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Executive Summary

A national review of adult elective orthopaedic services in England

GETTING IT RIGHT FIRST TIME

Contents

Foreword

The population is living longer and by 2030 over 15.3 million of the population in the UK will be over the age of 65 years. As a consequence, we will see an ever increasing demand on our health resources which are already stretched.

Indeed, orthopaedic referrals from GPs to secondary care providers are increasing by 7-8% per annum and show no signs of slowing. Moreover, trauma and orthopaedic surgeons make up 33% of the surgical workforce and are responsible for 25% (rising towards 26%) of all surgical interventions, and further demand will increase this.

This comes at a time of world financial austerity, and despite real term increases of Government NHS funding, demand will continue to outstrip supply. For example, in the first quarter of this financial year (2014-2015), over 17 trusts have already been reported to the Secretary of State for financial deficits and foundation trusts posted a combined deficit of £167 million. It is likely that the number of financially challenged hospitals will increase. In essence we are in a 'perfect storm' of ever-rising demand and financial austerity.

Whilst the focus has been on commissioning as the method of controlling costs and demand, however this will take a number of years to achieve. Moreover, the need for change is increasingly urgent if we are to maintain high quality timely care for our patients, in an NHS, which will be underfunded by billions within a few years. Provision of care accounts for 80% of the cost and it is here that I believe that we can do things differently to improve the quality of care, reduce complications and, as a result, save significant sums of money thereby allowing us to do more for less. It is here that we can make a difference so that commissioners, wherever they are, can purchase care knowing it is both high quality and best value. Indeed, we clinicians have a duty to do this.

Elective orthopaedics and spinal surgery has been used as the national pilot and funded by the Department of Health and NHS England. Since September 2013, my team and I have visited more than 200 hospitals in England, we have driven over 17,000 miles, and we have met 1,634 consultants and over 400 senior managers and chief executives to review each organisation's data set on orthopaedic care and outcomes.

The results of these visits and interactions are contained in this report and are a 'call to action' to all, namely, clinicians, healthcare workers, commissioners, politicians, to work together to ensure that all our patients receive the highest standards of orthopaedic care wherever they reside. This will involve a fundamental change in practice to reduce variation, contain costs in prostheses procurement and encourage the use of the evidence base that is available. This will require real leadership with clinicians, whom we need to re-empower, and managers working 'shoulder to shoulder'. The top-down management approach is failing and we have seen a number of examples of this on our visits. If clinicians are disenfranchised and their advice disregarded they will disengage, if that happens we will fail to make the changes necessary and, as a consequence, we will see decommissioning and rationing of services.

The methodology used in this pilot has been shown to be effective and 'to deliver'. Indeed we have been invited into Wales to undertake a GIRFT review of their orthopaedic services in November, and Northern Ireland in the New Year. Further, whilst 'one size' doesn't usually fit all, we believe that this methodology can be used as a template for the other specialties in the secondary care sector. The variation in practice that I have seen is unsustainable and needs addressing urgently.

This report provides the methodology for improving the care we provide to all our patients. It is a real opportunity for clinically driven change that will benefit all. We must seize this moment and act now.

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1. Introduction

The first 'Getting it right first time' (GIRFT) report, published in 2012, considered the current state of England's orthopaedic surgery provision suggesting that changes could be made to improve pathways of care, patient experience, and outcomes. The report took the view that this approach had the potential to deliver a timely and cost effective improvement in the standard of orthopaedic care across England, whilst maintaining timely and effective care for patients, as demand increased due to a population that was living longer.

The Secretary of State for Health and NHS England funded the GIRFT project as a national professional pilot across England (see Figure 1 for project structure diagram). The project, which was hosted on behalf of the British Orthopaedic Association (BOA), at the Royal National Orthopaedic Hospital (RNOH) in Stanmore, has involved senior clinicians offering a clinically led, free, peer-to-peer review of adult elective orthopaedic and spinal practice in each provider trust. It was based on a national review of baseline data, including data from the National Joint Registry (NJR), National Health Service Litigation Authority (NHSLA), Health Episode Statistics (HES), and Atlas of variation, and meetings with providers.

The project featured targeted self-assessment and peer review at a local level relating to musculoskeletal (MSK) services and their:

- Clinical outcomes
- Processes (including revisions)
- Patient experience
- Patient pathways
- Network arrangements
- Financial impacts
- Waiting times

This, in turn, led to bespoke peer to peer evidence based discussion about options for the configuration of services in selected elective orthopaedic pathways considered to be most in need of improvement. The implications for configuration will need to be considered at local and national level, depending on case mix and complexity. Individual trust reports were generated using data from 12 sources (including Patient Reported Outcome Measures [PROMs], NJR and litigation data from the NHS Litigation Authority). The format and approach was initially piloted at Queen's Hospital in Romford and reviewed by a BOA steering committee.

Table 1 - Measures of effectiveness of GIRFT

The effectiveness of the GIRFT National Professional Pilot should be measurable in the short, medium and long term, specifically:

Short Term	Medium Term	Long Term
Reductions in: ■ Prostheses costs ■ Loan kit costs ■ Readmission rates ■ Length of stay ■ Surgical-site infection	Reductions in: ■ National variation for procedures ■ Outliers in national registries ■ Infection/complication rates	Reductions in: ■ Revision surgery ■ Readmissions ■ Litigation numbers and rates

As well as its immediate impact, the project is intended to have a long-term positive benefit on service delivery. This includes (1) delivering a clinically led, provider-side focused catalyst, for improvements in quality and reductions in costs, (2) informing the setting up of and/or enhancing robust clinical networks, and (3) supporting the direction of travel being developed by the Clinical Reference Groups (CRGs) guiding specialised commissioning within NHS England. Moreover, GIRFT has also looked at the common procedures in elective orthopaedic and spinal activity, especially those with a high tariff cost. The principle has been to enhance the quality of care, with the delivery of consistent standards to the whole population.

2. Overview of findings

144 acute trusts (over 220 hospitals) received individual reports reviewing quality and output metrics relating to their total orthopaedic and spinal activity - over 650,000 episodes of care using established and agreed metrics (HES, NJR, Clinical Dashboards and data from National Litigation Authority).

To date, 120 trusts (205 hospitals), have been visited by the GIRFT team and appointments are in place with the remainder between now and the end of the year. All trusts that have not yet been visited have been asked to validate their data and provide context to enable this report to highlight and discuss the major themes that have emerged from the project.

Many interesting statistics have been generated that highlight undesirable variation in practice around the country. For example:

- 23.7% of surgeons performing hip replacements undertook ten or fewer procedures per annum.
- 16.1% of surgeons performing knee replacements undertook ten or fewer procedures per annum.
- 54.6% of surgeons performing unicondylar knee replacements undertook five or fewer procedures per annum and 73.3% performed 10 or fewer procedures per annum.
- 80.1% of surgeons performing knee revisions undertook ten or fewer procedures per annum.
- 60.1% of surgeons performing hip revisions undertook ten or fewer procedures per annum.
- An average of 10.4 shoulder replacements were performed in trusts.
- Average Orthopaedic Data Evaluation Panel (ODEP) 10A Acetabular use is…20.2% (Range 0% to 100%).
- Average ODEP 10A femoral use is… 79.8% (Range 13% to 100%).
- Average return to theatres within 30 days following fractured neck of femur surgery is… 2.37% (Range 0% to 7.29%).
- Average litigation claim cost per spell is... £59.56 (Range £0 to £151).

(Note that the National figure and LAT figures have altered from £54.48 as additional permissions by trusts for disclosure have been given, and the updated base for the denominator [number of orthopaedic spells] now includes 2012 data).

3. Emerging themes include:

- There are many exemplar units (usually those with high clinician engagement and management buy in) providing a high level of cost effective service, despite pressures from emergency admission.
- There is significant variation in practice around the country and within the same population - catchment areas.
- There is substantial evidence in the literature around the subject that indicates that surgeons undertaking low volumes of specific activities may well result in less favourable outcomes as well as increased costs.[2-9]
- There is evidence of a failure to follow the evidence of the NJR and other registries in decision making around implant choice, especially in those aged over 68 years.
- There is evidence of huge inexplicable variation in choice and cost of implants.
- Hospitals are spending on average £200,000 for loan kits per annum.
- Some trusts were unaware of the financial opportunity lost by not complying with the requirements of the best practice tariff for arthroplasty i.e. the cost of failing to meet the targets for NJR or PROMs compliance or PROMs measures of health gain.
- The loss or lack of ring-fenced orthopaedic beds, laminar flow theatres, and experienced orthopaedic theatre teams has had an extremely negative impact on morale and outcomes with demonstrably higher infection rates.
- Experienced dedicated orthopaedic theatre teams have become the exception. The complexity of surgery and the relative inexperience of many staff rotating through create a potentially unsafe and poorly productive environment. Indeed some complex surgery is still performed in non laminar flow theatres increasing infection risk.
- Closer working with clinical coders is needed.
- There is widespread poor use of national data, good and bad, at local level to inform change.
- In some cases these reports have demonstrated poor practice and have acted as ALERTS. If ignored, this failure to act should be seen as an ALARM. The true alarm is when no one pays attention or takes action.
- The anecdotal information gathered at the many meetings held across the country suggested strongly that better outcomes appear linked to more successful working relationships.
- Morale and clinical engagement are directly and inversely related.
- Despite the widespread use of Integrated Clinical Assessment and Treatment Services (ICATS) there remains a significant capacity gap to provide a timely 18-week pathway to complete elective orthopaedic care. Over 50% of the visited trusts failed to achieve18 weeks. This remains a real challenge for most trusts, even those currently demonstrating good demand and capacity planning.
- The relationship with local Any Qualified Provider (AQP) is critical - good relationships add value and poor relationships significantly undermined local NHS providers. Where a collaborative approach has been used we have seen sustainability of local services.
- AQPs carrying out elective orthopaedic surgery often do not accept emergency admission or re-admission. The local NHS Trust is expected to provide this care, which can be prolonged and expensive.
- Some AQPs 'cherry pick' the fit patients and simple elective cases. Complex cases and patients with multiple co-morbidities are frequently sent to the local NHS trust. These admissions can be prolonged and expensive and many providers reported that they often found the costs of delivering more complex care to be in excess of the national tariff price.
- AQPs do not provide trauma services, which represent 50% of the orthopaedic workload. A number of providers reported that a significant shift of activity to the independent sector had impacted on their ability to sustain the critical mass and expertise needed to deliver a comprehensive trauma service.
- The training of future generations of orthopaedic surgeons is potentially at risk with AQP services taking elective orthopaedic surgery to outside providers who provide little training.
- A renewed focus on quality and evidence should serve to engage and empower clinicians to take more of a lead in addressing the issue of variable quality and practice.
- There is significant variation in rehabilitation practice.
- A lack of emphasis on rehabilitation in the immediate post surgery period for hip fracture patients on acute wards.
- A lack of integrated commissioning and provision of rehabilitation services and social services..

Table 2 - GIRFT at a glance

Problem: Costly (quality of Life and ££) Variation in Outcome in Adult Elective Orthopaedics

Caused by	Solutions	Case study of Best Practice
VARIATION IN PRACTICE OF PRACTITIONERS ■ Not following evidence on implants ■ Low volumes of specialist work ■ Ownership of collecting outcome data and coding ■ Different approaches to networking, multidisciplinary team (MDT), joint working and trauma	PROFESSION ■ Clinical leadership ■ Follow guidance ■ Sub-specialise to deliver minimum numbers ■ Mentoring etc. ■ Appraisal ■ Revalidation	■ Royal Devon and Exeter ■ Princess Alexandra, Harlow ■ Leicester ■ The specialist units
VARIATION IN PATHWAY AT PROVIDERS ■ Ring-fenced beds, theatres and staff ■ Governance ■ Support for data quality and accuracy of outcome data and coding	PROVIDERS ■ Reconfiguration to facilitate critical mass and minimum volumes in networks ■ Ring-fenced beds, theatres and staff ■ Litigation - pre-emptive planning	■ Northumberland ■ Bolton ■ South West London Elective Orthopaedic Centre ■ Bournemouth ■ The specialist units
VARIATION IN MANAGEMENT MODEL ■ Top-down management combined with poor clinical engagement ■ Loss of clinicians morale	MANAGERS ■ Management model - shoulder to shoulder with clinicians	■ Wirral University Hospitals ■ Royal Devon and Exeter ■ Guy's and St Thomas' ■ Mid Yorkshire Hospitals
VARIATION IN COMMISSIONING ■ Lack of focus on minimum critical volumes across a region/potential network ■ Inconsistent and unregulated relationships with AQPs	COMMISSIONERS ■ Commission collaboration to achieve critical mass ■ Total collaboration across providers to encourage critical mass and healthy collaboration/competition with focus on sustainability and quality	■ London

4. Stocktake of rehabilitation services in England for elective and trauma surgery - Collaboration with the Chartered Society of Physiotherapists

In addition to the main GIRFT pilot, the team has collaborated with the Chartered Society of Physiotherapy (CSP) and included their complementary review of rehabilitation across two integrated patient pathways of orthopaedic care; hip fracture and total knee replacement (TKR). It was only possible to review two pathways - one elective and one trauma pathway - due to limited resources.

A major issue was the complete lack of national data to evaluate rehabilitation services. It was therefore impossible to use a similar methodology to the main GIRFT pilot. The team discussed rehabilitation services with all the hospitals visited. Although there were examples of excellent rehabilitation services, generally it was acknowledged that this area needed significant improvement. Since rehabilitation is offered to patients across the complete care pathway and provided by a variety of sectors, it was important to take stock of the whole pathway. For hip fracture patients, rehabilitation aims to return the individual to their pre-fracture capabilities and prevent recurrent falls. For TKR, it is aimed at reducing pain and improving lower limb function.

Current evidence demonstrates that early, intense and frequent rehabilitation:

- Decreases length of stay and post operative complications and costs.
- Increases function and quality of life.
- Reduces the rate of falls.

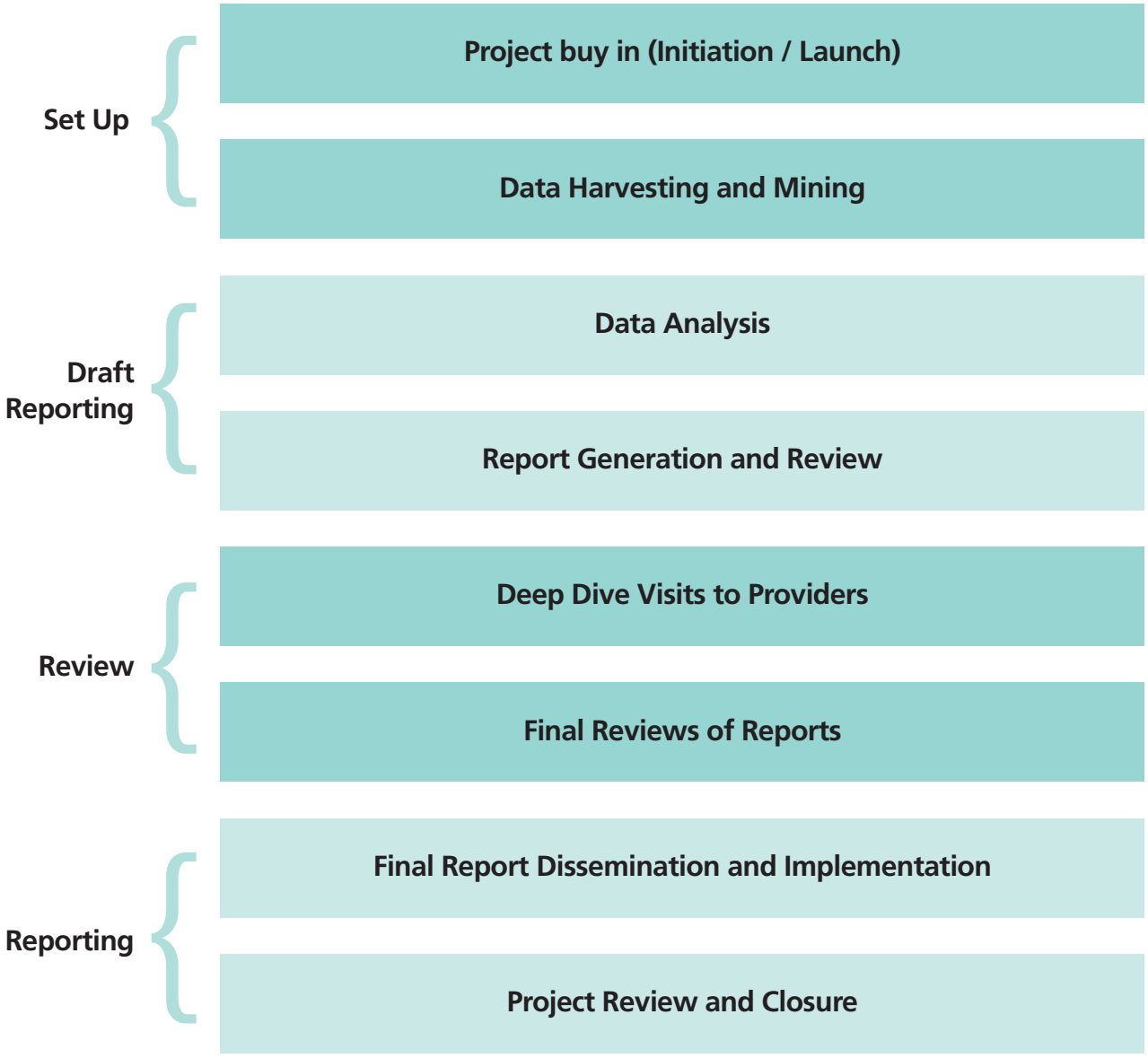
The CSP project surveyed all orthopaedic physiotherapy service leads in NHS trusts in England and interviewed orthopaedic physiotherapists within 15 NHS trusts, in both acute and community services. The survey and interviews investigated different elements impacting on the delivery of an optimal rehabilitation service along the whole care pathway.

A key theme of the review was variation in practice. Well designed and appropriately funded physiotherapy services, offered seven days a week, provide excellent rehabilitation for patients recovering from a hip fracture or TKR. The elective TKR pathways more frequently provided high quality rehabilitation services. However, too often hip fracture patients were not able to access rehabilitation at the appropriate level of intensity and frequency, in order to maximise recovery.

Emerging themes include:

- Variation in practice.
- Under funded services unable to deliver seven-day services and rehabilitation at adequate intensity and frequency.
- A lack of integrated commissioning and provision of rehabilitation services and social services including multiple providers of community services.
- Lack of emphasis on rehabilitation in the immediate post surgery period for hip fracture patients on acute wards.

Figure 1 - Project Structure



5. Activity and key statistics

Table 3 - Data collection and rationale

We collated a range of data from a variety of sources, focused on informing patient outcomes in adult elective orthopaedics.

Indicator	Source	Rationale
Activity volume by high impact (in terms of cost, complexity or volume) procedure	HES	Many studies have shown links between volumes by centre and individuals with outcomes. We wanted to particularly focus on high impact / high cost procedures where variation can lead to variable quality and cost of outcome.
Range of metrics including revision rate, ODEP rating etc.	NJR	Main orthopaedic registry and linked to Best Practice Tariff. We have also included the percentage uptake of ODEP 10a rated implants that is recorded by the NJR. This is a good indicator of the way organisations are using best value prostheses with good evidence. However, we recognise that many trusts are using excellent 7A and 5A rated devices which may in the future out perform implants with a current 10A rating.
Hip and knee arthroplasty PROMs	PROMs	Major national quality indicator and linked to Best Practice Tariff.
% of cemented hip replacements in the over 65s, Rate of knee arthroplasty one year after arthroscopy, etc.	North East Quality Observatory System (NEQOS)	We also selected a number of metrics from the excellent NEQOS Dashboard as initial Key Performance Indicators, because they demonstrate key aspects that the GIRFT team believe are indicators for overall quality of orthopaedic care. For example, research shows that cemented prostheses do well in the over 65s[10] and we have therefore used this metric as a quality indicator. It is worth noting that in a small number of cases there are centres that are demonstrating very high quality in their un-cemented activity, but these have tended to be centres with a particular specialism in these un-cemented procedures. The costs of implants become an issue as un-cemented prostheses, except in a few centres, tend to be significantly more expensive and early complications are higher. Similarly it is not good practice, nor cost effective if a high number of arthroscopies are being undertaken on patients who then require a TKR within one year.
Fractured Neck of Femur		Although GIRFT is predominantly interested in elective care, we have also included fractured neck of femur in our review as we believe that a successful care pathway for this should be indicative of an efficient trauma and orthopaedic service and, if well managed, should not impact negatively on elective cancellations. This is also linked to a Best Practice Tariff.

[10] *Failure rate of cemented and un-cemented total hip replacements (THR): register study of combined Nordic database of four nations. http://www.bmj.com/content/348/bmj.f7592*

6. Early wins from the GIRFT project to date

During the visiting phase of this project and prior to publication of the full report, a number of early benefits have been realised, including:

- Input into the decision making process by HEE that sets the number of trainees for trauma and orthopaedic surgery. The GIRFT project highlighted that demand and capacity is not in balance, there is a significant capacity gap. Referrals are rising, and there is an increase in complex surgery. As a result, training numbers were increased to 191 in 2014 and look set to be maintained at a reasonably high level for 2015. Further review is recommended in two years.
- GIRFT worked with the Better Procurement, Better Value, Better Care teams to review the pricing of orthopaedic implants; most specifically, the highest volume ones - those for hip and knee replacements. On the basis of this analysis Professor Briggs is writing to all providers and surgeons in England and Wales to let them know the price range that is being paid for the core ranges of the leading brands for these procedures.
- This exercise has demonstrated extensive variation in price. This letter is aimed at supporting providers in moves towards greater transparency in their orthopaedic procurement, and also suggests the price thresholds at which a joint decision making process should kick in.
- Direct discussion during visits has already begun to influence the shape and form of orthopaedic networks, including one network for revision arthroplasty in Nottingham, a city wide review in Manchester and very direct participation in the on going review of the structure of orthopaedic delivery in London.
- An international orthopaedic consensus panel symposium led by the BOA was held at the combined meeting between the BOA and the European Federation of Orthopaedics and Traumatology (EFORT) in London in June 2014. It is recognised that this is a problem that affects all continents around the world. From this, an English-speaking world consensus panel in orthopaedics has been established to propose solutions for tackling the increasing demand for MSK services within a financially austere landscape. It is proposed that the review will culminate in an international meeting in 2015/2016. Already other international orthopaedic associations have asked for copies of the GIRFT report and Professor Briggs has been asked to set up and moderate a two hour symposium on 'The International MSK Time Bomb - time for action' at the annual American Academy of Orthopaedic Surgeons (AAOS) to be held in Las Vegas USA in March 2015.
- A working party has been established involving the BOA, the NHSLA and leading solicitor firms for both defence and claimants, to reduce litigation working in trauma and orthopaedics within the NHS. The initial phase will look at litigation in hip and knee which is responsible for 18% of all claims.
- Each individual trust visit has resulted in an educational process for orthopaedic clinicians across England, based around activity and using the evidence base. This has resulted in clinician empowerment.
- GIRFT visits have been undertaken at all Health Boards in NHS Wales in November 2014 to review elective orthopaedic services.
- GIRFT visits are under discussion with NI for 2015.

7. Conclusions

The GIRFT national pilot has gathered overwhelming support from clinicians across the NHS, as it has been driven clinically with face to face meetings with orthopaedic clinicians and managers at individual trusts. The team personally visited over 200 NHS sites to understand first hand the differing practices and challenges to identifying realistic and achievable efficiency opportunities. The unique dataset sent to each trust 14-21 days before the GIRFT visit enabled us to have a robust peer to peer review. A major part of the visit was to understand the data and hear first hand from clinicians and managers about their service and how it could be improved.

As well as its immediate impact, the project is intended to have a long term positive impact on service delivery. This includes delivering a clinically led, provider side focused catalyst, for improvements in quality and reductions in costs; informing the setting up and/or enhancing of robust clinical networks; and supporting the direction of travel being developed by the CRGs guiding specialised commissioning within NHS England. Its basis has been to enhance the quality of care with a consistency of standard delivered to the population.

Orthopaedic procedures are in such high demand because they improve quality of life so dramatically for patients. It is our responsibility to work with government and commissioners to ensure that quality remains high and provision remains timely, affordable and sustainable.

In addition to providing each trust with local commentary, and opportunity for reflection and guidance, it is clear that there are significant issues arising from this pilot that need to be addressed at a national level. The most significant being:

- There is an urgent need to reduce the widespread variation in practice across the country.
- Networks need to be set up for complex orthopaedic procedures to ensure best outcome and best value.
- Rehabilitation services need to be improved and should begin immediately post operation for all hip fracture and TKR patients to restore mobility, function and confidence, reduce the risks of depression, and support a return to living as independently as possible at home. For hip fracture patients, this must continue without disruption after discharge.
- Intensive rehabilitation during the acute phase achieves better outcomes when delivered seven days a week, but there must be sufficient investment to fund this, instead of simply stretching five day services over the longer period.
- Elective orthopaedics requires an environment in which the infection risk is minimised. This will involve 'ring-fenced beds', laminar flow theatres, and improved theatre discipline and appropriate orthopaedic theatre staffing as an essential part of practice for any orthopaedic unit undertaking joint replacement surgery.
- Minimum critical volumes - this needs to be formally addressed by the profession and guidance issued.
- The existence of the capacity gap in elective orthopaedics needs to be acknowledged, training numbers cannot be cut and difficulties with 18 week targets must be seen in the national context.
- NICE, NHS England and CCGs need to formalise the requirement for ring-fenced elective orthopaedic beds, as a basic essential requirement for high quality service provision.
- Surgeons struggling with a 'top down' management relationship are demoralised and disengaged. The command and control methodology doesn't work but still exists. They need a mechanism in which their concerns can be listened to and acted upon. This management methodology is not best for patients. In our view 'shoulder to shoulder' working is the only way forwards for trusts, especially in times of financial austerity.
- Commissioners and Monitor need to emphasise that clinicians should use the evidence base from registries where that exists. The current marketing led trend towards un-cemented implants in patients over 65 years is not supported by the evidence of many registries and is too expensive. Appropriate guidance needs to be issued.
- Orthopaedic surgeons need closer working relationships with clinical coding departments and need to take individual responsibility for understanding, and complying with, the process for PROMs and NJR.
- The NJR needs to review how the issues relating to revision data can be managed/accounted for. With the appointment of the new NJR Medical Director this is now being addressed.

- The NJR needs to ensure that orthopaedic surgeons also receive their trust wide report, it will drive accountability at a more corporate level.
- Providers must use the tariff as a lever to improve a range of behaviours.
- Commissioners should be explicit in requiring and supporting collaboration and communication between their NHS and AQP providers, just allowing the situation to happen organically is damaging.
- Clinical dashboards should be transparent, understandable and reflect the whole patient journey and outcome including the section prior to surgery in the assessment and treatment centres.
- Commissioners should ensure that they have robust transparent data for the success of each stage of a patient's journey.

If these conclusions are followed through in their entirety to optimise the national service, the potential quality improvements and subsequent savings are significant given that trauma and orthopaedic surgeons make up 33% of the surgical workforce and provide 25% of all surgical interventions within the secondary care. The total annual MSK spend is £10 billion, the third highest behind cardiac and mental health, of which 80% is spent in hospitals that are the providers. Across this expenditure of £10 billion on MSK, each year there is a minimum efficiency saving of nearly 4% per annum (£2 billion spread over the next five years) that could be achieved by empowering clinicians through engagement. Examples of the potential savings identified included:

- Loan kit costs varied amongst providers from as little as £50,000 per annum to up to £750,000. Many trusts quoted figures of £200,000 to 400,000. This demonstrates the need to move to detailed consistent national reporting of this cost, however, a broad estimate based on reducing loan kit by 90% suggests in the region of £21 million a year could be saved across the 120 high volume elective providers in England. 90% reduction within next two years = **£108 million over 5 years.**
- Cost of implants (only Hip and Knee Prostheses). The NJR pilot on pricing demonstrated the large variation in price being paid for the same prostheses. The trusts involved in pilot were quickly able to realise very significant savings by challenging pricing. Furthermore, the shift to un-cemented has further driven up the implant budget (with the exception of one implant of similar cost to cemented) and a shift back to usage that more closely models the evidence from the NJR and the Scandinavian registries would drive significant savings. It is proposed based on the experience of the NJR pilot and from collaboration with trust procurement teams that a saving of up to £40 million per annum could be achieved across the 120 elective providers. Saving £40 million per year = **£200 million over 5 years.**
- Orthopaedic litigation costs have risen by £30 million per annum for each of the three years leading up to and including 2011/12. With the totally litigation cost for the final year being in approximately £180 milllion. However analysis of the causes of litigation indicates most are avoidable. It is proposed that a programme of work is undertaken to address rising litigation costs and that a reduction of up to £50 million per year should be achievable. **£150 million over 5 years.**
- Reduction in deep wound infection in TKR / THR which currently runs as high as 5% for a number of units and costs c. £100,000 per patient (based on comparative cost analysis of managing deep wound infection across a number of providers - cost drivers including re-operation, extended length of stay, high cost long term antibiotics and new high cost replacement prostheses) to resolve which equates to an extra £1,000 for each arthroplasty procedure to cover the costs of readmission, reoperation and medication for infected patients, as well as costs in the community = **£1.5 billion over 5 years**. This becomes greater still when rolled out to other orthopaedic procedures.

8. Next steps

This pilot has assessed the quality of existing practice across England and has identified specific aspects of the service where there is an unjustifiable variation in practice and quality. The next stage is to develop a series of specific programmes that will seek to facilitate change and thereby drive improvement in quality, reduce variation in practice and deliver cost savings. The GIRFT team is currently formulating the detailed scope for the next phase focusing on the provision of orthopaedics, and are currently in dialogue with The Department of Health.

The objective is to build on the lessons of the GIRFT pilot, and to focus on the creation and implementation of solutions/improvement programmes in order to:

- Improve the quality of outcome and patient experience.
- Enhance safety.
- Address unacceptable variation in practice and outcome.
- Challenge unacceptable and wasteful practices.
- Identify and disseminate best practice.
- Provide hands on consultancy/intervention to effect rapid change.

This will require leadership from all, especially the BOA, with clinicians standing 'shoulder to shoulder' with managers and commissioners - in order to deliver a timely, workable and financially sustainable model of care that will provide elective orthopaedic service to our population as it ages, within current NHS financial constraints.

It is hoped that the outputs of the next stage of the project will transition orthopaedics through to implementation stage across a range of Provider Enablement Group (PEG) projects involving collaboration across all across the profession and other key stakeholders. Establishing robust quarterly benchmarking to make sure that quality and behavior are monitored to ensure that improvements really are implemented so as to extend the reach and the success of the GIRFT methodology to other disciplines. Figure 11 outlines the outputs for this next phase. The project could also offer practical support for other specialties wishing to implement the approach.

We must not lose this window of opportunity and must act now.

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