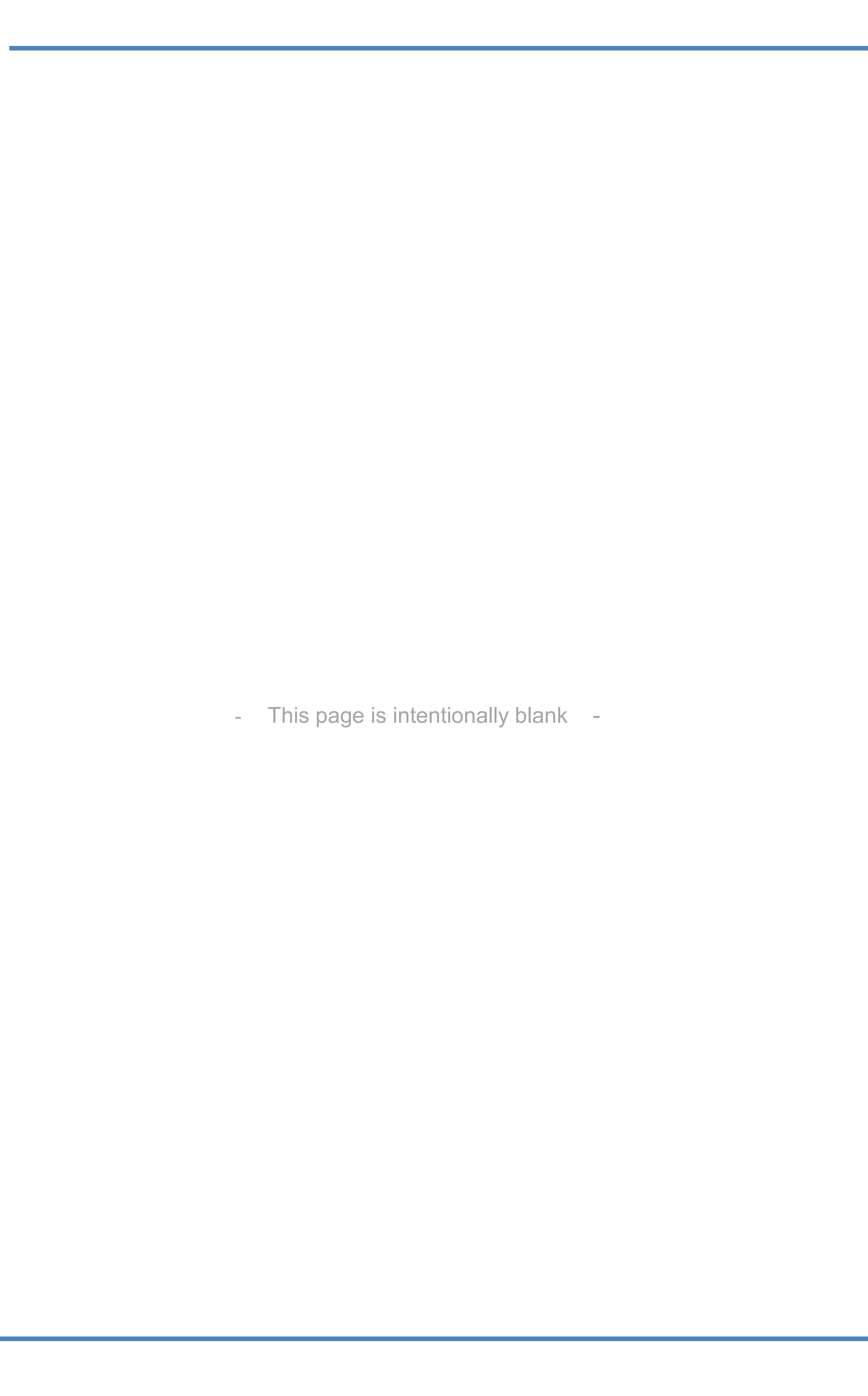
NHS
County Durham and Darlington

County Durham and Tees Valley Acute Services Quality Legacy Project

Final Report

March 2013



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Foreword

In April 2012, we initiated a project across County Durham, Darlington and Tees that would bring together our main providers of acute services to ask ourselves if we were delivering the best possible service in terms quality and efficiency for our patients.

Both commissioners and providers of acute services face a similar set of challenges over the next five- to ten years. Our population will be older, with more long term conditions being treated by a state funded NHS that is ultimately tied to the performance of the national economy. These services will also be operating as part of a wider system with social care which itself faces significant challenges related to national financial constraint.

We also know that we have historically called upon our acute hospitals too often with our use of hospital beds in the North East being higher than in other parts of the country. They are higher than what they should be based on the levels of illness, deprivation and age profile of our local communities.

We are fortunate however to start from a strong starting position. Our current main providers consistently deliver high quality services, meet national performance targets related to waiting times and cleanliness and operating efficiently within their means. Having said that, we know that we can do better.

There is important work already underway to improve standards of care for patients such as the proposals to reconfigure paediatric and maternity services at the Friarage Hospital in Northallerton. This report compliments that vital work and the recommendations on quality standards for acute paediatric, maternity and newborn services contained within this document clearly support the proposals put forward by Hambleton, Richmondshire and Whitby Clinical Commissioning Group, and it will be important to maintain that consistency going forward.

However, taking into account the current programmes of improvement work underway across the health economy, there is still even further to go until we can state we have universal coverage of services that can be described as “best in class”. In this process we have looked to our clinical community to define what the best possible care should look like in our hospitals and begin to outline the next steps of how we should go about delivering them, given the likely financial future and the workforce that will be available to us.

This report will act as one of the batons that will be passed to the new generation of commissioners; clinically-led, locality focused but with a will to work together. It will also be an important introductory guide for local Health and Wellbeing Boards and Health Watch groups to discuss the future development of local health economies and the implications for both health and social care. It is only through this common understanding of where we are now and what we should be aspiring to, that will allow us to deliver the improved standards that we all recognise our patients deserve.

Cameron Ward

Chief Executive
NHS Tees

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Introduction

In 2010, the NHS Constitution was established to define the principles and values of the NHS in England, setting out rights to which patients, public and staff are entitled, and pledges which the NHS is committed to achieve.

This Acute Services Quality Legacy Project was designed to help provide the evidence base that will help ensure the delivery of the NHS Constitution and the principles that underpin it, in particular *Principle 3: "aspiring to the highest standards of excellence and professionalism".*

Following the passing of the Health and Social Care Act 2012 and in time for the start of the 2013/14 financial year, there will be a new commissioning architecture for the NHS in England. Clinically-led commissioning groups (CCGs) will replace Primary Care Trusts (PCTs) as the main commissioner and purchaser of healthcare on behalf of patients, Local Education and Training Boards (LETBs) will replace Strategic Health Authorities (SHAs) as the main commissioner of medical education places for doctors and nurses and new Health and Wellbeing Boards (H&WBs) will be responsible for the alignment of health and social care strategies to improve outcomes for their populations.

The 2012/13 financial year is largely a transitional period between the current and the new worlds and as part of this transition, a series of legacy documents are being produced by PCT Clusters to support the emerging organisations in undertaking their new responsibilities.

The Acute Services Quality Legacy Project contributes to the development of these legacy documents so that CCGs, LETBs and H&WBs understand the opportunities and challenges in achieving best-in-class levels of service within the likely financial environment over the coming years.

This has been achieved by establishing definitions of the highest standards of service quality and the evidence base for these definitions and identifying what factors are most important when considering the sustainability of services that will meet these standards into the future.

The project builds on similar work carried out by the NHS North East Our Vision Our Future Clinical Innovation Teams and looks to ensure continuity of membership relative to local organisations where possible. It also feeds into the development of the new Clinical Senate for the North East and Cumbria and proposed strategic clinical networks.

The outputs of the project will also support commissioners to meet the requirements of the *NHS Outcomes Framework 2011/2012* (Figure 1).

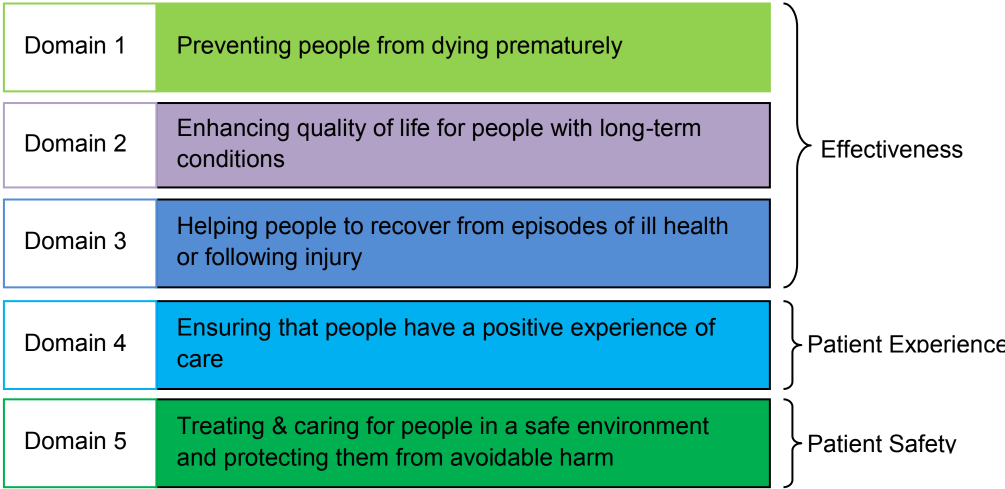


Figure 1: Domains mapped to elements of quality

The County Durham, Darlington and Teesside health economy is fortunate to have three large secondary care organisations within it"s boundaries that provide high-quality care to their patients. The current Care Quality Commission quality measures underline this as depicted in figure 2.

Provider	Accident & Emergency	Waiting list and planned admissions	Waiting to get a bed on a ward	The Hosptial and ward	Doctors	Nurses	Care and Treatment	Operations and Procedures	Leaving hospital	Overall views and experiences
CDDFT	7.5	6.6	7.7	8.1	8.5	8.2	7.3	8.2	7.1	5.7
NTHFT	8.4	6.5	8.5	8.3	8.5	8.3	7.5	8.5	7.2	6
STHFT	8.1	6.6	8.3	8.2	8.7	8.6	7.7	8.3	7.1	6.2

Worse than other Trusts nationally   Better than other Trusts nationally   In-line with other Trusts nationally

Figure 2: Care Quality Commission Indicators for Inpatients across service providers (out of ten)

Whilst demonstrating current secondary care providers are offering a high level of quality, these measures do not tell us if our patients are receiving now (or can expect to in the future) the highest possible level of quality of care.

This report will support commissioners and providers alike in determining priorities for incentivising changes to current practice, under-taking service improvement work or for re-designing the models of care that deliver them.

Summary of Project Recommendations

The follow recommendations are based on the work undertaken by the project team, clinical advisory groups and consultancy support and are explained in detail in the later sections of the document and under-pinned by the technical data outlined in Appendix 1.

Main Contextual messages on economics and workforce

The main contextual messages on economics and workforce are as follows:

- Following years of growth, demand for acute services is currently high for both elective and non-elective care.
- There will be a significant increase in prevalence across the major long term conditions over the next ten years and a greater proportion of the population will be over the age of 65.
- This will have an impact on the utilisation of acute services to a varying degree in the different service areas.
- This growth will put pressure on commissioners" allocations over the next ten years as an older population with more co-morbidity will consume more health resource, unless effective demand and long term condition management are implemented. This analysis does not take into account potential increased spend on high cost drugs and new medical technologies in the acute setting that may require further investment from commissioners.
- Forecasts show that providers can maintain a financially stable position over the next five years as long as cost improvement plans deliver to target. Failure to deliver these targets will have implications for trusts" operating surplus/deficit position and ultimately the length of time they can rely on cash savings to keep them solvent.
- This means that new funding is unlikely to be available to expand the access to services of the very highest quality as providers look to maintain the current levels of quality within the resources they have access to.
- Even if commissioners were to receive increases to their allocations and providers had efficiency requirements at pre-Comprehensive Spending Review levels, national and regional workforce constraints may have more impact on the ability to deliver higher quality standards.
- These national and regional workforce considerations are further compounded by supply and demand of particular grades and skills of the current and future workforce within the acute sector in County Durham, Darlington and Tees.

Acute Paediatrics, Maternity and Neonatology

The overall recommendations of the Acute Services Quality Legacy Project in relation to acute paediatrics, maternity and neonatology services, given the wider financial and workforce contexts, the underlying health data, views of the clinical advisory group and the specific workforce risks and opportunities, are that the Project Board:

- Endorse the Royal College of Obstetricians and Gynaecologists (RCOG) standard of 168 hours (24/7) consultant presence as the ultimate goal for maternity services across County Durham Darlington and Tees. This standard was supported by the majority of the Clinical Advisory Group (CAG) but there was a minority view that 98 hours consultant presence should be established as the standard for units with less than 4000 deliveries a year. The Project could not find enough evidence to inform a recommendation that goes against the Royal College standard, therefore the Project supports the RCOG standard and majority view of the CAG. Given the scale of this challenge however, there is a recognition that this needs to be delivered in a staged way, with 98 hours as an interim step for units with less than 4000 deliveries a year as part of a phased approach to implementation.
- Endorse the key quality standard of 1:1 Midwife care for women in established labour
- Ask Clinical Commissioning Groups to consider the steps they may take in the next contracting round to address some of the gaps in quality standards through the use of CQUIN incentives and agreeing small scale service improvement work with individual trusts.
- Agree to a further feasibility analysis to understand the implications of implementing the standards across County Durham, Darlington and Tees. This assessment should take into account the role of Midwife Led Units and how best to support an increase in home-births.
- Agree to inform the LETB to adjust commissioning plans to increase the numbers of midwife training places to mitigate against risks in future workforce shortages.

Acute Care

The overall recommendations of the Acute Services Quality Legacy Project in relation to acute care, given the wider financial and workforce contexts, the underlying health data, views of the clinical advisory group and the specific workforce risks and opportunities, are that the Project Board:

- Endorse the key quality standards recommended by the CAG as those that define high quality care.
- Endorse the recommendation for acute trusts to collaborate in establishing an interventional radiology service available 24/7.
- Agree that the critical care element of the Acute Care CAG continue until final recommendations can be made.

The overall recommendations of the Acute Services Quality Legacy Project in relation to end of life care, given the wider financial and workforce contexts, the underlying health data, views of the clinical advisory group and the specific workforce risks and opportunities, are that the Project Board:

- Endorse the key quality standards recommended by the CAG as those that define high quality care, particularly those that relate to the 24/7 availability of an appropriately trained nurse to provide practical support, responding within one hour, with access to necessary medicines and home equipment for End of Life cases. In addition the CAG recommends the appropriate use of the Liverpool Care Pathway in all care settings including the sharing of results
- Project board to endorse the recommendation for collaboration across the acute trusts to establish a 7 day per week service providing specialist palliative care advice.

End of Life Care

The overall recommendations of the Acute Services Quality Legacy Project in relation to long term conditions are as follows:

- Given the scale of the likely challenge ahead due to the ageing population, the rising prevalence of LTCs and the wider membership of organisations involved, a new project focusing on LTC management should be initiated across health and social care. This project should include community services, mental health and primary care providers as well as acute trusts.
- The project will add value to the existing work on long term conditions led by CCGs, by establishing a consensus on the scale of intervention needed and the quality standards to be achieved.
- Further work in this area would include more detailed work on the financial and workforce challenges to provide a better understanding of the required scale of transformation and the development of concrete plans to achieve this, learning from success locally, regionally and nationally.

Long Term Conditions

The overall recommendations of the Acute Services Quality Legacy Project in relation to planned care are as follows:

- CCGs should review the Planned Care Briefing Paper to identify and continue to understand unexplained variations in referrals from Primary Care and clinical practice in secondary care
- Where appropriate CCGs should look to use information to inform patient choice and commissioning levers to encourage competition to drive quality in Planned Care. This includes the introduction of new providers into the market to stimulate innovation
- CCGs should however consider the financial implications for current providers that any movement of activity away from them may have (either to other current or new providers) when making changes to elective pathways.

Planned Care

Overview of project methodology

In order to provide this assessment, the project consists of three inter-linked workstreams which contribute to the production of a final set of recommendations and an understanding of the wider context in which they are being made.

1) A clinical quality assessment across four broad clinical areas undertaken by Clinical Advisory Groups (CAGs) that addresses the following questions:

    - What are the current issues facing each service area?
    - What does best practice look like?
    - What are the barriers to achieving best practice?
    - What can be done to overcome those barriers to achieve best practice?

2) An economic assessment that provides an understanding of the local financial environment through a local agreed set of planning assumptions feeding into a fifth clinical area (Planned Care)

3) A workforce assessment that identifies current gaps/over-supply and future constraints of specialist clinical staff in relation to the deliverability of the quality standards agreed by the Clinical Advisory Groups.

The relationships and dependencies of the workstreams are shown in the figure 3.

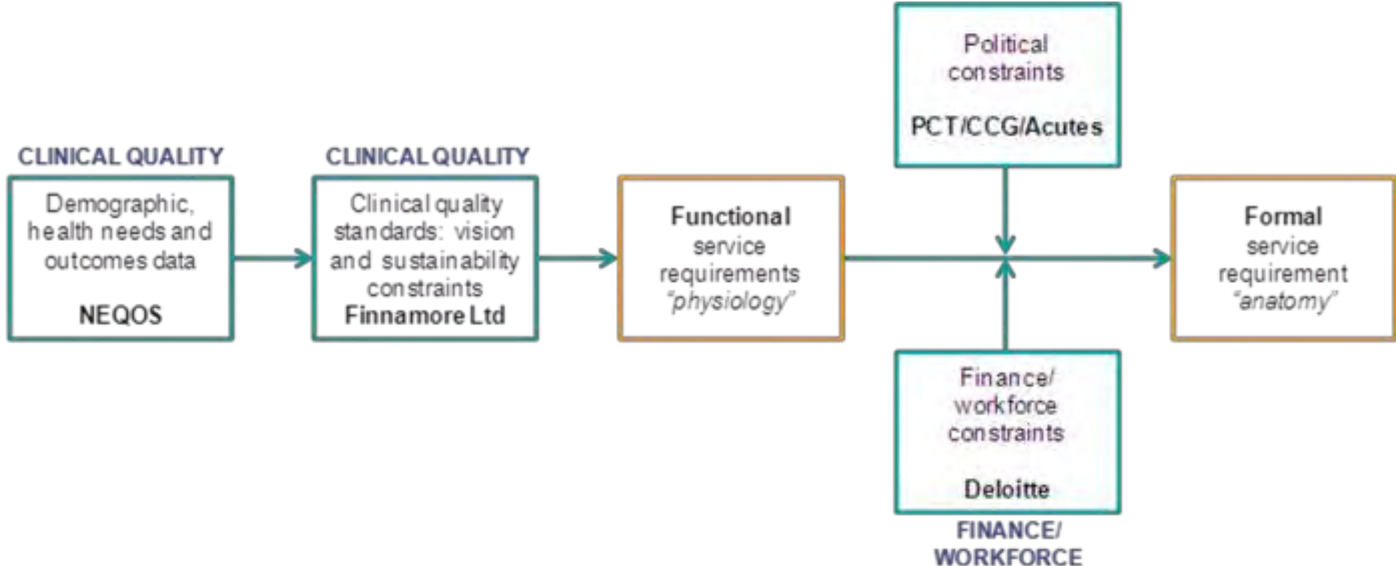


Figure 3: Workstream relationships and dependencies.

The Clinical Advisory Groups of the Clinical Quality work stream focused on secondary and tertiary care services at County Durham and Darlington FT, North Tees and Hartlepool FT and South Tees Hospitals FT, in three clinical areas.

These clinical areas are:

- Acute Paediatrics, Maternity and Neonatology
- Acute medicine, general surgery and ITU
- End of Life

Each of these Clinical Advisory Groups is made up of clinicians from each of the Foundation Trusts and representatives from CCGs. This report outlines the key recommendations from each of these groups, the ways in which the recommendations are most likely to be realised and the environment in which they are being made. A fourth Clinical Advisory Group with a smaller membership of primary care clinicians was also established to support the scoping of the long term conditions work.

Communications and engagement

Since May 2012 we have carried out the following work to ensure key stakeholders are informed about the project and are given opportunities to contribute their views:

- Briefings on the project have been made available to OSCs, shadow health and wellbeing boards and local authority leaders, chief executives and senior officers

- A number of meetings have been held with key stakeholders, such as the Tees Valley Health Scrutiny Joint Committee, Durham Adults, Wellbeing and Health Overview and Scrutiny Committee, local authority CEs, and the leaders and mayors group in Tees Valley, to inform them about the project and gather their views on further methods and opportunities to keep them informed of project progress and wider engagement

- Meetings with LINks will take place over the coming weeks

- MPs have been informed about the project and offered an opportunity for in depth briefing, Meetings with two MPs have been held as a result of such requests.

Context

In order to fully understand the findings and the recommendations from the project, it is important to set out the context for this work. The three main aspects of this context are:

- The changing demands on the acute sector caused by changes in demography, disease prevalence and clinical practice (including advances in medical technologies and drug therapies)
- The national and local financial environment over the coming years
- An understanding of national and local workforce considerations

A wide ranging analysis of nationally available data has been undertaken by the North East Quality Observatory System (NEQOS) to support each Clinical Advisory Group in understanding their own unique challenges caused by potential changes in demography, disease prevalence and clinical practice. As well as this service level analysis, the impact these changes have at macro- health economy level can also be assessed. This should support commissioners in choosing where to prioritise investment and to identify the opportunity cost of this prioritisation across the various health sectors (e.g. community based services and mental health provision).

These economic pressures then need to be seen within the wider financial environment of the NHS and the likely impact this will have on funding settlements for commissioners and efficiency expectations for acute providers. There will also be some “knock-on” to the NHS due to national funding settlements in other governmental department areas that have close ties with healthcare provision (for example social care).

Finally, several national policies will affect the supply or availability of the NHS workforce available to acute providers. These national policy decisions may be compounded by local constraints specific to either the North East as a region, County Durham, Darlington and Teesside as an area or at individual trust level.

Changing demands on the acute sector

Since the implementation of the Commissioning a Patient-Led NHS policy in 2005 there has been a steady and inexorable increase in secondary care activity. Some of this increase can be attributed to the reduction in elective waiting times across outpatient appointments, diagnostic testing and inpatient procedures, some to increased screening and early identification of conditions and some to the introduction of new services to meet previously unmet demand.

Despite the achievement of delivering the18 Week Wait across all specialties, the demand for services continues to remain high in County Durham, Darlington and Tees. Figure 4 shows the current activity levels for elective and non-elective admissions.

This high starting point is at risk of increasing further in the future due to the rise in the prevalence of long term conditions (figures 5 and 6) due mainly to a change in the age profile of the population (figure 7).

Increased activity in the secondary care sector has two main impacts. Firstly the increase in activity draws commissioners‟ resources into the acute sector (through the Payment By Results mechanism) at the opportunity cost of investing in more "up-stream", preventative services that would help manage demand in future years.

This creates a cycle of missed opportunities that over time becomes less and less affordable due to the rate at which the population ages. It can be argued that in the past, the impact of this cycle was masked by increases in commissioners‟ allocations at above inflation levels. The financial future of the NHS is tied to that of the wider UK economy however, so when forecast demand for services is mapped against a range of scenarios for income and efficiency, the effect of increased acute activity becomes more stark.

Secondly, depending on the type of activity, it makes it harder for providers to make the cost improvements necessary to make them financially stable on an ongoing basis as financial rules (such as the marginal tariff for non-elective care over 2008/09 levels) remove the income but without removing cost of caring for patients.

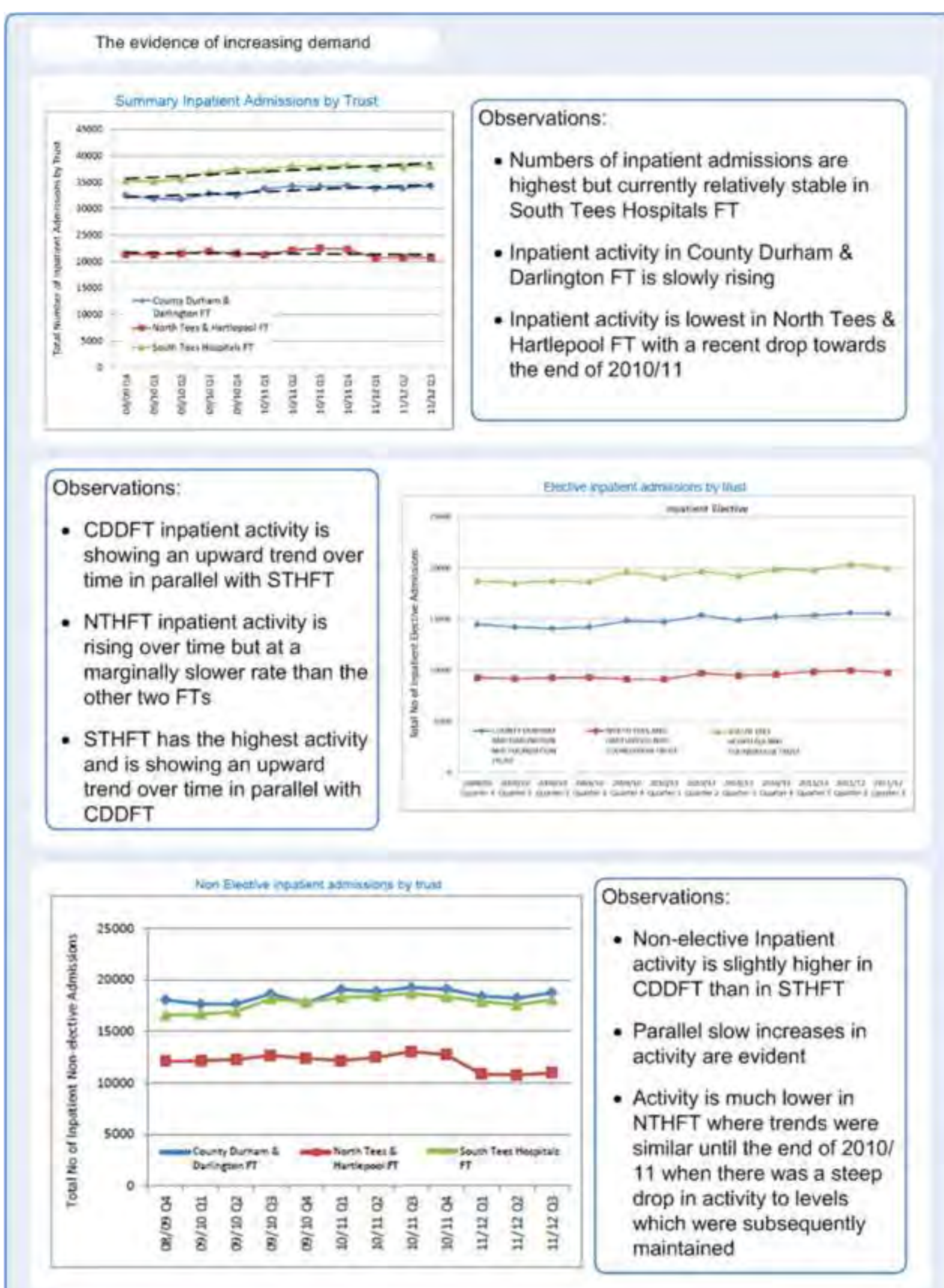


Figure 4: current activity in the acute sector

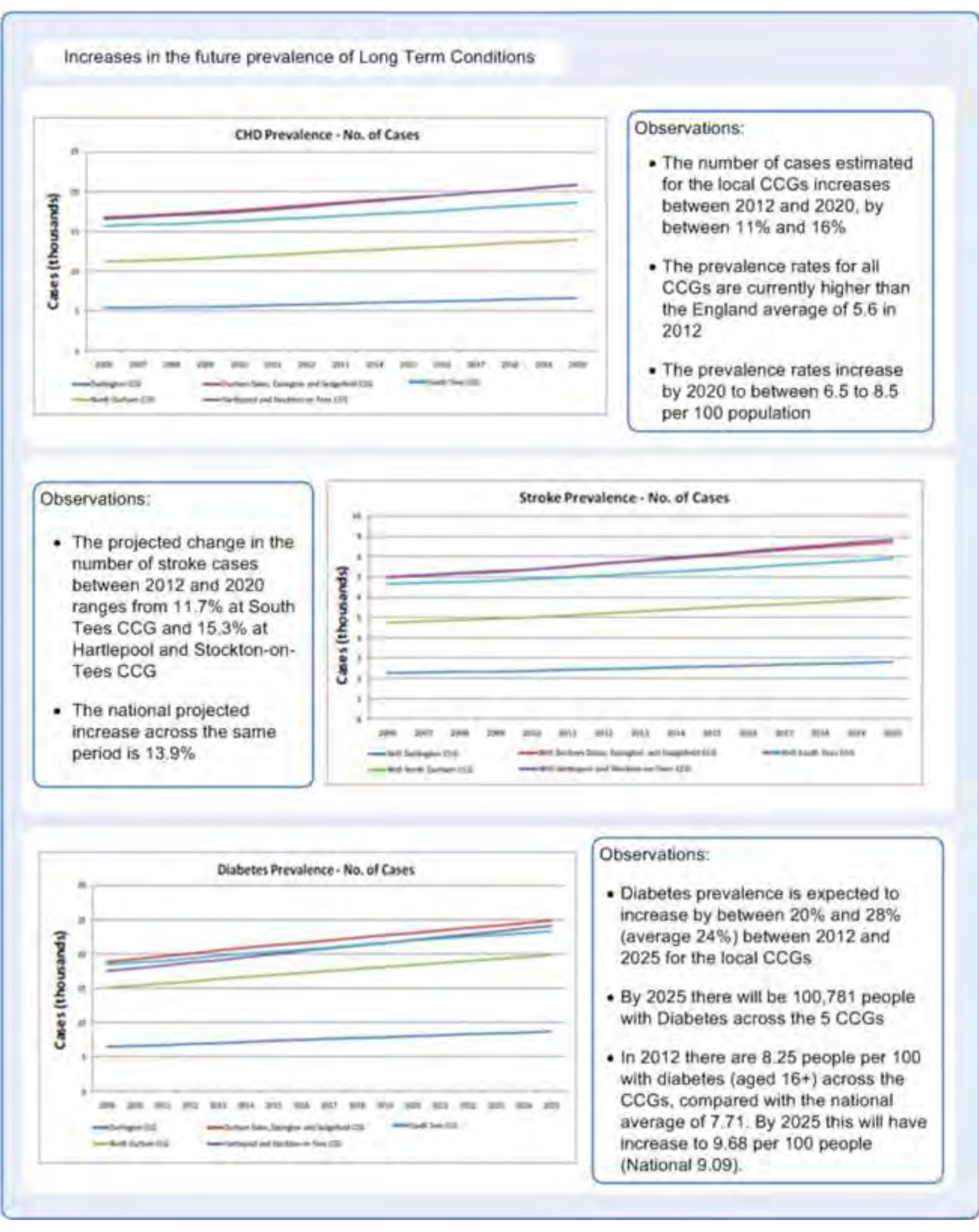


Figure 5: predicted increases in prevalence for CHD, Stroke and Diabetes

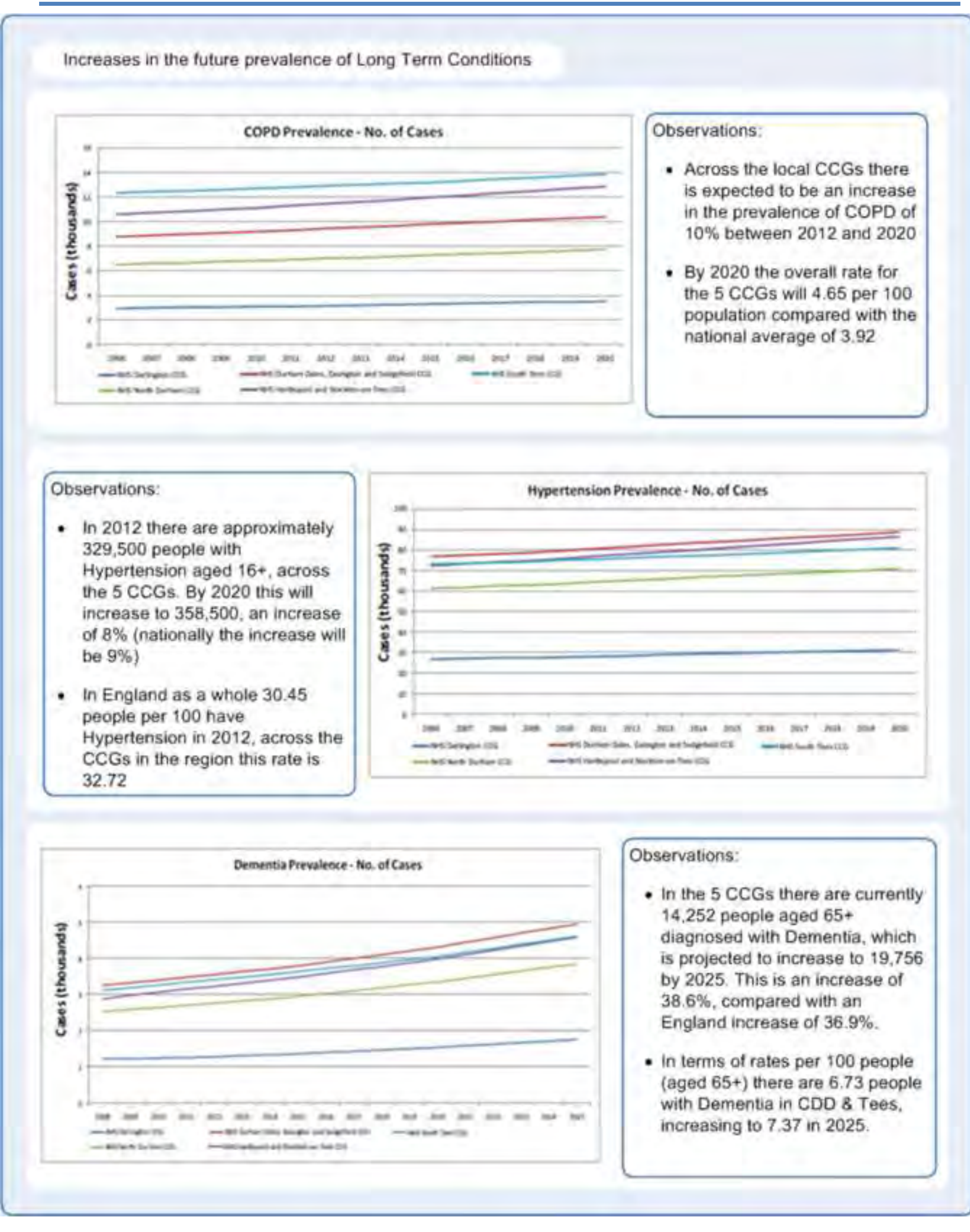


Figure 6: predicted increases in prevalence for COPD, Hypertension and Dementia

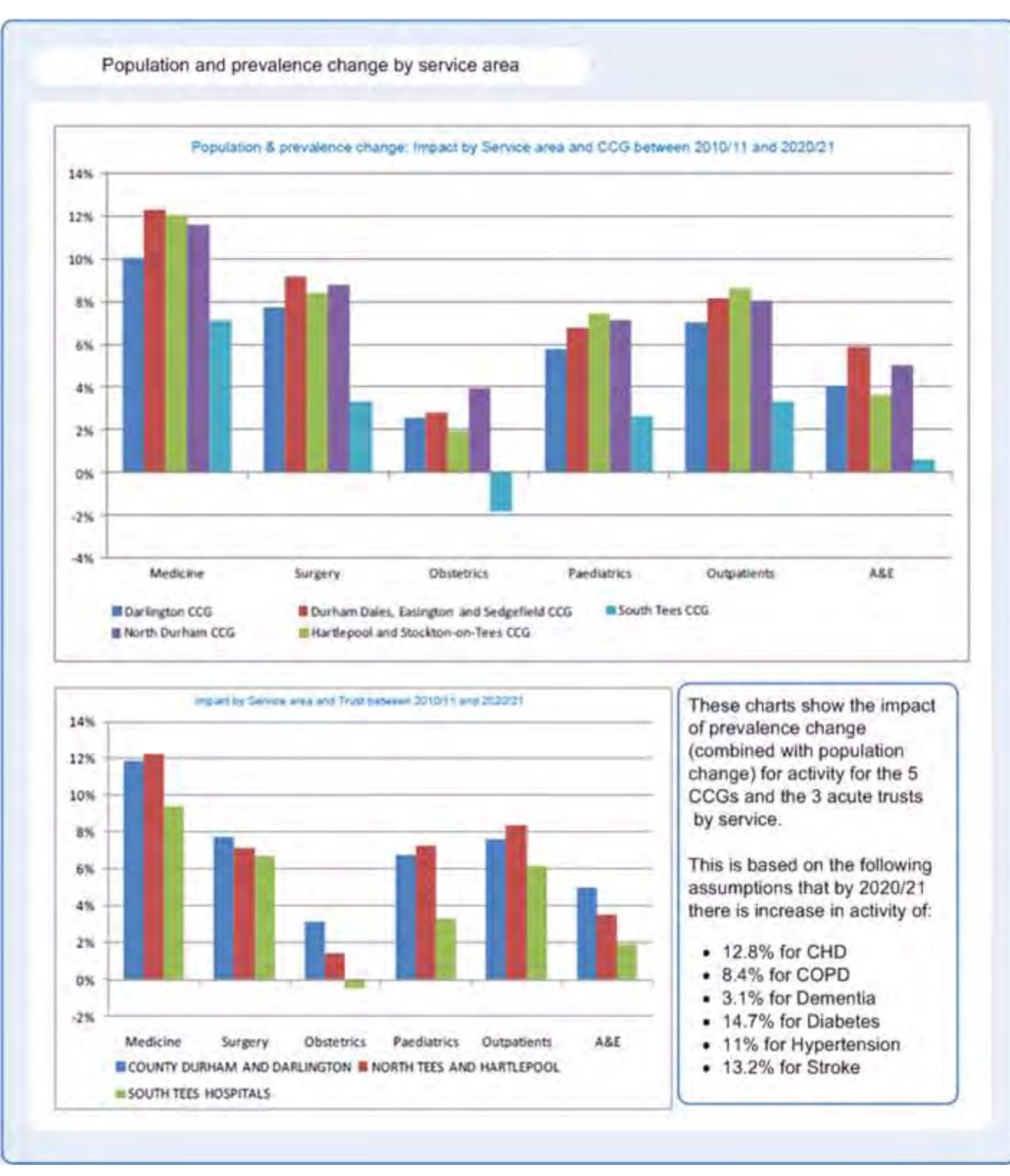


Figure 7: Impact of increased LTC prevalence and population changes on services

Economic context - commissioners

The financial implications of this forecasted increase in activity and utilisation has been assessed using a ten year financial model built on costed acute PBR activity. The use of PBR costed activity only gives a simplified message on the potential impact to commissioners, avoiding complications of changes in commissioning budgets to reflect the re-alignment of Public Health and Specialised Commissioning budgets in the future and also doesn"t take into account local risk-sharing arrangements.

Historic spend

Acute spend has grown at 7% p.a. from 2008/09 (Compound Average Growth Rate 2008/09 - 2011/12) in services paid for under the Payment By Results (PBR) mechanism (figure 8).

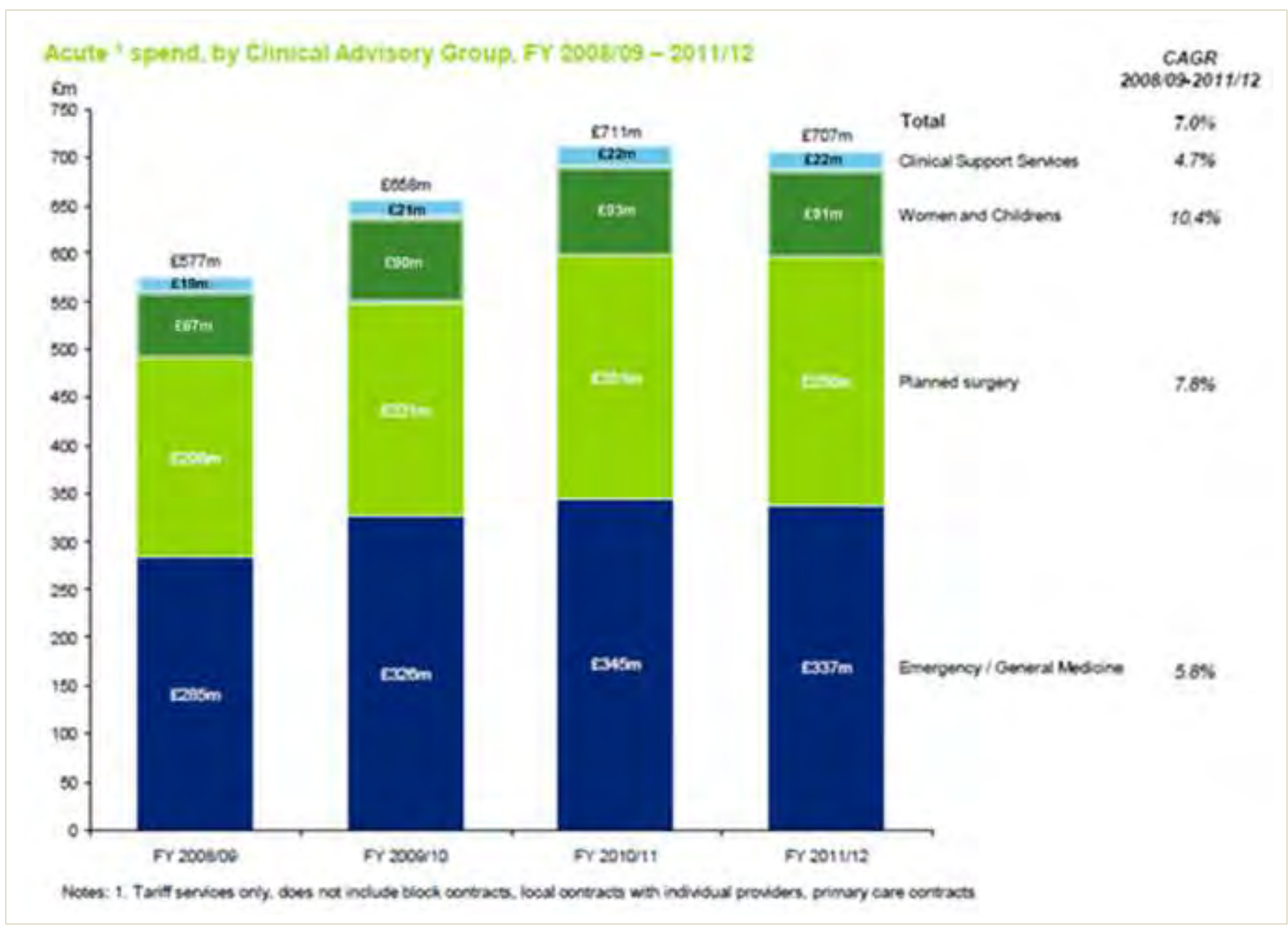


Figure 8: Historic spend on acute services paid for under PBR

In the first five years of the forecasted model, this increase is a modest 0.1 percent growth (as outlined in figure 9) as the financial impact of the ageing and growing population is offset by lower costs of procedures due to the impact of the tariff deflator, which is particularly high in these first 5 years.

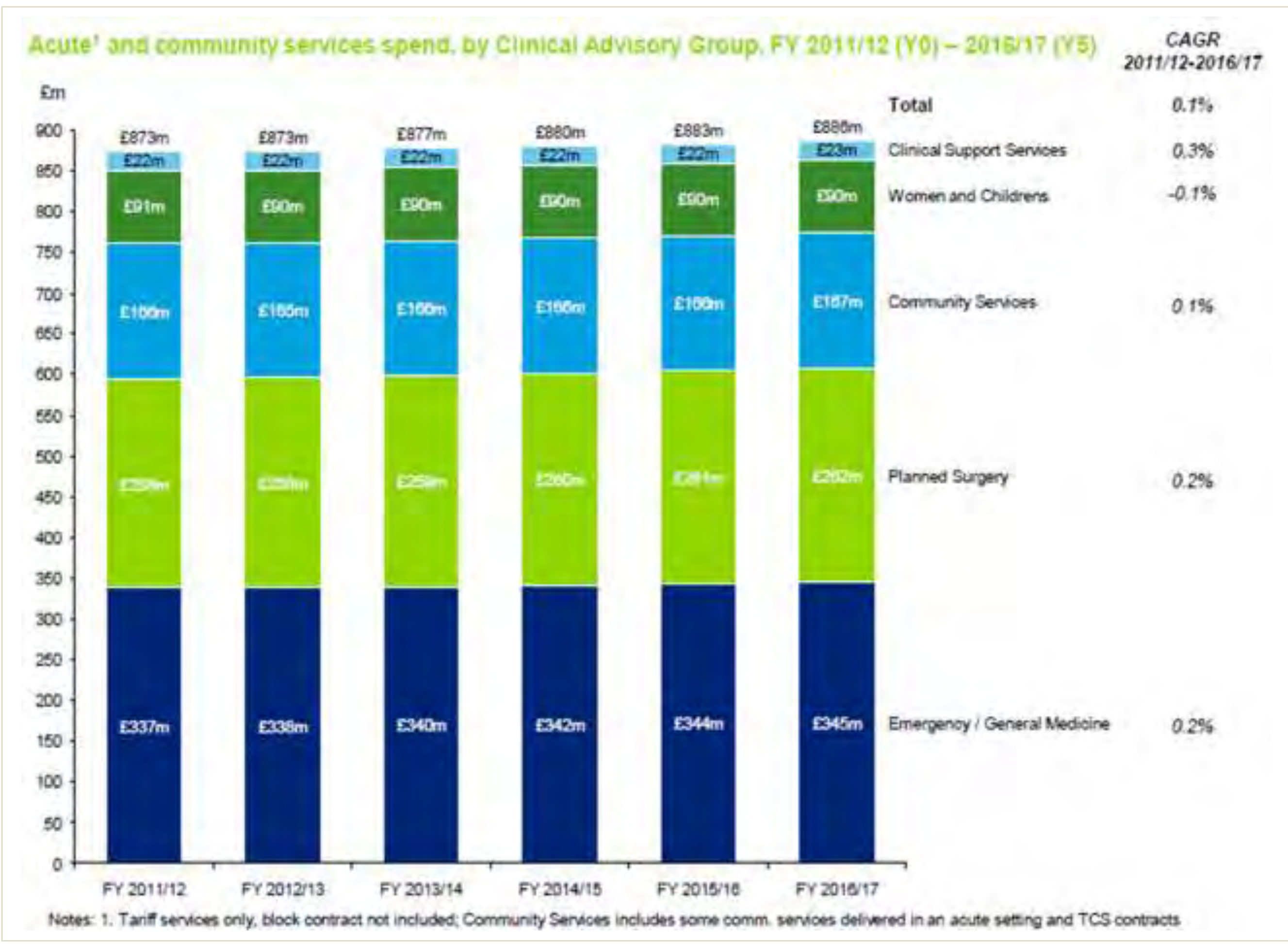


Figure 9: Forecast acute spend on acute services 2012/13 – 2016/17

Despite this slow rise in the early years of the forecast, the increasing proportion of the population being aged 65 or over suggest that the following five years will see more significant pressure.

Speciality by speciality modelling shows that this ageing population will drive an increase of 0.8% p.a. over the ten year period (figure 10) The primary causes of this increase are likely to be in the use of clinical support services (clinical haematology and clinical oncology) and in usage of emergency, general medicine, cardiology, ophthalmology and geriatrics medicine services.

Further increases in spending in the acute sector can also be anticipated outside of PBR related activity from the introduction and uptake in new drug therapies and advances in medical technology.

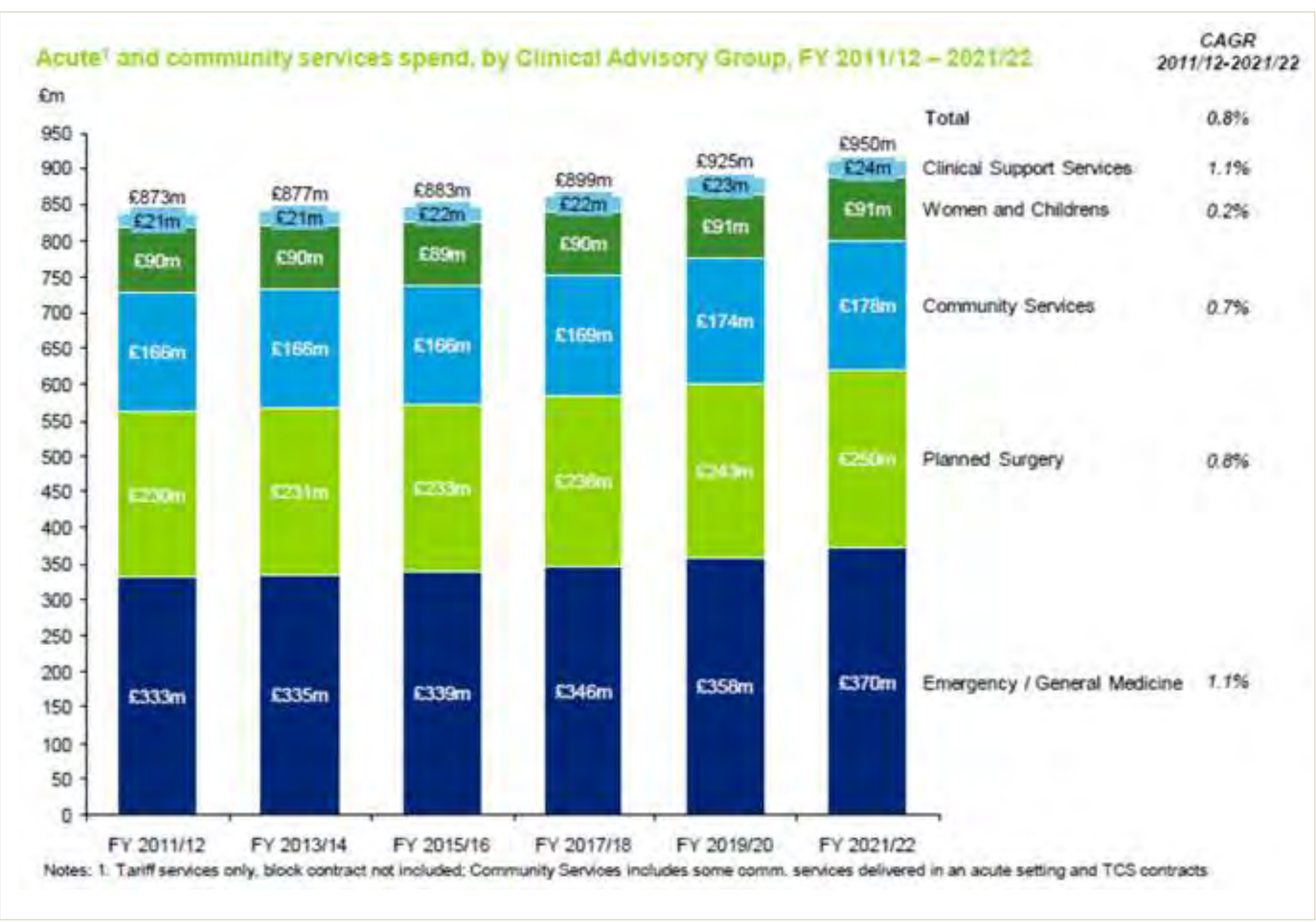


Figure 10: Forecast acute spend on acute services 2012/13 – 2021/22

Economic context - providers

As well as commissioners looking to keep expenditure on services within their likely allocated resources, provider organisations must work hard to deliver the level of efficiency required of them (as outlined in the financial rules of the Operating Framework for the NHS in England). Forecasts on the financial performance, ambition of cost improvement and resultant sustainability of profitability of the three local acute foundations trusts have been made over the next five years based on their current Medium Term Financial Plans.

Financial performance

The EBITDA (Earnings Before Interest, Taxes, Depreciation and Amortization) is a measure of the financial health of a provider organisation as it gives a simple measure of the operational profitability of each Trust and their ability to service their debts and pay a return to the taxpayer.

Another measure of financial performance is to look at Net Return After Financing. This measure is a step further on from the EBITDA as it considers specifically the surplus generated by the entity from which dividends can be paid back to the taxpayer in the form of public dividends.

The forecast EBITDA and Net Return After Financing levels can be seen in figure 11. Monitor assigns a risk factor to the EBITDA and Net Return After Financing calculation on a scale of 1 to 5 (1 being the worst, 5 the best). On the EBITDA measure, all three local providers are operating at a risk rating of 3 for the next 5 years and for Net Return After Financing a risk rating between 3-4.

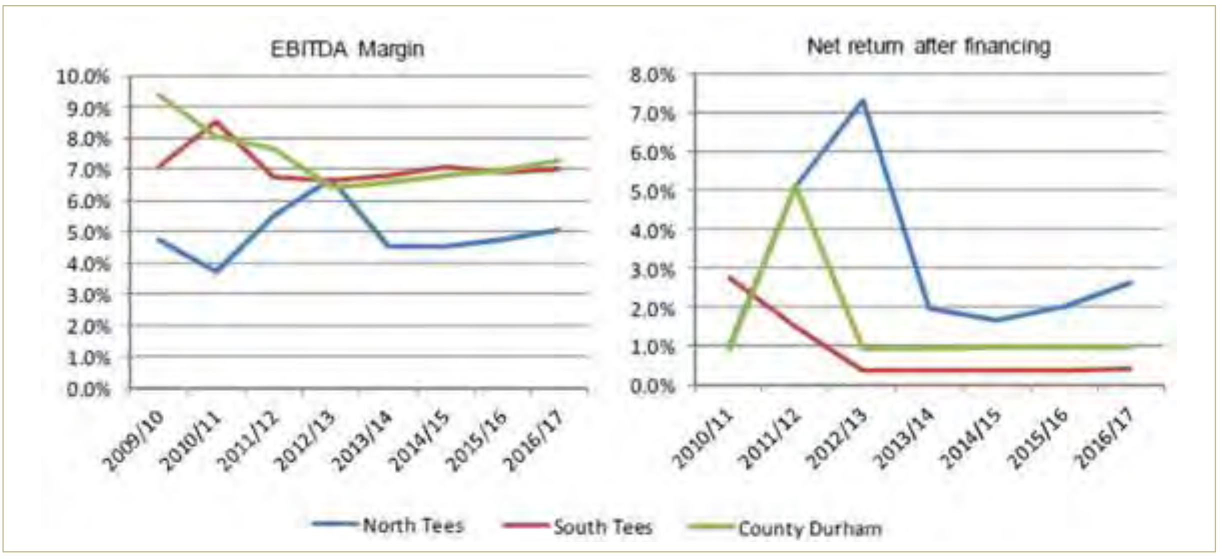


Figure 11: Forecast EBITDA and Net Return After Financing measures

Income and Expenditure (I&E) surplus margin is the simplest (and crudest) measure of performance and considers the surplus after deducting interest, depreciation and dividends as a fraction of operating revenues. All three trusts forecast an I&E surplus margin of around or below 1% in the final 3 years of the forecasted model (figure 12). This would represent a risk rating of between 2 and 3.

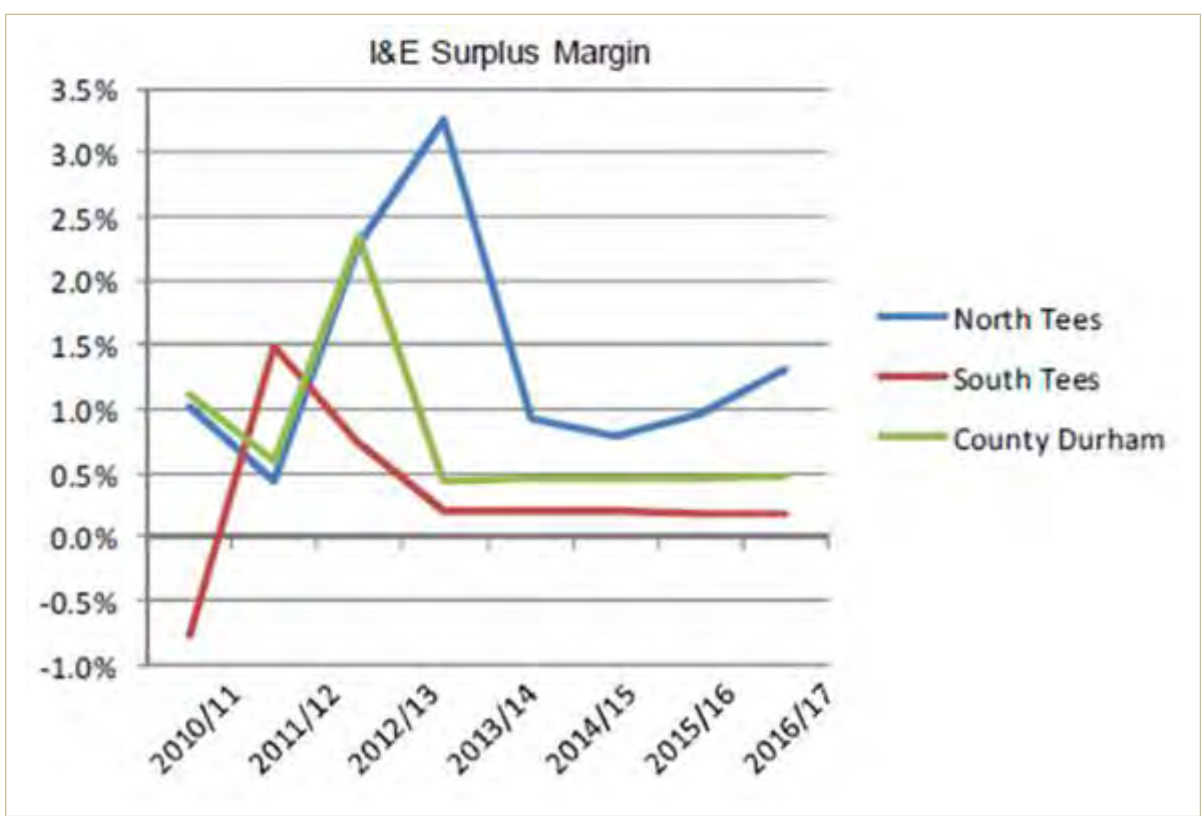


Figure 12: I&E Surplus Margin

Cost Improvement Plans

Cost Improvement Plans (CIPs) consist of a range of transactional and transformational changes that can release efficiencies which can be used by providers to re-invest in improving front-line care or reduce the need to bring in additional revenue in order to balance the books. Monitor assesses foundation trust CIP ambition against two scenarios; the Assessor and Downside cases as outlined in figure 13.

	2012/13	2013/14	2014/15	2015/16	2016/17
Monitor (Assessor)	4.50%	5.00%	5.00%	4.20%	4.20%
Monitor (Downside)	5.25%	5.50%	5.50%	5.00%	5.00%

Figure 13: Monitor Assessor and Downside CIP levels

The level of individual trust CIPs within each year of the five year forecasts can be seen in figure 14 and differ trust-to-trust and year-on-year, ranging from those that do not meet Monitor Assessor case levels to some that go well beyond them.

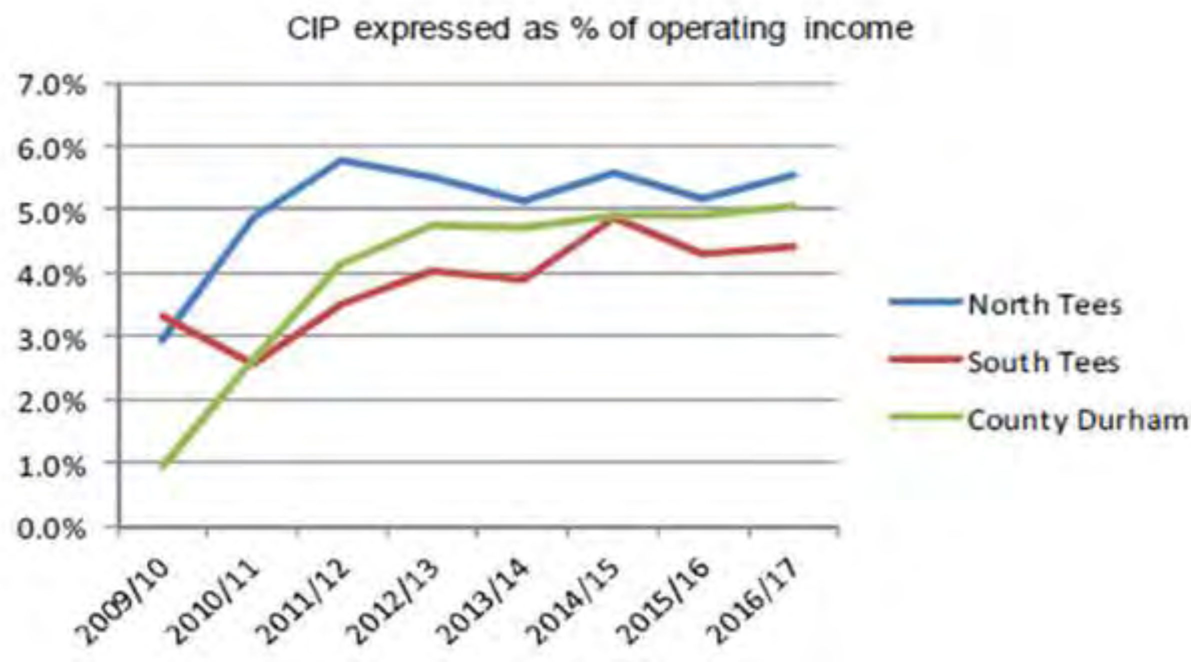


Figure 14: CIP expressed as a percentage of operating income

The implications of failing to achieve these cost improvement targets could have significant implications if further income could not be raised or alternative efficiencies found.

A sensitivity analysis was applied to the cost improvement plans that assessed the impact of achieving only a 3%, 2% or 1% cost improvement against expected income in each of the five years. The results are as follows:

- In the least severe scenario (3% CIP achievement every year) and if all other aspects of the financial plans remained constant, each trust would fall into an operating deficit by the end of 2013/14 but with sufficient cash in reserve to maintain financial balance until 2016/17.

- In the mid-case scenario (2% CIP achievement each year) one foundation trust would run out of cash reserves in 2014/15 with another following in 2016/17.

- In the most severe scenario (only 1% CIP achievement each year) one foundation trust would run out of cash reserves in 2013/14 with another following in 2014/15.

Wider economic implications

Whilst the NHS is forecasting constrained increases in allocation and increased demands on the services it provides, local authorities have experienced real terms cuts in grants since the comprehensive spending review. These cuts, which when forecast into the future against future demand and further changes/reductions in grants show a likely shortfall in revenue to meet spending pressures.

The Local Government Association (LGA) has modelled all future sources of council revenue, including grants, local taxes, fees and charges, investment income and reserves drawdown to the end of this decade on assumptions that offset grant cuts against the potential for growth in other revenue sources.[1]

Whilst social care spending is a statutory obligation in the short- to medium-term, longer term financial constraint may lead to discussions on the payment models for social care as the proportion of local authority funding rises, squeezing out funding for other currently provided services.

This scenario could lead to an increased risk of cost shifting between the health and social care sectors if opportunities to integrate services or commissioning services jointly aren't taken.

[1] LGA Funding outlook for councils from 2010/11 to 2019/20: Preliminary modelling, June 2012

Workforce context

As well as the likely future financial environment, the workforce context must be taken into account when understanding the constraints on delivering heightened levels of service quality. An assessment of the workforce issues and challenges has been undertaken together with a workforce model developed to understand specific current and future gaps against the Clinical Advisory Group recommendations about workforce quality standards.

The national and local workforce issues are outlined below and the specific findings of the workforce modelling are contained in the findings of the Clinical Advisory Groups sections of this report.

National workforce – policy drivers and key issues

There are a number of key policy and strategic workforce issues that will all have an impact on the available supply of the workforce delivering services in the clinical areas within the scope of the ASQLP

- Pensions reforms. The effect of reforms to the NHS Pension scheme will make it more difficult to predict retirement choices across different professions and therefore workforce planning.
- Move to all degree registration for nursing. Diploma nurses may be more likely to stay in the local area whilst degree nurses may be more likely to move out of the region on completion and therefore the north east, with relatively stronger ratio of diploma nurses, may find that graduate nurses will become more geographically mobile and therefore more difficult to retain after graduation
- European Working Time Directive .The challenge of delivering EWTD during financially constrained circumstances is ongoing and pressures on junior doctor rotas.
- Reaccreditation of doctors. Medical revalidation and the process through which fitness to practice/licensing is carried out, could lead to greater levels of attrition
- Consultant led services. A body of evidence is emerging that Consultant Delivered Care (CDC) can provide better outcomes for patients and recent papers published by the Academy of Medical Royal Colleges (AoMRC), and additional survey data by the Royal College of Paediatrics and Child Health (CPCH) appears to support this
- As well as these factors, the Francis 2 Report into the failings in Mid-Staffordshire is due to report in January 2013, the recommendations of which may have further implications for the acute services workforce.

Local workforce factors

There are also several local issues, challenges and constraints that will need have been taken into account in the production of this set of recommendations. These include:

- Weighted Capitation. Measures are used to provide an overview of the expected number of doctors proportionate to the regional population. The North East appears to be over-capitated for some of the consultant areas which are in scope for the project. The potential implication of over capitation is that it may be difficult to secure additional training posts e.g. in Obstetrics and Gynaecology (O&G). The recommendation from the Centre For Workforce (CfWI) Intelligence is to reduce National Training Numbers (NTNs), in the North East due the degree of over-capitation.

- Reduction in the numbers of medical trainees. Reduction in NTNs will need to be considered very carefully in terms of the impact for specific specialties and longer term planning. The CfWI recommendations are made on the basis of no reconfiguration of services and the impact of service changes in other parts of the region, e.g. Northumbria Emergency Care Centre will need to be considered as a local risk to supply.

- Maintaining specialist skills. At present there are often no standards set nationally that define the minimum number of procedures needed in each specialty to ensure doctors keep their clinical skills up-to-date once they qualify (although the reaccreditation of doctors has been introduced).

- Configuration of local services and impact on the labour market. There are different service models emerging and it will be important to address any capacity gaps as a result of these and also to identify skill mix opportunities which can be used to address these issues. In addition, developments in other parts of the North East may see staff migrate away from the three providers in County Durham, Darlington and Tees.

- Trainee satisfaction. The latest survey (GMC National Training Survey 2012) of trainee doctors rates the Northern Deanery highest in England overall. For Nursing and Radiography, Teesside University scores above average student satisfaction scores in the 2010 national student survey.

Key shortage supply areas not covered by CAG specific analysis

Shortages can be defined in a number of ways:

- Through analysis of national intelligence, e.g. CfWI drawing on likely changes in demographics and supply issues

- Reviewing weighted capitation which can provide a sense of „relative" shortage

- National shortage list. Each year the Migration Advisory Committee (MAC) publishes a list of national shortage occupations under what is known as „tier 2". This list of occupations provides important intelligence as to areas of current labour market shortages. These occupations can then be eligible for the consideration of recruitment of overseas (non EEA) individuals. Last year"s list included a number of professional groups which are relevant for the delivery of the services in the scope of the ASQLP.

Current staffing levels

Figure 15 shows the current staffing levels for senior staff per site and nurses per organisation for each 100 beds.

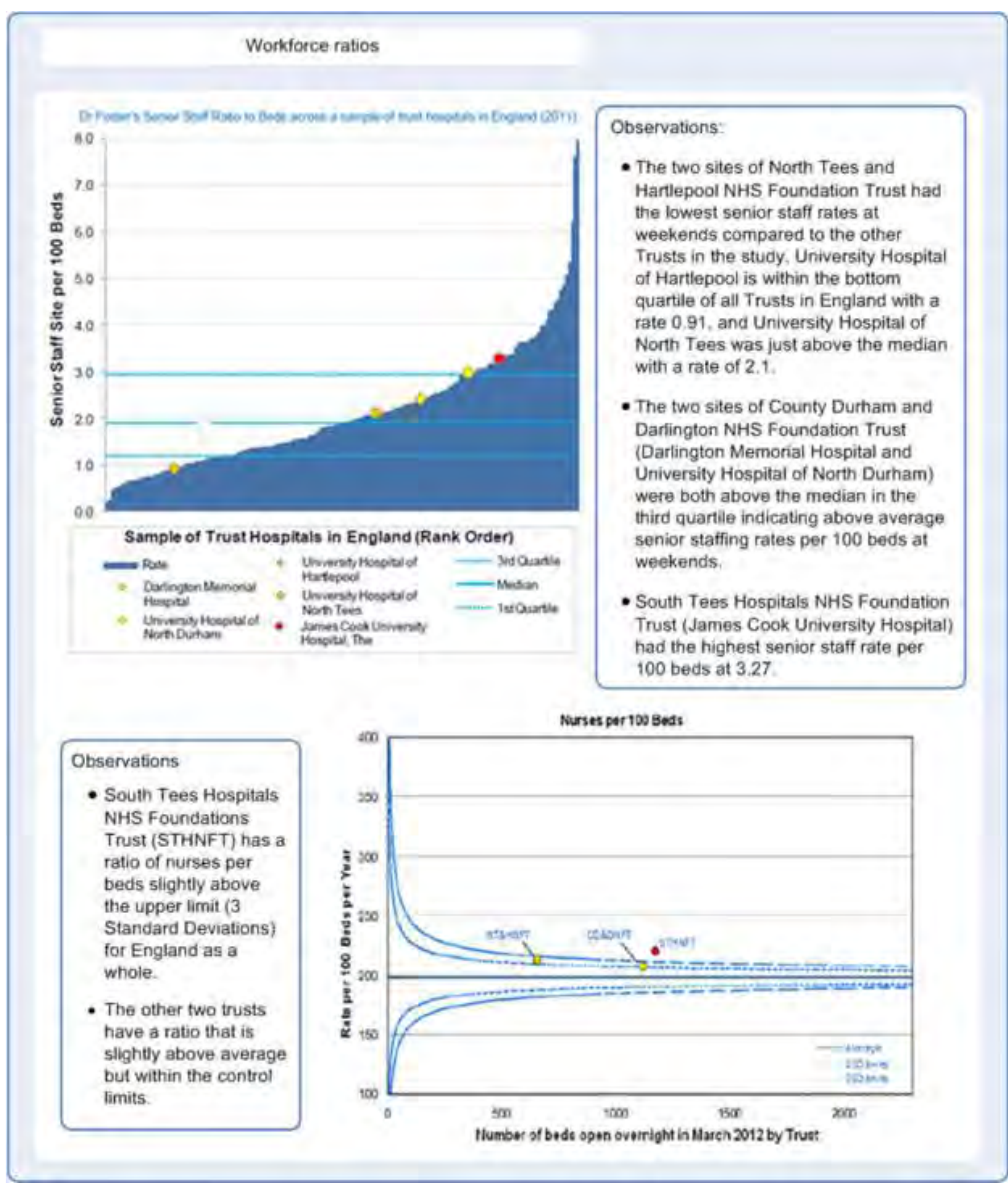


Figure 15: Commentary on high level staffing benchmarks

Clinical Advisory Groups

As identified earlier in the report, four CAGs were established to lead the definition and review of clinical standards that would best define high quality to care, as well as an informal gap analysis against these standards and an understanding of the barriers to introducing them.

Of the four clinical advisory groups established, three followed a standard approach to the review of quality standards as outlined in figure 16. These groups were as follows:

- Acute Paediatrics, Maternity and Neonatology
- Acute Care
- End of Life Care

The types of standards the CAGs were really interested in were those that related closest to the long term sustainability of services or were linked to staffing/rota requirements rather than those that focused on individual clinician-to-patient practice.

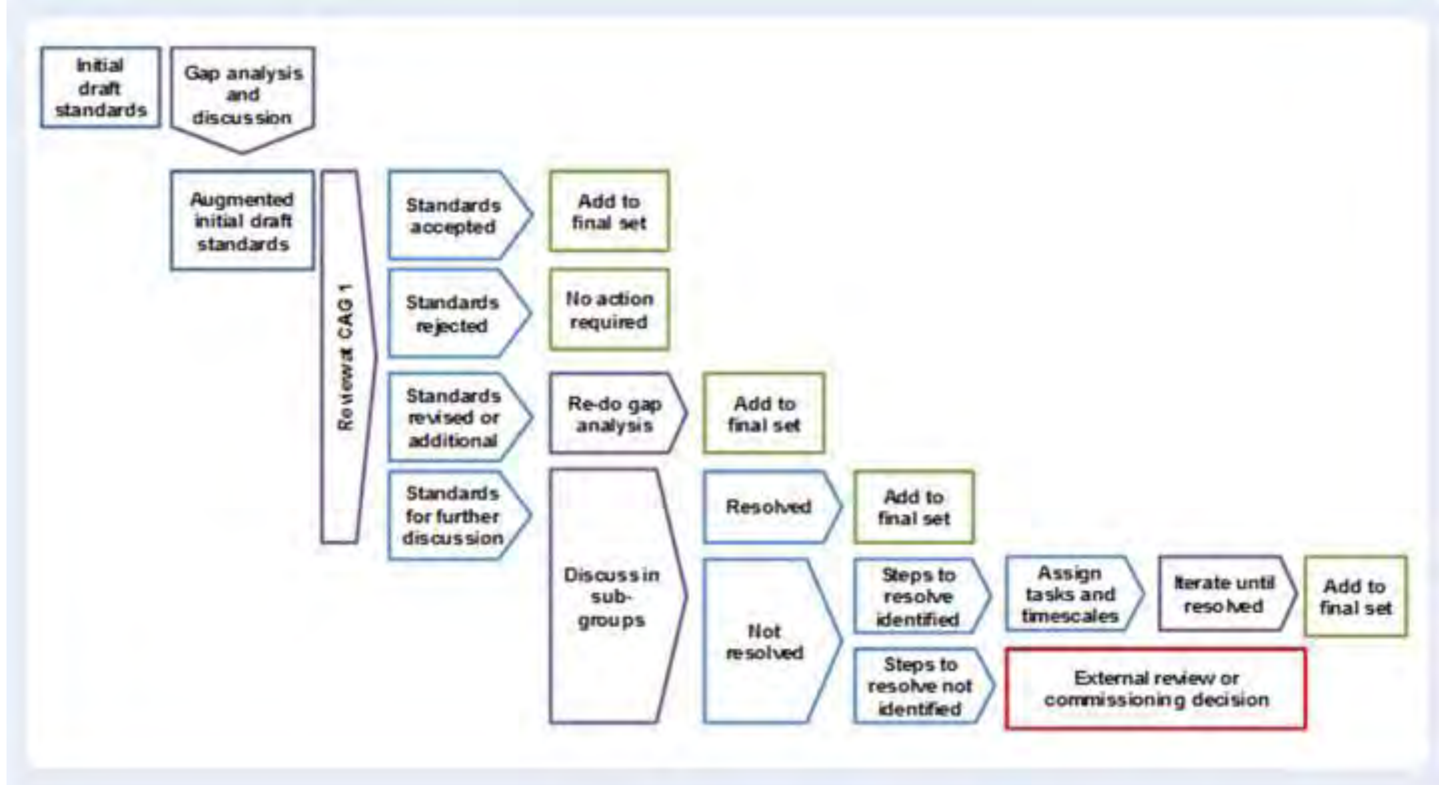


Figure 16: CAG process for the review of clinical standards

The Long Term Conditions CAG carried out a desk-top review of the financial impact to commissioners and providers of the introduction of a range of potential LTC interventions/service models.

Due to the sheer number of specialties involved in planned care, this section of the report will focus on quality issues identified in the North East Quality Observatory Briefing Paper and whilst looking to understand the current level of choice and competition across County Durham, Darlington and Tees.

Workforce modelling to support Clinical Advisory Groups

The ASQLP has focused on using quality standards as the basis of the models within the workforce assessment.

The workforce workstream combines two components:

- Qualitative analysis based on national and local workforce intelligence for all of the 5 areas;
- Quantitative analysis based on detailed staffing analysis for the areas of Maternity, Paediatrics and Neonatal services.

The quantitative models developed combine workforce data, baseline data and quality standards to provide an insight into three key things: current compliance with agreed quality standards, likely future compliance with standards and an illustration of the workforce implications of different scenarios (figure 17).

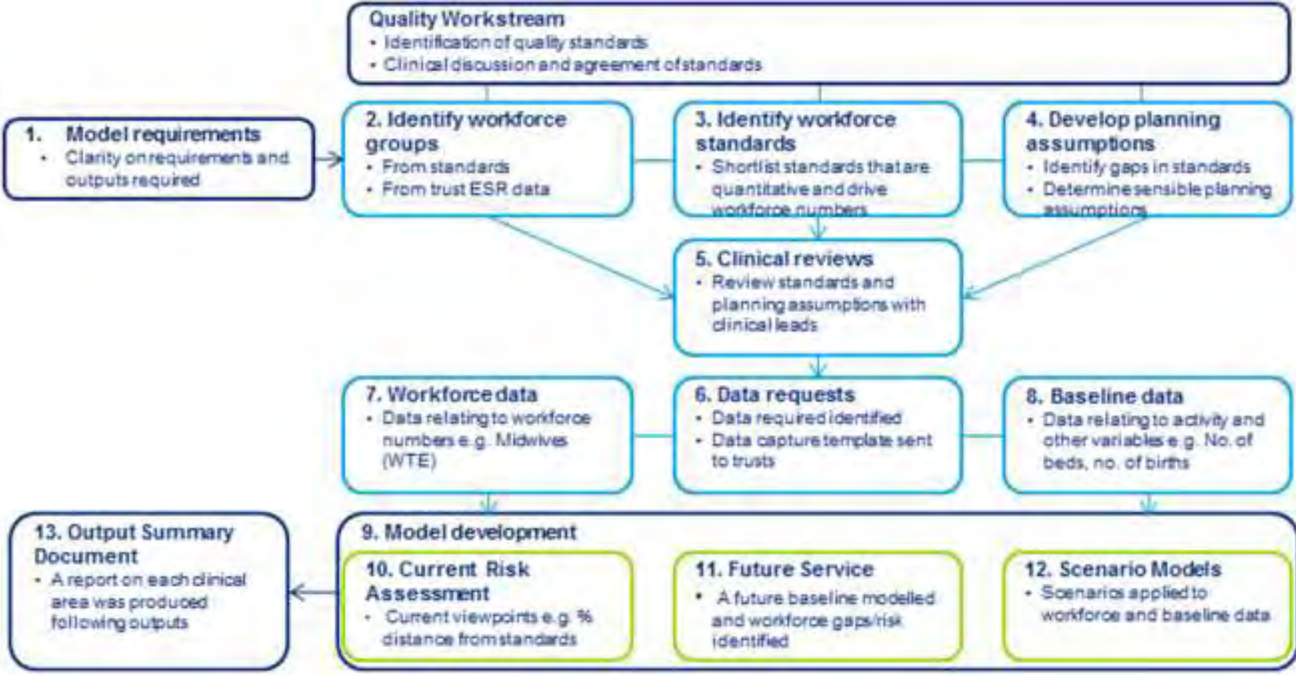


Figure 17: The workforce model process and outputs

Summarised Clinical Advisory Group sections

The following sections contain summarised information for each CAG area taken from two or more of the following perspectives as outlined in figure 18:

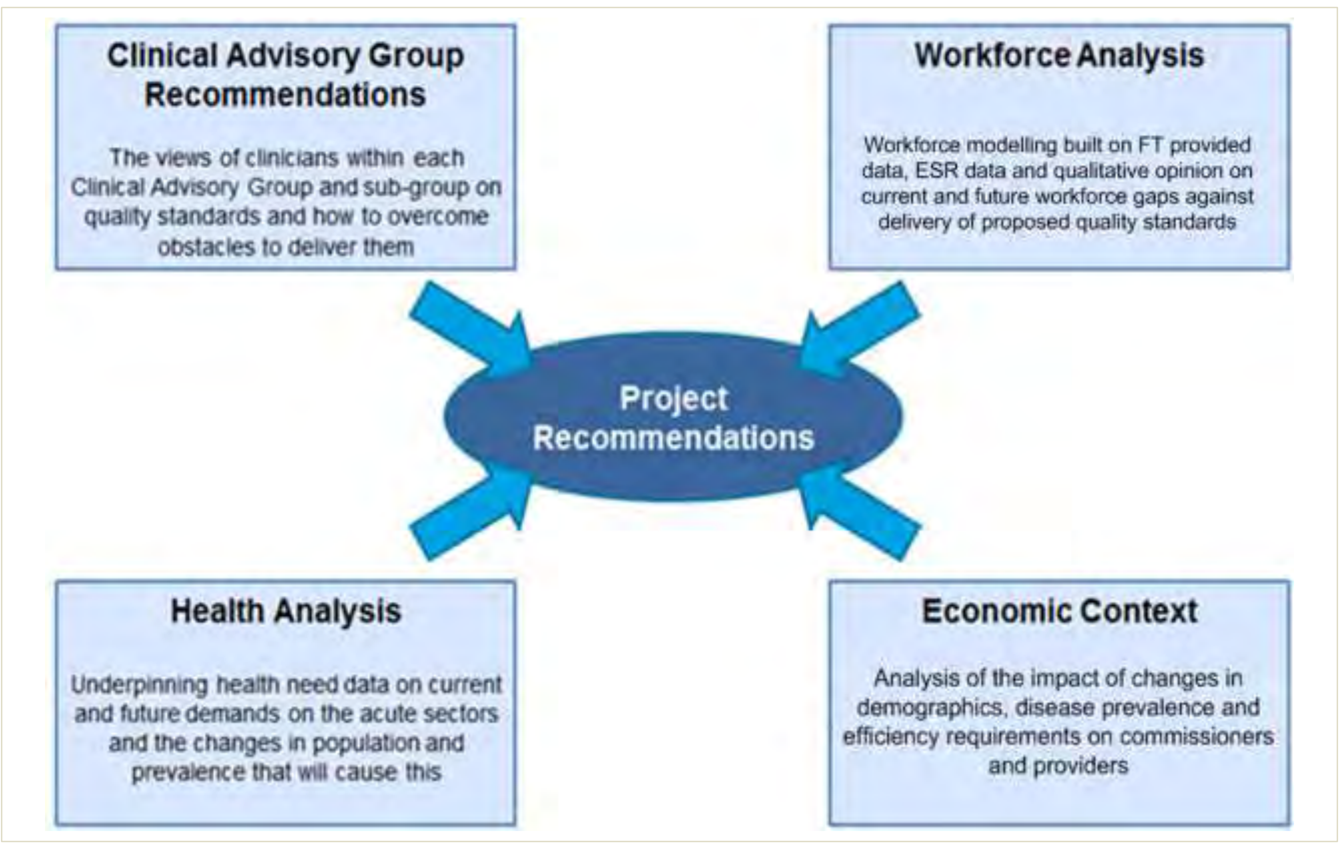


Figure 18: Perspectives of information

Details of the following are also given where appropriate:

- The Chair and membership of the CAG
- A summary of the key source documents that were used as the starting point for discussion by the CAG
- The key quality indicators identified by the CAG that may be best acted upon using CQUIN incentives or service redesign
- The key quality indicators identified by the CAG that are high unlikely to be achieved in the current service configuration
- Scenarios (other than the use CQUIN incentives or service redesign) that may address these challenges
- Final recommendations from the CAG / CAG sub-group
- Final recommendations from the Acute Services Quality legacy Project.

Acute Paediatrics, Maternity and Neonatology

The membership of Acute Paediatrics, Maternity and Neonatology CAG was as follows:

Chair: Robin Mitchell, Medical Director, CDDFT

Vice Chair: Derek Cruickshank, Chief of Service, Consultant Gynaecologist

Obstetrics

- Bob Aitken, Clinical Director, Women and Children , CDDFT
- Steve Wild, Clinical Director, Obstetrics and Gynaecology, NTFT
- Helen Simpson, Labour ward lead, SFTFT

Midwifery

- Anne Holt, Head of Midwifery , CDDFT
- Janet Mackie, Head of Midwifery, NTFT
- Yvonne Regan, Head of Midwifery, STFT

Paediatrics

- Stephen Cronin, Associate Medical Director, Head of Paediatrics , CDDFT
- Jagat Jani, Clinical Director, Child Health, NTFT
- Fiona Hampton, Clinical Director, Paediatrics, STFT

Neonatology

- Chidambara Harikumar, Consultant Neonatologist, NTFT
- Jonathan Wyllie, Consultant Neonatologist, STFT

Anaesthetics

- Paul Mowbray, Clinical Director, Anaesthetics, CDDFT
- Mike Tremlett, Clinical Director, Anaesthetics, STFT

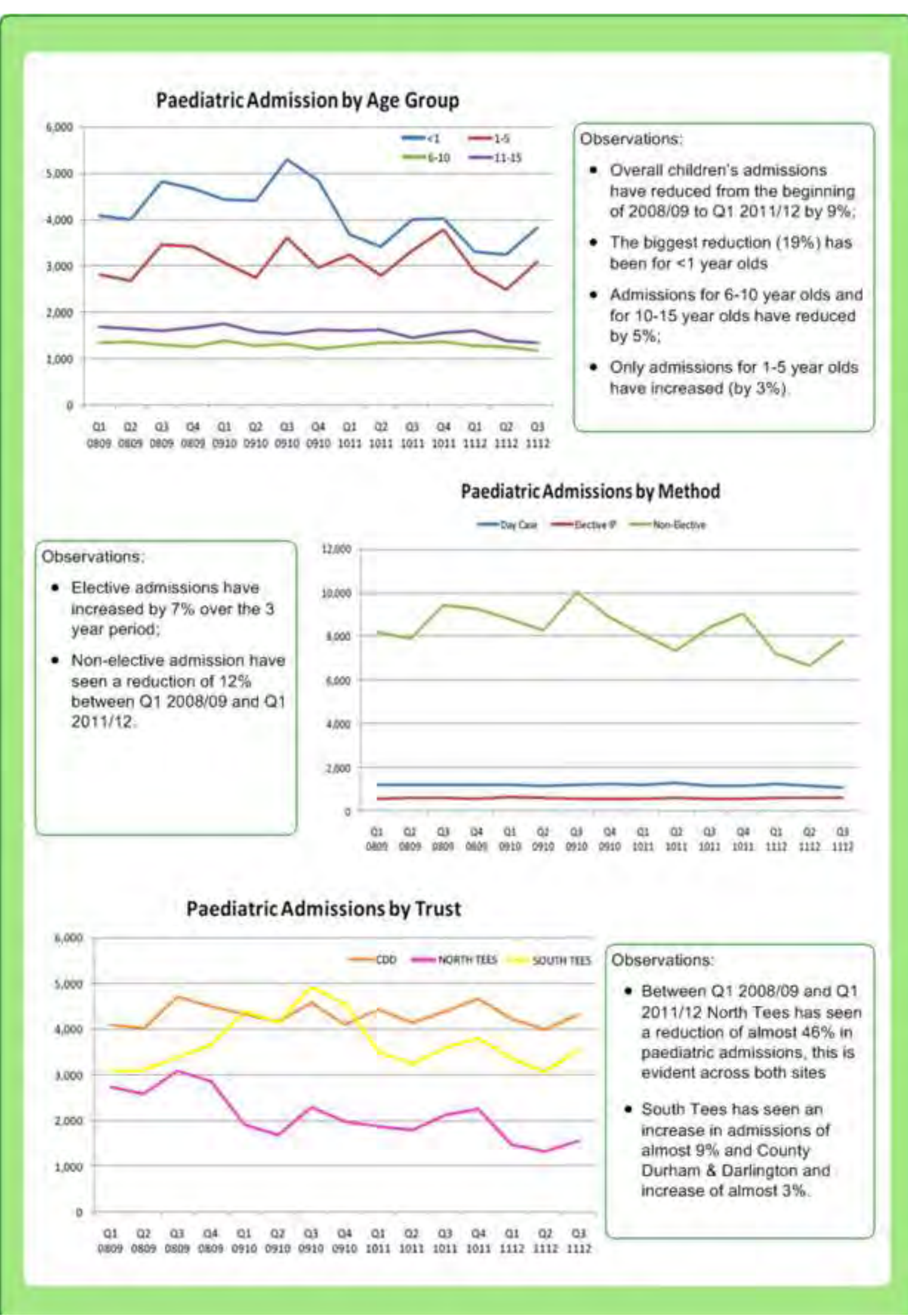
CCG representatives

- Kate Bidwell, Chair, North Durham
- Henry Waters, Chair, South Tees
- Boleslaw Posmyk, Chair, Hartlepool and Stockton-on-Tees

The group met three times as a whole with specialty level sub-groups meeting in-between.

Acute paediatric services

Three trusts provide acute paediatric services across six sites. These services were the focus of the paediatric quality standards and the key health indicators are as follows:


Paediatric Admission by Age Group
<1
1-5
6-10
11-15
Observations:
Overall children's admissions have reduced from the beginning of 2008/09 to Q1 2011/12 by 9%;
The biggest reduction (19%) has been for <1 year olds
Admissions for 6-10 year olds and for 10-15 year olds have reduced by 5%;
Only admissions for 1-5 year olds have increased (by 3%).
Paediatric Admissions by Method
Day Case
Elective IP
Non-Elective
Observations:
Elective admissions have increased by 7% over the 3 year period;
Non-elective admission have seen a reduction of 12% between Q1 2008/09 and Q1 2011/12.
Paediatric Admissions by Trust
CDD
NORTH TEES
SOUTH TEES
Observations:
Between Q1 2008/09 and Q1 2011/12 North Tees has seen a reduction of almost 46% in paediatric admissions, this is evident across both sites
South Tees has seen an increase in admissions of almost 9% and County Durham & Darlington and increase of almost 3%.

Acute paediatric clinical standards

Standards for acute paediatric care were sourced from a number of key documents as shown in figure 19. Early conversations within the paediatric subgroup highlighted a number of key issues and challenges that informed the selection of the key standards.

Figure 19: Source documents for acute paediatric clinical standards

A total of 32 acute paediatric standards were proposed by the sub-group and the initial gap analysis across the three Foundation Trusts identified a total of 12 acute paediatric quality standards were not being met by one or more of the trusts.

This information provides commissioners with opportunities to drive improvements in quality through mechanisms such as CQUIN incentive and to support service improvement work within current organisation configuration (which could feature in the service improvement schedules in acute contracts in future years).

The areas where standards are not being met by one or more trust include:

- Staffing: paediatricians – this includes paediatric consultant presence in the hospital at times of peak activity, the number of doctors available at different grades, and paediatric anaesthesia.
- Staffing: nursing – this includes the number of qualified children‟s nurses on each children‟s ward, and nurse to child ratios in different settings taking into account the level of complexity of the children‟s condition.
- Staffing: PICU – this includes medical staffing at all levels and nurse to baby ratios.

Four paediatric quality standards that have been agreed by the sub-group are not met by two or more trusts. Improved performance against these standards could possibly be driven through mechanism such as CQUIN incentives.

However, the sub-group agreed that achievement of these standards should be considered in the context of the current number of paediatric units as trusts are likely to be competing for staff and will require significant investment.

The four acute paediatric quality standards not being currently met by two or more trusts are:

- A paediatric consultant (or equivalent) is present in the hospital during times of peak activity.
- Every child or young person who is admitted to a paediatric department with an acute medical problem is seen by a consultant paediatrician (or equivalent staff, specialty and associate specialty grade doctor who is trained and assessed as competent in acute paediatric care) within the first 24 hours.
- All general acute paediatric rotas are made up of at least ten wte, all of whom are WTD compliant.
- Paediatric short stay assessment units and inpatient units should apply a dependency model to nurse: patient care that is validated by commissioners. For planning this should be based on a ratio of 1:7 for SSPAUs and 1:4 for inpatient units.

Scenarios to address the gap

Based on the standards the paediatric sub-group agreed a set of paediatric network "building blocks". The sub-group used these to develop five scenarios (including the status quo) for addressing the key challenges facing paediatric services, which were assessed for their relative strengths and weaknesses (figure 20).

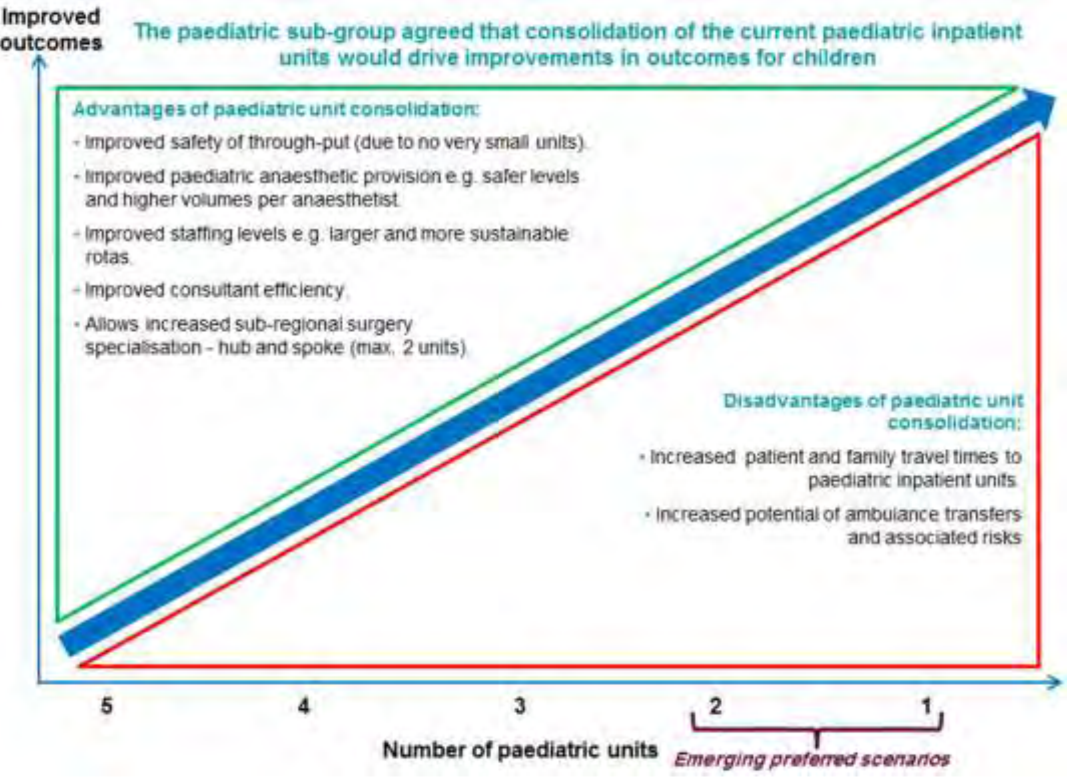


Figure 20: Review of scenarios

Recommendations from the Clinical Advisory Group sub-group

The Acute Paediatric sub-group identified that a reduction in the number of current paediatric units from the status quo would be the best way to address the expected shortage of staff to achieve the agreed consultant cover standards across all four units. The health analysis data made available to the CAG is listed in Appendix 1 and the final set of agreed standards can be found in Appendix 2.

Developments since November 2012

The acute paediatric sub-group continued to work on a more stringent set of standards for paediatric anaesthesia. A second draft of the paediatric surgery and anaesthesia standards has been produced but these have not been agreed across all three Trusts. The final report from the sub-group outlines the key issues still to be resolved.

The group looked at the implications of reducing the current number of paediatric in-patient units. This included further work on the expected staffing levels for Short Stay Paediatric Assessment Units (SSPAUs, and the implications for paediatric surgery and anaesthesia.

The group also looked at service specifications and CQUINs for some of the key standards.

Analysis of specific workforce constraints

Currently there are significant gaps in staffing when compared to the quality standards in some key groups:

Current Assessment	Workforce Group	Key issue in Quality Workstream?	Current Gap (estimate)		Notes
Red	Consultants	Yes	8 WTE	16%	• Shortage of qualified doctors on rota
Red	Tier 2 doctors		31 WTE	62%	
Green	Trainees doctors		- 2 WTE (surplus)	- 4% (surplus)	• Relative surplus, supported by GPVTS ~1/3 of tier
Red	Sister/Charge Nurses	Yes	13 WTE	51%	• Significant shortages against sister nurse standards • Slight surplus in staff nurse numbers
Green	Staff Nurses		- 1 WTE (surplus)	0.5% (surplus)	
Yellow	SNPs	Not specifically	- 4 WTE (surplus)	85% (surplus)	• Figures based on planning assumption reinforcing existing delivery model. No specific targets to achieve hence perception of surplus.
Green	HCAs	No	- 9 WTE (surplus)	- 15% (surplus)	

Output from the qualitative workforce assessment into paediatrics highlights comparable issues to those identified by the quantitative assessment:

Staffing group	National	RAG	Local	RAG
Consultants	Do not foresee a retirement bulge	Yellow	Age profiles of consultants are a concern and vacancies, Paediatrics noted in local collaborative risk assessments	Red
Junior Doctors	ST4 posts on the MAC list, RC highlights high vacancy levels at ST4 and ST7	Red	100% fill rate for specialty in 2010, however, average rate of posts filled shows degree of attrition over time	Yellow
SSASG	A significant number of doctors in the specialty are SSASG. Non Consultant non training posts on the MAC list	Red	Associate Specialist Age Profiles	Yellow
Anaesthetic Doctors	Non Consultant Non training doctors in this specialty and on the MAC list	Red	NE is over-capitated on both consultants and junior doctors. N Tees age profile for consultants.	Yellow
Paediatric Nurses	Low vacancy level in 2010 at 0.7%. Relatively younger age profile	Green	Highlighted in CDD risk assessment last year, in relation to possibility of taking up Health Visitor vacancies. Overall under weighted capitation for children's nurses (0.9% under)	Yellow
Operating Department Practitioner (ODP)	Important role in paediatric anaesthesia; contained in the MAC shortage list. Degree length changing	Red	Relatively low vacancy rate in the North East	Green
Paediatric Surgery	2011 vacancy level 0%, Recruitment to sub-specialty training has been difficult	Yellow	NE is under- capitated on consultants,	Yellow
Paediatric Emergency Medicine	Consultants in Emergency Medicine are on the MAC list	Red	Threshold for recommendation for 1 consultant with Paediatric Emergency Training is 16,000 admissions	Yellow

The risks were prioritised by severity:

Risk rating	Workforce risks in Paediatrics
1 (Top Risk)	Consultant age profiles and capacity for the near term
2	Mismatch of trainees to service needs in the medium term
3	Possible restrictions on NTNs in the future
4	Lack of SSASG doctors and international recruitment challenges
5	Paediatric Surgery

Future paediatric services are expected to face significant challenges in staffing given the current service configuration arrangements

Overall Assessment	Workforce Group	Current Gap (estimate)		2017 Gap (estimate)		Notes
Red	Consultants	8 WTE	16%	17 WTE	32%	• Persistent shortage of qualified doctors is projected. • Shortage equates to between 1 and 2 entire rotas of doctors
Red	Tier 2 doctors	31 WTE	62%	17 WTE	32%	
Green	Trainees doctors	- 2 WTE (surplus)	- 4% (surplus)	-3 WTE (surplus)	- 6% (surplus)	• Likely to be reduced by expected reductions in national trainee posts (assumptions are currently based on previous years)
Green	Sister/Charge Nurses	13 WTE	51%	- 4WTE (surplus)	- 16% (surplus)	• Potential undersupply of staff nurses which is expected to be offset by potential oversupply of senior nurses and SNPs
Yellow	Staff Nurses	- 1 WTE (surplus)	0.5% (surplus)	9 WTE	5%	
Green	SNPs	- 4 WTE (surplus)	85% (surplus)	- 12 WTE (surplus)	- 250% (surplus)	
Yellow	HCAs	2 WTE	3%	13 WTE	22%	• Potential shortfall on current recruitment and attrition basis. Expected to be readily addressable

The future risks for the nursing and medical workforce in acute paediatrics can be seen in figure 21 and figure 22.

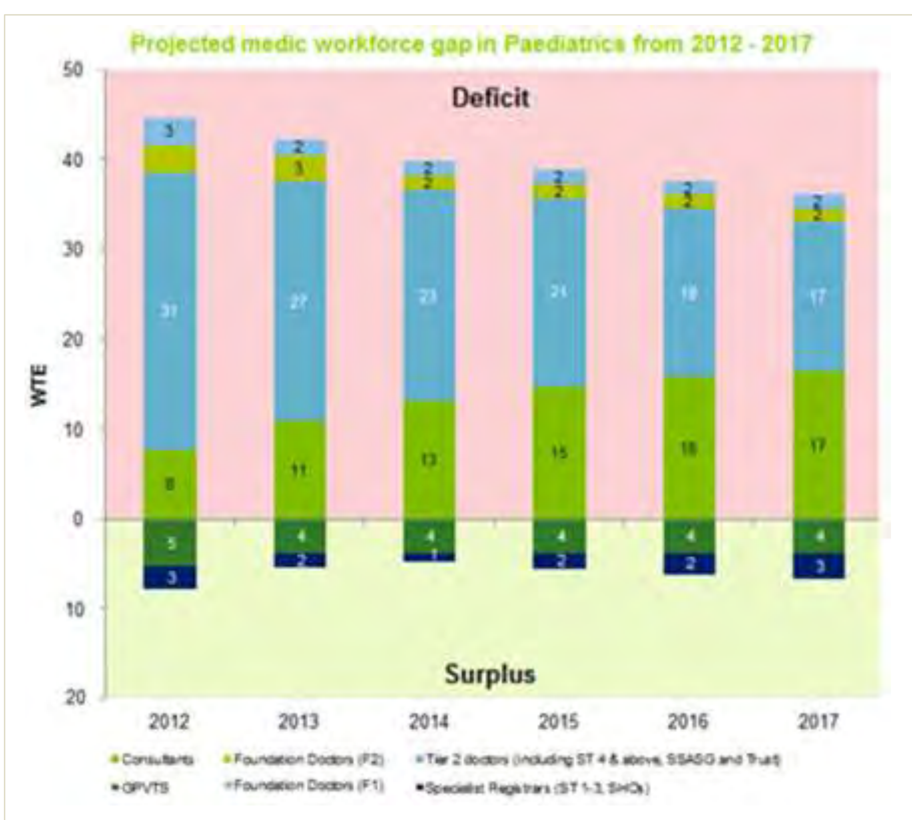


Figure 21: medical workforce in paediatrics 2012 -2017

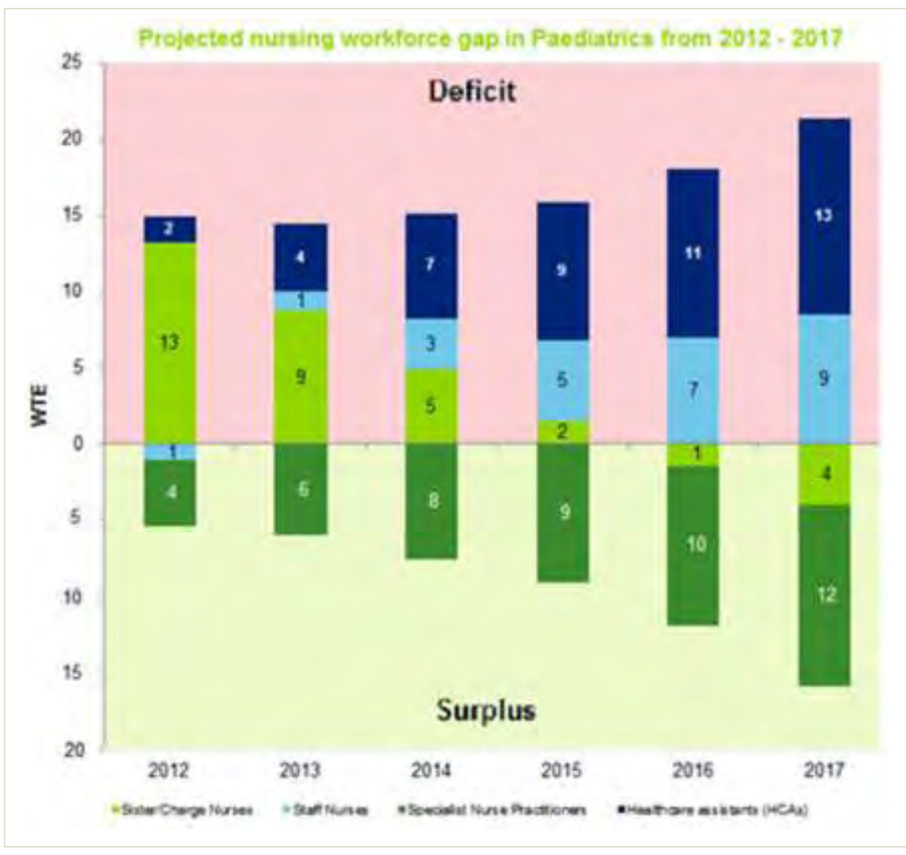


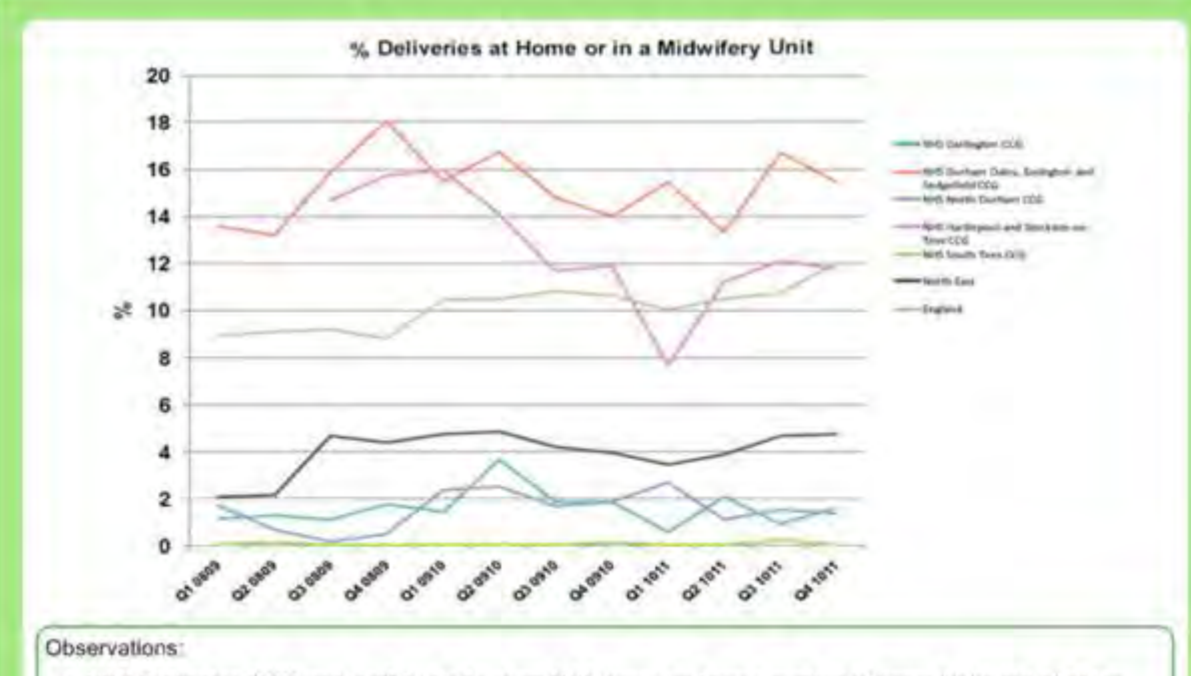
Figure 22: nursing workforce in paediatrics 2012 -2017

The findings of the CAG sub-group specific workforce assessment are:

- Rota consolidation appears necessary if quality standards are to be achieved. 5 rotas appears unsustainable, 4 is challenging but 3 would be readily achievable
- Nursing numbers are likely to remain appropriate but some sub-groups are over staffed and other under staffed. Career planning will be required to smooth progression and ensure appropriate utilisation of skills.

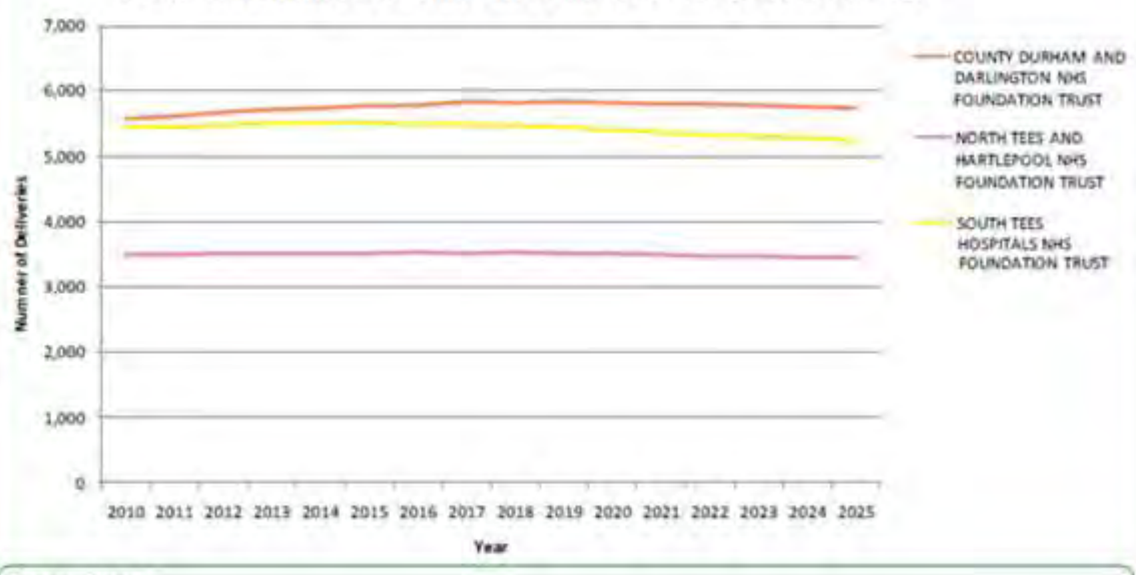
Acute maternity services

The key health indicators for acute maternity services are as follows:



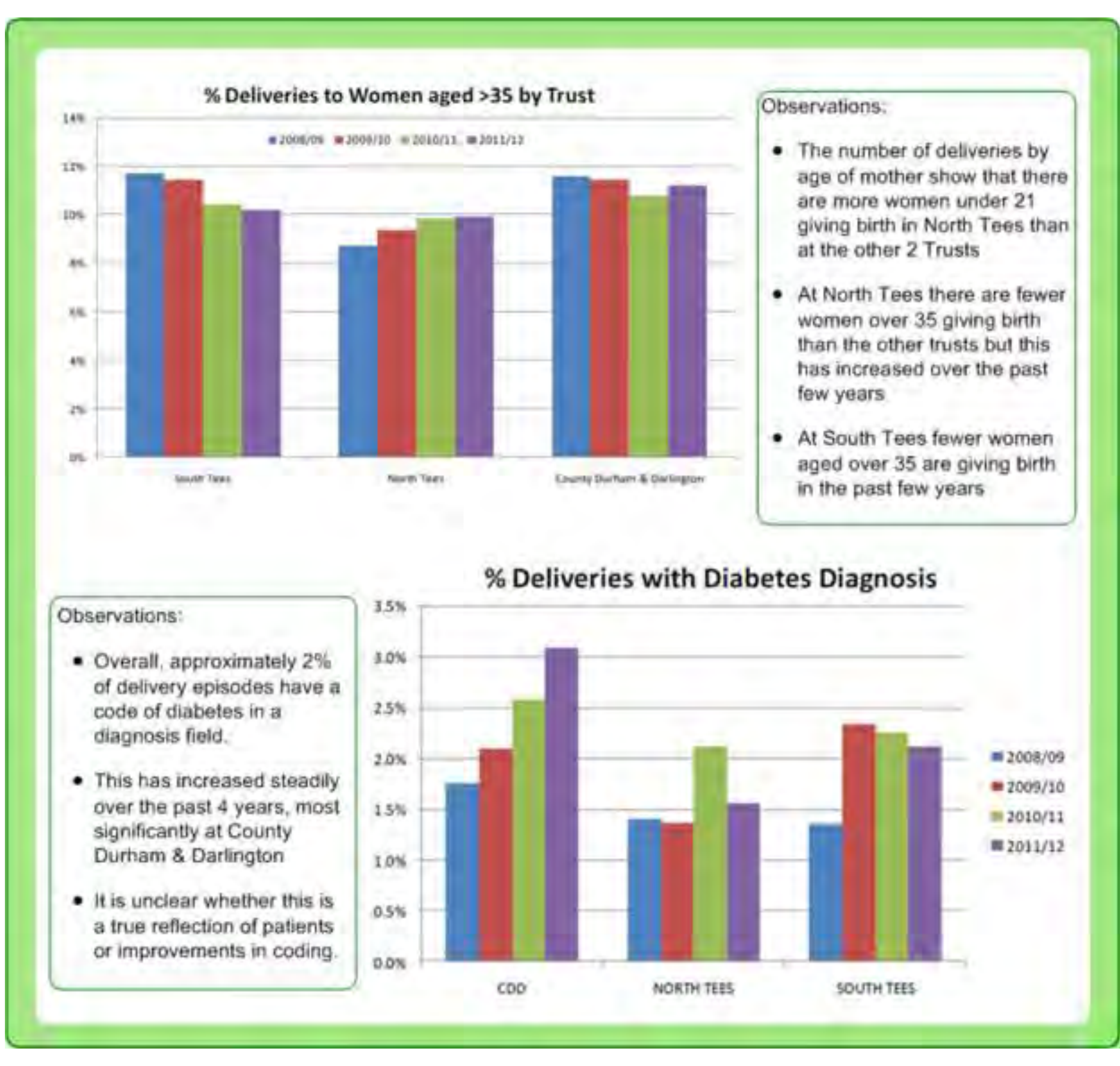
Observations:

- NHS Darlington CCG and NHS North Durham CCG have the lowest number of home births out of all the local CCGs. NHS Durham Dales, Easington and Sedgefield CCG has the highest number of home births.
-
- These differences are explained by the availability of midwife led units in different areas



Observations:

- There is expected to be a 2.8% increase in deliveries at County Durham & Darlington by 2025, an increase of 154 deliveries per year, almost 3 per week;
- At South Tees, deliveries are expected to reduce by 205 per annum, almost 4 per week
- Deliveries at North Tees are expected to stay almost the same.



% Deliveries to Women aged >35 by Trust
Observations:
The number of deliveries by age of mother show that there are more women under 21 giving birth in North Tees than at the other 2 Trusts
At North Tees there are fewer women over 35 giving birth than the other trusts but this has increased over the past few years
At South Tees fewer women aged over 35 are giving birth in the past few years
% Deliveries with Diabetes Diagnosis
Observations:
Overall, approximately 2% of delivery episodes have a code of diabetes in a diagnosis field.
This has increased steadily over the past 4 years, most significantly at County Durham & Darlington
It is unclear whether this is a true reflection of patients or improvements in coding.
3.5%
3.0%
2.5%
2.0%
1.5%
1.0%
0.5%
0.0%
CDD
NORTH TEES
SOUTH TEES
2008/09
2009/10
2010/11
2011/12

Acute maternity clinical standards

Standards for acute maternity care were sourced from a number of key documents as shown in figure 23. Early conversations within the maternity subgroup highlighted a number of key issues and challenges that informed the selection of the key standards.

Figure 23: Source documents for acute maternity clinical standards

A total of 30 acute maternity standards were proposed by the sub-group as those that define high quality care. Across County Durham, Darlington and Tees, a total of 17 maternity quality standards are not being met by one or more of the trusts.

This information provides commissioners with opportunities to drive improvements in quality through mechanisms such as CQUIN incentive and to support service improvement work within current organisation configuration (which could feature in the service improvement schedules in acute contracts in future years).

Areas where 17 standards are not currently met:

- Access to antenatal services
- Access to EPU
- Networks
- Throughput
- Theatre capacity
- Midwife Led Unit (MLUs)
- Staffing: obstetrics
- Staffing: midwifery
- Staffing: anaesthetics
- Staffing: paediatrics

Nine maternity quality standards that have been agreed by the sub-group are not met by two or more trusts.

Improved performance against these standards could be driven through mechanism such as CQUIN incentives but the sub-group felt that this would not reflect the financial and workforce resources available to the health system as a whole, and therefore the ability of all trusts to meet the agreed standards.

Areas where 9 standards are not currently met:

- Developed maternity and neonatal care networks
- Obstetric units should have co-located Alongside Midwifery Units.
- Units with between 2500-4000 births should have 98 hour consultant presence and units of 4000 births + should have 168 hour presence
- There should be a minimum of 10 WTE on medical staff rotas
- 1:1 midwifery care during established labour - based on 1:28 midwives:births
- Anaesthesia and analgesia service with consultant supervision
- Separate consultant anaesthetist for each formal elective C-section list
- Maintain care of anaesthetic care level 2 patients on labour ward
- Paediatric middle grade cover should be available 24/7

Scenarios to address the gap

Based on the standards the maternity sub-group agreed a set of maternity network "building blocks". The sub-group used these to develop seven scenarios (including the status quo) for addressing the key challenges facing maternity services. Having defined the scenarios the maternity sub-group considered the advantages and disadvantages of them (figure 24).

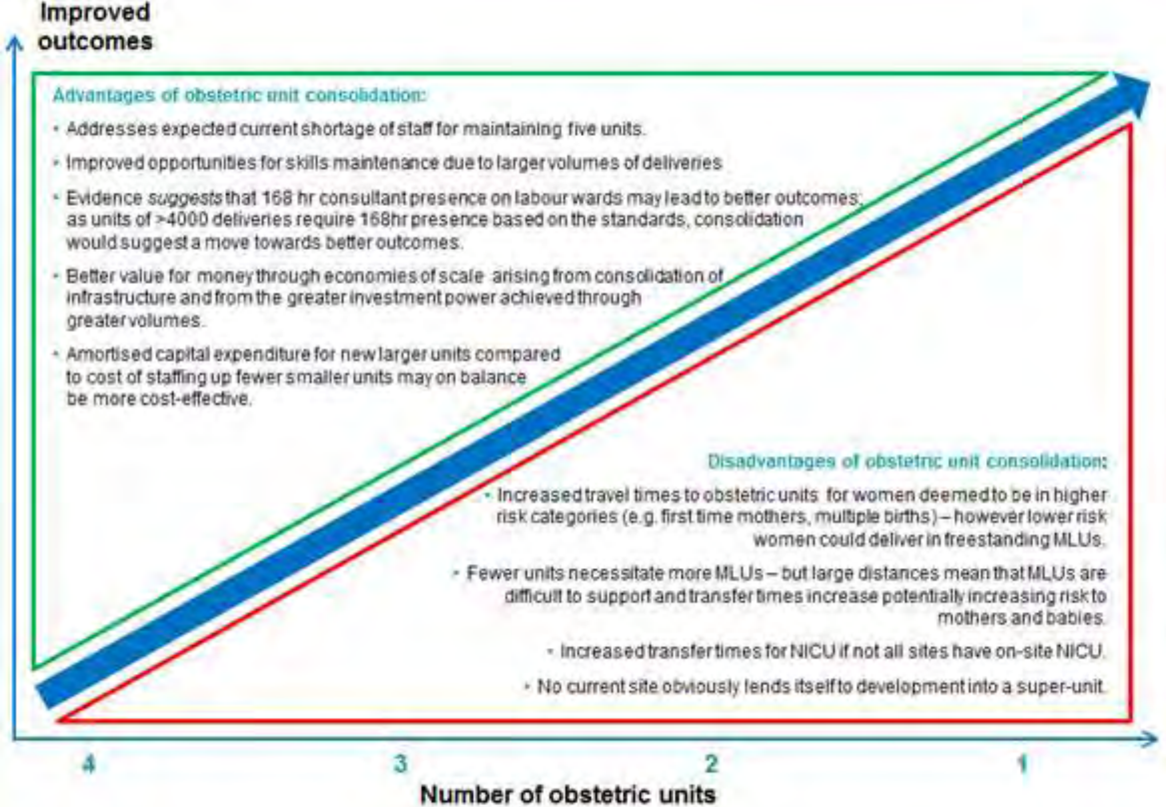


Figure 24: Review of scenarios

Recommendations from the Clinical Advisory Group sub-group

The sub-group identified that a reduction in the number of obstetrics units from the status quo would address the expected shortage of staff to achieve the agreed consultant cover standards across all four units. The health analysis data made available to the CAG is listed in Appendix 1 and the final set of agreed standards can be found in Appendix 2.

Developments since November 2012

The maternity sub-group looked at the interface between obstetrics and gynaecology due to the agree standards for obstetrics cover of the labour wards. These included discussions around the proportion of a consultant‟s job plan allocated to labour ward cover, and the level of clinical experience needed for consultants to maintain their competence. The group considered adopting a locally agreed set of quality indicators around the management of 2nd stage labour.

The groups also looked at service specifications and possible CQUINs for key standards.

Analysis of specific maternity and obstetrics workforce constraints

Currently there are significant gaps in staffing when compared to the quality standards across all key groups:

Current Assessment	Workforce Group	Key issue in Quality Workstream?	Current Gap (estimate)		Notes
	Tier 3 Consultant Workforce	Yes	10 WTE	17%	• Shortages across all rotas • Basis for consultant comparison is 98 hour presence target at all sites
	Tier 2 Medical Workforce		19 WTE	37%	
	Tier 1 Medical Workforce (Trainees)		7 WTE	14%	
	Senior Midwifery Workforce	Yes	- 22 WTE (surplus)	- 61% (surplus)	• Surplus of senior midwifery workforce • Shortages across midwives in region
	Midwifery Workforce		47 WTE	9%	
	Student Midwifery Workforce	Not highlighted	1 WTE	4%	
	MCAs	Not highlighted	6 WTE	5%	• The gap in the number of MCAs is not a key area of concern given the training required to address this

Output from the qualitative workforce assessment into Maternity highlights comparable issues to those identified by the quantitative assessment:

Staffing group	National	RAG	Local	RAG
O&G consultants	Recommendation of reduction of 40 NTNs for 4 years from 2011		Some relatively high levels of turnover locally , over capitated in NE	
O&G junior doctors	Issues of attrition have been identified for specialty trainees		94% of vacancies filled in Deanery in 2010	
SSASG O&G doctors	Non consultant non training posts on the MAC list		Most of AS workforce close to retirement age locally	
Midwives	Relatively older age profile; quarter or workforce is over 50		Under capitated for midwives Age profile issues	
Sonographers	MAC shortage list		Highlighted in 2 local risk assessments	

The risks were prioritised by severity:

Risk rating	Workforce risks in Maternity
1 (Top Risk)	Midwifery age and retirement profiles
2	Sonography Capacity
3	Possible reduction in NTNs
4	Mismatch of available number of trainees and service needs
5	SSASG doctor capacity (including age profiles)

The highest identified risk created by the age profile of the midwife population and estimate retirement date is start when modelled forward to 2017. The future risks for the nursing and medical workforce in maternity can be seen in figure 25 and figure 26.

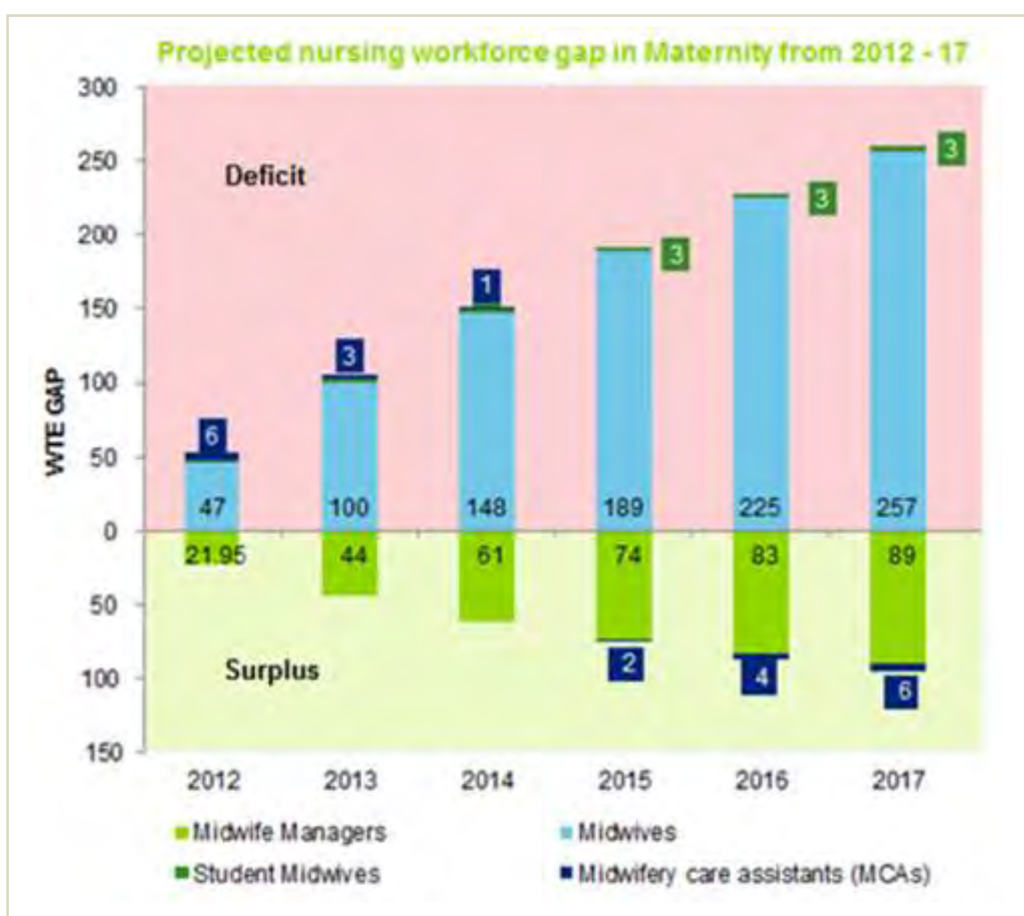


Figure 25: Projected gap in midwife numbers

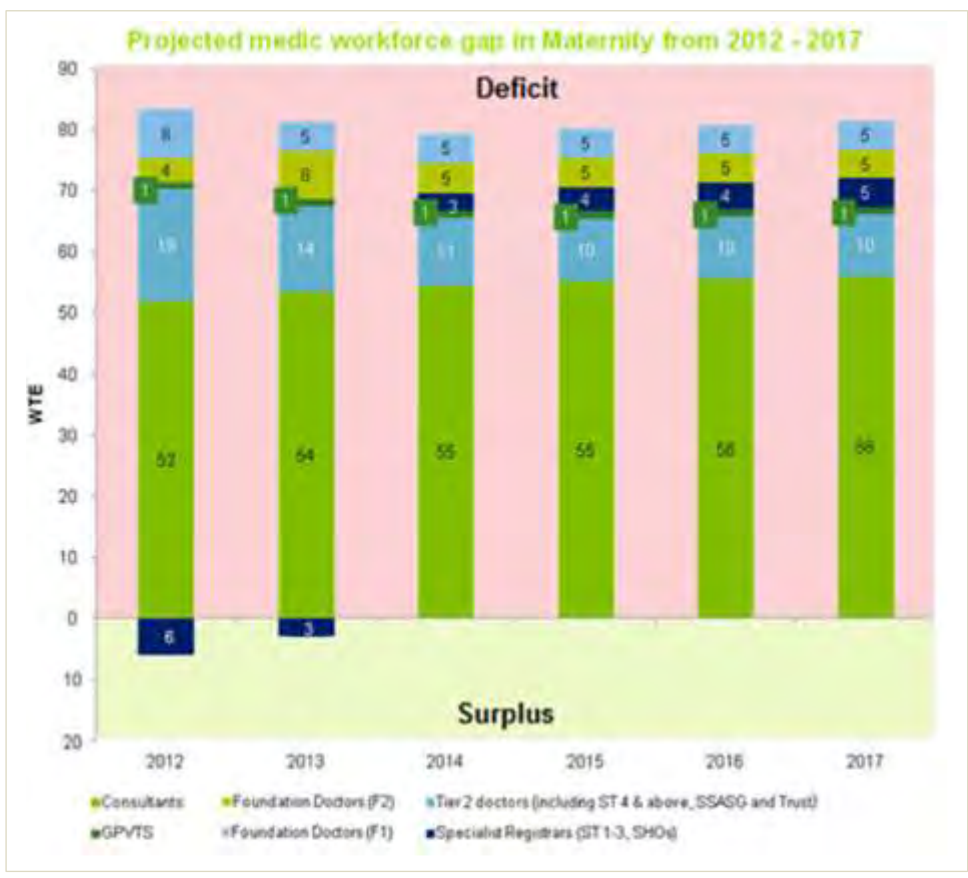


Figure 26: Projected gap in midwife numbers

Future Maternity services are expected to face significant challenges in staffing given the current service configuration arrangements.

Overall Assessment	Workforce Group	Current Gap (estimate)		2017 Gap (estimate)		Notes
	Tier 3 Consultant Workforce	10 WTE	17%	14 WTE	24%	• Consistent material shortfalls across all rotas, primarily driven by the number of rotas that currently require staffing in the area • Sufficient resources to cover 3 rather than 5 rotas
	Tier 2 Medical Workforce	19 WTE	37%	10 WTE	20%	
	Tier 1 Medical Workforce (Trainees)	7 WTE	14%	15 WTE	30%	
	Senior Midwifery Workforce	- 22 WTE (surplus)	- 61% (surplus)	- 89 WTE (surplus)	- 235% (surplus)	• Growing shortage of midwives, fuelled by retirements • Potential to utilise high number of senior midwives to lead unit / drive quality / staff medical trainee rotas • Shortage of trainees to meet replenishment rates, let along meet demand increases
	Midwifery Workforce	47 WTE	9%	257 WTE	45%	
	Student Midwifery Workforce	1 WTE	4%	3 WTE	11%	
	MCA	6 WTE	5%	- 6 WTE (surplus)	- 4% (surplus)	• Potential for increased utilisation of MCAs to free up as much midwifery capacity as possible where appropriate competencies have been demonstrated.

The findings of the CAG sub-group specific workforce assessment are:

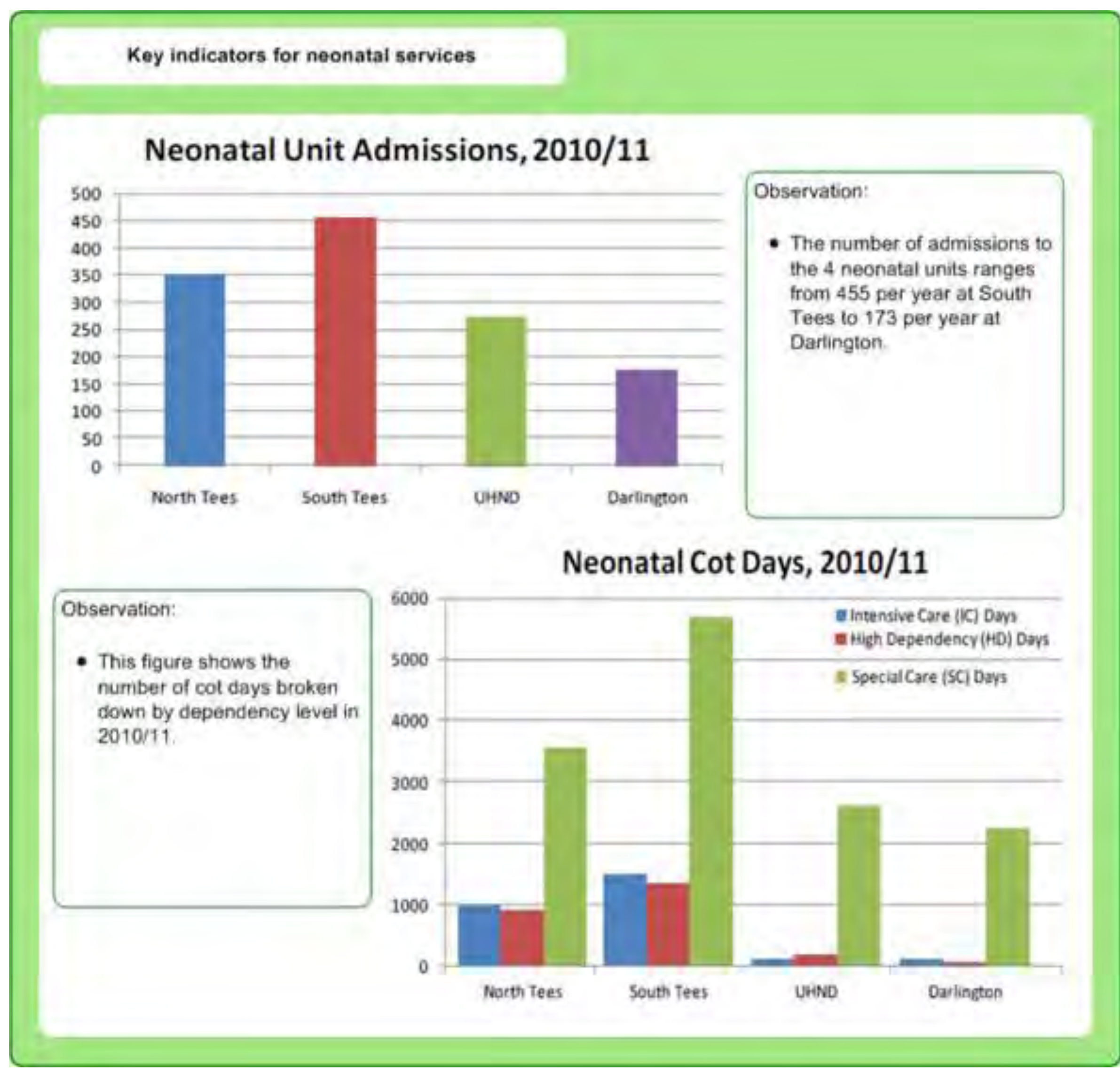
- Rota consolidation appears necessary if quality standards are to be achieved. 3 rotas could be reasonably staffed but 4 would be extremely challenging to staff.

- A variety of strategies need to be quickly established to manage the midwife retirement "time-bomb". This could include rapid training increases, attracting resourcing from elsewhere or incentivising retirees to stay on.

- Given the experience within the midwifery workforce and the resource challenge in the medical workforce, midwife led units (from a workforce perspective) appear an attractive option.

Acute neonatology services

Three trusts provide acute neonatology services across six sites but only South Tees and North Tees provide ITU units. These services were the focus of the neonatology quality standards and the key health indicators are as follows:



Acute neonatology clinical standards

Standards for acute neonatal care were sourced from a number of key documents as shown in figure 27. Early conversations within the neonatology subgroup highlighted a number of key issues and challenges that informed the selection of the key standards.

Figure 27: Source documents for acute neonatology clinical standards

A total of 14 acute neonatology standards were proposed by the sub-group as those that define high quality care, with four neonatal quality standards that have been agreed by the sub-group as not met by either trust.

This information provides commissioners with opportunities to drive improvements in quality through mechanisms such as CQUIN incentive and to support service improvement work within current organisation configuration (which could feature in the service improvement schedules in acute contracts in future years).

However, a constant theme throughout the discussions of the sub-group was the financial and workforce resources available to the health system as a whole, and therefore the ability of both trusts to meet the agreed standards as follows:

- Eight wte on tier 2 medical rota
- Eight wte on tier 3 medical rota
- 1:1 nurse: baby ratio for ITU cots
- Presence of a dedicated nurse co-ordinator on every shift

Scenarios to address the gap

Based on the standards a set of neonatal network "building blocks" were established. These were used to develop seven scenarios (including the status quo) for addressing the key challenges facing neonatal services (figure 28). The health analysis data made available to the CAG is listed in Appendix 1 and the final set of agreed standards can be found in Appendix 2.

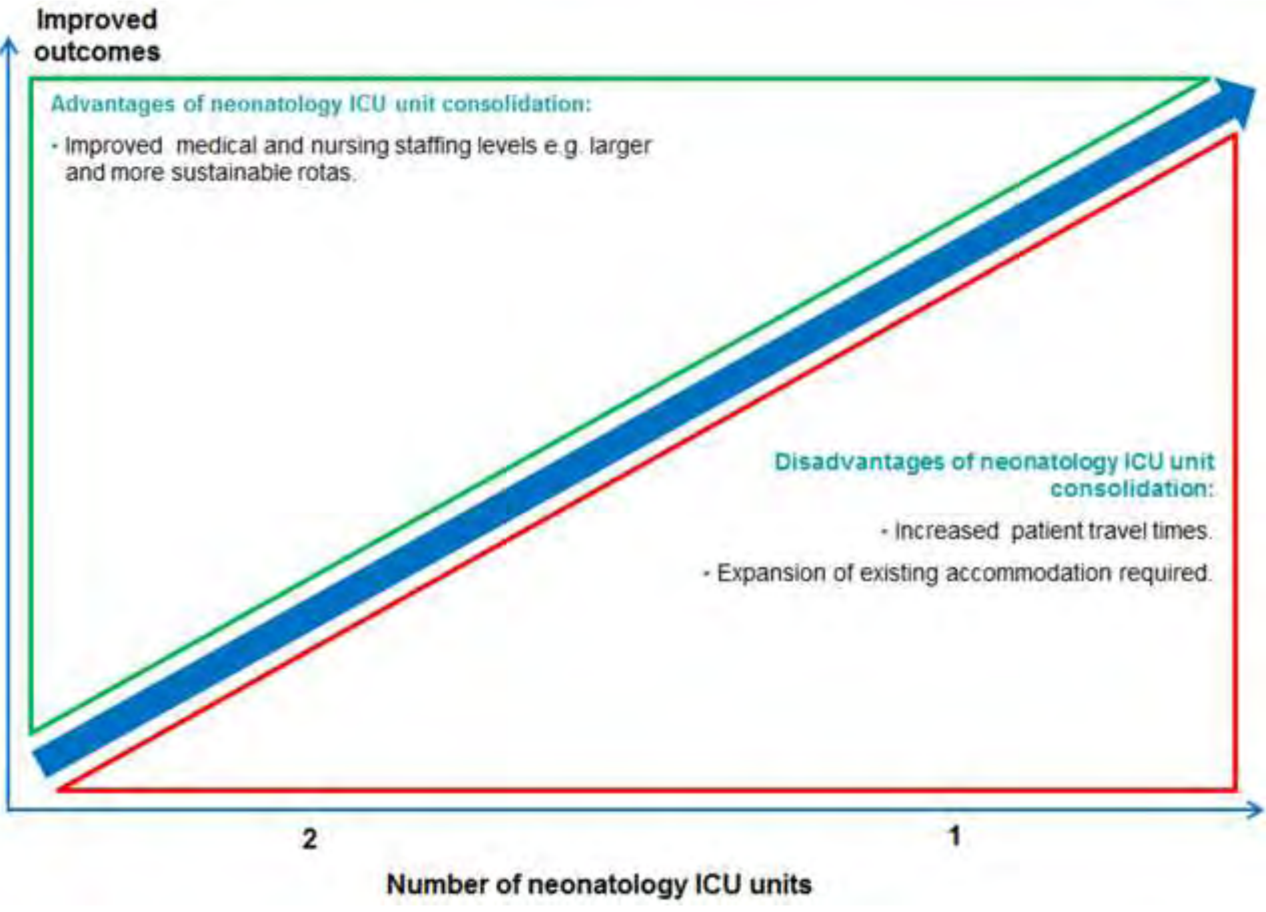


Figure 28: Review of scenarios

Recommendations from the Clinical Advisory Group sub-group

The neonatologists have expressed a desire to move from two neonatal ITU units in the County Durham and Tees Valley area to one unit, as single super SCBU/HDU unit networked to the single ICU unit would reduce travel times for clinicians and provide the economies of scale a large SCBU unit would bring.

Developments since November 2012

Members of the project team met the specialist services commissioners responsible for neonatal intensive care services. They will take part in the optional appraisal process in the next stage of the project.

Analysis of specific workforce constraints

Currently there are significant gaps in staffing when compared to the quality standards in some key groups:

Current Assessment	Workforce Group	Key issue in Quality Workstream?	Current Gap (estimate)		Current Quantitative Assessment
● (red)	Consultant Workforce		7 WTE	43%	• Shortages across qualified doctor rotas
● (red)	Tier 2 Medical Workforce	Yes	4 WTE	25%	
● (green)	Tier 1 Medical Workforce (Trainees)		0 WTE	0%	• Relative surplus of trainee grades given utilisation of AANPs on tier 1 rotas • Shortfall if staffing purely with medical trainees
● (red)	Sisters / Charge Nurses	Yes	17 WTE	53%	• Structural issues between shortage of seniors and surplus of more junior nurses
● (green)	Staff Nurses		-16 WTE	-12%	
● (red)	AANPS	Not highlighted	N/A	0	• Lack of standards for AANPs. There is opportunity for them to play a greater role in service delivery if available
● (grey)	HCAs	Not highlighted	0 WTE	0%	• Current planning assumption is based on current HCA ratios – hence current standard appears to be being met exactly

Output from the qualitative workforce assessment into neonatology highlights comparable issues to those identified by the quantitative assessment:

Staffing group	National	RAG	Local	RAG
Neonatology	Facing the Future recommendations would require significant increases in specialists	● (red)	Some difficulties in covering rotas in Tees	● (red)
Neonatal Nurses	Issues of attrition have been identified for specialty trainees	● (red)	Neonatal nurses included in S Tees risk assessment	● (red)

The risks were prioritised by severity:

RAG	Workforce risks in Neonatology
1 (Top Risk)	Neonatology Consultant capacity in a reconfigured service to meet rotas
2	Neonatal Nurse capacity in the future
3	Securing sufficient Neonatal trainees if there is a reduction in the number of paediatric trainees
4	Potential recruitment and retention of nurses from the local area as a result of introduction of all graduate workforce
5	Relatively small number of training venues for all different types of staff

Future Neonatal services are expected to face significant challenges in staffing given the current service configuration arrangements:

Overall Assessment	Workforce Group	Current Gap (estimate)		2017 Gap (estimate)		Notes
Red	Tier 3 Consultant Workforce	7 WTE	43%	7 WTE	44%	• Consultant staffing levels will remain insufficient to staff 2 full rotas
Yellow	Tier 2 Medical Workforce	4 WTE	25%	-1 WTE (surplus)	-6% (surplus)	• Tier 2 workforce standards will improve from a low base over the period
Red	Tier 1 Medical Workforce (Trainees)	0 WTE	0%	2 WTE	25%	• Tier 1 medical staffing will be supported by ANNPs resulting in a lower medical workforce requirement and adherence with standards • Longer term the use of ANNPs may create tier 2 and 3 issues over a longer period
Red	Senior Nurse	17 WTE	53%	3 WTE	12%	• Material shortages of senior nurses are expected to continue over the period
Green	Staff Nurses	-16 WTE (surplus)	-12% surplus)	-6 WTE (surplus)	-6% (surplus)	
Green	AANPs	2 WTE	32%	-2 WTE (surplus)	-25% (surplus)	• The surplus in this group is driven by a lack of an aggressive standard • This group should be seen as an opportunity to offset issues elsewhere
Green	HCAs	N/A	N/A	N/A	N/A	• No shortage, but unlikely to be able to play significantly increased roles given nature of the work

The future risks for the medical and nursing workforce in maternity can be seen in figure 29 and figure 30.

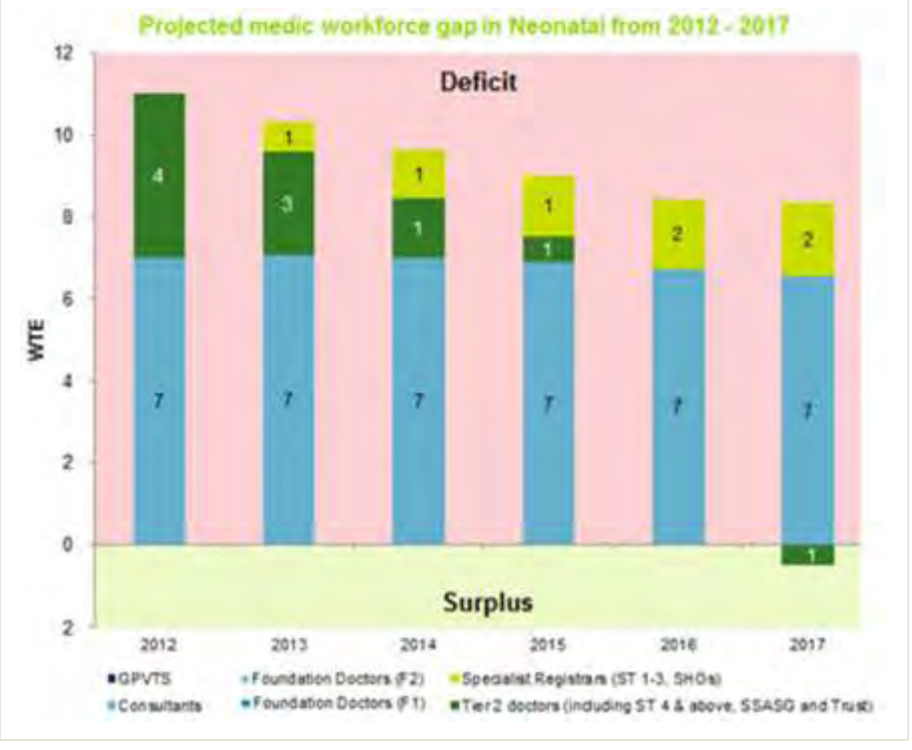


Figure 29: Projected medical workforce gap in Neonatology

Figure 30: Projected nursing workforce gap in Neonatology

The findings of the CAG sub-group specific workforce assessment are:

- Rota consolidation appears necessary if medical staffing quality standards are to be achieved
- Achievement of nursing standards (particularly ICU) are extremely challenging however staffing within the area is likely to remain broadly appropriate to meet these standards
- Increased use of AANPs appears both feasible (supply available) and desirable in terms of providing support to the challenged nursing workforce

Combined recommendations from the Acute Paediatrics, Maternity and Neonatology CAG

Delivery of the agreed quality standards under the status quo is felt to be unsustainable by all three CAG sub-groups. All three groups identified advantages and disadvantages of a consolidation in the number of units.

Paediatrician view:

- None of the units currently meet the agreed quality standard for general acute inpatient paediatric rotas (10 wte on each of the three tiers of medic rotas).
- The current number of inpatient paediatric rotas is not seen as a sustainable position and does not enable sub-regional surgical specialisation.
- The sub-group identified a reduction in the number of units to two or one as the emerging preferred options

The views of the sub group can be summarised as follows: Focusing inpatient provision at 2 centres is seen as an opportunity to drive improvements in outcomes and staffing levels. Focusing down to 2 centres enables sub-regional surgical specialisation. There may be an increase in patient travel times and potentially patient transfers, but this could be minimised by a network of short stay paediatric assessment units.

Obstetrician and Midwifery view:

- Delivery of the agreed standards of 98hrs consultant cover for units of <4000 births and 168 hours over 4000 births is felt to be unsustainable across the current number of sites.
- The sub-group identified that a reduction in the number of obstetric units from the status quo would address the expected shortage of staff to achieve the agreed consultant cover standards

The views of the sub-group can be summarised as follows: Consolidation of obstetric units is seen as an opportunity to drive improvements in outcomes and there would be potential significant economies in medical workforce. Travel times for women unable to deliver in Midwife Led Units would increase however and it could also increase exposure to risk for women in Midwife Led Units due to travel distances from obstetric units. This would make the relationship to the North of the NE region and North Yorkshire important when considering changes to future patient flows.

Neonatologists view:

- Neither ITU currently meets the agreed quality standards for medical and nurse provision
- Future achievement of these standards across both units is seen to be extremely challenging.
- Two ITU units is not seen to be a sustainable position.
- Two small SCBU units is not seen to be as a good use of scare resources (workforce and finance) due to minimum staffing requirements.
- The sub group expressed a desire to move to one neonatal ICU/HDU unit

The views of the sub group can be summarised as follows: A single ITU unit supported by a large SCBU/HDU is seen as the preferred solution to meet the quality standards, drive improvements in outcomes and optimise resources and access.

Following the third CAG meeting which looked specifically at the workforce modelling, the conclusion reached from the combined sub-groups is that the current configuration of services will not be able to achieve the agreed quality standards.

Although the CAG did not come to a conclusion on a preferred option, the number of viable alternatives was limited to a three centre or two centre model, while not ruling out the option of a single centre of excellence.

Conclusion

Since the project began, the Royal College of Obstetricians and Gynaecologists has published a report on the future of the specialty („Tomorrow"s Specialist; RCOG September 2012). This report includes the following statement – „The College is adamant that the obstetric delivery suite needs fully qualified specialists available at all times …" The RCOG recognises that not all consultant-led units need resident specialists 24 hours a day at present, but recommends that all units with a high number of deliveries and managing complex cases do need specialists resident at all times. However, the RCOG anticipates a reconfiguration of services with fewer obstetric units in maternity networks so that 24 hour specialist care is available.

The basis of the RCOG position is the emerging evidence for a significant difference in outcomes between deliveries during office hours and at other times. The view of the RCOG is that „the lottery of time of birth for women and their babies should not be accepted as the status quo by commissioners, policy makers, providers or women themselves.

The report cites the findings from a recent study in Scotland that showed an increased risk of neonatal death due to anoxia among women delivering outside office hours. About one in four deaths from intrapartum anoxia at term could be prevented if all women had the same risk of this event as those delivering during office hours. Preliminary data from the North East Perinatal Morbidity and Mortality Survey shows a similar difference in risk for County Durham and Tees Valley.

Whilst there was a minority view within the Clinical Advisory Group that 98 hours consultant presence should be established as the standard for units with less than 4000 deliveries a year, there was insufficient clinical evidence identified to justify going against the RCOG standard.

Therefore, the recommendation of the ASQL Project to the CCGs is to recognise a standard of 168 hours per week for consultant presence on each labour ward in line with the RCOG guidance (and the standard set by the NE Clinical Innovation Team), with a minimum of 98 hours per week for units with less than 4000 births per year by 2014 as an interim step.

Acute medicine, acute general surgery and intensive care medicine

The Acute CAG was chaired by Dr David Emerton, Medical Director of North Tees and Hartlepool NHS Foundation Trust and had the following membership:

Chair: David Emerton, Medical Director, NTFT
Vice Chair: Vincent Connolly, Clinical Lead for Medicine, STFT

Acute medicine

- Jean MacLeod, Clinical Director for Medicine, NTFT
- Vincent Connolly, Clinical Director for Medicine, STFT
- Bernard Esisi, Clinical Director for Medicine, CDDFT
- Mike Jones, Consultant Physician, CDDFT
- Nick Roper, Clinical Lead for Acute Medicine, NTFT

Acute surgery

- Iain Bain, Clinical Director of Surgery, CDDFT
- Pud Bhaskar, Clinical Director of Surgery, NTFT
- Ous Alozairi, General Surgeon, NTFT
- Chris Tulloch, Clinical Director, Trauma and Orthopaedics, NTFT
- Richard Wight, Head of Surgery, STFT
- Peter Davis, Clinical Director, General Surgery, STFT
- Andrew Simpson, Clinical Director A&E, NTFT

Anaesthetics/ Intensive care

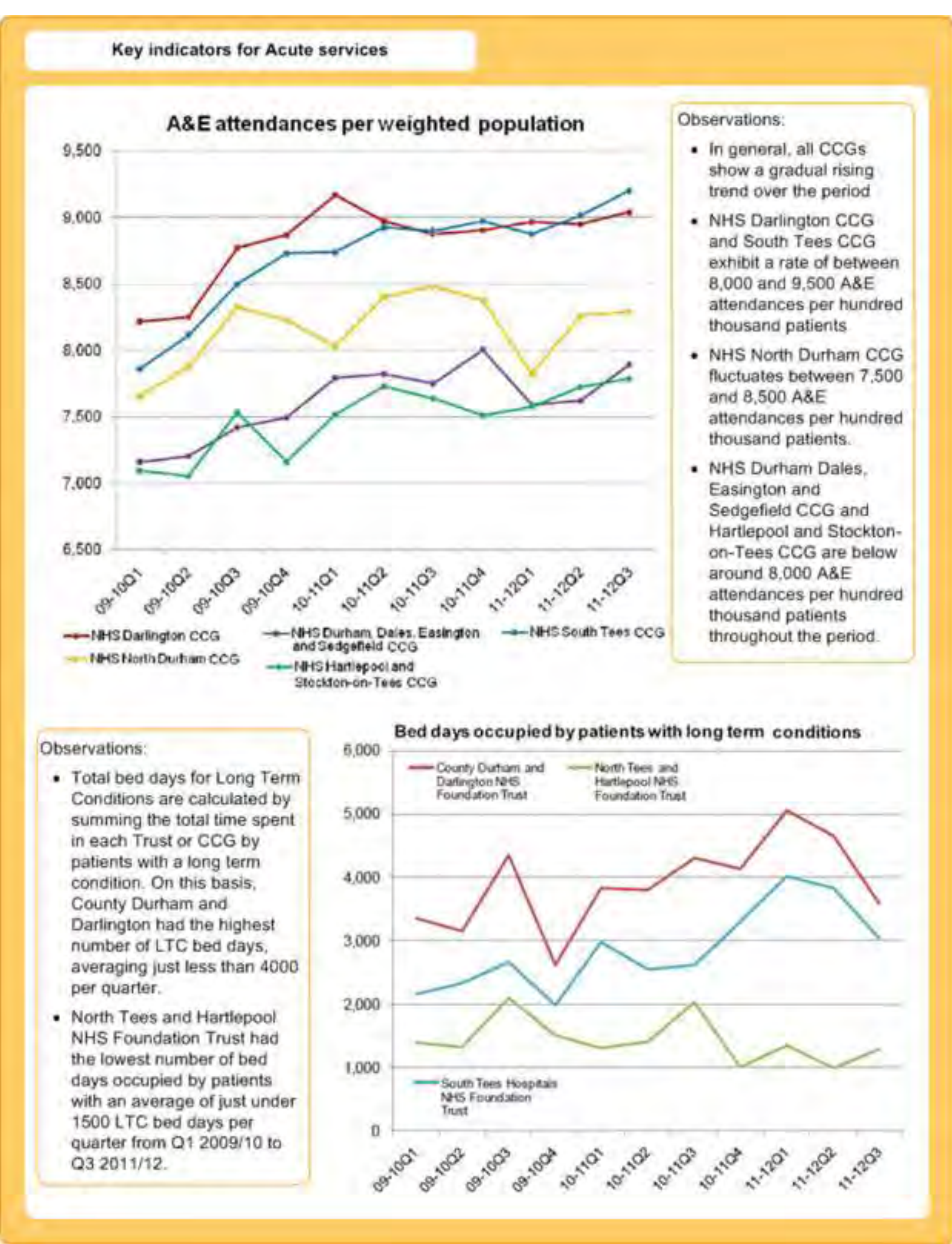
- Narayanan Suresh, Clinical Director, Anaesthetics, NTFT
- Steve Bonner, Clinical Director, Intensive Care, STFT
- Dominic Errington, Consultant Intensivist, CDDFT

CCG representatives

- Neil O'Brien, North Durham
- Ian Davidson, North Durham CCG

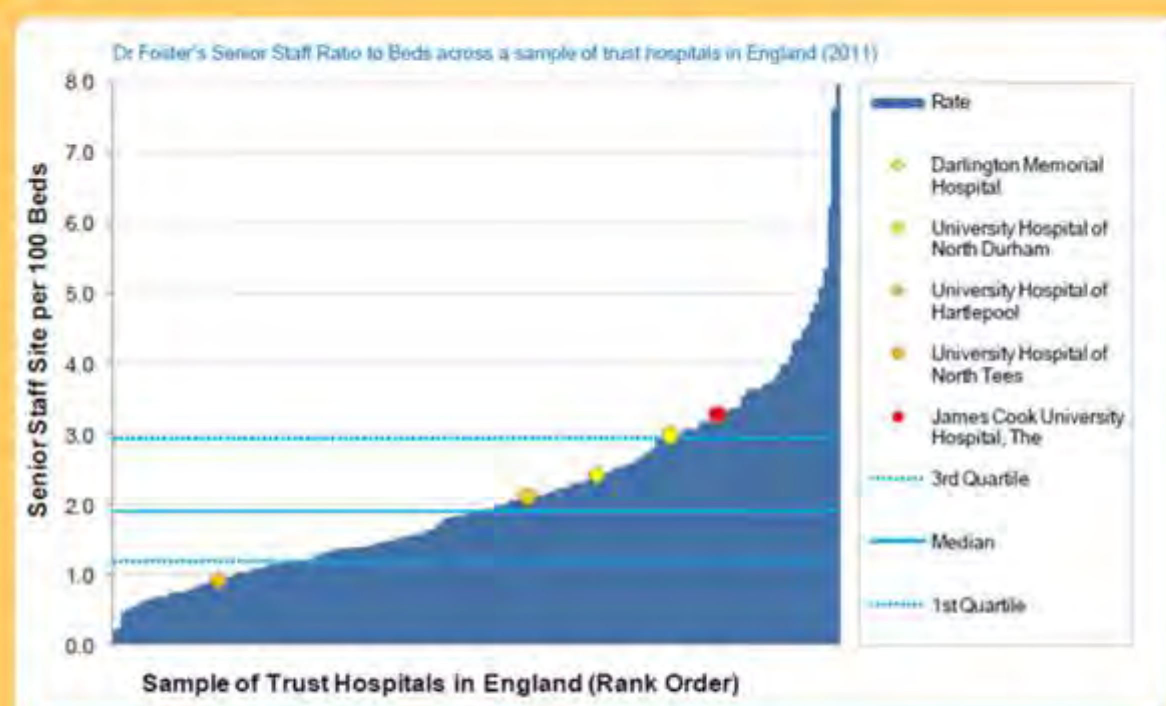
Acute services

Three trusts provide acute services across six sites in County Durham, Darlington and Tees. The key headline indicators for acute care are shown below:



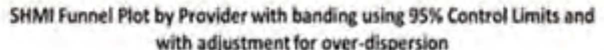
Observations:

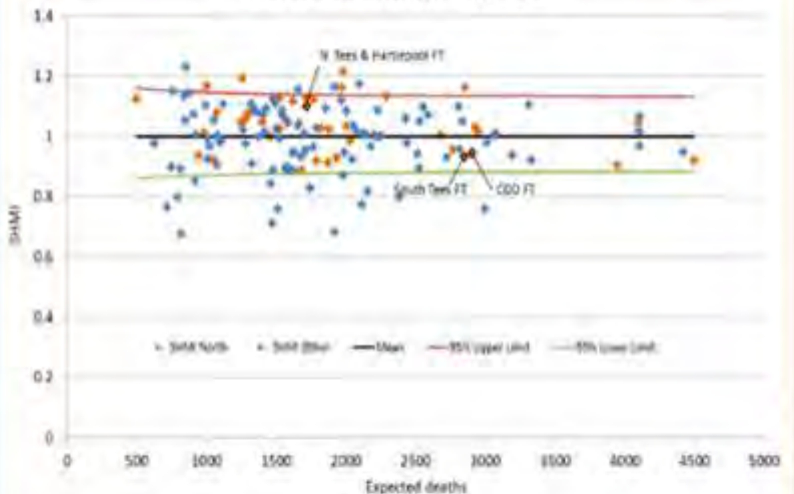
- Mortality on weekdays is consistent across the three Trusts, with a Relative Risk of 95, indicating slightly below expected mortality but within the expected range and not significantly high or low when compared to national variation. Weekday Relative Risk is within 2.5 percentage points of overall HSMR for the entire week (see data table for figures).
- Mortality at weekends is higher for all three Trusts, with South Tees having the highest Relative Risk at 109.5. This approaches the upper quartile when compared to all Trusts nationally; however it is still within the expected ranges meaning it is not considered significantly high. This compares to a weekday relative risk of 95.8 and an overall RR of 98 for South Tees. Mortality rates for County Durham and North Tees are only slightly higher than on weekdays, at 103 and 100 respectively compared to a Relative Risk of 95 for both during weekdays, and a 97 and 95 overall.



Observations:

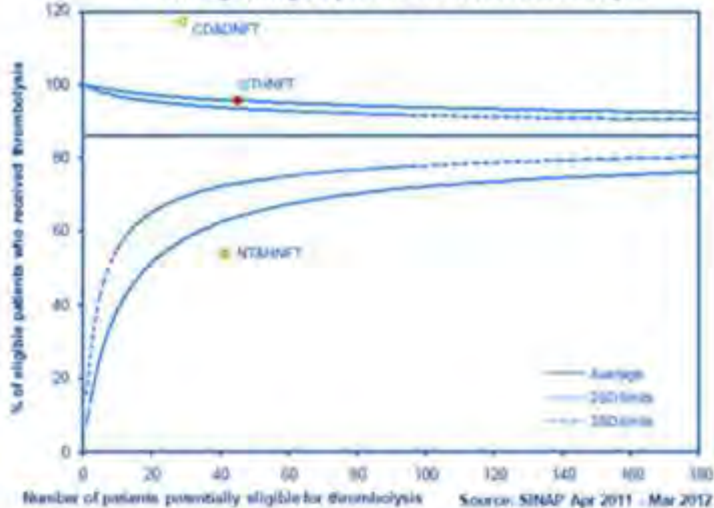
- A point prevalence exercise undertaken for the Dr Foster's 2011 Good Hospital Guide assessed the number of senior staff physically on site at weekends on two weekends in 2011. The research suggested a correlation between senior staffing levels at weekends and mortality, in that more senior staff per bed at weekends is associated with a lower weekend emergency mortality rate (DFI, 2011).
- The two sites of North Tees and Hartlepool NHS Foundation Trust had the lowest senior staff rates at weekends compared to the other Trusts in the study. University Hospital of Hartlepool is within the bottom quartile of all Trusts in England with a rate 0.91, and University Hospital of North Tees was just above the median with a rate of 2.1. On the surface however, this does not seem to correlate to higher mortality as North Tees and Hartlepool NHS Foundation Trust had the lowest weekend mortality of the three Trusts.
- The two sites of County Durham and Darlington NHS Foundation Trust (Darlington Memorial Hospital and University Hospital of North Durham) were both above the median in the third quartile indicating above average senior staffing rates per 100 beds at weekends.
- South Tees Hospitals NHS Foundation Trust (James Cook University Hospital) had the highest senior staff rate per 100 beds at 3.27, and interestingly also had the highest weekend mortality of the three trusts.
- There are many other factors which contribute to a higher relative risk at weekends such as complexity and severity of casemix. These findings likely indicate that senior staff rates is only one contributing factor to increased weekend Relative Risk, and should not be looked at in isolation.





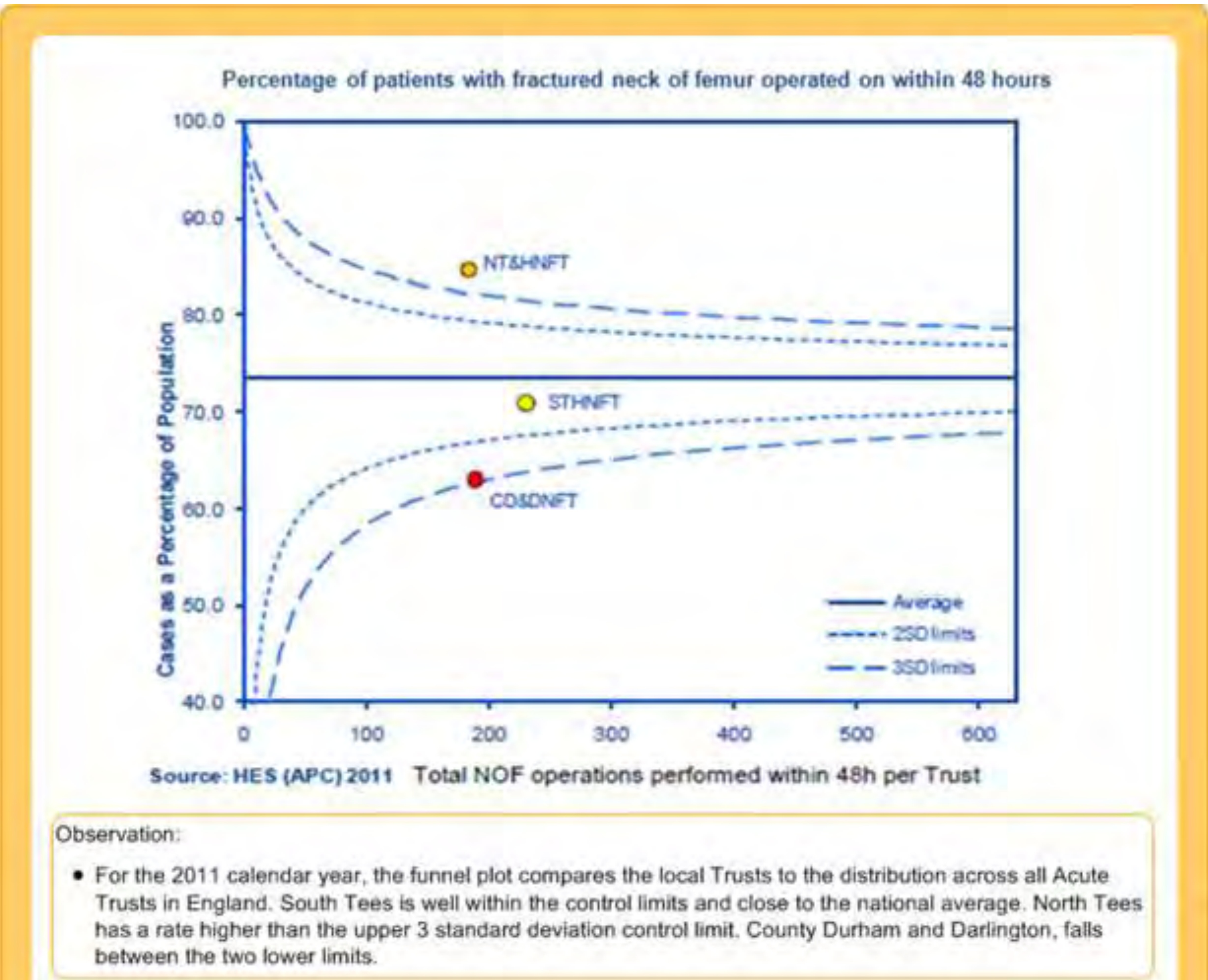
Observations:

- SHMI (Summary Hospital-level Mortality Indicator) is the new hospital-level indicator which reports all deaths in hospital and all deaths that occur within 30 days of discharge from hospital across the NHS in England. It compares the observed number of deaths for each hospital with the number expected from a statistical model that takes account of patients" age, sex, method of admission to hospital and comorbidities. None of the three Trusts has SHMIs outside the control limits, i.e. none has a higher or lower SHMI than expected.



Observations:

- County Durham and Darlington NHS Trust (RXP) provided thrombolysis to eligible patients well above the upper 3SD limit for England trust data, at 117%. This indicates that for the period they provided a statistically significantly higher rate of thrombolysis post stroke when compared to other trusts in England.
- South Tees Hospitals NHS Trust (RTR) provided thrombolysis to 96% of eligible patients, which was just within the upper 3SD limit, indicating that for the period this Trust provided a high rate of thrombolysis compared to the English average.
- North Tees and Hartlepool NHS Trust (RVW) provided thrombolysis to only 54% of eligible patients below the upper limit for England trust data, indicating that for the period they provided a statistically significantly lower rate of thrombolysis post stroke when compared to other trusts in England.



Percentage of patients with fractured neck of femur operated on within 48 hours
Cases as a Percentage of Population
100.0
90.0
80.0
70.0
60.0
50.0
40.0
NT&HNFT
STHNFT
CD&DNFT
Average
2SD limits
3SD limits
0
100
200
300
400
500
600
Source: HES (APC) 2011
Total NOF operations performed within 48h per Trust
Observation:
• For the 2011 calendar year, the funnel plot compares the local Trusts to the distribution across all Acute Trusts in England. South Tees is well within the control limits and close to the national average. North Tees has a rate higher than the upper 3 standard deviation control limit. County Durham and Darlington, falls between the two lower limits.

Acute medicine clinical standards

Standards for acute medicine were sourced from a number of key documents as shown in figure 31. Early conversations within the acute medicine sub-group highlighted a number of key issues and challenges that informed the selection of the key standards.

Figure 31: Source documents for acute medicine clinical standards

A total of 23 acute medicine standards were proposed by the sub-group as those that define high quality care, with 21 quality standards that have been agreed by the sub-group as not met by either trust.

Many of these relate to changing working practices which may provide commissioners with opportunities to drive improvements in quality through mechanisms such as CQUINS and service improvement schedules.

Three key areas were identified as being particularly difficult to address. Improved performance against these standards could be driven through mechanism such as CQUINS. However the sub-group agreed that achievement of these standards could require more significant infrastructural change and will require significant investment:

- On-admission assessment within 4 and 12 hours (in and out of hours respectively)
- 24hr access to diagnostics.
- Efficient discharge processes (both internal and with partners)

It should be noted that the 12 hour response OOH is to ensure that a consultant sees anyone admitted overnight as soon as they are on duty. Demand for acute medicine is not evenly spread over 24 hours with admissions to acute medicine dropping significantly overnight, whereas the timing of maternity deliveries is evenly spread throughout 24 hours with a slightly higher than expected proportion OOH.

A 12 hour response for all admissions OOH is a pragmatic standard that makes better use of consultant time. Standard 3 for acute medicine (see agreed list of standards) should ensure that high risk patients are seen within 1 hour, thereby ensuring a prompt response for high risk patients.

Recommendations from the Clinical Advisory Group Acute Medicine sub-group

The acute medicine sub-group prioritised the following standards:

- Emergency admissions seen and assessed by a relevant consultant within 4 hours in hours and 12 hours out of hours

- Clear multi-disciplinary assessment undertaken and clear case management plan in place within 4hrs in hours and 12hrs out of hours

- Emergencies to have access to key diagnostics 24/7:
    - Critical – imaging and reporting within 1hr of request.
    - Non-critical – imaging and reporting within 12hrs of request.

- Emergencies to have access to interventional radiology 24/7:
    - Critical – imaging and reporting within 1hr of request.
    - Non-critical – imaging and reporting within 12hrs of request.

- Patients discharged to their GP with a complete discharge summary sent within 24 hours – the issue is not the standard itself, but the availability of external partners such as social services to support the discharge when ready.

Developments since November 2012

The project team began to work on a plan to implement an interventional radiology service to achieve the standard set by the Royal college of Radiologists for a 24/7 service for all hospitals admitting medical and surgical emergencies. Progress could not be made as we were unable to engage clinicians from James Cook University Hospital.

Acute general surgery services

Standards for acute surgery were sourced from a number of key documents as shown in figure 32. Early conversations within the acute surgery sub-group highlighted a number of key issues and challenges that informed the selection of the key standards.

Figure 32: Source documents for acute surgery clinical standards

A total of 28 standards were proposed by the sub-group. Across North Tees NHS FT, South Tees NHS FT and County Durham only 5 of the 28 standards are being met and many of those not being achieved relate to changing working practices.

The identification of these gaps provides commissioners with opportunities to drive improvements in quality through mechanisms such as CQUINS and service improvement schedules.

Two key areas were identified as being particularly difficult to address. Improved performance against these standards could be driven through mechanisms such as CQUINS. However the sub-group agreed that achievement of these standards require more significant infrastructural change will require significant investment:

- On-admission assessment within 4 and 12 hours (in- and out –of-hours respectively)
- 24hr access to diagnostics
- 24hr access to interventional radiology

The sub-group suggested that there were some clear implications for the organisation of future services:

- Small units are likely to close
- Greater co-dependencies between hospital sites and between trusts, e.g. through networks or specialty healthcare groups.

Recommendations from the Clinical Advisory Group Acute Surgery sub-group

The acute surgical sub-group priorities the following standards:

- When on-call, a consultant and their team are to be completely freed from any other clinical duties or elective commitments
- In order to meet the demands for consultant delivered care, senior decision making and leadership on the acute surgical unit to cover extended day working, seven days a week, amounting to a minimum of 70 hours per week
- All hospitals admitting medical and surgical emergencies have access to all key diagnostic services in a timely manner 24 –hours-a-day, seven-days-a-week to support clinical decision making:
    - Critical – imaging and reporting within 2 hours
    - Urgent – imaging and reporting within 12 hours
    - All non-urgent – within 24 hours
- Rotas to be constructed to maximise continuity of care for all patients in an acute medical and surgical environment. A single consultant is to retain responsibility for a single patient on the acute surgical unit. Subsequent transfer or discharge must be based on clinical needs
- Patients admitted for unscheduled care to be nursed and managed in acute surgical unit, a specialty ward relevant to the patient"s clinical need, or critical care environment
- All hospitals admitting emergency general surgery patients to have access to fully staffed emergency theatre immediately available and a consultant on site within 30 minutes at any time of the day or night
- Establish a 24/7 interventional radiology service, especially for trauma services

Developments since November 2012

The acute general surgical sub-group looked at the sustainability of acute surgical services. The main factors are an increase in sub-specialising reducing the number of consultants available for an acute general surgical rota and the uncertainty around the availability of middle grade doctors. Further work is needed to model these factors and to establish what a viable service might look like.

Intensive Care

During the Clinical Advisory Group process for Acute Care, it was decided to initiate a third sub-group to review Intensive Care Standards. As Intensive Care Medicine is emerging as a standalone school, standards were also based on the conversations with clinical leads. This sub-group has reviewed the national guidance (figure 33) and is reviewing a draft set of 29 standards.

Figure 33: Source documents for intensive care clinical standards

The sub-group will continue to meet to:

- Revise the standards before they are finalised,
- Carry out a self- assessment of each Trust against the agreed standards
- Make recommendations on any priorities for service change or developments.

At the point in the process that this report was written, the members of the Intensive Care Sub-group do not predict that the review and self-assessment against the initially identified standards will lead to recommendations for significant/multi-organisational reconfiguration.

Developments since November 2012

The Intensive Care sub-group completed their review of standards and carried out a self-assessment. Among the final set of 28 standards, only 6 are being met in all units. The group looked at the key enablers to delivering the standards including a tariff-based funding system and the development of additional staff groups such as critical care nurse practitioners.

Top 5 Risks for the Workforce in Acute Services

The CAG specific workforce analysis produced a set of key risks for the acute surgical and medical workforce outlined in figure 34.

RAG	Top 5 Risks for the Workforce in Acute Services
Red	**Surgical Workforce** – converging factors of MAC list professions, large numbers of Associate Specialists nearing retirement, over capitation for junior doctors (but low 2010 fill rates for training
Red	**Anaesthetics** – some difficulties in recruiting locally and age profiles
Red	**GIM/AIM** – age profiles of consultants, but relatively low training fill rates in 2010 and under capitated for junior doctors (impact of restrictions of future NTN growth
Amber	**Respiratory Medicine** – under capitation (possible future restriction of NTN growth)
Amber	**Supporting professions** – difficulties in recruiting Sonographers locally, nationally MAC list includes ODPs and Nurses working in operating theatres

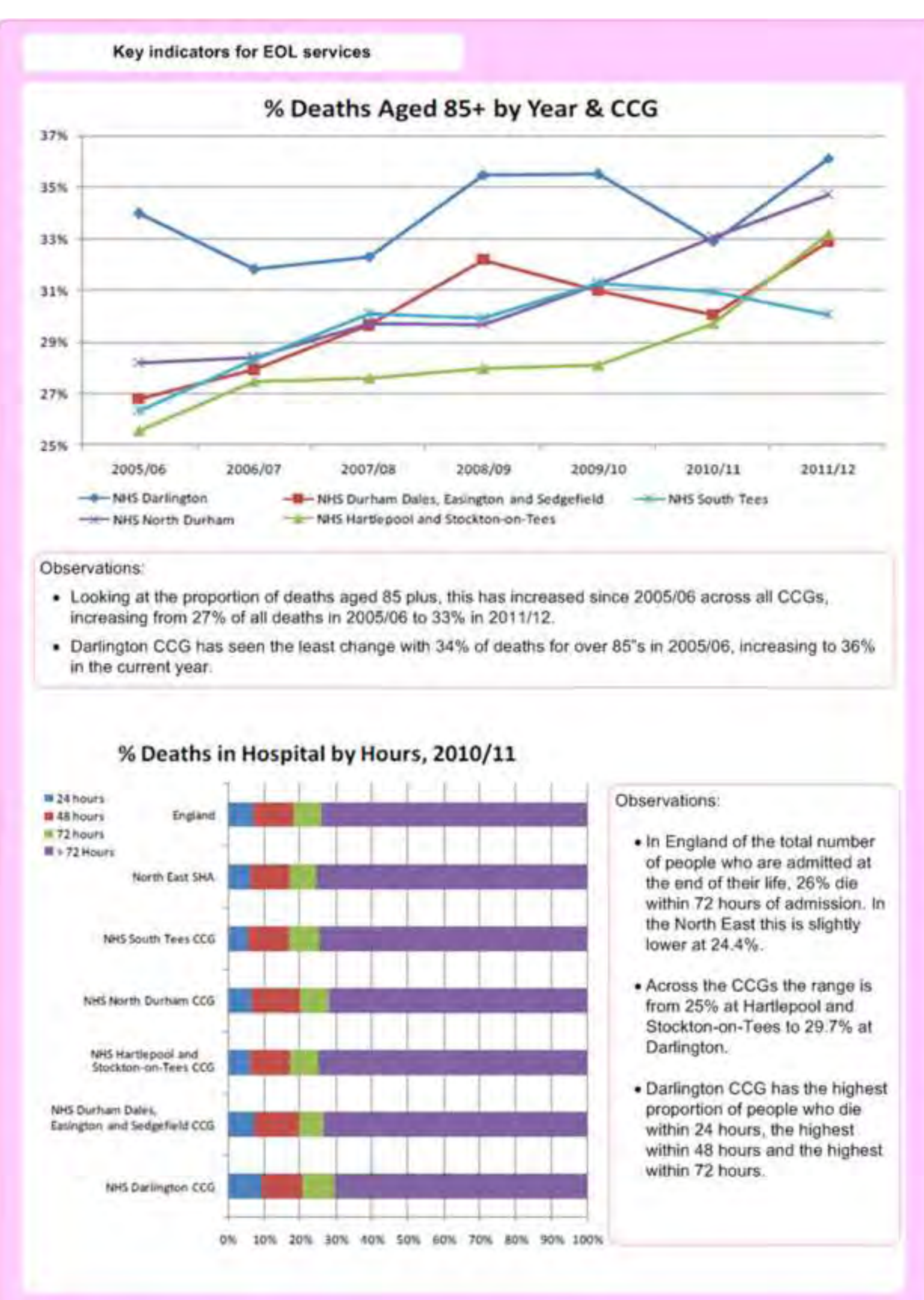
Figure 34: Acute surgery and medicine workforce risks

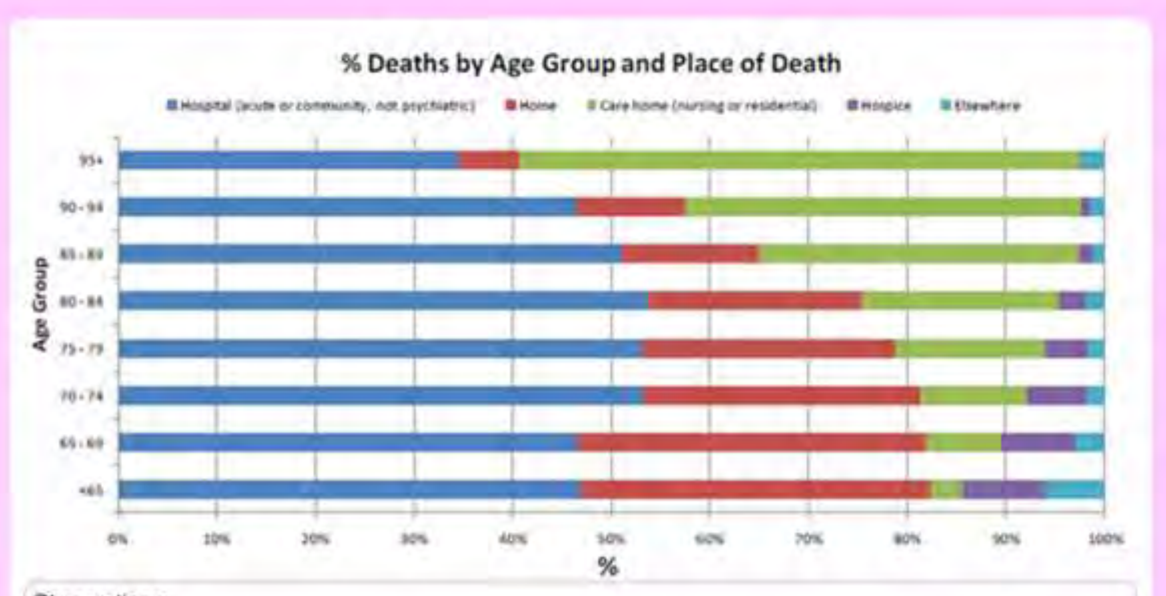
End of Life Care

The End of Life CAG was chaired by Professor Edwin Pugh, Consultant in Palliative Medicine, North Tees and Hartlepool NHS Foundation Trust and had the following membership:

Chair: Professor Edwin Pugh
Vice Chair: Dr Elizabeth Kendrick

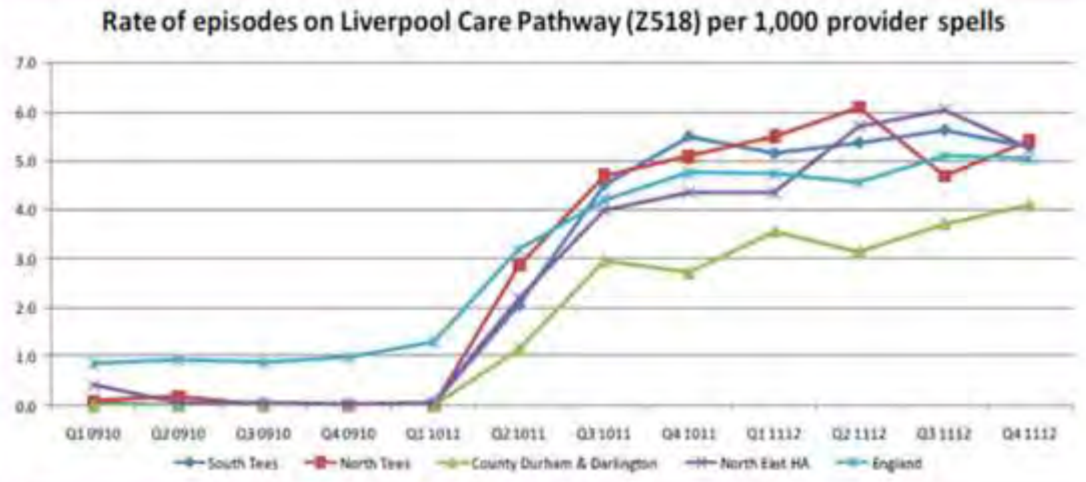
- Carol Lancaster, Community Matron
- Christine Hearmon, General Practitioner
- Kay McAlinden, Macmillan Lead Nurse for Cancer & Palliative, CDDFT
- Paddy O'Neill, NTHFT
- Paula Swindale, Community Matron
- Sarah Hepburn, Consultant in Psychiatry of Old Age, CDDFT
- Sarit Carlebach, Research Fellow - Centre for Health and Social Evaluation (CHASE), Teesside University
- Sue Burke, Macmillan Nurse for Care and Nursing


Key indicators for EOL services
% Deaths Aged 85+ by Year & CCG
37%
35%
33%
31%
29%
27%
25%
2005/06
2006/07
2007/08
2008/09
2009/10
2010/11
2011/12
NHS Darlington
NHS Durham Dales, Easington and Sedgefield
NHS South Tees
NHS North Durham
NHS Hartlepool and Stockton-on-Tees
Observations:
• Looking at the proportion of deaths aged 85 plus, this has increased since 2005/06 across all CCGs, increasing from 27% of all deaths in 2005/06 to 33% in 2011/12.
• Darlington CCG has seen the least change with 34% of deaths for over 85"s in 2005/06, increasing to 36% in the current year.
% Deaths in Hospital by Hours, 2010/11
24 hours
48 hours
72 hours
> 72 Hours
England
North East SHA
NHS South Tees CCG
NHS North Durham CCG
NHS Hartlepool and Stockton-on-Tees CCG
NHS Durham Dales, Easington and Sedgefield CCG
NHS Darlington CCG
0% 10% 20% 30% 40% 50% 60% 70% 80% 90% 100%
Observations:
• In England of the total number of people who are admitted at the end of their life, 26% die within 72 hours of admission. In the North East this is slightly lower at 24.4%.
• Across the CCGs the range is from 25% at Hartlepool and Stockton-on-Tees to 29.7% at Darlington.
• Darlington CCG has the highest proportion of people who die within 24 hours, the highest within 48 hours and the highest within 72 hours.



Observations:

- The number of deaths by place of death varies significantly by age group
- People under 65 are more likely to die in hospital (47%) or at home (36%), with only 3% dying in a care home
- With increasing age, it becomes far less likely for someone to die at home and more likely for them to die in a care home



Observations

- The use of Z518 to record the Liverpool Care Pathway use was mandated in national coding guidance from April 2011. The rate of using this code was negligible before 2010/11, and it has slowly increased until the end of 2011/12.
- The indicator is averaging around 5 episodes per 1,000 provider spells in quarter 4 2011/12, across England and the North East.
- South Tees and North Tees Trusts have slightly higher rates than average.
- County Durham and Darlington's rate is lower with only 4 per 1,000 spells.

Observations:

- In 2010/11, across the 5 CCGs, 94% of practices have a complete palliative care register, compared with 96% in the North East SHA and England.
- North Durham CCG has an above average rate of completion, but all other CCGs are lower than the comparators, especially Darlington which has a completion rate of only 83%.

Observations:

- The End of Life Care modelling tool is designed to allow predictive modelling of local health and social care systems for specific conditions or groups of people. This shows the current number of spells in each of the three Trusts associated with End-of-Life care in 2011-12 along with the projected number of spells in five years' time if the current configuration of services is left as-is (Future Present) and the number of spells that would occur in alternate care settings if service changes occur based on the modelling projections (Future Scenario). The model shows that roughly one quarter of future spells could be diverted to Care Homes and one tenth to Home/Private Residence.

End of Life clinical standards

Standards for end of life care were sourced from a number of key documents as shown in figure 35. Early conversations within the End of Life CAG highlighted a number of key issues and challenges that informed the selection of the key standards.

Figure 35: Source documents for acute neonatology clinical standards

The 16 NICE Quality Standards for End of Life Care for Adults were accepted by the CAG as those that define high quality care.

Across County Durham and Tees, a total of 5 End of Life Care standards are not being met by two or more of the trusts. These provide commissioners with opportunities to drive improvements in quality through mechanisms such as CQUINS and service improvement schedules.

Areas where the 5 standards are not completely met:

- Co-ordinated Care - People approaching the end of life receive consistent care that is coordinated effectively across all relevant settings and services at any time of day or night, and delivered by practitioners who are aware of the person‟s current medical condition, care plan and preferences.
- Urgent Care - People approaching the end of life who experience a crisis at any time of day or night receive prompt, safe and effective urgent care appropriate to their needs and preferences.
- Care after death – This includes the verification and certification of the death and bereavement support.

Of these 16 standards, 4 were only being met partially by two or more of the trusts. These provide commissioners with opportunities to drive improvements in quality through mechanisms such as CQUINS and service improvement schedules.

Areas where the standards are partially achieved currently:

- Identification - People approaching the end of life are identified in a timely way
- Communication and information - People approaching the end of life and their families and carers are communicated with, and offered information, in an accessible and sensitive way in response to their needs and preferences.
- Holistic support - psychological and physical - People approaching the end of life have their physical and specific psychological needs safely, effectively and appropriately met at any time of day or night, including access to medicines and equipment.
- Specialist palliative care - People approaching the end of life that may benefit from specialist palliative care, are offered this care in a timely way appropriate to their needs and preferences, at any time of day or night.

Recommendations from the End Of Life Clinical Advisory Group

The End of Life CAG recommends a focus on the following priorities:

- Promotion of the North East „Good Death Charter"

- Identification of resources to support individuals at end of life.

- Effective use of palliative care registers in supporting appropriate and personalised care planning.

- Development of access to 24/7 support for those with end of life needs, ensuring that patient choice and wishes are respected.

CAG Specific Workforce Assessment

The key pressures and workforce risks perceived to key facing the area are outlined in (figure 36).

Staffing group	National	RAG	Local	RAG
Palliative Care Consultants	No impending age retirement pressure for Palliative care consultants National Council for Palliative Care (NCPC) note various estimates put the national figure between 251 – 362 headcount of consultants. 27.5% of Consultant workforce aged over 50, vacancies stand at 7.8%		The NCPC survey points to a consultant body which is older than the England average in the North East (32.4%) with vacancies standing at 15.9% However SHA Workforce data from ESR shows that the numbers of consultants aged over 50 in CDD and Tees is lower than the figures highlighted by the NCPC.	
Doctors in Training for Palliative Medicine	CfWI modelling indicates there is a possibility that growth in CCT holders could become too strong from 2015. There was a 65% national speciality training fill rate in 2010		Information from the Northern Deanery indicates that 5 trainees are due to complete training in 2012. CfWI figures indicate in 2010 a 25% fill rate to specialty training in the Deanery	
SSASG Doctors in Palliative Medicine	NCPC 2010 data shows a national vacancy rate of 10%		NCPC 2010 data shows a NE vacancy figure at 28.1%	
Specialist palliative care nurses	NCPC data shows that 38.2% is aged over 50 (48% for bands 2-4)		NCPC data shows that 41.2% is over 50 (52.2% for bands 2-4) in the NE	

Figure 36: End of Life workforce risks

The following risks were prioritised:

Risk rating	Workforce risks in End of life care
1 (Top Risk)	Undercapitation for Palliative Care Consultants
2	Future supply of trainees to become consultants (potential NTN restrictions)
3	Relatively low rate of training fill rate in Deanery
4	High levels of SSASG vacancies in NE
5	Capacity issues for the wider workforce e.g. sonographers, Emergency Care Consultants

The findings of the CAG specific workforce assessment are:

- The number of consultants in palliative care medicine meet the recommended standards

- The emphasis should be on collaborative working across the health economy to provide specialist palliative care advice 7 days a week, and that all health and social care workers have the knowledge, skills and attitudes necessary to be competent to provide appropriate high-quality care and support for people approaching the end of life and their families and carers.

Long Term Conditions

As the majority of long term conditions management can, and arguably should, be provided closer to patients" home from community or primary care settings and often benefits from a multi-agency approach, the Long Term Conditions Clinical Advisory Group worked to the following remit:

- Consider the information in the Technical Papers describing the current population profile and demand for health care, and the estimated future demand for health care based on demographic change and increasing prevalence of long-term conditions
- Advise the project team on the assumptions to include in the modelling work we plan to do looking at the potential for managing care for patients with long term conditions closer to home. This involves agreeing on some assumptions about the potential impact of evidence based interventions and consistent standards of care on future care provision
- Make recommendations on the scope and timescale for more detailed work across primary and secondary care, health and social care on assessing the quality of services against the agreed standards, and identifying priorities for developing integrated services

Focus of discussion of the LTC CAG

The LTC CAG used financial scenarios developed from similar work from other parts of the country to assess the role in LTC management in meeting future economic pressures and then relate them to the most relevant aspects of efficiency management (outlined in figure 37).

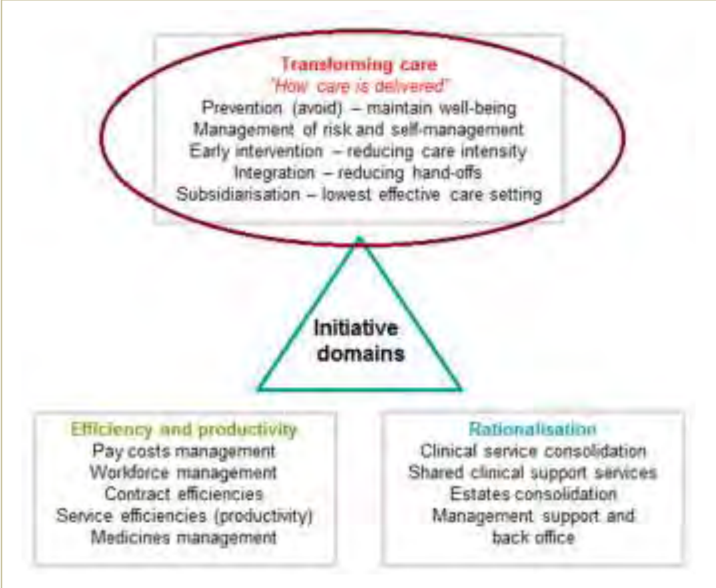


Figure 37: LTC Initiative Domains

Recommendations from the LTC CAG

The recommendations from the group are:

- CCGs to come together to share the same case for change. They will consider a whole systems approach that takes account of current progress in local areas and focuses on change that will add value at every level of intervention from the individual patient to interventions and agreed standards across multiple CCGs in order to gain the scale that will allow for the most effective interventions to be implemented on the largest possible footprint.

- A whole system plan spanning e.g. five years should be developed to meet the financial challenge and the opportunity around the management of patients with Long Term Condition as a large part of mitigating the overall risk to the health economy.

- This plan needs to be presented through the lens of improving quality and outcomes, not just the financial drivers: the focus on right person, right place right time, up-streaming of care to prevention services are key and should be able to be described by all CCGs as one coherent message.

- System wide governance will need to be developed to agree and implement the changes required. Decision making processes will need to support some of the difficult politics and compromises that will need to be managed.

This needs to happen as soon as possible because:

- It is clear that a funding crisis is looming - shifting all of the risk to providers will not lead to a sustainable future for Durham and Tees Valley

- There is an opportunity to build on the recent work with acute trusts and use the momentum generated to carry forward a partnership working approach

The LTC CAG agreed that while the analyses presented were reasonable, further work was both necessary and urgent to facilitate the next steps:

- More detailed work on the financial and workforce challenges to provide a better understanding of the required scale of transformation.

- Addressing the mental health needs of people with long term conditions and mental health problems as long term conditions should be included in the scope of the work, understanding that this is a more difficult area in which to quantify opportunities.

- Joint working between the system leaders to establish buy-in to a shared „aiming point" for a balanced budget.

- Joint working between the system leaders to understand the planning assumptions and establish buy in to the potential scale of change.

- More detailed analysis to understand the activity/spend in the acute sector on scheduled and unscheduled care that is attributable to LTC patient cohorts.

- Analysis to understand the interplay between scheduled and unscheduled care and integrated care.

- Understand the scale and pace of existing QIPP plans –specifically those relating to LTCs – in light of the transformation potential.

- Identify and agree opportunities – cohort/condition specific as necessary – for going further and/or faster.

- Develop detailed cross economy plans for transformation including business cases for investment, phasing of delivery, impact on wte, agreed risk shares and procurement and governance arrangements.

Developments since November 2012

The project team has commissioned from NEQOS, a report for each CCG, profiling the unplanned admission rates for ambulatory care sensitive conditions (ACSCs). The purpose of these reports is to support CCGs with their plans to improve the quality of care and reduce costs. The next step is to work with a CCG to develop a core set of standards for the management of ACSCs and to carry out a self-assessment against these standards.

Planned Care

As outlined in the project methodology, due to the number of specialities, the project focused on variation in practice and levels of competition within planned care.

Current level of competition in Planned Care

As part of the assessment of the economic analysis, a review of current levels of competition and market share was also carried out (figure 38).

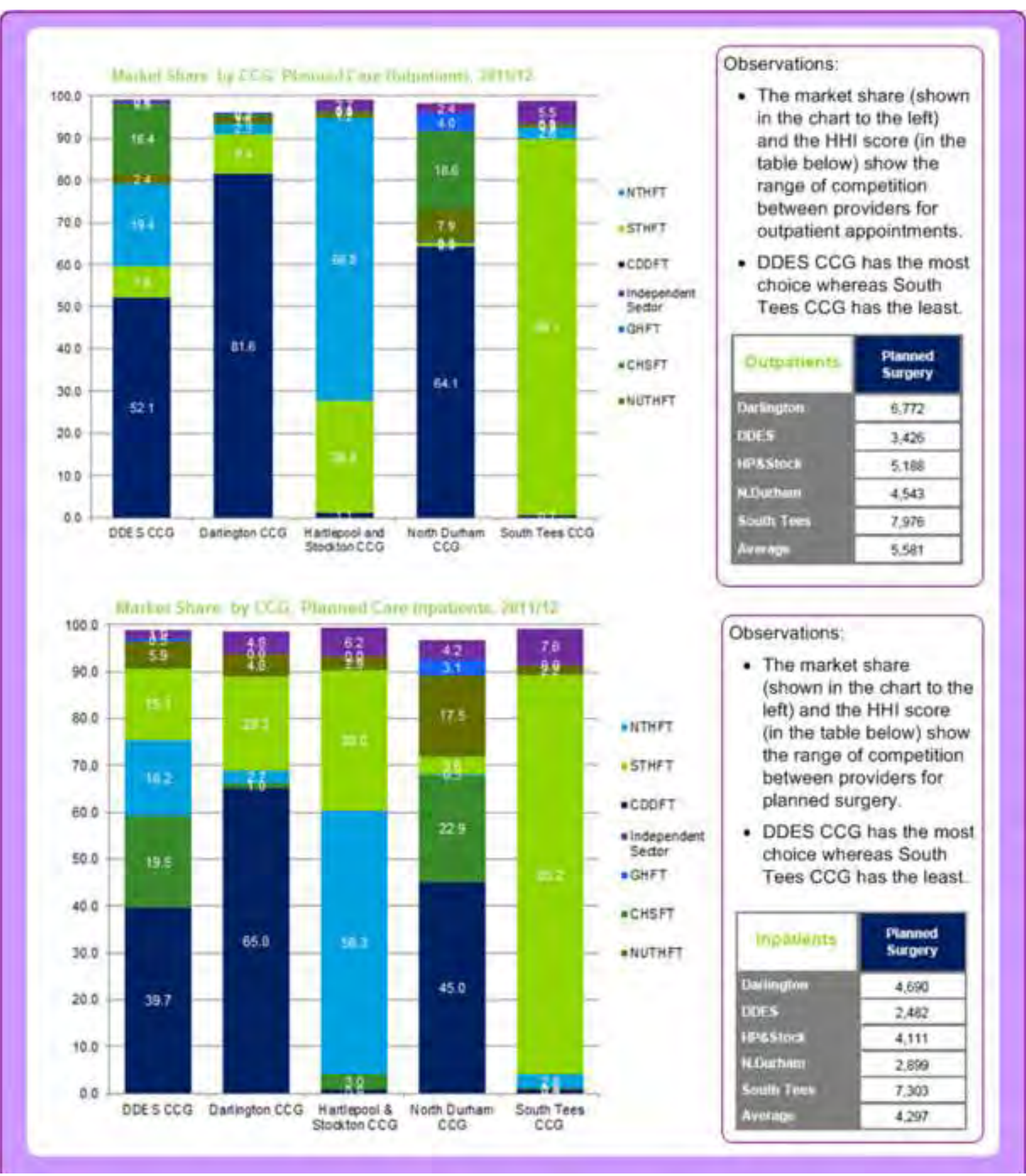


Figure 38: Market share and HHI scores for planned care

To do this, Hirschman Herfindahl Index (HHI) scores were derived for each clinical specialty area and clinical commissioning group area. HHI scores provide a numerical indication of the concentration of competition within a particular market (and as such, an approximation of patient choice).

A high HHI score (>7000) indicates that there is a lack of competition in a particular market and as a result a lack of patient choice (which can often be expected in very niche markets e.g. tertiary services). Scores of <5000 are considered favourable within the UK health sector as this indicates that patients have a reasonable choice of provider.

Overall, the Durham Darlington and Tees health economy has relatively more competitive compared to the national position. DDES CCG scores the lowest HHI scores which represents the greater choice offered by its close locality to four major Trusts (CDDFT, NTHFT, CHSFT & NUTHFT). By contrast STHFT is the predominant supplier to the South Tees area; HHI scores for South Tees CCG are extremely high, indicating a monopolistic market; despite the potential for patient flows to move away from STHFT they are loyal to their local hospital. The same is seen in Darlington where the local culture is such that despite the level of choice in the area, the population of Darlington is very loyal to their local hospital.

Variation in practice

Within the supporting documentation, a review of variation in practice and potential impacts of future changes has been undertaken. The main areas of analysis of variation covered in the technical and briefing papers includes:

- Value based commissioning report. This report is a local adaption of one produced by the Midlands and East Quality Observatory to show the relative performance in carrying out certain procedures which may be considered of limited clinical benefit when weighted against their cost (an example is shown in figure 39). The Value Based Commissioning Dashboard compares interventions at a Clinical Commissioning Group level to the national average and displays this on a Statistical Process Control (SPC) chart to show the level at which the CCGs differ statistically from the national average.

- Conversion rates from outpatient to inpatient for elective specialties. This is a variant of a surgical conversion rate metric which looks at the numbers of first outpatient appointments and inpatient admissions by speciality within each quarterly time period.

- Community based recovery and early supported discharge. Enhanced recovery is a method of managing the pre-, intra- and post-operative care of a surgical patient to optimise management and reduce post-operative length of stay. Based on the national programme (which focuses on seven high priority surgical procedures), an analysis on the impact of any pathway changes has been undertaken to inform providers and commissioners on local performance.

- The impact of change drivers. An assessment of the impact on local activity of assumptions relating to a potential change in policy, technology or clinical practice has been undertaken for each CCG.

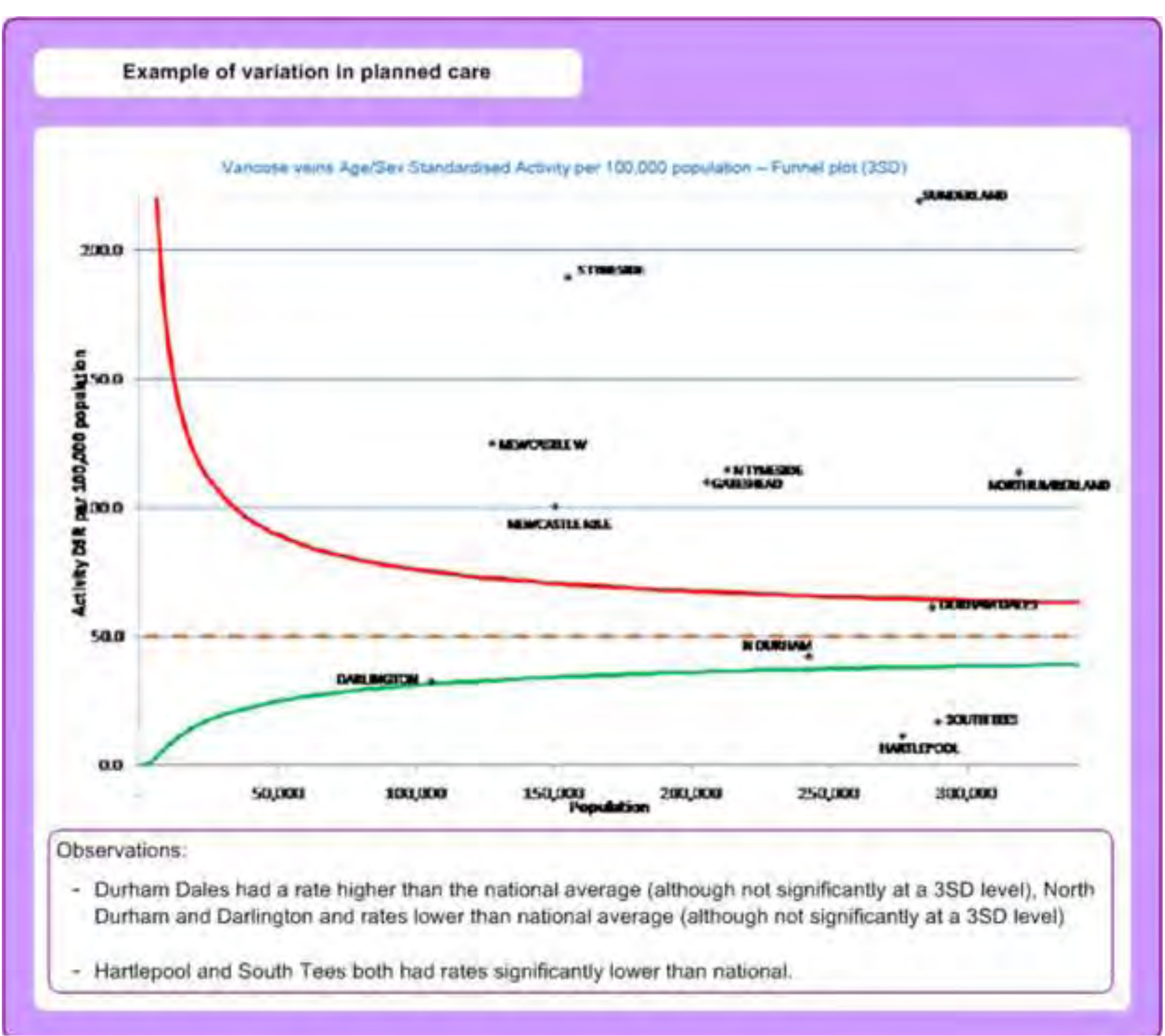


Figure 39: Example of variation across CCGs within planned care

Generally across the NHS, elective services are often more profitable than non-elective services. Commissioners need to be mindful of this when changing commissioning patterns so that movements of activity between or away from providers do not have a destabilising effect on them as they are left with the cost of provision with no income to cover them or a need to increase their cost improvement targets above the levels outlined in the section on economic context.

Access to service line reporting data would be necessary in order to make a full and proper assessment of the scale of this risk however.

Next steps

NHS County Durham and Darlington and NHS Tees have carried out this work as part of their responsibility to ensure maintenance of quality through the transition. This work goes well beyond the expectations of the Department of Health (DH) for the development of legacy documents as part of the transfer of commissioning responsibilities from PCTs to CCGs and other bodies.

This report describes a synthesised set of analysis and clinical recommendations, supported by wider workforce and economic modeling, developed through a robust clinically led process with a focus on sustainable, high-quality care. The findings and recommendations set out in the report have implications that range from potential changes to be made to provider contracts through incorporating the agreed clinical quality standards, to potential service reconfiguration across County Durham and Tees valley.

As part of the transfer of responsibilities, CCGs have agreed to build on this legacy work and will take this work forward in line with the duty placed upon them to commission high quality sustainable services.

This expectation is consistent with CCG functions and the duties and powers in place to enable them to fulfill these functions as set out in The Functions of Clinical Commissioning Groups (DH June 2012).

When the transition is complete at the end of March 2013, the responsibility for the implementation of the report findings and recommendations will transfer to the five CCGs in County Durham and Tees Valley. They will work in partnership with Hambleton, Richmondshire and Whitby CCG, due to the scale of their patient flows into the Tees Valley area.

It has been agreed that this work will continue to be a commissioning led process and as such, Darlington CCG will lead the work on behalf of the six CCGs across County Durham, Darlington, Tees and Hambleton, Richmondshire and Whitby. The project will also feed into, and be supported by, the work of the Area Team of the NHS Commissioning Board.

Darlington CCG Chief Officer will provide leadership for the project and ensure that it delivers the objectives for the next phase of work which are to assess the feasibility of, and options for, implementing the standards and progressing implementation. This will include working with North of England Commissioning Support (NECS) and the CCGs on including the quality standards in contracts and CQUIN schemes. It is critical that this leadership role encompasses communications and engagement to continue and develop further the stakeholder engagement that has been undertaken to date.

The clinical lead for Hartlepool and Stockton on Tees CCG will work alongside the Darlington CCG chief officer to ensure sufficient clinical focus as the work moves forward.

It is anticipated that the role of steering the project will rest with the project board which will, it is suggested, continue to include the CCG chief officers and clinical leads, the FT chief executives, the Area Team and two local authority chief executives, chaired in the future by the lead CCG chief officer.

In light of the fact that existing project team members are moving into new roles as part of the transition process, project team membership will be reviewed and updated to ensure delivery of the next phase of the project and this team will be accountable to the Darlington CCG Chief Officer as project lead.

The project board will require new terms of reference setting out its role steering the project going forward.

It is anticipated that the role of the project board in the next phase of the work of the project will include:

- steering the feasibility analysis on implementing the report recommendations and standards
- a commitment to reviewing/revising/maintaining the clinical quality standards
- the involvement of clinicians in this process
- ensuring that the standards are included in commissioning intentions, service specifications, CQUINs and clinical network development
- supporting wider engagement as the project moves forward

It is anticipated that the project board will meet bi-monthly, starting in May 2013.

The key actions going forward therefore will be:

- To review the project board terms of reference and membership to enable it to oversee the next phase of the project, to include transferring leadership to CCGs.
- To ensure that the project continues to have dedicated resources to support the next phase of work.
- To undertake a feasibility analysis on implementing the recommendations of the ASQLP report.
- To maintain the engagement of the clinicians who have contributed to this work.
- For FTs to consider the report recommendations, with particular reference to the implications for their own organisations and areas where they will work together and with the CCGs, to support the next phase of the project.
- For FTs to consider the report recommendations in regards to their own workforce planning and subsequent recommendations they make to the NELETB on education and training commissions.

Appendix 1: List of Supporting Documents

The following documents have been produced in support of this project report and will be available via the North East Quality Observatory System website (http://www.neqos.nhs.uk/):

Health analysis

- Technical Paper A: Current and future demand. Produced by NEQOS, 288 pages, file size 13.7MB.
- Technical Paper B: Future Activity. Produced by NEQOS and Mott Macdonald, 102 pages, file size 1.5MB.
- Technical Paper C: Quality. Produced by NEQOS and Mott Macdonald, 213 pages, file size 6.3MB.
- Acute Paediatrics, Maternity and Newborn Briefing Paper. Produced by NEQOS and Mott Macdonald, 267 pages, file size 4.2MB.
- Acute Care Briefing Paper. Produced by NEQOS and Mott Macdonald, 340 pages, file size 5.2MB.
- End of Life Care Briefing Paper. Produced by NEQOS and Mott Macdonald, 76 pages, file size 0.9MB.
- Long Term Conditions Briefing Paper. Produced by NEQOS and Mott Macdonald, 104 pages, file size 2.5MB.
- Planned Care Briefing Paper. Produced by NEQOS and Mott Macdonald, 519 pages, file size 12.6MB.

Appendix 2: Acute Services Quality Legacy Project Board Members

Yasmin Chaudhry	CEO, NHS County Durham and Darlington (Joint Chair)
Chris Willis	CEO, NHS Tees - Up to 1/12/2012 (Joint Chair)
Cameron Ward	Director, Durham, Darlington & Tees Area Team, NHS Commissioning Board, CEO NHS Tees – From 1/12/2012
Sue Jacques	CEO, County Durham and Darlington NHS FT
Alan Foster	CEO, North Tees & Hartlepool NHS FT
Tricia Hart	CEO, South Tees Hospitals NHS FT
Amanda Hume	Chief Officer, South Tees CCG
Dr Henry Waters	CCG Chair, South Tees CCG
Ali Wilson	Chief Officer, Hartlepool and Stockton on Tees CCG
Dr Boleslaw Posmyk	Chair, Hartlepool and Stockton on Tees CCG
Nicola Bailey	Chief Operating Officer, North Durham CCG
Neil O"Brien	Chief Clinical Officer, North Durham CCG
Martin Phillips	Chief Officer, Darlington CCG
Andrea Jones	Chair, Darlington CCG
Vicky Pleydell	Clinical Chief Officer, Hambleton, Richmondshire & Whitby CCG
Debbie Newton	Chief Operating & Finance Officer, Hambleton, Richmondshire & Whitby CCG
Stewart Findlay	Chief Clinical Officer, Durham Dales, Easington and Sedgefield CCG
Mike Taylor	Chief Operating & Finance Officer, Durham Dales, Easington and Sedgefield CCG
Gill Rollings	CEO Middlesbrough Council
Rachael Shimmin	Corporate Director, Children & Adults Services Durham County Council
Rosemary Granger	Project Director

(CCG – Clinical Commissioning Group
CEO – Chief Executive Officer)