



The National Framework for Service Change IN NHS Scotland

Elective Care Action Team

Final Report

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Executive Summary

The White Paper, Partnership for Care (2003), stressed the importance of looking at the pathway of care from the patient's point of view making it smoother, more accessible less complicated and less subject to delays. This is both challenging and necessary given the volume of patients who receive care within NHS Scotland. In 2003/04 around 683,000 patients were discharged following an episode of inpatient care. Of these 205,000 were elective admissions and 477,000 were emergency admissions. A further 360,000 were treated as day cases. Despite all the advances in improving the patient journey there is still a lingering perception amongst patients, with some justification, that their journey remains littered with barriers, pitfalls, duplication and delay.

For most people their use of the NHS episode of care begins and ends in Primary Care which will require to have adequate support systems and more rapid access to a wide range of services such as diagnostics. This means that treatments are carried out in a primary care setting rather than in hospital and undertaken by a different member of the healthcare team than previously. More acute services will be delivered in hospitals on a day case basis, and in ambulatory care and diagnostic centres.

In this context it is important to consider the implications of new Community Health Partnerships (CHP's) and of Managed Clinical Networks (MCN's) the objectives of both serve to underpin the development of integrated services with the patient as the focal point. Existing MCN's such as cancer have demonstrated benefits to patients which can reduce delays, tackle bottlenecks and have enabled patients and carers to access clearer information. Community Health Partnerships will be the local focal point for integration between community based services and local acute provision.

Elective Care was identified as a key area of concern by the National Framework Advisory Group chaired by Professor David Kerr. The Elective Care Action Team was established and this report constitutes the output of the group. The group was chaired by Charles Swainson, Medical Director NHS Lothian and met formally on 7 occasions between July and December 2004.

The commissioning document at annex 1 provided the framework for the group's work. Group membership is also described. The work which had a focus on orthopaedics was subsequently divided into 7 distinct sections;

1. Identify improvements for the pre admission component of elective care
2. How to streamline the hospital component of elective care
3. Describe alternatives to the patient pathway
4. Describe good practice in assessing need and capacity planning
5. Identify improvements in aftercare
6. Implications for the separation of emergency and elective care
7. Teaching, training and research for healthcare professionals

The main findings of this work are described under 4 headings

Pre admission

In patient Care

Post operative Care

Supportive mechanisms for managers

Summary of Recommendations

- Develop centres/facilities that deal only with elective care either on existing hospital sites or in new buildings
 - Treat day surgery as the norm for elective surgery
 - Maximise pre admission services and post discharge recovery in Primary Care
 - Develop Referral Management Services
 - Train and support key clinical and managerial staff
 - That there is recognition and acceptance by NHS Scotland of the 'top 5' key areas for affecting change and improving services;
1. Treat day surgery rather than inpatient surgery as the norm for elective surgery
 2. Maximise access to diagnostics particularly in Primary Care
 3. Manage variation in patient discharge reducing length of stay
 4. Manage variation in the admission process
 5. Follow up only when necessary, by the most appropriate person, as close to home as possible

1. BACKGROUND AND DRIVERS FOR CHANGE

The provision of elective care has had to respond to increasing demands associated with an ageing population and changing patterns of ill-health. Additionally, in many areas there has been increasing recognition that older people are as entitled to and are as likely to benefit from treatment as are younger people. This has paralleled a lower tolerance of ageism and unjustified 'age-related thresholds' for treatment in the NHS.

Thus the demand for treatment has risen and the provision of planned procedures and other forms of elective care has risen. However it is impossible to track numerically the overall volume of 'activity' which this represents precisely because of changes which have taken place in the way services are delivered.

Over the last twenty years there has been a progressive transfer of many forms of elective surgery from an inpatient environment to a day case setting. The pattern has been extended as increasing numbers and types of procedure are carried out in an outpatient setting or in primary care, e.g. endoscopy and minor surgery. This tendency towards a localisation of elective care has occurred in part for reasons of efficiency and in part for reasons of patient comfort and convenience. It has involved a widening empowerment of staff as surgery has ceased to be the exclusive preserve of surgeons and other hospital based clinicians and has provided

opportunities for other health care professionals to widen their skills and the scope of their relationship with their patients.

This shift along the spectrum from inpatient settings to primary care can be regarded as the result of creative responses to increasing demand and increasing technological potential. However in many respects – such as the carrying out of minor surgery in a primary care setting – it is still early days and there is a considerable potential for further shifts.

The process has not gone as far in Scotland as it has in England for example. A recent Audit Scotland Report showed that overall Scotland has lower day surgery rates than England (Audit Scotland 2004).

One of the main threats to the smooth delivery of much elective care comes from the kind of emergency pressures which have already been outlined. Before a surgical procedure can be carried out a range of resources have to be brought together at the right time and the right place: surgical staff, nursing staff, anaesthetist, theatre time, beds. Remove any one of these components and the operation has to be cancelled.

Where the same staff and resources are available for both elective and emergency care, emergency treatment will always come first – because it is an emergency. The need to perform emergency treatment can mean the loss of one or more of these components.

This is a further example of a situation where a whole system solution is required. Stresses in the provision of emergency care have knock-on effects to planned activity causing the frustration of cancellation and delay. To some extent the answer to providing better and quicker elective care lies in smoothing the mis-match between the variation in demand and supply of emergency care but it also involves doing more of the role enhancement and smarter working, particularly streaming elective care away from emergency care when it is sensible to do so.

2. PRE ADMISSION

2.1 Improvement to the patient Pathway

Demand Management and Improving Waiting Time

Performance indicators and performance management within the NHS contribute to the collective drive towards the NHS strategic objectives. Traditionally, they have focused on the performance of managed units, key aspects of public policy such as infection rates and clinical staff workloads. These are measured in uni-organisational settings such as an individual hospital's waiting time per specialty, infection rates, access to emergency treatment and bureaucracy. The current organisational changes present a rare opportunity to review what and how we measure the efficiency and effectiveness of the NHS and relate it more to the fundamental objectives of the NHS which are to improve health, treat illness, to agreed standards of access and quality and in a cost-effective manner.

An objective of a shared performance assessment framework between the primary and acute sector is to incentivise the strategic outputs of the NHS. Each element has to have a stake in the performance of the other. So for instance long waiting times in the acute sector have traditionally been blamed on inefficiencies or inadequate investment in that sector without taking into account the impact of primary care on demand and demand management. Similarly, poor access to diagnostics for primary care clinicians has been blamed on inefficient poorly managed or increasingly expensive and technical investigation services. Neither sector has had responsibility for health improvement nor has there been any overview of the patients' journey and the patient's experience.

In order to develop and incentivise sectors to work more collectively recent thinking has developed to include

1. Waiting time measurement should be adapted to more accurately reflect the patients experience and could include;

Time to first presentation following onset of symptoms (*self-care*)

Time to referral or investigation (*GP response*)

Time to first appointment (*hospital response*)

Time to end of episode of care (*ditto*)

2. The responsibility for waiting times should be shared by both sectors.
3. Investment in new services should be agreed by both sectors and waiting time initiative funding should be linked to redesign, devolved to primary care in association with its acute sector partners, and aimed at spending that will have the most long term beneficial effect on waiting list issues and problems.
4. Costing of care should reflect the cost of the whole pathway (programme budgeting)

These are laudable but will require the clinical management processes to be supported and organised effectively. A combination is suggested which sees local clinicians using the best available evidence to plan care pathways which make the most of the skills of staff across sectors. Referral information is a first step to analysing demand and capacity to meet it.

2.2 Management Referral Systems

The introduction of shared Referral Services adds value for both primary and secondary care. Referral *Information* is the first step to collecting information on demand and to working within primary care and community services to find appropriate alternatives to traditional consultant outpatient appointments. At present there is often an information gap between primary and secondary care in relation to referrals: GPs may not be aware of all the referral options open to them and secondary care may have no mechanism of informing GP colleagues of alternative or more appropriate treatment options with lower waits. Referral Information Services can help to close this gap and promote referral dialogue between primary and

secondary care. They also offer additional benefit by providing data on referral patterns for primary and secondary care service planners and by introducing the chance to pool referrals across specialties and consultants. This last point is of major significance as pooling of referrals can, on its own, have a major beneficial effect on waiting times.

Referral Management enables more sophisticated handling of referrals from GPs and other health care professionals within primary care. For example, by triaging referrals and considering where best to treat each individual patient, a referral management service can arrange appointments with the most appropriate service or professional either within primary care or at an appropriate hospital. Often this service will have a shorter waiting time or be provided in a more convenient location than a traditional consultant appointment. For example GPs are increasingly comfortable with the idea of referring patients to GP colleagues with a Special Interest (GPSIs) or to other health care professionals within primary care. This offers a mechanism for linking clinical and care teams across primary and secondary care and is an excellent opportunity for engaging Community Health Partnerships at the centre of system wide redesign and enabling them to demonstrate a genuine contribution to the shared management of waiting times.

Referral Management also facilitates the ongoing development and monitoring of patient pathways and there is real benefit in applying this principle over a much wider vicinity than the local NHS Board area. For example, Regional Centres for specific elective work such as orthopaedics could be developed, thereby allowing GP's and patients faster access to appropriate NHS facilities and expertise. This would also ensure the best use of existing NHS resources and offer increased patient choice at the point of contact.

Referral Information Services are being piloted from April 2005 in Glasgow and Lothian as part of the Outpatients Programme. Experience from England suggests that sharing of up-to-the-minute referral, waiting times and capacity information between primary and secondary care can reduce waiting times by reducing variation in referral patterns. Two additional demonstration sites will be recruited from April 2005 to test the added value that triage and multi-disciplinary team assessment and treatment services can offer to specific hard pressed specialties such as Dermatology and Orthopaedics.

Examples of success: In Stockport, Greater Manchester the introduction of referral management services demonstrated during the six months to October 2003, that 29.1% of routine referrals to Orthopaedics did not require a consultant appointment. At a conference in March 2005 this was described as having risen to 36%. The effect of introducing pooling through Referral Information Services will vary between specialties but is easily illustrated by queuing theory and there are models to demonstrate this.

Managing Capacity can be conceptualised in 4 ways:

1. Existing care can be moved to less resource intensive settings = substitution
2. New care can be started in less resource intensive settings meeting new or previously unmet needs = addition
3. Unnecessary care provided at the moment is stopped = rationalisation
4. Health improvement and contribution to self-care by patients is moved upstream so patients do not require resource intensive care = downward substitution

Managing Capacity can be achieved in a number of ways including:

1. The development of new roles for nurses, pharmacists and AHP's and all other NHS staff (reducing dependence on professionals) which will be supported by Agenda for Change and the new NHS Knowledge and Skills Framework. (DoH 2004).
2. Developing more specialist staff in community settings such as Practitioners with specialist interest (PwSI) (reducing dependence on hospital services)
3. Shifting support services, for example, by enabling direct access to diagnostics that is protocol driven (sustaining the change).

Reduction of waiting times as well as an improvement in the patient's journey can be achieved if a significant proportion of these patients have their work up in a primary care setting.

2.3 Alternatives to the Traditional Patient Pathway

There is a well established evidence base supporting the use of extended scope practitioner physiotherapists (ESP) in the Orthopaedic clinic (Byles and Ling 1989, Hockin and Bannister 1994, Hourigan and Weatherly 1995, Weale and Bannister 1995 and Daker-Whyte et al 1999). With appropriate training physiotherapists can effectively manage the care of patients referred to the Orthopaedic clinic, including arranging further radiological and haematological investigations to confirm a clinical diagnosis, carrying out steroid injections and adding agreed procedures to surgical waiting lists. By doing so Consultant time is effectively freed up to permit more appropriate use of surgeons' time.

The ratio of new patients to future operations should move from 2: 1 to closer to 1: 1 in surgical specialties. Currently the conversion ratio from Orthopaedic outpatient appointment to surgery is currently quite low. The introduction of appropriate multidisciplinary services should mean that the appointment to operation conversion ratio increases, demonstrating that the patient has seen the appropriate practitioner. This will occur as a result of the introduction of extended scope practitioners and triage services in primary care. The higher conversion ratio will allow consultant surgeons to spend less time in outpatient clinics and more time operating.

In West Glasgow a physiotherapist with an extended scope of practice effectively triages and manages care of referrals to the Orthopaedic Department. The

physiotherapist has the capacity to arrange any further haematological or radiological investigation required and can refer directly onto other specialists, including Rheumatology and Pain Clinic and can place patients directly on the waiting list for Surgery. This will be done in accordance with Consultant or departmental guidelines and patients will attend for pre admission assessment. Consent for surgery remains the responsibility of the operating surgeon. This service was developed initially to work with two Orthopaedic Surgeons and effectively decreased waiting time to Out Patient Appointment while maintaining high levels of patient satisfaction. This has developed over the past five years and is now supplemented by the appointment of three extended scope physiotherapists to assist in the management of all Orthopaedic referrals.

At present models such as the one described operates predominately in the acute care setting but with development of protocols and working practice patients could effectively be managed in primary care within the same model of care. Modern scoring systems enable thresholds to be set and monitored. Patients could be added to waiting list for surgery by ESP's in accordance with agreed protocols from clinics conducted in primary care. A small number of patients will still require hospital appointments but this should then entail a 'one-stop' with any required investigations etc, having already been carried out. Inappropriate referrals to the acute care setting should be prevented avoiding wasted clinic appointments for medical staff and patients alike. The ESP would practice as an autonomous practitioner in both primary and secondary care but also continue to function as part of the consultant led team. To work effectively there must be established working practice and confidence in clinical competency within the consultant led team. The system would improve collaboration between primary and secondary care and would streamline orthopaedic patient care.

Most Physiotherapy departments now accept direct access referrals. By appropriate triage through ESP's patients requiring Orthopaedic opinion or investigation could access this directly in primary care. Such a system saves medical practitioner time in both primary and secondary care and reduces appointments and waiting times for patients.

Established protocols would continue to permit the patients requiring direct or urgent orthopaedic consultant opinion, for example suspicion of serious pathology, to be seen within an appropriate time frame.

The Outpatients Programme has developed musculo-skeletal patient pathways and is working with NHS Boards to test these ideas by implementing through Scotland-wide projects referral triage, referral management, musculo-skeletal pathways, extended scope nurses and practitioners in physiotherapy and podiatry. The Programme will share emerging good practice across Scotland throughout 2005.

The Current Situation

Patients presenting to primary care with signs or symptoms of illness are assessed clinically by a GP. The GP practice or Primary Care A.H.P. undertakes an agreed work up schedule for each clinical scenario. If the GP feels that the patient requires further investigation or a consultation in the secondary care sector, a referral is made usually by way of a referral letter, standard referral form or, in more urgent cases, by

telephone.

This referral process is traditionally paper based via internal or external mail. On receipt of the referral the relevant hospital department confirms that the referral is complete and appropriate (“vetting” of the referral by appropriate clinical staff). Administrative staff then allocate an appointment slot and send details to the patient by post. The timing of the appointment is dependent on factors such as the level of urgency indicated by the GP on the referral (confirmed during the vetting process) and waiting times. One critical factor is that the number of “urgent” referrals is related to waiting times. Waiting times in months generate a high proportion of urgent referrals. Waiting times of one to two weeks obviate the need for “urgent” referral in the vast majority of cases.

In orthopaedics ‘one stop clinics’ exist and function well for things that can be applied to this particular model, i.e. plain radiology and simple laboratory diagnostics. In some specialties however, patients may be referred to multiple locations within the secondary care sector simultaneously e.g. consultant led clinic, radiology, laboratories etc. There is little co-ordination between departments at present. This frequently results in the patient making multiple trips to hospital on different days, misleading reporting of waiting times and unexplained DNAs.

Results from tests, consultations etc. are sent back to the GP when available by post. Not infrequently, only some (or none) of the results are available at the time of the GP return appointment. This can result in wasted resources in terms of time and undermines confidence in the healthcare system at an early stage of the patients’ journey.

Why change is necessary

This model of care was not designed but evolved around traditional boundaries that exist between departments, primary and secondary care. The GP role in overseeing this complex process is considerable. The burden on the patient trying to cope with illness is magnified by organisational inefficiencies, multiple points of contact and multiple visits.

In this traditional approach, the diagnostic pathway chosen by the GP is based on a combination of factors including the clinical impression gained during the consultation, clinical experience of similar cases, individual clinical preferences and the services available at the local hospital.

To reduce stress and improve the quality of care, a more controlled and coordinated approach is proposed.

The Elective care Action Team would wish to recommend;

- The introduction of Diagnostic Pathways. These will address the problem of urgency by stratifying and managing risk in relation to serious illness/pathology. This combined with a streamlined administrative process or referral management system will allow for timely diagnosis of serious conditions but also for speedy exclusion.

The “Team Diagnostics” approach is more patient centred as a multidisciplinary clinical team will be configured around the patient to optimise individual care. The “team” includes staff within traditional primary and secondary care boundaries and in effect removes this interface. The constitution of the team will vary dependent upon the type of clinical challenge and the clinical partnership formed will develop and agree local management protocols. Diagnostic pathways will be optimised to individual clinical scenarios (based on agreed referral criteria and all available diagnostic tools) with an emphasis on using technology appropriately and efficiently. An example would be using CT scanning and a fibre optic examination as the first line investigation in preference to standard x-rays if justified by the patients’ clinical condition at the time of referral.

A recent example is the development of protocols for patients with suspected colorectal pathology (annex 2).

From the time of GP referral, the system is designed to care for the patient throughout the diagnostic process in a truly seamless way. The time of first “specialist consultation” is the point when the completed referral is assessed and the appropriate pathway determined. The patient exits the pathway when significant disease has been excluded or when referred onwards (in consultation with the GP) for further management. Repeat visits to the GP for “results” are no longer required freeing up GP time and reducing the substantial administrative resource presently tied up in chasing hospital results.

For the patient and GP a single point of contact will be critical and trained clinical coordinators are a pre-requisite. The coordinators will perform many of the more administrative functions traditionally performed by GPs. Their role in tracking individual patients will be pivotal. Without this resource, the system will not be sufficiently robust. A further essential role of the coordinators will be ensuring GPs are kept informed of significant events. It is assumed that IT solutions providing GPs with continuous updates from clinical information systems will be enabled.

A “one stop” approach will be supported for patient convenience provided this does not disadvantage the patient population as a whole. This approach is part dependent on complex scheduling procedures that will be inter-dependent and follow the agreed clinical pathways. Key to this approach is to ensure that any investment in redesigning services also plans to use freed up or changed resources to impact on further service development.

There is scope to develop the model beyond diagnostics, with direct links to multidisciplinary treatment teams. A potential huge gain is using the “Team Diagnostics” approach to EXCLUDE significant illness (e.g. cancer) and give the patient an accurate “all clear” as soon as possible. Traditionally patients may wait days or even weeks after a series of tests is completed before receiving this information. In most cancer related referral scenarios, this is the most common outcome and constitutes the largest patient group.

To reduce stress and improve the quality of care, a more controlled and co-ordinated approach is proposed across a range of specialties and diagnoses

The new model of team diagnostics includes;

- Maximum work up in primary care
- Identifying key diagnostic indicators
- Triage on the basis of one and two above
- Clear understanding of which imaging and diagnostics routes are direct access and which are restricted following triage

In turn avoiding the “blunderbuss” approach to multiple referral points reduces pressure on waiting times for investigation and targets those in the highest risk categories.

Key themes have emerged, including the relationships between primary care and acute sector practitioners, the development of best practice Guidelines (SIGN and NICE), developments in Information Technology allowing rapid access to results and potentially allowing access for primary care practitioners to direct listing of patients for investigations and procedures. In addition the developing role of the practitioner with special interest and in the specialist practitioner role in both nursing and Allied Health Professions (AHPs). Other groups include healthcare scientists in spirometry, echocardiography and imaging.

The key principles of this model are;

Where the differential diagnosis makes it likely that the patient can be managed in primary care then the primary care clinician should have direct access to the investigations that will support the management of that disease.

Where the differential diagnosis is not deemed to be manageable in Primary Care, the team diagnostic route would apply, including Primary Care based advance work up, triage access with direct pathways to imaging and surgical or medical intervention.

Clinicians using an agreed “patient journey” model including full work up in the Primary Care setting and better management of referrals by receiving secondary care will improve patient experience. Primary Care Clinicians are concerned that using a referral management centre and team diagnostics might restrict choice or control. We need to develop a methodology for incentivising primary and secondary care to work together perhaps by joint incentivisation of patient journeys by patient or by result, or transferring the funding for out-patient services to Community Health Partnerships.

We must locally empower clinical leadership to redesign services. Managed Clinical Networks should reflect local relationships between clinicians across Primary and Secondary Care and further develop safe and effective pathways of care for patients. Local Clinical fora are an opportunity for primary care clinicians and managers to work together on the redesign agenda. Their key functions should be to agree

1. Service priorities
2. Joint investment
3. Scrutinise patient pathways

4. Develop Team Diagnostic Templates
5. Oversee the management of change
6. Review performance and be jointly accountable for it

Managers must support the empowerment of clinicians and clinicians must share accountability for efficient and effective delivery of health care.

Key principles are:-

- 1) Following initial investment there should be early planning for the reuse of freed up resources to enable the original investment to have an impact far beyond the service or diagnostic group originally targeted
- 2) Team diagnostics/agreed referral should be agreed by a wide representation of clinicians from Acute and Primary Care.
- 3) New investment should only be applied if agreed jointly by CHPs and by local acute providers.
- 4) Both should be jointly accountable for waiting times and both should consider how demand and capacity can be managed effectively.
- 5) The emphasis in the New GMS Contract should be shifted from the bureaucracy of clinical indicator marking, to the potential health gain that could be achieved with more imaginative use of the Enhanced Services element of the contract in priority areas such as cancer. The incentives built into Enhanced Services will fuel creativity in CHPs and GP Practices of proven and trusted quality.

2.4 Pre Admission Assessment

Definition of pre hospital Assessment

Pre operative assessment established that the patient is fully informed and wishes to undergo the procedure. It ensures that the patient is as fit as possible for the surgery and anaesthetic. It minimises the risk of late cancellations by ensuring that all essential resources and discharge requirements are identified and coordinated.

After a patient has been seen, investigated, and a diagnosis is made, potential treatment options should be discussed. When these involve hospital admission (including day case) a number of individuals and teams must work together to ensure the best possible outcome for the patient.

At all times it must be evident to the patient that despite the large number of individuals involved, they are all working together and are in possession of all relevant information. Their individual roles, training and responsibilities should be clear to the patient.

Information systems that allow common viewing of the treatment plan and ongoing investigations will enhance communication.

Information systems which allow all appropriate individuals to view investigations and the planned care pathway will enhance patient management. These must be secure, yet accessible from multiple points.

To ensure patient safety, adequate information must be obtained to allow risk stratification, planning of care, and if necessary revision of treatment options. Obtaining this information should involve minimum disruption for the patient.

Much risk stratification can be done with minimal direct medical input, although an overall link must be maintained. Many preoperative services involve nurses and Operating Department Practitioners as the major contributors. Many investigations can be performed in local health centres or hospital facilities convenient to the patient. This may include consultation with other specialists or specialised investigation. General Practitioners with specialist interests may be involved.

Investigation guidelines are increasingly being adopted, offering opportunity for safe and cost-effective care. Compliance with guidelines is enhanced where decision support systems are in place, or guidelines are integrated into care pathways.

Only investigations which are relevant, indicated, and likely to alter management should be performed. Many investigations will have been performed relatively recently as part of standard care, and may be acceptable as preadmission tests. National and international guidelines are available for many procedures and conditions. Further agreement in their use can ensure safe and effective care. Examples include NICE guidelines on preoperative investigations and agreements on preoperative cardiology investigations.

If new information alters risks or treatment plans, the patient must be adequately involved in any subsequent discussions or treatments prior to admission.

Continued dialogue with the patient is essential. This may be through the General Practitioner, or members of the hospital team, by post, email, telephone or direct consultation.

Pre admission assessment provides opportunities to improve health and reduce risk.

Treatments to reduce operative risk generally coincide with good general medical care. For some patients who are undergoing surgery this may be the first contact with healthcare professionals. This presents an opportunity to give lifestyle advice on such areas as blood pressure control, smoking cessation, moderating alcohol consumption and weight loss. However as the contact may be brief due to the reduction in lengths of stay the key will be to have a 'navigator' of care who can continue to provide information and support in order that any necessary changes are maintained. It is likely this would happen in Primary Care.

Patients must have access to high quality information in an accessible and appropriate form on all aspects of their proposed care. Those involved in delivering

the care should be involved in providing this information, which should be where possible peer reviewed and evidence-based. New technology certainly offers many solutions, but alternatives must be available where it is inappropriate or inaccessible to patients. Telephone advice or information may be useful.

Many international hospitals and health care systems have excellent well-designed websites: <http://www.health.uab.edu/> is one example. These may link to other sites which provide excellent information. http://www.cas.ca/public/patient_info/ is a Canadian site giving high quality reviewed information on anaesthesia. Such systems are beginning to be used in Scottish hospitals (RIE SMILE system).

Certain aspects of preadmission treatment and discharge planning related to elective care may be carried out in the community.

This may include education, physiotherapy, and identification of need for support and home aids.

In many cases, the requirement for in-patient stay will be reduced. Day of Surgery admission is increasingly the standard of care. If properly organised and resourced, this can improve the patient experience considerably.

Patients being admitted on the Day of Surgery must have good information on preoperative instructions, access to the hospital, and placement following surgery. If Critical Care is required postoperatively the bed will have been confirmed. They must have the opportunity to speak to medical staff involved in their operation in a calm, unhurried fashion in a private area.

Organisation and communication during the preoperative phase is crucial. There are many good examples of practice-as always, the challenge is to ensure that the best examples are integrated together.

Failure to adequately assess patients preoperatively can be responsible for high cancellation rates, or unacceptable risk to patients. Australian studies show that inadequate preoperative assessment and management are frequently implicated in deaths attributable to anaesthesia.

Preoperative Services have been developed by redesigning current facilities and staff. Although frequently led by Medical staff (usually anaesthetists) they utilise different staff groupings to ensure that all patients presenting for surgery will be adequately assessed. (Figure 1). They have been shown to reduce cancellation rates, improve operating theatre efficiency and increase patient satisfaction. Discharge planning should also be performed at this time and involve the professionals described in figure 2. This is particularly important where patients and in particular the elderly may have complex needs.

Figure 1

ASSESSMENT

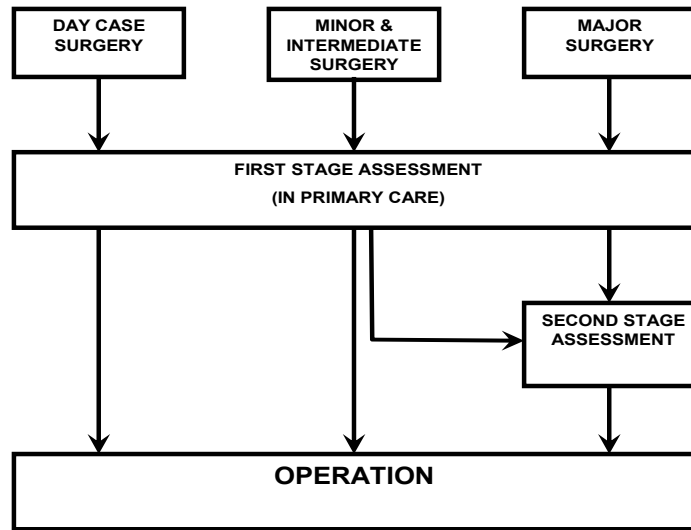
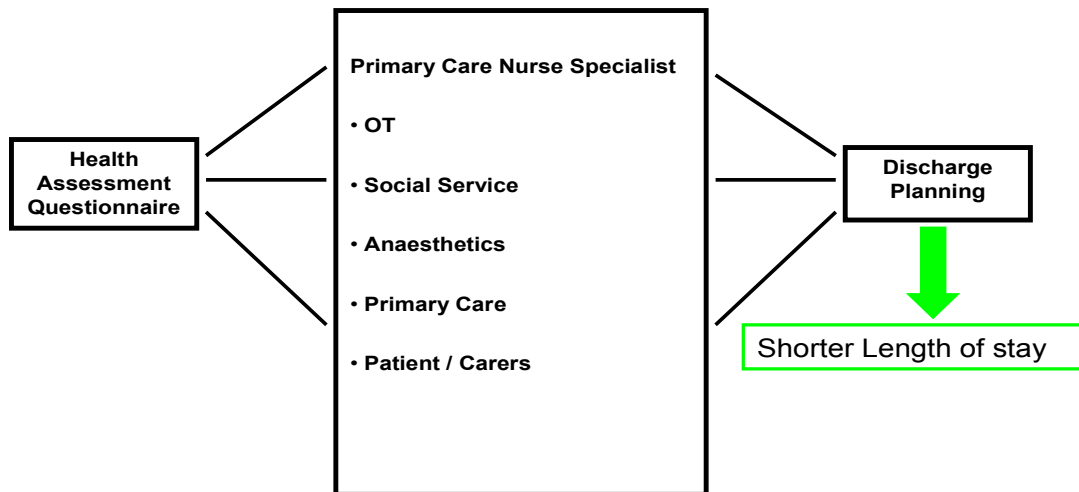


Figure 2

INVOLVEMENT



The Health Assessment Questionnaire should be a standardised document that can be completed by any member of the Multi Professional Team. Ideally this would be part of an electronic patient record that would be available throughout the patient journey. The discharge process should start prior to admission. The principle of the 'navigator' of care should be applied i.e. the most appropriate person within the team

to coordinate pre and post op care. It is likely that this person would be based within Primary Care. For highly complex cases particularly involving multi agencies it may be appropriate to appoint a designated discharge coordinator.

Multi-Disciplinary Supported Discharge Team in NHS Lothian

This team is for Orthopaedic patients aged 70 and over admitted with orthopaedic trauma. It is assumed that all patients will need the team until proven otherwise, therefore discharge planning starts at admission. The hospital based team is led by a Consultant Geriatrician and 2 domiciliary physiotherapists. Discharge is supported by home OT assessment, timely equipment provision, domiciliary physiotherapy, telephone follow-up, liaison nurses and provision of private homecare up to three times per day, over 7 days for the first 3 weeks following discharge.

The Elective Care Action Team would wish to make the following recommendations:

- There is development of Referral Management Services
- Pre admission services are maximised in Primary Care

3. IMPROVEMENTS TO INPATIENT CARE

3.1 Streamlining the Inpatient episode

A streamlined journey for patients will provide

- A multidisciplinary intervention where appropriate
- Consultation, investigation and diagnosis at a simple visit
- Enhance communication from start to finish of the journey
- Efficient use of resources particularly theatre time, beds and patient capacity
- Optimisation of resources - staff and equipment

A review of the literature gives a view of those initiatives which will contribute to streamlining the hospital component of elective care. Examples for consideration of key clinical pathways and the organisational components of care that underpin the modernisation of services are as follows:

3.2 Diagnostics/Outpatients

Where possible outpatient and diagnostic services should be provided in local communities and should be delivered by primary care clinicians aligned to the Team Diagnostics concept. Low tech diagnostics should be provided at practice level with

higher technical diagnostics at community hospitals. It may be necessary to consider access to diagnostics at a Regional or even National level as a way of improving access and therefore reducing waiting times. This would be particularly relevant where significant investment has already taken place. A robust IT system is essential for any of these developments to happen.

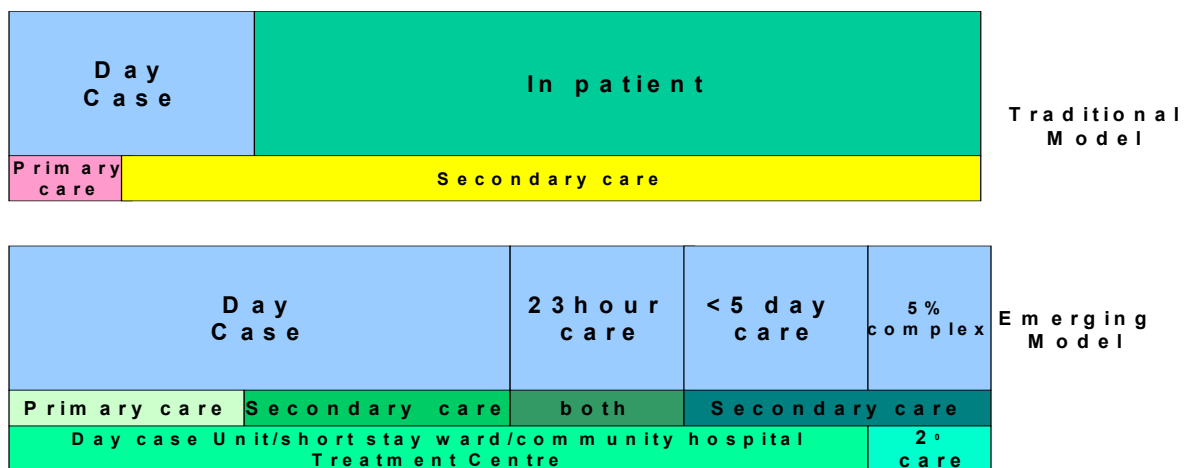
3.3 Increasing day surgery rates

ISD define a day case as a patient who makes a planned attendance to a speciality for clinical care, sees a Doctor or dentist and requires the use of a bed or trolley. The patient does not remain overnight.

In the last twenty years there has been a growth in the amount of day surgery performed. This has been possible due to technological and medical innovations such as less invasive surgery and improved anaesthesia (Hurst&Siciliani 2003). Comparison against Scottish targets and English performance demonstrate that there is still potential to increase day surgery rates and is supported by the variation across health boards (Audit Scotland 2004).

The Department of Health has argued that there is a requirement to have a common approach to day surgery and short stay elective care. There are commonalities between the two but often a distinction is made. This requires a change in culture attitude towards day surgery. The modernisation agency attributes this poor uptake to the way in which hospitals are organised focussing predominately on the delivery of in patient care. This therefore requires a shift away from the delivery of day case care in an acute setting to one that is more appropriate based on clinical need.

The Department Of Health (2004) has described this shift that and is illustrated in the diagram below.



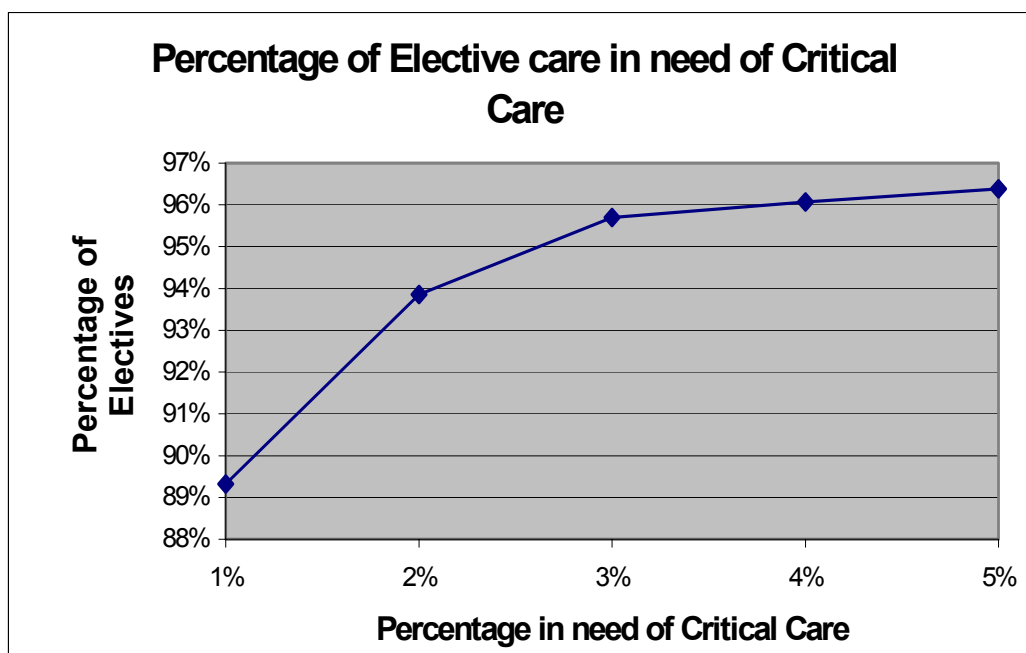
There are significant advantages to increasing the amount of day surgery that is performed for both patients and staff alike. Care is provided through an evidence based pathway which in turn is likely to produce better outcomes with reduced rates of hospital acquired infection. Day case surgery is less disruptive to patients and their families and as such there is a high preference if this choice is made available. Staff who are involved in day surgery area are able to work flexibly with more family friendly rotas. Nursing staff may have a greater level of autonomy and patient

contact as they can be responsible for nurse led pre admission assessment post op care and discharge. Consideration must be given to patients from Remote and Rural communities who experience day surgery. Distance should not be a barrier to performing day surgery but Remote and Rural Health Boards will have to plan differently. Discharge planning is critical in particular to ensure that there is effective management of pain when patients have to undertake long journeys.

3.4 Separating scheduled and unscheduled care

One of the major questions we face over the separation of scheduled and unscheduled care is how far the concept of separation (i.e. streaming) can be taken. Streaming is the separation of elective care from emergency pressures (through dedicated theatres, beds and staff) reducing cancellations, achieving a highly systematic and predictable workflow, and therefore improving the quality of service to patients. Patient safety has to be at the forefront of any proposal that involves elective care being delivered at a distance from critical care back up.

The DOH has carried out an initial analysis, to group elective procedures by prevalence of an associated critical care stay. This provides an indication, at a very high level, of what could safely be streamed in a facility which does not have critical care facilities readily accessible. The provisional results are as follows -



- **89%** of elective care by volume requires a critical care stay in fewer than **1%** of cases
- **96%** of elective care by volume requires a critical care stay in fewer than **4%** of cases
- These volumes give some indication of what work could be carried out safely in a streamed environment, regardless of proximity to critical care, if risks are carefully managed and with relatively modest predictive filtering

out of higher risk patients (e.g. using ASA / BMI criteria). The range of procedures which might be streamed in practice will clearly depend on safety factors such as the extent of back-up and proximity to critical care facilities as well as economic factors

Models are varied dependent on availability of dedicated resources, access to support departments and proximity to essential services. It follows therefore that the implications of separation would have to be individually examined dependant on the service design chosen for a particular health economy.

Streaming of scheduled care will undoubtedly provide significant improvement in a range of key outcome indicators, for example, a predictable & increased workflow, reduction in cancellations, value for money, improved recruitment and retention, and importantly, reduced waiting times for patients.

There are a number of differing models where many of the elements of elective care can be mixed and combined. Dependent on the model chosen there may be a range of issues that should be addressed fully before any implementation. For example, a purpose built/designed unit will create additional capacity but may face staffing issues with national shortages in certain professions. Refurbishment/redesign of existing acute areas has proven very attractive to staff who choose to move from other high pressure emergency areas on the same site. This however, may create problems between staff groups.

This highlights only a few of the key implications. In an attempt to provide a more comprehensive overview of the risk elements, annex 3 offers a range of issues to be considered. No assumptions have been made over specific service design, it merely suggests potential risks that would need to be considered dependant on the patient pathway chosen.

Streaming can be carried out on a local, regional or national basis. Locally the hospital could be designated as elective care centre and used entirely to day surgery or short stay surgery (one - three days). These beds would not available for emergency admissions as there is always a risk of that happening if it is on the same hospital site as an A&E department. Within a health board area, it may be possible to stream elective care across hospital sites, so that one hospital is designated as primarily elective care hospital with an ability to deliver a streamlined service uninterrupted by emergency admissions or cancellations. This might be across one or several specialties. Streaming also has great potential at the regional or national level. Regions of Scotland often have multiple hospitals performing unscheduled and scheduled care; travelling distances for the central belt are 30 minutes or less to a wide range of hospitals. Regional planning should enable capacity in demand across a wider population to be met by streaming hospitals for particular specialties or groups of specialties. This should enable extra capacity to be leveraged provided that key staff and patients are willing to travel for a more stable service.

Key Categories

Clinical Governance

The goal of an elective stream is to reduce waiting times by increasing capacity through a predictable high volume workload with minimal cancellations, therefore making effective and efficient use of staff, equipment and public money. Importantly, patient satisfaction is improved. This has to be viewed alongside the creation and impact of any emergency streams (eg Trauma), which would facilitate immediate access to essential services but could prove to be less predictable and at a much higher cost than the current dual purpose ward areas.

Control of infection and adverse incident rates can be improved through dedicated facilities and staff (e.g. theatres, wards, specialist teams). There is however a potential for duplication of services if the elective centre is not co-located with other departments. Area or regional shared services would need to be considered.

Intensive Therapy Units (ITU) and High Dependency Units (HDU) require a critical mass of specialist staff and equipment. If these are on site with the elective centre then a full range of minor to complex work could be undertaken, off site would need a full risk assessment to determine case mix.

Staff Governance

Dedicated elective facilities can improve recruitment as many professionals look for stability of specialty and case mix, which in turn will support Training, Research and Development.

However, duplication of resources, for example Orthopaedic theatre skills would be required. This may cause a recruitment problem but also offer the opportunity for redesign and role development if the elective centre is off site from the main trauma service. Real opportunities exist when teams of experts work together and look to cross traditional professional boundaries to find innovative solutions to staffing issues.

A key element of determining case mix is on-call requirements, lack of staff may prevent streaming of certain elective work but alternative models could be cross speciality or regional on-call arrangements sustainability of the workforce has to be carefully considered and planned. There are significant training issues associated with new roles, rotational posts and multi-skilling.. Concentrating specific elective procedures could potentially de-skill certain staff, flexibility and sustainability of the workforce has to be carefully considered and planned. There are significant training issues associated with new roles, rotational posts and multi skilling.

Corporate Governance

Streamed care will reduce elective cost per case; it could also increase emergency costs due to the concentration of highly complex cases. New financial models need to be developed to reflect the change in patient pathways. Dedicated purpose built

units will require capital investment; the cost and complexity of the technology needed may strongly influence the type and number of centres.

Central to delivering streamed care is the need for integrated Information Management and Technology. Effective scheduling systems are a key success factor along with diagnostic request and reporting functions available to clinicians in a timely fashion.

Patient focused booking will increase choice and undoubtedly reduce DNA's and patient cancellations. Increased use of telemedicine with protocol driven pathways will smooth the flow of care and support the delivery of services in the community. Pace of change will undoubtedly quicken and clinical communities need to be prepared and supported for this.

The Regional Dimension

While it may prove difficult to apply the principles of streaming in a single system there are benefits of pooling resources at a regional level as a way of increasing capacity for elective care.

3.5 Maximising the efficiency of Operating Theatres

While the audit Commission Reviewing Operating Theatres (2003) report suggests that the Bevan (1989) standard of 90% theatre utilisation is a valid standard this may hide many potential wastes of valuable theatre time. Because the run time of a list is the time elapsed from the start of the first operation on a list, time lost between cases is rarely accurately estimated.

Problems which now arise to diminish efficiency in operating theatres are numerous.

- Large general hospitals with multi-theatre suites creating transport bottlenecks at lifts and with portering.
- Multi-theatre suites causing bottlenecks both into theatre at reception and particularly out of theatre with inadequate recovery facilities (particularly staffing).
- Changes in theatre organisation, which may result in patient's not being brought to the anaesthetic room timeously before the end of a previous case.
- Changes in anaesthetic practice, which means anaesthetic room time is lengthened for the insertion of monitoring equipment and utilisation of peripheral nerve block anaesthesia.
- Changes in surgical practice with the introduction of new procedures which take longer but may not be more efficacious e.g. in orthopaedics the introduction of widespread arthroscopic surgery or mini incision arthroplasty.
- Changes in recovery room practice such that the patients remain longer in recovery before transfer back to the open ward contributing to the bottleneck.

Adding to these problems of theatre organisation and medical practice is the contemporary issue of problems with decontamination and sterilisation and surgical equipment. Increased turn around time for sterilised equipment means that more equipment is required with its consequences for storage space and in many areas matters are further compounded by the centralisation of the sterilisation services.

Even if pre-admission clinics are used effectively to minimise the number of patients who are actually cancelled because of unfitness or lack of availability this does nothing to influence the efficiency of the theatre process.

Within existing systems only individual consultant surgeons have an interest in controlling the waiting list to which other groups of staff have no obligation. Currently there is little in the way of true incentives to improve performance other than the desire to provide a good service for patients.

3.6 Manpower

Professor John Yates has highlighted a study into the work of 182 orthopaedic Surgeons that found on average that they operated for 7 hours per week.

A fifth were working below the minimum standard recommended by the British Orthopaedic Association. Professor Yates recommended that all orthopaedic surgeons should be able to operate for a minimum of 8 hours per week. Four sessions of 3.5 or 3 five hour sessions. Theatres are mainly used 9-5 weekdays but by extending the working day to allow 2 five hour lists would increase capacity by 50% (Yates *et al* 2000). There is a challenge here for managers who must ensure that this happens and will be dependant on the appropriate support, training and information.

3.7 Reducing Length of Stay

The recent benchmarking exercise highlighted the variations in length of stay across Scotland and the fact that the number of days that a patient spends in hospital prior to an elective operation is higher than England (NHS Scotland 2004).

There is evidence to suggest that there is greater variation in the pattern of discharge from hospital than the patterns of admission. (Modernisation Agency 2004). This is due to the way that the process is managed. Waiting for ward rounds that take place at set times, accessing test results or awaiting discharge prescriptions inevitably lead to a variable and unpredictable length of stay. Friday is generally the busiest day for discharges with limited activity over the weekend. Patients are admitted as emergency over a seven day period but discharged over five. Patients who are admitted on Friday could potentially have a length of stay that is 25% longer than a patient admitted on a Tuesday. Ironically this is an area that can be managed effectively thus reducing bottlenecks within the system. There are benefits also for patients who have a reduced length of stay enabling them to plan their lives accordingly. This would have significant benefits for patients from Remote and Rural areas, as it may reduce their time away from home and allow for improved coordination of transport arrangements.

The average length of stay should be the same regardless of day of admission. In summary in order to achieve this the following points have to be adopted into everyday practice;

- Identify bottlenecks
- Map information flows and the clinicians responsibility for patient care throughout the episode of care
- Analysis of current patterns of discharge
- Analysis of inpatient stays by length of stays to identify areas of improvement
- Plan for discharge prior to admission
- Have a dynamic discharge process that includes nurse led discharge, timing of discharge with the demand for beds for new admissions

The Unscheduled Care Programme which launches in May 2005 will work with NHS systems across surgical and medical flows and will look specifically at variations in discharge processes.

The Elective Care Action Team would wish to make the following recommendations:

- That day surgery is treated as the norm for elective surgery adopting the basket of procedure described by the Audit Commission
- Develop Centres/facilities that deal only with elective care on existing hospital sites or in new buildings

4. POST OPERATIVE CARE –AVOIDING UNNECESSARY FOLLOW UPS

Traditionally, orthopaedic elective patients have attended the hospital for routine follow up. This is often inconvenient for patients and is costly in terms of consultant and clinic time.

With improved preoperative assessment and preparation the Orthopaedic patients' discharge is now planned even prior to admission thus avoiding delayed discharge. Multidisciplinary supported discharge teams are now established to facilitate prompt discharge home. Patients do not need to attend hospitals in the early post-op period. Wound checks and removal of sutures etc, can effectively be managed in primary care.

Telephone follow-up either conducted as a routine or by providing patients with access to opinion, should the patient or family have concerns, avoids unnecessary anxiety or inappropriate GP or hospital visits. Thereafter, arthroplasty follow-up can effectively be managed by either nurse or AHP practitioner. Follow-up timing can be arranged in agreement with local guidelines and follow-up assessment can be conducted according to agreed protocols, with validated outcome measures and radiological markers identified.

There is no need for patients to routinely see the orthopaedic surgeon. Should progress not be in line with the accepted protocols then consultant review will be arranged, which in practice will involve a small number of patients. With access to required imaging this service could be provided in primary care decreasing the burden on the acute setting whilst improving accessibility and convenience for

patients. Automatic secondary care follow up should only be used where necessary and clinically appropriate.

Implementation of such a service also allows for collection of robust outcome data which is important for clinical governance and monitoring of revision rates. It facilitates monitoring of outcome over a long period of time whilst saving considerable consultant time. Moreover, reduced follow up appointments create the capacity to see new patients sooner.

5. SUPPORTING MECHANISMS FOR MANAGERS

It is imperative to provide training to allow managers to deal effectively with the complexities of delivering healthcare. The need to understand and take a whole systems approach is vital if we are to make significant improvements to the patient journey. The ability to access accurate information necessitates an integrated IT system.

In recent years, healthcare has made increasing use of business models to improve quality. Amongst the earliest of these was the Business Process Reengineering model, which contributed to early healthcare redesign initiatives. This approach relied significantly on process mapping and analysis, as a tool to enable practitioners to gain a better understanding of systems and processes to inform improvement programmes. A number of consequent initiatives developed and modified the basic approach, and contributed to the creation of 'toolkits' available to healthcare systems and professionals to support system improvements. These reflect for example a collaborative (multi-disciplinary, whole system) ethos, commitment to work with patients and carers to improve services, and are linked to important national work streams tackling workforce planning and redesign, training and education, quality measurement and monitoring systems.

The Centre for Change and Innovation will develop a toolkit approach in 2005 built upon the learning from the NHS Modernisation Agency and Innovations in Care (Wales).

5.1 Demand and capacity analysis- Managing Variations in Elective Admissions

There is an assumption that emergency admissions adversely impact on elective admissions due to the associated unpredictability and level of variability. There is evidence however, to suggest that due to the way in which elective admissions are planned results in major variations across the system (Modernisation Agency 2004). The effective management of variation in patient admissions could ensure that beds are available when required, cancellations reduced, enabling patients to have quicker access to treatment and care. This applies to both elective and emergency admissions.

Demand and capacity analysis is one component of service redesign. In a redesign pathway it follows process mapping. Wherever a queue (or bottleneck) forms, it arises because there is variation in demand and supply which has impacted on the "flow" of patients through the system or because of some constraint at that point in the system which causes the system to go out of balance. The purpose of demand

and capacity analysis is to identify blockages and constraints in a pathway which cause such queues. In turn the analysis informs the identification of solutions to these blockages which may bring a system back into balance. The analysis can be undertaken at each and every stage of a total pathway. The answer is rarely as simple as simply injecting further resource into one part of the pathway, as this may actually contribute to further blockages and bottlenecks elsewhere in the same pathway.

The objective of analysis and redesign is to align demand and activity, and to streamline the pathway, while making best use of all resource. The point of both process mapping and demand and capacity analysis is for the team to gain a better understanding of the process and to enable it to develop solutions which improve the alignment of supply and demand. At risk of stating the obvious, those solutions will either reduce demand or expand capacity, or both.

The Modernisation Agency has a simple 6 step approach to redesign focused on aligning demand and capacity.

- Use measurement to predict and manage
- Manage the bottleneck in the patient flow
- Resolve capacity problems at the appropriate point in the system
- Reduce all unnecessary waits and delays
- Eliminate backlogs
- Match capacity and demand on a daily basis – i.e. reduce variation.

The key to the process however is to consider the whole pathway, and to pilot changes on an iterative basis, tackling those elements and issues which maximise impact in the shortest time, without actually increasing blockages elsewhere in the system. There are obvious points to make about increasing throughputs in parts of a process (e.g., expansion of outpatient clinics) which require to be matched by additional inpatient capacity in surgical pathways. This theory underpins all CCI national change programmes and where clinicians and managers have used the learning from demand and capacity workshops it is helping to drive the redesign of services.

5.2 Redesign

At the simple end of redesign, concentration on process issues such as queue management (single queues – e.g. referrals to a service rather than a named consultant) both in the department to which the referral is made and in those providing for example diagnostic support to the process can reduce queues substantially. Similarly if queues are currently stratified into multiple streams depending on urgency, this too contributes to delay, and should be tackled. A simple classification of urgent and routine should be adequate when systems are in balance. In addition, analysis of DNA rates is often fruitful, particularly if these are high. It is important to consider whether there is a relationship between rates and particular groups of patients or particular GP practices and it is also crucial to consider what impact they have on queues. (For example, are clinics overbooked to allow for expected DNA rates). Initiatives such as patient focused booking will reduce

DNA and cancellation rates. Patient Focussed Booking is now being implemented in over 30 major “appointment” centres in Scotland for first appointments but has wider potential for application to day case and inpatient services as well as to diagnostics.

Professionals should not be engaged in processes which waste their expertise (e.g. chasing notes, test results, etc). The pathway should be organised in such a way as to ensure that each professional involved sees the patient at the appropriate time and has the appropriate information to hand to enable either a diagnosis to be made or treatment prescribed. Steps in the pathway which do not contribute to this objective should be eliminated, and effective arrangements put in place to facilitate this approach.

If elements in a pathway do not need to be done sequentially, the possibility of doing multiple things simultaneously should be explored. This will reduce the overall length of the pathway.

A crucial distinction, in terms of expanding capacity, must be made between segmentation and carving out of capacity. Segmentation is the process which considers demand for a service, and groups patients with similar features / processes. Its objective is to improve waits for all patients. Thus in the example of triage of referrals to alternative professionals (see below), each group of patients should experience quicker access to the professional best able to meet their clinical needs. No group is disadvantaged by this means, and all benefit.

‘Carve out’ is a process which aims to improve flow for one group of patients, but does so at the expense of others. An example is rapid access to clinics and treatment for cancer patients. It may not be necessary to increase capacity but it will be essential to make whole system changes in order to create ‘room’ within the system.

Moving towards more complex issues, any change which requires modifications to behaviour or practice are more difficult to implement. For example, introduction of referral protocols, and referral thresholds requires careful attention to the human aspects of implementing change. Such initiatives are directed at reducing demand for services and are most successful where there is whole system clinical collaboration supporting the change. Such collaboration can be achieved through sharing tasks, for example, reviewing referrals to gain a better understanding of demand. In turn this enables agreement to be obtained on thresholds for access to service.

More radically the collaborative may consider alternatives to the traditional outpatient consultation for dealing with that demand. For example, demand can be triaged to other professionals (e.g. GPs or allied healthcare professionals with a special interest, specialist nurses). If referrals are managed within primary care, triage can be backed up by the provision of educational support to referring doctors, contributing to an increase in the quality of future referrals, and to equity for patients.

None of these more complex interventions provide quick fixes. In addition to the delays involved in implementing change, there are significant training and education issues which require to be resolved. For GPs with a special interest there are now in

existence recognised diplomas which offer formal accredited learning programmes (usually modular, with a distance learning component, supported by a mentoring process involving supervising consultant medical staff). These take up to 2 years to complete, but have been developed for many specialties. Other initiatives may be more ad hoc, but require all parties to be comfortable with issues of patient safety and quality.

Orthopaedics Redesign

There is currently significant redesign of Orthopaedic outpatient services occurring across Scotland. Projects are looking at the introduction of alternative pathways of care and consequently the development of additional referral options. GP with a Special Interest, Extended Scope physiotherapist and podiatrist, and Nurse Specialist roles are being developed with the aim of ensuring that the patient sees the practitioner with the most appropriate skill mix and that where possible care can be provided in the community setting. The effect of this will be to alter the current demand on consultant orthopaedic surgeons potentially allowing them to decrease the number of outpatient clinics that they need to run. Where referral information and management services are available they will increase the effectiveness of such services by routing referrals effectively and providing information on demand for various aspects of a musculoskeletal service.

Where next?

Reference has been made to the origins of the approach, located in business improvement initiatives for industrial processes. It seems likely that further work in the business sector might shape the direction of travel for future healthcare improvement initiatives.

Already, key individuals and organisations are considering statistical process analysis which examines variation in processes (again firmly rooted in demand and capacity analysis) through statistical analysis of variations expressed in terms of standard deviations from a mean. This provides a tool which enables issues which cause significant variation from the mean to be identified. In turn this informs the redesign process, by focusing attention on those matters which cause major variation, and eliminating them.

6. TRAINING EDUCATION AND RESEARCH

Training and education for health service staff must ensure that the appropriate skills and competencies are available and delivered in an appropriate setting to each patient. An integrated approach to service delivery and education must be taken to ensure an unbroken continuum of elective care is provided throughout the primary, secondary and tertiary care sectors, which may challenge the traditional professional and care location boundaries. Improving training for NHS staff will develop and maintain the required skills and competencies for a new approach to elective care and greatly empower the diversity of health carers.

Redesign of services for elective care on this scale will inevitably result in pressures on the current systems of training and education, and has the potential to adversely affect research. It should be remembered, that much of what has been suggested is already in practice in parts of our current system, and many of the associated challenges have been identified and dealt with on a local basis. Utilising the experience from these pilot sites to form appropriate templates and frameworks for training and education for all staff groups (and patients) should allow early transition to an active system.

It is important to identify that a key component of this development will be the ability for flexibility- flexibility in roles, responsibilities, skills, competencies and the extension or realignment of current care teams. Local issues such as geography, staff availability and availability of specialist diagnostic or treatment facilities may prompt the need for more individualised solutions on a locality or specialist basis. Each service may require specialised support.

All staff groupings should have the opportunities to develop skills within their abilities supported by appropriate education and training, and this may include taking on roles more traditionally associated with other professional groups. Where this happens it is important that confidence is assured within the team, roles and responsibilities are clear with clear lines of accountability and governance and that the team have time and information support to reflect on their activities and prospectively critically and comprehensively audit their service.

Ongoing support for all individuals of all professions should be assured by assisting them to:

1. identify their own particular current skills and competencies and future training needs
2. specify these in an agreed personalised training development plan, which is reviewed regularly
3. gain access to appropriate training solutions.

The NHS Knowledge and Skills framework clearly identifies these issues complemented by Agenda for Change and Modernising Medical Careers.

Solutions for training and education will lie with development of an integrated strategy for an integrated approach to joint and multi-professional training. between the groups of education stakeholders and providers including the Royal Colleges, Universities, Further Education Establishments, NHS Education Scotland, the NHS and other groupings and institutions. Shared training, where appropriate, will foster trust between professions and allow more understanding of roles and responsibilities and hopefully result in more integrated and quality care. There will be occasions when one or other staff group will definitely require to take the lead for practical service delivery purposes, even although historically this was professionally different.

To facilitate the change in the provision of elective care, the NHS in Scotland, NHS Education Scotland, Professional Bodies and Educational bodies must:

1. identify the existing skills and competencies within the overall health care workforce
2. identify the new skills and competencies required in each speciality, elective care setting
3. develop training and education programmes to fill the 'gap'
4. develop programmes to maintain these newly acquired qualities and skills
5. develop national standards for curricula to ensure consistency throughout elective care

Developing a model to facilitate multi-professional roles and education should link the required skills and competencies to current educational programmes such as Agenda For Change, Nursing and Medical Career Structures, Modernising Medical Careers and the Scottish Credit and Qualifications Framework (SCQF). This would enable health service and educational planners to utilise an integrated and robust template to provide the appropriate skill mix for the future health service.

All new education developments will require the identification and allocation of resources, which must include time to teach, train and ensure quality of service delivery for all staff groupings.

NES will play a key part in co-ordinating activities, ensuring lines of communication, and setting appropriate standards for education and assessment in association with professional bodies to provide relevant programmes to support skill enhancement, skill maintenance and clinical competence.

6.1 Impact of Streaming

Moving a large proportion of elective care from current facilities could adversely affect all training for health care groups.. If the new elective care centres attract and retain staff from the current pool of experienced personnel, there are dangers of suddenly destabilising the ability of the current system to deal with either elective or emergency work, as well as providing training.

The English/Welsh NHS has already been pursuing similar policies for some time, and have faced problems with recruitment and retention in all staff groupings to both the new centres and the affected local hospitals. Appointment of non-UK health staff has had mixed success and occasional highly publicised failures and there may now be limited areas from which to recruit. This will pressurise any current capacity for training

Opportunities exist, however, to develop new roles in a more purely elective environment. Recruitment from previously untapped sources such as science graduates rather than from current shortage groups like nurses, ODPs or AHPs should be seriously addressed. Recruiting to, or enhancing existing workforce to roles such:

1. Anaesthesia and Critical Care Practitioners [ACCP]
2. Physician Assistant
3. Specialist Nurses such as arthroplasty nurse
4. Specialist Practitioner

5. Extended Scope Practitioner
6. GP with a special interest
7. Specialist GP

Recruitment to roles such as Anaesthesia and Critical Care Practitioners (ACCPs) may allow expansion of the Anaesthesia Team and increased efficiency. Pilot programmes in association with the Royal College of Anaesthetists are already in place in England, and early results are awaited. Centres should be identified in Scotland to liaise with the pilot sites to determine the place of such schemes and potential for assistance.

The development of Physician Assistant in the USA recruits science graduates, who are not considering a career as a doctor or a nurse, but wish to enter the health field. In essence the PAs are a hybrid with less training than a doctor but more responsibility and skills than most nurses and many work within either a general or specialised field of health, and speciality based elective care within a supervised setting would be highly appropriate.

Other staff groupings will also be able to build on excellent work already being done by Arthroplasty nurses, specialist and Extended Scope Practitioner (ESP) Physiotherapists for example.

The concentration of elective work unaffected by emergency care will provide excellent opportunities to concentrate planned training more reliably in shorter periods of time for all the health care groups.

Concentration of elective work in a specific part of the service will facilitate the conduct of clinical audit and research and development in partnership with Universities, specialist groups, and industry.

6.2 Impact of Increasing Day Surgery

Concentration of surgical activity to the extent of making day surgery the norm will undoubtedly affect current training arrangements and requirements for many health care workers. It will be the norm, that much of the assessment, associated investigations, diagnosis, discussion of management options preoperative assessment and all but very early postoperative care will be delivered in the community based setting. It is essential that the health cares have the appropriate training for the acquisition and maintenance of the requisite skills and competencies.

Access to these training opportunities must be maintained for certain secondary care staff groups, and support and incentives given to those in Primary Care whose workload will be affected by either delivery of care or need to provide training.

Again the integrated Primary Healthcare Team will be able to identify and develop new roles within the community needed to support this further increase in day-case activity. This is, of course, a developing field and many primary care teams are already dealing with significant workloads in this area.

6.3 Preadmission services and postoperative management

Much is already being done throughout Scotland to rationalise and improve preoperative preparation of patients. The changing needs of the modern hospital with increasing day-case activity and reduction in availability of inpatient beds for preoperative uses have prompted much innovative thinking within the current system. Many believe that more radical systemic changes producing a 'peri-operative system' are more efficient and safer for patients.

Such a system allows for clerical staff, managers, medical staff, nurses AHPs and other health staff to work together with the patient to optimise their admission and surgery.

The training needs can be dealt with in-house for most staff, but perhaps a standardised care pathway with quality assurance built in should be developed for the NHS in Scotland, which could be adapted for local circumstances. There are clearly opportunities for existing energetic and experienced staff to take on more specialised roles. IT skills and systems to allow co-ordination of care are essential, so IT training is again a prerequisite.

The preoperative system will be also integrating with the in-hospital and primary care teams to ensure co-operative and co-ordinated postoperative care. The training and development needs of those involved must foster trust and co-operation in the aim of good patient care, and therefore integration and shared learning will be required. It is essential that all stakeholders agree to the pathway of peri-operative care, that the appropriate skills and competencies are available and that regular and prospective clinical audit is in evidence.

6.4 Referral Management Services

Where these have been most successful, it has depended upon local enthusiasm, trust and respect between groups. Flexibility and tolerance of change has been demonstrated by all concerned.

The focus of learning support should be on dealing with local requirements rather than developing national 'standard' courses for referral management. The developing staff groups to a great extent have much of the necessary knowledge, they require support in time and resource to consolidate and apply this, and to discuss and audit their successes and failures.

6.5 Training and Support for Specific Staff groups

All health care staff groups will be faced with the challenges of delivering and receiving training to cope with the proposed new elective care system. An integrated, co-ordinated and co-operative approach will be essential, and NES will have a key role in this regard. Some issues are:

1. accreditation and validation of all health care educational programmes which address the new and additional roles of health carers will ensure the transferability of skills and promote multi-professional working
2. to develop a standardised core competency framework to support the proposed changes to deliver elective care.
3. to support and develop a multi-professional approach to experiential learning in an appropriate environment across different clinical settings.
4. A robust and uniform, multi-professional mechanism for the supervision and assessment of skills and competencies will be required, and ideally this should be formalised and consistent.
5. develop a training programme which identifies and exploits the area of information and communication skills to fully utilise the potential of tele-medicine including telephone, e-mail, tele -conferencing, tele-management and diagnosis supporting elective care.
6. to develop aids to integrated decision making support for elective care
7. to develop a training package for the public to address the public perception of proposed changes to elective health care.

Specific issues for some groups are identified below.

Medical

Consultants and Specialists will require identified time to train and participate in training of both trainee medical staff and other staff groups. They will also require time to work with an extended team integrating with the Primary Care sector. This will include work with Practitioners with Specialist Interests from various backgrounds on both training and audit.

This will require flexibility in negotiation on Supporting Professional Activity (SPA) time in the new consultant contract, both to ensure delivery of effective training by all consultants, and to support allocation of extra training time to individuals of proven ability.

Where clinical care is delivered in the new centres as well as traditional hospitals, opportunities to share teaching and audit sessions should be maximised.

Experience and support in developing and delivering shared learning will be necessary.

Nursing

The undoubted opportunities to develop new roles must not alienate those who, while embracing new responsibilities, wish to pursue more traditional nursing careers. Loss of experienced nurses in an uncontrolled fashion to new developments risks destabilising the current in-house training and development of nurses.

Ensuring adequate staffing levels on wards and ability to protect training time will aid recruitment and retention of staff.

Encouragement of personal development need planning should be supported by increased availability of funding for internal and external courses, training and conferences.

Allied Professions

Similar constraints will apply in balancing the need to develop new roles with the requirement of maintaining good staffing levels within the parent professions. Access to training and training support must be maintained and improved for both those who take on new roles, and those who concentrate on more broad-based general care.

Management

It is likely that widespread introduction of these changes will result in movement of activity, workload and expenditure rapidly and, in many cases, in different ways within the same region.

Flexibility will be needed in budgetary control to ensure that money follows the activity, and there will be difficulties in ensuring necessary financial prudence while allowing a flexible approach to develop.

It will be more crucial than ever to ensure that managers work closely with health care workers of all professions in the primary and secondary care sectors to understand the developing needs while not unduly committing clinical time to constant meetings. Key individuals with proven ability need to be identified at an early stage, given significant autonomy, and supported strongly.

They will also need to liaise closely with colleagues in other sectors to ensure flow of funds or staff in appropriate directions. Some of the educational issues for managers include:

1. communication and IT
2. decision making skills in clinical settings
3. appreciation of holistic health care and pathways of elective care
4. education, skills and competencies for elective care
5. risk management
6. performance management, demand management, waiting time theory and management referral systems

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Annex 1

NATIONAL FRAMEWORK FOR SERVICE CHANGE IN THE NHS IN SCOTLAND

COMMISSIONING DOCUMENT: Elective Care

Definition

This work will;

- cover all elements of elective care and consider where this care is best delivered
- identify the scale and scope of outpatient activity, with a focus on Orthopaedics
- consider the trends in elective activity including those relating to waiting times
- take full account of Ministerial commitments to reduce outpatient and inpatient waiting times
- consider the patient journey and what support is required to enable preparation and aftercare in Primary Care
- consider how technology can support more efficient /effective working
- explore how day surgery can become a focussed service to the public
- link with the Centre for Change and Innovation's Outpatient's Programme with a particular focus on the Orthopaedic redesign initiative.
- Examine how benefits to patients may be achieved through expansion of Managed Clinical Networks

Background

The White Paper, Partnership for Care made clear Scottish Ministers' commitment that no patient should wait longer than 26 weeks for a first outpatient appointment by 26 December 2005. Patients requiring inpatient or day case treatment can also expect to wait no more than 6 months by the end of 2005.

These commitments demand significant improvement from the status quo.

The White Paper, Partnership for Care, stressed the importance of looking at the pathway of care from the patient's point of view making it smoother, more accessible less complicated and less subject to delays. For most people their episode of care begins and ends in Primary Care which will require to have adequate support

systems and more rapid access to a wide range of services such as diagnostics. This may mean that treatment is carried out in a primary care setting rather than in hospital and undertaken by a different member of the healthcare team than previously. More acute services will be delivered in hospitals on a day case basis, and in ambulatory care and diagnostic centres.

It is important to consider the implications of Managed Clinical Networks (MCN's) the objectives of which serve to underpin the development of integrated services with the patient as the focal point. Existing MCN's such as cancer have demonstrated benefits to patients which can reduce delays, tackle bottlenecks and have enabled patients and carers to access clearer information.

Objectives

The National Planning team should report on the following;

- How to maximise the number of day cases and identify scope for the local delivery of elective care
- the implications of the redesign work emerging from the Centre for Change and Innovation
- the alternatives to traditional hospital outpatient consultation and the implications of those alternatives for patient pathways and the future role and structure of Scottish hospitals,
- to what extent services provided need to be planned at a regional or board level.
- implications for remote and rural areas, including the role of community hospitals

Milestones

1. Steering Group to agree Commissioning Document at 1st meeting.
2. Short-life working group identified by end June
3. Data/analytical report by end September
4. Interim Report by end November (and report to Steering Group)
5. Final Report by end December

National Planning Advisory Group Lead

Charles Swainson Medical Director, NHS Lothian

National Planning Team Lead

Una Lyon Advisor, National Planning Team, SEHD

Membership of Elective Care Sub Group

David Finlayson	Consultant Orthopaedic Surgeon, Chairman of Scottish Committee for Orthopaedics and Trauma (SCOT)
Stephen Gallagher	Assistant Director (Programmes) Centre for Change and Innovation SEHD
George Barlow	GP, The Crescent Medical Practice, Glasgow
Judith Reid	Physiotherapist North Glasgow NHS
Deb Den Herder	Project Director, Planned Care, NHS Grampian
Ian Bashford	Senior Medical Officer, SEHD
Dermot McKeown	Consultant in Anaesthesia and Intensive Care NHS Lothian
Greg Murray	Consultant General Surgeon, NHS Tayside
Jill Young	Chief Executive, Golden Jubilee National Hospital
Mandy Yule	General Manager, Surgical Services, Ayrshire and Arran

ANNEX 2

Colorectal Protocol

- Agreement on key markers for colorectal cancer
- Use of an agreed referral template
- Referrals to a central point
- Tracking and audit of all patients entering the system
- Creation of an integrated patient assessment service (triage by consultant)
- Stratifying and managing risk
- Addressing urgency to minimise chance of failure to diagnose serious pathology

Results

- Joint ownership of the process with partnership between GPs and clinicians
- Good management of high volume referrals obscuring small numbers of cancers
- Marked reduction in waiting time from GP referral to diagnosis of bowel cancer (reduction from 9 months to several weeks)
- Marked reduction in barium enema examination (6 months + to 2-3 weeks)
- Reduction in outpatient waiting times for colorectal clinics
- Achievement of National Cancer Guidelines

Glasgow University Hospitals Division & Glasgow Local Health Care Co-operatives
Request for Colorectal Investigations
(South Glasgow)

Patients Details

GP Details

Patient Number		GP Practice Code	
CHI Number	Male/Female		
DOB	[Age]	GP Name	
Surname			
First Name		GP Practice Name	
Address		Address	
Postcode			
Telephone		Telephone	

Patient History

Family History

Previous similar symptoms [yes] [no]	Warfarin [yes] [no]	History of cancer in 1 st degree relatives
Previously seen at:	Insulin [yes] [no]	[yes] [no]
Previously seen when:	Oral Hypoglycaemics [yes] [no]	What relation:
	Other	What cancer:
		Age of onset:

1. THIS SECTION MUST BE COMPLETED

Duration of current symptoms?	Weeks/months
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Symptoms (circle as appropriate)

Change of bowel habit	Bleeding	Others	Pain	Weight loss
None	None	Pruritus	None	None

Constipation	Separate from stool	Mucus	Abdominal pain	> 3kg
Persisting loose stools	Mixed with stool	Mucus & Blood	Pain on defecation	> 6kg
Alternating	(Please indicate)			
Incontinence symptoms	Fresh			Current Weight
Urgency	Dark			

Symptoms (circle as appropriate)

General	Abdominal	Haematology	Rectal examination
Normal	Normal	Haemoglobin	Normal
Cachexia	Tenderness	MCV	Haemorrhoids
	Abdominal mass	Ferritin	Fissure
	Hepatic enlargement		Palpable mass

1.1 Significant Co-morbidity

Comments

I would be grateful if this patient could be investigated

Signed _____ Date _____

1.1.1 For hospital use only

Destination:	Barium Enema	Nurse led clinic	Consultant led clinic
Urgent	1.1.2 Colonography	Colonoscopy Soon	Flexible sigmoidoscopy CT
Routine			

Please send to:

Annex 3

Implications of separation of scheduled and unscheduled care

<u>Category</u>	<u>Area</u>	<u>Potential Issue or Impact of separation</u> (Positive or Negative)
Staff Governance	<u>Workforce:</u> Training & Development Recruitment & Retention	<ul style="list-style-type: none"> • Worsen/create shortage of certain specialist staff • Need to cross traditional professional boundaries • Separation is seen as attractive to some staff & improves recruitment • Opportunity to have 'Teams of experts' together • May be a need to have a critical mass of staff if specialty based • Specialist Vs Generalist • Opportunity for role extension and multi-skilling • Improved career structure for certain groups • New role development and training opportunities • Centres of Excellence could be quickly established • Sustainable elective services not affected by emergencies
	Accreditation	<ul style="list-style-type: none"> • Maximising throughput of case mix without cancellations could improve ability for accreditation, training, supervision etc • Concentrating electives could 'de-skill' in certain areas of expertise
	Resources/skills	<ul style="list-style-type: none"> • Duplication may be an issue with similar resources/skills needed for the Orthopaedic elective unit and the Trauma service e.g. • May - reduce flexible use of resources and skills if separate sites - increase flexible use if multi-skilled or Generalist
	On-call	<ul style="list-style-type: none"> • Lack of available staff to cover duplication of specialties • Cross specialty cover could be required • Move to area/regional on-call
	Pay Modernisation	<ul style="list-style-type: none"> • Working Time Directive / Junior doctors – reduced hours available • Consultant Contract - Reduction of available hours, increased cost - Ability to design 'job plan' to suit requirements • GMS Contract – Enhanced services, reduce demand, streamed referrals, develop pathways, community based care/teams • Development of GP Specialist – Hospital and Community • Agenda For Change – Opportunity to develop roles and extended skills and cross traditional professional boundaries • Allied Health Professions – lead in care, extended scope Practitioners <p><i>*South Durham. Joint Assessment Team</i></p>

Clinical Governance	Waiting Times & Patient Volumes	<ul style="list-style-type: none"> • Elective stream will deliver – increased capacity, high volumes, low cancellations, reduced length of stay, value for public money, productivity, efficiency and reduced Wait Times • Emergency stream will deliver – immediate access to essential resources, improved quality care, higher cost but value for money, variation in utilisation of capacity, reduced Wait Times
	ITU HDU CCU	<ul style="list-style-type: none"> • On site with elective ‘centre’ will allow a full range of minor and complex elective work and overnight cover • Off site – would need to consider risk, cover, distance & transport availability to determine case mix and volumes
	Theatres, DSU, Treatment units, Wards etc	<ul style="list-style-type: none"> • Dedicated elective facilities – Improve/reduce recruitment depending on profession, increase NHS capacity, throughput and VFM, concentrate specialties/teams, support R&D and training, ?efficient use of high cost resources as they would ‘close’ overnight • Dedicated emergency facilities – Improve/reduce recruitment, immediate availability, right skills to care for ill patients, high cost but effective and efficient use of resources • Increases number of beds for emergencies and winter <p><i>* Day Surgery Units – guidelines and examples. R Chapman</i> <i>* Management & use of Operating Departments.. NHS VFM Unit</i></p>
	Risk Management	<ul style="list-style-type: none"> • Improve Control of Infection and reduce HAI rates • Reduce adverse incidents (right skills, right place, right time) <p><i>* Tayside OP & Home Parenteral Antibiotic Therapy</i></p>
	Shared Services	<ul style="list-style-type: none"> • Laboratories, TSSU, AHP, Laundry, Administration, Records etc – could create additional pressures, potential duplication of services if elective centre ‘off site’, increase costs, could also support a move to more ‘area/regional’ services and deliver efficiencies
	Redesign Modernisation	<ul style="list-style-type: none"> • Facilitate earlier and easier redesign of patient referral & pathway • Tackle embedded cultures, change behaviours, team approach • Support implementation of best practice and research base • Reduce Wait times, increase productivity, utilisation, & efficiency <p><i>*Central Middlesex ACAD 1999</i> <i>* Ayrshire & Arran Urology Unit 2001</i></p>

Financial Governance	Revenue Capital PPP	<ul style="list-style-type: none"> • Elective – reduce cost per case (dependent on TP, start up and running costs) planned skill mix and numbers of staff • Emergency – increase cost per case, but more efficient use resources, higher skill mix and numbers of staff needed. • May only provide some services in a few locations depending on complexity, cost, expertise and technology • Capital – modest initial outlay, more efficient maintenance programme, capital charges increased if new build & off site • PPP – increase market interest for dedicated elective centres <p><i>* DoH Value for Money Unit</i></p>
PFPI	Access Involvement	<ul style="list-style-type: none"> • Choice – Increase/decrease choice depending on site or centralisation • Distance/transport – increase travel & cost for patient, potential to base centres in heart of ‘community’ • Increased demand on Ambulance and Local Authorities • Patient focused booked admission, reduced DNA & cancellations • Increase patient involvement in redesign of referral and care pathways • Potential to remove/reduce deprivation based inequality
I.M. Technology & Equipment	‘Admin’ systems Medical Technology Equipment	<ul style="list-style-type: none"> • Scheduling systems would increase in range and volume, need to ensure integration with clinical systems • Allow booking of tests at right time & result reporting availability • Direct GP referral & access to ‘treatment’ (protocol driven pathways) • Facilitated by PACS, electronic record, Lab/Imaging result reporting • Duplication of technology and equipment, improved training • Support R&D, implementation of new ‘technology/treatments’ • Pace of change will quicken <p><i>* Park Royal Centre. NW London Hospital Trust</i> <i>* Effective Theatre Scheduling. Southern Derbyshire Acute Trust</i> <i>* DSU Bristol Royal Hospital</i> <i>* Nuffield Ortho Centre. Oxford</i> <i>* SW London Ortho DTC</i> <i>* Chase Hospital. Basingstoke</i></p>
	Telemedicine	<ul style="list-style-type: none"> • Increase use of telemedicine, tele-consulting, tele-conference/MCN’s • ‘Virtual’ Physician & triage • Development of ‘Referral Information/Management Centres’

		<i>* Somerset Coast PCT</i> <i>* Manchester and NW London</i>
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