

NORTH LINCOLNSHIRE COUNCIL

CABINET

**THE STANDARDISED HOSPITAL MORTALITY INDEX (SHMI) IN
NORTHERN LINCOLNSHIRE AND GOOLE - REPORT OF THE HEALTH
SCRUTINY PANEL**

1. OBJECT AND KEY POINTS IN THIS REPORT

- 1.1 To consider a report of the Health Scrutiny Panel in relation to the Standardised Hospital Mortality Index in Northern Lincolnshire and Goole.

2. BACKGROUND INFORMATION

- 2.1 At a meeting in June 2013, the Health Scrutiny Panel approved its draft report in connection with the Standardised Hospital Mortality Index in Northern Lincolnshire and Goole.
- 2.2 The report was referred to cabinet for consideration of the recommendations with a view to the preparation of an action plan.
- 2.3 For several years, it has been noted that patient mortality rates across Northern Lincolnshire and Goole appear to be significantly higher than should be expected. The panel had decided therefore to look into this issue particularly in relation to the Standard Hospital Mortality Index in Northern Lincolnshire and Goole. A copy of the Scrutiny Panel's report is attached to this report.

3. OPTIONS FOR CONSIDERATION

- 3.1 There are no options associated with this report.

4. RESOURCE IMPLICATIONS (FINANCIAL, STAFFING, PROPERTY, IT)

- 4.1 There may be some resource implications associated with the recommendations when they are implemented.

5. **OUTCOMES OF INTEGRATED IMPACT ASSESSMENT (IF APPLICABLE)**

5.1 Not applicable in relation to this current report.

6. **OUTCOMES OF CONSULTATION AND CONFLICTS OF INTERESTS DECLARED**

6.1 The scrutiny panel consulted as appropriate.

7. **RECOMMENDATIONS**

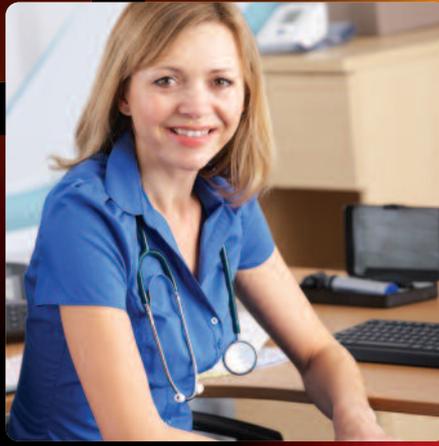
7.1 That the report and recommendations be approved and adopted.

7.2 That the Northern Lincolnshire Health Community prepare an action plan in response to the recommendations of the report for submission to a future meeting of cabinet.

DIRECTOR OF POLICY AND RESOURCES

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Background Papers used in the preparation of this report: Nil



Scrutiny Report

The Standardised Hospital Mortality Index in Northern Lincolnshire and Goole

Report of the Health Scrutiny Panel
North Lincolnshire Council
June 2013





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FOREWORD FROM THE CHAIRMAN

For several years, it has been noted that our patient mortality rate across Northern Lincolnshire and Goole appears to be significantly higher than should be expected. A number of explanations were suggested to explain this phenomenon; that the local population's poor health was to blame, or perhaps that there was a culture locally where patients were "sent to hospital to die". However, when explored further, these explanations were found to be unsubstantiated. It appears that there is no single factor that leads to a higher-than-expected hospital mortality rate.

The scrutiny panel is encouraged that the health community now appears to be 'pulling together' to address the many issues that are likely to lead to a high SHMI rate. However, we recognise that addressing some of these will not be easy. Providing a 24/7, consultant-led service across two relatively small district general hospitals, plus the smaller unit in Goole, comes with numerous challenges.

Of course, this is not only an issue for the Hospital Trust. Primary, community, intermediate and social care will all have an input to reducing our mortality rate. Progress is further complicated by forthcoming proposals to restructure health services across the patch. Any reconfiguration is likely to be substantial, and it will be important to maintain momentum. The panel is aware that reducing mortality rates and improving quality will be key tests when evaluating any proposals, and on behalf of the panel, I give my commitment to ensure that any proposals will be scrutinised fully on behalf of local people.

Regarding this report, we fully acknowledge that in many areas, the situation described throughout is now several months out of date. The panel also notes that many separate pieces of work are ongoing, some of which are reported in public and some which are not. We do have a number of continuing concerns and suggestions for improvements, which are outlined in our recommendations.

The publication of the report coincides with an in-depth review by NHS England's Medical Director, Professor Sir Bruce Keogh. It is likely that many issues contained within this report will be echoed in Sir Bruce's work. It is our hope that these documents will assist the local health community in reducing our mortality rates, and ensuring that this work is co-ordinated, comprehensive and, importantly, within the public domain. This openness will greatly assist in ensuring local people have confidence in our hospitals and the wider NHS.

I would like to thank colleagues throughout the NHS for kindly collating and sharing a substantial amount of information to inform the panel's work. Most notably, thanks must go to Karen Jackson and Wendy Booth from Northern Lincolnshire and Goole Hospitals NHS Foundation Trust for their candid assistance. I would also like to thank my colleagues on the Health Scrutiny Panel, including the Vice-Chair, for their hard work throughout this complex review. I greatly look forward to a swift, comprehensive and non-defensive response to this report.

Councillor Jean Bromby
Chairman of the People Scrutiny Panel.

GLOSSARY

Term	Description
AoMRC	Academy of Medical Royal Colleges. An umbrella body established to co-ordinate, promote and facilitate the work of the Medical Royal Colleges and their faculties.
CHKS	Caspe Healthcare Knowledge Systems. A specialist health intelligence company, who developed the widely used RAMI measure (see below).
CQC	The Care Quality Commission. The national health and social care inspectorate and regulator.
DPH	Director of Public Health
DPOW (or DPoW)	The Diana, Princess of Wales Hospital. A District General Hospital serving Grimsby and much of North East Lincolnshire.
GP	General Practitioner.
GDH	Goole and District Hospital. A relatively small hospital serving Goole and the surrounding area.
HSMR	Hospital Standardised Mortality Ratio. A summary measure developed by Dr Foster Intelligence that compares observed deaths to expected deaths.
NELCCG	North East Lincolnshire Clinical Commissioning Group. The clinically-led group of all GP surgeries (and others) who plan, manage and commission many health services across North East Lincolnshire.
NEWS	The National Early Warning Score. A national, standardised method of objectively assessing illness severity in hospitals.
NLAG (or NLaG)	Northern Lincolnshire & Goole Hospitals NHS Foundation Trust. The local acute and community Trust. Sometimes referred to as 'the Hospital Trust'.
NLCCG	North Lincolnshire Clinical Commissioning Group. The clinically-led group of all GP surgeries (and others) who plan, manage and commission many health services across North Lincolnshire.
NPOB	Nurses per Occupied Bed. A proposed method of evaluating nurse staffing levels against the number of beds.
PARS	Patient at Risk Score. A method of identifying patients at risk of deterioration, enabling early referral and escalation to appropriate clinical staff.
RAMI	Risk Adjusted Mortality Index. A ratio indicator developed by CHKS that compares actual deaths within hospitals with expected deaths.
SGH	Scunthorpe General Hospital. A District General Hospital serving Scunthorpe and much of North Lincolnshire.
SHMI	The Summary Hospital-level Mortality Index. A third method of comparing observed deaths with predicted deaths.
SMART	Specific, Measurable, Attainable, Relevant and Timely. A mnemonic used to ensure that objectives, recommendations or actions are delivered effectively.
THL	Transforming Health Limited. A specialist health consultancy company, who completed Phase 1 of NLAG's Mortality Outcome Performance in June 2012.

RECOMMENDATIONS

Recommendation 1: The panel recommends that the Northern Lincolnshire Health Community commit to commissioning Phase 2 of an external review into SHMI across Northern Lincolnshire in 2013-14. We further recommend that a key component of this review should be a wide-ranging review of staffing levels at Northern Lincolnshire & Goole Hospitals Trust (NLAG) at all times, and across all sites and specialities, and whether senior staff are on-site or on-call. The terms of reference set for this review should include discussions with primary and secondary care practitioners and clinicians.

Recommendation 2: The panel recommends that North Lincolnshire Clinical Commissioning Group (NLCCG) receive regular and detailed NLAG staffing reports at public meetings of their Board.

Recommendation 3: The panel recommends that staffing reports presented at NLAG's Board of Directors and NLCCG's Board should include peer comparison rates to enable informed comparison. We further recommend that all staffing reports should also include staffing levels that include levels of consultants, doctors, and other key personnel, and the usage of bank or 'agency' staff.

Recommendation 4: The panel recommends that every speciality at NLAG with a high (perhaps 120+, or for local determination) SHMI rate, or that is identified in the CQC Risk Profile, should automatically trigger an internal clinical review, an analysis by the Trust's Quality and Audit Team, and if thought appropriate by NLAG's Medical

Director, a peer review. NLCCG and NELCCG should also maintain an oversight of this work.

Recommendation 5: The panel recommends that the NLAG and the wider Northern Lincolnshire Health Community Mortality Action Group Action Plans be amalgamated as soon as is practical, and that all actions are drafted to comply with SMART principles. All actions should result in actual changes at ward, bed or community level, and not simply be about producing reports and maintaining oversight.

Recommendation 6: The panel further recommends that a review is undertaken of the combined action plan, in order to ensure that all of THL's original recommendations are incorporated, or if they aren't, that there is a clear and evidenced public explanation why not. We further recommend that the combined action plan include an appendix of completed actions to ensure that the public are aware of progress and completed work.

Recommendation 7: The panel recommends that there be stricter oversight of progress on the combined action plan by all Chairs, NLAG's Chief Executive and the Chief Officers of the three CCGs to ensure that there is the necessary leadership to reduce the number of delayed actions and the significant number of amber targets.

Recommendation 8: The panel recommends that the Northern Lincolnshire Health Community Mortality Action Group continue to meet regularly for the foreseeable future, in order to co-ordinate action and provide accountability in reducing the SHMI to ‘typical’ rates and beyond.

Recommendation 9: That, as recommended in North Lincolnshire DPH’s 2011-12 Annual Report mentioned on page 10, a method of allowing advice and input from a suitably senior public health practitioner to the work of the Northern Lincolnshire Health Community Mortality Action Group be agreed.

Recommendation 10: The panel is unconvinced that reducing multiple ward transfers, bed occupancy rates and excess mortality arising from weekend admission are satisfactorily addressed within the action plans. There is a clear need to identify actions at both ward and strategic level. We recommend that these three issues, that remain of concern, are strengthened within a combined action plan and are set out in much more detail with clear ownership, accountability and timescales.

Recommendation 11: Following a number of concerns highlighted in the THL report regarding comparable data not being available at all NLAG sites for conditions such as cardiac arrests, the panel recommends that NLAG conduct a verification exercise to ensure that both site-specific and comparable Trust-wide data is routinely collected, monitored, and freely available.

Recommendation 12: The panel remains concerned that there is no robust system to monitor out-of-hospital deaths. The panel recommends that the Northern Lincolnshire Health Community Mortality Action Group prioritise this action to ensure that every death outside of hospital is reviewed by a GP.

Recommendation 13: The THL report concluded that “there will be data available for community and care homes but there is no central data source to monitor this important indicator of good end of life care”. The panel recommends that the Northern Lincolnshire Health Community Mortality Action Group work with these organisations to develop and share a centralised database of relevant information.

Recommendation 14: The panel recommends that the Northern Lincolnshire Health Community Mortality Action Group explore the reasons why the mortality rate outside of hospital is rising, as referenced on page 20, taking appropriate action.

Recommendation 15: The panel is unsure whether NLAG have reviewed the reasons for the ‘spike’ of cardiac arrests on Wednesdays. We recommend that this phenomenon is reviewed with some degree of urgency by clinicians, with appropriate support, with remedial action taken as necessary. The panel further recommends that the ongoing and lengthy cardiac arrest audit be prioritised by NLAG.

FINDINGS

The Summary Hospital-level Mortality Ratio (SHMI) is an important indicator of the reputation of an area's local NHS. Whilst there have been valid criticisms of the benefits and methodology of introducing such an indicator, it is equally as important to note that hospital mortality has been measured for many years, and that publication of this information should be accessible to the public. It is therefore widely acknowledged that a high SHMI rate can be a useful warning to a healthcare provider, its commissioners and other stakeholders, that there may be underlying issues that need to be tackled. As the national guidance states,

“The SHMI requires careful interpretation, and should not be taken in isolation as a headline figure of trust performance. It is best treated as a ‘smoke alarm’.”

There are a number of possible causes for a higher-than-expected rate of mortality. These possibilities include incorrect information and coding, inappropriate levels of care in primary, community and secondary settings, safety or staffing, patients with particularly marked illnesses who may be late to present or be referred, higher than average causal factors, or a lack of out of hospital provision in the community or elsewhere.

Several pieces of work have now been completed or are ongoing to examine these factors in detail. These will be discussed throughout this report.

Definitions

Prior to the introduction of SHMI, a number of methods were (and continue to be) used in the healthcare community to measure mortality. The simplest is the Crude Mortality Rate, which compares the number of deaths to the number of patients admitted to hospital. This is considered to be a flawed measure, as it does not take a number of underlying factors such as local demography or case-mix into account. In recent years, there were two other widely-used calculations; the Risk Adjusted Mortality Index (RAMI) which was developed by CASPE Healthcare Knowledge Systems (CHKS), and the Hospital Standard Mortality Ratio (HSMR), developed by Dr Foster Intelligence. The key differences between RAMI and HSMR are:

- RAMI includes all patients admitted to hospital; the Dr Foster HSMR uses a basket of 56 diagnoses that account for 80% of all in-hospital deaths;
- RAMI excludes stillbirths whereas Dr Foster's HSMR includes them;
- Palliative care patients are excluded from RAMI but included in HSMR.

Historically, NLAG used the HSMR measure. However, in November 2010 NLAG migrated their clinical information system from Dr Foster's HSMR to CHKS's RAMI, as it allowed wider benchmarking, included all deaths rather than a proportion of deaths, and was more 'user friendly'.

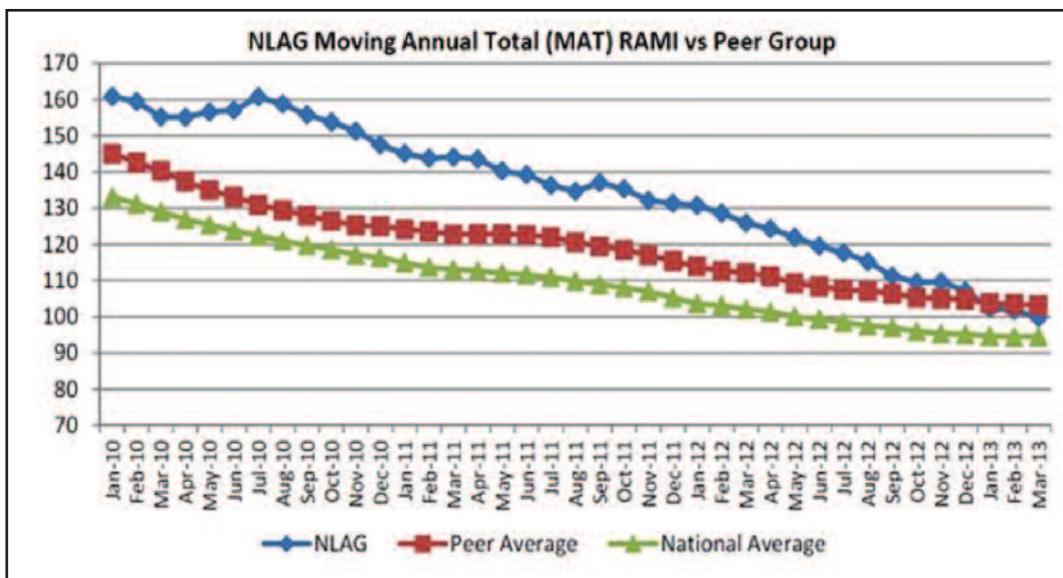
Recent History of Mortality Measurement

RAMI figures reported by the Trust show that NLAG's performance on RAMI was consistently poorer than the national average from Autumn 2009 until recently. However, NLAG's RAMI rate is reducing faster than their peer group, overtaking them in 2013. The latest figures that the scrutiny panel has access to show that, for the twelve months to March 2013, NLAG had a RAMI of 100, their peers had a RAMI of 103 and the national baseline was 94.

Despite NLAG moving from HSMR to RAMI

in November 2010, the former NHS North Lincolnshire (the predecessor body to NLCCG) continued to report HSMR statistics to their Board until May 2012, showing performance to be generally in line with expectations (see over), apart from a steep rise in Quarter 4 (2011-12) which may have been caused by a change in Dr Foster's methodology. Dr Foster highlighted HSMR in their annual Hospital Guide in 2009 and 2010, and although NLAG's performance wasn't stated, it was not included on their list of outliers until 2011. It remains an outlier in the 2012 report.

Figure 1: Comparison of NLAG's RAMI versus Peer and National Averages



Source: Information Services

Directorate of Clinical & Quality Assurance, May 2013

FINDINGS

Table 1 Quarterly HSMR rates at NLAG as reported to NHS North Lincolnshire’s Board.

2010-11				2011-12			
Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Not reported	Not reported	103.3	103.4	95.8	105.5	96	115.9

The independent report by Transforming Health Ltd. (THL) ‘A Review of Northern Lincolnshire and Goole Hospitals Mortality Outcome Performance – Phase 1’ states that

‘the high RAMI rate had been noticed in early 2010 by [NLAG’s...] incoming Head of Information. Reaction was initially slow at senior level and largely focused on the technical issues...’. The report concludes that “...up until the exceptionally high SHMI published in October 2011, NLAG were NOT (their emphasis) giving mortality a ‘high enough priority’”.

It is possible that this perceived lack of prioritisation was due to the fact that the RAMI rate was slowly reducing from early summer 2010, or because of a lack of pressure from commissioners who were relying on the HSMR figures instead of the RAMI statistics that NLAG were using and which didn’t highlight any particularly strong concerns. As the organisation no longer exists, it is unclear to the panel if, and when, the former lead

commissioner (North East Lincolnshire Care Trust Plus) raised concerns.

Following publication of the first SHMI data, the Director of Public Health included a recommendation in their 2011-12 Annual Report that:
“The two Clinical Commissioning Groups, public health directorates and Northern Lincolnshire and Goole (NLaG) hospitals work together to complete a thorough analysis of local data to find out why death rates post discharge from NLaG hospitals are reported as higher than average last year. This should be set in the context of all recorded deaths in the area during that period”.

Whilst post discharge deaths are being reviewed as part of the work of the Northern Lincolnshire Health Community Mortality Action Group’s work, this hasn’t included input from a public health representative.

SHMI performance

The SHMI is calculated by the NHS Information Centre quarterly, using a rolling year's worth of data. It is reported on a Trust-wide basis, so individual results for Scunthorpe, Grimsby and Goole are

unfortunately not available publicly. It is important to reiterate that the SHMI also incorporates patients who die in the community within 30 days of discharge, and will also always relate to deaths that occurred between 6 and 18 months prior to publication.

Table 2 SHMI results, April 2010 – March 2011 to July 2011 – June 2012.

Publication date	Time period covered	Value	Actual deaths	Expected deaths	Excess deaths	National rank
Oct 27 2011	Apr 2010 – March 2011	1.15	2,268	1,976	292	139 (out of 147)
Jan 25 2012	Jul 2010 – Jun 2011	1.13	2,238	1,981	257	132 (out of 147)
Apr 24 2012	Oct 2010 – Sept 2011	1.16	2,285	1,969	316	140 (out of 147)
July 25 2012	Jan 2011 – Dec 2011	1.16	2,242	1,927	315	138 (out of 143)
Oct 23 2012	Apr 2011 – Mar 2012	1.17	2,266	1,934	332	139 (out of 142)
Jan 24 2013	Jul 2011 – Jun 2012	1.18	2,286	1,934	352	140 (out of 142)
Apr 23 2013	Oct 2011 – Sept 2012	1.15	2,236	1,938	298	138 (out of 142)

As the SHMI is based on a rolling 12 month data source, there is inevitably a delay in reporting any change in performance. As can be seen above, performance has been static at best.

FINDINGS

Staffing Levels, Weekend Cover and the 7 Day Hospital

The repeated concerns around staffing within THL's report were familiar to the panel, who have heard anecdotal but regular evidence of this for a number of years. Indeed, at a recent scrutiny meeting, Who Cares (the former Local Involvement Network) provided an update on an Enter & View report which highlighted a reported lack of ward staff to provide assistance to patients at meal times. The scrutiny panel regularly discusses staffing levels with NLAG management, who robustly defend the staffing levels and skill mix. The THL report states that "the difference between [...] perceptions of nurse staffing shortages and the Trust leadership's position is stark...", although it should be noted that the THL report was published a year prior to this report.

There is evidence of the Trust increasingly addressing concerns about staffing levels and skill mix. Reports to the Board of Directors have become noticeably more detailed in recent months, and there is evidence that the situation in some areas appears to be improving. Despite this, NLAG acknowledge that there are still issues with data quality to be resolved, most notably in their indicator illustrating the number of shifts without charge cover (i.e. missing a person with 'in charge' skills).

There is currently no universal minimum staffing level. However, the Royal College of Nursing recommends that, for 'ideal, good quality care', a ratio of 65% registered nursing staff to 35% unregistered should be maintained. A skill-mix of 50% registered

nursing staff to 50% unregistered (the 50:50 ratio) can provide 'basically safe care'. 'The latest figures to NLAG's Board of Directors illustrate that Scunthorpe General Hospital (SGH) and Diana, Princess of Wales Hospital (DPOW) have generally been running at, or above, this 65:35% ratio figure. Goole District Hospital (GDH), perhaps because it includes a smaller cohort of staff, fluctuates above and below this 'ideal, good quality care' skill mix level, albeit still providing 'basically safe care'.

The Trust also reports on unfilled rosters, where, for a variety of reasons, wards are effectively understaffed. The number of unfilled rosters has tended to remain fairly static at SGH and DPOW in the past year, between 10% and 20%. The situation at GDH appears more challenging, with up to more than a third of rosters unfilled on occasion. NLAG believe that this situation was caused by staffing baselines not being adjusted to match the number and requirements of patients. In recent months the situation has improved at Goole to some extent, although a fifth of rosters at SGH and GDH remain unfilled.

In December 2012, the Chief Nursing Officer for England launched a three-year 'Vision and Strategy' called Compassion in Practice, designed to improve the standards of nursing, midwifery and care staff. Within this document, there is a recommendation that;

Directors of Nursing in Trusts should agree staffing levels through the application of evidence based tools and we recommend these are published at least every 6 months. All nursing and midwifery staffing levels and quality and experience metrics should be discussed at Trust Board level in a public meeting at least twice a year. Any proposed changes to the nursing and midwifery skills mix, required to reflect any service redesign project, should also be discussed at Board level.

The scrutiny panel would welcome this increase in transparency and accountability, and this is discussed further in our recommendations (see page 6). We believe that comparator data from NLAG's peer group should be incorporated into these reports in order to allow the Trust Board, Council of Governors, and the public to gain an informed picture of local staffing. The panel also believes that commissioners should be fully involved in discussions around staff mix and staffing levels in acute wards in their locality. This point was recently emphasised by Sir David Nicholson, Chief Executive of NHS England, at a hearing of the Health Select Committee. Sir David states that "Commissioners have to be interested in

staffing levels. If you accept that well supported and well staffed organisations provide great outcomes for patients, you have to be interested in that".

The recent Francis Report (2013) into failings at the Mid Staffordshire Foundation Trust formalises staffing considerations (amongst other issues) into a series of recommendations (recommendations 123-138) regarding oversight of commissioned services. The scrutiny panel firmly believes that this should incorporate staffing levels, skill mix, etc. Whilst the government has not yet fully responded to the Francis Report, North Lincolnshire Clinical Commissioning Group's commissioning plan 'Right Care, Right Place' suggests that a host of staffing performance indicators will be monitored as part of the usual contract management arrangements. However, it is not clear whether this includes minimum staffing levels, Nurses Per Occupied Bed (NPOB) levels, or similar.

The panel has investigated other sources of evidence about staffing levels and skill mix. Firstly, the CQC has not identified NLAG (or any of its hospitals) as one of 26 providers and 17 hospitals across the country with unsafe staffing levels. The panel also requested ward level staffing data in late 2012, but the Safer Nursing Care Tool used to gather this data was, at the time, not fully functional. The use of this tool in 2013 has recently been interrupted due to concerns about its validity (through no fault of NLAG) and data collection will continue from March 2013. The panel will monitor this with interest.

FINDINGS

Finally, the panel reviewed the 2012 National NHS Staff Survey to establish if staff at NLAG had raised concerns about staffing levels. Question 7g asks staff to state whether 'there are enough staff at this organisation for me to do my job'. Within NLAG, only 25% of staff agreed that this was the case (national average = 30%, n=240). However, this is a slight improvement to 2011, where only 23% of staff felt there were enough staff. Further clues can be gained from the question 'I am unable to meet all the conflicting demands on my time at work', where only 26% of staff agreed that they had the opportunity to do this, compared to a national figure of 31%. Other potential indicators were generally in line with the national picture.

Many concerns raised by individuals during THLs evidence gathering were around nursing cover, and the panel questioned NLAG's Chief Nurse at a public meeting on 29 October 2012. It was explained that NLAG now has a team at Scunthorpe and Grimsby of both nurses and healthcare assistants who can be deployed to any ward at short notice in order to fill any gaps. However, it is not yet clear from the above that this team is impacting markedly on improvements to skill mix or unfilled rosters.

The panel's general view is that it is likely, but not definite, that the staffing situation on wards across NLAG is not markedly different from other Trusts. Despite this, given the lack of peer data, and the continued concerns expressed via various sources discussed above, we believe that there is a genuine need for further independent inquiry into this crucial subject.

As such, the panel is heartened that both providers and commissioners have publicly committed to this issue being included as a key piece of work in phase two of the external review on mortality. Despite anecdotal evidence, it is important that reviews are evidence based, and the THL report acknowledged that nursing cover at the wards visited by their reviewer were 'in accordance with establishment'. This requires an objective eye, with clinical, analytical and statistical tools beyond the level of expertise of the panel. Again, this is addressed in our recommendations.

Weekend staffing

Dr Foster published data on emergency mortality and staffing to inform their 2011 Hospital Guide. Compared to a national average of 100, this suggests that NLAG had a 'high' risk rating for both weekday (114.4) and weekend (123.9) mortality, using their HSMR measurement. This equates to a non-statistically significant 8% increase in weekend emergency mortality at the weekend.

Dr Foster then asked about senior staffing cover at the weekend. This showed that, on the two Sundays surveyed in March and April 2011, there were no on-site consultants at either Scunthorpe General Hospital (SGH) or Diana, Princess of Wales (DPoW) Hospital in Grimsby. Whilst a minority of Trusts do rely only on on-call consultants at the weekend, alongside cover from Registrars and other senior staff, this is sufficient to put NLAG into band 1, the band containing the lowest ratio of senior staff on site per bed.

Table 3 Senior Clinical Staff Weekend Coverage at SGH and DPoW Hospitals, Spring 2011.

Hospital	Consultant cover 27/03/11		Consultant Cover 17/04/11		Registrar cover 27/03/11		Registrar Cover 17/04/11		Senior staff on site	Senior staff on-call	Senior staff on site per 100 beds	Senior staff on call per 100 beds
	On site	On site	On site	On site	On site	On site	On site	On site				
SGH (375 beds)	0	11	0	10	2	1	3	2	2.5	12	0.67 (band 1)	3.2 (band 2)
DpoW (458 beds)	0	11	0	12	2	1	3	1	2.5	12.5	0.55 (band 1)	2.73 (band 2)

Source, Dr Foster, Inside Your Hospital, 2011.

Dr Foster repeated their work with their 2012 Hospital Guide, which also found occasions where there was no weekend consultant coverage for current medical inpatients at Scunthorpe and Grimsby. NLAG state that there is regular consultant cover in a number of specialties, both on-site and on-call, at Scunthorpe and Grimsby at weekends, and that these arrangements have been in place for several years.

The Dr Foster report concluded that “more senior staff per bed at weekends is associated with a lower weekend emergency mortality rate.” Further, Dr Foster also reviewed weekend staffing at hospitals with an Accident and Emergency (A&E) department. Worryingly, SGH and DPoW were two of only ten in the country that were identified as having the lowest levels of senior doctor coverage at the weekends.

FINDINGS

The Academy of Medical Royal Colleges (AoMRC) recently published a report on seven day consultants in acute care. A national lack of consultant level presence in hospitals over weekends and bank holidays has long been identified as a major concern for patient care, safety and clinical outcomes.

The AoMRC report proposes three standards to ensure consistent inpatient care regardless of the day of the week. These standards are:

Standard 1: Hospital inpatients should be reviewed by an on-site consultant at least once every 24 hours, seven days a week, unless it has been determined that this would not affect the patient's care pathway.

Standard 2: Consultant-supervised interventions and investigations along with reports should be provided seven days a week if the results will change the outcome or status of the patient's care pathway before the next 'normal' working day. This should include interventions which will enable immediate discharge or a shortened length of hospital stay.

Standard 3: Support services both in hospitals and in the primary care setting in the community should be available seven days a week to ensure that the next steps in the patient's care pathway, as determined by the daily consultant-led review, can be taken.

Whilst the panel does not have specific information about Standard 2, we are aware of a number of cases where 'inattention' has, worryingly, been noted as a factor within the Trust's Trigger Tool Mortality Dashboard.

Standard 3 remains a significant distance away, both locally and nationally.

The concerns raised by AoMRC and others have been echoed by recent pronouncements from NHS England who have set up a working group to look at ensuring 7-day access to all tiers of healthcare.

The panel is aware that a detailed project is currently underway to implement a '7 day hospital' model at NLAG, and this is a key area for improvement identified in the joint action plan. This change would be very welcome, although we acknowledge that it will require negotiation both nationally and locally and, for some NHS staff, a change of culture. However, moving to a 7 day hospital is not a panacea, as it would impact on staffing cover during the week. The AoMRC report states that 'The Academy does not believe that the standards proposed in this report can be universally achieved within local resourcing arrangements and NHS tariff levels.' Clearly, there will be a need for national leadership on this issue.

Day of Admission and Ward Transfers

As discussed on page 7, a key finding of the THL report was that a patient admitted to a hospital in Northern Lincolnshire at the weekend was 20% more likely to die than someone admitted during the week. This figure is twice that of other Trusts in the region, strongly suggesting that this should be a priority area for work.

The THL report states that:

“It is clear that mortality for Sunday admissions is higher than other days. We know from other published sources that the difference nationally between the mortality associated with weekday and weekend admissions is in the order of 10%. For Northern Lincolnshire and Goole it is nearer 20%. This is highly likely to have some bearing on both SHMI and RAMI.”

Transforming Health Limited, our emphasis.

There is much evidence that weekend admission is often correlated with excess mortality. For example, an internal Dr Foster Intelligence report from 2011 found that between April 2011 to November 2011 291 people admitted at the weekend died, against an expected figure of 231; an excess of 60, making NLAG the Trust with the highest risk rating across its peer group.

An internal review undertaken by NLAG in November 2011, using a cohort of over-75s who were admitted as emergencies, found that “all sites have a higher mortality rate when the patients stay exclusively at a

weekend compared to a weekday. **Grimsby and Scunthorpe’s weekday mortality rate doubles at a weekend**” (our emphasis). Latest figures suggest that the RAMI for weekend emergency admission is 6 points higher than weekday admission.

One key area of concern raised by THL was the impact that transferring patients between wards might have on mortality rates. THL’s analysis found that the death rate at DPOW where patients move wards several times was significantly higher than those who weren’t moved. The phenomenon was not repeated at SGH, where the number of ward moves had little effect on mortality.

The panel is concerned that action plans are not overtly referencing these vital issues beyond monitoring non-clinical patient moves. Clearly, some issues related to the higher than normal mortality for weekend admissions will be picked up via other recommendations (staffing, etc.) or other pieces of work, but the scrutiny panel believes that a formal action would help focus on improvement and enable oversight.

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Standards of Care

As part of the work within the acute trust to identify possible areas of improvement, reviews of all clinical specialities with higher numbers of mortalities than would be expected, including stroke and cardiac care, were completed by clinicians and support staff. These identified a range of concerns, some serious, that were passed to NLAGs Quality & Patient Experience Committee and elsewhere for action. For example, a new action plan is now in place to improve stroke care across Northern Lincolnshire & Goole, and North Lincolnshire CCG has agreed with NHS England that increasing thrombolysis rates for stroke patients is identified as a key issue for improvement.

The panel does have some concerns that, in some specialties prior to 2012, standards of care fell below optimal levels when subsequently reviewed by clinicians as part of the response to the THL report. The panel also has concerns that, on occasion, the time taken for clinicians to systematically audit services with a high SHMI rate was frustratingly long. The panel will continue to follow any concerns up, seeking comprehensive evidence of improvements, and will also raise any specific concerns about the standards of care with NLAG, commissioners and the CQC as appropriate.

The NHS Safety Thermometer rates all Trusts and providers on providing harm-free care. Since the measure was introduced in January 2012, NLAG has been broadly in line with national and regional benchmarks, although there was a recent 'spike' in the number of patients developing a new venous

thromboembolism. Reducing the number of falls, improving access times for A&E, and reducing the number of patients developing pressure ulcers are also key areas for improvement for the Trust.

Observations and Charts.

A major criticism raised in the THL report was around the failings in recording observations and charts. Incomplete or incorrect charts were identified, with a lack of escalation protocols evident on some occasions. NLAG have since taken steps to improve observations, with a monthly report to their Board of Directors. Generally, the Trust is meeting its target of 95% of patients' observations being recorded at least twice daily. However, performance at Goole has been erratic until recent improvements, and SGH has dipped below the threshold four times in the last eighteen months. The THL report also makes an important point that observations should be made as often as clinically required, and that twice-daily is only a 'starting point'.

The Trust has also replaced their previous 'Check Your Charts' and Patient At Risk (PAR) scoring tool with the National Early Warning System (NEWS). NEWS is designed to identify patients with a risk of deterioration, escalating them and/or changing treatment as appropriate. The Trust still has work to do on ensuring that targets for the implementation of NEWS at SGH and DPOW are consistently above the 95% target. An audit on the implementation of NEWS is currently in the planning stages.

Primary, Community and Palliative Care

Whilst the THL report and subsequent attention was, understandably, focussed on NLAG as acute provider, the provision and quality of primary and community care is a vital aspect of preventing mortality. Similarly, where a patient receives a palliative diagnosis, having a comprehensive, multi-disciplinary team to provide dedicated care and support can help extend the person's life, or enable them to die in a place of their own choosing. Of course, this approach is much more preferable for the person receiving end-of-life care and their families, carers and loved ones.

NLCCG has prioritised End-of-Life Care within their commissioning plan, and is currently working on an innovative, patient-experience informed update to their palliative care strategy and end of life strategy. A number of improvements have been identified for action this year, including reducing avoidable admissions to hospital, improving patient choice, and improving the current under-performance in the numbers of people approaching the end of their life who are included on a register, with an associated care plan.

The panel welcomes this prioritisation, in part because end-of-life care takes up at least a fifth of NHS spending, but also to address the concerns raised in the THL report that “end of life care is fragmented, possibly borne out of [...] system complexities” related to the view that there is no single commissioner or single acute provider perspective. The Marie Curie Trust's latest (somewhat outdated) figures suggest that, within North Lincolnshire, we

fall well short of the national average in identifying both palliative need and palliative deaths. The panel has previously raised concerns during a recent consultation on therapy services, recommending that for palliative support, there “should be 24/7 coverage, in line with Healthy Ambitions recommendations, to ensure continuity of care”. The panel notes that there continues to be no palliative consultant locally, and it is unlikely that one will be in place until at least the autumn.

NLCCG has also chosen ‘reducing unwarranted variation’ in primary care as one of its strategic aims, and part of this will be improving variation in palliative care. Variation has long been recognised locally as an issue, and was flagged by the scrutiny panel as an area of concern within its March 2010 report on the Inverse Care Law in North Lincolnshire.

The panel is currently monitoring steps to introduce five joint health and social care locality teams across North Lincolnshire. These teams have the potential to play a key role in supporting people within their own homes, preventing unnecessary admission to hospital, and increasing independence. The panel does have some concerns with the timescales involved in setting up these teams, and remains clear that their roll-out must correlate with a reduction in acute bed occupancy and pressure in order to prove sustainable. Occupancy levels across many wards at NLAG remain higher than the 85% target, and the panel is concerned that the action plans are not robust enough in reducing this demand. Both action plans

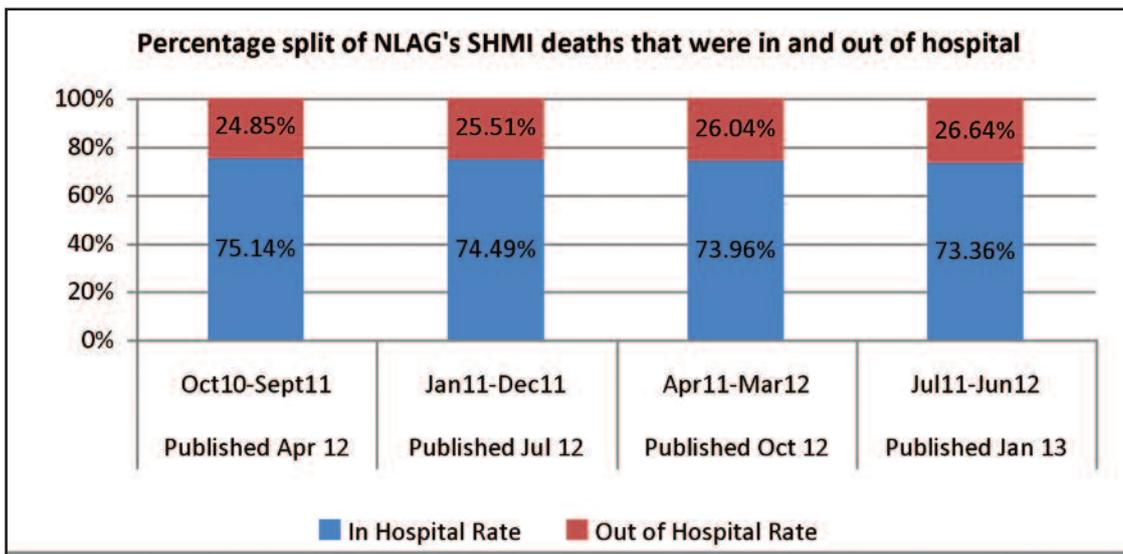
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currently make reference to monitoring occupancy at individual sites and wards, but make little reference to taking the necessary action to reduce rates, via diversion, supported discharge, preventative work, reduction of ward transfers, etc.

Whilst the SHMI has remained generally static for many months, there is some evidence that rates of mortality in-hospital

are slowly decreasing, whilst out-of-hospital rates are increasing. Whilst care needs to be taken with reaching conclusions about the following non-statistically significant data, it could be that the hospital's measures for tackling the SHMI are having an impact whilst services in the community are lagging behind, or alternatively that patients are being discharged too early, or another explanation.

Figure 2. Percentages of NLAG's SHMI Deaths In and Out of Hospital.



Coding

Coding errors were identified in the THL report as a possible area for further work. Incorrect or incomplete coding can lead to the recording of an inaccurate cause-of-death, and therefore an inaccurate SHMI rating. Specialties that are clinically safe and effective can therefore be labelled as poorly performing, or vice-versa. Coding errors can also lead to misdiagnosis and patient safety issues, and correct coding is vital to ensure organisations' financial stability.



Encouragingly, coding is an issue that has been picked up in the mortality action plans for both NLAG and the wider Northern Lincolnshire Health Community, and the panel is aware that the accuracy and depth of coding has improved notably, month-on-month.

Cardiac Arrest and Resuscitation

The THL report highlighted a ‘significant number of cardiac arrests’ at NLAG, with particular issues on Wednesdays. It was recommended that NLAG investigate why Wednesday’s should provide such an issue, and we are seeking assurances that this is being picked up by the Trust. Other important issues around treatment escalation and resuscitation were identified by THL. The panel is encouraged that ‘care of the deteriorating patient’ is a key component of both action plans, and that appropriate actions have been identified, allocated to leads and are being monitored. A deteriorating patient group has been established by NLAG’s Chief Nurse and, as stated previously, improvements made to charts and observations.

An important audit is underway at the time of writing this report. NLAG’s intention is that this audit will inform actions to reduce cardiac arrests across the Trust. The panel does have some concerns with the timescales involved. The Mortality Action Plan presented to NLAG’s Board of Directors on December 18 2012 identified the action “Audit of cardiac arrests to be undertaken, encompassing care up to 48 hours prior to arrest” as aiming for completion by October 2012, and with an accompanying commentary that stated

‘Audit underway and first cases completed’. An updated report was tabled at the Board’s meeting on 28 May 2013 was identical, with the exception that the timescale had been extended to March 2013.

The panel acknowledges that this is a complex issue, and that finding time to dedicate clinical input to such reviews can be difficult. However, we are concerned that the audit, and therefore the necessary actions to reduce the number of cardiac arrests, is taking too long. This echoes the panel’s view, expressed on page 18, that clinical audit at NLAG can be a frustratingly lengthy activity. The panel is also concerned that other relevant recommendations within the THL report are not being picked up in the action plans.

When analysing the data for cardiac arrest, THL found that SGH and DPOW were effectively separate audit arms. As such, THL could not analyse figures for cardiac arrest at SGH. There is a concern that this reinforces the view that, in practice, SGH and DPOW are separate and largely autonomous organisations. Again, we would seek assurances that, whilst site specific data is important, it is essential that trust-wide data is available for use by NLAG’s information team, and to the Board of Directors, the Council of Governors and others. This is recognised in Recommendation 11 of this report.

The local response

NLAG responded to the THL report by updating their existing action plan to incorporate the THL work, with an increasingly detailed report typically

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presented at NLAG's monthly Board of Directors meeting. A combined action plan, amalgamating NLAG's plan with actions for the two Northern Lincolnshire Clinical Commissioning Groups was agreed in February 2013. Updates are regularly discussed at the Partnership Board of North East Lincolnshire CCG, but discussion at the public meetings of North Lincolnshire CCG Board is less regular.

The panel is not clear of the benefits of operating two overlapping but separate action plans, and is concerned that some of the original recommendations from THL have either been overlooked or have not been given the necessary priority. For example, important recommendations on addressing sepsis are included in the joint plan, but were only incorporated into NLAG's action plan in June 2013. THL's recommendation to review the accessibility of the Intensive Therapy Unit is not included in either action plan. We estimate that, from THL's original 40 recommendations, only a handful are included in both action plans. Between 50-60% are not included in either.

Of course, this is not to say that THL's recommendations are not being acted upon. In some cases, the scrutiny panel is aware of either ongoing or completed work to address these. However, we cannot say with authority how, or whether, local health bodies have responded to the majority of THL's recommendations. This raises concerns around a lack of the necessary transparency and public scrutiny required to measure progress or to build confidence amongst local people.

Future Commissioning and Provision Intentions

Long-standing concerns around financial viability, duplication and some clinical and staffing standards have led to a long-running 'Sustainable Services' review of healthcare (and in particular acute care) across the Northern Lincolnshire & Goole Hospitals patch. Details of forthcoming proposals remain unclear, but NLCCG's Commissioning Plan for 2013/14 described a 'vision for future models of care' that suggests that services such as stroke, some maternity services, and some mental health services "may not be provided in North Lincolnshire", although the panel is aware that detailed work in ongoing to evaluate options and that any decisions have yet to be made. Sustainable Services will be subject to an 'engagement exercise' throughout the summer of 2013, with a formal public consultation in autumn/winter 2013. Whilst addressing the current unacceptable SHMI rate is cited as a key driver for the Sustainable Services review, it is not overtly included in either action plan, although it is likely that ongoing work described in the joint plan is related.

Until the scrutiny panel is clearer about local intentions, we cannot speak with authority about the likelihood of addressing the SHMI through the Sustainable Services process. We are, of course, aware of ongoing financial and demographic pressures on the local health economy, but the panel is clear that any proposals must have genuine patient benefits, rather than being solely about saving money. We do have some concerns that Sustainable Services review may be taking attention away from improving the SHMI.

CONCLUSION

Generally speaking, the panel acknowledges the great deal of work that has been undertaken to address the poor performance of the SHMI. Much of this work has been successful, such as recent improvements to observations and record keeping. The panel is pleased to note that nursing standards, patient satisfaction and the number of patients willing to recommend the Trust to their friends and family at NLAG remains consistently high. As we stated in our recent submission to the Trust's Quality Account,

“our general view is that the Trust is performing well in the majority of its services, and reacting appropriately to the changing environment.”

Despite recent improvements, we are concerned that progress remains too slow, as evidenced by the static performance of the SHMI since its launch, and the historically above-average figures for the RAMI. We believe that the response of the wider health community is, to some extent, muddled, with the use of two action plans where one would suffice. ‘Amber’ ratings on progress form the majority of both action plans, with timescales regularly being extended. In many ways, the original THL recommendations have been lost as the majority are not currently included in action plans, or marked as completed actions. Clearly, we recognise that many of these issues are very complex, and the required work coincided with recent changes to local health structures. We also recognise, and support, that clinicians' first priority will be to focus on delivering patient care.

However, ‘addressing the SHMI’ is frequently named as the health economy's top priority.

The panel is encouraged by evidence that suggests services are improving, particularly in some areas where performance may have dipped below levels that NLAG and its commissioners would wish to see. Satisfaction levels remain high, and we believe that clinicians, led by NLAG's Medical Director, are now more committed to clinical audit, and that there is a push to involve all interested parties. We are very encouraged by the openness that NLAG in particular have shown with their attempts to improve, and we look forward to a refreshed refocus that will lead to further progress in the coming months.

