Nottingham University Hospitals NHS

NHS Trust

Trust Headquarters

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Thursday 29 November 2012

Councillor G Klein Constitutional Services L H Box 28 Loxley House Station Street Nottingham NG2 3NG

Dear Councillor Klein,

Further to the Committee meeting I attended in September 2012, I am pleased to provide our second quarterly update which describes our improving cancelled operations performance.

In this update I include:

- A summary of the findings of the Mott MacDonald Report (the external review of cancelled operations, published in September 12). The report and our associated commentary was shared with the Committee ahead of publication
- An update on our performance for cancelled operations July-September 12

QUARTERLY UPDATE: 2

Please find below our second quarterly update for the Joint Health Scrutiny Committee, covering each area in turn where information has previously been requested by the Committee.

1. An update on the progress, and outcomes, of the external review commissioned by the Trust into the upsurge in cancellations

The report (external review), published in September 12, concluded that there was no single reason for the cancellations. Rather the increased pressure in

our emergency (and then) elective pathways was caused by the unforeseen and complex interaction of inter-related organisational and service changes.

In February 2011 we reduced our capacity at Nottingham City Hospital by 96 beds. We were able to do so safely by reducing internal waits and hence length of stay. The external report describes that the bed reductions did not cause the increase in cancellations. Several months passed between the bed closures and the marked rise in cancelled operations. But the bed closures did reduce the resilience of our system to changes in patient flows.

In April 2011 we changed the flow of patients to our Nottingham City Hospital and Queen's Medical Centre (QMC) campuses. In line with our strategy to develop QMC as our unselected emergency care centre and City Hospital as the focus for planned care and treatment (including emergency treatment) of long-term diagnoses, we directed patients with known illnesses to City Hospital and those with unknown diagnoses/conditions to QMC. Emergency general surgery (and elective gastroenterology) moved to QMC, patients with long-term illnesses were directed to City Hospital.

The report supports our safety and quality reasons for making these changes to the configuration of services across our campuses. It describes that, notwithstanding the significant number of cancellations and the pressure experienced by our hospitals and staff, our clinical outcomes remained among the finest in the country.

However, the report describes that our planned changes in patient flow were in a system which was already stressed. Although it was not immediately apparent in the number of cancellations or in any of the other numbers we track, the swing (daily and weekly) in the number of patients entering and leaving our hospitals had increased. The anticipated move of elective orthopaedics from QMC to City Hospital in April was delayed by staff concerns. Although bed numbers remained the same at QMC in the run up to winter 2011/12, the types of bed changed. Fewer elective beds were readily available for emergency use when there were peaks in demand.

The overall impact was that our system was less able to cope with extreme day-to-day variations in demand, and we took much longer to recover from very busy days, than in previous years.

In the first weeks of January QMC became overfull with emergency patients and we had no reasonable alternative than to cancel planned many operations. Even then it was several weeks until the system re-established an equilibrium and we were able to reduce cancellations.

Like other NHS hospitals we routinely tracked the number of operations cancelled on-the-day of planned surgery, but not all cancellations (including those before-the-day). Because we avoided on-the-day cancellations if at all possible they did not increase until our systems were very stressed, by which time there had already been a very significant increase in before-the-day cancellations. We were unaware of this huge number of increased cancellations for several weeks.

The report describes that in future we can and should improve our planning to better take account of day-to-day variation in flow in and out of our hospitals. We should not rely on average numbers.

The full report and related action plan are available on our website at <u>www.nuh.nhs.uk</u>. The executive summary is attached as an appendix (Appendix 1).

2. Levels of last minute ('on the day') & prior to the day nonclinical cancelled operations

Mindful of the significant impact of the cancellations on our patients and their families, we have focused our efforts on reducing cancellations for all reasons. We can report that we have largely sustained our significantly improved position since the end of April 2012. Our Chief Executive's Team is sighted and reviews all cancellations weekly and our Trust Board on a monthly basis. This information is published monthly (as in Table 1).

January-October 2012 we cancelled 3,161 operations prior to the day and 977 operations 'on the day' (a total of 4,138 operations). In the same period we performed a total of 106,152 operations at NUH.

Notably, the prior to the day cancellation figures have reduced from 1,894 in Quarter 4 11/12 (Jan-March 12) to 704 in quarter 1 12/13 (April -June 12) and more recently to 443 in quarter 2 for 12/13 (July-September 12).

Please refer to Table 1 (below) for monthly figures for NUH (for 'on the day' and 'total' cancellations) for all reasons January-October 2012 and Table 2 (also below) for the percentage of cancellations (vs total admissions) for the same period.

The total cancellation rate January-March 2012 was 10%, compared to 2.7% for July-September 2012.

DEFINITIONS

- **'On the day' (or 'last minute')** means on or after the day the patient was due to be admitted for their operation (usually on the planned day of the surgery). For example: if a patient is admitted on a Monday for an operation on Tuesday and we cancel the operation on Monday or Tuesday, this would count as an 'on the day' cancellation.
- **'Prior to the day'** means before the day the patient was due to be admitted for their operation (this can range from one day before to several weeks before the scheduled surgery).

Table 1

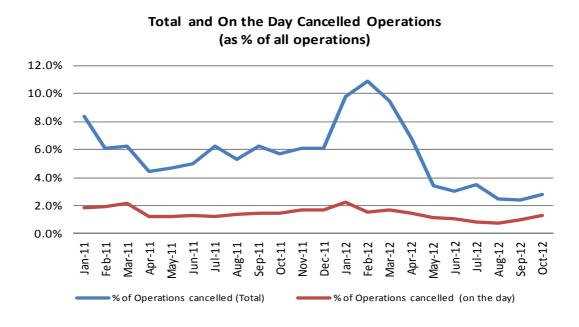
| Reason | Jan-12 | Feb-12 | Mar-12 | Apr-12 | May-12 | Jun-12 | Jul-12 | Aug-12 | Sep-12 | Oct-12 |
|--|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| Ward Bed Unavailable | 417 | 463 | 348 | 156 | 20 | 13 | 21 | 2 | 5 | 24 |
| ICU/HDU Bed Unavailable | 21 | 17 | 41 | 42 | 31 | 9 | 13 | 9 | 6 | 11 |
| Clinical Priority | 110 | 105 | 152 | 117 | 89 | 89 | 86 | 92 | 80 | 102 |
| Staffing | 62 | 98 | 83 | 59 | 73 | 44 | 70 | 34 | 29 | 55 |
| Theatre Time | 64 | 29 | 41 | 37 | 59 | 11 | 15 | 14 | 14 | 11 |
| Administrative Error | 29 | 29 | 31 | 14 | 4 | 9 | 11 | 13 | 11 | 15 |
| Equipment | 10 | 9 | 11 | 12 | 11 | 40 | 57 | 21 | 17 | 9 |
| Other | 38 | 53 | 52 | 30 | 0 | 1 | 6 | 1 | 1 | |
| Total Cancelled Operations | 751 | 803 | 759 | 467 | 287 | 216 | 279 | 186 | 163 | 227 |
| % of Operations cancelled (Total) | 9.82% | 10.90% | 9.44% | 6.79% | 3.40% | 3.04% | 3.46% | 2.51% | 2.36% | 2.80% |
| Cancelled twice for the same procedure | | | | | 12 | 19 | 32 | 12 | 10 | 24 |
| Cancelled 3 times for the same procedure | | | | | 1 | 8 | 16 | 6 | 2 | 3 |
| Cancelled 4 times or more for the same procedure | | | | | 1 | 0 | 5 | 1 | 0 | 0 |
| On the day Cancelled Operations | 169 | 115 | 135 | 98 | 95 | 73 | 64 | 55 | 66 | 107 |
| % of Operations cancelled (on the day) | 2.21% | 1.56% | 1.68% | 1.43% | 1.12% | 1.03% | 0.79% | 0.74% | 0.95% | 1.32% |
| Cancelled twice for the same procedure | 13 | 11 | 11 | 12 | 6 | 2 | 5 | 3 | 1 | 6 |
| Cancelled 3 times for the same procedure | 1 | 3 | 5 | 0 | 1 | 0 | 1 | 0 | 0 | 1 |
| Cancelled 4 times or more for the same procedure | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 |

A total of 227 operations were cancelled in October (including 107 'on the day'). This was higher than the previous months and is the first time since April we have seen an increase in cancellations. This increase was mainly due to 'on the day' cancellations due to ward and critical care bed capacity and clinical priority of other patients in theatre.

As at Monday 26 November (at the time of writing this paper), the latest figures for November for total cancellations was 172. This compares to 227 in October, 163 in September, 186 in August, 279 in July, 216 in June and 287 in May.

We have reviewed all reasons for cancellations. We have made significant improvements in relation to cancellations due to bed unavailability. The main reason for cancellation is in relation to patients being rescheduled to accommodate more clinically-urgent patients. We are progressing further work with clinical colleagues to understand how we further reduce these cancellations while also retaining appropriate access for clinically-urgent cases.





3. Comparator information from similar major trusts in the region

The Department of Health publishes comparative information for all NHS Trusts on a quarterly basis. This allows NUH to see how we compare with our peer organisations (and other Trusts around the region) for 'on the day' cancellations. The recently- published Department of Health figures for Quarter 2 'on the day' cancellations demonstrate that NUH's position compared to peer hospitals has improved markedly since quarter 1.

The comparative data for Quarter 2 (July-September 2012) was published in November 2012 (see Appendix 1). NUH had 193 'on the day' cancellations for Quarter 2, compared to 286 in quarter 1 (April-June 12) and 454 'on the day' cancellations the previous quarter (December 2011-March 2012), as previously shared with the Committee.

215: Sheffield
204: Cambridge
202: Leicester
193: NUH
188: Leeds
159: Birmingham
135: Bristol

We are confident that the Quarter 3 figures for 2012/13 will show a sustained improvement in our performance as a result of the ongoing actions we are taking to reduce cancellations (as described on page 2).

4. Benchmarking performance against the national standard, where available

See response to question 3. The Department of Health comparative data (which is published quarterly) is only available for 'on the day' cancellations. We believe we are first trust in the country to report 'total' cancellations. As these numbers are not routinely collected or made available, as such no comparative data is currently available.

An assessment of the knock-on effect of the upsurge in cancellations on waiting times for non-urgent elective operations, the Committee being concerned that patients suffering cancellations could potentially face ever-longer waiting times for rescheduled operations

We continue to prioritise patients who have operations cancelled when booking operations, to ensure patients have their operations as soon as possible. We have increased the number of patients who we readmit within the 28 day national standard compared to earlier this year. Since April, 81 out of 583 who had their operations cancelled on the day (13.8%) were not readmitted for their operation within the 28 day standard. The national target is 5%.

We have more work to do to improve our performance Vs the 28 day readmission percentage although there are signs that our performance is improving. April 12 – 25 patients (were not readmitted within 28 days), May 12 – 15 patients, June 12 – 11, July 12 – 6, August 12 – 7, September 12 – 9 and October 12 – 8.

There are a very small number of cases each month where either the complexity of the treatment and the resources required to deliver it or the prioritisation of more clinically-urgent patients means it is not possible to offer earlier dates without compromising patient safety or subjecting another patient to cancellation.

If there is any further information that I can provide in advance of the Committee meeting on 11 December please do not hesitate to contact me. I look forward to seeing you at next month's meeting.

Yours sincerely,

Tober Hora

Peter Homa, Chief Executive Appendix 1 – Executive Summary – Mott MacDonald Report (external review)

Executive Summary

Overview

- This report has been commissioned to identify the main reasons for the high level of elective cancellations at Nottingham University Hospitals NHS Trust (NUH) in the winter of 2011/12. Its findings and recommendations will be used to improve resilience and performance in the future.
- The path which led to the unacceptably high level of cancellations was complex, and there was no single cause of failure.
- The trust has maintained its position as one of the best in the country in terms of clinical outcomes. To have sustained this while navigating through the significant disruption of last year is a considerable achievement.
- 4. The relative contribution of individual factors to the cancellations is difficult to assess, as there were multiple interdependencies and a cumulative impact. We consider the most important single contributor was loss of synchronicity in a planned reconfiguration of services across the Trust's two main campuses. This reconfiguration, moving emergency surgery and undifferentiated medical emergencies to the QMC campus and elective activity to the City campus was undertaken for valid patient safety, clinical quality and workforce sustainability reasons. During the process of reconfiguration the planned revised flow of emergency and elective patients to the two campuses became|un-synchronised. This led to a loss of resilience and unpredictable changes in the system when controls were applied in an effort to meet demand and maintain both emergency and elective services.
- Reporting systems were not sensitive enough to changes in processes (in emergency and elective services) and did not pick up early warnings that resilience had been lost and that consequently (1) elective cancellations were higher than should be expected and (2) there was an increasing underlying number of emergency patients placed on non-core-specialty wards (outliers).
- If individual services had considered more fully the impact of local changes on the overall capacity of the system, and had this been more visible to the leadership team, the Trust could have managed the loss of synchronicity (and hence resilience) more effectively.
- The removal of 96 beds from the City Hospital campus in February 2011 did not itself cause the increase in cancellations, though it was one of the many elements increasing stress on the system.

8. A number of other internal and external factors relating to patient volumes and case-mix have been investigated as possible contributory factors to the rise in cancellations. These include: an increased number of emergency admissions, an increase in the acuity of ED attendances and subsequent admissions, an increasing age of emergency admissions, and a longer length of stay of emergency admissions. The report finds that these played a relatively minor part in the system deterioration and increased cancellations.

Key Findings

- KF1: Changes made to the organisation of services across the two campuses resulted in a loss of resilience in the system : it was unable to cope with the combination of peak demands for emergency admissions and continuing elective demand, and to recover from the destabilisation caused by the emergency peaks. The changes caused the system to behave in an unexpected manner, rendering forecasts and planning assumptions invalid. This was a novel situation that could not have been predicted from previous experience.
- KF2: Disparate information systems and flows made collation of a clear and unified picture challenging. Information provided to all levels of Trust management no longer represented the whole system, due to multiple planned and tactical changes (both local and corporate).
- KF3: The growing problem was not visible early. In retrospect the system had probably changed (become unstable and unpredictable) by September 2011. Indeed there is some evidence that there had been a change in the system (to a different but relatively steady state) at least a year earlier (before the closure of beds in February 2010 and before the service reconfigurations through 2011/12). But the Trust's routine reports (supporting decisionmaking) did not signal the growing system failure until December 2012.
- KF4: A multitude of local and corporate process workarounds were enacted to cope with a system that was becoming unstable and not reacting as it had previously to changes in demand or to control measures. Rather than reasserting control, in the absence of an understanding of the fundamental system-wide issues, these workarounds amplified the instability.

Conclusion

There was no single cause of the increased cancellations in winter 11/12. Three factors were pre-eminent:

- a. Although most individual decisions about the emergency and elective pathways over the period were reasonable, they were based on incomplete data and forecast models which over-relied on average previous numbers (rather than 'worst case' numbers and variation).
- b. Service moves between QMC and City (reconfiguration) did not happen with the anticipated choreography. This led to a loss of flexibility of bed use at QMC; notably the number of beds readily available for emergencies (the potential outlier "buffer") at QMC was reduced. The availability of beds for elective operations (at QMC and City) became more difficult to predict. This inefficiency in bed use coincided with a period in which emergency and elective volumes were unsteady because of Christmas and bank holidays. To maintain capacity for emergencies the Trust cancelled an increasing number of electives. In an effort to maintain elective activity the Trust rescheduled elective operations as soon as there seemed to be some capacity. This led to an increased swing in the pattern of flow into and out of the hospital beds. The day-to-day and week-to-week fluctuation in availability of beds for operations increased dramatically. Such a system is unstable, difficult to control, and lacks resilience if faced with short-term (days or even hours) increases in demand.
- c. There was limited awareness of this instability and loss of resilience, the swinging day-by-day flow, and the number of cancellations, because information on prior-to-the-day cancellations was not routinely collated across the trust, or escalated through its performance management mechanisms. On-the-day cancellations, which the Trust did track, are a much less sensitive indicator of system deterioration. This in turn meant that the corporate response, integrated across all directorates, was later than it might have been. By the time of this corporate escalation and response there had been many hundreds of additional prior-to-the-day cancellations.
- 10. The combination of a severe loss of resilience, inadequate information flows and an inability to fully coordinate cancellations led to an increasingly unstable system, running with a high background level of cancellations (to which the 2010 system change may have contributed earlier). In this circumstance a relatively minor seasonal increase in demand over the winter of 2011/12 had a disproportionate impact because the system could no longer cope with any further variation (or increase) in demand. The planned responses to cope with even short-term (hours or days) changes in demand were no longer sufficient, and the Trust found itself in uncharted waters, requiring wholesale cancellation of operations a situation that had not been modelled, so decisions could not be based on any reliable projections.

11. Focus should now be brought to aligning the resources on the two sites with the demand on them. This needs to be supported by an accurate and timely picture of the status of the trust's emergency and elective systems, which will require unification of its information systems to enable effective decision-making.

Appendix 2 – Benchmarking figures published by the Department of Health

The number of last minute cancelled elective operations in the quarter for non-clinical reasons, NHS provider organisations in England for Quarter 2 (July-September 2012)

| SHA Code | Organi sation Code | Organisation Name | Number of last minute elective operations cancelled for non clinical reasons | Number of patients not treated within 28 days of last minute elective cancella tion |
|-------------|--------------------------|---|--|--|
| _ | _ | England (Excluding Independent Sector) | 13,122 | 577 |
| | | England (Including Independent | 10,122 | 377 |
| - | - | Sector) | 13,154 | 590 |

| Q30 | RE9 | SOUTH TYNESIDE NHS FOUNDATION TRUST | 28 | 0 |
|-----|-------|-------------------------------------|-----|----|
| | | CITY HOSPITALS SUNDERLAND NHS | | |
| Q30 | RLN | FOUNDATION TRUST | 82 | 1 |
| | | GATESHEAD HEALTH NHS FOUNDATION | | |
| Q30 | RR7 | TRUST | 15 | 0 |
| | | THE NEWCASTLE UPON TYNE HOSPITALS | | |
| Q30 | RTD | NHS FOUNDATION TRUST | 130 | 0 |
| | | NORTHUMBRIA HEALTHCARE NHS | | |
| Q30 | RTF | FOUNDATION TRUST | 61 | 0 |
| | | SOUTH TEES HOSPITALS NHS FOUNDATION | | |
| Q30 | RTR | TRUST | 100 | 7 |
| | | NORTH TEES AND HARTLEPOOL NHS | | |
| Q30 | RVW | FOUNDATION TRUST | 36 | 0 |
| | | COUNTY DURHAM AND DARLINGTON NHS | | |
| Q30 | RXP | FOUNDATION TRUST | 80 | 1 |
| Q31 | NT497 | BMI GISBURNE PARK HOSPITAL | 0 | 0 |
| | | WIRRAL UNIVERSITY TEACHING HOSPITAL | | |
| Q31 | RBL | NHS FOUNDATION TRUST | 74 | 12 |
| | | ST HELENS AND KNOWSLEY HOSPITALS | | |
| Q31 | RBN | NHS TRUST | 90 | 0 |
| | | LIVERPOOL HEART AND CHEST NHS | | |
| Q31 | RBQ | FOUNDATION TRUST | 5 | 0 |
| | | ALDER HEY CHILDREN'S NHS FOUNDATION | | |
| Q31 | RBS | TRUST | 5 | 0 |
| | | MID CHESHIRE HOSPITALS NHS | | |
| Q31 | RBT | FOUNDATION TRUST | 89 | 10 |
| Q31 | RBV | THE CHRISTIE NHS FOUNDATION TRUST | 2 | 0 |
| Q31 | REM | AINTREE UNIVERSITY HOSPITAL NHS | 82 | 9 |

| | | FOUNDATION TRUST | | |
|------|-------|---|-----|----|
| | | LIVERPOOL WOMEN'S NHS FOUNDATION | | |
| Q31 | REP | TRUST | 27 | 1 |
| | | THE WALTON CENTRE NHS FOUNDATION | | |
| Q31 | RET | TRUST | 47 | 3 |
| Q31 | RJN | EAST CHESHIRE NHS TRUST | 22 | 0 |
| | | COUNTESS OF CHESTER HOSPITAL NHS | | |
| Q31 | RJR | FOUNDATION TRUST | 55 | 0 |
| _ | | UNIVERSITY HOSPITAL OF SOUTH | | |
| Q31 | RM2 | MANCHESTER NHS FOUNDATION TRUST | 144 | 1 |
| Q31 | RM3 | SALFORD ROYAL NHS FOUNDATION TRUST | 54 | 0 |
| Q31 | RMC | BOLTON NHS FOUNDATION TRUST | 94 | 1 |
| | | TAMESIDE HOSPITAL NHS FOUNDATION | | |
| Q31 | RMP | TRUST | 35 | 0 |
| | | NORTH CUMBRIA UNIVERSITY HOSPITALS | | |
| Q31 | RNL | NHS TRUST | 73 | 4 |
| 0.04 | | ROYAL LIVERPOOL AND BROADGREEN | | |
| Q31 | RQ6 | UNIVERSITY HOSPITALS NHS TRUST | 55 | 1 |
| 001 | DDE | WRIGHTINGTON, WIGAN AND LEIGH NHS | 100 | 2 |
| Q31 | RRF | | 130 | 3 |
| Q31 | RTX | UNIVERSITY HOSPITALS OF MORECAMBE | 168 | 22 |
| Q31 | RIA | BAY NHS FOUNDATION TRUST SOUTHPORT AND ORMSKIRK HOSPITAL | 108 | 22 |
| Q31 | RVY | NHS TRUST | 63 | 3 |
| 031 | KV1 | CENTRAL MANCHESTER UNIVERSITY | 03 | 3 |
| Q31 | RW3 | HOSPITALS NHS FOUNDATION TRUST | 92 | 2 |
| Q31 | RW6 | PENNINE ACUTE HOSPITALS NHS TRUST | 141 | 0 |
| Q31 | RWJ | STOCKPORT NHS FOUNDATION TRUST | 97 | 3 |
| 231 | KVVJ | WARRINGTON AND HALTON HOSPITALS | 77 | 5 |
| Q31 | RWW | NHS FOUNDATION TRUST | 119 | 3 |
| 201 | | BLACKPOOL TEACHING HOSPITALS NHS | | 0 |
| Q31 | RXL | FOUNDATION TRUST | 54 | 0 |
| | | LANCASHIRE TEACHING HOSPITALS NHS | | |
| Q31 | RXN | FOUNDATION TRUST | 128 | 5 |
| Q31 | RXR | EAST LANCASHIRE HOSPITALS NHS TRUST | 103 | 5 |
| Q32 | NTP23 | ECCLESHILL NHS TREATMENT CENTRE | 29 | 13 |
| | | BRADFORD TEACHING HOSPITALS NHS | | |
| Q32 | RAE | FOUNDATION TRUST | 143 | 0 |
| | | YORK TEACHING HOSPITAL NHS | | |
| Q32 | RCB | FOUNDATION TRUST | 151 | 1 |
| | | HARROGATE AND DISTRICT NHS | | |
| Q32 | RCD | FOUNDATION TRUST | 35 | 0 |
| Q32 | RCF | AIREDALE NHS FOUNDATION TRUST | 31 | 0 |
| | | SHEFFIELD CHILDREN'S NHS FOUNDATION | | |
| Q32 | RCU | TRUST | 15 | 0 |
| | | BARNSLEY HOSPITAL NHS FOUNDATION | | |
| Q32 | RFF | TRUST | 51 | 0 |
| Q32 | RFR | THE ROTHERHAM NHS FOUNDATION TRUST | 72 | 0 |
| _ | | SHEFFIELD TEACHING HOSPITALS NHS | | |
| Q32 | RHQ | FOUNDATION TRUST | 215 | 2 |
| 000 | | NORTHERN LINCOLNSHIRE AND GOOLE | | - |
| Q32 | RJL | HOSPITALS NHS FOUNDATION TRUST | 75 | 0 |
| 000 | | DONCASTER AND BASSETLAW HOSPITALS | | ~ |
| Q32 | RP5 | NHS FOUNDATION TRUST | 83 | 0 |
| Q32 | RR8 | LEEDS TEACHING HOSPITALS NHS TRUST | 188 | 7 |

| | | HULL AND EAST YORKSHIRE HOSPITALS | | _ |
|------|------|---|-----|----|
| Q32 | RWA | NHS TRUST | 163 | 0 |
| Q32 | RWY | CALDERDALE AND HUDDERSFIELD NHS FOUNDATION TRUST | 75 | 0 |
| Q32 | RXF | MID YORKSHIRE HOSPITALS NHS TRUST | 86 | 0 |
| 0.32 | | CHESTERFIELD ROYAL HOSPITALS INTO TROST | 00 | 0 |
| Q33 | RFS | FOUNDATION TRUST | 63 | 2 |
| 033 | KI S | SHERWOOD FOREST HOSPITALS NHS | 03 | ۷. |
| Q33 | RK5 | FOUNDATION TRUST | 59 | 1 |
| 033 | | KETTERING GENERAL HOSPITAL NHS | | 1 |
| Q33 | RNQ | FOUNDATION TRUST | 75 | 1 |
| 200 | | NORTHAMPTON GENERAL HOSPITAL NHS | , 0 | |
| Q33 | RNS | TRUST | 126 | 0 |
| 200 | | DERBY HOSPITALS NHS FOUNDATION | | |
| Q33 | RTG | TRUST | 61 | 0 |
| | | UNITED LINCOLNSHIRE HOSPITALS NHS | _ | |
| Q33 | RWD | TRUST | 190 | 68 |
| | | UNIVERSITY HOSPITALS OF LEICESTER | | |
| Q33 | RWE | NHS TRUST | 202 | 15 |
| | | NOTTINGHAM UNIVERSITY HOSPITALS NHS | | |
| Q33 | RX1 | TRUST | 193 | 22 |
| | | DERBYSHIRE COMMUNITY HEALTH | | |
| Q33 | RY8 | SERVICES NHS TRUST | 18 | 0 |
| | | SHROPSHIRE COMMUNITY HEALTH NHS | | |
| Q34 | R1D | TRUST | 0 | 0 |
| Q34 | RBK | WALSALL HEALTHCARE NHS TRUST | 42 | 0 |
| | | SOUTH WARWICKSHIRE NHS FOUNDATION | | |
| Q34 | RJC | TRUST | 11 | 0 |
| | | MID STAFFORDSHIRE NHS FOUNDATION | | |
| Q34 | RJD | TRUST | 80 | 4 |
| | | UNIVERSITY HOSPITAL OF NORTH | | |
| Q34 | RJE | STAFFORDSHIRE NHS TRUST | 229 | 3 |
| | | BURTON HOSPITALS NHS FOUNDATION | | |
| Q34 | RJF | TRUST | 50 | 0 |
| | | UNIVERSITY HOSPITALS COVENTRY AND | | - |
| Q34 | RKB | WARWICKSHIRE NHS TRUST | 94 | 2 |
| | | THE ROBERT JONES AND AGNES HUNT | | |
| 004 | DI 1 | ORTHOPAEDIC HOSPITAL NHS | 10 | 0 |
| Q34 | RL1 | | 18 | 0 |
| Q34 | RL4 | THE ROYAL WOLVERHAMPTON NHS TRUST | 72 | 0 |
| Q34 | RLQ | WYE VALLEY NHS TRUST | 17 | 0 |
| Q34 | RLT | GEORGE ELIOT HOSPITAL NHS TRUST | 37 | 1 |
| 004 | D.U. | BIRMINGHAM WOMEN'S NHS FOUNDATION | | 0 |
| Q34 | RLU | | 4 | 0 |
| 004 | DNIA | THE DUDLEY GROUP NHS FOUNDATION | 10 | 0 |
| Q34 | RNA | TRUST BIRMINGHAM CHILDREN'S HOSPITAL NHS | 40 | 0 |
| 024 | 002 | | 107 | 4 |
| Q34 | RQ3 | FOUNDATION TRUST HEART OF ENGLAND NHS FOUNDATION | 107 | 6 |
| Q34 | RR1 | TRUST | 150 | 0 |
| 234 | | THE ROYAL ORTHOPAEDIC HOSPITAL NHS | 100 | U |
| Q34 | RRJ | FOUNDATION TRUST | 8 | 0 |
| 201 | | UNIVERSITY HOSPITALS BIRMINGHAM NHS | | 0 |
| Q34 | RRK | FOUNDATION TRUST | 159 | 0 |
| Q34 | RWP | WORCESTERSHIRE ACUTE HOSPITALS NHS | 90 | 1 |
| 204 | INVE | WORGESTERSTINE ACOTE HOSFITALS INTS | 70 | I |

| | | TRUST | | |
|------|-------|--------------------------------------|-----|----|
| | | SANDWELL AND WEST BIRMINGHAM | | |
| Q34 | RXK | HOSPITALS NHS TRUST | 85 | 1 |
| | | SHREWSBURY AND TELFORD HOSPITAL | | |
| Q34 | RXW | NHS TRUST | 207 | 45 |
| | | BIRMINGHAM COMMUNITY HEALTHCARE | | |
| Q34 | RYW | NHS TRUST | 0 | 0 |
| Q35 | 5PT | SUFFOLK PCT | 2 | 0 |
| Q35 | NNQ01 | BRAINTREE COMMUNITY HOSPITAL | 2 | 0 |
| 035 | | SOUTHEND UNIVERSITY HOSPITAL NHS | 2 | 0 |
| 0.05 | | | 140 | , |
| Q35 | RAJ | FOUNDATION TRUST | 140 | 6 |
| Q35 | RC1 | BEDFORD HOSPITAL NHS TRUST | 34 | 4 |
| | | LUTON AND DUNSTABLE HOSPITAL NHS | | |
| Q35 | RC9 | FOUNDATION TRUST | 30 | 1 |
| | | THE QUEEN ELIZABETH HOSPITAL, KING'S | | |
| Q35 | RCX | LYNN, NHS FOUNDATION TRUST | 99 | 15 |
| | | BASILDON AND THURROCK UNIVERSITY | | |
| Q35 | RDD | HOSPITALS NHS FOUNDATION TRUST | 70 | 4 |
| | | COLCHESTER HOSPITAL UNIVERSITY NHS | | |
| Q35 | RDE | FOUNDATION TRUST | 25 | 0 |
| | | PAPWORTH HOSPITAL NHS FOUNDATION | | |
| Q35 | RGM | TRUST | 96 | 3 |
| 200 | Rom | PETERBOROUGH AND STAMFORD | /0 | 0 |
| Q35 | RGN | HOSPITALS NHS FOUNDATION TRUST | 101 | 11 |
| 033 | KGN | JAMES PAGET UNIVERSITY HOSPITALS NHS | 101 | 11 |
| 0.25 | | | FO | 2 |
| Q35 | RGP | FOUNDATION TRUST | 53 | 2 |
| Q35 | RGQ | IPSWICH HOSPITAL NHS TRUST | 56 | 0 |
| Q35 | RGR | WEST SUFFOLK NHS FOUNDATION TRUST | 39 | 0 |
| | | CAMBRIDGE UNIVERSITY HOSPITALS NHS | | |
| Q35 | RGT | FOUNDATION TRUST | 204 | 7 |
| | | NORFOLK AND NORWICH UNIVERSITY | | |
| Q35 | RM1 | HOSPITALS NHS FOUNDATION TRUST | 226 | 37 |
| | | MID ESSEX HOSPITAL SERVICES NHS | | |
| Q35 | RQ8 | TRUST | 186 | 6 |
| | | HINCHINGBROOKE HEALTH CARE NHS | | |
| Q35 | RQQ | TRUST | 45 | 2 |
| 200 | Ree | THE PRINCESS ALEXANDRA HOSPITAL NHS | 10 | 2 |
| Q35 | RQW | TRUST | 62 | 10 |
| 000 | KQW | WEST HERTFORDSHIRE HOSPITALS NHS | 02 | 10 |
| Q35 | RWG | TRUST | 103 | 4 |
| Q35 | RWG | | 103 | 6 |
| 0.05 | DMU | EAST AND NORTH HERTFORDSHIRE NHS | 0.0 | 0 |
| Q35 | RWH | TRUST | 23 | 0 |
| | | CAMBRIDGESHIRE COMMUNITY SERVICES | | |
| Q35 | RYV | NHS TRUST | 2 | 0 |
| Q36 | R1H | BARTS HEALTH NHS TRUST | 243 | 0 |
| | | ROYAL FREE LONDON NHS FOUNDATION | | |
| Q36 | RAL | TRUST | 102 | 0 |
| | | ROYAL NATIONAL ORTHOPAEDIC HOSPITAL | | |
| Q36 | RAN | NHS TRUST | 28 | 0 |
| - | | NORTH MIDDLESEX UNIVERSITY HOSPITAL | | |
| Q36 | RAP | NHS TRUST | 14 | 0 |
| 200 | | THE HILLINGDON HOSPITALS NHS | | 0 |
| Q36 | RAS | FOUNDATION TRUST | 29 | 3 |
| | | | | |
| Q36 | RAX | KINGSTON HOSPITAL NHS TRUST | 18 | 1 |
| Q36 | RC3 | EALING HOSPITAL NHS TRUST | 25 | 0 |

| 0.27 | | BARKING, HAVERING AND REDBRIDGE | | 2 |
|------|-------|--------------------------------------|-----|----|
| Q36 | RF4 | UNIVERSITY HOSPITALS NHS TRUST | 83 | 2 |
| 001 | DEW | WEST MIDDLESEX UNIVERSITY HOSPITAL | 10 | 0 |
| Q36 | RFW | NHS TRUST | 12 | 0 |
| 001 | DIA | GUY'S AND ST THOMAS' NHS FOUNDATION | 0.4 | 1 |
| Q36 | RJ1 | TRUST | 94 | 1 |
| Q36 | RJ2 | LEWISHAM HEALTHCARE NHS TRUST | 50 | 7 |
| Q36 | RJ6 | CROYDON HEALTH SERVICES NHS TRUST | 61 | 0 |
| Q36 | RJ7 | ST GEORGE'S HEALTHCARE NHS TRUST | 78 | 2 |
| | | KING'S COLLEGE HOSPITAL NHS | | |
| Q36 | RJZ | FOUNDATION TRUST | 118 | 12 |
| Q36 | RKE | THE WHITTINGTON HOSPITAL NHS TRUST | 20 | 0 |
| 1 | | GREAT ORMOND STREET HOSPITAL FOR | | |
| Q36 | RP4 | CHILDREN NHS FOUNDATION TRUST | 36 | 0 |
| | | MOORFIELDS EYE HOSPITAL NHS | | |
| Q36 | RP6 | FOUNDATION TRUST | 39 | 0 |
| | | THE ROYAL MARSDEN NHS FOUNDATION | | |
| Q36 | RPY | TRUST | 7 | 0 |
| | | CHELSEA AND WESTMINSTER HOSPITAL | | |
| Q36 | RQM | NHS FOUNDATION TRUST | 19 | 2 |
| | | HOMERTON UNIVERSITY HOSPITAL NHS | | |
| Q36 | RQX | FOUNDATION TRUST | 6 | 0 |
| | | UNIVERSITY COLLEGE LONDON HOSPITALS | | |
| Q36 | RRV | NHS FOUNDATION TRUST | 152 | 14 |
| | | ROYAL BROMPTON AND HAREFIELD NHS | | |
| Q36 | RT3 | FOUNDATION TRUST | 92 | 0 |
| | | NORTH WEST LONDON HOSPITALS NHS | | |
| Q36 | RV8 | TRUST | 112 | 1 |
| | | BARNET AND CHASE FARM HOSPITALS NHS | | |
| Q36 | RVL | TRUST | 88 | 0 |
| | | EPSOM AND ST HELIER UNIVERSITY | | - |
| Q36 | RVR | HOSPITALS NHS TRUST | 74 | 0 |
| | | IMPERIAL COLLEGE HEALTHCARE NHS | | |
| Q36 | RYJ | TRUST | 190 | 6 |
| Q36 | RYQ | SOUTH LONDON HEALTHCARE NHS TRUST | 372 | 17 |
| Q37 | NTP16 | WILL ADAMS NHS TREATMENT CENTRE | 1 | 0 |
| 407 | | ROYAL SURREY COUNTY HOSPITAL NHS | | 0 |
| Q37 | RA2 | FOUNDATION TRUST | 68 | 2 |
| 207 | 10.2 | FRIMLEY PARK HOSPITAL NHS | | 2 |
| Q37 | RDU | FOUNDATION TRUST | 40 | 0 |
| Q37 | RN7 | DARTFORD AND GRAVESHAM NHS TRUST | 44 | 2 |
| Q37 | RPA | MEDWAY NHS FOUNDATION TRUST | 80 | 0 |
| 037 | KFA | QUEEN VICTORIA HOSPITAL NHS | 00 | 0 |
| Q37 | RPC | FOUNDATION TRUST | 8 | 0 |
| Q37 | RPC | | 0 | 0 |
| 027 | עדס | ASHFORD AND ST PETER'S HOSPITALS NHS | 12 | 0 |
| Q37 | RTK | FOUNDATION TRUST | 12 | 0 |
| 007 | ото | SURREY AND SUSSEX HEALTHCARE NHS | 25 | 2 |
| Q37 | RTP | | 35 | 2 |
| 007 | | EAST KENT HOSPITALS UNIVERSITY NHS | 100 | 0 |
| Q37 | RVV | FOUNDATION TRUST | 103 | 8 |
| 007 | | MAIDSTONE AND TUNBRIDGE WELLS NHS | ~~ | ~ |
| Q37 | RWF | TRUST | 39 | 0 |
| Q37 | RXC | EAST SUSSEX HEALTHCARE NHS TRUST | 53 | 1 |
| | | BRIGHTON AND SUSSEX UNIVERSITY | | |
| Q37 | RXH | HOSPITALS NHS TRUST | 96 | 0 |

| Q37 | RYR | WESTERN SUSSEX HOSPITALS NHS TRUST | 115 | 3 |
|------|--------|--------------------------------------|----------|----------|
| Q38 | R1F | ISLE OF WIGHT NHS TRUST | 34 | 6 |
| 200 | | HEATHERWOOD AND WEXHAM PARK | 01 | 0 |
| Q38 | RD7 | HOSPITALS NHS FOUNDATION TRUST | 175 | 18 |
| 200 | | MILTON KEYNES HOSPITAL NHS | 170 | |
| Q38 | RD8 | FOUNDATION TRUST | 70 | 0 |
| 200 | | UNIVERSITY HOSPITAL SOUTHAMPTON NHS | , 0 | |
| Q38 | RHM | FOUNDATION TRUST | 92 | 6 |
| Q38 | RHU | PORTSMOUTH HOSPITALS NHS TRUST | 82 | 1 |
| 030 | KIIU | ROYAL BERKSHIRE NHS FOUNDATION | 02 | I |
| Q38 | RHW | TRUST | 67 | 5 |
| 0.00 | | HAMPSHIRE HOSPITALS NHS FOUNDATION | 07 | |
| Q38 | RN5 | TRUST | 29 | 0 |
| 030 | KND | OXFORD UNIVERSITY HOSPITALS NHS | Data not | Data not |
| Q38 | RTH | TRUST | | |
| 030 | КІП | SOUTHERN HEALTH NHS FOUNDATION | returned | returned |
| Q38 | RW1 | TRUST | 15 | 0 |
| 030 | K VV I | BUCKINGHAMSHIRE HEALTHCARE NHS | 10 | 0 |
| Q38 | RXQ | TRUST | 60 | 2 |
| - | | | | 2 |
| Q39 | 5QH | GLOUCESTERSHIRE PCT | 0 | 0 |
| Q39 | RA3 | WESTON AREA HEALTH NHS TRUST | 2 | 0 |
| 000 | 544 | YEOVIL DISTRICT HOSPITAL NHS | 10 | 0 |
| Q39 | RA4 | FOUNDATION TRUST | 43 | 0 |
| | | UNIVERSITY HOSPITALS BRISTOL NHS | | |
| Q39 | RA7 | FOUNDATION TRUST | 135 | 11 |
| | | SOUTH DEVON HEALTHCARE NHS | | |
| Q39 | RA9 | FOUNDATION TRUST | 92 | 10 |
| | | TAUNTON AND SOMERSET NHS | | |
| Q39 | RBA | FOUNDATION TRUST | 97 | 0 |
| | | DORSET COUNTY HOSPITAL NHS | | _ |
| Q39 | RBD | FOUNDATION TRUST | 64 | 0 |
| | | NORTHERN DEVON HEALTHCARE NHS | | _ |
| Q39 | RBZ | TRUST | 41 | 0 |
| Q39 | RD1 | ROYAL UNITED HOSPITAL BATH NHS TRUST | 131 | 0 |
| Q39 | RD3 | POOLE HOSPITAL NHS FOUNDATION TRUST | 77 | 1 |
| | | DORSET HEALTHCARE UNIVERSITY NHS | | |
| Q39 | RDY | FOUNDATION TRUST | 0 | 0 |
| | | THE ROYAL BOURNEMOUTH AND | | |
| | | CHRISTCHURCH HOSPITALS NHS | | |
| Q39 | RDZ | FOUNDATION TRUST | 65 | 1 |
| Q39 | REF | ROYAL CORNWALL HOSPITALS NHS TRUST | 99 | 1 |
| | | SOMERSET PARTNERSHIP NHS | | |
| Q39 | RH5 | FOUNDATION TRUST | 0 | 0 |
| | | ROYAL DEVON AND EXETER NHS | | |
| Q39 | RH8 | FOUNDATION TRUST | 131 | 6 |
| Q39 | RK9 | PLYMOUTH HOSPITALS NHS TRUST | 199 | 5 |
| | | GREAT WESTERN HOSPITALS NHS | | |
| Q39 | RN3 | FOUNDATION TRUST | 56 | 0 |
| Q39 | RNZ | SALISBURY NHS FOUNDATION TRUST | 83 | 4 |
| | | GLOUCESTERSHIRE HOSPITALS NHS | | |
| Q39 | RTE | FOUNDATION TRUST | 200 | 4 |
| Q39 | RVJ | NORTH BRISTOL NHS TRUST | 82 | 17 |