



Department of Management

# LSE/ Right Care project on NHS Commissioners' use of the NHS Atlas of Variation in Healthcare

**Case studies of local uptake** 

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**March 2012** 

# Introduction

In order to understand how the Right Care Atlas series is being used within PCT clusters and CCGs to inform planning activities, and identify levers and barriers to use, Right Care has been working with Professor Gwyn Bevan's team at the London School of Economics.

The LSE has been commissioned to conduct a survey of PCTs and we hope that the results of this research will be published in an academic journal in due course. A report has been provided to the National Director of QIPP, Jim Easton.

This work will inform further Atlas production and promotion of their use by PCTs and CCGs.

The work has been conducted by Laura Schang and supervised by Dr Alec Morton. The research approach included telephone interviews with a sample of PCT managers and in-depth case studies of PCTs use of the Atlases.

This Right Care Casebook brings together the Case Studies and is available as a downloadable PDF on the Right Care website:

http://www.rightcare.nhs.uk/atlas

# Case study NHS Bedfordshire: towards a revised clinical threshold for cataract surgery

# Setting

NHS Bedfordshire manages an annual budget of over £585 million and is responsible for commissioning health services for more than 420,000 people. As part of the QIPP Planned Care workstream, the Primary Care Trust is in the process of defining and revising eligibility criteria for a number of surgical procedures. The aim is to ensure a fairer allocation of resources across procedures and groups of patients. Benchmarking is used as an approach to identify potential areas where a re-allocation of resources might generate savings while improving outcomes for patients.

# The problem or situation

To identify variation in activity compared to other Primary Care Trusts, the public health team considered several sources of evidence. This included data from programme budget lines, the NHS Atlas of Variation and NHS comparators. Phako-emulsification cataract extraction and insertion of lens (cataract surgery) emerged as one area of concern. According to the NHS Atlas, NHS Bedfordshire was in the highest quintile for rate of expenditure on this procedure. Map 12 also showed a considerably higher standardised rate of cataract surgery in NHS Bedfordshire than in comparable Primary Care Trusts in the East of England.

# What action was taken

NHS Bedfordshire considered their current prior approval and funding policy for cataract surgery. The current clinical threshold was at a level of 6/9 in the worse eye (referring to the smallest row of letters the eye can identify at six metres which a person with normal vision can discern at nine metres). This was found to be lower than the 6/12 threshold many other Primary Care Trusts used. It was also at the lower end of the driving standard set by the Driver and Vehicle Licensing Agency which falls between 6/9 and 6/12.

The PCT reviewed the evidence regarding patient health outcomes and found that a large national audit of the Cataract National Dataset data showed little benefit and some harm to patients at the current threshold. According to the audit, 35% of eyes with a pre-operative visual acuity of 6/9 either had no benefit or a poorer outcome post-operatively Thus, one in every three cataract operations would not be effective at this level of visual acuity. Conversely, in eyes with a pre-operative visual acuity of 6/12, only one in eight did not improve or even worsened following surgery (12%).

Extrapolating from the national audit, the public health team estimated the numbers of overtreatment and numbers of admissions conferring no benefit to the patient. On this basis, a policy recommendation was developed to align the visual acuity threshold with the threshold used by other PCTs. However, decreasing the visual acuity threshold to 6/12 across the board would also disadvantage a small group of patients for whom good visual acuity is essential to perform their work. Occupations in which small gains in binocular visual acuity can make a big difference to the ability to work, such as watchmakers or microsurgeons, were thus taken into account.

### What happened as a result

The review was then discussed at the Priorities Forum for Bedford and Hertfordshire, which advises the PCT on the policies that should be given high or low priority, including thresholds for referral and treatment, and comprises public health consultants, a lay representative, secondary care consultants, a GP, a librarian, PCT and practice-based commissioners. Based on the review the Priorities Forum agreed to increase the clinical threshold for cataract surgery to the 6/12 level. To prevent inequities arising for some occupational groups, a clause for patients with special occupational circumstances was added. Put in place from October 2011, the full year effect is expected to materialize in 2012/13. Savings are estimated to amount to £300,000 or more.

# Learning points

Triangulation of different benchmarking data was found to be helpful in identifying areas for action. The availability of and comparison with clear and objective threshold measures for surgery served as an enabling factor in using benchmarking sources such as the NHS Atlas, as this facilitated the translation of data on variation into changes in commissioning policy.

### Contact

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#### **Further information**

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P Jaycock, R L Johnston, H Taylor, M Adams, D M Tole, P Galloway, C Canning, J M Sparrow and the UK EPR user group (2009). The Cataract National Dataset electronic multi-centre audit of 55 567 operations: updating benchmark standards of care in the United Kingdom and internationally. Eye 23: 38-49

# **Case Study NHS Eastern and Coastal Kent: reviewing referral and treatment criteria for magnetic resonance imaging**

# Setting

NHS Eastern and Coastal Kent has just over £1billion to invest in healthcare for the 732,000 people living in the Ashford, Canterbury, Dover, Shepway, Swale and Thanet areas. In previous years work has focused on analyzing variations within the PCT; particularly between GP practices based on Quality and Outcomes Framework (QOF) data.

### The situation or problem

For procedures considered to be of limited value, uncertainty existed regarding the criteria which GPs and hospital consultants used for referral and treatment. For example, GPs in Eastern and Coastal Kent have open access to magnetic resonance imaging (MRI) scans, particularly for knees and joints. Given their preciseness and richness of information, MRI may potentially reduce the number of diagnostic procedures that need to be performed. However, the cost of MRI equipment may also encourage frequent and generous use. The PCT aimed to ensure that patients consistently get the right treatment at the right time. The challenge was to enable health professionals to minimise the risks of diagnostic and therapeutic procedures and maximise benefits for patients.

#### What action was taken

In light of NICE guidance, NHS Eastern and Coastal Kent started a work stream to review referral and treatment criteria for elective pathways of care. The review was based on current best practice to enable the NHS to provide the best possible care to patients.

The Patient Safety and Care Quality committee, a sub-committee of the PCT Board, also analyzed the NHS Atlas of Variation in Healthcare. The Committee considered particularly the areas where the PCT was in the top or bottom quintile. The objective was to identify areas where the PCT was an outlier in the indicators considered to be of poorer quality.

#### What happened as a result

The review of the Patient Safety and Care Quality Committee led to joint work with local providers to understand why the PCT appeared to be an outlier in the NHS Atlas of Variation. Especially for MRIs, NHS Eastern and Coastal Kent appeared to have a considerably higher rate of activity than other PCTs.

The suspicion was that higher rate of activity was partly GP-led, partly hospital-led. The PCT then took action with clinical commissioning groups and with their local acute trust provider. The findings of the NHS Atlas were shared and discussed with providers. Some issues were specifically explored with the acute provider at one of the regular performance meetings with the chief executive, the medical director and chief operating officers.

This led to a review of the indications at which hospital consultants initiate MRI scanning. The conclusion was that, although rates of MRI activity seemed to be high, comparatively, hospital consultants were using the diagnostic according to best-practice care pathways and thus appropriately.

# Learning points

The joint review and discussions suggested that in this instance high use was beneficial for patients and reflected good access to the diagnostic. The NHS Atlas supported this process as it gave readily accessible and visually appealing benchmark information at a national level, on a range of clinical indicators drawn from multiple information systems. What GPs and the acute trust found valuable was the way in which the maps were presented: so that everyone could visually very quickly grasp the areas in which NHS Eastern and Coastal Kent would be an outlier, compared to the rest of the country.

### Contact

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# **Case study NHS Lincolnshire: Addressing unwarranted variation in treatment for cancer and musculoskeletal conditions**

# Setting

NHS Lincolnshire, established in 2006 as one of the largest Primary Care Trusts in England, allocates a commissioning budget of approximately £1.2 billion per year to ensure the delivery of health care for about 740,000 people living in Lincolnshire. The PCT has been analysing variations in medical practice for several years, particularly with regard to patterns of elective and urgent care referrals, accident and emergency attendances and hospital admissions. Due to data availability, previous work has largely focused on variations within Lincolnshire rather than benchmarking across areas.

### The situation or problem

In 2009/10 NHS Lincolnshire undertook a major review of its expenditure to identify potential costsavings and areas for quality improvement from reducing unwarranted variation. The joint modelling exercise with finance and contracting teams indicated over £50 million savings if all practices performed as the best practice in Lincolnshire. Using the NHS Sustainability tool and common sense, a planning process was undertaken to evaluate what could be achieved realistically. The results showed that, if a realistic and deliverable pace to change was adopted, Lincolnshire could achieve £12-16 million savings per year and the Cluster has now embarked on this path and delivered savings of this magnitude in 2010/11.

Cancer and musculoskeletal conditions were two programme budget categories marked by particularly high levels of expenditure, if compared across England. Given the high volume and budget impact of cancer and musculoskeletal care, NHS Lincolnshire wanted to better understand variations in spending and delivery, to identify opportunities for improvement and for shifting resources to areas of higher value.

# What action was taken

NHS Lincolnshire has sought to make benchmarking a constant philosophy for action. Addressing variation has been built into the operating plan alongside concerns for volume and cost of care, and systems and processes have been put in place to translate information on variation into better-value care.

- At a strategic commissioning level, NHS Lincolnshire has been working with the regional Right Care team using Programme Budgeting and the NHS Atlas of Variation as the initial level of detail. Starting from a broad overview over spending across disease-based programme budget categories and variation across PCTs, variation was then examined down to a granular level with data from the East Midlands Quality Observatory.
- A programme management office has been established to oversee and coordinate all programmes and projects to improve value in healthcare across Lincolnshire.

- At local level, monitoring takes place at the level of 7 GP localities within four Lincolnshire CCGs right down to practice level. Primary care and commissioning dashboards have been developed to monitor deviations from locally agreed targets. The dashboards are updated regularly and discussed in bi-monthly meetings involving Clinical Commissioning Groups (CCGs) and the PCT's commissioning team. The objective is to check whether agreed project objectives are delivered, or whether the variation might be unwarranted. The CCG executives are then taking this information to individual practices. Targeted feedback and conversations between colleagues concerned are seen as valuable approaches to understand potential reasons for variation which are not reflected by quantitative evidence, and to agree changes if necessary.
- Analysis showed significant numbers of procedures being carried out without prior approval and contributing to major variation. The prior approval process has been restated to ensure that prior approval for a procedure which is deemed to be of low clinical value unless delivered to a highly targeted patient group can happen in a transparent and timely manner.

# What happened as a result

Cancer and musculoskeletal conditions illustrate two programme budget categories where NHS Lincolnshire has been using data from the NHS Atlas and other sources of information such as NHS Comparators to identify unwarranted variation, and then has taken corrective action to remedy the misallocation of resources. Various levers – service planning, clinical thresholds and contracting action – have been employed to address both overuse and under provision.

**Cancer:** The Atlas confirmed the programme budgeting assessment of a high expenditure on cancer against poorer than average outcomes in terms of mortality. An in-depth review by the cancer team then focused on major drivers of cost and activity within the programme budget. The review indicated several areas for action:

- Chemotherapy regimens and spend: a review with the local Cancer network showed multiple charging for treatment events, in particular four separate charges for chemotherapy. Contracting action is now underway to ensure appropriate payment.
- High levels of emergency admissions, both at active treatment stage and end of life: new services including Palliative Care Co-ordination and Rapid Response Teams (commissioned from the 3<sup>rd</sup> sector) have already had an impact on increasing the number of patients who are dying at home.

**Musculoskeletal conditions:** The regional Right Care programme identified large variations in rates of un-cemented hip replacement across Lincolnshire. Local clinicians cited high levels of trauma as being the explanation, despite low levels of hip fractures shown in the Atlas of Variation. An in-depth review of activity was undertaken to explain variation against regional and national norms.

 A review of waiting lists, originally intended to identify numbers of trauma-related cases, identified large scale non-compliance with prior approval processes especially in Spinal Surgery and for other musculoskeletal conditions. This involved undertaking review of procedures of limited clinical value and also reviewing the range of procedures already available in the community within primary care. This revealed the fact that much highly specialist orthopaedic time was being spent undertaking simple procedures easily performed in Primary Care settings; both closer to the patients' homes and at lower cost.

- Clinical thresholds for all elective orthopaedics are now being enforced and the acute provider has established a dedicated orthopaedic programme board to deliver change. Rigorous enforcement of prior approval now in place is expected to save £2m by the end of 2012/13. The PCT has instituted a policy of non-payment for procedures of low clinical value not having prior approval.
- Opportunities in the contracting process are increasingly used to influence provider behaviour. Reduction in variation has been identified as a potential Commissioning for Quality and Innovation (CQUIN) payment for 2012/13 if no change is detected. Clear links have been identified between long lengths of hospital stay and the variation in clinical practice between both different provider organisations and clinical teams. Reducing this variation and adopting best practice is seen as a key enabler in delivering the efficiency savings required.

# Looking forward

Lincolnshire is well on the way to address unwarranted variation in care locally. The publication of the NHS Atlas gave reinforcement to Lincolnshire's existing local attention to variation in health care. The Atlas not only provided a strategic overview over potential areas for action, but also a narrative to engage clinicians to be backed-up locally with systems and processes to identify and tackle unwarranted variation. Future plans are to expand action on variations through a specialty-wide focus in cooperation with the East Midlands Quality Observatory. Variation data in terms of secondary care activity will play a key part in the "tool boxes" being assembled by emerging clinical Commissioning Groups and their Commissioning Support Services. The atlas provides a high level summary which enables us to ask questions, it clearly has the potential to answer many more if developed further.

# Contact

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# **Case study NHS Southampton City: Using information on variation to inform priority-setting**

# Setting

NHS Southampton City is in charge of commissioning health care for approximately 230,000 people based on a budget of over £370 million. In light of tightening financial constraints, the PCT needs to make savings of £95 million between 2010 to 2014, almost £2 million a month. Prioritisation of health need within and between programme budget categories becomes increasingly vital to deliver efficiencies while safeguarding the quality of care.

In their Joint Strategic Needs Assessment, NHS Southampton and Southampton City Council have identified benchmarking their performance against national comparable PCTs and Local Authorities as an approach to identify areas for action and prioritisation of health need.

### The situation or problem

During the ongoing process of monitoring key parameters of provider contracts, including cost, throughput and measures of outcomes (such as Patient Reported Outcome Measures/ PROMs), NHS Southampton identified orthopaedics as a special area for concern in 2011 given its budget impact, volume and recent changes in provider activity.

Within the orthopaedic specialty, some procedures appeared to be subject to rapidly rising volumes of activity. The PCT initiated a major investigation and discovered that in some areas, consultants were performing an increasing number of osteotomies and surgery for hip impingement syndrome that was unexplained by differing population health need.

### What action was taken

National benchmark data aided in getting an insight into strategic questions relevant to commissioning. The NHS Atlas of Variation in Healthcare provided the national context for several additional indicators, such as relatively high rates of hip and knee replacements. This raised questions about interactions between an entire specialty and individual orthopaedic procedures and, ultimately, about the opportunity cost of unwarranted variation.

NHS Southampton City then followed a structured process to inform future commissioning action.

- 1. Based on evidence of national variation in activity and a local health care needs assessment, the PCT proceeded with a detailed review of the effectiveness and cost-effectiveness of available orthopaedic interventions. The review combined clinical, and health economic evidence of what works, which patients benefit from the procedure and why they need it based on information from contracting information, registries and national databases.
- 2. This evidence was then taken into account by the prioritisation committee to decide on the degree of priority for commissioning (high, medium or low) of different services.
- 3. An inquiry meeting involving clinicians, patients, commissioners, public health experts was held to consider the problem and formulate a policy to make provision more equitable across the population served.

### What happened as a result

Following the evidence review and local deliberation a commissioning policy was developed. The PCT found the evidence for hip impingement surgery too weak to fund this service as a routine intervention, and has seen a commensurate decrease in activity.

Hip and knee replacement surgery were identified as generally cost-effective procedures. The local analysis indicated, however, that pre-operative services were organized in a sub-optimal manner. An enhanced recovery programme was developed, comprising pre-operative services such as smoking cessation and nutrition counselling for patients with elevated Body Mass Index (BMI) in order to reduce their risk of wound infections and delayed healing following surgery. Special health needs of patients with multiple morbidities were recognized through plans to improve cardiovascular care in older patients with diabetes.

The review also identified low rates of completion of Patient Reported Outcome Measures (PROMs), about 15%, as a weakness of the current system. NHS Southampton is thus setting up a new programme to increase yield. Evidence of variation in completion of PROMs nationally allowed to encourage the acute trust to improve performance in that area. The use of Commissioning for Quality and Innovation (CQUIN) is considered to incentivize complete data collection, which is seen as an important step towards better measurement of patient outcomes and quality improvement.

# Looking forward

The new NHS Atlas of Variation 2011 has been welcomed as a resource to identify potential areas for action for 2012/13. NHS Southampton City has produced a localized version of the Atlas, highlighting key outliers in hospital admissions for respiratory disease and diabetes. The message has been communicated in one of the regular newsletters for Clinical Commissioning Groups (CCGs), and marks some of the health challenges commissioners will need to address.

#### Contact

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