Staff unavailability and safe staffing: Are headroom allowances 'realistic'?

DRAKE, Robert <http://orcid.org/0000-0003-4673-5531>

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Corresponding Author:	Robert Drake Sheffield Hallam University Sheffield, UNITED KINGDOM
Corresponding Author Secondary Information:	
Corresponding Author's Institution:	Sheffield Hallam University
Corresponding Author's Secondary Institution:	
First Author:	Robert Drake
First Author Secondary Information:	
Order of Authors:	Robert Drake
Order of Authors Secondary Information:	
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Author details:

Name: DRAKE, Robert, G

Job title: Principal Lecturer

Qualifications: BSc, MSc, MBA

Contact details:
Email: r.drake@shu.ac.uk - Sheffield Hallam University, UK

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Key Words:

Nursing, rostering, management, policy, staffing, technology

Key Points:

- The transparency provided by e-rostering has enabled staff unavailability to be examined in greater detail
- Headroom is a budgeted allowance to cover annual leave, sickness, study leave, non-clinical working days and parenting.
- Of 35 roster policies citing headroom, 13 did not specify any value for headroom. In the remaining 22 policies, headroom varied from 18% to 25%
- In 2018, the UK National Quality Board proposed a target headroom figure of 22% - in practice, across the 87 trusts examined, actual unavailability varied from 16-34%
- When over-stated, headroom can often be resolved by staff redeployment, but when under-stated, it has implications for patient care, staff workload and staff well-being.

Reflective questions:

- Does your trust have a roster policy that specifies ‘headroom’? If so, what target value does the policy suggest?
- What is the headroom for your ward/unit? How is it calculated?
- Try to calculate your own ‘unavailability’ (Remember: it includes; annual leave, sickness, study leave, non-clinical working days and parenting). What is your ‘headroom”?
- What are the strengths and weaknesses of organisations such as the National Quality Board specifying target values for ‘headroom’?

Introduction

The use of Hours per patient day (HPPD) plus planned unavailability ("headroom") for staff resource budgeting is, almost, ubiquitous and can be found in many countries, including; Australia (Government of Western Australia, Department of Health 2019), the Republic of Ireland (University College Cork 2018), Malaysia (Drake 2013), the USA (Fike & Smith-Stoner 2016) and the UK (NHS Improvement 2018). HPPD is a long-established, easy to use, metric for determining unit budgets and comparing staff resourcing across organisations (Kirby 2015). HPPD is a measure of *direct* hours per patient day, however, in a 24/7 care environment there are *indirect* staff costs (annual leave, sickness, study leave, parental leave and non-clinical work) that must be included when calculating the staffing budget for a unit. In the budgetary process, these indirect costs, often called 'unavailability', are offset using a 'headroom' allowance (Hunt 2018). It is crucial that this allowance is 'realistic' (NHS Improvement 2018, p11).

The transparency provided by e-rostering systems has enabled unavailability to be examined in greater detail (Drake 2014b), allowing many institutions to define a single, hospital-wide, headroom figure as a Key Performance Indicator (KPI) within their roster policies. However, evidence suggests that headroom can vary by more than 10% from unit-to-unit within the same hospital (Drake 2013). Using data from e-rostering systems and those published within hospital roster policies, this research explores the components of unavailability and contrasts the use of headroom in calculating unit establishments with it's deployment as a management KPI.

Background

The long-standing global shortage of nurses has been widely reported (ICN 2006, ICN 2019). Clearly, the effective use of existing staff is imperative. The objective of workforce scheduling (rostering) is to ensure hospital units have the appropriate staff available to meet the clinical needs of their patients (Rocha et al. 2011). However, staff rosters, typically published 4-8 weeks before they are worked, are based upon a forecast level of patient demand contained within a 'demand template' (Drake 2018). As McIntyre (2016) notes, demand templates, "essentially determine the amount of staff, of a particular type, needed on each shift on each day" (p9).

'Establishment' is the defined level of staffing for a ward, unit or hospital to deliver a specified level of care (Hurst 2003, National Quality Board 2018). Establishment is calculated using the unit 'demand' (the number of staff required to deliver the requisite HPPD *excluding staff unavailability*) plus a planned 'headroom' allowance to cover staff unavailability. Headroom, also referred to variously as 'uplift', 'downtime', 'time-out' or 'non-productive time' (National Quality Board 2018, Hurst, 2003, Drake 2014a, McIntyre, 2016), is "a budgeted allowance to cover annual leave, sickness, study leave, non-clinical working days and parenting" (NHS Improvement, 2018). Both establishment and demand are quoted in Whole-Time Equivalent (WTE) or Full-time Equivalent (FTE). To differentiate between the *planned* allowance for staff absence and the *recorded* absence, captured during the working of the roster, the terms 'headroom' and 'unavailability' will be used respectively.

Headroom, and it's components

Given the importance of headroom in ensuring safe staffing levels, it is imperative that the allowance is 'realistic' (NHS Improvement 2018, p11; Kirby 2015). However, headroom is increasingly being included in hospital roster policies as a performance

measure to be reviewed monthly (NHS Improvement, 2018). The headroom allowance comprises:

- Annual leave: Typically, the largest component of headroom, this varies within a defined range of 13-16% according to the service profile of each unit (NHS Employers, 2019);
- Sickness: In the UK, the annual sickness rate for nurses/midwives has remained steady between 4.48% and 4.83% for the last decade (NHS Digital, 2018), while roster policies often specify a range of 3-5%;
- Study Leave: All nurses and midwives must complete a minimum of 35 hours mandatory Continuing Professional Development (CPD) in 3 years to comply with the NMC (Nursing & Midwifery Council, 2019). This alone equates to 0.6% unavailability, however, beyond this minimum allowance, study leave may vary considerably between units. For example, if all staff are required to attend two days of mandatory training, four days will be required if two individuals share a full-time post (National Quality Board, 2018);
- Parenting: Staff with nominated caring responsibilities are entitled to up to 18-weeks parental leave per child, up to each child's 18th birthday (NHS Employers, 2015). Consequently, parental leave per unit is dependent upon the number of staff with children and how many children those staff have. Importantly, parental leave does not include maternity/paternity leave
- Non-clinical work (often referred to as "Working" or "Management" days) : The role of the Unit Manager includes staffing and administrative duties such , "recruitment, development and discipline, clinical leadership and protocols, stores and budget management as well as an expanding clinical role resulting from junior doctors' reduced working hours" (Wise 2007, p475). It has been

recommended that nurses and midwives with team leadership responsibilities have a minimum of 7.5 hours per week “protected time” in order to focus on these tasks (Scottish Executive Health Department, 2004).

In the UK, the National Quality Board (2018) recently proposed a figure of 22.2% for headroom. This is comparable to the earlier recommendation of 22% (Hurst, 2003) and a broader range of 22-25% by McIntyre (2016). However, in practice, the Carter Report (2016), based upon 32 NHS Trusts, found a range of headroom allowances from 18.5% to 27% (p21). Disparities of this magnitude are disturbing. While over-statement of headroom may prove costly, this can often be resolved by judicious staff redeployment. However, under-stated headroom results in under-stated unit budgets (McIntyre 2016). This has implications for patient care, staff workload, staff well-being, staff retention and, indirectly, cost, due to the use of additional bank and agency staff.

The Study

Aims

Using e-rostering to investigate disparities between planned unavailability (“headroom”) and recorded unavailability and to explore variations in the components of headroom; namely, annual leave, sickness, study leave etc.

Design

Using both quantitative and qualitative data, this study compares data from the e-rostering systems of hospitals and publicly available roster policies to examine the relationship between actual staff unavailability and “headroom” allowance.

Sample

This research uses two sources of data. Firstly, data extracted from the e-rostering systems of 87 NHS Trusts of various sizes for the period 1st Jan 2016 to 31st Dec 2016. This convenience sample represents approximately 37% of NHS Trusts. The sample included a variety of trust 'types' (Foundation (53), Acute (46), Community (44), Mental Health (30)) and sizes (<1,000 beds (34), 1,000-2,999 (45), 3,000-5,000 (7), >5,000 (1)).

The second data source, are a series of 35 publicly available roster policies, collected between 2015-17 as part of a separate study. This convenience sample represents approximately 19% of NHS Trusts.

Data Collection

Collecting planned headroom and recorded unavailability data from the e-rostering system

Each of the Trusts studied employed the same brand of e-rostering system. For each of the Trusts, the annual data for staff unavailability were extracted from the e-rostering system, along with the planned headroom data, into a Microsoft Excel file for analysis. The original sample included 100 trusts. However, 13 trusts contained no data on target headroom or unavailability and were subsequently removed from the sample.

Collecting roster policy data

Using the Google search engine, the data were originally collected during the period between August 2015 and March 2017 using the search terms indicated in table 1. These results were then screened to remove duplicate/older versions of policies and irrelevant documents such as agendas, minutes and newsletters in which roster polices were mentioned. The resulting list of 46 roster policies was then revisited in Oct 2018 to capture any changes/updates. The policies were evaluated using Nvivo

11.4.3, a qualitative data analysis software package, for reference to ‘headroom’, ‘uplift’, downtime’, ‘unavailability’, ‘time-out’ or ‘non-productive time’. This screening produced 35 policies that were subsequently analysed for references to the components of headroom (table 2).

Ethical Considerations

This study uses aggregated, Trust-wide data. The details of all Trusts discussed have been anonymized throughout this research, except, in the case of the named roster policies, which are (or have previously been) freely available online. No data regarding any individual hospital, unit or staff member were used in this research.

Data Analysis

Analysing unavailability data from the e-rostering system

For the 87 trusts examined, the maximum, minimum, mean and median recorded variability were documented (figure 1). However, 11 of these trusts did not include data for headroom. These 11 were then removed from the sample and for each remaining trust, the values of planned headroom were compared with those for recorded unavailability occurring over a 12-month period (figure 2). Finally, for each trust, actual unavailability was subtracted from headroom to provide an estimate of the potential for over- or under-staffing (figure 3).

Analysing headroom data from roster policies

Of 35 policies citing headroom, 13 did not specify any value for headroom or any of its components. Of the remaining 22 roster policies, those of two Trusts, Isle of Wight and Royal United Hospital Bath, included headroom figures of 22% but did not specify the

components of this total. Where available, the value of each component of headroom, as specified within the roster policy, was recorded (table 3).

Validity and Reliability/Rigour

Data collection took place at least one year after the implementation of the e-rostering system to allow unit staff to gain experience in using the system. Despite this, some staff were still learning the intricacies of the e-rostering system and, in some cases, target headroom data had not been entered. The roster policies used in this research were originally collected between 2015-17 as part of a separate study. Where these policies have been updated, the most recent version has been used.

Results

Headroom and unavailability data from e-rostering system

Across the 87 trusts examined, recorded unavailability varied from 16-34% (figure 1). Fourteen trusts were below the 22% headroom figure recommended by Hurst (2003) and the lower limit suggested by McIntyre (2016), whilst 54 were above the upper limit of 25% prescribed by McIntyre (2016). Consequently, the average across the sample, 25.7%, was higher than McIntyre's upper limit. Of the 76 trusts specifying headroom data, headroom varied from 16-26% (figure 2), with an average of 21.1% (marginally lower than Hurst's recommendation and McIntyre's lower limit). For trusts where headroom exceeded unavailability (positive variability) there was the potential for over-staffing. For those where unavailability exceeded headroom (negative variability), this was indicative of under-staffing (figure 3). The mean for both headroom and unavailability were calculated for the remaining 76 units.

Headroom in roster policies

Of 35 policies citing headroom, 13 did not specify any value for headroom or its components. For the remaining 22 policies, headroom varied from 18% to 25%, with an average of 22%. This corresponds to the recommendation of Hurst (2003) and the lower limit of the range recommended by McIntyre (2016). The roster policies of two trusts, Isle of Wight and Royal United Hospital Bath, included headroom figures of 22% but did not specify the components of this total and were therefore excluded from further analysis. For the remaining 20 trusts, the value of each component of headroom, as specified within the roster policy, often varied substantially from trust to trust (table 3). For example, annual leave, the largest component of headroom was only 10% at Barnet, Enfield and Haringey trust, but 16% in the Somerset Partnership Foundation trust. The range of quoted headroom across the sample varied from 18% - 25% (table 4).

Discussion

Unavailability and headroom

In the UK, it has been suggested that a 1% improvement in staff unavailability would provide an additional £339 million to fund further frontline work (NHS Workforce Deployment Expert Group, 2019). To offset this unavailability, trusts are advised to include headroom when setting unit establishments (NHS Improvement, 2018) but, importantly, unavailability and headroom are not the same. At board level, many trusts regard headroom as a Key Performance Indicator (KPI) and set targets for its components in their roster policies (Mersey Care NHS Foundation Trusts, 2017). Often this ‘headroom KPI’ is applied across all units (Mersey Care NHS Foundation Trusts, 2017) (North Tees & Hartlepool NHS Foundation Trusts, 2018). However, this

research highlights large variations in unavailability from 15.8% to 33.6% (fig 1) and contrasting levels of headroom (16-26%). Indeed, 13% of the trusts investigated, do not incorporate any headroom in their e-rostering system. These 11 trusts include that with the highest recorded unavailability (33.6%) and five others that exceed McIntyre's (2016) 25% threshold.

Low values of unavailability (≤ 20%) may be regarded as unusual, given a mandated annual leave allowance between 13-16% (NHS Employers, 2019) and a typical sickness rate of 4.5% (NHS Digital, 2018). Such levels of unavailability may require further scrutiny to confirm that study leave, parenting and non-clinical work are included. In this research, seven trusts recorded unavailability of 20% or less in their e-rostering systems. In the roster policies examined, 18 trusts declared headroom below 20%. The roster policies of two trusts; Barnet, Enfield & Haringey and Mersey Care provide a useful insight (table 3). Barnet, Enfield & Haringey quote a headroom of 19% based upon 10% annual leave and 3% sickness. However, assuming staff plan to use all of their holiday entitlement, annual leave must be between 13-16%. To achieve 10% annual leave, even assuming all staff have less than 5-years' service, each employee would need to forego 9-days holiday. Regarding sickness, the trust policy provides only a 3% allowance, this despite an average trust sickness rate of 4.2% for the nine-year period 2009-18 (NHS Digital, 2018). Similarly, Mersey Care quote a headroom of 18% based upon 3% sickness and no allowance for study leave or non-clinical working. The average sickness rate for Mersey Care for the period 2009-18 was 6.2%. Barnet, Enfield & Haringey and Mersey Care were two of 14 trusts that specified no allowance for parenting (table 3) in their roster policies.

The National Quality Board (2018) offer a sample breakdown of headroom (table 5) that has been used as the basis for some roster policies. However, it appears at odds with guidelines produced by other bodies such as NHS Employers and the NMC. It also makes no allowance for non-clinical work. Clearly, budgeting for unavailability remains challenging and recommendations of headroom value have been omitted from the latest version of the e-rostering, “Good practice guide" (NHS Improvement, 2018). A further barrier to achieving more accurate headroom allowance may be the nature of certain components of unavailability.

Annual Leave and sickness

Annual leave varies within 13-16% according to the service profile of each unit (NHS Employers, 2019) and analysis of roster policies (table 3) supports this with a mean of 14.3%. Given that leave must be requested, and often requires a notice period, the challenge for Unit Managers is ensuring that leave is taken regularly throughout the year - a difficult, but manageable, task in most instances. In contrast, absence due to ‘sickness’ often occurs without notice and is difficult to forecast. Such short-term absence may be due to social and personal factors rather than illness, whereas long-term absence is mostly associated with medical problems (Johnson, Croghan, & Crawford, 2003).

At trust level, given the smoothing effect of multiple units and the annualization of data, variations of sickness absenteeism appear modest and consistent with those typically quoted in roster policies. However, at unit level, the situation is quite different. For example, trust-wide sickness data from North Staffordshire Combined Healthcare Trust for the period 2009/18 reveals an average sickness level of 4.6% (NHS Digital, 2018). However, using data from the trust’s Six Month Safer Staffing Reviews (Wilson

2014, Sylvester 2015, Murray 2016), it is clear that, at unit level, absenteeism due to sickness fluctuates significantly (table 6). Furthermore, taking longitudinal data for each unit, it is clear that some units have prolonged issues with high levels of sickness. In this instance, a trust assigned allowance of 4.6% for unavailability due to sickness, would give insufficient headroom to meet the requirements of, say, the "Summers View" unit, which has an average sickness rate of 10.7% for the period Oct '13 to Jun '16 (table 6). Consequently, it is important, to ensure safe staffing, that the setting of trust targets for sickness unavailability is not confused with realistic unit-based values when determining headroom.

Continuing Professional Development (CPD) and Study Leave

Given that all nurses and midwives must complete 35 hours of mandatory CPD over a 3 years period (Nursing & Midwifery Council, 2019), it would be prudent for roster policies to include a minimum of 0.6% study leave unavailability. Details from the 20 roster policies examined shows a broad spread, including two policies with no allowance for study leave. The National Quality Board (2018) recommend a study leave allowance of 3%, which compares favourably with the 2.3% average value from the roster policies examined. Ultimately, CPD/study leave should be determined by each individual's personal development plan (PDP) and agreed within the staff appraisal process, putting study leave within the purview of the unit manager.

Parental Leave Allowance

While it is unlikely that staff will request a uniform parental leave of 5-days per year for 18-years (NHS Employers, 2015), it may be prudent to make this assumption in the absence of other information. Unfortunately, only six trusts specify parental leave as

a component of headroom in the roster policies examined. Moreover, there is some confusion regarding inclusion of maternity/paternity leave in parenting leave. NHS Employers (2015) clearly state that, “Parental Leave is a separate provision from either maternity or maternity support (paternity) or adoption leave”, while McIntyre (2016) and the National Quality Board (2018) suggest that it be included in ‘parenting’. The Safer Nursing Care Tool (The Shelford Group, 2013) specifies a headroom of 22% but this does not include maternity leave which, as Hinchliffe (2013) notes, “can be compromising when more than 50% of Leeds Teaching Hospitals Trust wards have a maternity leave rate of greater than 3%” (p21). Four of the roster policies that incorporated parenting allowance, included maternity/paternity.

Non-clinical work

Only nine of the policies reviewed included an allowance for non-clinical days, with an average allowance of 1.8%. This is surprising given the management, administration and reporting responsibilities of Unit Managers (Wise, 2007). Clearly, for care targets to be met, more research is required to assign an appropriate degree of non-clinical time to the headroom allowance.

Conclusions

The transparency offered by e-rostering has shone a light on the usage and composition of headroom, allowing it to be administered as a key performance indicator. Consequently, trusts are encouraged to define headroom around idealised ‘target’ values, often to the detriment of headroom as a fundamental component of unit Establishment. In order for a unit to be safely staffed, its headroom must reflect the anticipated unavailability on the unit as accurately as possible – it must be realistic.

Unavailability varies from individual to individual, depending upon; length of service, managerial responsibilities, career development and personal circumstances, such as sickness, number of children etc. Consequently, to ensure establishment is sufficient to meet the demand template, headroom will also vary from unit to unit, given each unit's unique staff profile. Thus, specifying performance, based upon a single trust-wide metric, may prove grossly misleading. Compelling a unit with unavailability between 28-30%, to adopt a trust-wide headroom of 22% may, at best, increase spending on bank/agency staff, or, at worse, jeopardise patient safety. One alternative would be to build headroom from the bottom-up by creating (and maintaining) individual 'headroom profiles' for each member of staff. This would provide an accurate estimate of headroom and identify issues at an individual and unit level. Some components of unavailability, such as annual leave and study leave, can be planned and managed within the unit. Others, such as sickness and parenting, are much less predictable. Some trusts allow annual leave and study leave to be managed by the unit, while managing sickness and parenting centrally based upon unit needs.

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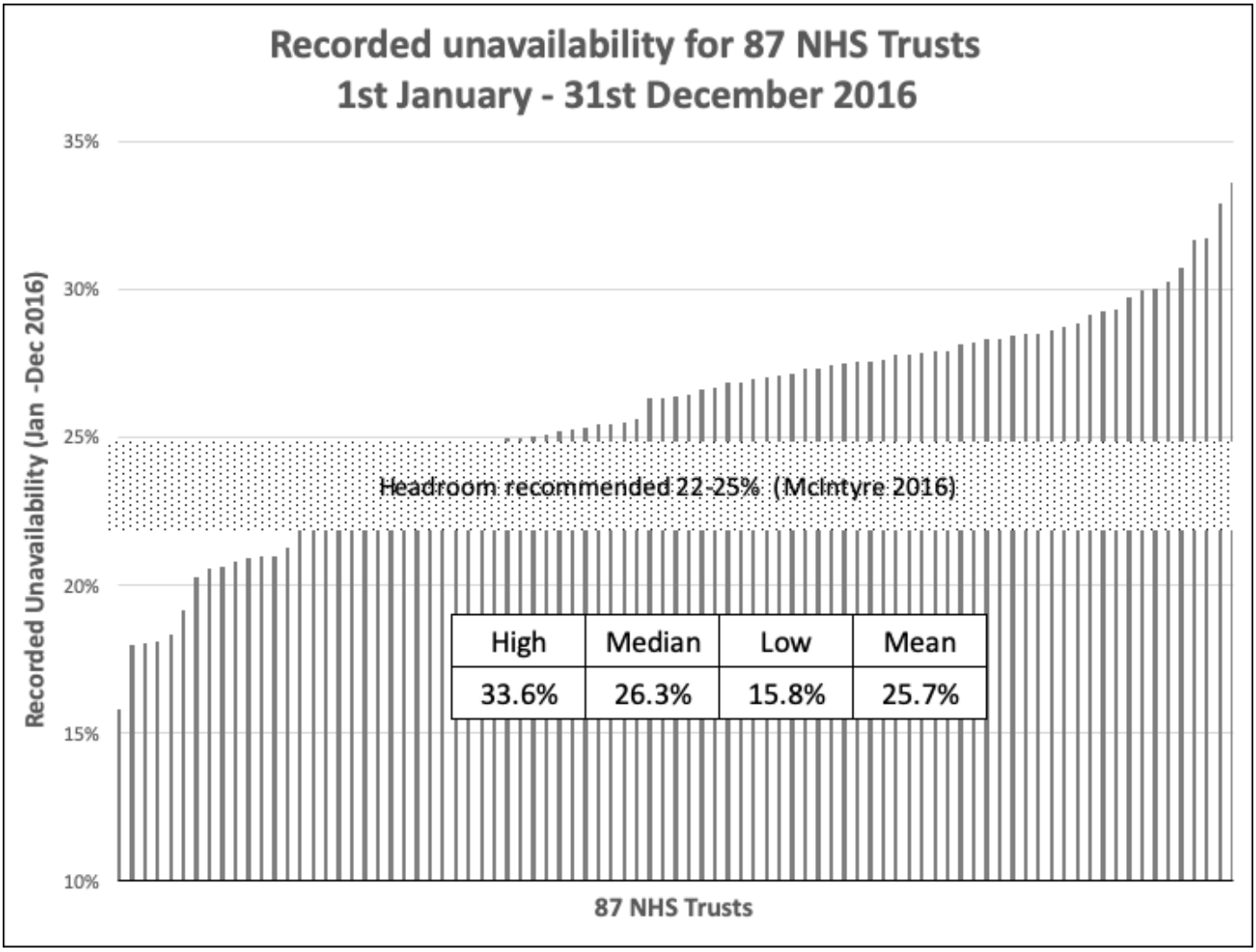

Figure 1: Recorded unavailability for 87 NHS Trusts for the period 1st Jan - 31st Dec 2016

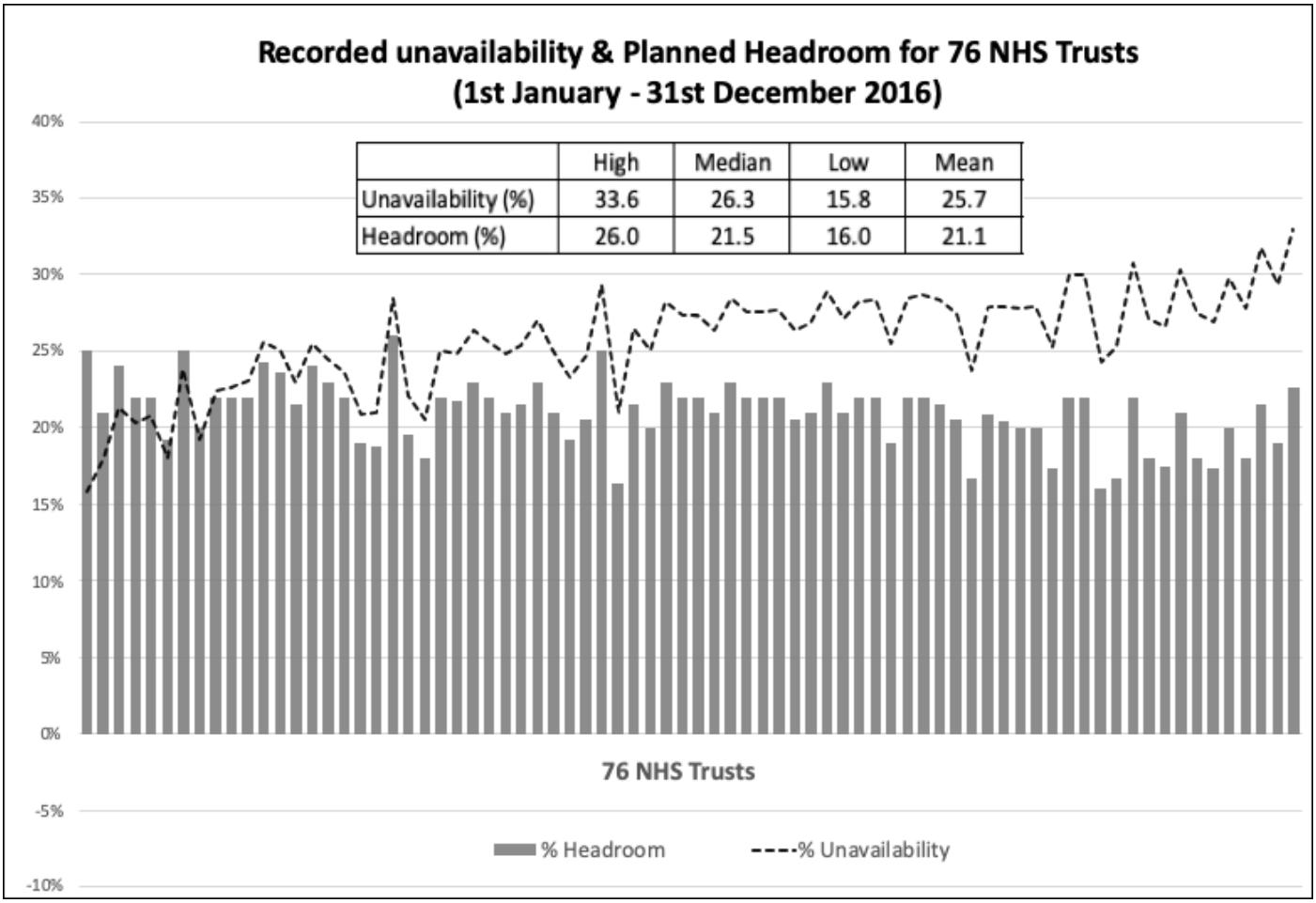

Figure 2: Recorded unavailability and planned headroom for 76 NHS Trusts for the period 1st Jan - 31st Dec 2016

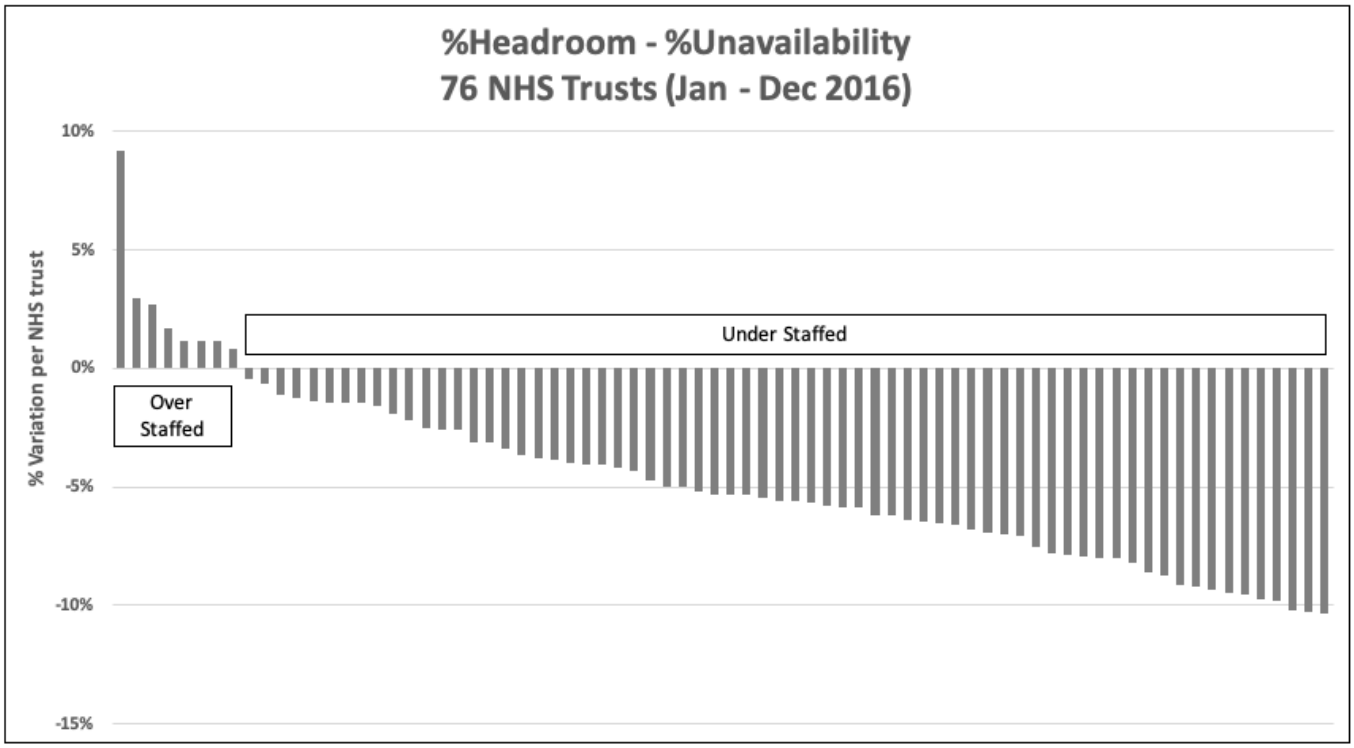

Figure 3: Variation between planned and recorded unavailability for 76 NHS Trusts

Table 1: Roster policy search criteria

Search Term	Hits
"rostering policy" site:nhs.uk filetype:pdf	614
"roster policy" site:nhs.uk filetype:pdf	337
nurse "rostering policy" -site:nhs.uk filetype:pdf	269
nurse "roster policy" -site:nhs.uk filetype:pdf	179
"rostering policy" site:nhs.uk filetype:doc	15
nurse "rostering policy" -site:nhs.uk filetype:doc	9
nurse "roster policy" -site:nhs.uk filetype:doc	4
"roster policy" site:nhs.uk filetype:doc	3
"rostering policy" site:nhs.uk filetype:docx	3
nurse "rostering policy" -site:nhs.uk filetype:docx	3
nurse "roster policy" -site:nhs.uk filetype:docx	2
"roster policy" site:nhs.uk filetype:docx	1

Table

Click here to download Table Table 2- Published roster policies used for analysis.docx

Trust	URL	Date Last Accessed	Policy Version	Date Approved
Aintree University Hospital NHS Foundation Trust	No longer available online	30/08/2016	9.0	Feb-13
Avon and Wiltshire Mental Health Partnership NHS Trust	http://www.awp.nhs.uk/news-publications/publications/policies/	29/04/2019	3.1	Jun-18
Barnet, Enfield and Haringey Mental Health NHS Trust	No longer available online	23/08/2016	1.0	May-11
Blackpool Teaching Hospitals NHS Foundation Trust	https://www.bfwh.nhs.uk/onehr/wp-content/uploads/2016/02/E-Rostering-Management-Guidelines.pdf	03/10/2018	2.0	Jun-15
Bolton NHS Foundation Trust	http://www.boltonft.nhs.uk/wp-content/uploads/2018/02/Roster-Policy-Jan-2018-2.2.pdf	03/10/2018	2.2	not specified
Cheshire and Wirral Partnership NHS Foundation Trust	http://www.cwp.nhs.uk/media/1178/hr18-roster-policy-issue-2.pdf	03/10/2018	1	Jun-12
Cumbria Partnership NHS Foundation Trust	https://cdn.cumbriapartnership.nhs.uk/uploads/policy-documents/Rostering_Policy_POL-004-043.pdf	03/10/2018	POL/004/043	Jan-16
Doncaster and Bassetlaw Hospitals NHS Foundation Trust	https://www.dbth.nhs.uk/document/emp35	29/04/2019	2.0	Jan-15
East Kent Hospitals University NHS Foundation Trust	No longer available online	30/08/2016	1.7	Mar 11
Gloucestershire Hospitals NHS Foundation Trust	No longer available online	12/03/2017	2	Nov-15
Hampshire Community Health Care	No longer available online	12/03/2017	1	Sep-10
Isle of Wight NHS Trust	https://www.iow.nhs.uk/Downloads/Policies/Rostering%20Policy%20for%20all%20Clinical%20Staff.pdf	29/04/2019	3	Dec-18
Leicestershire Partnership NHS Trust	http://www.leicspart.nhs.uk/Library/eRostering PolicyexpJan19.pdf	03/10/2018	not specified	Feb-12
Mersey Care NHS Trust	https://www.merseycare.nhs.uk/media/3438/9-34-e-rostering-policy-uploaded-20-feb-17-rev-feb-18.pdf	29/04/2019	9.3	Feb-17
NHS Borders	http://www.nhsborders.scot.nhs.uk/media/154827/Rostering_Policy.pdf	03/10/2018	not specified	July 13
NHS Tayside	https://www.nhstaysidecdn.scot.nhs.uk/NHSTaysideWeb/idcplg?IdcService=GET_SECURE_FILE&dDocName=PROD_172141&Rendition=web&RevisionSelectionMethod=LatestReleased&noSaveAs=1	29/04/2019	3.0	Jun-18
Northumberland, Tyne & Wear NHS Foundation Trust	https://www.ntw.nhs.uk/content/uploads/2014/08/NTWO59-Rostering-V03.3-Oct-17.pdf	03/10/2018	V03.3	Oct 17
North Devon Healthcare NHS Trust	https://www.northdevonhealth.nhs.uk/wp-content/uploads/2016/07/eRoster-Policy-v2.2-June16.pdf	03/10/2018	2.2	Jun-16
North Tees and Hartlepool NHS Foundation Trust	http://truststore.nth.nhs.uk/sites/policies/mfhandler.asp?file=E%2DRostering%20Policy%20HR62%20v3%20%281%29%2Epdf&table=Policies&field=Policy%20Link&pageType=list&key1=141	03/10/2018	3.0	Jun-18
Nottingham University Hospitals NHS Trust	https://www.nuh.nhs.uk/download.cfm?doc=docm93jijm4n1540.pdf&ver=1645	03/10/2018	5.0	Apr-15
Portsmouth Hospitals NHS Trust	https://www.porthosp.nhs.uk/about-us/policies-and-	03/10/2018	3.1	Mar-16

	guidelines/policies/Nursing%20and%20Midwifery/Roster%20Management%20Policy.doc			
Plymouth Hospitals	https://www.plymouthhospitals.nhs.uk/download.cfm?doc=docm93jijm4n2791.pdf&ver=3523	03/10/2018	5.0	Sep15
Rotherham, Doncaster and South Humber NHS Foundation Trust	https://www.rdash.nhs.uk/wp-content/uploads/2014/05/3-Rostering-Policy-v3.pdf	03/10/2018	3.0	Aug-18
Royal Surrey County Hospital NHS Foundation Trust	http://www.royalsurrey.nhs.uk/wp-content/uploads/2017/12/Roster-Policy-Review-v-3.pdf	03/10/2018	3.0	Nov 16
Royal United Hospital Bath NHS Trust	http://www.ruh.nhs.uk/about/policies/documents/non_clinical_policies/black_hr/HR_156.pdf	03/10/2018	1.0	Oct-12
Salford Royal NHS Foundation Trust	Currently available on intranet only	29/04/2019	2.1	Aug-14
Solent NHS Trust	https://www.solent.nhs.uk/_store/documents/hr35staffrosteringpolicy2016.pdf	03/10/2018	3.0	Feb-16
Somerset Partnership NHS Foundation Trust	http://www.sompar.nhs.uk/media/4821/roster-policy-v3may-2017.pdf	03/10/2018	3.0	May-17
South Staffordshire and Shropshire Healthcare NHS Foundation Trust	http://www.sssft.nhs.uk/images/Policies/eRoster_Policy/E-Rostering_Policy_and_Procedure.pdf	03/10/2018	1.0	Sep-17
Southern Health NHS Foundation Trust	http://www.southernhealth.nhs.uk/_resources/assets/inline/full/0/71095.pdf	03/10/2018	1.0	Mar-18
Surrey and Borders Parnership NHS Foundation Trust	https://www.sabp.nhs.uk/download_file/849/1370	03/10/2018	4.0	Jul-09
Sussex Partnership NHS Foundation Trust	https://policies.sussexpartnership.nhs.uk/download/workforce-1/347-rostering-policy-1/file	03/10/2018	V.2	Nov-17
Tameside Hospital NHS Foundation Trust	No longer available online - available under Freedom of Information request	29/04/2019	3.0	Feb-13
Tees, Esk and Wear Valleys NHS Foundation Trust	https://www.tewv.nhs.uk/content/uploads/2018/12/Staff-Rostering-Procedure.pdf	29/04/2019	4.0	Mar-18
Worcestershire Acute Hospitals NHS Trust	No longer available online	30/08/2016	1.0	Apr-12

Table 2: Published roster policies used for analysis

Table

Click here to download Table Table 3- Components of headroom.docx

Trust	Headroom (%)	Annual Leave (%)	Sickness (%)	Study Leave (%)	Parenting (%)	Working Day (%)
South Staffordshire & Shropshire Healthcare NHS Foundation	25.0	15.8	3.9	3.4	0.0	2.0
Cheshire & Wirral Partnership NHS Foundation	25.0	14.0	4.0	4.0	0.0	3.0
Hampshire Community Health Care	24.0	14.0	3.0	2.0	3.0	2.0
Rotherham, Doncaster & South Humber NHS Foundation	24.0	15.0	4.0	3.0	0.0	2.0
Solent NHS	24.0	15.0	4.0	2.0	2.0	1.0
Sussex Partnership NHS Foundation	24.0	15.0	3.5	5.5	0.0	0.0
Southern Health NHS Foundation	23.0	14.0	3.0	2.0	3.0	1.0
Plymouth Hospitals	22.5	15.0	4.0	1.0	2.5	0.0
NHS Tayside	22.5	15.0	4.0	2.0	1.5	0.0
Aintree University Hospital NHS Foundation	22.0	15.5	4.5	2.0	0.0	0.0
Somerset Partnership NHS Foundation	22.0	16.0	4.0	2.0	0.0	0.0
North Tees & Hartlepool NHS Foundation	21.5	14.0	4.0	3.5	0.0	0.0
Leicestershire Partnership NHS	21.0	14.0	4.0	2.0	0.0	1.0
NHS Borders	21.0	15.0	4.0	0.0	2.0	0.0
Nottingham University Hospitals NHS	21.0	13.5	4.0	3.5	0.0	0.0
Surrey & Borders Parnership NHS Foundation	21.0	11.0	7.0	3.0	0.0	0.0
Northumberland, Tyne & Wear NHS Foundation	21.0	14.0	5.0	2.0	0.0	0.0
Doncaster & Bassetlaw Hospitals NHS Foundation	20.6	15.0	3.6	1.0	0.0	1.0
Barnet, Enfield & Haringey Mental Health NHS	19.0	10.0	3.0	3.0	0.0	3.0
Mersey Care NHS	18.0	15.0	3.0	0.0	0.0	0.0
Mean:	***22.1***	***14.3***	***4.0***	***2.6***†	***2.3***†	***1.8***†

Table 3: Components of headroom, as specified in the roster policies of 20 NHS Trusts

† Zero values excluded when calculating mean value.

Table

		Range	
		Minimum value (%)	Maximum value (%)
From Roster Policies	% Headroom	18.0	25.0
	% Annual Leave	10.0	16.0
	% Sickness	3.0	7.0
	% Study Leave	0.0	5.0
	% Parenting	0.0	3.0
	% Working Day	0.0	3.0

Table 4: The range of headroom components from 20 roster policies

	National Quality Board (2018)	Comments
Annual Leave	14.7%	13-16% according to the service of employee (NHS Employers, 2019);
Sickness/Absence	3.0%	4.48% - 4.83% for the last decade (NHS Digital, 2018)
Study/CPD Leave	3.0%	Minimum of 0.6% (Nursing & Midwifery Council, 2019) for mandatory training only
Parenting	1.0%	2% per child, excluding maternity/paternity leave (NHS Employers, 2015)
Other Leave	0.5%	Includes carers' leave, compassionate leave, etc. (National Quality Board, 2018)
Non-Clinical Work	0.0%	20% "protected time" for Unit Managers (Scottish Executive Health Department, 2004)
Total:	**22.2%**	

Table 5: National Quality Board (2018) sample headroom breakdown

Table

Click here to download Table Table 6- Unit and trust-wide sickness absenteeism.docx

Unit	Oct (2013) - Mar (2014)	Jan-Jun (2015)	July-Dec (2015)	Jan-Jun (2016)	Max	Min	Diff.	Mean
Ward 1	5.1%	8.1%	8.2%	2.1%	*8.2%*	*2.1%*	*6.1%*	*5.9%*
Ward 2	3.1%	9.0%	11.6%	10.6%	*11.6%*	*3.1%*	*8.5%*	*8.6%*
Ward 3	6.3%	8.4%	9.1%	4.6%	*9.1%*	*4.6%*	*4.5%*	*7.1%*
Ward 5	6.1%	4.7%	8.2%	6.3%	*8.2%*	*4.7%*	*3.5%*	*6.3%*
Ward 6	7.2%	8.4%	9.5%	6.5%	*9.5%*	*6.5%*	*3.0%*	*7.9%*
Ward 7	5.0%	5.6%	3.2%	1.8%	*5.6%*	*1.8%*	*3.8%*	*3.9%*
Florence House	9.1%	7.2%	5.1%	10.2%	*10.2%*	*5.1%*	*5.1%*	*7.9%*
Summers View	8.9%	9.3%	10.9%	13.8%	*13.8%*	*8.9%*	*4.9%*	*10.7%*
Darwin Centre	2.3%	2.0%	2.1%	3.2%	*3.2%*	*2.0%*	*1.2%*	*2.4%*
Assessment and Treatment (A&T)	6.0%	6.6%	4.4%	12.1%	*12.1%*	*4.4%*	*7.7%*	*7.3%*
Edward Myers	4.5%	5.7%	2.0%	7.6%	*7.6%*	*2.0%*	*5.6%*	*5.0%*
Trusts-wide Data	**4.7%**	**4.5%**	**4.5%**	**5.0%**	***5.0%***	***4.5%***	***0.6%***	***4.7%***

Table 6: A comparison of unit and trust-wide sickness absenteeism in North Staffordshire Combined Healthcare Trust