact of changes		17.0	-12.0	33.0

Appendix 8: Extracts from the National Model (continued)

Pathfinder Local Financial for PCT, ACT & Social Services by Year

Level 3 Benefit

Funders & Beneficiaries from improved

As the benefits are longer run this requires investment in short term (5 years) health care.

Investment appears a major problem for ACT's & PCT's whoc appear to be struggling to manage on current

Social services is the biggest beneficiary but is not involved in taking the decisions/ making the investment.

ACT's bear all the additional costs but are the smallest beneficiary.

PCT's do not benefit / suffer short term so there is a tendency to not take a decision - especially as orthotics

Unless Social Services / ACT's provide the budget to make these changes they will not happen

The level 2 changes to referral pathway will increase referrals. Wthout this funding the level 2 changes will also be unable to be implemented by ACT's

	Years after initial change launched							
	1	2	3	4	5	10	15	L/run
	£ k	£ k	£ k	£ k	£ k	£ k	£ k	£ k
PCT - Total impact of the changes	0	0	0	0	15	90	150	150
Benefit of reducing acute mobility problems (5%)	0	0	0	0	9	54	90	90
Benefit of reducing lower level mobility problems (20%)	0	0	0	0	6	36	60	60
ACT - Total impact of the changes	-18	-36	-54	-72	-71	-65	12	12
Cost of additional orthotic care	-18	-36	-54	-72	-90	-180	-180	-180
Benefit of reduced orthopaedic procedures - resulting from improved provision of orthotic care	0	0	0	0	19	115	192	192
S/Services - Total impact of the changes	0	0	0	0	195	1170	1950	1950
Benefit of reducing acute mobility problems (95%)	0	0	0	0	171	1026	1710	1710
Benefit of reducing lower level mobility problems (80%)	0	0	0	0	24	144	240	240
Total all organisations	-18	-36	-54	-72	139	1195	2112	2112

Appendix 9: Clinical Reporting – Sample outputs from Rapport

Available on request from Business Solutions Consultancy

Appendix 10: Membership of the original working party

Available on request from NHS PASA