The Carter Report: Reducing Unwarranted Variation in Operational Performance & Productivity in Hospitals in England



Professor Timothy W Evans DSc.FRCP.FRCA.FMedSci

National Director of Clinical Productivity

Productivity & Efficiency Division

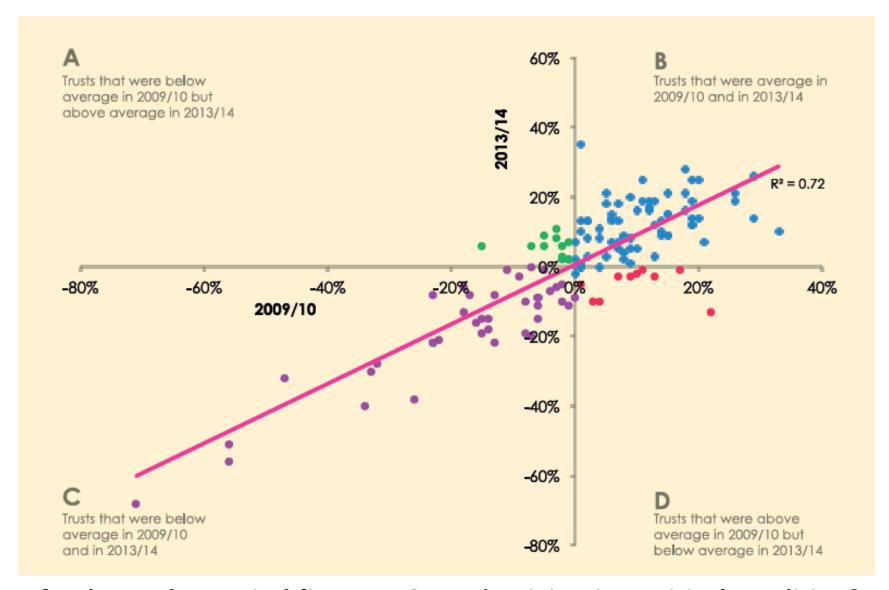
Finance, Commercial and NHS Directorate

Department of Health

Richmond House, Whitehall, SW1A 2NS

E: Tim.Evans@dh.gsi.gov.uk T: 0207 210 6870

Follow us on Twitter @DH_Commercial



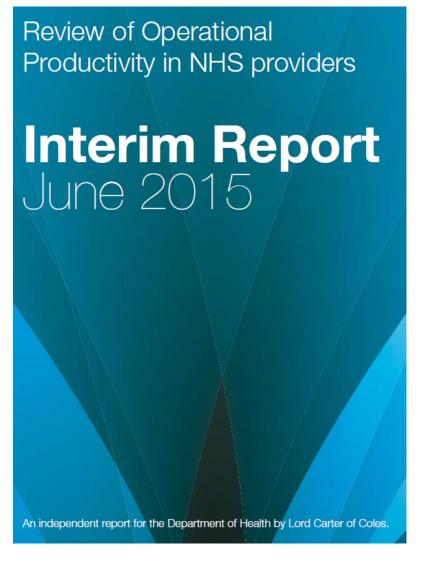
Lafond S et al: Hospital finances & productivity: in a critical condition?

Health Foundation 2015

The Carter Report: Reducing Unwarranted Variation

- The Carter report:
 - What it said and why
 - Moving the recommendations to implementation and alignment with changes planned in the system elsewhere
 - Clinician productivity:
 - What's been done before, what we plan to do
 - Getting It Right First Time (extension to other areas)
 - The model hospital, its concept and progress

The interim report: What happened next:



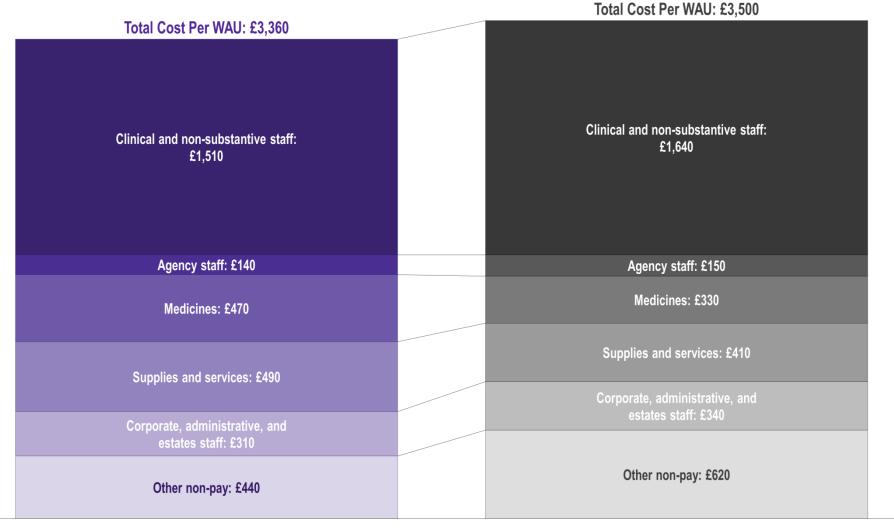
- Trust support packs and potential savings opportunities identified (next)
- Lord Carter's ongoing program of trust engagement (approx 40 visited)
- Professor Tim Briggs (GIRFT) & Professor Tim Evans appointed
- Developing the model hospital and new metrics (Weighted Activity Unit, based on the cost of one standard elective inpatient stay for the NHS. WAUs per trust calculated by summation of all types of activity weighted according to the national average cost of providing that activity; and everything included in reference costs eg non-elective work, outpatients, diagnostic tests).
- Understanding what good looks like for:
 - Clinical specialties (next slide)
 - Areas (eg outpatients, inpatients etc)
 - Processes (working patterns, job plans)

The Weighted Activity Unit (WAU)

- The type of treatments provided by acute trusts differ substantially (casemix).
- This makes it difficult to make robust comparisons between trusts using simple measures of output.
- Both in the UK and elsewhere (e.g. US, Australia), this issue is tackled by using a measure of **cost-weighted output**.
- Cost-weighting is used to adjust for differences in casemix between trusts.
- Lord Carter has pioneered the use of the Weighted Activity Unit (WAU).
- One WAU is the equivalent of an elective inpatient admission, based on the cost of providing that treatment (≈£3,500).

Total cost per WAU for a sample acute trust

This trust (at the 27th centile) spends £140 less per weighted activity unit than the national average.



Sample Trust

National Average

MailOnline



Home | News | U.S. | Sport | TV&Showbiz | Australia | Femail | Health | Science | Money | V

NHS costs review warns 8,500 hospital beds blocked every day

By PRESS ASSOCIATION

PUBLISHED: 10:53, 5 February 2016 | UPDATED: 10:54, 5 February 2016



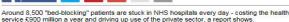












The review into how the NHS can save cash found bed-blocking - which occurs when patients are medically fit to leave but care has not yet been organised in the community - is a bigger problem for NHS hospitals than previously thought

In the wide-ranging report, commissioned by the Government, Lord Carter of Coles sets out the way NHS hospitals can cut costs in a bid to save £5 billion a year by 2020.



The review found bed blocking is a bigger problem for NHS hospitals than previously thought

HOME » NEWS » HEALTH » HEALTH NEWS

The hospitals with more room for pen-pushers than patients

The head of an NHS efficiency review orders hospitals to sell off swathes of surplus land, devote more space to patients and bring an end to 'Soviet-style' attitudes to those in their care















Hospitals devote too little of their space to patients, the review found Photo: ALAMY

Operational productivity and performance in English NHS acute hospitals: Unwarranted variations

February 2016





Well done, Sir Andrew - but your job is

♠ SECTORS+ TOPICS+ HSJ.LOCAL+ COMMENT+ HSJ.KNOWLEDGE+ MORE_+ JOBS

FINANCE AND EFFICIENCY

Carter savings 'won't be enough', experts warn

The Carter report has illustrated how difficult it will be to extract further savings from the hospital sector, think tanks have warned

Politics & Policy

February 5, 2016 5:01 am Carter report paints grim picture of NHS Sarah Neville, Public Policy Editor Author plants

Home UK" World Companies" Markets" Global Economy Lex Comment



A government-commissioned report has painted a damning picture of a health service where bullying and harassment of staff is rife and there is little attempt to harness the NHS's huge collective buying power.



home > UK > society law scotland wales northern ireland education media

👔 UK world politics sport football opinion culture business lifestyle fashion environment tech travel

This is the NHS

NHS could save £5bn a year on running costs and 'bedblocking', finds report

Inefficient use of staff, expensive supplies, patients staying in hospital too long and reliance on agency workers costs health service billions

Denis Campbell Health policy editor



Save for later



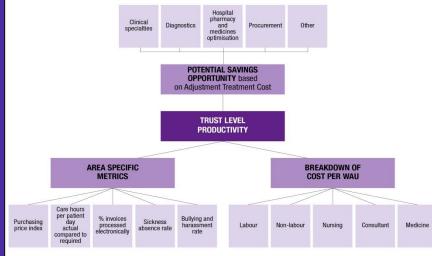
O Consultant Fit Mark Which's with his team on his morning month on the layer yand at University hospital Southampton, Photograph: Felix Clay for the Guardian



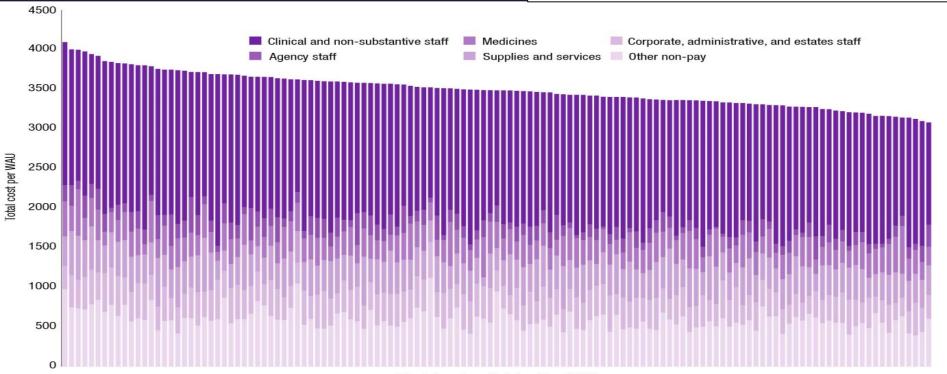
≡ browse all section

Metrics and variation

- We worked with cohort of 32 to develop metrics
- ATC helped us identify the opportunity but we realised we needed different perspectives
- ldentified the key categories



Three ways to measure productivity and efficiency, and to estimate the potential to raise productivity



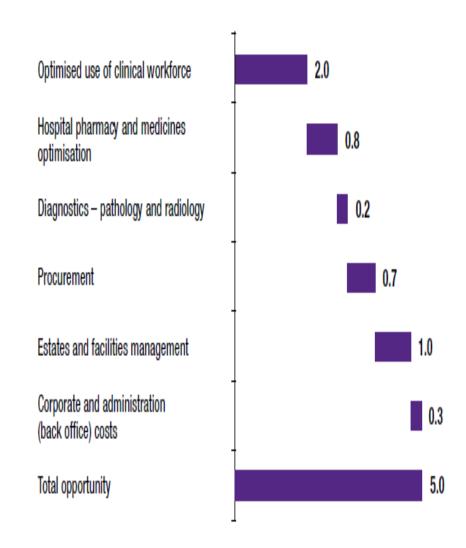
Trusts in order of total cost per WAU

A distribution of the cost per WAU breakdown by trust

Overview of the final report: £5bn savings

15 recommendations involving:

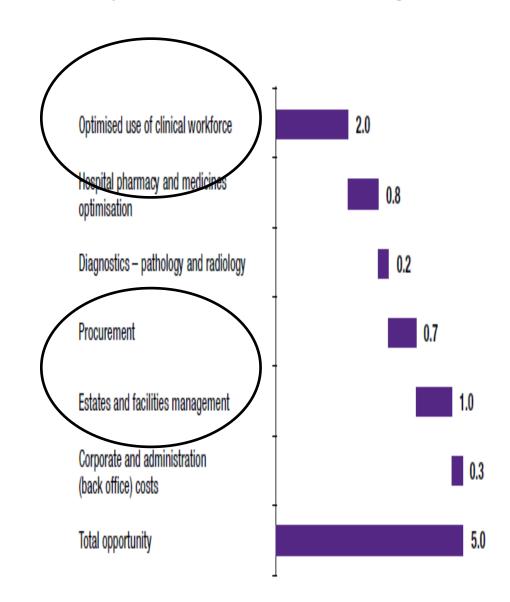
- Optimising application of clinical resources
- Optimising use of nonclinical resources
- Quality & efficiency throughout care pathway
- Implementation & engagement with trusts



Overview of the final report: £5bn savings

15 recommendations involving:

- Optimising application of clinical resources
- Optimising use of nonclinical resources
- Quality & efficiency throughout care pathway
- Implementation & engagement with trusts



Overview: Optimising the use of human resources

What we found:

- The greatest asset of the NHS is its staff
- £33.9bn of £55bn total spend is on clinical resources
- There is

 unwarranted
 variation across
 trusts amounting to
 £3.1bn £3.8bn of
 potential savings

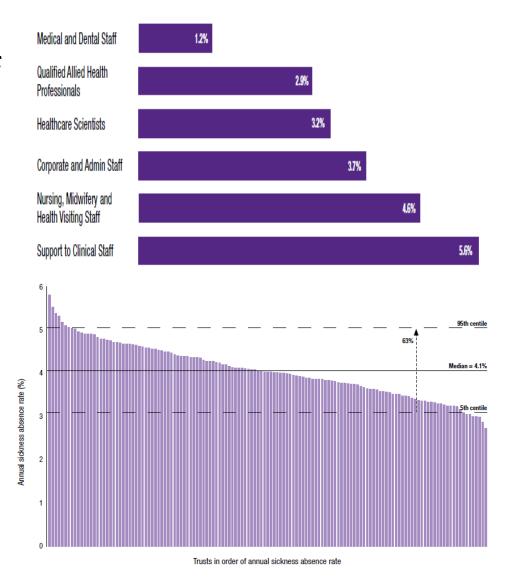
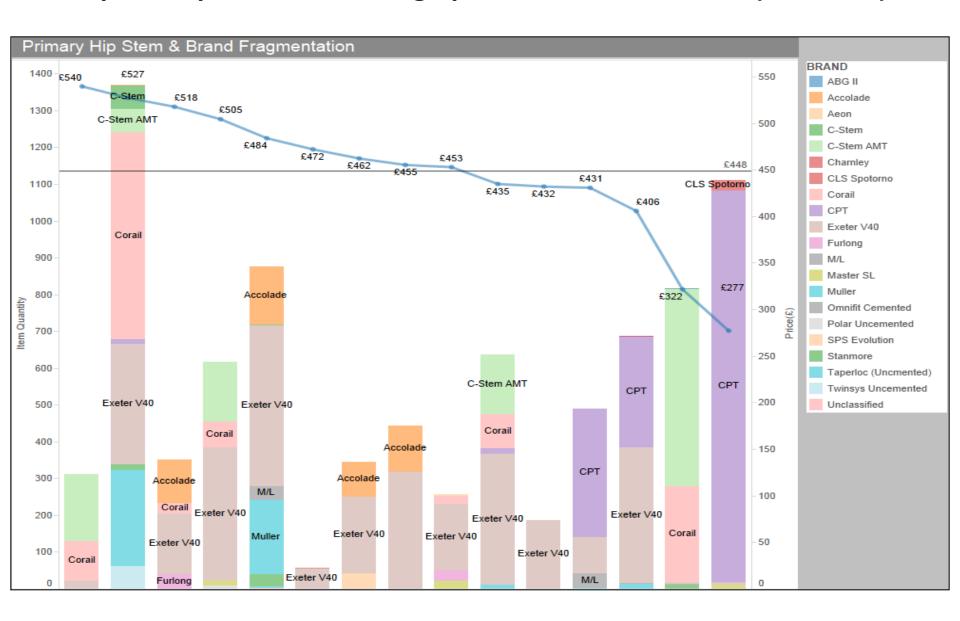


Figure 2.3 – A distribution of 2014/15 staff sickness rates. The trusts with the highest staff sickness rates are around 1.6 times more than the trusts with the lowest¹³

Hip stem prosthesis average price, volume & brand (15 trusts)



Overview: Optimising the use of non-clinical resources

What we found: Estates:

- Occupied floor space area of the NHS is 25m M²
- Total running costs exceed £8bn per year
- Marked variation of energy use, non-clinical floor space, food services and running costs
- Potential savings of £2.1bn-2.4bn

The Carter Report: Reducing Unwarranted Variation

The Carter report:

- What it said and why
- Moving the recommendations to implementation and alignment with changes planned in the system elsewhere
- Clinician productivity:
 - What's been done before, what we plan to do
 - Getting It Right First Time (extension to other areas)
 - The model hospital, its concept and progress

Overview: Quality & efficiency along the patient pathway

What now?

- Joint clinical governance for specialities
- Real-time national and local dashboards for each clinical speciality (roll-out of GIRFT programme)
- £1bn IT support
- Joined up strategy with local government and health economy
- Collaboration and coordination of clinical services

137 NHS acute hospital trusts (non-specialist) in England have received detailed plans that show how and where they can improve patient care and become more efficient. The £5 billion worth of savings has been broken down by speciality. The top 12 specialties are:

Specialty	Potential saving (£ million)
General medicine	381
Obstetrics and gynaecology	362
Trauma and orthopaedics	286
Pathology	256
Cancer services	255
Emergency medicine	254
General surgery	234
Community nursing	217
High cost drugs	213
Paediatrics	209
Intensive and critical care	209
Cardiology	184

Overview: Quality & efficiency along the patient pathway For each GIRFT specialty (10 surgical, 8 non surgical)

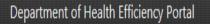
- Appoint national lead
- Identify scope (Eg for general medicine 'MAU', 'the take', 'ward cover')
- Data bank (pre existing if possible, £1bn IT support)
- Assemble panel (GIRFT methodology) to decide 'what good looks like'
- Develop dashboard (n=25, CQC compliant)
- Pilot & introduce across trusts (n=137)

Trauma & Orthopaedics Dashboard:

- Standardised hip revision rate at 5 years
- Oxford hip score case-mix adjusted
- Cemented fixation in over 65s
- Average no. of nurses in theatre for a primary arthroplasty (hip and knee combined calculation)
- Percentage of orthopaedic patients seen in one-stop-shop clinic.

The model hospital shows metrics by speciality to demonstrate, for example:

- Effectiveness, through metrics such as length of stay and delayed transfers of care.
- Productivity, through numbers of admissions, occupied bed days, medical procedure time, theatre time and other figures.
- Costs of care, presented in ways such as cost of an admission, cost per patient day and volumes of high cost items.



Welcome James, please select a provider:

Burton Hospitals NHS Foundation Trust (RJF)











Admin Tools



Model Hospital

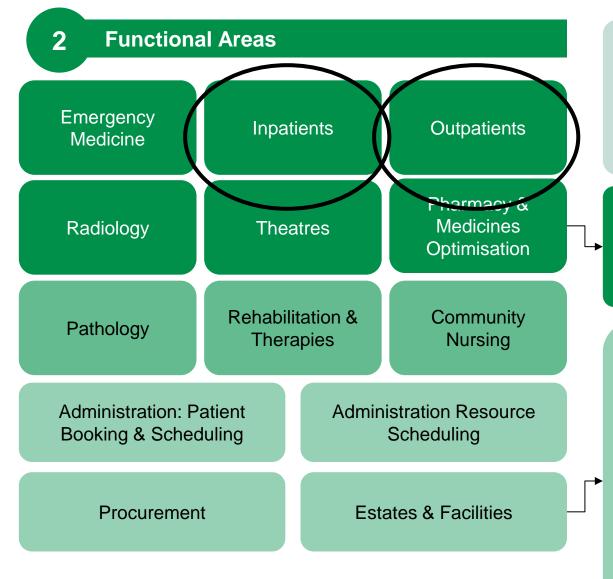
Dashboard

Trial Area

Test Trauma & Orthopaedics

V

Trust Level Trust Level, Quality Metrics & Quality Metrics National Info Variation Trend Trust level quality metrics Period Trust Actual Peer Mean Mean Detail Level Friends and family score (Inpatient) & KPI's 2014/15 1.95 1.92 1.91 SHMI (Summary Hospital Mortality Index) & Elective Activity 2013/14 386.34 407.33 400.50 (Inpatient) urgeon Data Info Trend Estimates of casemix complexity and Period Trust Actual Peer National Variation & Non-elective Mean Mean patient demographics - of patients with % of total activity (with procedure) identified uk RTT, PROMs, & Best Practice 2012/13 7.00% 16.78% 18.02% as specialist Average Charlson score (of patients with Infections & Complications X 2012/13 0.60 0.56 0.55 procedure) & Mortality Average age (of patients with procedure) × 2012/13 59.64 57.13 56.39 % patients aged 75+ year (of patients with X 2012/13 16.50% 14.15% 14.88% procedure) & Costs Metrics Average deprivation index value (of patients X 16.60 21.38 2012/13 20.65 with procedure % patients in top deprivation index quintile (of × 2012/13 25.73% 18.32% 18.85% patients with procedure) Average ASA rating × 2.17 2013/14 2.00 2.15



The model hospital displays indicators by functions, whether they be clinical functions, groups of inpatient or outpatient specialties, back office or administrative functions of the trust.

Pharmacy & Medicines Optimisation (sample metrics)

Total antibiotic consumption

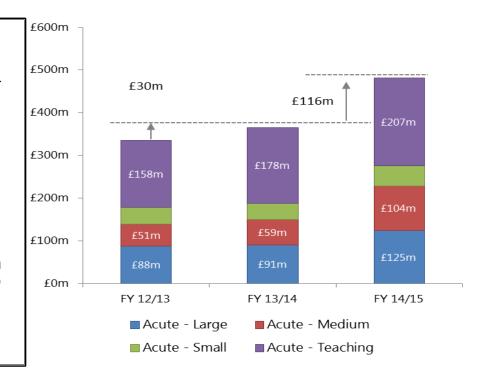
Estates & Facilities (sample metrics)

- Critical Infrastructure Risk in cost per square metre
- Total Backlog Maintenance
- Cleaning productivity, in square meter per FTE
- Food productivity, as number of meals per bed per day
- Waste costs per tonne

Trusts highlight unplanned loss of income from cancellations

Definition:

- A delayed transfer of care from an acute or nonacute (including community and mental health) facility occurs when a patient is ready to depart from such care but still occupies a bed.
- A patient is ready for transfer when:
 - A clinical decision has been made that patient is ready for transfer AND
 - A multi-disciplinary team decision has been made that patient is ready for transfer AND
 - The patient is safe to discharge/transfer.



	2014/15	2013/14	% Change
	£m	£m	
NHS Providers - Acute	482	36	32%
NHS Providers - Non Acute	297	280	6%
NHS England Group - CCGs	10,297	9,373	10%
Totals	11,076	10,019	11%

Figure 4.3 - A table highlighting the level of NHS expenditure in the non NHS sector

The Carter Report: Reducing Unwarranted Variation

The Carter report:

- What it said and why
- Moving the recommendations to implementation and alignment with changes planned in the system elsewhere
- Clinician productivity:
 - What's been done before, what we plan to do
 - Getting It Right First Time (extension to other areas)
 - The model hospital, its concept and progress



REPORT BY THE COMPTROLLER AND AUDITOR GENERAL HC 885 SESSION 2012-13 6 FEBRUARY 2013

Department of Health

Managing NHS hospital consultants

'This report examines the extent to which the expected benefits of the 2003 consultants' contract have been realised and whether consultants are managed effectively and consistently across NHS trusts.'

- At September 2012, the NHS employed 40,394 consultants (38,197 on a full-time equivalent basis) across a range of specialty areas.
- Total employment cost of consultants was £5.6 billion in 2011-12, of which 81 per cent was consultants' earnings, with employer pension and employer National Insurance contributions each accounting for 9.5 per cent.
- In 2011-12, consultants made up 4 per cent of all NHS hospital and community health service fulltime equivalent staff, accounting for 13 per cent of related employment costs.

Part One

The 2003 consultant contract

Part Two

The management of hospital consultants

Part Three

Progress in implementing the 2007 Committee of Public Accounts' recommendations

Overview: Optimising the use of human resources - medical

Medical staff

The total cost of medical staff in NHS trusts was £10bn in 2014-15. As with all other clinical staffing groups we have observed significant variation across acute trusts (see figure 2.10).

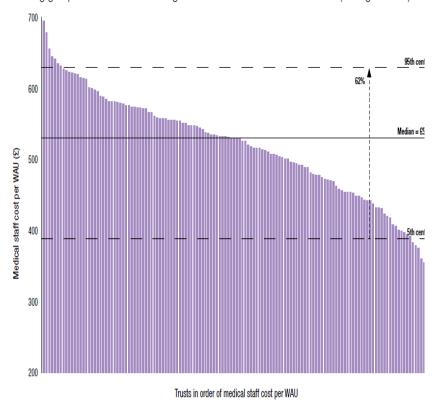


Figure 2.10 – A distribution of medical staff cost per WAU. The most expensive trusts spend around 1.6 times more on medical staff per WAU than the least expensive trusts

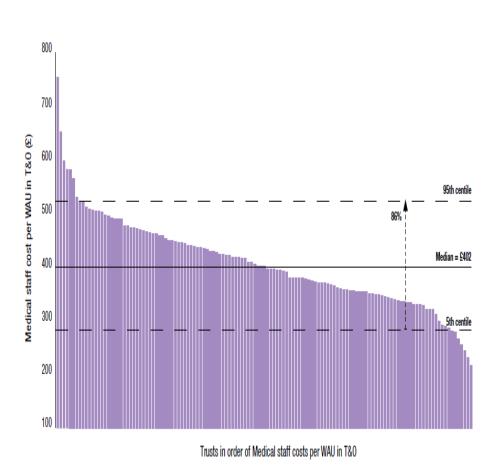


Figure 2.11 - A distribution of medical staff cost in Trauma & Orthopaedics per WAU. The most expensive trusts spend around 1.9 times more on medical staff in Trauma & Orthopaedics per WAU than the least expensive trusts³¹

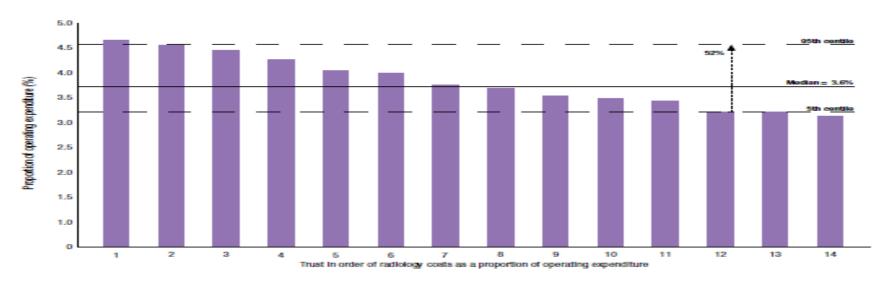


Figure 2.17 – A distribution of diagnostic radiology costs as a proportion of trust operating expenditure. Some trusts spend around 1.5 times more on diagnostic radiology costs as a proportion of their operating expenditure than others

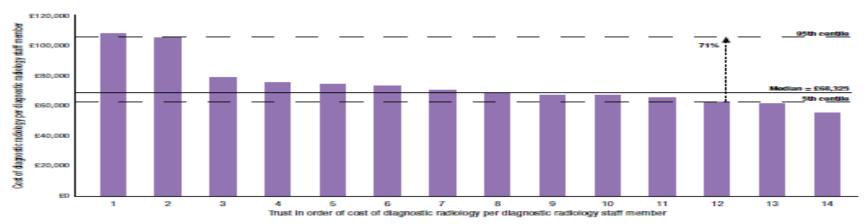
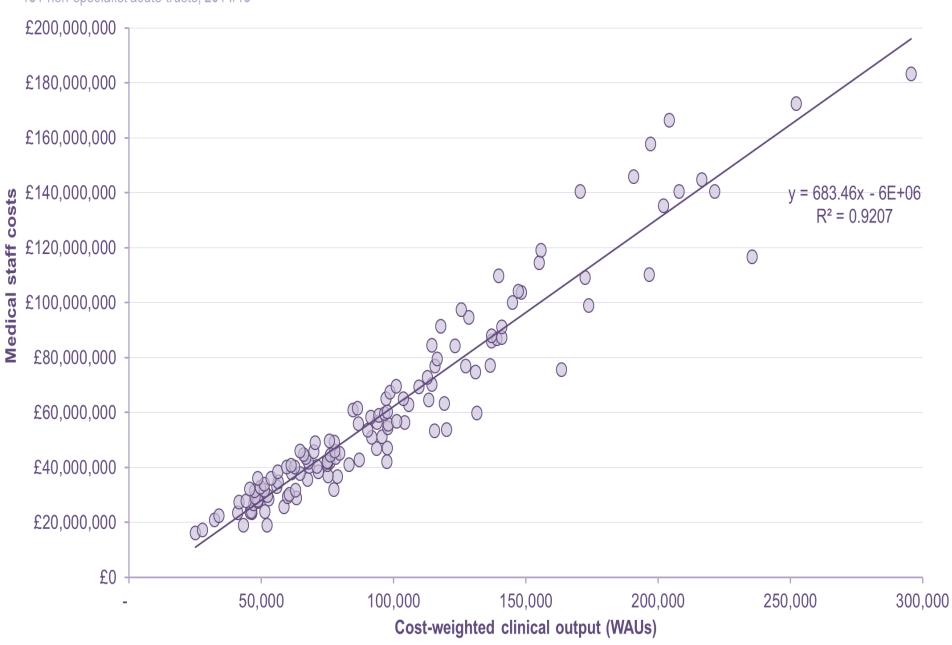


Figure 2.18 – A distribution of the cost of diagnostic radiology per diagnostic radiology staff member. Some trusts spend around 1.7 times more per diagnostic radiology staff member than others

Overview: Optimising the use of human resources - radiology

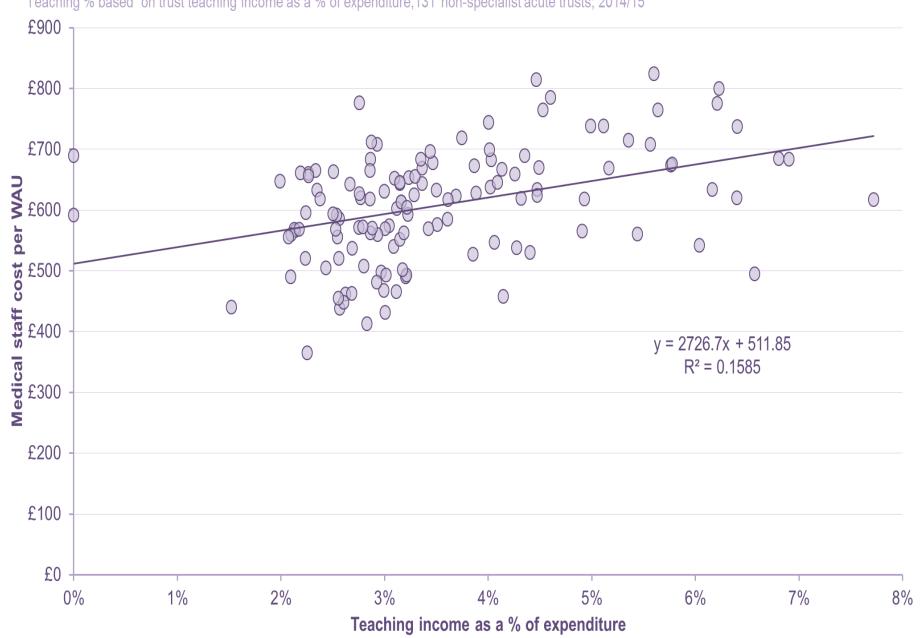
Medical Staff costs (y) against cost weighted clinical output (x)

131 non-specialist acute trusts; 2014/15



Unadjusted medical staff cost per WAU (y) against trust teaching % (x)

Teaching % based on trust teaching income as a % of expenditure,131 non-specialist acute trusts; 2014/15



Overview: Quality & efficiency along the patient pathway

Information to be requested immediately (June-September 2016):

- How many consultants are employed by your trust (absolute number, WTE)?
- How many of these have job plans for the current financial year (2016-17; no, %)?
- For those with job plans, how many sessions are they paid (mean plus range)?
- How many sessions are for Direct Delivery of Care (DCC; mean, range)?

Cross over metrics (for GIRFT dashboards), in addition to above:

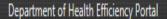
- How many consultants are (absolute number, WTE) in the GIRFT specialties (n=18)?
- How many have job plans for the current financial year (2016-17; number, %)?
- For those with job plans, how many sessions are they paid (mean plus range)?
- Within these job plans, how many sessions are for Direct Delivery of Care (DCC)?

Development of new metrics (say Spring 2017):

- Supporting professional activities (education, management and leadership, research)
- Diagnostic codes aligned with GIRFT specialties by consultant
- Sickness absence

Product

- DCC/WAU at trust level (Section 1) (Autumn 2016)
- DCC/WAU at GIRFT specialty level (from Spring 2017)
- Analysis of SpA/sickness (from Summer 2017)



Welcome Emmi, please select a provider:

Guy's and St Thomas' NHS Foundation Trust (RJ1)













Model Hospital

Dashboard

3. Workforce

Test Workforce Analysis

٧

Trust Level

🔒 All Staff

Bank & Agency

Staff Groups

Allied Health Professionals

Medical & Dental

Nursing & Midwifery

Specialties

& Emergency Medicine

General Medicine

🖋 General Surgery

Geriatric Medicine

Paediatrics

Cardiology

& Trauma & Orthopaedics

Obstetrics & Gynaecology

Within Critical Care

Cost Weighted Output (CWO) £68,909,396 Adjusted Treatment Cost (ATC) £0.99 Weighted Activity Units (WAU) 19,591 Cost per WAU £3,486

			Weighted Activity Units (WAU) per FTE					Cost per WAU					
	FTE (Template)	FTE (ESR)	Trust Actual	National Median	Upper Quartile	Peer Median			Substantive Cost (ESR)	Trust Actual	National Median	Lower Quartile	Peer Median
Medical & Dental	88	66	223	401	956		Medical & Dental	£8.9m	£6.6m	£455	£238	£67	
Additional Clinical Services	19	13	1034	409	622	-	Additional Clinical Services	£0.4m	£0.3m	£21	£58	£33	
Professional Scientific & Technical	1	0	19591	4133	8323		Professional Scientific & Technical			N/A			
Administrative & Clerical	20	12	996	1313	2140		Administrative & Clerical	£0.7m	£0.4m	£34	£16	£8	
Allied Health Professionals	2	0	9747	3721	9747	-	Allied Health Professionals			N/A			
Estates & Ancillary			N/A			-	Estates & Ancillary			N/A			٠
Healthcare Scientists	29	22	682	2016	4988		Healthcare Scientists	£llm	£0.9m	£57	£25	fll	٠
Nursing & Midwifery Registered	442	316	44	38	48	-	Nursing & Midwifery Registered	£19.3m	£13.8m	£984	£1065	£845	
Total	601	429	33	33	40		Total	£30.4m	£22.0m	£1551	£1265	£967	

Overview: Quality & efficiency along the patient pathway

What now?

- Assessing job planning: DCC/WAU
- Joint clinical governance for specialities
- Real-time national and local dashboards for each clinical speciality (roll-out of T&O GIRFT programme & methodology)
- £1bn IT support
- Joined up strategy with local government and health economy
- Collaboration and coordination of clinical services locally will be essential, cross trust if needed

Overview: Trust engagement & implementation

Where and when trusts have told us they see deliverable savings opportunities:

- Tighter grip on resources: within a year
- Process of coordination and collaboration: 2-3 years
- Structural areas (DTOC, capital investment): up to 5 years

Implementation:

- Strong leadership and management practices
- Organisational culture and capability
- Staff engagement
- National capability and support

Next steps

- Continued engagement with trusts
- Working closely with our partners
- Move to NHS Improvement
- Getting the model hospital and integrated performance framework right
- Transparency throughout