

## AGENDA

**68<sup>th</sup> Meeting of the Public Health Agency board to be held on  
Thursday 18 September 2014, at 1:30pm,  
Public Health Agency, Conference Rooms,  
12/22 Linenhall Street, Belfast, BT2 8BS**

No	Time	Item	Paper	Sponsor
1.	1:30	Welcome and Apologies		Chair
2.	1:30	Declaration of Interests		Chair
3.	1:30	Minutes of the PHA board Meeting held on 21 August 2014		Chair
4.	1:35	Matters Arising		Chair
5.	1:40	Chair's Business		Chair
6.	1:45	Chief Executive's Business		Chief Executive
7.	1:50	Presentation on MARA		Dr Harper
8.	2:20	Finance Update <ul style="list-style-type: none"> <li>• PHA Financial Performance Report</li> </ul>	<b>PHA/01/09/14 (for Noting)</b>	Mr Cummings
9.	2:30	Programme Report – Service Development and Screening		Dr Harper
10.	2:55	Overview of Quality 2020	<b>PHA/02/09/14 (for Noting)</b>	Dr Harper
11.	3:15	10,000 Voices Phase One Summary Report and Annual Report	<b>PHA/03/09/14 (for Approval)</b>	Mrs Cullen
12.		HSCB / PHA Annual Quality Report	<b>PHA/04/09/14 (for Approval)</b>	Mrs Cullen

13. 3:45 Perinatal Mortality Report

**PHA/05/09/14** Dr Harper  
**(for Noting)**

14. 4:05 Any Other Business

15. **Date, Time and Venue of Next Meeting**

Thursday 16 October 2014

1:30pm

East Belfast Network Centre

Templemore Avenue

Belfast

BT5 4FP

## MINUTES

**Minutes of the 67<sup>th</sup> Meeting of the Public Health Agency board  
held on Thursday 21 August 2014 at 1:30pm,  
in Public Health Agency, Conference Rooms,  
12/22 Linenhall Street, Belfast, BT2 8BS**

**PRESENT:**

Ms Mary McMahon	- Chair
Dr Eddie Rooney	- Chief Executive
Mrs Pat Cullen	- Director of Nursing and Allied Health Professionals
Dr Carolyn Harper	- Director of Public Health/Medical Director
Mr Edmond McClean	- Director of Operations
Alderman William Ashe	- Non-Executive Director
Mr Brian Coulter	- Non-Executive Director
Mrs Julie Erskine	- Non-Executive Director
Dr Jeremy Harbison	- Non-Executive Director
Mrs Miriam Karp	- Non-Executive Director
Mr Thomas Mahaffy	- Non-Executive Director
Alderman Paul Porter	- Non-Executive Director

**IN ATTENDANCE:**

Mr Simon Christie	- Assistant Director of Finance, HSCB
Mrs Fionnuala McAndrew	- Director of Social Services, HSCB
Mr Robert Graham	- Secretariat

**APOLOGIES:**

Mr Paul Cummings	- Director of Finance, HSCB
Mrs Joanne McKissick	- External Relations Manager, Patient Client Council

		<b>Action</b>
<b>98/14</b>	<b>Item 1 – Welcome and Apologies</b>	
98/14.1	The Chair welcomed everyone to the meeting and noted apologies from Mr Paul Cummings and Mrs Joanne McKissick.	
<b>99/14</b>	<b>Item 2 - Declaration of Interests</b>	
99/14.1	The Chair asked if anyone had interests to declare relevant to any items on the agenda. Mrs Karp declared an interest in	

relation to Item 14 in her role as a Chair of a Fitness to Practice committee.

**100/14 Item 3 – Minutes of the PHA Board Meeting held on 19 June 2014**

100/14.1 The minutes of the previous meeting, held on 19 June 2014, were approved as an accurate record of the meeting. The minutes were duly signed by the Chair.

**101/14 Item 4 – Matters Arising**

*83/14.3 Position re e-cigarettes*

101/14.1 The Chair noted that, since the discussion at the last Board meeting, the Public Health Agency had published its view on the use of e-cigarettes. Alderman Ashe said that he welcome the Agency's view and was pleased to note this development.

*83/14.2 Inter-sectoral Programme Boards*

101/14.2 The Chair advised that there had been difficulties in agreeing a date for the first meeting of the Older People's Group, but that this would take place on 6 November. However, an earlier meeting would be convened in the next week to sign off the terms of reference and agree the membership and schedule of future dates.

**102/14 Item 5 – Chair's Business**

102/14.1 The Chair advised that she had attended a mental health capacity legislation workshop and said that there were lessons to be learnt for the implementation of the new mental health capacity legislation in Northern Ireland, given the experience in England. Mrs McAndrew said that there was currently a public consultation on the new legislation and that HSCB and PHA were submitting a joint response. At the suggestion of the Chair, she agreed to facilitate a presentation for members at a future meeting.

102/14.2 The Chair said that she had attended a risk and resilience workshop organised by NICON. She also attended the launch of the Royal Paediatrics and Child Health NI branch and the

opening of the new Ballymena One Stop Shop.

102/14.3 The Chair informed members that she had met with the new Permanent Secretary, Richard Pengelly.

102/14.4 The Chair said that she attended the annual Belfast Trust lecture as part of the West Belfast festival which was on the theme of alcohol and drugs.

### **103/14 Item 6 – Chief Executive’s Business**

103/14.1 The Chief Executive informed members that he had been invited by the Northern Ireland Human Rights Commission to appear at the public enquiry on emergency department to discuss 10,000 voices.

103/14.2 The Chief Executive advised that he has been asked by the Chief Medical Officer to establish the Regional Board to take forward the implementation of Making Life Better.

103/14.3 The Chief Executive said that he, and the Director of Operations, had held a series of introductory meetings with the Chief Executives of the new Councils.

103/14.4 The Chief Executive noted that he had attended the Transplant Games in England, which had proved to be very successful for the Northern Ireland team.

### **104/14 Item 7 – Finance Update**

- **PHA Financial Performance Report (PHA/01/08/14)**

104/14.1 Mr Christie presented the Financial Performance Report for the period up to 30 June 2014. He said that the report indicated a surplus to date of £140k from expenditure of £18m. He noted that £600k of expenditure had yet to be deployed.

104/14.2 Mr Christie advised members that the Lifeline contract was showing an overspend to date of £123k due to the increased demand on the service and that it was anticipated that this situation would remain during the course of the financial year.

104/14.3 Mr Christie informed members that PHA was continuing to struggle to meet its prompt pay targets due to ongoing issues

with the financial system. However, he did note an improvement in relation to the 10-day target.

104/14.4 Mrs Erskine asked if there had been any improvement during July in relation to the prompt pay statistics. Mr Christie said that he was not aware of any evidence to suggest any improvement.

104/14.5 Mr Coulter asked about Lifeline and queried if there are any demand-led measures in place. Mr Christie said that PHA is obliged to pay for all appropriate activity against the Lifeline contract but acknowledged that it is difficult to project activity levels. He went on to say that PHA ensures that it is provided with the appropriate evidence before making payments. Dr Harper added that there are six specific requirements in the area of demand management that have been agreed with Contact.

104/14.6 Members noted the Financial Performance Report.

**105/14 Item 8 – Remuneration Committee Update (PHA/02/08/14)**

- **Minutes of 4 December 2013 meeting**
- **Verbal briefing from Chair**

105/14.1 The Chair advised members that the minutes of the meeting of December 2013 were available for noting.

105/14.2 The Chair advised that the Committee had recommended a fully acceptable pay award for Executive members for 2013/14. The Board endorsed the decision.

**106/14 Item 9 – Update from Corporate Strategy Project Board**

106/14.1 Dr Harbison gave an overview to members of the three meetings that had taken place of the Corporate Strategy Project Board.

106/14.2 At its first meeting in July, Dr Harbison advised that a PID, terms of reference and membership had been agreed. It was decided that an external member should join the Project Board and that an invitation had been extended to, and accepted by, Dr Liz Mitchell from the Institute for Public Health.

106/14.3 Dr Harbison went on to say that the terms of reference had been agreed and a draft timetable considered. He added that a Project Team, consisting of PHA Assistant Directors, has also

been established. He went on to say that PHA would be appointing a Project Support Officer to take forward this work.

- 106/14.4 Dr Harbison outlined the Project Team's approach to engagement. He said that the first stage would be an internal event arranged with PHA staff in November which would be followed by an external event in early 2015.
- 106/14.5 Dr Harbison advised that the Project Board will continue to meet monthly over the next few months.
- 106/14.6 The Chair thanked Dr Harbison for the update and was pleased to note the progress that has been made to date.
- 106/14.7 Members noted the update from Dr Harbison.

**107/14 Item 10 – Performance Management Report – Corporate Business Plan and Commissioning Plan Directions Targets for Period Ending 30 June (PHA/03/08/14)**

- 107/14.1 Mr McClean presented the first quarterly Performance Management Report and said that of the 85 targets, 69 were rated as "green", 15 as "amber" and 1 as "red".
- 107/14.2 The Chair expressed concern about the target rated "red" and said that the Board would give support to the Executive Team in its discussions with DHSSPS regarding this. Mrs Cullen said that PHA is working closely with HSCB to ensure that workforce planning is fit for purpose as it is essential that a universal health visiting service is delivered and that there had been discussions with the HSCB Director of Commissioning regarding this. In response to a query from Dr Harbison, she said she was not aware of any proposed cuts in this area and added that there remain plans to recruit up to 38 new registrants in September 2014.
- 107/14.3 Mr Coulter queried whether the target regarding Safety Forum initiatives was moving towards a "red" rating. Mrs Cullen acknowledged that there are continuing demands being placed onto the Safety Forum and that there is a need for additional investment. The Chief Executive said that this situation will be closely monitored.

- 107/14.4 Members noted the Corporate Performance Report.
- 108/14 Item 11 – HCAI Target Monitoring Report and Death Data (PHA/04/08/14)**
- 108/14.1 Dr Harper presented the quarterly HCAI report, together with the death data. She noted that there has been a continuing downward trend since 2008 and that recently some Trusts had reported zero cases of MRSA. She commended the work of the Trusts in achieving this outcome.
- 108/14.2 Members noted the HCAI target monitoring report.
- 109/14 Item 12 – Northern Ireland Breast Screening Programme Annual Report 2012/13 (PHA/05/08/14)**
- 109/14.1 Dr Harper introduced Dr Adrian Mairs to the meeting and invited him to present the Breast Screening Programme Annual Report for 2012/13.
- 109/14.2 Dr Mairs said that this was the fourth Annual Report of the Northern Ireland Breast Screening Programme undertaken by the Quality Assurance Reference Centre (QARC). He explained that the role of QARC is to ensure that with each screening programme, minimum standards are met, and that there is a programme of continuous improvement.
- 109/14.3 Dr Mairs informed members of two key developments which had taken place during 2012/13. Firstly, the old analogue mammography equipment was being replaced with new digital equipment and that the fleet of five mobile screening trailers was being replaced by seven new trailers. Secondly, a new set of information leaflets regarding the programme had been published.
- 109/14.4 Dr Mairs said that just under 75% of women who were invited to breast screening had attended. He said that this rate compared favourably with other parts of the UK, where a comparison could be made. He added that the Northern Trust had the highest take-up rate of any Trust in the UK.
- 109/14.5 Dr Mairs advised that 97.1% of women receive a result of their screening within two weeks, and for those women who receive



an abnormal result, 90% receive an appointment for an assessment within three weeks. He said that this represented a slight decrease, but he added that all letters issued state that women should attend this assessment.

- 109/14.6 Dr Mairs explained that ductal carcinomas in situ (DCIS) cases and advised that every one woman who has her life saved as a result of breast screening, three women receive treatment for a condition that would not have harmed them.
- 109/14.7 Dr Mairs advised that the round length (where woman should be invited back to screening within 36 months of their first appointment) was below the national standard, but that it had been improving over recent years.
- 109/14.8 Mrs Erskine asked if a customer satisfaction survey undertaken. Dr Mairs said that surveys are undertaken, but that they are not included in the report as there is no standard to be measured against. However, he said that the outcome of these was largely positive.
- 109/14.9 Dr Harbison thanked Dr Mairs for the report and noted that the additional comparative information requested by members had been made the report much more comprehensive. He expressed concern about the 20,000 women who did not attend for appointment and queried whether initiatives, such as sending text message reminders, or working with GP practices would help. Dr Mairs said that there was no evidence that sending text messages had helped with the uptake, but that Trust staff had found it useful. With regard to working with GP practices, Dr Mairs said that this work had only commenced, but he gave an example of how staff had attended a local shopping centre distributing information about the programme, and that this had helped increase take-up.
- 109/14.10 Alderman Porter asked whether PHA had considered using evidence that attending for screening can save lives as a method of increasing take-up. Dr Mairs that it would be difficult to present such evidence, and he pointed out that there are instances where women who attend get treated for a condition which may not have harmed them.
- 109/14.11 Mrs Karp asked if there was a link between non-attendance and

those living in areas of low deprivation. Dr Mairs said that PHA did do some work with QUB on this, but there was no apparent link. Mrs Karp asked about improving the round length statistics. Dr Mairs said that measures were being put in place, and that there was now a key performance indicator for Trusts.

109/14.12 Mr Coulter noted that the report places an emphasis on age-related risk, and asked how confident this approach is. Dr Mairs said that the lowest attenders were those who had never previously attended, and that once an individual attended, there were more likely to attend future sessions. Mr Coulter asked about the role of the community and voluntary sector. Dr Mairs said that PHA has a contract with the Women's Resource and Development Agency who help train facilitators who work in the community to engage with those groups who may be deemed less likely to attend for screening.

109/14.13 Members noted the Northern Ireland Breast Screening Programme report for 2012/13.

#### **110/14 Item 13 – e-Health and Care Strategy for Northern Ireland (PHA/06/08/14)**

110/14.1 The Chief Executive introduced the eHealth and Care Strategy and welcomed Claire Buchner to the meeting to present the Strategy to members.

110/14.2 Ms Buchner thanked members for the opportunity to present this draft Strategy. She explained that the Strategy was not an entity in its own right, but a culmination of current driving forces to bring the health and social care system into the 21<sup>st</sup> Century. She outlined examples of how technology can benefit patients by having their information more readily available, and therefore reducing duplication. She added that the infrastructure was already in place and that this Strategy would be taken forward by medical professionals, and not solely IT professionals.

110/14.3 Ms Buchner advised members that an eHealth Strategy Group and Steering Group have been established to develop this Strategy with professional input from across the HSC and across the UK. She explained that there had been an initial engagement process, but that following approval of the Strategy, a full public consultation would take place between September

and December 2014. She added that an EQIA had also been carried out and this had highlighted issues with regard to some of the Section 75 groups and that these issues would be picked up as part of the implementation plan.

- 110/14.4 Ms Buchner gave members an overview of the vision and principles as well as the six key objectives of the Strategy. She reiterated that the Strategy does not seek to replace existing work, but rather to build on work already been carried out.
- 110/14.5 Mr Coulter said that he found the Strategy to be exciting, but he asked whether additional funding would be made available to enable its implementation. He asked about the potential for patient safety and what impact the Strategy could have on social care.
- 110/14.6 Ms Buchner said that she would be confident that additional funding would be made available given the long term benefits. With regard to patient safety, she acknowledged that information being inputted into systems was only as reliable as those who were inputting it, but she welcomed the recent developments in terms of the Northern Ireland Electronic Care Record (NIECR). She said that systems need to be updated daily and that a cultural change is needed. Ms Buchner conceded that there is some way to go in terms of integrating social care and much of this work has been aimed at the acute sector. Mrs McAndrew said that it was important that this work is extended into secondary and community care.
- 110/14.7 The Chief Executive noted that 20 years ago, technology would have been cited as the reason for not being able to take this type of work forward, but now that technology has advanced, it is up to the HSC to maximise its potential. He added that it would also have been a perception that IT was only used by IT professionals, but now all staff have the skills to use it.
- 110/14.8 Mr Mahaffy welcomed the Strategy but noted that there is always public scepticism around the use of new IT systems. Ms Buchner said that this is one of the reasons why public consultation will be important and she added that during the initial engagement, there had been enthusiasm for this project. Mr Mahaffy noted that he felt the use of the word “citizens” may not feel inclusive.

110/14.9 Dr Harbison said that the Strategy offered huge opportunities, and that even PHA should review its own use of technology, for example reducing the use of papers at meeting and being more laptop compliant. Alderman Ashe agreed and said that the technology is there, it is now up to organisations to use it.

110/14.10 Members approved the eHealth and Care Strategy.

**111/14 Item 14 – Local Supervising Authority (LSA) Report (PHA/07/08/14)**

111/14.1 Mrs Cullen introduced Verena Wallace and invited Ms Wallace to give members an overview of the Local Supervising Authority (LSA) Report.

111/14.2 Ms Wallace advised members that there had been a different audit process undertaken and that instead of 50 standards, PHA was measured against 8 standards. Of these 8 standards, she said that PHA had no failures, but 2 standards where improvements were required.

111/14.3 Ms Wallace explained that this year's review had been carried out by Mott McDonald during January to March 2014, and that the focus of the audit was on quality assurance. She said that the two areas highlighted for improvement were around service user engagement and the interface with statutory supervision following adverse incidents. Ms Wallace said that training had been undertaken with Bond Salon, and she said that all midwives now receive an annual supervision review.

111/14.4 Ms Wallace gave an overview of other key findings from the review. She drew members' attention to issues regarding the transfer of records from self-employed midwives to LSAs, but noted that this was not a major issue in Northern Ireland.

111/14.5 Mrs Wallace said that there had been discussions regarding the recruitment of lay reviewers, but that formal training would be required which should be clearly linked to PHA's PPI work. Overall, she said that the review found the LSA's framework to be satisfactory and she highlighted that meetings had been held with the Chief Executive and Director of Nursing.

- 111/14.6 Mrs Wallace moved onto the second report and advised that in Northern Ireland the ratio of supervisors to midwives is 1:13. She said that overall, the NMC had found that the LSA ensured that adequate measures are taken to control risks.
- 111/14.7 Mrs Karp asked about the two areas highlighted for improvement and how these would be followed up in terms of future reporting. Ms Wallace said that Mott MacDonald would carry out quarterly monitoring but that she could prepare a bi-annual update for the PHA Board.
- 111/14.8 Mrs Karp asked about the LSA's Midwifery Officer role. Ms Wallace acknowledged that there is only one person carrying out the role, but she felt that she has adequate support to undertake this, however there are issues about succession planning which should be considered. Mrs Cullen said that some conversations had already taken place regarding this.
- 111/14.9 Members APPROVED the Local Supervising Authority Report.
- 112/14 Item 15 – Serious Adverse Incidents Learning Report (PHA/08/08/14)**
- 112/14.1 Mrs Cullen introduced Mary McElroy to the meeting to present the next two reports.
- 112/14.2 Ms McElroy presented the Serious Adverse Incidents Learning Report for the period October 2013 to March 2014. She advised that during 2012/13 a review of the SAI procedure had taken place with the revised guidelines taking effect from 1 April 2014. The two main amendments to the guidelines were a requirement to report all child deaths up to the age of 18, and a reduction from 24 months to 12 months for SAIs relating to service users known to mental health services.
- 112/14.3 Ms McElroy gave an overview of the SAI process and outlined the various methods for disseminating learning. She highlighted specific initiatives to demonstrate how learning had been disseminated and outlined some of the thematic reviews that had been undertaken during the period of the report.
- 112/14.4 Mrs Erskine expressed concern about the low numbers of SAIs regarding children and children's homes, and asked how these

incidents were being reported. Mrs McAndrew explained that they would be categorised under Family and Childcare but added that there are notifiable incidents under the Children's Order which are reported via a different reporting mechanism.

112/14.5 Mr Coulter noted that there had been a significant increase in the number of incidents reported in the Northern Trust. Mrs Cullen explained that there had been a culture change in the Trust following the appointment of the turnaround team, and this had seen an increase in reporting, but that the situation would be kept under review.

112/14.6 The Chair and Chief Executive both queried the requirement to report all child deaths. Dr Harper explained that it only related to those in receipt of HSC services and she explained that there is also a requirement for the Safeguarding Board to set up overview panels to look at child deaths, following the recent hyponatraemia inquiry.

112/14.7 Members noted the report on Serious Adverse Incidents.

**113/14 Item 16 – Quality Improvement Annual Report (PHA/09/08/14)**

113/14.1 Ms McElroy informed members that the Quality Improvement Annual Report emanates from a requirement within the Commissioning Plan for Trusts to identify safety and quality priorities and report on a range of indicators. She said that Trusts have Quality Improvement Plans in place and the data obtained from monitoring these is reported to the Quality, Safety and Experience (QSE) team in PHA.

113/14.2 Ms McElroy gave members an overview of the six key areas featured in the report and outlined Trusts' performance against the indicators.

113/14.3 Ms McElroy advised that, with regard to pressure ulcer skin bundle compliance, the performance of the South Eastern Trust appeared lower as it was using a different set of data to report on. However, she said that by focusing on the data it was required to report in, its performance would be closer to compliance.

113/14.4 Ms McElroy said that Trusts' performance in relation to

compliance with the WHO Surgical checklist had improved following dissemination of a learning letter. She advised that all Trusts had met their targets with regard to reductions in cardiac arrest rates.

113/14.5 Ms McElroy noted that Trusts had not met their targets in relation to VTE (Venothromboembolism), but that the gap was closing. She finished her report by advising that the Health Protection team are working to help Trusts address issues with regard to infections.

113/14.6 The Chair said that the report showed a good performance across all of the Trusts. The Chief Executive added that while compliance is acceptable, there should be always be improvement and it was encouraging to see the improvements over recent years.

113/14.7 Members APPROVED the Quality Improvement Plan Annual Report.

#### **114/14 Item 17 – Review of Respiratory Services Framework (PHA/10/08/14)**

114/14.1 Dr Harper advised that the first Respiratory Services Framework had been published in 2007 and this amended framework was being presented for approval.

114/14.2 Dr Harper explained that RQIA had undertaken a review of Service Frameworks and that framework is subject to a formal review process. She said that following Board approval, this amended Framework would be taken to the Service Framework Programme Board and then be issued for public consultation.

114/14.3 Dr Harper said that the amended Framework contains a range of standards across a range of respiratory conditions. She added that there is a quarterly audit process in place. In terms of the costs of implementation, Dr Harper explained that any proposals for additional investments are put alongside other financial demands. She suggested that investment in some areas, for example community support, could see a reduction in episodes of care and admissions to emergency departments.

114/14.4 Mr Coulter was pleased to note that some of the proposals in the

frameworks were part of the “shift left” agenda.

114/14.5 Members approved the review of the Respiratory Services Framework.

**115/14 Item 18 – Any Other Business**

115/14.1 There was no other business.

**116/14 Item 19 – Date and Time of Next Meeting**

Date: Thursday 18 September 2014

Time: 1:30pm

Venue: Public Health Agency

Conference Rooms

2<sup>nd</sup> Floor

12-22 Linenhall Street

Belfast

BT2 8BS

Signed by Chair: \_\_\_\_\_

Date: \_\_\_\_\_



# **PHA Board Report**

**July 2014**

### Income

	<u>Page Reference</u>	Annual £000s	Year to Date £000s
Department Allocation*		96,395	24,736
Income from Other Sources		931	466
<b>Total Income</b>		<b>97,326</b>	<b>25,202</b>

### Expenditure

Non-Trust Programme	2	41,896	8,022
Trusts	3	34,680	10,881
PHA Administration (inc. BSO)	4	20,750	6,531
<b>Total Expenditure</b>		<b>97,326</b>	<b>25,434</b>
<b>Surplus/(Deficit)</b>		<b>-</b>	<b>( 232 )</b>

\*Includes assumed allocations of £797k for the Safeguarding Board for NI (SBNi), £134k for Clinical Excellence Awards, £250k for Research & Development projects from the Department for Social Development and £354k from HSCB re Accommodation charges.

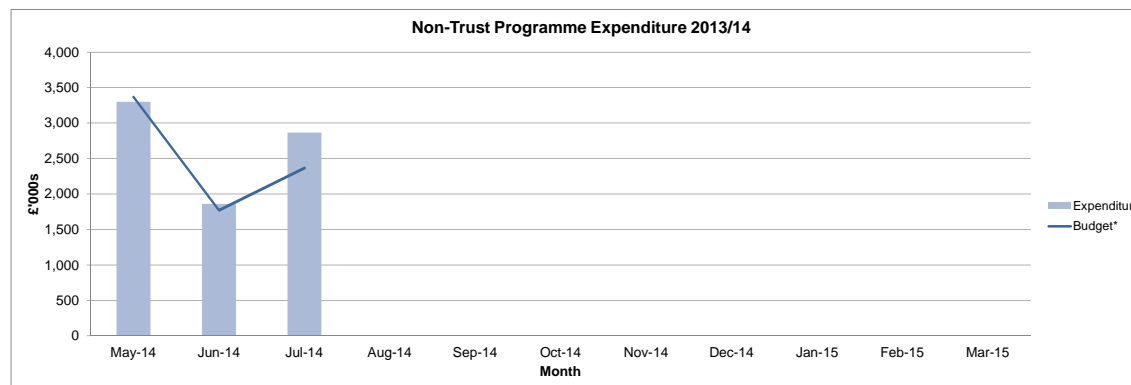
### **Position Synopsis:**

Following a review of all budgets, PHA continues to project a breakeven position at the year end. However, it should be noted that decisions on a balance of funds held for 2014/15 investments still requires to be made by PHA.

Year to date the financial position shows a small deficit of £232k, relating to the non Trust Programme budget (£521k) and Management and Administration budgets £289k.

The PHA has yet to approve developments against a balance of £1.1m Full Year Effect and £0.6m Current Year Effect, remaining from the deployment of additional allocations received in 2014/15 and recycled baseline resources, decisions on priorities are currently being considered by PHA. The financial position above assumes that these resources will be fully expended within 2014/15.

Non-Trust Programme Spend



	£'000s	£'000s	£'000s	£'000s	£'000s	£'000s	£'000s	£'000s	£'000s	£'000s	£'000s	£'000s
	May-14	Jun-14	Jul-14	Aug-14	Sep-14	Oct-14	Nov-14	Dec-14	Jan-15	Feb-15	Mar-15	Total
Budget	3,368	1,769	2,364									7,501
Expenditure	3,299	1,858	2,865									8,022
<b>Surplus/(Deficit)</b>	<b>69</b>	<b>(89)</b>	<b>(501)</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>(521)</b>

Surplus/(Deficit) made up as follows:

Health Improvement - Belfast LCG	87	2	(42)									47
Health Improvement - South East LCG	(137)	(158)	312									17
Health Improvement - North LCG	(88)	67	(305)									(326)
Health Improvement - South LCG	135	(54)	79									160
Health Improvement - West LCG	249	(146)	(200)									(97)
Health Improvement - Lifeline Contract	(137)	14	11									(112)
Health Improvement - Smoking Cessation	0	0	0									0
Health Protection	(60)	(12)	(482)									(554)
Service Development & Screening	115	65	38									218
Research & Development	29	(28)	71									72
Campaigns	(96)	17	(50)									(129)
Nursing & AHP	(3)	8	5									10
Health Improvement - Regional Projects	(25)	136	62									173

Position Synopsis:

The current position shows an overspend of £521k at the end of July 2014 based on profiles shared by budget managers and the PEM system used by PHA to plan commitments. The Financial Management team have continued to meet with Budget Managers to review budgets, profiles and assumptions regarding expenditure for 2014/15.

The increase in overspend this month is related to a large number of payments being issued ahead of the planned expenditure profile. It is expected that the expenditure versus budget will normalise over the next couple of months.

Budget Holders continue to anticipate that all approved budgets, with the exception of the Lifeline contract, will breakeven at year end.

PHA Management Team continues to scrutinise in detail the pressure with respect to the Lifeline Service and the demand management measures in place. HSCB Financial Management team are being regularly briefed in order to allow an assessment of the potential financial impact that the pressure may have on the year end financial position.

## Revenue Resource Limits (RRLs) to Trusts

July 2014

	Annual Budget (per revised SBAs) £'000s	Budget to Date £'000s	Variance from Annual Budget £'000s	<u>Main Reasons for Increase in Funding</u>
Western Trust	5,113	5,556	443	
Northern Trust	6,129	6,671	542	
Belfast Trust	11,178	12,127	949	
South Eastern Trust	2,889	3,271	382	
Southern Trust	4,595	5,019	424	
Funds identified to Trusts in Budget Paper but not yet allocated	4,751	2,036	(2,715)	The funds shown against specific Trusts have been notified via Service & Budget Agreements. The PHA are making good progress in issuing the funding which was previously unallocated at the beginning of the year.
<b>Total</b>	<b>34,655</b>	<b>34,680</b>	<b>25</b>	

	<b>Total Budget £'000's</b>	<b>Budget £'000's</b>	<b>Current Month Expenditure £'000's</b>	<b>Variance £'000's</b>	<b>Budget £'000's</b>	<b>Year to Date Expenditure £'000's</b>	<b>Variance £'000's</b>
Salaries	17,416	1,507	1,443	64	5,773	5,619	154
Goods & Services	2,675	220	188	32	827	692	135
<b>Sub-Total Administration</b>	<b>20,091</b>	<b>1,727</b>	<b>1,631</b>	<b>96</b>	<b>6,600</b>	<b>6,311</b>	<b>289</b>
BSO	659	55	55	0	220	220	0
<b>Total Administration</b>	<b>20,750</b>	<b>1,782</b>	<b>1,686</b>	<b>96</b>	<b>6,820</b>	<b>6,531</b>	<b>289</b>

### ***Position Synopsis:***

An overall management and administration surplus of £289k is reported at the end of July 2014 based on budgetary profile. Any full year surplus will be used for other PHA priorities.

**Prompt Payment Statistics**

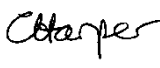
	<b>July 2014 Value £'000</b>	<b>July 2014 Volume of Invoices</b>	<b>Cumulative position as at 31/07/14 £'000</b>	<b>Cumulative position as at 31/07/14 Volume of Invoices</b>
Total bills paid (relating to Prompt Payment target)	2,096	971	9,502	3,154
Total bills paid on time (within 30 days or under other agreed terms)	1,979	878	8,473	2,804
<b>Percentage of bills paid on time</b>	<b>94.4%</b>	<b>90.4%</b>	<b>89.2%</b>	<b>88.9%</b>

The BSO has not yet been able to provide a comprehensive prompt payment report which is accurate for PHA. In the interim HSCB finance, on behalf of PHA, continue to generate a prompt payment report based on the audited method which was used to provide the Annual Accounts figures. This will ensure consistency of information reported to PHA on a monthly basis, while BSO works to produce a meaningful report.

PHA staff continue to make progress in utilising the new systems to clear invoices promptly, with 73.7% of all invoices paid within 10 days of receipt. Overall 30 day performance has improved in July with over 90% clearance of invoices by both volume and value, however, the year to date figures are being affected by the lower performance in May & June.

The cumulative position for 2014/15 by volume of invoices is 88.9% and by value 89.2%, which remains short of the 95% DHSSPS target.

**PUBLIC HEALTH AGENCY BOARD PAPER**

<b>Date of Meeting</b>	21 August 2014
<b>Title of Paper</b>	Overview of Quality 2020
<b>Agenda Item</b>	10
<b>Reference</b>	PHA/02/09/14
<b>Summary</b>	
<p>The Q2020 Project Manager will present a brief overview of the Quality 2020 Strategy which will include information on how the strategy came about, how it operates, what it has achieved to date, what it hopes to achieve in the future and how what other strategies/ work it interfaces with.</p>	
<b>Equality Screening / Equality Impact Assessment</b>	N/A
<b>Audit Trail</b>	This presentation was made at AMT on 9 September 2014.
<b>Recommendation / Resolution</b>	For Noting
<b>Director's Signature</b>	
<b>Title</b>	Director of Public Health
<b>Date</b>	9 September 2014



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# WHAT IS QUALITY 2020?

Quality 2020 is a strategy,  
backed by the Minister for Health,  
put in place to improve health services in  
Northern Ireland



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and Public Safety**

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# WHAT DOES Q2020 WANT TO DO?

Quality 2020 wants to improve safety, effectiveness of services and make the health and social care (HSC) in Northern Ireland more patient centred



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# FOR NORTHERN IRELAND THIS 10-YEAR QUALITY STRATEGY DEFINES QUALITY UNDER THREE MAIN HEADINGS:

## **SAFETY**

avoiding and preventing harm to patients and clients from the care, treatment and support that is intended to help them.

## **EFFECTIVENESS**

the degree to which each patient and client receives the right care (according to scientific knowledge and evidence-based assessment), at the right time in the right place, with the best outcome.

## **PATIENT AND CLIENT FOCUS**

all patients and clients are entitled to be treated with dignity and respect and should be fully involved in decisions affecting their treatment, care and support.

# QUALITY 2020 VISION

“to be recognised internationally, but especially by the people of Northern Ireland, as a leader for excellence in health and social care”



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# QUALITY 2020 WILL ACHIEVE THIS THROUGH 5 STRATEGIC GOALS

TRANSFORMING THE CULTURE  
STRENGTHENING THE WORKFORCE  
MEASURING THE IMPROVEMENT  
RAISING THE STANDARDS  
INTEGRATING THE CARE



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# HOW IS QUALITY 2020 BEING IMPLEMENTED?

Quality 2020 is being directed by a Steering Group chaired by the Chief Medical Officer, and an Implementation Team chaired by the PHA Medical Director and Director of Nursing and Allied Health Professions.

The Implementation Team includes representatives from Trusts, HSCB, postgraduate training bodies for Medicine, Nursing and Social Work.

In addition, RQIA and the Patient Client Council are designing an engagement process to involve the public and service users in the development and review of actions to take Q2020 forward.



# WHAT DOES THIS LOOK LIKE IN PRACTICE?

In 2013/14, seven Task Groups were established:

Task 1	Managing Safety Alerts	Measures / Standards
Task 2	Developing HSC Trust Annual Quality Reports	Measures / Standards
Task 3	Review the Policy Framework for Safety and Quality	Standards
Task 4	Developing Professional Leadership	Strengthening Workforce
Task 5	Developing an E-learning System to Support and Track Training	Integrating the Care
Task 6	Ward Level Review of the Quality of Clinical and Social Care	Transforming Culture
Task 7	Review the Literature on Changing Organisational Culture	Transforming Culture



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# QUALITY 2020 ACHIEVEMENTS TO DATE

TASK 1	A dedicated protocol has been put in place to manage Safety Alerts across the HSC.	COMPLETE
TASK 2	HSC Trust Annual Quality Reports for 2012/13 have been produced and are available on Trust websites. These reports have been reviewed and revised criteria is being issued to Trusts. Department has issued criteria to all other Arms Length Bodies to produce similar reports for Sept 2014.	PHASE 2
TASK 3	A Catalogue of Standards has been collated.	COMPLETE
TASK 4	A Leadership Attributes Framework has been developed and approved by Steering Group. This will be launched in December 2014 to then roll out across the HSC.	PHASE 2
TASK 5	This is now at its second stage. An ELearning minimum mandatory training package for Nursing and Social Care staff is being developed.	PHASE 2
TASK 6	A paper is being produced to look at options following on from a scoping exercise that reviewed the work across the region in relation to Safety and Quality and Experience (regional and local).	PHASE 2
TASK 7	Literature review on Organisational Culture has been published.	COMPLETE



# QUALITY 2020 - 2014/15

Task 2	Developing HSC Trust Annual Quality Reports	Measures / Standards
Task 4	Developing Professional Leadership	Standards
Task 5	Developing an E-learning System to Support and Track Training (HSC ELearning System (Experior))	Strengthening Workforce
Task 6	Ward Level Review of the Quality of Clinical and Social Care	Transforming Culture
Task 8	Communications Plan	
Task 9	Stakeholder Forum	Measures / Standards
Task 13	WHO Curriculum on Patient Safety in Undergraduate Training	Strengthening Workforce
Task 14	Minimising Variations across Trusts	Strengthening Workforce

Complaints Work (promoting positive attitudes)

Task 10 / 11 are currently up for discussion at DHSSPSNI



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# Q2020 links

REGIONAL STRATEGIES	Transforming Your Care, Improving and Safeguarding Social Wellbeing: A Strategy for Social Work in Northern Ireland, Patient and Client Experience Standards, PPI
10,000 VOICES	INTEGRATING THE CARE, RAISING THE STANDARDS, MEASURING THE IMPROVEMENT, STRENGTHENING THE WORKFORCE, TRANSFORMING THE CULTURE
QUALITY IMPROVEMENT PLANS	MEASURING THE IMPROVEMENT, RAISING THE STANDARDS, MEASURING THE IMPROVEMENT
QUALITY SAFETY AND EXPERIENCE GROUP	MEASURING THE IMPROVEMENT, RAISING THE STANDARDS, MEASURING THE IMPROVEMENT
SAFETY QUALITY AND ALERTS TEAM	MEASURING THE IMPROVEMENT, RAISING THE STANDARDS, MEASURING THE IMPROVEMENT
COMPLAINTS	RAISING THE STANDARDS, MEASURING THE IMPROVEMENT, STRENGTHENING THE WORKFORCE, TRANSFORMING THE CULTURE
HSC SAFETY FORUM	RAISING THE STANDARDS, MEASURING THE IMPROVEMENT, STRENGTHENING THE WORKFORCE, TRANSFORMING THE CULTURE

# THE WAY FORWARD

Whilst there is a recognition that the HSC Family in Northern Ireland faces increasing challenges, Quality 2020 is a fluid process and is about embedding the systems and processes to support good practice, train staff, develop leaders at all levels, review care and report to the public.



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# My Role

## Service Delivery

To assist and support the Implementation Team Chairs in the delivery of Quality 2020

To assist and support and the Task Group project leads with the implementation of their work plans

## Collaborative Working

Liaise and work with all stakeholders in driving the Q2020 strategy

## Communication and Information Management

Deliver on the communications plan



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W: [www.dhsspsni.gov.uk/quality\\_strategy\\_2020](http://www.dhsspsni.gov.uk/quality_strategy_2020)



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**PUBLIC HEALTH AGENCY BOARD PAPER**

<b>Date of Meeting</b>	18 September 2014
<b>Title of Paper</b>	10,000 Voices Phase One Summary Report and Annual Report
<b>Agenda Item</b>	11
<b>Reference</b>	PHA/03/09/14

**Summary**

**INTRODUCTION**

Quality 2020 defines quality under three headings:

**SAFETY**

Avoiding and preventing harm to patients and clients from the care, treatment and support that is intended to help them.

**EFFECTIVENESS**

The degree to which each patient and client receives the right care (according to the scientific knowledge and evidence-based assessment), at the right time in the right place, with the best outcome.

**PATIENT AND CLIENT FOCUS**

All patients and clients are entitled to be treated with dignity and respect and should be fully involved in decisions affecting their treatment, care and support. The aim of the first annual HSCB and PHA Quality report is to share information and demonstrate improvements both to those who use health care services and those who deliver them.

**PROCESS**

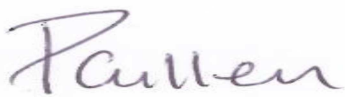
During 2012/13, in line with the Implementation of Quality 2020 Strategy (2011) each of the HSC Trusts were tasked with producing an annual Quality Report, made up of core quality indicators which build on what is currently gathered and reported by Trusts in relation to quality and safety. These reports have now become an annual requirement for both Trusts and arms lengths bodies of Health and Social Care including the PHA and HSCB from 2013/14; and seek to aid organisations in demonstrating their organisational role in contributing to the quality agenda and highlight their achievements in delivering core objectives which improve the Quality of care.

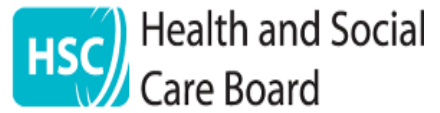
The HSCB and PHA Annual Quality report has been structured around the three core themes of the Safety, Effectiveness and Patient and Client Focus and highlights the range of work that the HSCB and PHA undertake on a daily basis to improve the

quality of care for patients and clients.

### **RECOMMENDATION**

The Board is asked to approve the Annual Quality Report for submission to Department of Health Social Services and Public Safety.

<b>Equality Screening / Equality Impact Assessment</b>	N/A
<b>Audit Trail</b>	The report was approved by AMT on 2 September 2014.
<b>Recommendation / Resolution</b>	For approval
<b>Director's Signature</b>	
<b>Title</b>	Director of Nursing and AHPs
<b>Date</b>	11 September 2014



## **PATIENT/CLIENT EXPERIENCE**

**10,000 VOICES**

**ANNUAL REPORT**

**June 2013 – July 2014**

**Final Draft**



## Foreword

I am pleased to present the first annual report of the '10,000 Voices' initiative. This initiative has been commissioned and funded by the Health and Social Care Board (HSCB) and the Public Health Agency (PHA), to introduce a more patient focused approach to shaping the way services are delivered and commissioned. It provides a mechanism for patients not only to share their experience of the health services, both positive and negative, but also to affect and inform change.

The Beryl Institute describes patient/client experience as: *"The sum of all interactions, shaped by an organization's culture that influence patient perceptions across the continuum of care"*. (The Beryl Institute)

Patient and client experience is a key indicator of quality and is central to many of the strategic drivers for health and social care improvement and innovation. For instance 'Patient and Client Focus' is one of three key elements outlined in the Quality 2020 Strategy (DHSSPS 2012) and highlights that all patient and clients are entitled to be treated with dignity and respect and should be fully involved in decisions affecting their treatment and support.

In addition, "Transforming Your Care" (DHSSPS 2011) focuses on reforming and modernising services, so that they are centred on people rather than institutions, therefore placing patient and client experience at the heart of health and social care reform.

This report outlines the progress of 10,000 Voices Initiative and includes the analysis of Phase 1, which relates to patients and clients who have accessed unscheduled care services in our Emergency Departments (ED), GP Out of Hours Services and Minor Injury Units.

I am delighted that so many people have taken the time to share their experiences of Health and Social Care through the 10,000 Voices initiative and wish to thank all those who participated; their contribution has been invaluable and will influence the delivery and commissioning of services.



**Pat Cullen,**

**Executive Director of Nursing, Midwifery and Allied Health Professionals, PHA.**

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## Section 1

### 1.1 Introduction

Patient/client experience is a recognised component of high-quality care, the increasing evidence and knowledge base in relation to patient/client experience presents a clear message that experience of care is as important to patients and clients as clinical effectiveness and safety (NHS Institute for Innovation and Improvement).

Recent studies (NHS Confederation 2010) have shown that organisations with a strong emphasis on providing high quality patient experience have demonstrated better health outcomes. In stark contrast, the high profile inquiry into the failings at the Mid Staffordshire NHS Foundation Trust (Francis 2013) indicates when the focus is on systems, not outcomes the patient/client experience is adversely affected.

A substantial body of evidence shows, patients want to be involved in decisions about their care, have their preferences respected, have clear information, emotional support and be treated with respect (Picker Institute). Additionally, it is widely recognised that the staff experience within the workplace can influence the patient/client experience. A recent review found compelling evidence that those NHS organisations with high levels of staff engagement and where staff are strongly committed to their work and involved in decision-making deliver better quality care (Kings Fund 2014)

In Northern Ireland, The Public Health Agency (PHA) and Health and Social Care Board (HSCB) have led the implementation of the Patient/Client Experience 10,000 Voices Initiative with the six Health and Social Care (HSC) Trusts. The overarching aim was to provide a mechanism for patients not only to share their experience of the health service but to affect and influence the way services are commissioned and delivered. 10,000voices is a metaphor for collecting patient experiences on a large scale to inform and change practice.

This report presents the work which has been undertaken in the 10,000 Voices Initiative from July 2013 – July 2014.

## Summary of actions and outcomes

The 10,000 Voices Initiative has achieved a number of significant actions and outcomes to date, these include:

- A regional robust structure in place to capture, understand and improve patients experience using narrative methodology
- Testing, development and implementation of data collection processes within 4 focused areas during the 10,000 Voices Initiative (Unscheduled care, NIAS, Experience of nursing and midwifery care and Care in your own home)
- Development of a partnership model to lead quality improvement programmes in patient /client experience in NI (based on EBD principles)
- Development of widespread regional and local engagement processes to ensure that all service users in NI have an opportunity to share their experience of health and social care services
- Identification and implementation of a number of regional and local actions to improve and influence patient experience, such as:
  - a. Development of interactive teaching session on patient experience for medical and nursing students
  - b. Improvements in waiting areas (EDs), for example increased cleaning schedules, increased visibility of staff and refurbishment of waiting rooms
  - c. Improvements in basic comfort needs of patients when accessing unscheduled care, for example review of pain relief, ensuring patients are warm and comfortable and the provision of meals, snacks and drinks
  - d. Improvements in communication, for example, written information for patients who may be recalled after suspected fracture, information on waiting times displayed and regional action on importance of staff introductions through endorsement of “Hello my name is” campaign

## 1.2.0 Strategic context

Patient/client experience is central to many key strategic drivers for innovation and improvement in health and social care services within Northern Ireland. The 10,000 Voices Initiative can be very closely aligned to and meet the objectives outlined in the following strategic papers.

### 1.2.1 Quality 2020

Quality 2020 (DHSSPS 2011) sets the direction for improvement in the quality of health care in Northern Ireland and outlines that safety, effectiveness and patient and client focus will form the basis to determine and improve quality of care. The vision of this strategy is:

***To be recognised internationally, but especially by the people of Northern Ireland, as a leader for excellence in health and social care”***

Within the area of patient and client focus, this framework articulates that all patient and clients are entitled to be treated with dignity and respect and should be fully involved in decisions effecting their treatment and support.

***“Services must have a clear patient and client focus. People are not just an element in a production process. There is abundant evidence that such an approach delivers improved health and well-being outcomes. There is also more than enough evidence, particularly in recent reports with the UK alone and internationally, that when the dignity of a person is not respected, or people are not effectively involved in decision making about their health and well-being or indeed listen to when they complain or raise concerns, quality suffers and declines” (DHSSPS 2011).***

### 1.2.2 Transforming Your Care (TYC)

Transforming Your Care” (DHSSPS 2011) sets the strategic direction for health and social care delivery and is about moving services closer to home and delivering more care in the community setting. It presents a significant opportunity to fundamentally improve the quality of care for everyone in Northern Ireland and places patient experience at the heart of these reforms.

Through these proposals the vision is to drive up the quality of care for patients, clients and service users, improve outcomes and enhance the patient experience so that people are treated in the right place, at the right time and by the right people. One of the key underlying principles of TYC is to place the individual at the centre of any model by promoting a better outcome for the service user, carer and their family.

### **1.2.3 Patient/Client Experience Standards**

Within Northern Ireland (NI) we want to ensure that throughout the entire patient/client experience people are treated with compassion, dignity and respect. In April 2009, the DHSSPS published the “Improving the Patient & Client Experience” Standards document. The development of these standards incorporated significant consultation and involvement of patients, carers and service users or their representatives. The document comprises five core standards: Respect, Attitude, Communication, Behaviour, Privacy & Dignity.

### **1.2.4 PHA Business Plan 2014/2015**

Improving the quality of health and social care services is one of six core areas of work outlined in the annual business plan for the Public Health Agency (PHA 2014/15/) Business Plan. One of the key actions identified to achieve this is to continue the roll out and implementation of 10,000 Voices and providing strategic direction to improving patient/client experience.

### **1.2.5 Health and Social Care Board (HSCB) Commissioning 2014/2015**

As outlined in the draft Commissioning Plan for 2014/2015, the commissioning of safe, high quality Health and Social Care Services is a top priority and core responsibility of the HSCB and PHA as well as the monitoring of feedback from the Patient Experience Standards and Patient stories. Reference is specifically made to the PHA continuing to lead the 10,000 Voices to shape and influence commissioning.

### **1.2.6 Recommendations from Francis Report**

The recommendations highlighted in the Francis Report (2013) clearly state that creating the right culture where care is centred on the patient must be a key priority for all healthcare organisations. The report highlights that in the Mid Staffordshire

NHS Foundation Trust statistics and reports were preferred to patient experience data, with a focus on systems, not outcomes. It further states that nothing is more likely to focus the mind on the impact of decisions on patients than to listen to patients' experiences. It is also recommended that the engagement of the public needs to be more visible in the commissioning process.

### **1.2.7 The Intelligent Board**

The Intelligent Board 2010 paper entitled 'Patient Experience' articulates that there is increasing evidence of a positive association between patient experience and clinical outcomes and between quality and financial performance. It further states that "acquiring and responding to good intelligence about patients' experiences is more than just another 'must do' for Boards" Patient experience information is core to the vision and values of HSC Trusts in NI and is vital in fulfilling the governance responsibilities of service providers and commissioners.

### **1.3. Background to 10,000 Voices Initiative**

The 10,000 Voices Initiative, led by the Executive Director of Nursing (PHA), commenced in October 2012, was initially funded for 18 months by the HSCB. The overarching aim of the initiative was to develop a robust system, which would enable change to be implemented both locally and regionally, to improve the experience for patients, clients and their families. It was anticipated that in doing this, a more patient-focused approach to shaping and delivering future healthcare in Northern Ireland will be achieved.

In 2009 DHSSPS launched of the *Standards to help improve the experience of patients and clients receiving services within the HSC*, emphasising that throughout their experience of HSC services, people should at all times be treated in accordance with the standards of privacy, dignity, respect, communication, attitude and behaviour. The standards were included in Priorities for Action Targets which enforced the message that the patient and client experience is key consideration in the achieving high quality care.

Since 2011, there has been a comprehensive programme of work measuring the implementation and monitoring of DHSSPS Patient and Client Experience Standards (2009), through the Patient Client Experience (PCE) work streams, which has been

lead regionally by the PHA. This has included using patient surveys, observations of practice and collection of patient stories in a triangulated approach. Whilst this has been recognised as a positive piece of work, it has also been shown to have some limitations, which can be directly attributed to the lack of resources and inconsistency in infrastructures to support the work within the Trusts. The qualitative information contained in the patient stories, collected within Patient /Client Experience work stream, provided a source of information on the patient/ client experience, but whilst it was on a relatively small scale it was useful for identifying areas of good practice as well as areas for improvement. In order to build on this approach and to understand what really matters not only to patients, but carers and their families, the PHA has created an opportunity through 10,000Voices for them to tell us.

This initiative was commissioned to enable engagement with patients/clients to focus on **what matters** to them as well as **what is the matter** with them when using healthcare services. The 10,000 Voices Initiative has added an additional dimension to the PCE work as patients/clients/families have shared in-depth accounts of their experiences and this has enabled those providing the service to view the services through the eyes of the patient.

In addition it has created the opportunity to have an integrated approach and develop a single model to support patients/clients/families to affect and inform change.

This initiative is a vehicle to introduce 'Experience Led Commissioning' within Northern Ireland and builds on the approaches identified by the NHS Institute for Innovation and Improvement (2009) in their work on Experience Based Design (EBD). The EBD approach enables patients and staff to share the role of improving care and re-designing services and seeks to capture the experiences of all those people involved in health and social care services (patients, clients, carers and staff). It is recognised as a powerful tool to support commissioning decisions.

The core principles are:

- Affect and inform change: partnership approach between patients, staff and carers with an emphasis on co-design of services
- Focus on the 'patient experience' rather than attitudes or opinions of their experience



- Narrative and storytelling approach to identify good practice and areas for improvement
- Evaluation of patient experience and improvements

The key steps in progressing this approach have been blended into 10,000 Voices Initiative which has led to colleagues in the UK to describe NI as “leading the way in experience led commissioning”

Phase one of 10,000Voices commenced in September 2013 and focused on Unscheduled care (Emergency Departments, GP out of Hours service, Minor Injuries Units and Northern Ireland Ambulance Service).

### **Accessibility**

A range of methods were used to engage with the public, and information has been collected in a variety of settings such as voluntary community & charitable groups, schools/colleges and commercial venues as well as health service establishments.



The 10,000 Voices survey is available online, as a paper copy, voice recorded, digital app and has been translated into 6 languages (Chinese simple, Chinese complex, Latvian, Slovak, Lithuanian and Polish).

During the initial data collection in Phase 1 it was recognised that the survey did not adequately reflect patients’ experience of the Northern Ireland Ambulance Service, therefore a bespoke survey was developed to capture the experience of people who use the Ambulance Service.

The second phase of the initiative commenced in February 2014 in Primary Care, initially with people who receive care in their own home. A parallel work programme is also running alongside all phases of 10,000 Voices which aims to capture patient experience of nursing and midwifery care, using regionally agreed Key Performance Indicators.

## Section 2 Methodology

### 2.1 Methodology 10,000 Voices

National and international evidence demonstrates that patient stories have unique features which make them an appropriate methodology for quality improvement. The 1000 Lives Campaign in Wales (2010) identified the following key elements which make patient stories an important source of information:

#### **Patient stories:**

- are the result of a combination of interactions between healthcare staff, patients and the environment
- creates an opportunity to visualise the service through the eyes of the patient
- focuses on the individual experiences and not the organisation or patients condition

Based on this evidence it was agreed that the 10,000 Voices Initiative would use patient stories as the approach to inform and affect change. An internationally evidence based collection methodology was used (SenseMaker), to enable the capture and analysis of a large quantity of stories. This software has been used in a number of previous patient experience improvement work in NI, such as Think child, Think family, Neurological conditions, and Patients with Heart Failure within Northern Ireland and also in many national and international settings.

#### **The Survey:**

The respondents are asked to describe 'their' experience of healthcare by "telling their story" and they can choose to share all of their experience or aspects of it. They then are asked to respond to a series of questions which are formatted in the shape of a triangle. In each of these questions the respondent reviews 3 statements and places a 'dot' nearest to the statement that reflects their experience. Finally they complete the survey by answering a few multiple-choice questions.

Respondents are asked not to give their name or the name of any staff who provided care and are advised not to worry about spelling or grammar. They are asked to give their story a title and to select key words which described their experience.

The software which is used for the 10,000Voices initiative enables complex analysis of the information including the identification of themes and trends and provides both a qualitative and quantitative overview of the information.

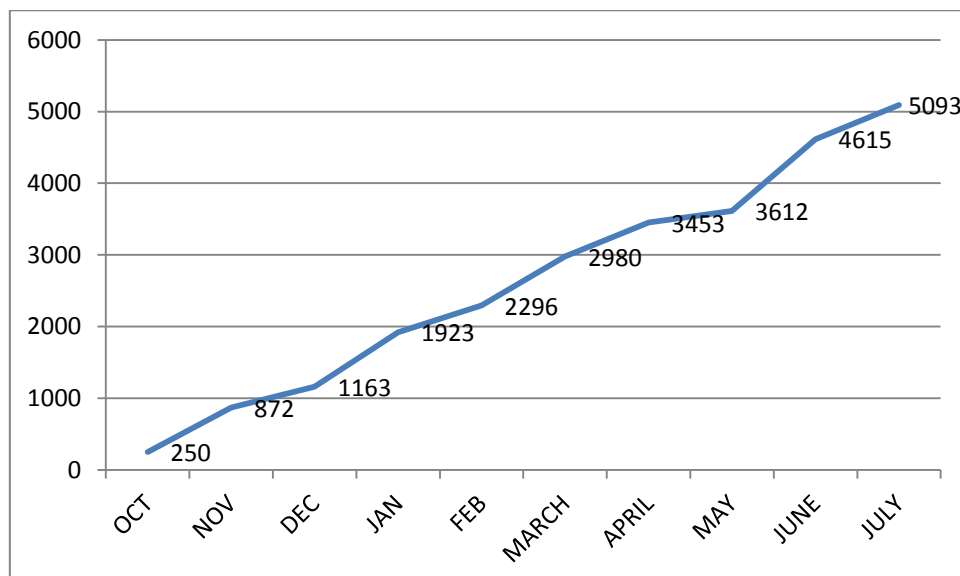
## 2.2 Design of survey tools

The Survey was designed and developed at regional workshops which involved service users, carers and staff from HSC Trusts.

## 2.3 Data Collection and Analysis

Project Facilitators were appointed in each of the Trusts to raise awareness of the initiative and engage with the public to collect patient stories. There has been a month on month increase in the number of patients/clients/families which have taken the time to complete the survey which demonstrates their engagement in wanting to influence and improve services.

**Table 1: Collection of stories per month**



The patient stories are reviewed on a weekly basis by the HSC Trusts and PHA and areas of concern are escalated to the relevant Trust senior managers. This enables changes to be made to service delivery in response to patient experiences.

Themes and trends are identified from the analysis of this information and this is shared with staff across all levels and disciplines within the Trusts through local workshops. This facilitates a “hands on” opportunity for staff to listen to what was said about their care and develop regional and local action plans to improve the way services are delivered. It is also important to focus on practices which patients reflected upon positively so that these can be replicated in other areas.



**10,000voices is more than the collection of patient stories it's about:**

**Listening** to patients

**Learning** from patients

**Improving** the quality of services for patients by **involving** patients.

**Influencing** how services are shaped for the future

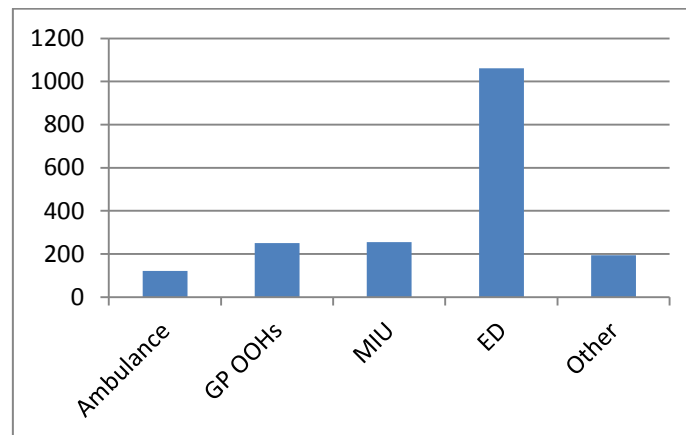
## Section 3 Phase 1 Results and Findings

This section presents the statistical results and findings from the 1885 surveys received during Phase 1 from September 2013 -19 May, 2014. All Trusts were engaged in the 10,000 Voices survey with the majority of patient experiences relating to the Emergency Departments.

### 3.1.1 Returns per Trust

Trust	Number of stories
BHSCT	302
SHSCT	243
NHSCT	438
WHSCT	220
SEHSCT	638
NIAS	39
Missing data	5

### 3.1.2 Returns per unscheduled care setting



### 3.2 Demographic information:

This information is provided by the respondent of the survey; it may not necessarily be the patient but may be the patients representative, family, carer or other.

#### Facts:

- 61% female
- 39% male
- 37% over 60
- 63% of surveys were completed by the patient themselves

#### Returns by Gender

Gender	Return (n=1885)
Male	738 (39%)
Female	1143 (61%)
Transgender	0
Not completed	4

#### Returns by age profile

Age range	Return (n= 1885)
0-18	85
19-29	218
30-39	241
40-49	305
50-59	310
60+ years	697
Not completed	29

#### Returns by Ethnic group

Ethnic group	Return (n=1885)
White	1838
Chinese	6
Indian	5
Black Caribbean	1
Black African	0
Black – other	2
Irish Traveller	7
Pakistani	0
Bangladeshi	1
Mixed ethnic group	7
Any other ethnic group	14
Not completed	4

**Returns by – Respondent: “Which best describes you?” – Patient, on behalf of a patient or other -**

Which of the following best describes you?	Return (n= 1885)
I am a patient who has used unplanned care services in the past six months	1193
I am completing the survey as instructed by a person who has used unplanned care services in the past six months	369
Other – examples include parent/spouse/partner	253
Not completed	70

**Returns by – “Did you attend the department because of any of these long term conditions?”**

Did you attend the department because of any of these long term conditions?	Number
Respiratory	201
Stroke	37
Diabetes	34
Cancer	82
Neurological Conditions	46
None	1485

### 3.3 Responses to questions

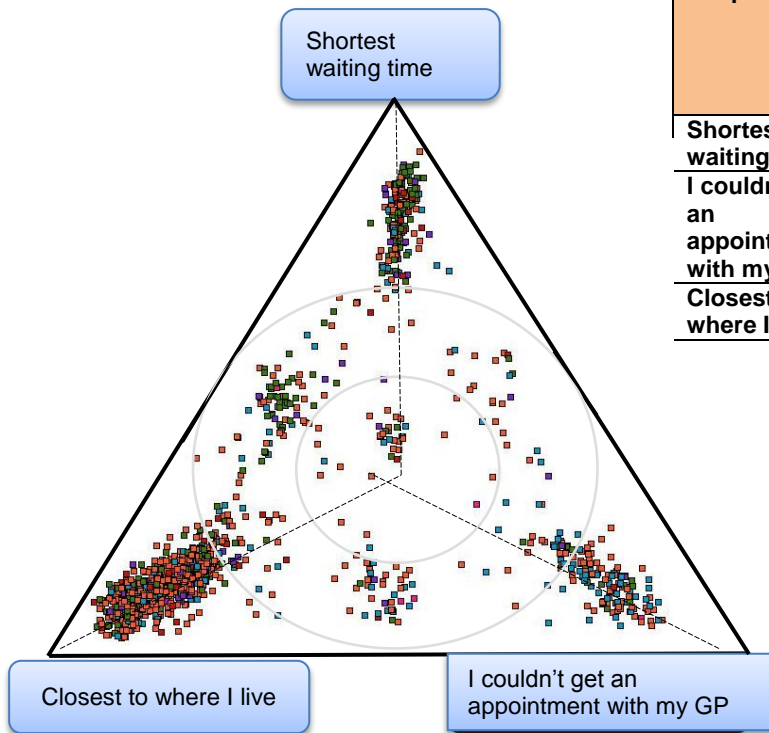
The response to each of the questions is presented below with some examples of quotes from the patient stories.

The percentages in the tables below represent the statements which strongly reflect the patient’s experience i.e. this is demonstrated by the dots which have been placed in corners of the triangle.

Each ‘marker/dot’ is colour coded for the area which it represents.



**Question 1: What made you decide where to go for help?**



Response	Overall results (n=1409)	ED (n=771)	MIU (n=245)	GP OOHs (n=215)
Shortest waiting time	14%	7%	30%	11%
I couldn't get an appointment with my GP	12%	10%	6%	36%
Closest to where I live	57%	66%	40%	30%

**Interpretation/Discussion**

Analysis of the overall information indicates that the majority of respondents chose to attend the closest treatment centre to where they lived with only 14% considering waiting times when deciding where to attend.

**Almost a third of patients choosing MIU said they had considered waiting times**

**36% of Patients who chose to go to the GP OOHs said they did so because they couldn't get a GP appointment**

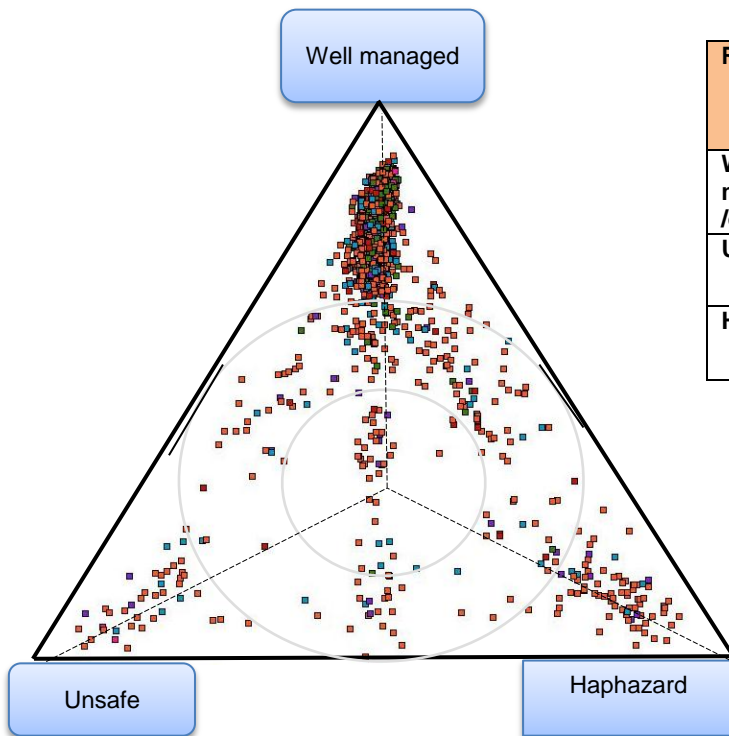
A number of stories indicate that respondents attended the ED as their GP appointment did not fit with their working hours, although we are unable to ascertain if they sought a GP appointment prior to attending the ED.

**Area for action:**

Improve information for patients/clients/families/carers to increase awareness of the most appropriate health and social care services to use so that they can get the right care at the right time in the right place.



**Question 2: Did you feel the department was..?**



Response	Overall results (n=1810)	ED (n=1025)	MIU (n=249)	GP OOHs (n=238)
Well managed /efficient	80%	74%	98%	84%
Unsafe	3%	4%	0%	3%
Haphazard	6%	8%	0%	4%

**80% felt the services were well managed and safe.**

**Interpretation / Discussion**

The majority of respondents who answered this question stated that they found the services to be well managed and safe. Whilst only 3% felt it was unsafe; these individual stories were further analysed, identifying areas for improvement and action. An example of an improvement which was implemented was increased visibility of staff in the waiting area which provides reassurance to the patient.

98% of participants who attended Minor Injuries Units found that the department was well managed and efficient.

**What patients said:**

*at our local A&E department where he received very good care. The staff saw us immediately & carried out tests. Was completely fine with no symptoms of anything and they monitored him for a couple of hours just to be sure. I'm very grateful for this as the staff put my mind at ease.*

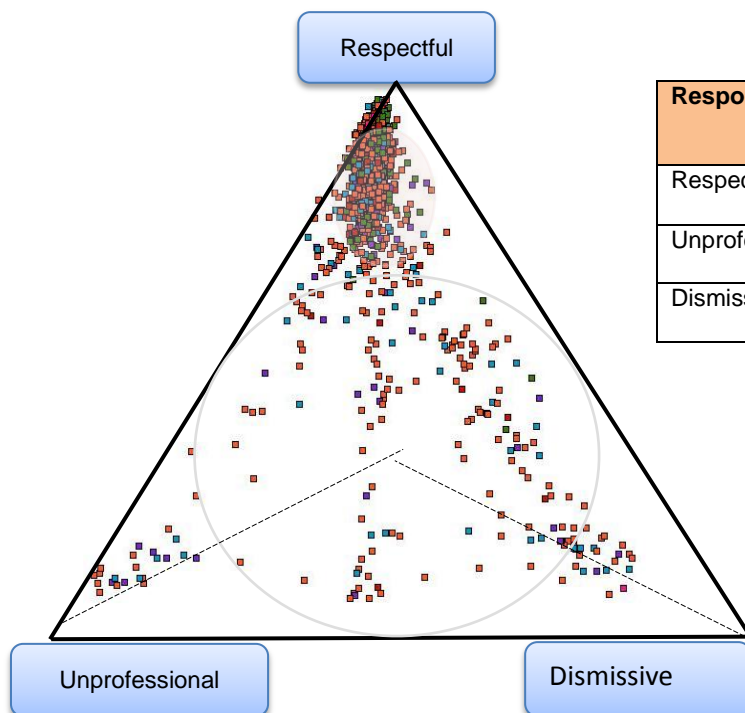
*Waiting for assessment was made very difficult for a frail, distressed, acutely unwell, elderly woman in the middle of people who were drunk and boisterous.*

*They are always very helpful in the Minor Injuries Unit.*

## Areas for action (the areas for action relate to waiting environment)

- Waiting areas need to be warm and comfortable and have adequate seating
- Visibility of staff, including portering and security staff to increase patient sense of safety.
- Appropriate management of people with disruptive behaviour towards staff or other patients.

### Question 3: Overall did you feel the staff you met were...?



Response	Overall results (n=1859)	ED (n=1049)	MIU (n=253)	GP OOHs (n=248)
Respectful	88%	85%	99%	81%
Unprofessional	1%	1%	0%	2%
Dismissive	4%	4%	0%	4%

## Interpretation/Discussion

The largest cluster demonstrates that the majority of service users found staff to be respectful, with numerous stories highlighting the care, compassion and professionalism of staff.

### What patients said:

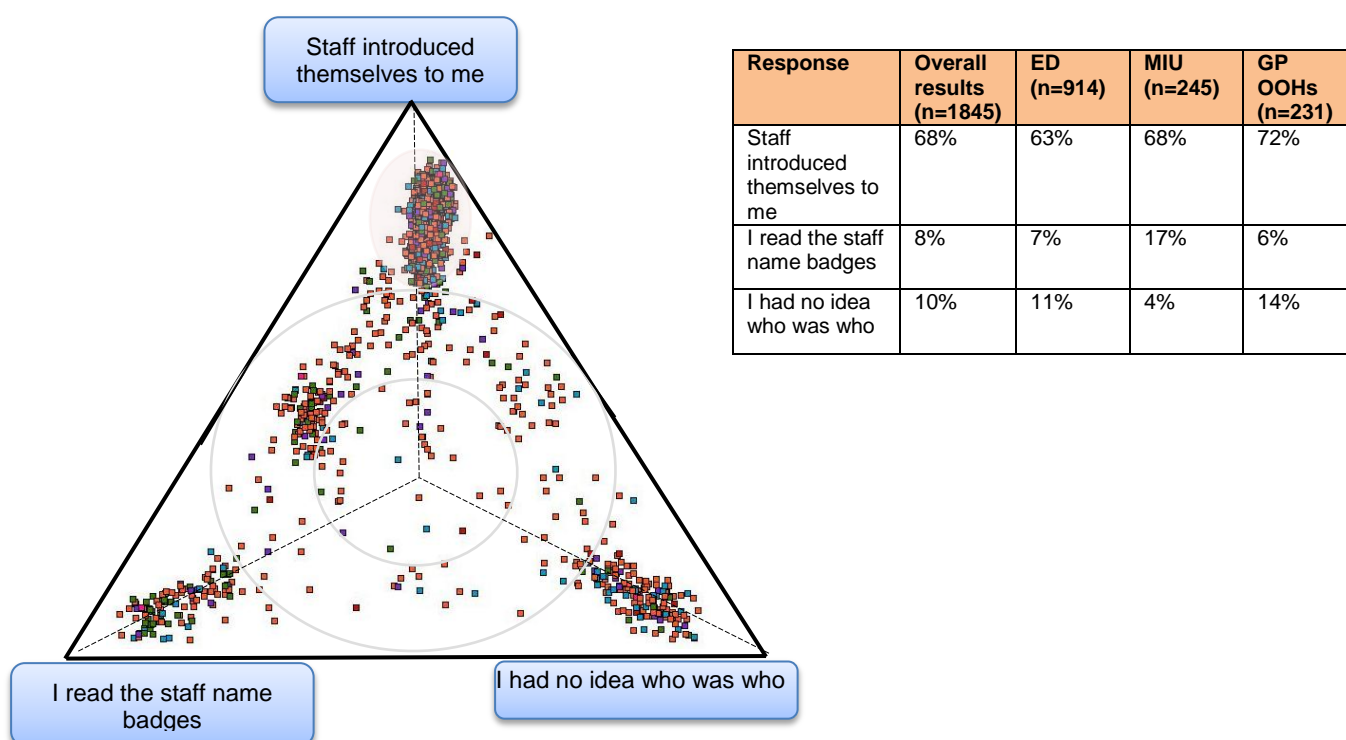
*...he said he didn't need to listen to me and turned from me and walked away.*

*All the nurses, auxiliary nurses and doctors were excellent - so respectful and so caring.*

## Area for Action

- Integration of information from 10,000 Voices Initiative into Patient experience elements of pre and post registration training for all HSC staff as well as local Trusts Customer Care training and Trust Induction.

### Question 4: *How did you know who was looking after you?*



## Interpretation/Discussion

In the overall analysis, over two thirds of the responses indicate that staff introduced themselves to patients; however 10% of respondents were not clear in who was treating them. Introducing yourself is the first basic step taught in any clinical interaction for health and social care professionals as getting to know people's names is known to be fundamental to building good relationships with patients. This issue was also identified through the monitoring of the Patient Client Experience standards and has been made a key priority for Trusts to address and will be reinforced by the introduction of staff name and designation badges.

It is widely documented that delivering compassionate care often means getting the simple things right. 'Hello my name is' and 'I am looking after you today' makes patients automatically feel safe, looked after and cared for and affords them the opportunity to respond to the introduction by telling the staff member their preferred

name. This is reflected in a large number of stories which have been received, indicating that the first impression created can influence the overall experience of the patient and their family. Analysis has also shown that there is a link between patients “having no idea who was who” and considering the department to be “unsafe” or “haphazard”.

### What patients said:

*From the very first minutes of presenting myself at Reception where my details were taken with brisk efficiency and very courteous manner by the receptionist, my experience of the A&E department was exceptional. Within 10 minutes of registering at reception, I was seen by the triage nurse who politely introduced herself, took my details of the fall and injury, and she explained I will be next seen by the nurse*

*Staff introduced themselves, and kept me up to date with my treatment plan*

*The triage nurse never gave me her name any pain relief or anything to help me. ...*

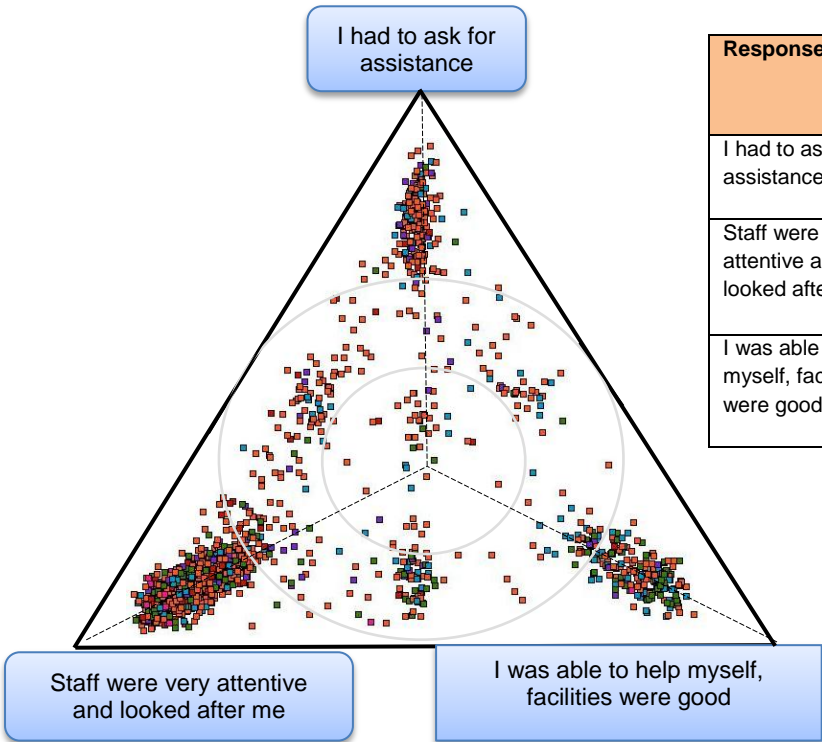
*No-one introduced themselves.*

*All the staff, including everyone were very good. Making sure I knew there name and who they were*

### Areas for action – the areas for action relate to staff introductions

- Implementation of Patient Client Experience key priorities
- Reminders to staff of the importance of introductions and first impressions.
- Name and designation badges for all staff
- Introduction of “Hello my name is...” campaign

**Question 5: While waiting to be seen were your needs met?**



Response	Overall results (n=1781)	ED (n=1010)	MIU (n=248)	GP OOHs (n=228)
I had to ask for assistance	13%	15%	2%	13%
Staff were very attentive and looked after me	53%	52%	61%	38%
I was able to help myself, facilities were good	15%	12%	24%	31%

**Interpretation /Discussion**

This triangle has been populated to demonstrate that in over half the stories received staff attended to the person’s needs Overall results indicate that 13% of respondents had to ask for assistance with their needs.

A number of stories which have been received indicate that patients who are frail and elderly, including residents from nursing homes, have to wait for long periods of time in emergency departments.

**What patients said:**

*He was very attentive, listened carefully to what I had to say, asked sensible and pertinent questions. He did all the relevant tests and provided a suitable antibiotic.*

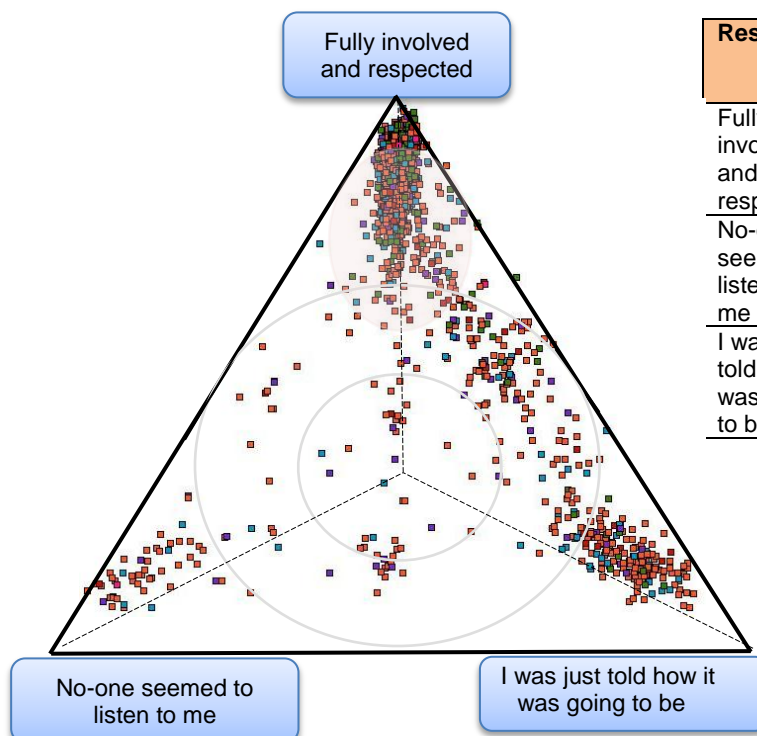
*My relative had numerous visits to A/E due to her cancer and other conditions and the visits have all turned out to be unpleasant experiences due to toilet needs, lack of meals/drinks, long wait on a trolley when in severe spinal pain, having to wait on prescribed pain relief until sent to a ward (other than paracetamol) and each time it became apparent that we needed to attend A/E we would dread going.*

*: I have had close experience of the Good, the Bad and the Indifferent - but I have not yet seen any other A&E department can match what I encountered at ... - for courtesy, efficiency and spotlessly clean facilities! Congratulations to the staff*

## Areas for Action

- Make departments more user friendly with adequate facilities which are cleaned and maintained regularly- toilets/ tea and coffee machines/ water stations/ enough blankets and pillows.
- Appropriate seating /recliners for those with long term conditions, including chronic pain, who are waiting
- Passport through ED for those with long term conditions, cancer and chronic pain.
- Collaboration with RQIA and HSCB/PHA to develop a regional policy/ transfer document for frail elderly/nursing home residents attending unscheduled care areas
- Direct admission to wards for patients who have been assessed by their GP in the community
- Enhancing skills and competencies around the care of older people, specifically in appreciating the complexity of care when older people have multiple conditions are increasingly frail.
- Review of medicines management in EDs

### Question 6: How involved were you in the treatment and care given?



Response	Overall results (n=1834)	ED (n=1030)	MIU (n=251)	GP OOHs (n=245)
Fully involved and respected	73%	77%	88%	77%
No-one seemed to listen to me	4%	3%	0%	3%
I was just told how it was going to be	12%	12%	5%	12%

## Interpretation /Discussion

Overall results indicate that most patients feel that they are involved in decisions about their care and treatment however between this element and “I was just told how it was going to be” there is a heavily populated band. This may reflect the care in ED where due to the nature of the presenting condition, at times treatment and care must be led by healthcare professionals because of the urgency to deliver lifesaving and emergency measures.

### What patients said:

*My concerns were listened to and taken seriously. I was treated with respect, care & compassion. The measures taken to ensure a positive outcome for my condition were weighed up by the surgeon & radiologists in a timely, unhurried way to make sure I received 1st class treatment.*

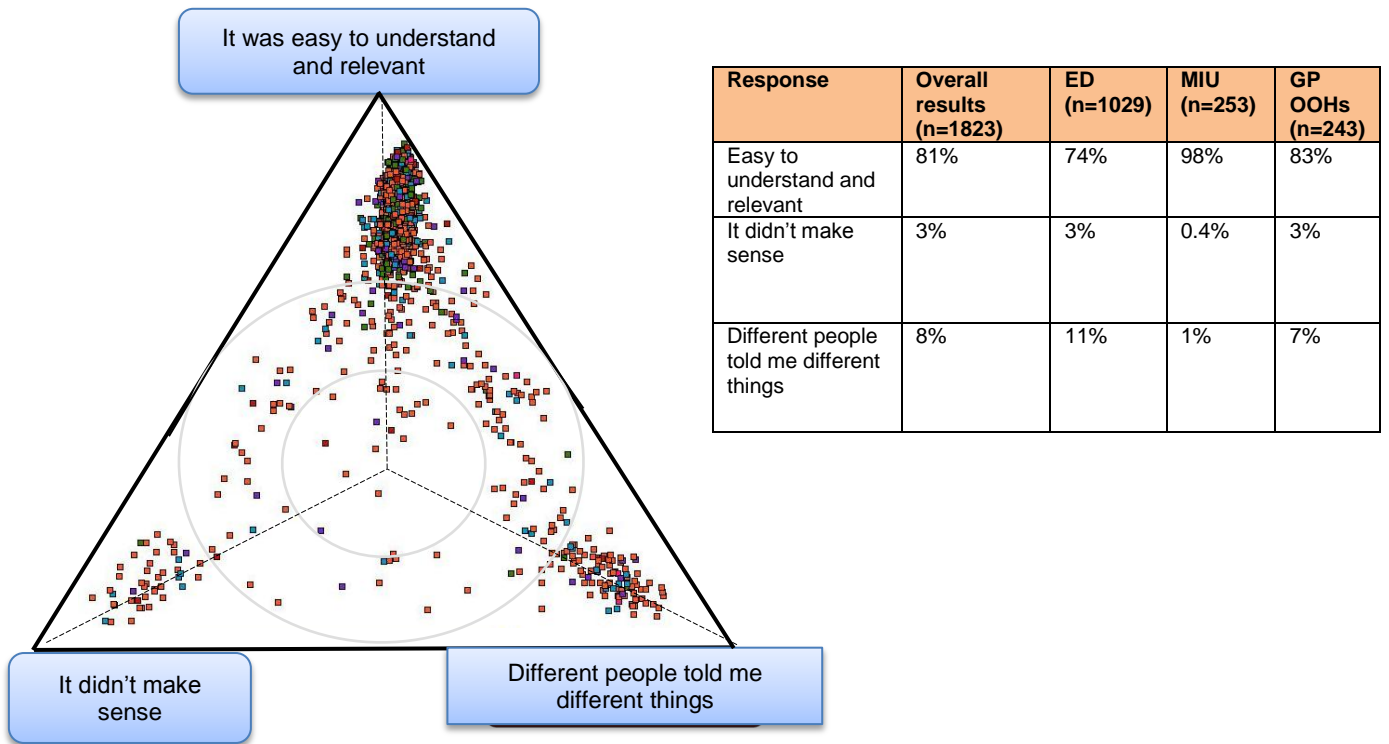
*The nurse didn't listen. It reminded me of "little Britain" - " the computer says no".*

*we waited for a long time before we were given info on the plan of treatment for Mum.*

### Areas for Action

- Developing staff skills to enable them to support patients to articulate an understanding of their condition and treatment using appropriate communication methods.
- Empowering members of the public to take responsibility for their own personal health and to work alongside clinicians in equal partnership (TYC)
- Integration of person centeredness into pre –registration health care programmes
- Ensuring organisational cultures support person centred practices
- Care planning involvement of patients when it is possible
- Asking patients do they understand the treatment /care plan.

**Question 7: What best describes what you were told by staff about your treatment and care?**



**Interpretation/Discussion**

The largest cluster indicates that information shared with patients was easy to understand and relevant however the issue of patients either not understanding what they have been told or being told of different things by different people is also prevalent in this question.. It is important, therefore, for all staff to establish **what matters to the patient** as well as what is the matter with the patient.

**What patients said:**

*They were all nice, helpful and extremely efficient putting me at my ease and explaining what they were doing & why.*

*Told me I needed an operation but the next morning another doctor told me different, this was good news but I had made an arrangement which I had to rearrange again*

*What doctors tell you sometimes doesn't make sense sometimes I feel they don't listen.*

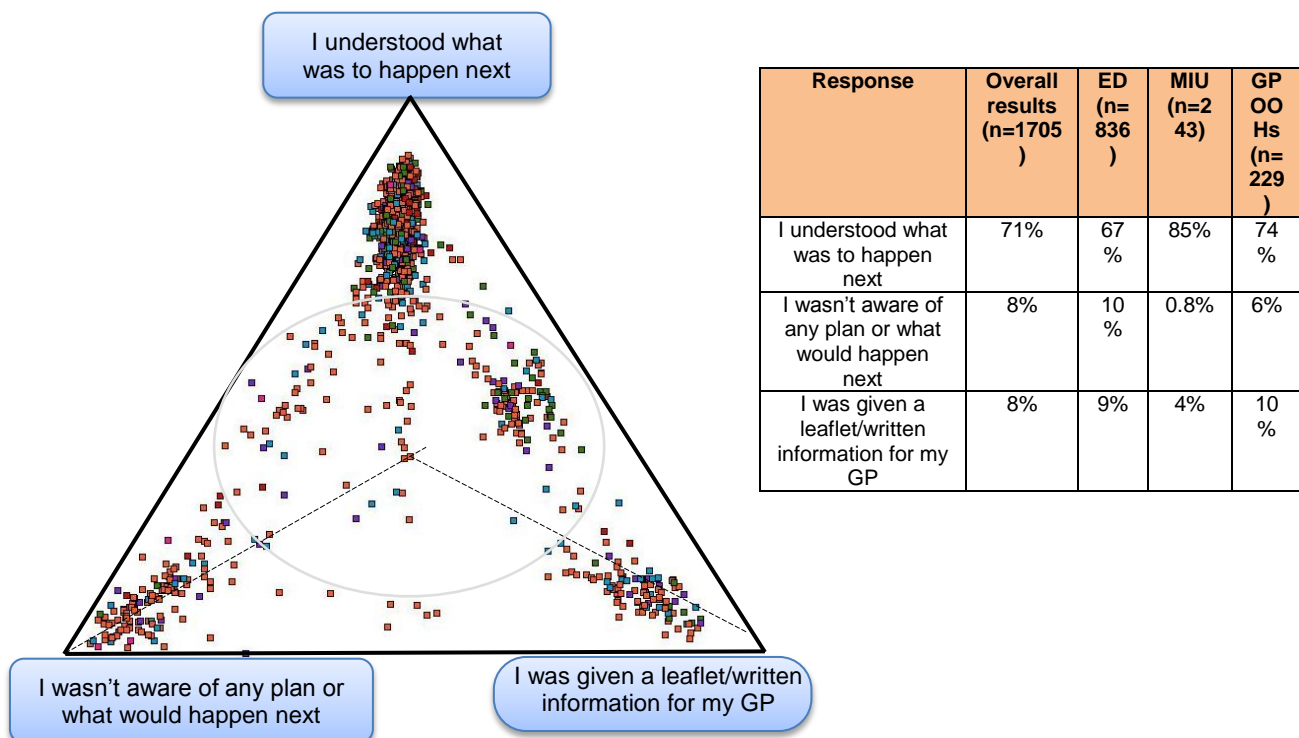
*Initially medics were unfamiliar with mums and this resulted in mixed messages and various treatments which were not beneficial.*



## Areas for Action

- Advocate for elderly patient who acts as a conduit between all medical/nursing assessments and has responsibility for giving this information to the patient
- Ensure consistent, reliable information is given to patients about their treatment and care

### Question 8: On leaving were you told what would happen next?



## Interpretation/ Discussion

Almost three quarters of respondents overall, report that they understood the next steps to the care/treatment plan that was made for them. Information for patients who are being discharged, particularly from Emergency Departments, is vital to their recovery and rehabilitation and can avoid unnecessary readmission to Emergency Departments.

On average the number of patients given written information to advise them on the next steps of their treatment was 8%. Written information is a valuable way of reinforcing advice on treatment and care, however should not be used as a substitute to a verbal explanation from a health care professional.

## What patients said:

*On 30th March I had an asthma attack & unable to get my own Dr I phoned the Out of Hours Service where the receptionist took details & alerted the Dr who phoned me almost immediately. The Dr sent an ambulance with 2 paramedics who nebulised & gave me oxygen. Their care & attention was wonderful. On arrival at A&E at ...I was seen immediately by the nurse & very soon by a Dr who explained my planned treatment. I was later admitted to a ward where I remained for 12 days*

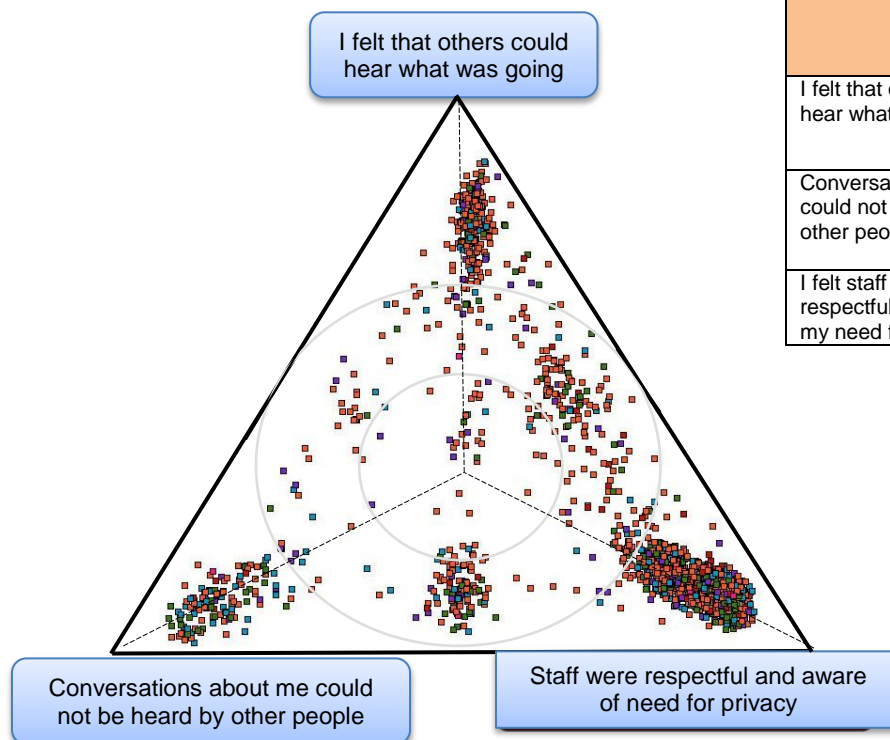
*When I got to A + E via ambulance I was treated by a doctor who I found very difficult to understand. I also felt that I was unaware of what was going on around me the staff were all nice but I felt that they were keeping me in the dark.*

*She explained very comprehensively what was the nature of my injury and what gentle exercises are recommended to restore full mobility to the injured knee. She also gave me a leaflet with clearly illustrated diagrams of these specific exercises.*

## Areas for action

- Ensuring discharge planning commences from the point of admission to unscheduled care
- Coordinated, multidisciplinary approach to discharge planning, empowering patient to be involved in their discharge planning and working with family and carers.
- Improving the knowledge of risk factors for patients who are at a high risk of hospital readmission due to long term complex conditions and identify areas of preventive interventions in the community setting to prevent readmission to unscheduled care.

## Question 9: Did staff ensure your privacy and dignity were protected?



Response	Overall results (n=1810)	ED (n=1036)	MIU (n=246)	GP OO Hs (n=235)
I felt that others could hear what was going on	19%	23%	11%	11%
Conversations about me could not be heard by other people	9%	6%	10%	18%
I felt staff were respectful and aware of my need for privacy	54%	49%	61%	55%

### Interpretation and discussion

Quality 2020 (DHSSPS 2010) states that all patients and clients are entitled to be treated with dignity and respect and should be fully involved in decisions affecting their treatment, care and support.

Privacy and dignity is a term which is used frequently throughout healthcare in Northern Ireland and is one of the Patient and Client Experience Standards (DHSSPS 2009), however in the stories shared for 10,000 Voices, people do not commonly use this terminology but refer to their “modesty” or “being made feel embarrassed”.

Almost a quarter of the respondents for Emergency Departments felt that others could overhear their personal information or what was happening with them, while receiving care in the treatment area and even on the point of entry to the department when having to check in at reception. This could be partly due to the design and layout of an emergency department, which tends to have cubicles separated only by curtains.

### What patients said:

*The doctor on duty asked who was behind the curtain I could hear everything she gave my name and why I was there*

*I was left on a trolley beside other patients in the corridor I felt my privacy was poor I was left for about 6 hours*

*New ED amazing - So spacious and clean. Lovely to have privacy in own room.*

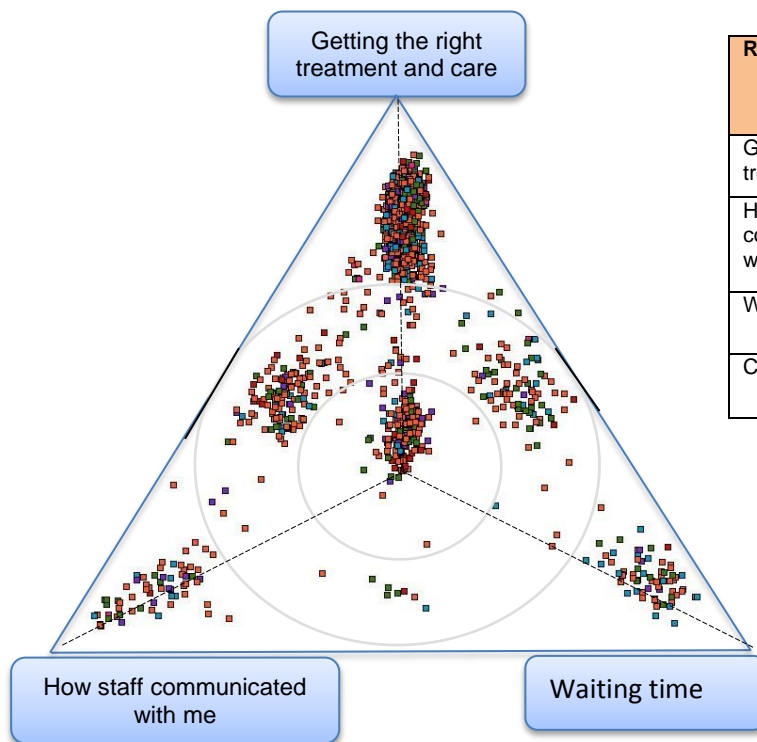
*I was fully aware of what was happening and I felt I was treated and respected well.*

*did not attempt to rush my elderly father. His dignity+ privacy was maintained at all times*

### Areas for action

- All health care professionals should be reminded of their own personal and professional responsibility in relation to their Code of Conduct and the protection of patients' information.
- Planning of new units should take into consideration the need for patient privacy
- Review of the information receptionists require
- Reception area should be separate from waiting areas
- Staff being vigilant to check if patients require more blankets or other measures to prevent embarrassment.

Question 10: What was most important to you in this experience?



Response	Overall results (n=1853)	ED (n=1047)	MIU (n=254)	GP OOHs (n=250)
Getting the right treatment and care	68%	68%	59%	68%
How staff communicated with me	4%	4%	4%	3%
Waiting time	4%	4%	4%	8%
Centre of triad	10%	10%	9%	7%

### Interpretation and discussion

Over two thirds of respondents stated that getting the right treatment and care is the single most important factor to them, with around 10% patients saying that all three elements are equally important to them. This finding reinforces the principles underlying Transforming Your Care (DHSSPS 2011) that patients and service users should receive ***the right care in the right place at the right time by right staff.***

It has been recognised that frequently members of the public attend services that are not appropriate to their needs, creating long waiting times for those who need unscheduled care services. A regional campaign was launched in late 2013 by HSC Board to raise the public’s awareness about where to receive the most appropriate care, this campaign is called “Choose well”.

## What patients said:

. All STAFF that I came in contact could not be more helpful. While waiting many patients waiting to be seen became very vocal at the length of time while waiting. I pity the staff that have to put up with that behaviour.

Was seen promptly by efficient, friendly +professional staff. ... My father was cared for, investigated + treated with no undue delays by staff who in his words were' wonderful + very caring'. ..

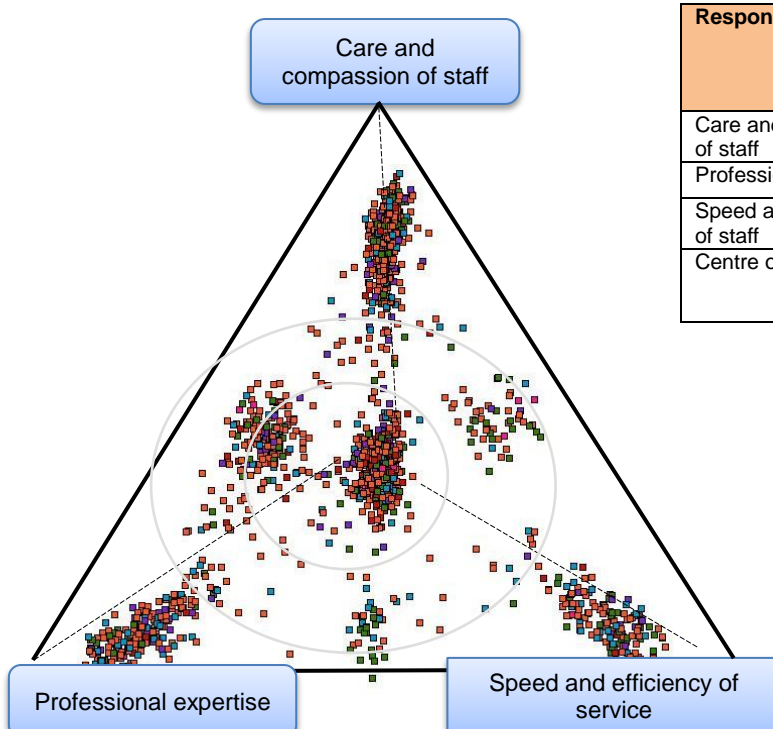
Self-presented to ED, first impressions were I'm going to be here a while, whilst waiting patient felt safe, waiting room was warm. Seen by ENP and x-rayed quickly,

Great service provided in minor injuries unit by great staff

## Areas for action

- Further awareness of the *Choose Well* campaign by HSC organisations
- Review of model of care delivery, including triage at the point of first contact and signposted correctly to appropriate service.
- Increased availability of Minor Injuries Unit

## Question 11: Overall what were you most satisfied with?



Response	Overall results (n=1744)	ED (n=977)	MIU (n=248)	GP OOHs (n=232)
Care and compassion of staff	25%	29%	19%	20%
Professional expertise	14%	15%	13%	22%
Speed and efficiency of staff	11%	9%	14%	14%
Centre of triad	30%	29%	31%	27%

## Interpretation / discussion

It is significant to note that over 90% of respondents choose to answer this question, indicating that they were satisfied with at least one of the available options.

Distribution of responses is scattered throughout the triangle indicating satisfaction with two or three of the elements, with the highest numbers of responses for each area in the centre, indicating satisfaction with all three options equally.

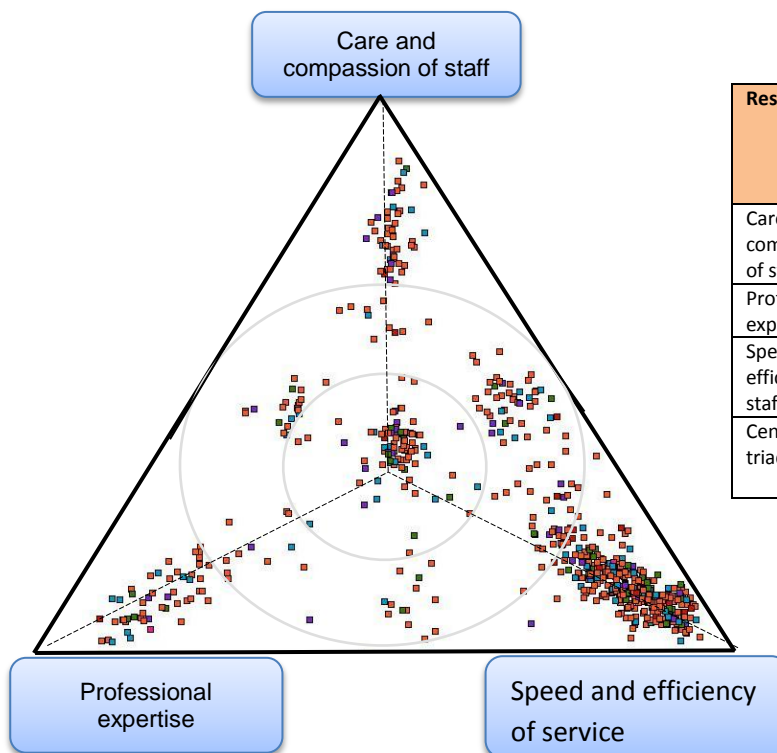
## What patients said?

*Excellent no complaint seen quickly and staff from porter, to nurse & doctor were all very helpful and caring*

*My wife had chest pains, visited the GP, who referred her to A and E at the..... She was promptly seen and kept in hospital overnight. Throughout she was sensitively and competently attended to.*

*Was attended to professionally and with care by nursing staff & doctors*

## Question 12: Overall what were you most dissatisfied with?



Response	Overall results (n=752)	ED (n=510)	MIU (n=50)	GP OOHs (n=106)
Care and compassion of staff	9%	9%	4%	10%
Professional expertise	8%	7%	7%	7%
Speed and efficiency of staff	56%	59%	59%	55%
Centre of triad	10%	8%	12%	9%

## Interpretation / discussion

When asked “What were you most dissatisfied with?” there was a significant number of respondents (60%) who opted to not complete this signifier, this would appear to indicate that on the whole these patients felt there was no element that they were dissatisfied with. The largest cluster of those who did respond, their dissatisfaction was with the speed and efficiency of service, this is equally spread between all three departments.

### What you told us:

*...extremely frustrating and little consideration was given , , my daughter was left for 7 hours in a cubicle, with nursing staff only appearing after we sought information*

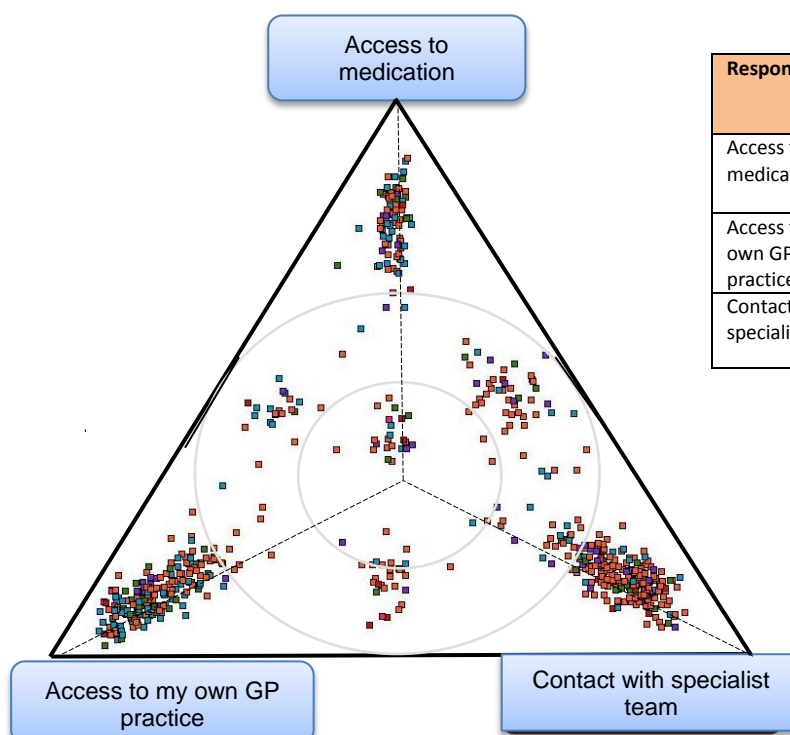
*waited 6 hours which was extremely stressful with a sick, breathless & distressed young baby. When eventually seen, the doctor & nursing staff were professional & helpful & my baby was admitted to hospital for 3 days. A&E clearly under-staffed to deal with level of patients*

*. . . . . staff were rude & didn't speak to patient or relatives & didn't speak to all.*

### Area for action

- Regional review of staffing levels with EDs
- Ongoing monitoring of waiting times

### Question 13: What would have enabled/supported you to stay at home?



Response	Overall results (n=733)	ED (n=397)	MIU (n=72)	GP OOHs (n=164)
Access to medication	14%	13%	11%	21%
Access to my own GP practice	29%	24%	46%	45%
Contact with specialist team	35%	43%	26%	18%



## Interpretation / discussion

This signifier was to establish if other services had been in existence elsewhere would these patients still have had to access the unscheduled care service and do the users believe they made the right choice. Stories reflected that on many occasions patients with long term conditions had no other choice available to them and had to attend unscheduled care services. This caused high levels of distress to patients and their families, for example very long waits in busy EDs for patients with acute oncology conditions and patients with chronic pain. Of the 400 people who said they attended unscheduled care areas because of a long term condition, almost half said they would have been enabled/supported to stay at home if access to medication/own GP practice or specialist services were available.

Stories would also indicate that on occasions, patients are admitted to the Emergency Departments for palliative/end of life care. Feedback from staff has indicated that this creates a lot of distress for the patient, their relatives and the staff as ED is not the appropriate place to provide end of life care for patients who have been receiving palliative care in the community setting.

There was also a high response rate to the option – Access to my own GP practice , with many stories from patients indicating that they were not able to get an appointment with their own GP, often this was because of their working pattern, not fitting in with GP opening hours

### What patients said:

*All but one of these five times or more I have received medication (mostly antibiotics & steroids)*

*Had laryngitis GP not available for an appointment under 2 weeks from time of occurrence I had missed walk in surgery.*

*The GP out of hours doctor I found extremely helpful and supportive. However my doctor surgery is difficult if not impossible to access.*

*I have very specialist conditions that require specialist professors to care for me. ...*

*For cancer patients there should be one point of contact throughout treatment as it is very difficult being passes from surgery - chemo - radiotherapy & not knowing who to contact if there was a problem...*

## Areas for action

- Access to own GP practice
- Integration of information into Palliative Care Strategy , specifically around advance care planning
- Passports/Rapid access/direct admission for patients with long term conditions, acute oncology needs, residents from nursing homes
- Self-management skills/training for those with long term conditions
- Early identification for crisis within long term conditions and appropriate interventions
- Access to pharmacy/medications “out of hours”

### 3.4 Northern Ireland Ambulance Service Patient Experience Survey

During Phase 1 it was recognised that the unscheduled care survey was not sensitive enough to collect information relating to the Northern Ireland Ambulance Service (NIAS).

A bespoke survey was therefore developed for NIAS to reflect patient experiences and data collection began in March 2014. This is ongoing and will be carried forward into the work plan for 2014/2015.

### 3.5 Key findings - Phase 1

Regional subjective analysis of the information highlights that the many patients reflected positive experiences within the unscheduled care services. However there has been a focus on identifying areas for improvement and sharing areas of good practice to affect and inform quality improvements locally and regionally.

**65% of patient stories reflect a positive experience**

**Patient experience quote:**

*“.....I have not yet seen any other A&E department can match this unit I encountered at.....- for courtesy, efficiency*

**20% of patients described both positive and negative elements to their experiences:**

**Patient experience quote:...***My care from staff was good but after my original treatment I was left on a trolley beside other patients in the corridor*

**15% of patients stories reflected an experience which could be improved upon:**

**Patient experience quote:**....*Didn't introduce himself. He asked me why I was here. He was so abrupt*

10.000 Voices initiative differs from other methods to gain feedback from patients as it promotes and builds on a partnership approach between service users and staff and gains their commitment to change the way services are delivered and commissioned.

Throughout the initiative, patient stories (which are anonymous) have been shared with staff working within these areas. It has provided the staff with an in-depth reflective overview of patient experiences and has enabled them to view from a patient perspective how care has been delivered. This has provided the opportunity for staff to discuss as a team, how to implement improvements and develop local plans. The themes which reflect positive aspects of care have been shared with staff at the Trust workshops and are shown below:

Key themes identified	
<b>Patient and Client Experience Standards</b>	Positive experiences expressed by patients in relation to staff attitude, communication, privacy and dignity
<b>Professionalism of staff</b>	Stories reflect how staff treat patients in a professional manner and are clinically competent
<b>Delivering compassionate care</b>	A large proportion of stories reflect the caring and compassionate manner of staff in all areas of unscheduled care
<b>Efficiency of service</b>	Stories reflect a very high level of satisfaction with care received in Minor Injury Units, particularly in relation to the efficiency of the service and how patients were treated by the staff

A number of themes have been identified which have required local or regional actions to be progressed. As the improvement work continues within unscheduled care services and these actions are further tested and implemented, consideration will be given to how the local actions could be progressed regionally so that opportunities for shared learning and improvement are maximised.

### **Regional Actions**

The following areas for regional action have been identified, some of which may also contribute to the commissioning process and which will also be considered within wider ongoing quality improvement work streams.

**Partnership approach to improving patient experience.** A key achievement of the 10,000 Voices Initiative has been the development of the partnership approach to improving patient experience. It is intended to build on this model during future phases of 10,000 Voices, so that key stakeholders can work together and have ownership of quality improvement plans.

**Compliance with Patient/Client Experience Standards:** The patient stories from the 10,000 Voices initiative will contribute to and inform the regional implementation of the Patient Client Experience Standards. All Trusts will integrate the information from 10,000 Voices into ongoing work around Patient/ Client Experience and also into corporate and local induction programmes

**Staffing levels in Emergency Departments.** Stories received in all Trusts indicate that patients feel staff are under pressure to deal with the workload, particularly in Emergency Departments. This is being addressed through a regional review of staffing levels within Emergency Departments.

**Caring for patients with Mental Health Issues.** Stories received reflect the need for some staff to become more aware of their attitude when caring for patients with mental health issues in unscheduled care areas. Information received from 10,000 Voices will be integrated into training programmes and will be aligned with and inform regional improvement work streams in the provision of Mental Health Services.

**Patient experience teaching session.** An interactive teaching session has been developed and tested with medical students and student nurses. Evaluations were very positive and indicated a number of key learning points, as well as increased self-awareness of how behaviour and attitude can influence patient experience. It is intended to have a regional “roll out” of this session and to incorporate it into pre and post registration health and social care programmes.

**Regional transfer document for residents from nursing homes.** The information received from 10,000 Voices highlights the need to ensure that when residents from nursing homes have to attend unscheduled care services, systems are in place for safe handover of key information. Work has commenced to develop a regional transfer document.

**Staff Introductions.** A Number of stories highlighted that patients had no idea who was looking after them and as result felt that the department was unsafe or haphazard. It is well recognised that first impressions and a simple introduction can set the tone for the quality of the patient experience and is the first step in providing high quality, compassionate care. All Trusts have pledged their commitment to the “Hello my name is” campaign and have commenced work on this initiative. A regional launch of this campaign will take place in September 2014..

### **Local Actions**

The following section provides some examples of actions which have been identified within local Trusts. As the improvement work continues within unscheduled care services and these actions are further tested and implemented, consideration will be given to how these could be progressed regionally so that opportunities for shared learning and improvement are maximised.

#### **Pain relief in unscheduled care**

A number of stories highlight that on occasions patients feel that they do not receive adequate or timely pain relief, as a result the following actions have commenced:

- Progression of improvements in pain relief in ED within quality improvement pathway
- Review of Patient Group Directions (PGDs)

## **Waiting Environment**

Patients have expressed the view that their experience is influenced by the environment in which they are waiting for treatment. In relation to waiting environment the following actions have been commenced;

- Increased visibility of porters and security staff in the ED following a number of stories which highlighted that patients sometimes feel vulnerable and unsafe in the waiting area particularly if there are people under the influence of alcohol/drugs, or when people are loud or aggressive
- Appointment of a housekeeper to work in the ED to ensure that the environment is comfortable while patients are waiting for treatment
- Commitment to refurbish the ED as a direct result of patient stories relating to the environment, service users who participated in 10,000 Voices workshops will be included in this work.
- Increased cleaning regimes within ED as a number of stories related to environmental cleanliness

## **Basic comfort measures**

Respondents said that at times basic comfort measures, such as being warm and comfortable, and having something to eat and /or drink, were not always attended to.

- Relevant departments have increased supplies of pillows and blankets
- Provision of food and fluids in EDs is being progressed.

## **Care of babies and children in unscheduled care**

A number of stories highlighted concerns of parents when they need to access unscheduled care services with babies/children, as a result work has commenced to review of care provided to babies and children within ED with a focus to:

- Ensure the safe and effective management and transfer of babies/children from the ED to Children's Wards through the development of clinical pathways and ensuring effective teamwork between ED and paediatric ward staff

### **Information for patients**

Some stories highlight that patients do not always receive adequate information about waiting times and also about their treatment

- Information about waiting times in ED is now being displayed on screens within the department
- Work has commenced to improve/clarify information relating to the possibility of patient recall, following preliminary radiology reporting, through the development of a patient information leaflet
- The need to establish a patient experience group for ED has been identified and the service users who participated in 10,000 Voices workshop have agreed to be part of this group.
- Service users have been invited to join the Trust ED Patient Flow Reform Board

### **3.6 Emerging aspects of patient experience to influence regional actions/commissioning priorities**

This section captures the aspects of patient experience that have emerged out of the Phase 1 of the 10,000 Voices Initiative, which could potentially influence the way services are delivered and commissioned.

- The continued **provision of unscheduled care services at Minor Injuries Units** and the need to explore increased use of the Minor Injuries Units across Northern Ireland
- The need to address **waiting times in unscheduled care areas** for frail elderly/ patients, patients from nursing homes and patients with acute oncology needs/ patients with long term conditions.

- The development and design of a **regional transfer document and advocacy policy for patients admitted from nursing homes.**
- The need to address **staffing levels** in Emergency Departments as a high volume of stories indicate that patients feel that staff are under pressure due to inadequate staffing and high volumes of patients. A regional review of staffing levels in EDs is currently taking place.

### **3.7 Phase 1 Conclusion**

Phase 1 of 10,000 Voices has successfully tested and implemented the systems and processes required to undertake an extensive quality improvement programme in patient/client experience. Since this analysis was completed an additional 89 stories have been received relating to unscheduled care. Analysis of these stories is on-going and will be included in the on-going quality improvement work. Data collection for Phase 1 has now concluded (from 30th June 2014); however quality improvement work within the Trusts and at regional level will be ongoing. It is anticipated that data collection within the unscheduled care areas will be included in the 2014/2015 work plan programme so that improvements can be measured.

## **Section 4 Experience of Nursing and Midwifery Care**

Nurses and Midwives in Northern Ireland deliver care across a broad range of services in a variety of settings and account for one third of the workforce in HSC Trusts. A research study was commenced in NI in 2009 to develop a framework for the identification, measurement and implementation of Key Performance Indicators (KPIs) for nursing and midwifery. The key performance indicators were identified and tested using SenseMaker methodology by Professor Tanya McCance.

10,000 Voices Initiative is using these KPIs to measure experience of nursing and midwifery care in Northern Ireland and began data collection in November 2013.



Early analysis of the information received indicates a high level of satisfaction with the standard of nursing and midwifery care, with many of the stories paying tribute to the care, compassion and professionalism displayed by nurses and midwives. These stories clearly demonstrate a high level of respect, appreciation and public confidence in our nurses and midwives. Initial findings show the following results:

Overall feelings about nursing/midwifery care	Number of stories (n= 2395) (28 <sup>th</sup> July 2014)
Strongly positive/positive	91% (n=2174)
Strongly negative/negative	3% (n=76)
Neutral/not sure	6% (n=145)

## Demographic information

### Does your story relate to nursing or midwifery?

Nursing	1911 (80%)
Midwifery	356 (15%)
Both	128 (5%)

### Returns per Trust

Trust	Return (n=2395)
BHSCT	546
SHSCT	432
NHSCT	370
WHSCT	418
SEHSCT	629
Missing data	3

### Returns by Gender

Gender	Return (n=2395)
Male	934
Female	1455

Transgender	1
Missing data	5

### Returns by age profile

Age range	Return (n= 2395)
0-18	50
19-29	270
30-39	329
40-49	235
50-59	329
60+ years	1146
Missing data	36

### Returns by Ethnic group

Ethnic group	Return (n=2395)
White	2373
Chinese	2
Indian	3
Black Caribbean	0
Black African	1
Black – other	0
Irish Traveller	2
Pakistani	0
Bangladeshi	0
Mixed ethnic group	4
Any other ethnic group	10

### Returns by – “Which best describes you?”

Which of the following best describes you?	Return (n= 2395)
I am a patient who has received care from a nursing/midwifery team in the past six months	1895
I am completing the survey as instructed by a person who who has received care from a nursing/midwifery team in the past six months	344
Other – examples include	89

parent/spouse/partner	
Missing data	67

### Experience of Nursing and Midwifery Care - Next steps

Data collection will continue until 31<sup>st</sup> August 2014, at which stage the following actions will take place:

- Analysis of the information will take place in the Trusts
- Identification of areas for improvement and development of local and regional action plans
- Identify areas for consideration in commissioning priorities
- Development on ongoing regional co-ordinated approach to measuring experience of nursing and midwifery care in collaboration with the Regional KPI advisory group

## Section 5 Phase 2 – Care in your own home

The 10,000 Voices Steering group agreed that the second phase should focus on primary care settings. A data collection tool was developed with a wide range of staff working in primary care settings and service users. It was acknowledged that one tool would not be specific enough to cover all areas of primary care and after an initial test period within the HSC Trusts it was decided to concentrate initially to capture experiences from people who receive care in their own home.

Data collection commenced in February 2014, initially response was slow despite widespread engagement processes. A mid-point evaluation of this phase is currently being completed. Initial findings show the following results:

Overall feelings about receiving care at home	Number of stories (n=666 as at 28 July 2014)
Strongly positive/positive	78% (n=518)
Strongly negative/negative	3% (n=22)
Neutral/not sure	19% (n=126)

## Demographic Information

### Returns per Trust

Trust	Return (n=666)
BHSCT	137
SHSCT	76
NHSCT	41
WHSCT	146
SEHSCT	266

### Care provided by:

Trust staff	446
Independent provider	96
Not sure	59
Other	65

### Returns by Gender

Gender	Return (n=666)
Male	248
Female	417
Transgender	0
Missing data	1

### Returns by age profile

Age range	Return (n= 666)
0-18	5
19-29	13
30-39	9
40-49	21
50-59	50
60 - 69	80
70 - 79	184
80 + years	293
Missing data	11

## Returns by sexual orientation

Sexual orientation	Return (n=666)
Heterosexual	596
Lesbian	1
Bi-sexual	1
Gay	0
Prefer not to comment	68

## Returns by Ethnic group

Ethnic group	Return (n=666)
White	659
Chinese	0
Indian	
Black Caribbean	0
Black African	0
Black – other	0
Irish Traveller	1
Pakistani	1
Bangladeshi	0
Mixed ethnic group	1
Any other ethnic group	3

## Section 6 – Conclusion

The 10,000 Voices Initiative has established a system to listen to, learn from and improve the experience of people who use our health and social care services. This also represents a unique opportunity for patients/clients to influence the commissioning priorities for health and social care in Northern Ireland and provides a mechanism for HSC Trusts to receive real time information relating to the experience of people for whom they provide care.

Many patients have told the facilitators that because of the anonymity of 10,000 Voices initiative they feel very comfortable in sharing their experience and often see it is being therapeutic. It is obvious from many of the stories received, that many patients had a positive experience while accessing health and social care services as they describe the compassionate and professional care they have received. The experiences shared have provided a balanced picture of our health and social care services.

The 10,000 Voices initiative has been welcomed by Senior Management Teams within Trusts as a systematic and robust mechanism to capture patient experience within their organisation, as 10,000 Voices listens very clearly to the patients experience and looks at **what matters to the patient** as well as **what is the matter with the patient**. The work of the 10,000 Voices team has been recognised nationally, with a number of Trusts expressing a wish to visit Northern Ireland and discuss how they could progress patient experience improvement work using this approach.

### **Acknowledgements**

The 10,000 Voices team would like express sincere thanks to all those who have been involved and to acknowledge the patients, families and carers who have taken the time to tell us about their experience to make care better for others in the future.

We would also like to positively acknowledge the staff working in HSC Trusts Services for embracing this opportunity, despite the challenging environment and

pressures which they are currently working within. It has been obvious through their commitment to 10,000 Voices Initiative how important it is for them to improve and influence services for patients/clients.

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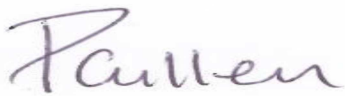
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**PUBLIC HEALTH AGENCY BOARD PAPER**

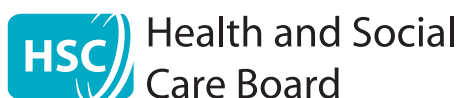
<b>Date of Meeting</b>	18 September 2014
<b>Title of Paper</b>	HSCB / PHA Annual Quality Report
<b>Agenda Item</b>	12
<b>Reference</b>	PHA/04/09/14
<b>Summary</b>	
<p>The aim of the first annual HSCB and PHA Quality report is to share information and demonstrate improvements both to those who use health care services and those who deliver them.</p> <p>The report has been structured around the three core themes of the Safety, Effectiveness and Patient and Client Focus and highlights the range of work that the HSCB and PHA undertake on a daily basis to improve the quality of care for patients and clients.</p> <p>During 2012/13, in line with the Implementation of Quality 2020 Strategy (2011) each of the HSC Trusts were tasked with producing an annual Quality Report, made up of core quality indicators which build on what is currently gathered and reported by Trusts in relation to quality and safety. These reports have now become an annual requirement for both Trusts and arms lengths bodies of Health and Social Care including the PHA and HSCB from 2013/14; and seek to aid organisations in demonstrating their organisational role in contributing to the quality agenda and highlight their achievements in delivering core objectives which improve the Quality of care.</p>	
<b>Equality Screening / Equality Impact Assessment</b>	N/A
<b>Audit Trail</b>	This report was approved by AMT on 2 September 2014.
<b>Recommendation / Resolution</b>	For approval
<b>Director's Signature</b>	



<b>Title</b>	Director of Nursing and AHPs
<b>Date</b>	11 September 2014

# Health and Social Care Board and Public Health Agency

## Annual Quality Report 2013/2014



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# Chief Executives' foreword

Welcome to the first *Annual Quality Report* of the Health and Social Care Board (HSCB) and Public Health Agency (PHA).

Annual quality reports are a recommendation of the Department of Health, Social Services and Public Safety's (DHSSPS) *Quality 2020: a 10 year strategy to protect and improve quality in Health and Social Care in Northern Ireland*.

The HSCB and PHA want patients, carers and their families to feel confident about the quality of health and social care services in Northern Ireland. This report demonstrates what we have done to achieve this in the last year. It also highlights the broad range of work that we routinely undertake and reaffirms our commitment to **safety, effectiveness** and **patient and client focus**.

This report (and indeed our work) has been structured around these three core themes, as high-quality care can only be achieved when all three are present.

## Safety

Recently there have been high-profile reports published with important lessons for health and social care in Northern Ireland: *The Francis Report* (which detailed failings of care at the Mid Staffordshire NHS Foundation Trust), *The Keogh Review* (which examined hospitals with high mortality) and *The Berwick Report* (regarding patient safety in the NHS).

These reports have provided stark evidence of the importance of ensuring that those delivering and commissioning care continually strive to provide the very best care possible while protecting patients from harm. Where they have concerns, they must feel able to speak up.

During 2013 the HSCB and PHA provided evidence to the Inquiry into Hyponatraemia Related Deaths (IHRD). When published, the final report will be reviewed by both organisations.

## Effectiveness

Throughout 2013/14 there has been a sustained focus on developing and implementing services for at-risk members of the community, such as people living with dementia, and improving informed choice for screening services.

There has also been a reduction in healthcare-associated infections (HCAs), specifically a reduction in *Clostridium difficile* and meticillin-resistant *Staphylococcus aureus* (MRSA) rates, which are now at an all-time low.

## Patient and client focus

The HSCB and PHA have made a significant investment in the **10,000 Voices** initiative, which has provided an opportunity for patients, carers and their families to share their experiences.


More than 3,000 people have taken the time to do this, influencing the delivery, design and improvement of services. By focusing on things that really matter to patients we have seen improvements in patient and staff communication.

There is, however, no room for complacency. Therefore the HSCB and PHA will continue our efforts to ensure and improve good practice, and to address areas of concern.

The coming years will present a very challenging financial environment, but it is essential that efforts to improve the quality of care are maintained.

In order to build on the previous year's work, we have selected a number of new priorities and objectives for 2014/15, with a theme of **improving public health and reducing preventable harm**. We feel that this is fundamental to ensuring that our patients receive high-quality care.

Finally, we would like to thank all the staff for their continuing efforts over the past year to improve the quality of our services. There will always be areas for improvement and we will continue to aim for the highest quality in the care we provide and put our patients at the heart of everything we do.



Mrs Valerie Watts  
Chief Executive  
Health and Social Care Board



Dr Eddie Rooney  
Chief Executive  
Public Health Agency

# What is Quality 2020?

*Quality 2020* is a ten year strategy to protect and improve the quality of health and social care in Northern Ireland. It was developed by the DHSSPS with involvement from both service users and HSC staff.

The strategy defines three core elements of **quality**:

## Safety

Avoiding and preventing harm to patients and clients from the care, treatment and support that is intended to help them.

## Effectiveness

The degree to which each patient and client receives the right care (according to evidence-based assessment), at the right time, in the right place, with the best outcome.

## Patient and client focus

All patients and clients are entitled to be treated with dignity and respect and should be fully involved in decisions affecting their treatment, care and support.

The aim of *Quality 2020* is for the HSC **“to be recognised internationally, but especially by the people of Northern Ireland, as a leader for excellence in health and social care”**.

The strategy sets five goals to be achieved by 2020:

## Transforming the culture

This means fostering a culture that embraces change, innovation and new thinking.

## Strengthening the workforce

It is vital that the people who work in health and social care (including volunteers and carers) are equipped with the skills and knowledge they need.

## Measuring the improvement

To confirm that improvement is taking place, the service needs more reliable and accurate means of measuring, valuing and reporting on improvement and outcomes.

## Raising the standards

The service requires a coherent framework of robust and meaningful standards against which performance can be assessed.

## Integrating the care

Patient care should cross all geographic and professional boundaries to benefit patients, clients and families.



# How we measure and report on our work

The HSCB and PHA have established two joint strategic groups to monitor and report on **safety, effectiveness and patient client focus**: The quality, safety and experience group and the safety and quality alerts (SQA) team.

## Quality, safety and experience group

The quality, safety and experience group (QSE) was established in November 2013 to oversee all issues relating to **safety, effectiveness and patient client focus** within the HSCB and PHA. This group allows senior staff to share information, approve policy and identify areas of concern.

The group meets monthly and is chaired by the PHA Executive Director of Nursing, Midwifery and Allied Health Professionals.

An overview of the QSE governance and assurance structure is outlined in Appendix 1.

The serious adverse incident review sub-group and regional complaints sub-group report to and support the work of the QSE.

## Serious adverse incident review sub-group

The serious adverse incident review sub group (SAIRSG) provides assurances that appropriate structures, systems and processes are in place within the HSCB and PHA for the management and follow-up of **serious adverse incidents** arising during the course of the business of an HSC organisation or commissioned service.

The SAIRSG also has responsibility (in conjunction with the QSE and SQA team) to ensure that trends, examples of best practice and learning are identified and disseminated in a timely manner.

The group is co-chaired by the HSCB Governance Manager and the PHA Senior Manager for Safety, Quality and Patient Experience.

## Regional complaints sub-group

The regional complaints sub-group meets monthly to consider complaints arising from regional HSC services. The group makes key recommendations for action and agrees issues to be referred to the QSE.

The group is chaired by the HSCB Complaints/Litigation Manager.

## Safety and quality alerts team

The safety and quality alerts (SQA) team was formed in April 2012 to coordinate the implementation of regional safety and quality alerts, letters and guidance issued by the DHSSPS, HSCB, PHA and other organisations.

This team meets fortnightly and is chaired by the PHA Medical Director/Director of Public Health. This provides a mechanism for gaining regional assurance that alerts and guidance have been implemented or that there is an existing robust system in place to ensure implementation.

**Table 1: Category 1 alerts or equivalent correspondence reviewed by the SQA team from 1 April 2013 to 31 March 2014.**

Category 1	Status of alert/report		Total
	Completed	Ongoing	
<b>Safety and quality alerts/circulars</b>	45	3	<b>48</b>
<b>Learning letters</b>	6	4	<b>10</b>
<b>RQIA reports</b>	5	3	<b>8</b>
<b>GAIN reports</b>	3	0	<b>3</b>
<b>DHSSPS independent reviews</b>	1	0	<b>1</b>
<b>Total</b>	<b>60</b>	<b>10</b>	<b>70</b>

Last year the SQA team oversaw a number of key quality improvements, including:

- a regional competency assessment framework for the safe administration of intravenous fluids to reduce the risk of hyponatraemia;
- preliminary work on an e-learning module on fluid management and hyponatraemia;
- a regional approach to preventing fatalities from medication loading devices;
- a regional passport and leaflets to support the safer administration of insulin;
- a regional training programme for nurses on the safer administration of insulin;
- work to improve appropriate resuscitation practice for patients at end-of-life;

- refinement of patient selection criteria for maternity units that do not fully meet the standard for resident anaesthetic, paediatric and obstetric medical staff;
- work through the Northern Ireland Critical Care Network to standardise pre-operative risk assessment;
- a review of compliance with roll-out of national early warning scores;
- work to implement the recommendations of the Regulation and Quality Improvement Authority (RQIA) report on hospitals at night;
- development of a joint HSCB/PHA action plan in response to the *Memorandum of Understanding: Investigating patient or client safety incidents (unexpected death or serious untoward harm)*;
- publication of the *Learning Matters* newsletter to complement existing methods of sharing learning from incidents, reviews, complaints and patient experience;
- introduction of a system to provide the appropriate assurance mechanism that all HSCB/PHA actions contained within RQIA reports are implemented.
- review of prescribing data from August – October 2013 from all GP practices to identify instances of oral ketoconazole prescribing;
- awareness raising of new SMS messaging service for air pollution to the Business Services Organisation (BSO), HSCB and PHA.

# Governance and audit committees

Both the HSCB and PHA maintain statutory governance committees:

## HSCB governance committee

The HSCB governance committee is made up of four non-executive directors (one with a professional nursing background) with an integrated understanding of risks across the organisation.

In addition, the HSCB senior management team attends all meetings of the governance committee.

The governance committee provides a broad range of assurances to the board of directors including:

- management of corporate risk;
- quality, safety and standards in health and social care;
- social care delegated statutory functions, controls assurance and internal control;
- serious adverse incident management;
- complaints management;
- litigation management;
- maintenance of the reputation, image and integrity of the HSCB;
- professional regulation;
- information governance.

The governance committee also receives briefings on case management reviews as well as reports from professional leads.

Once approved, minutes of governance committee meetings are brought to the attention of the full board of directors at the subsequent public meeting.

## PHA governance and audit committee

The purpose of the PHA governance and audit committee (GAC) is to assure the PHA board and accounting officer of the effectiveness of the PHA's system of internal control.

The GAC has an integrated governance role encompassing financial governance, clinical and social care governance and organisational governance, all of which are underpinned by risk management systems.

The GAC meets at least quarterly and comprises four or more non-executive directors supported by the PHA Director of Operations, the HSCB Director of Finance, the BSO Head of Internal Audit, and their respective staff.

# Links with key partners

The HSCB and PHA work in partnership with statutory and professional bodies to support and improve professional standards and clinical practice.

## Northern Ireland Medical and Dental Training Agency

The Northern Ireland Medical and Dental Training Agency (NIMDTA) commissions, promotes and oversees postgraduate medical and dental education and training throughout Northern Ireland. In June 2012 the HSCB and PHA established a timetable of quarterly meetings between commissioners and NIMDTA. The purpose of the meetings is threefold:

- **To discuss the allocation of medical and dental training placements and the recruitment of trainees.**

This means commissioners are aware when there are recruitment issues that might lead to service pressures within a particular HSCT or speciality, and can work to resolve or manage them.

Commissioners also discuss how service pressures or plans might impact on placements so that training remains aligned with current and future service needs. For example, following discussions with NIMDTA about ongoing service pressures within haematology, there is now greater rotation of haematology trainees through cancer units to encourage greater take-up of haematology posts.

- **To ensure that clinical governance concerns raised through NIMDTA visits to HSCTs are appropriately escalated to the HSCB and PHA.**

Commissioners work with NIMDTA and HSCTs to respond to and manage clinical governance concerns at the earliest opportunity. From 2014, a report summarising issues and resulting actions will be taken through the HSCB governance committee annually.

- **To provide an opportunity to share skills and resources with a view to enhancing the quality of training.**

Examples of this include shared inequalities e-learning resources, communication skills training and the introduction of a regional email account for all trainee doctors and dentists in Northern Ireland.

## **Regulation and Quality Improvement Authority**

The PHA meets quarterly with the Regulation and Quality Improvement Authority (RQIA) and agrees the work programme for service reviews. A point of contact for each review (an 'affiliate') is appointed.

The reports issued by RQIA are processed through the SQA team. Eight RQIA reports were taken through this process last year.

## **Professional meetings with HSCTs**

The directors of medicine, nursing and social services from the HSCB, PHA and HSCTs meet quarterly with their professional colleagues from health and social care providers to address quality concerns. The DHSSPS senior professional officers also meet regularly with their professional colleagues.

## **Accountability meetings with DHSSPS**

There are biannual accountability meetings between the DHSSPS and the HSCB, PHA and HSCTs to provide assurance on the delivery of the agreed commissioning plan.

The HSCB and PHA also meet bimonthly with HSCTs to assure performance and address quality.

# Governance arrangements for primary care

There are four healthcare services provided to patients and clients through primary care: general medical, pharmaceutical, ophthalmic and dental.

The HSCB Directorate of Integrated Care is responsible for commissioning these services and has established governance arrangements to ensure primary care is safe, effective and patient client focused.

## General medical services

General practitioners (GPs) are responsible for the provision of general medical services to their registered practice population. The role of general practice is to treat acute and chronic illnesses and to provide preventative care and health education to patients.

The HSCB undertakes a range of contractual and governance activities with GPs, including the management and reporting arrangements of adverse incidents and serious adverse incidents.

- **Contract review and visit process**

All GP practices are visited on a three year cycle, at which a detailed contract review is undertaken. There are also visits each year to the 10% of practices with the lowest performance in clinical outcomes. Practice visits perform a quality-improvement role and an inspection function.

- **Clinical governance review**

The GMS contract requires general practices to have an effective system of clinical governance.

A comprehensive clinical governance framework for primary care has been developed over the past five years and is now the agreed regional framework for GMS clinical governance.

By the end of each year each practice must submit the following documentation to the HSCB:

- governance record describing work undertaken in the previous year;
- annual practice governance declaration signed by the clinical governance lead.

- **Continuing professional development**

Education is a key part of the HSCB relationship with practices and through education programmes and protected learning afternoons, each locality has hosted specific training events. These allow staff to discuss practice performance and plan service improvements. Courses are organised by integrated care staff in response to changing clinical priorities and contractual and statutory requirements.

- **Management of performance concerns**

### **HSCB Reference Committee**

The role of the HSCB Reference Committee is to ensure that the highest quality of health and social care is maintained in Northern Ireland. Primarily this is achieved by monitoring the professional standards of family care practitioners – GPs, dentists, pharmacists and opticians, considering complaints and feedback about any relevant matters, and referring any such cases for further investigation. Depending on the nature of each case subsequent investigation can involve the HSCB, other agencies or relevant professional bodies such as the General Dental Council, the General Medical Council, the General Ophthalmic Council or the Pharmaceutical Society of Northern Ireland. The work of the committee is supported by professional officers and their staff.

The committee has established processes to ensure that any cases coming before it are considered in a fair and confidential manner and, with HSCB professional leads, regularly reviews the operation of these processes to ensure they are fit for purpose. Occasionally concerns over relevant strategic issues are raised with the HSCB.

Cases that can require consideration by the reference committee can relate to:

- failings in professional standards
- serious adverse incidents involving a practitioner, particularly when an incident puts the public at risk
- matters referred by the police, the Coroner, or other legal entities

In overall terms, the committee remains of the view that the quality of care and clinical standards provided by family practitioners across Northern Ireland remains of a very high standard. Any such failings remain as rare events, and the committee acknowledges that much work continues to maintain and develop standards. This process is being actively pursued with the input and assistance of practitioners and their representative organisations.

### **Regional professional panel**

The regional professional panel, which is an advisory body to the HSCB, manages concerns about the safety of patients posed by the performance of a practitioner. The panel makes recommendations to the HSCB on whether there needs to be any restriction or suspension placed on a practitioner's practice. In such cases referral is made to the HSCB reference committee which considers serious disciplinary matters relating to family health service practitioners.



## **Management of the Northern Ireland primary medical performers list**

A doctor is required to be listed as a primary medical services performer in order to treat patients in primary care. *The Health and Personal Social Services (Primary Medical Services Performers Lists) Regulations (Northern Ireland) 2004* introduced the Northern Ireland primary medical performers list (NI PMPL) on 1 April 2004. The HSCB is responsible for the admission of doctors to the NI PMPL and for their removal from the list, subject to strictly defined criteria.

### **The Medical Profession (Responsible Officers) Regulations (Northern Ireland) 2010**

The medical profession regulations came into operation on 1 October 2010 and require each designated body to nominate or appoint a responsible officer (RO).

The HSCB RO is responsible for the evaluation of the fitness to practise of every medical practitioner who has a prescribed connection with the HSCB, including the revalidation of practitioners.

The estimated number of practitioners to be revalidated each year are:

2013–14 Year one:	93
2014–15 Year two:	607
2015–16 Year three:	601

To support the HSCB RO in making robust revalidation statements to the General Medical Council, a process has been developed to consider any issues flagged by the RO that might impact on a revalidation statement (see page 72).

## **Pharmaceutical services**

The most common primary care medical service is the prescribing of medication. Community pharmacies are responsible for dispensing and advising on these medicines and providing advice on a range of wider health issues. Currently there are 535 community pharmacies across Northern Ireland.

HSCB staff work closely with community pharmacies to ensure that appropriate governance arrangements are in place and that the services they provide are consistently delivered to a high standard.

A system has been developed around the management of adverse incidents and complaints that occur in community pharmacies, and work on the governance arrangements for the full range of services that are provided in community pharmacies is ongoing.

## General ophthalmic services

In Northern Ireland, eyecare services within primary care are delivered by 266 providers (practices) of general ophthalmic services. Over 400 ophthalmic professionals are responsible for sight testing and ophthalmic dispensing in optometry practices.

*Developing eyecare partnerships, improving the commissioning and provision of eyecare services in Northern Ireland* is the policy document that has facilitated recent developments in integrated eyecare provision, including the establishment of enhanced eyecare provision by optometrists for the triage, treatment and management of certain eye conditions.

The HSCB ensures the quality of general ophthalmic services using a variety of methods:

- **Ophthalmic checking clinics**

Ophthalmic checking clinics assure the quality of provision of general ophthalmic services. Patients are invited to attend a meeting to have their optical appliance checked and verified and to provide views on the service they received.

- **Annual quality assurance (QA) returns**

Opticians are expected to send to the HSCB for review an annual summary of: complaints; adverse incidents; business continuity planning; and notification of the receipt and implementation of regulations and guidance.

- **Governance reviews of clinical records**

HSCB advisers review the clinical records of patients during optometry practice visits and then follow up any issues that are identified.

## Dental services

There are currently 380 dental surgeries in Northern Ireland with 1056 dentists working in them. These are mostly practices where general dental care and treatment is provided. A small number deliver specialist dental care and treatment, particularly orthodontics and oral surgery.

Quality of care provided by dental practitioners is monitored through the Referral Dental Service (RDS). This was historically the responsibility of the DHSSPS and transferred to the HSCB in 2010.

The RDS examines a sample of patients post-treatment for all practitioners. Patients are called to clinics to be examined by dental advisers and their record cards are also examined. The subsequent reports comment on the quality of treatment provided and in addition contribute to financial assurances and the overall probity process.

Each practitioner is now also issued with an analysis of the records review and the examination reports.

- **Dental prescribing**

General dental practitioners prescribe medications as listed in the *Dental Practitioners'*

*Formulary*. Controlled drug prescribing is monitored on a monthly basis by a dental adviser with support from a pharmacy adviser. To date, correspondence with practitioners has resulted in identification of two serious adverse incidents and a referral to the Counter Fraud Unit of BSO.

- **The Regulation and Quality Improvement Authority (RQIA)**

Establishments providing any private dental care or treatment are subject to the *Independent Health Care Regulations (Northern Ireland) 2005* and must be registered with the Regulation and Quality Improvement Authority (RQIA). This organisation has overall responsibility for assessing and reporting on the quality and safety of those services and for encouraging improvements.

The RQIA gives the HSCB assurance of these practices through a regular programme of inspections.

A decorative graphic consisting of two thick, parallel lines that start from the left edge and curve upwards and to the right. The top line is grey and the bottom line is teal. The word "Safety" is positioned between these lines.

# Safety

# The management of serious adverse incidents

This section outlines how we follow the procedure for the reporting and follow-up of serious adverse incidents (revised October 2013) (see Appendix 2) and the number of serious adverse incidents (SAIs) reported between 1 April 2013 – 31 March 2014.

The current operational arrangements for managing SAIs reported to the HSCB or PHA are:

- SAIs are reviewed by senior professional officers; in addition, the HSCB senior management team receives and considers all SAIs on a weekly basis.
- Each SAI has a nominated professional who is the designated review officer (DRO).
- Reports, themes and learning are shared with the SAI review sub-group (SAIRSG) and the quality safety and experience (QSE) group to agree actions.
- The safety and quality alerts (SQA) team provide an assurance mechanism for any actions to be taken forward as a result of regional learning.

The aim of the SAI process is to:

- provide a mechanism to share learning, focusing on quality and leading to service improvement for service users;
- provide guidance on the SAI criteria, responsibilities and the process for reporting, investigation, dissemination and implementation of learning arising from SAIs;
- ensure the process works simultaneously with all other statutory and regulatory organisations;
- provide a culture of openness and transparency that encourages the reporting of SAIs;
- ensure trends, best practice and learning are identified, disseminated and implemented in a timely manner, in order to reduce recurrence;
- maintain a high quality of information and documentation within a time-bound process.

## Training

During the reporting period, a number of regional training programmes were undertaken to support staff in the implementation of the SAI procedure:

- Regional significant event audit training (December 2013)
- Designated review officer workshop (December 2013)
- Regional root cause analysis training (January/February 2014)

## Service user and family involvement in SAIs

The HSCB and PHA SAI procedure makes clear the need for appropriate communication and involvement of service users, relatives and carers.

In addition, the HSCB and PHA are working with the HSCTs, Patient and Client Council (PCC) and RQIA to develop guidance for HSC organisations when involving service users/families throughout the stages of the SAI process. A leaflet is also being developed to provide information for patients/families on the process.

**Table 2: Serious adverse incident activity 1 April 2013 – 31 March 2014**

The HSCB received **483 SAI notifications** from across the HSC for the above period, of which 23 were subsequently de-escalated and three transferred. The table below provides an overview of all SAIs reported by organisation and programme of care (POC) for 2013/14.

Organisation	2013/14													
	SAI notifications received	SAI de-escalated	SAI transferred	Total SAIs excluding de-escalated and transferred SAIs	POC 1	POC 2	POC 3	POC 4	POC 5	POC 6	POC 7	POC 9	POC NA	
BHSCT	105	8	1	96	26	41	3	0	21	2	0	1	2	
BSO	1	0	0	1	0	0	0	0	0	0	0	0	1	
NHSCT	154	7	0	147	53	12	8	27	34	6	1	1	5	
NIAS	3	1	0	2	2	0	0	0	0	0	0	0	0	
Primary care	29	2	1	26	0	0	0	0	0	0	0	26	0	
SEHSCT	57	2	1	54	11	8	5	4	22	2	1	0	1	
SHSCT	75	2	0	73	11	14	1	16	27	1	0	2	1	
WHSCT	58	1	0	57	14	9	2	3	24	1	0	0	4	
NIBTS	1	0	0	1	1	0	0	0	0	0	0	0	0	
<b>Totals</b>	<b>483</b>	<b>23</b>	<b>3</b>	<b>457</b>	<b>118</b>	<b>84</b>	<b>19</b>	<b>50</b>	<b>128</b>	<b>12</b>	<b>2</b>	<b>30</b>	<b>14</b>	

### Key

POC1	Acute services	POC6	Learning disability
POC2	Maternity and child health	POC7	Physical disability and sensory impairment
POC3	Family and childcare (including CAMHS)	POC8	Health promotion and disease prevention
POC4	Elderly	POC9	Primary health and adult community (includes GPs)
POC5	Mental health	POCNA	Corporate business/other

In addition to SAls, adverse incidents (AIs) in primary care are reported to the HSCB Directorate of Integrated Care through a variety of methods, including anonymised reporting.

**Table 3: Overview of AIs reported during 2013/14**

Localities/ areas	General medical	Dental	Pharmaceutical (see below)	Ophthalmic	Multi*	Total
<b>Belfast</b>	17	2	0	0	1	20
<b>Northern</b>	37	3	2	0	0	42
<b>South Eastern</b>	16	0	0	2	0	18
<b>Southern</b>	63	2	0	0	0	65
<b>Western</b>	15	3	0	1	0	19
<b>Blanks**</b>	3	0	0	0	0	3
<b>Total</b>	151	10	2	3	1	167

\*Refers to incidents occurring across multiple organisations

\*\*Refers to incidents where the local area cannot be determined

In 2013/14 the adverse incidents reported to the HSCB were categorised as follows:

- Medication incidents (eg prescribing errors, drug specific issues) 47%
- Patient issues (eg records/identification issues) 19%
- Interface incidents between primary and secondary care 13%
- Premises/equipment issues 13%

The majority of pharmaceutical service incidents are not represented on the table above. These incidents are not recorded by locality but either anonymously or as named incidents. There were 395 anonymous incidents recorded in 2013/14:

- Dose/strength wrong or unclear 32%
- Wrong drug 26%
- Wrong quantity 7%
- Other 13%

There were 156 named incidents recorded in 2013/14:

- Dose/strength wrong or unclear 29%
- Wrong drug 21%
- Mismatch between patient and medicine 15%
- Wrong quantity 5%

The key aim of our SAI and AI processes is to reduce the risk of recurrence and improve patient safety by learning from incidents, not only within the reporting organisation, but across the HSC as a whole.

The HSCB and PHA use a variety of mechanisms to share learning in a timely manner for implementation, including:

- Learning letters;
- Newsletters;
- Thematic reviews;
- Training;
- Audits, guidelines and resources.

## Learning letters

Last year the following 10 Learning letters were issued:

- Loss of data from the Twinkle paediatric diabetic database managed by BSO ITS (23 May 2013)
- Management of data in community services (17 May 2013)
- Haemolysis during or after haemodialysis (28 June 2013)
- Know the massive haemorrhage protocol (9 July 2013)
- Child centred decision making (13 August 2013)
- Revised communication of patient risk status for CJD (2 September 2013)
- Care planning for adult mental health patients (28 August 2013)
- Safe use of intravenous (IV) magnesium sulphate (9 September 2013)
- Safe management of lower bowel dysfunction including digital rectal examination (DRE) and digital removal of faeces (DRF) (16 December 2013)
- Head injury in patients on Warfarin – treat as a medical emergency (8 January 2014)

## Newsletters

A number of newsletters have been developed to share learning from SAIs and AIs. These include:

- Learning matters (see Appendix 3)
- Optometric practice
- Medicines safety matters
- Prescribing matters
- General practice
- Medicines management



## Thematic reviews

Thematic reviews are commissioned by the QSE group to focus on specific areas to identify themes or trends. Recommendations are disseminated across the HSC.

The following thematic reviews were undertaken during 2013/14:

- Patient falls in hospitals
- Failure in referral or follow-up process
- Venous thromboembolism (VTE)

## Training

There are various on-going training programmes, especially in the area of medicines safety on a range of subjects to share learning and improve practice for all disciplines.

## Audits, guidelines and resources

The HSCB, through the pharmaceutical medicines management team, has developed a number of resources to help healthcare providers review and improve systems and prescribing in their practice. These range from workbooks on developing standard operating procedures, to audits and guidelines, including the Northern Ireland formulary. Existing resources are updated on a regular basis and new resources are developed as required.



## Quality improvement plans

The *Francis report* highlights that statistics, benchmarks and action plans are not ends in themselves and should not come before patients and their experiences.

Therefore, while the HSCB and PHA are continuously reviewing performance measurements, our quality improvement plans focus, where possible, on patient-orientated outcomes to demonstrate improvements.

In 2013/14 our quality improvement plans included:

1. Pressure ulcer prevention
2. Falls prevention in hospitals
3. The World Health Organization (WHO) surgical checklist
4. Preventing harm from venous thromboembolism (VTE)
5. Cardiac arrest rates
6. Monitoring and reducing healthcare associated infections

The HSCTs report to the PHA and HSCB quarterly on their progress with each indicator.

## Pressure ulcer prevention

Pressure ulcers (often called pressure sores or bed sores) are areas of localised damage to the skin and underlying tissues caused by pressure or friction. Not all pressure ulcers are avoidable, but in the majority of cases they can be prevented by frequently changing a patient's position, using special mattresses or chair cushions and attention to hydration and nutrition.

### Skin care bundle (four elements)

**S**upport the surface

**K**eep moving the patient

**I**ncreased moisture management (keep skin dry and well cared for)

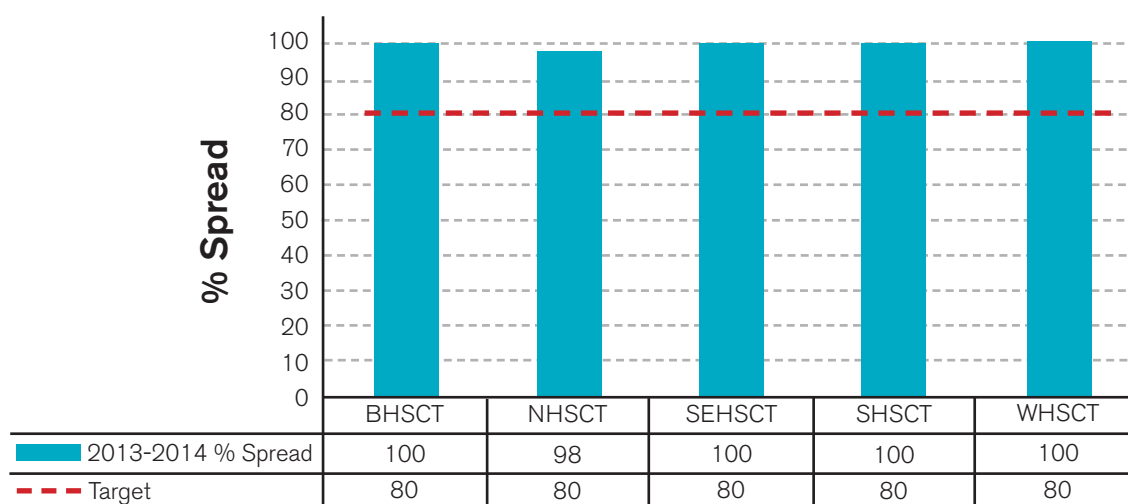
**N**utrition (ensure patient is well fed and hydrated)

The 'SKIN' care bundle is a powerful tool as it defines and ties best practices together. The bundle also makes the actual process of preventing pressure ulcers visible to all. This minimises variation in care practices. Consistently delivering all elements of the care bundle at every care opportunity will improve the pressure area care that a person receives. This will have impact on improving care outcomes.

Last year the PHA worked closely with HSCTs to implement a pressure ulcer prevention programme within acute hospitals, and have continued to work in partnership with Your Turn, a non-profit organisation, to raise awareness of pressure ulcer prevention in the community. In 2013/14 HSCTs were tasked with spreading the 'SKIN' bundle to 80% of all inpatient areas/wards, ensuring 95% implementation by March 2014. All Trusts have implemented this quality improvement initiative across adult inpatient areas/wards and are focusing on improving compliance with all elements of the bundle.

Figure 1 (below) illustrates that while the indicator required the HSCTs to have spread the SKIN bundle to over 80% of all adult inpatient areas (red line), all HSCTs exceeded this and spread to over 90% of required areas.

**Figure 1: Spread of SKIN bundle as of March 2014**



## Falls prevention in hospitals

Falls can not only lead to physical injury, they can also have a significant detrimental impact on a person's confidence, increase anxiety and lead to a reduction in mobility, which can have longer lasting effects than the physical injury. The HSCB and PHA are committed to ensuring that the risk of falls in hospitals is minimised.

Falls are among the top five most frequent adverse incidents reported in HSCTs.

To reduce risks it is important to understand why patients fall in hospital and put steps in place to reduce falls and the harm from falls.

We cannot prevent falls without imposing unacceptable restrictions to patients' independence, dignity and privacy. However research has shown that falls can be reduced by 20–30% through assessments and interventions.

The PHA is leading a project to implement The Royal College of Physicians 'Fallsafe' bundle in hospitals in Northern Ireland, which is an evidence-based bundle of interventions shown to reduce falls.

The PHA monitors the HSCT implementation of Part A of the Fallsafe bundle:

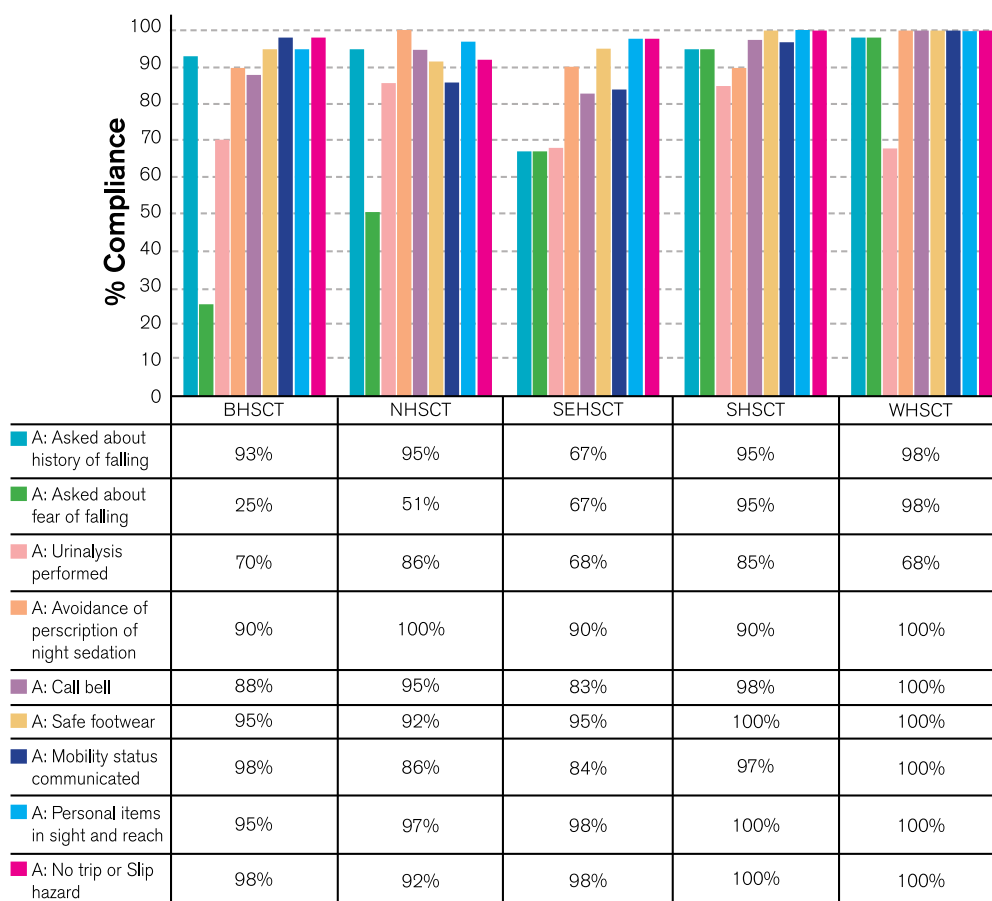
- Patient asked about history of falling
- Patient asked about fear of falling
- Urinalysis performed
- Avoidance of prescription of night sedation
- Call bell provided
- Safe footwear
- Mobility status communicated
- Personal items in sight and reach
- No trip or slip hazard

**There were approximately 10,250 falls reported last year in health and social care facilities. Of these, 284 resulted in moderate to severe harm such as broken bones.**

HSCTs have worked diligently to implement all these elements (see Figure 2). However two elements are proving a challenge: 'patient asked about fear of falling' and 'urinalysis performed' as these factors were not routinely recorded on patient's notes.

The new regional nursing documentation will include routine urinalysis and a question asking patients about a fear of falling, which should significantly improve compliance when introduced.

**Figure 2: Fallsafe bundle: HSCT compliance with all of Part A**



## World Health Organization safe surgical checklist

The World Health Organization (WHO) has undertaken a number of global and regional initiatives to address surgical safety. The WHO safe surgical checklist is an initiative aimed at increasing surgical safety.

**The checklist identifies three phases of an operation:**

- 1. Sign in (before the induction of anaesthesia)**
- 2. Time out (before the incision of the skin)**
- 3. Sign out (before patient leaves the operating room)**

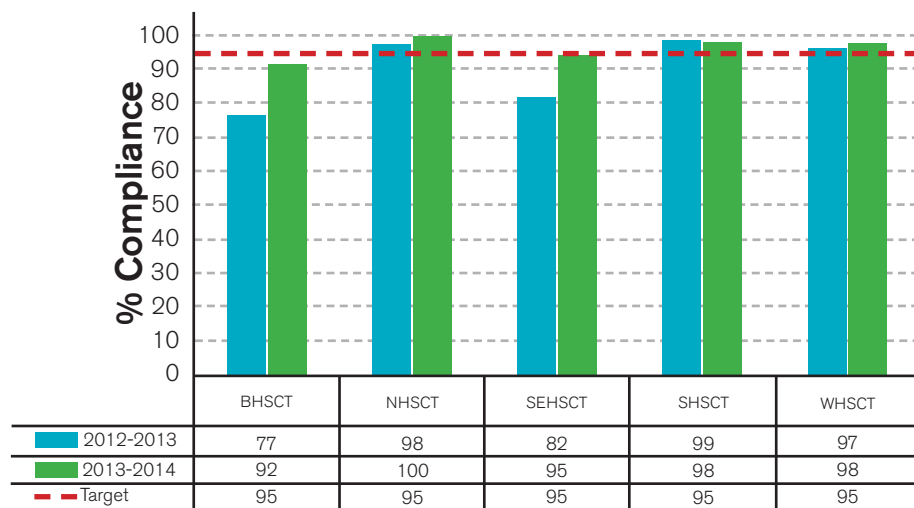
**A checklist coordinator must confirm that the surgical team have completed the listed tasks before proceeding with the operation.**

In each phase, a checklist coordinator must confirm that the surgery team has completed the listed tasks before proceeding with the operation. By following a few critical steps, health care professionals can minimise the most common and avoidable risks to patients.

Last year each HSCT undertook a number of measures to achieve at least 95% implementation of the checklist across all theatres and day procedure units in Northern Ireland.

Figure 3 (below) shows that all HSCTs have increased their implementation of the WHO surgical checklist. Four HSCTs have achieved 95% or more and the remaining HSCT achieved 92%, with a plan to ensure it is introduced to the remaining areas in the next quarter; these include all procedural areas.

**Figure 3: WHO surgical checklist end-of-year compliance**



## Preventing harm from venous thromboembolism (VTE)

Venous thromboembolism (VTE) is a term that covers both deep vein thrombosis and its possible consequence: pulmonary embolism (PE).

A deep vein thrombosis (DVT) is a blood clot that develops in the deep veins of the leg. If this blood clot becomes mobile in the bloodstream it can travel to the lungs and cause a blockage (PE) that could lead to death.

Some patients are at increased risk of a blood clot, particularly if they are not mobile due to their condition or treatment.

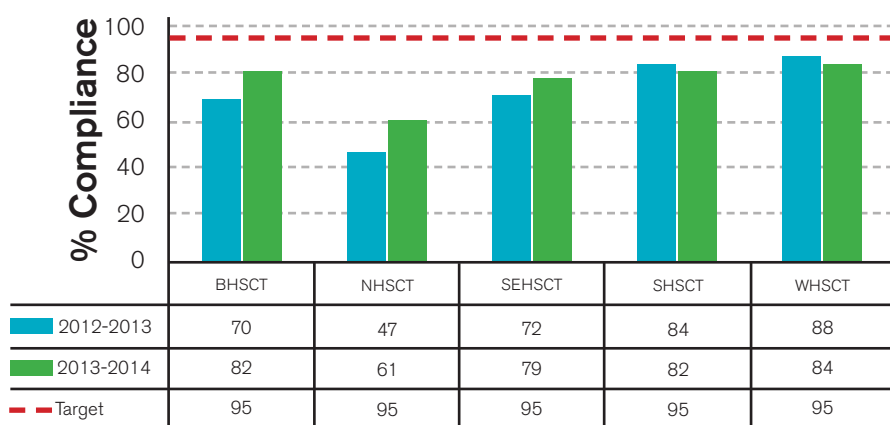
The risk of hospital-acquired VTE can be greatly reduced by risk-assessing patients and, if required, prescribing appropriate treatment.

**Evidence suggests that as many as 50% of people in whom a blood clot in the leg is left untreated will go on to develop a blood clot in their lung.**  
**NICE guidelines (CG 144; June 2012)**

Last year HSCTs were required to increase implementation of the VTE risk assessment across all inpatient units/wards and, in addition, achieve 95% compliance with appropriate VTE prophylaxis prescribing in all clinical areas.

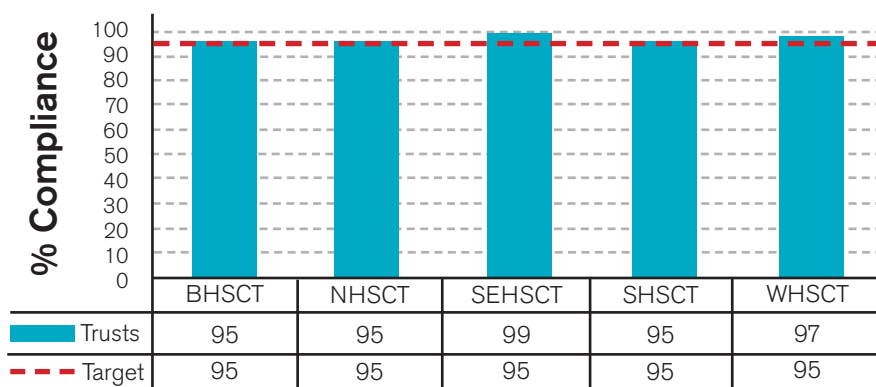
Figure 4 (overleaf) shows the number of risk assessments completed between April 2012 and March 2014 has increased regionally. HSCTs are committed to implementing the VTE risk assessment to improve the quality of patient outcomes.

**Figure 4: VTE risk assessment end-of-year compliance**



All HSCTs reported 95% or above implementation of VTE prophylaxis prescribing following VTE risk assessment (see Figure 5).

**Figure 5: VTE prophylaxis prescribing compliance as of December 2013**



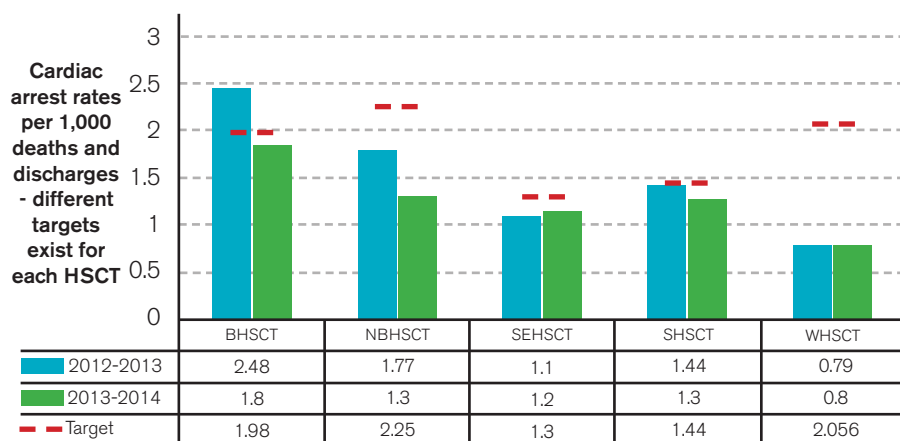
## Cardiac arrest rates

Early recognition and detection of deterioration can reduce the number of cardiac arrests and improve the outcomes for patients.

The use of tools such as the National Early Warning Score optimises the delivery of safer care as it supports an enhanced level of surveillance and clinical review. It should be used for initial assessment of acute illness and for continuous monitoring of a patient's wellbeing throughout their stay in hospital. Where a patient's condition is identified as deteriorating, prompt escalation to senior staff ensures timely interventions and appropriate clinical care.

Cardiac arrest rates are monitored by the PHA and HSCTs are required to maintain or achieve a 20% reduction from baseline. Baselines were calculated individually for each HSCT based on monthly crash call rate per 1000 deaths and discharges. The target set for each HSCT individually is illustrated by the red bar on the diagram. All HSCTs maintained rates below the target level (see Figure 6).

**Figure 6: Reduction in cardiac arrest rate measure at end-of-year**



## Monitoring and reducing healthcare associated infections

Healthcare associated infections (HCAs) are a major and preventable cause of death and illness. Older patients and patients with coexisting illness are at increased risk of developing infections either as part of, or as a result of, their healthcare.

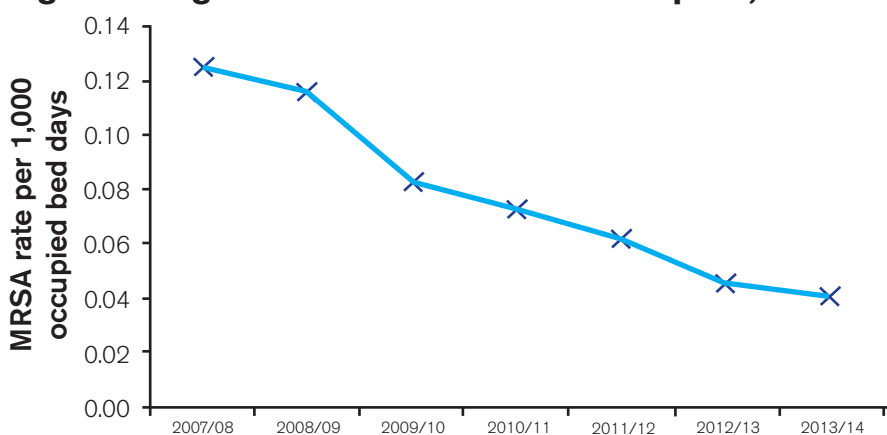
The PHA oversees and delivers a number of regional HCAI surveillance programmes in Northern Ireland. Partners across health and social care use the information reported through our regional surveillance programmes to monitor the impact of infection prevention and control programmes and service improvements.

### Meticillin-resistant *Staphylococcus aureus* bloodstream infections

The regional rate for Meticillin-resistant *Staphylococcus aureus* (MRSA) bacteraemias has decreased considerably between 2007/08 and 2013/14. This represents an absolute reduction of almost two thirds, from 221 episodes in 2007/08 to 62 episodes in 2013/14 (71.9% reduction).

Compared to 2012/13, eight fewer MRSA bacteraemias were reported in 2013/14 (11.4% reduction). During 2013/14 the regional ministerial target of 46 MRSA bacteraemias was exceeded by 16 episodes, with one HSCT meeting its individual MRSA reduction target.

**Figure 7: Regional MRSA bacteraemia rate per 1,000 occupied bed days 2007/08 to 2013/14**

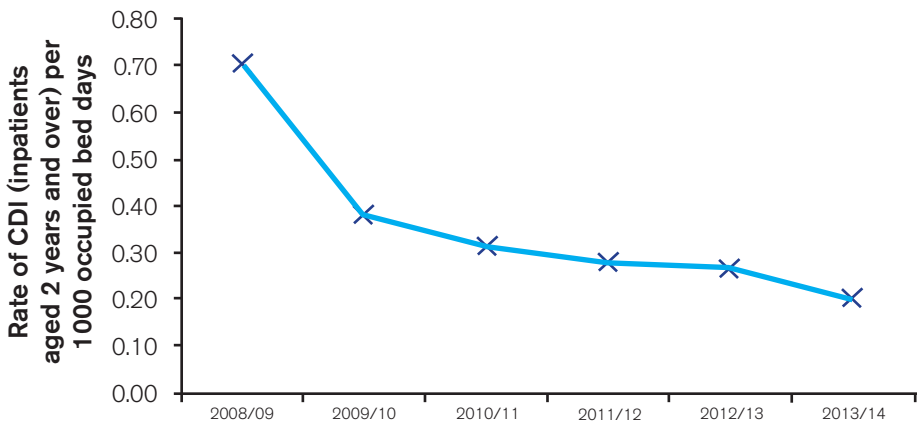


## Clostridium difficile infections

The regional rate for *Clostridium difficile* infections (CDI) among hospital inpatients aged two years and over has also decreased considerably between 2008/09 and 2013/14. This represents an absolute reduction of two thirds, from 1,177 episodes in 2007/08 to 310 in 2013/14 (73.7% reduction).

Compared to 2012/13, 101 fewer CDI episodes among inpatients aged two years and over were reported in 2013/14 (24.6% reduction). During 2013/14 the regional ministerial target of 324 CDI episodes among inpatients aged two years and over was achieved with 310 episodes reported from acute hospitals.

**Figure 8: Regional CDI rate, in inpatients aged two years and over, per 1,000 occupied bed days, 2008/09 to 2013/14**

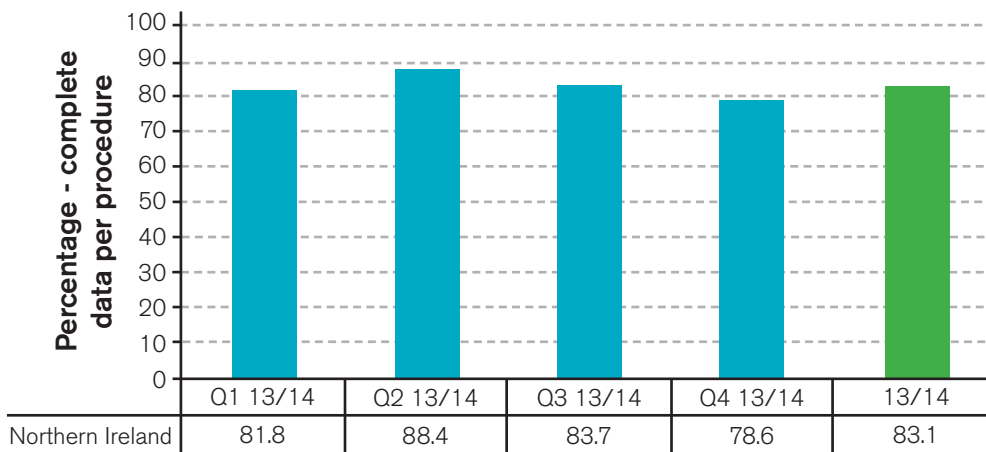


## Orthopaedic surgical site infection surveillance

Compliance with orthopaedic surgical site infection (SSI) surveillance is based on the number of surveillance returns received by the PHA with valid orthopaedic procedure and SSI details recorded (reported as part of HSCT quality improvement plans). Compliance with SSI surveillance for orthopaedic procedures exceeded 80% throughout 2013/14.

During 2013/14 the regional SSI rate for orthopaedics was 0.16 per 100 orthopaedic procedures. This represents a considerable reduction from an SSI rate of 0.86 per 100 orthopaedic procedures reported in 2008/09.

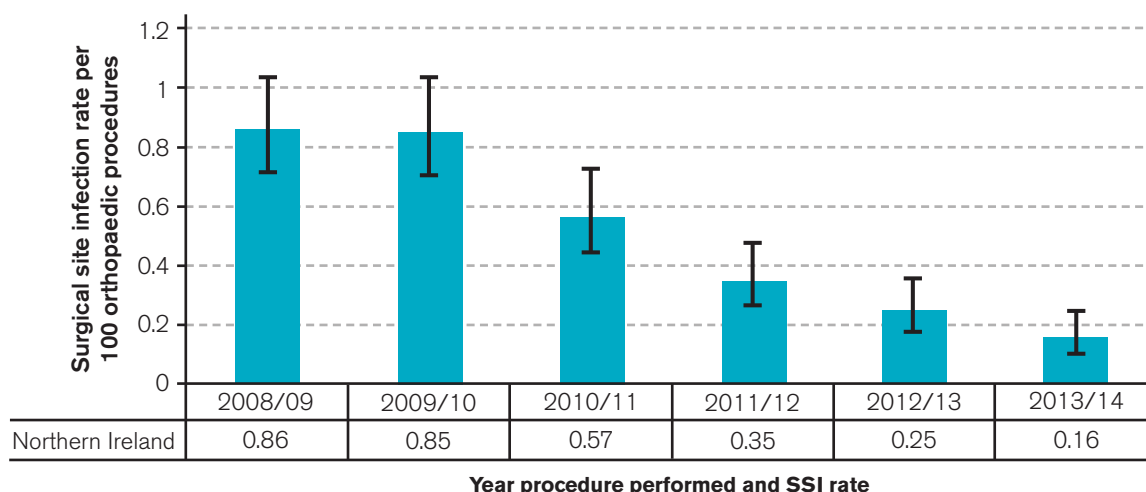
**Figure 9: Orthopaedic procedures: compliance with SSI surveillance 2013/14**



(Paper forms with necessary data per procedure/ excludes Musgrave Park Hospital where data are submitted electronically)



**Figure 10: Orthopaedic procedures: regional SSI rate 2008/09 – 2013/14**

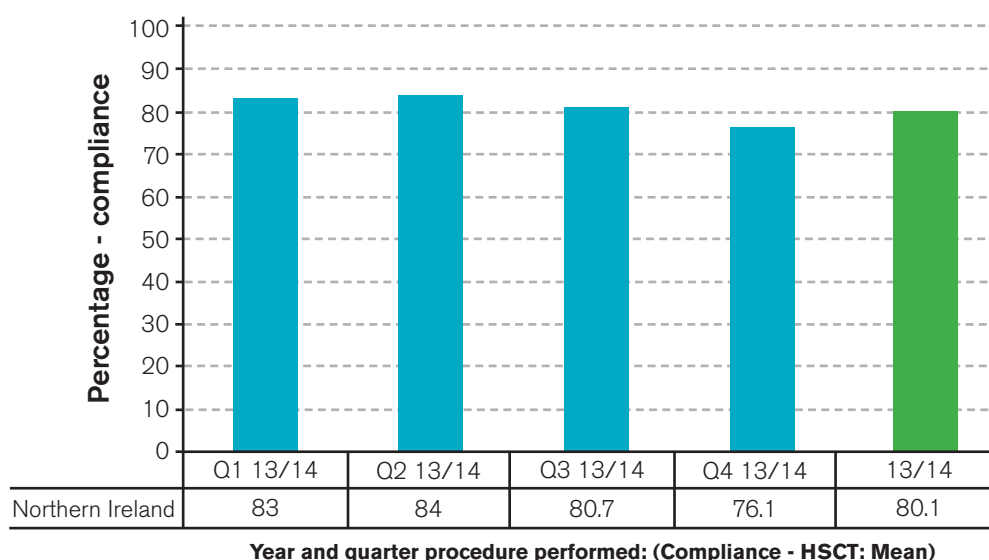


### Caesarean-section SSI surveillance

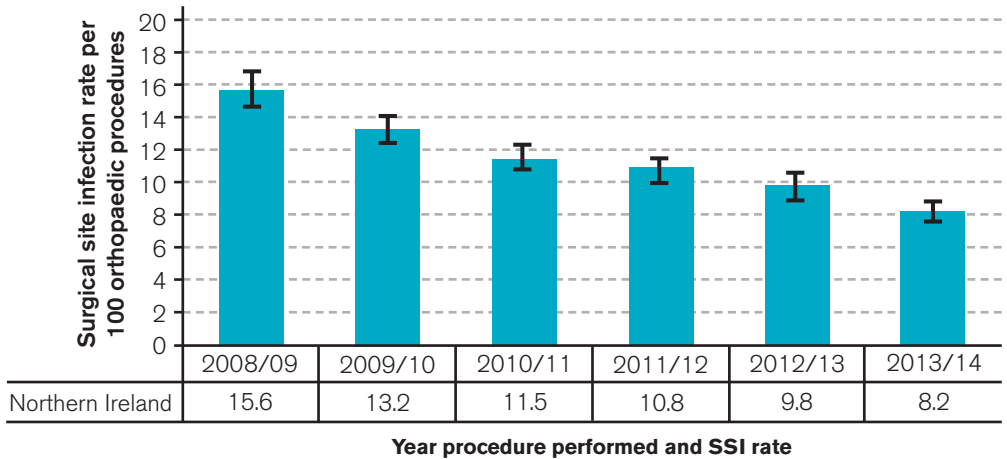
Compliance for Caesarean-section (C-section) SSI surveillance is based on the number of C-section procedures reported to the PHA compared to the number performed. Compliance in C-section SSI surveillance has increased from 44% in 2008/09 to 80% in 2013/14. For three of four quarters in 2013/14 compliance with SSI surveillance for C-sections exceeded 80%.

During 2013/14 the regional SSI rate for C-sections was 8.2 per 100 C-section procedures. This represents a reduction from an SSI rate of 15.6 per 100 C-section procedures reported in 2008/09.

**Figure 11: Caesarean sections: compliance with SSI surveillance 2013/14**



**Figure 12: Caesarean sections: regional SSI rate 2008/09 – 2013/14**



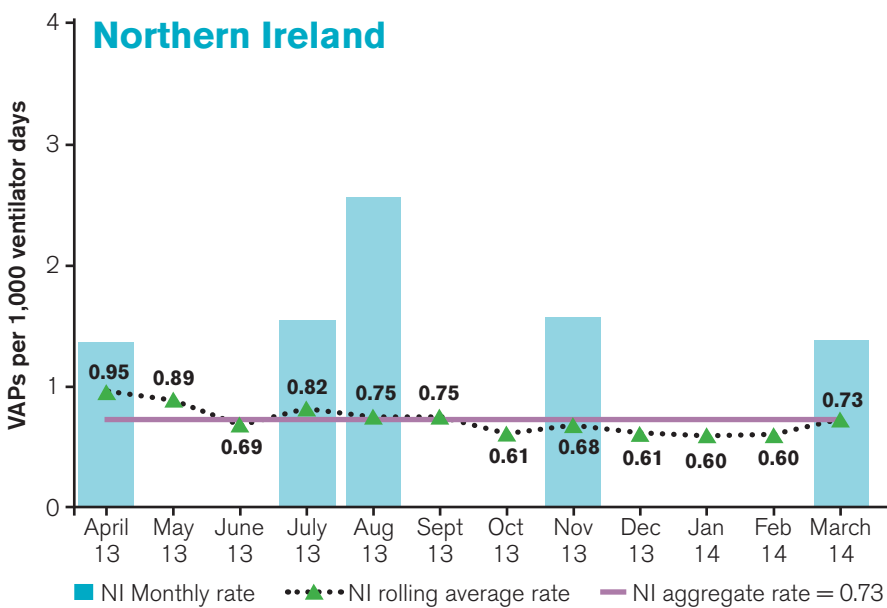
**Device-associated infection surveillance**

The device-associated infection (DAI) surveillance programme monitors three infections associated with invasive medical devices, an identified risk for HCAI, among patients receiving care in all critical care units in acute hospitals in Northern Ireland. This paperless surveillance programme is delivered through electronic data capture and sharing.

**Ventilator associated pneumoniae**

The regional ventilator associated pneumoniae (VAPs) rate for March 2014 was 0.73 per 1,000 ventilator days. This represents a slight reduction in the regional 12-month rolling average VAP rate from 0.95 per 1,000 ventilator days in April 2013.  $VAP\ rate = (number\ of\ VAP / number\ of\ ventilator\ days) \times 1,000$ .

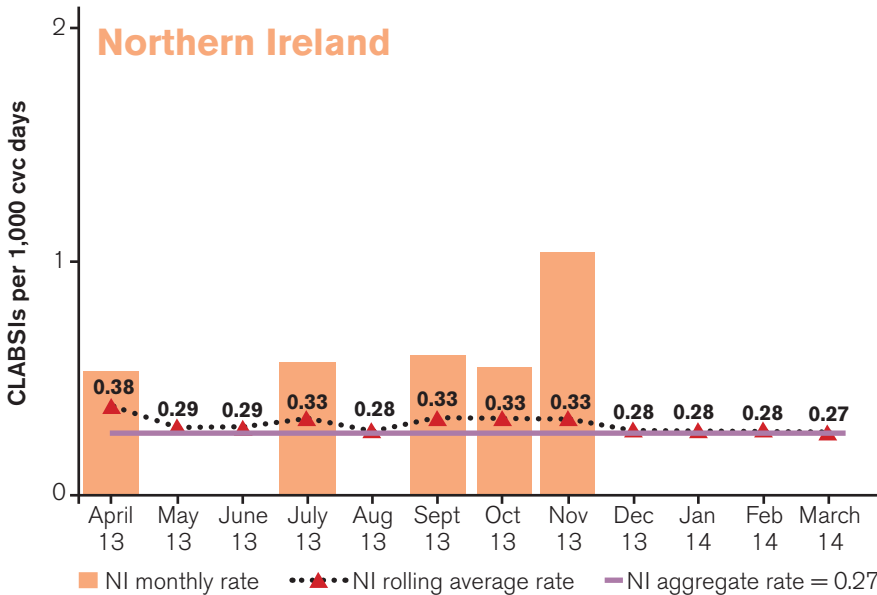
**Figure 13: Regional VAP rate April 2013 to March 2014**



## Central line associated infections

The regional central line associated infections (CLABSIs) rate for March 2014 was 0.27 per 1,000 central venous catheter days. This represents a slight reduction in the regional 12-month rolling average CLABSI rate from 0.38 per 1,000 central venous catheter days in April 2013. CLABSI rate = (Number of CLABSI / Number of central venous catheter days) x 1,000.

**Figure 14: Regional CLABSI rate April 2013 to March 2014**

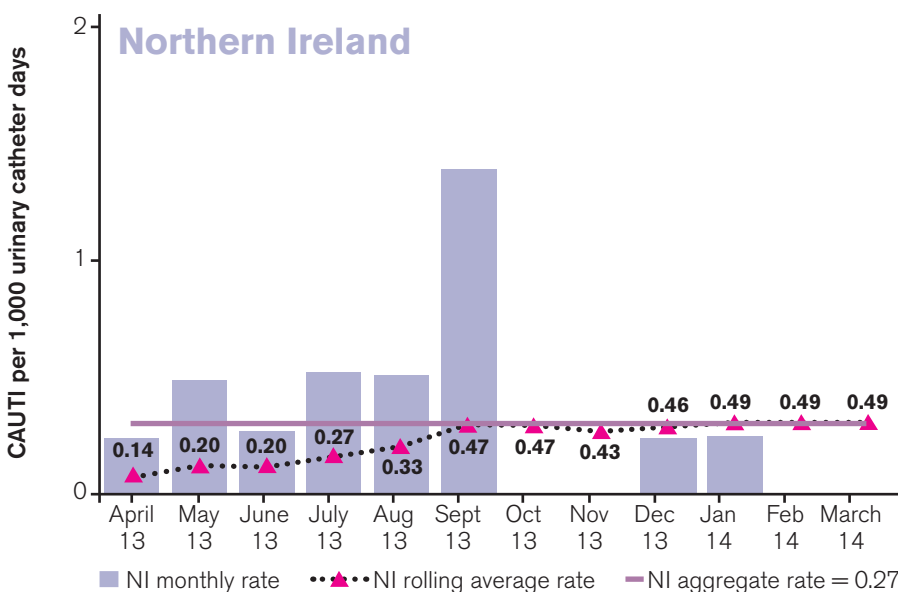


## Catheter associated urinary tract infections

The regional catheter associated urinary tract infections (CAUTI) rate for March 2014 was 0.49 per 1,000 urinary catheter days. This represents a slight increase in the regional 12-month rolling average CAUTI rate from 0.14 per 1,000 ventilator days in April 2013.

CAUTI rate = (number of CAUTI / number of urinary catheter days) x 1,000.

**Figure 15: Regional CAUTI rate April 2013 to March 2014**



# HSC Safety Forum

The HSC Safety Forum provides leadership in quality improvement and patient safety. Achievements in 2013/14 include:

- organising Delivering Safer Care 2014, the largest conference supporting safety and quality improvement ever held in Ireland;
- leading the development of an Attributes framework for quality improvement and leadership as part of Quality 2020;
- providing (or contributing to) training for HSC staff in improvement science, human factors and change management.

The forum leads quality improvement collaboratives involving key staff from all HSCTs in:

- scheduled care;
- unscheduled care;
- maternity;
- paediatrics;
- mental health;
- nursing homes;
- primary care.

The highlights of our collaborative programme include:

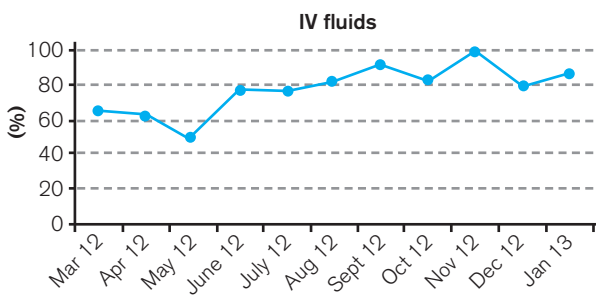
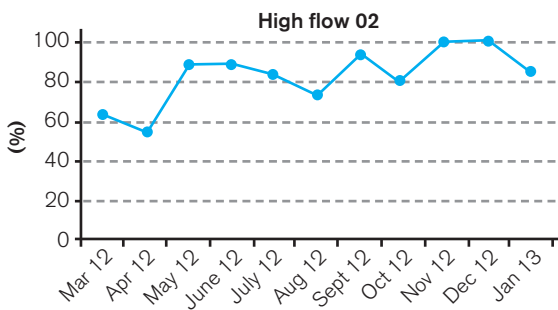
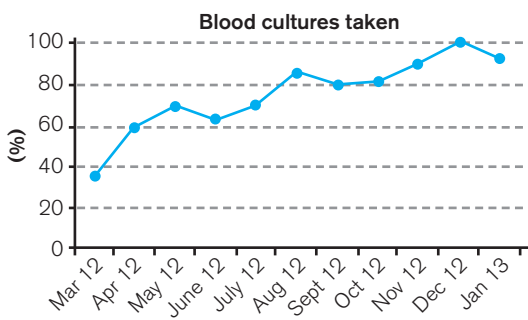
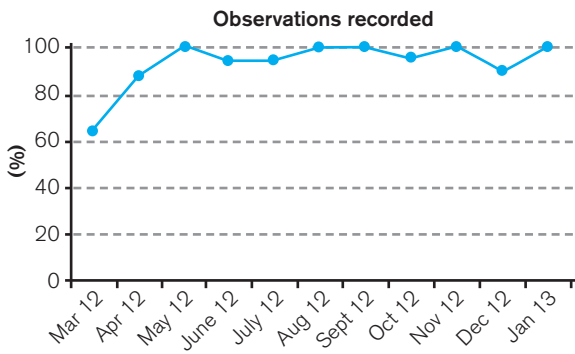
## Emergency department

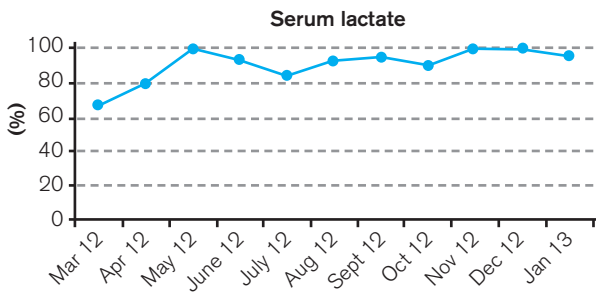
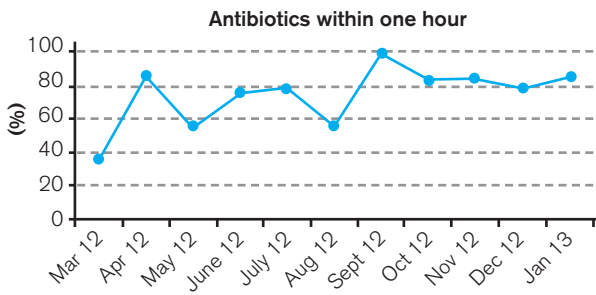
The Emergency department (ED) improvement collaborative has worked with all EDs on the care of patients with life-threatening infection (severe sepsis) and those suffering from (acute) stroke.

### Management of severe sepsis

Following 12 months of engagement and improvement through the collaborative, by mid-2013, Northern Ireland exceeded the College of Emergency Medicine standards on early management of severe sepsis. A point in time audit, conducted by all HSCTs in spring 2014, demonstrated that this improvement had been maintained.

**Figure 16-21: Sepsis run charts**

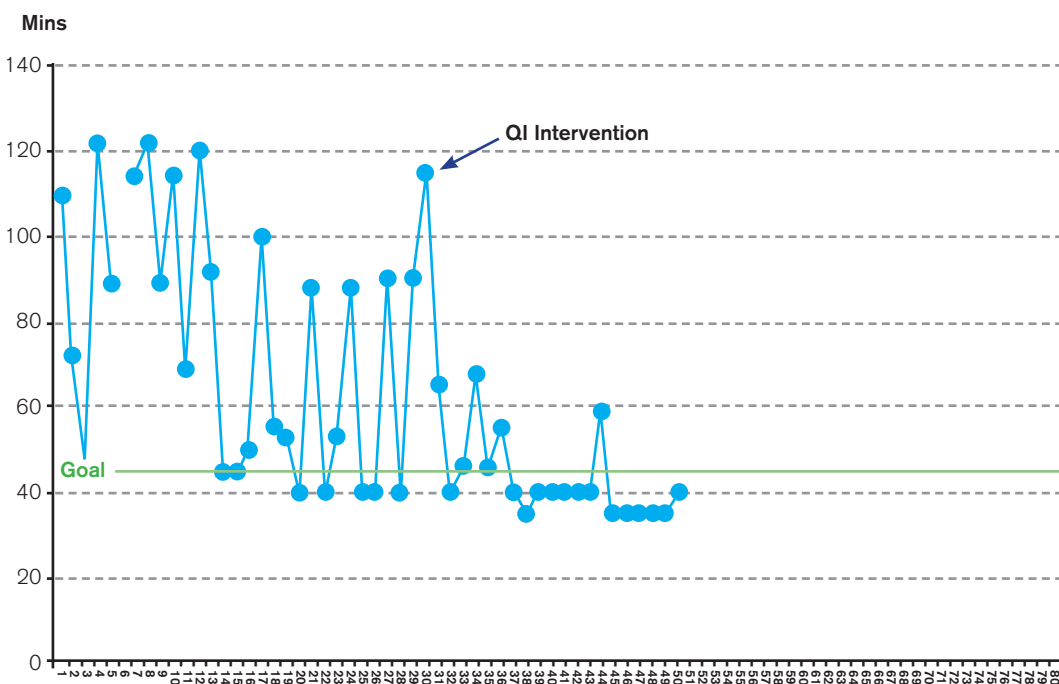




### Stroke thrombolysis

Time is of the essence in the management of acute stroke and the collaborative aim was to ensure patients have a completed CT scan of the brain within 45 minutes of arrival in ED. The chart below, showing time to completed CT scan, is an example from a single HSCT showing the effectiveness of this quality improvement intervention and how the goal was achieved. This work was conducted as part of a cross border patient safety training programme, facilitated by the forum and partners and funded by Cooperation and Working Together (CaWT).

**Figure 22: Time to CT scan in suspected stroke**



The ED collaborative has also begun work on the College of Emergency Medicine Safer Care Checklist and the development of a regional ambulance handover proforma.

## Paediatrics

The HSC Safety Forum paediatric improvement collaborative has worked on:

- Improved communication – improving structured handovers, safety briefs and use of professional communication tools such as SBAR and IPASS.
- Early detection and rescue of children whose condition is deteriorating – this includes piloting the use of age-adjusted regional paediatric early warning scores and escalation protocols, and also evaluating intervention models used in other healthcare systems such as ‘safety huddles’ and ‘watchers’ to improve overall situational awareness.
- Improved arrangements to enhance medication safety for high-risk drugs.
- Medication safety in paediatrics and reducing prescription error.

## Maternity care

The stated aim of the maternity improvement collaborative is to provide high quality, safe maternity care and ensure the best outcomes for women and babies. The work of the collaborative is aligned to the *Northern Ireland Maternity Strategy* and includes the promotion of normalising birth and birth choice plans using improved data from NIMATS system. Recent improvements from this collaborative have included:

- regional intrapartum and antenatal CTG evaluation stickers;
- regional in-utero transfer proforma;
- regional obstetric early warning score/escalation protocols for early pregnancy antenatal and postnatal care. An audit of this work is currently underway.
- regional vaginal examination sticker (12 month pilot).

## Mental health

The mental health improvement collaborative was established in early 2014 and has agreement that HSCT teams will work on two areas of improvement:

- crisis prevention and management;
- improving the physical health needs of mental health patients.

## National early warning score

As part of its leadership role, the HSC Safety Forum has led the regional implementation of the National early warning score (NEWS), including appropriate escalation arrangements to improve care of the deteriorating patient, in all HSCTs. This tool helps professional staff identify early deterioration in a patient’s condition. Abnormal scores prompt specific actions and/or referral to greater expertise. Part of this work involved facilitating HSCTs to clearly define their expectations regarding intervention when NEWS is abnormal.

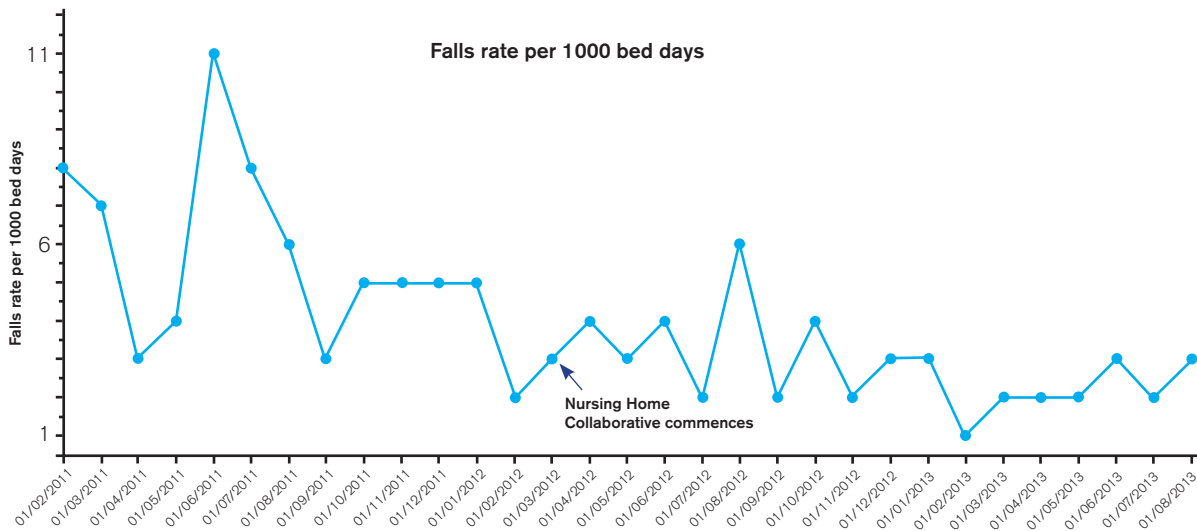
NEWS was implemented across all HSCTs by November 2013 and its use has since been audited. Further work is on-going on improving the usefulness of NEWS in patients with long-term conditions.

## Nursing homes

The nursing home improvement collaborative, set up in 2012, has continued its work. The first focus of improvement was on falls prevention and in 2013 the collaborative achieved a reduction in falls (rate/1000 bed days) of 25%. The falls prevention toolkit developed during this work has been made available to all nursing homes. During 2014, an additional seven nursing homes joined the collaborative and currently 18 homes are working on improving nutrition and the prevention of pressure ulcers which aligns with current RQIA inspection themes.

The graph below, based on data from one of the participating nursing homes in the collaborative, shows the effectiveness of using a quality improvement approach to implementing a falls prevention strategy.

**Figure 23: Falls rate per 1000 bed days (within one of the participating nursing homes)**



## Safe nursing levels

The people of Northern Ireland are rightly demanding that they and their relatives are cared for by a workforce that has sufficient nurses with the right skills to ensure the delivery of a compassionate, safe, effective and person-centred service.

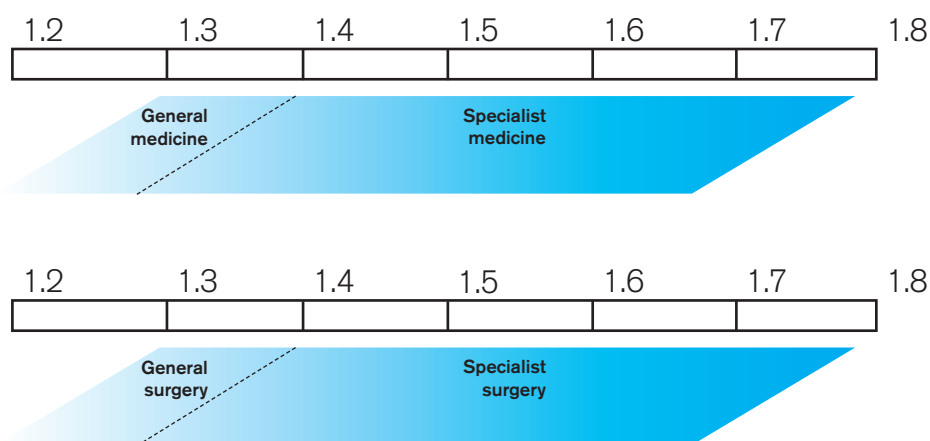
*Delivering care: A framework for nursing and midwifery workforce planning to support person-centred care in Northern Ireland* is the first in a series that will address a variety of settings across hospital and community care. It will provide all staff, but particularly nurses, in front line practice, management and commissioning with a toolkit which will assist workforce planning processes and support constructive conversations about nurse staffing levels in Trusts.



The framework refers to staffing ranges which are expressed as nursing to bed ratios. There are a number of assumptions which must be considered when understanding how a range is set. These assumptions are:

- assurance of safety, quality and experience – by providing assurance across a number of quality outcomes for people receiving care and treatment that proves either effective workforce planning, or conversely, a need for review of a nursing workforce staff complement;
- planned and unplanned absence allowance – this has been agreed at 24% and refers to periods of anticipated absence from work including annual leave, study leave and sickness;
- skill mix – this refers to the ratio of registered to unregistered nursing staff working within a team in an individual setting. The level of skill mix may vary depending on the setting and on the complexity of the care being delivered;
- management of recruitment – to ensure vacancies are filled promptly to maintain safe and effective care;
- influencing factors – such as ward layout, length of stay or percentage bed occupancy.

**Figure 24: Normative staffing range for general and specialist adult hospital medical and surgical care settings**



The first phase has targeted general and specialist medicine and surgery.

Figure 24 pictorially represents the range in both specialties eg a general medical ward is defined between 1.3 and 1.4 nurses per bed recognising that a small number may fall below 1.3 to 1.2 and similarly, a small number exist at the higher end of the range at 1.4.

Future phases in the development of normative staffing ranges will include frameworks for emergency departments, district nursing and health visiting.



# Effectiveness

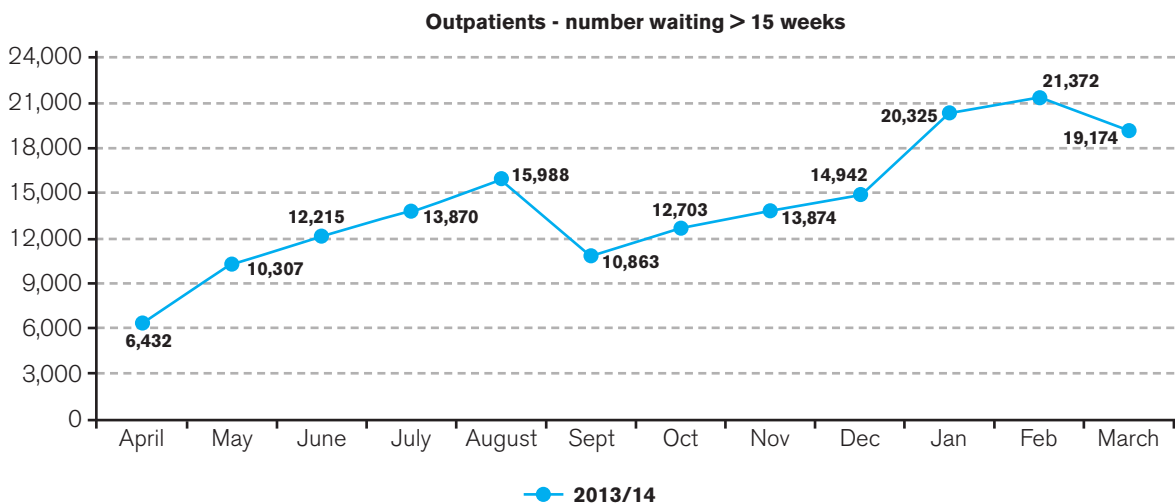
# Performance against targets and standards

## Elective care

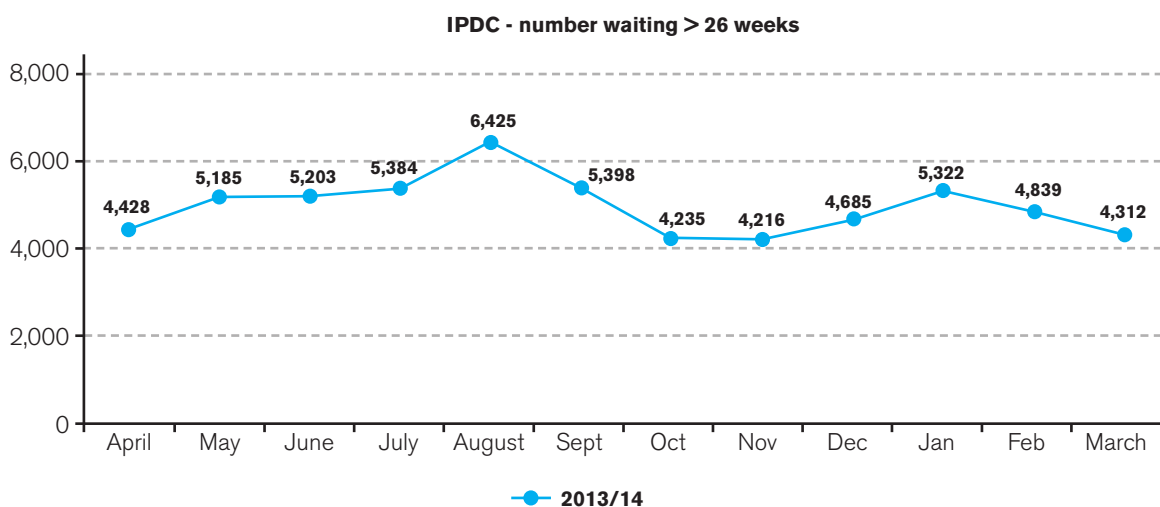
At the end of March 2014, 69% of patients were waiting less than nine weeks for a first outpatient appointment and 67% of patients were waiting less than 13 weeks for inpatient or daycase treatment (target: 80% by March 2014).

At the end of March 2014, 19,174 patients were waiting longer than the March 2014 target waiting time of 15 weeks for a first outpatient appointment and 4,312 patients were waiting longer than the inpatient/daycase maximum waiting time target of 26 weeks.

**Figure 25: Outpatients - number waiting > 15 weeks**



**Figure 26: IPDC - number waiting > 26 weeks**

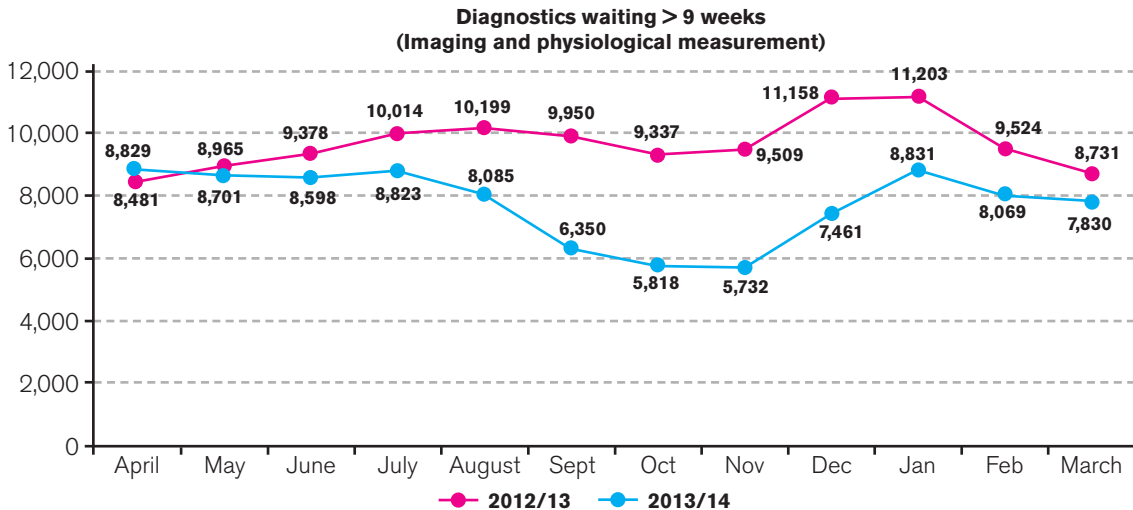


The HSCB will continue to monitor progress in reducing waiting times to improve the quality of services and outcomes for patients.

## Diagnostics

Generally during 2013/14, the length of time patients waited for diagnostic tests has improved. Regionally at the end of March 2014, 7,830 patients were waiting longer than nine weeks for a diagnostic test compared to 8,731 at the end of March 2013, a reduction of 901 (10%).

**Figure 27: Diagnostics waiting > 9 weeks (imaging and physiological measurement)**

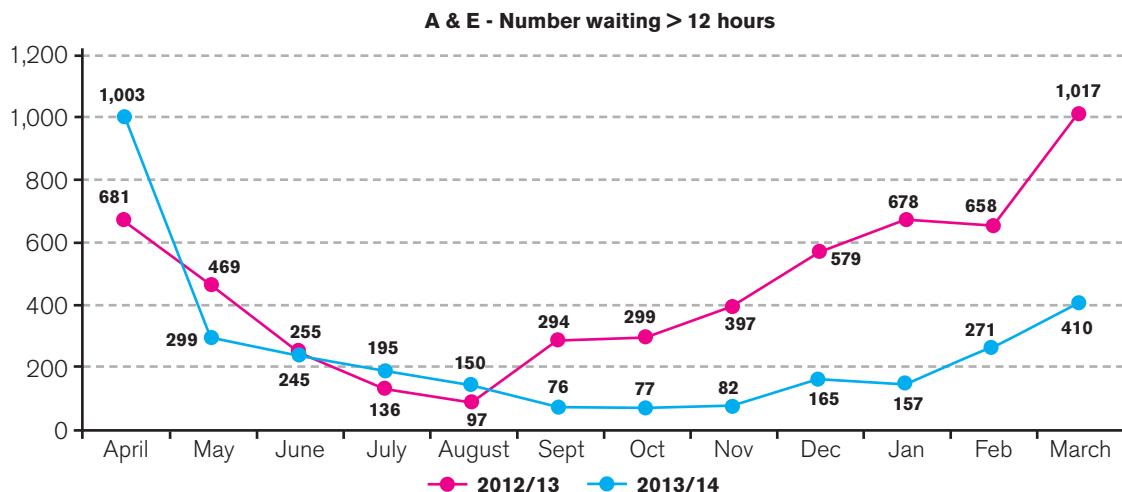


## Emergency departments (4 and 12 hour performance standards)

There has been a 44% reduction in the number of patients who have waited longer than 12 hours in emergency departments (ED) during 2013/14 compared to 2012/13 (a total of 3,130 patients waited longer than 12 hours during 2013/14 compared to 5,560 in 2012/13, a reduction of 2,430 patients). Regionally, during 2013/14, the percentage of patients treated and discharged, or admitted within four hours of their arrival in ED, has remained relatively unchanged.

Continuing to reduce the length of time patients wait in ED and improving patient experience will continue to remain a top priority for the HSCB.

**Figure 28: ED - number waiting >12 hours**

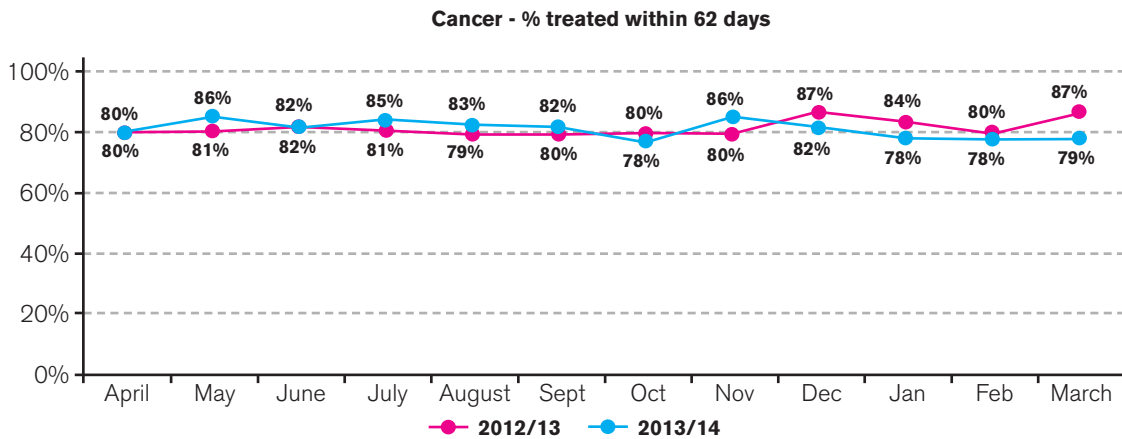


## Cancer services

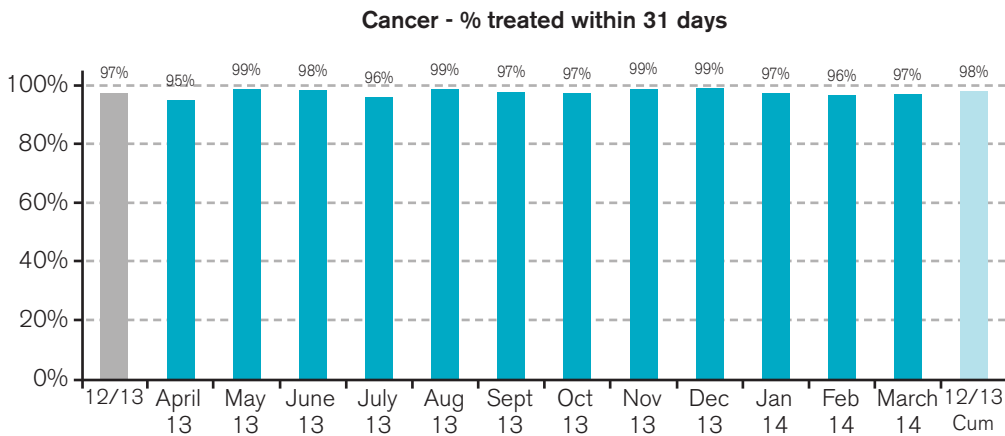
The length of time patients have waited for cancer treatment has remained broadly unchanged. Regionally, 82% of patients urgently referred with a suspected cancer began their first definitive treatment within 62 days and 98% of patients diagnosed with cancer received their first definitive treatment within 31 days of a decision to treat.

Improving performance in this important area will continue to be a priority in 2014/15.

**Figure 29: Cancer - % treated within 62 days**

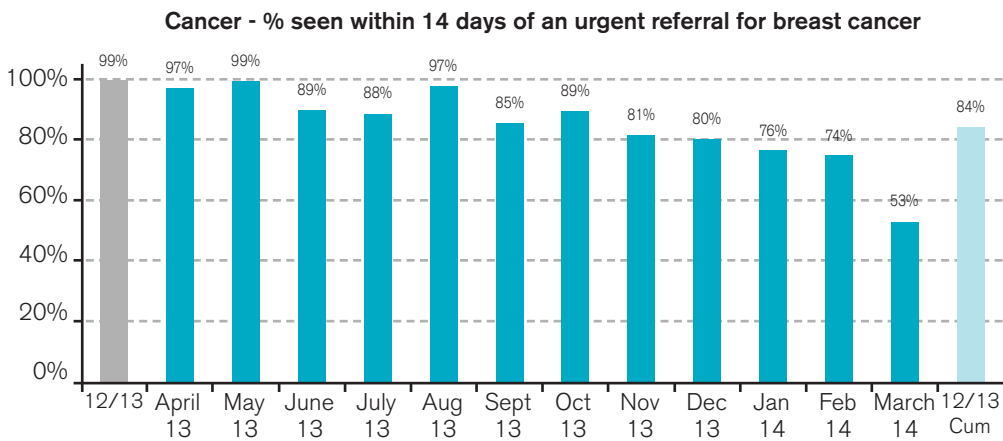


**Figure 30: Cancer - % treated within 31 days**



There has been a significant deterioration in the length of time patients have waited to be seen following an urgent referral for breast cancer. Regionally during 2013/14, 84% of urgent breast cancer referrals have been seen within 14 days. In particular, performance has deteriorated significantly in three HSCT areas and is largely as a result of a reported increase in demand. Actions have been put in place and the waiting times for patients will see a significant improvement.

**Figure 31: Cancer - % seen within 14 days of an urgent referral for breast cancer**



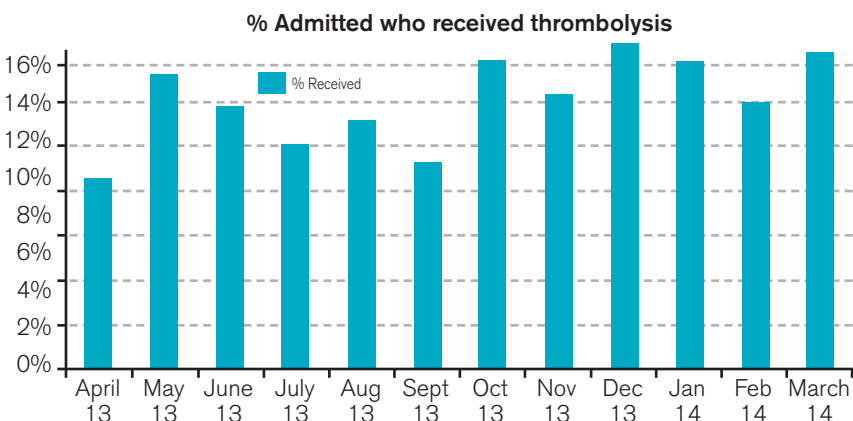
## Specialist drugs

There has been an improvement in patient waiting times for specific NICE approved specialist therapies. Regionally at the end of March 2014, no patients were waiting longer than three months to commence NICE approved specialist therapies for rheumatoid arthritis, psoriatic arthritis or ankylosing spondylitis and no patients were waiting longer than three months to commence NICE approved specialist therapies for psoriasis.

## Stroke patients

The proportion of patients with confirmed ischaemic stroke who receive thrombolysis has increased in line with the Minister's 10% target.

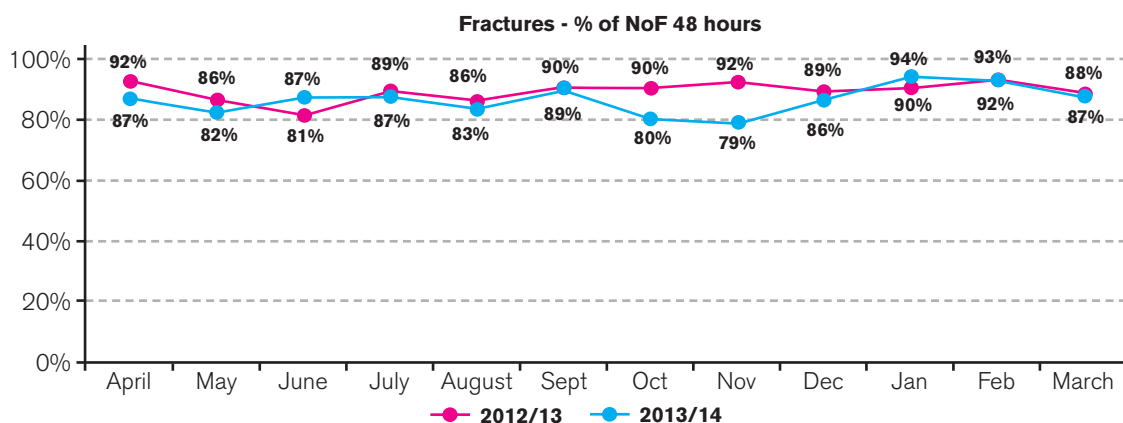
**Figure 32: % Admitted who received thrombolysis**



## Hip fractures

During 2013/14, 86% of patients, where clinically appropriate, received inpatient treatment for hip fractures within 48 hours. While this remains broadly unchanged from the previous year, significant improvements were made in the latter part of the year and improvements are expected to continue.

**Figure 33: Fractures - % treated within 48 hours**



## Quality assurance arrangements for screening programmes

Screening programmes aim to identify, from a population of apparently healthy (asymptomatic) people, those individuals who may be at increased risk of a disease or condition. These people can then be offered information, further tests and appropriate treatment to reduce their risk, and or any complications, arising from the disease or condition screened for.

Screening programmes are complex systems of care, often involving a wide range of services, such as call and recall services, highly specialised laboratories and provision of assessment and treatment in HSC Trusts and primary care.

The PHA is responsible for commissioning and for the quality assurance (QA) of the following screening programmes:

### Adult screening programmes

- Abdominal aortic aneurysm
- Bowel cancer
- Breast cancer
- Cervical cancer
- Diabetic retinopathy
- Surveillance screening for women at higher risk of breast cancer

### Antenatal and newborn screening programmes:

- Antenatal
- Newborn bloodspot
- Newborn hearing

QA is an integral part of screening because screening can cause harm as well as good and the balance must be tipped in favour of benefits. QA aims to monitor, maintain and improve upon minimum standards of service, performance and quality across all elements of a screening programme.

Each screening programme has a QA structure to ensure standards and quality of service and to provide advice and recommendations for service improvement. This would generally take the form of a QA Committee or Regional Quality Improvement Group supported by specialty specific QA Groups who would be chaired by an appointed regional QA Lead. Each screening programme is then accountable through the PHA to the DHSSPS.

Examples of QA activity include audit, performance monitoring, QA visits, shared learning, training and linking with UK screening programmes.

## QA visits undertaken by cancer screening programmes in 2013/14:

Bowel screening – South Eastern HSCT – November 2013

Breast screening – Southern HSCT – May 2013

## Screening programme performance

The tables below indicate that for the majority of the screening programmes the standards and targets are being met or exceeded. Work to increase uptake is being taken forward through a number of measures including a media campaign for bowel cancer screening, advance ‘teaser’ letters for the bowel screening programming in the two LCG areas where uptake was lower and work on the breadth of cancer programmes to improve informed choice to participate in screening. This work has focused on those groups who find services harder to reach.

Each screening area also produces an annual report which is presented to the PHA Board.

**Table 4: AAA screening data for 2013/14**

Measure	Standard/target/comparative data	Outcome
Uptake (initial)	<p>≥ 60% (acceptable)</p> <p>≥ 85% (achievable)</p>	82%
Minimise harm (minimal rupture between detection and referral to vascular specialist)	<p>≥ 3% (acceptable)</p> <p>≤ 1% (achievable)</p>	0%
Timely intervention (% of subjects with AAA > 5.5cm seen by vascular specialist within eight weeks)	<p>≥ 95% (acceptable)</p> <p>100% (achievable)</p>	100%



**Table 5: Cervical screening data for 2012/13**

Measure	Standard/target/comparative data	Outcome
5 year coverage	80% (25-64)	78.04%
Lab turnaround (taken to authorised)	80% within 4 weeks	97%

**Table 6: Bowel screening data for 2013/14**

Measure	Standard/target/comparative data	Outcome
Uptake	55% in 2012/13 Commissioning directions	53.49% - April - Sep 2013. Based on a six month compliance period.
SSP waiting time	Appointment offered within two weeks of positive test result	All HSCTs are meeting the standard.
Colonoscopy waiting time	Appointment offered within two weeks of SSP appointment	All HSCTs are meeting the standard.

**Table 7: Antenatal screening data for 2013/14**

Measure	Standard/target/comparative data	Outcome
90% uptake of all four screening tests	NSC IDPS 2010 standards	> 99%

**Table 8: Diabetic retinopathy screening data for 2011/12 (most recent data not available)**

	Total invited	Total attended	%
Northern Ireland	46715	36193	77%

**Table 9: Newborn bloodspot screening data for 2012/13**

Measure	Standard / target / comparative data <sup>1</sup>	Outcome (2012/13)
Timely sample collection	95% of first samples taken 5-8 days after birth	98.0%
Timely processing of screen positive samples (PKU, CHT and MCADD only)	100% of positive screening results available and clinical referral initiated within 4 working days of sample receipt by screening laboratory.	Within 3 working days PKU - 100% CHT - 100% MCADD - 100%
Coverage (% of babies, born in and still resident, who have a conclusive test result recorded on CHS by 17 days of age)	Greater than or equal to 95% for all tests	PKU- 99.3% CHT- 98.4% MCADD- 99.3% CF - 99.2% SCD - 99.3%

**Table 10: Newborn hearing screening data for 2013 (quarter 2)**

Measure	Standard / target / comparative data	Northern Ireland
Coverage by 4 weeks of age (the proportion of babies eligible for newborn hearing screening for whom the screening process is complete.	Minimum 95.0% Achievable 99.5%	95.6%
Coverage by 3 months of age (the proportion of babies eligible for newborn hearing screening for whom the screening process is complete by 3 months corrected age).	99.0%	98.9%

**Table 11: Breast screening data for 2012/13**

Measure	Standard/target/comparative data	Outcome
Uptake rate	Min Standard >70% Target 80%	73.9% NI
Round length	> 90% first offered appts within 36 months	83.2% NI*
Screen to assessment	> 90% within 3 weeks	90.6% NI

\*Failure to meet the round length standard in 2012/13 was due to the Eastern Breast Screening Unit (BHSCT) not meeting the standard in the first two quarters of 2012/13. Round length is now meeting standard.

## Promoting good nutrition

Ensuring patients receive the right nutritional care; at the right time; in the right place; with the best outcome.

Malnutrition is a condition that occurs when a person's diet does not contain the right amount of nourishment. It means 'poor nutrition' and can refer to:

- undernutrition – when you don't get enough nutrients;
- overnutrition – when you get more nutrients than you need.

### Cost of malnutrition

- **£13billion to the UK in 2007**
- **This is double the amount spent on overweight and obesity**
- **29% of patients admitted to hospital in Northern Ireland are at risk of malnutrition**

The *Promoting Good Nutrition (PGN) Strategy in Northern Ireland* aims to improve the quality of nutritional care of adults who at risk of or who are malnourished.

Most people at risk of malnutrition or who are malnourished have their needs met by 'food first' approach, a smaller number require oral nutrition supplements, fewer still need entera ( tube feeding) nutrition and a small minority require parenteral ( via vein) nutrition. The 'food first' approach is the term used for general dietary guidance to improve food intake.

It includes approaches such as:

- increasing food frequency;
- modifying food intake;
- fortifying foods to increase the consumption of energy and nutrient-dense foods.

'Food first' advice has been developed to support the implementation of the PGN and is available through the link below:

[www.dhsspsni.gov.uk/pgn-must-cs-food-first-leaflet.pdf](http://www.dhsspsni.gov.uk/pgn-must-cs-food-first-leaflet.pdf)

To ensure that people on oral nutritional supplements have had access to the correct assessment and education, the HSCB and PHA have worked in together in developing the medicines management dietitian team (MMDT).

This team, along with general practice, identifies and assesses individual adult patients who are prescribed oral nutritional supplements (ONS) but are not under the care of HSCT dietetic services.

Patients will have a dietary assessment undertaken in the clinic, in their own home or in care home by the MMDT. They will provide individualised dietary advice to patients and their carers. The team also provides support and educate to health care professionals in GP practices, care homes and community pharmacies around identification and management of malnutrition.

As of 31 March 2014, the MMDT have completed dietetic assessments in 24 practices (484 patients) across the region. In 62% of cases, food fortification was used to meet patients' nutritional requirements and prescriptions for nutritional supplements were stopped with patient's agreement. Changes to the amount and or type of oral nutritional supplements were changed in a further 14% of patients with their agreement.

## National Institute for Health and Care Excellence (NICE)

NICE is an independent organisation responsible for providing national guidance on the promotion of good health and the prevention and treatment of ill health. It produces different types of guidance, including Technology Appraisals (new drugs, medical treatments and therapies) and Clinical Guidelines (recommendations on the appropriate treatment and care of people with specific diseases and conditions)

The HSCB have put in place processes to ensure that all Technology Appraisals and Clinical Guidelines approved by NICE and endorsed by the DHSSPS are implemented within Northern Ireland.

During 2013/14, the HSCB issued 30 Technology Appraisals and 64 Clinical Guidelines for implementation.

More information about the technology appraisals and clinical guidelines that are being implemented can be found at [www.hscboard.hscni.net/NICE/](http://www.hscboard.hscni.net/NICE/)

The HSCB produce an annual report which provides greater detail on the roles, processes and timelines associated with the implementation of NICE guidance. The report can also be found on the HSCB NICE webpage.

## **Social Care Institute for Excellence (SCIE)**

SCIE is a leading improvement agency and independent charity that works to improve the quality of care and support for adults and children. It has established a collaborating centre for social care to produce guidance on social care on behalf of NICE. This is a new initiative and so far NICE has published quality standards for the following topics:

- Autism
- Health and wellbeing and looked after children
- Mental wellbeing of older people in care homes
- Supporting people to live well with dementia

## **Service frameworks**

Service frameworks are an important driver in relation to improving quality for the planning, commissioning and delivery of services in Northern Ireland frameworks have been developed for key areas of health and social care. They set out, at a strategic level, the type of service that patients and service users should expect. These frameworks are lined to good practice guidelines and will promote and secure better integration of service delivery across the whole pathway of care, including disease prevention, diagnosis, treatment, rehabilitation and end of life care. The following service frameworks are currently progressing in Northern Ireland.

### **Mental health**

The mental health service framework is helping to reduce variation between mental health services/service models within Northern Ireland – it is therefore helping to ensure that people living with mental health problems get access to the same level of care no matter where they live in Northern Ireland.

Service users told us they wanted services that focused care on supporting recovery and building the resilience of people with mental health problems rather than just treating or managing their symptoms. This has resulted in the development of more ‘recovery’ based mental health service provision. This is being taken forward regionally through the implementing recovery through organisational change initiative (ImROC).

### **Learning disability**

The service framework for learning disability has been developed over the past 3 years. Service users, carers and families were involved in this development and the standards were widely consulted upon.

The aim of the service framework is to improve the health and wellbeing of people with a learning disability, their carers and their families by promoting social inclusion and reducing inequalities in health and improving quality of care. There are nine standards which encompass inclusion in community life, at home in the community and ageing well.

An estimated 69% of people with a learning disability known to GP practices are receiving an annual health check as a result of the framework.

## Older people

The service framework for older people was launched in September 2013 and will cover the three year period from 2014–2017. It aims to improve the health and wellbeing of older people, their carers and families by setting 46 standards in relation to:

- person-centred care;
- safeguarding;
- conditions more common in older people;
- transitions of care.
- health and social wellbeing improvement;
- carers;
- medicines management; and

## Cancer

This framework was the strategic driver for the introduction of a screening programme for bowel cancer. It was fully implemented with the age extended to 74 years from April 2013. Early indications are that this is resulting in earlier diagnosis of bowel cancer which will help to improve the outcomes and survival for people who are found to have bowel cancer.

The framework has resulted in the introduction of the Human Papilloma Virus (HPV) immunisation programme for girls aged 12–18 which will reduce the incidence of cervical cancer for future generations of women.

The framework has also resulted in the introduction of new treatments (eg a type of radiotherapy called brachytherapy) and diagnostic test across a number of cancer types which have led to improved diagnosis and treatment.

Anyone with a suspect or confirmed diagnosis of cancer has their care and treatment discussed by a multidisciplinary team. All of these teams work to a common set of standards. These standards ensure that patients get the best possible care no matter where in Northern Ireland they live.

The introduction of the cancer survivorship programme has begun to change how we provide follow up for patients who have survived cancer. We are now moving from a model of follow-up which focused solely on physical symptoms and illness, to one that looks at health and wellbeing. A new regional cancer survivorship website has been set up to allow patients and families to see what support services are available in their area.

## Respiratory

In response to patient comments a new oxygen contract was negotiated to procure more portable equipment enabling patients to get out and about more easily. This has resulted in a much better quality of life for those requiring oxygen.

Patients have told us that pulmonary rehabilitation programmes have greatly improved their quality of life and would like them to continue for longer than the 6 week programme. While the evidence supports the six weeks programme we have established a range of 'follow on' exercise and social support groups for people to be supported when the programme finishes. We have also increased access to pulmonary rehabilitation programmes across Northern Ireland.

## Cardiovascular

The 2009 framework aimed to increase the number of living kidney donor transplants to 18 per year in Northern Ireland. We have actually achieved 50 per annum. The programme in Northern Ireland is now the most successful of its kind in the United Kingdom. Not only has it transformed the lives of individual patients, but it has also led to a levelling off in demand for hospital dialysis, a service which had previously been growing year on year.

The stroke thrombolysis rate in Northern Ireland now matches the rate in the rest of the UK. Primary percutaneous coronary intervention (PPCI) was established in September 2013 giving people who experience acute coronary artery blockages immediate access to medical intervention.

## Children and young people

A draft service framework for children and young people has been developed during 2013/14 by the HSCB and PHA. The framework sets standards aimed at improving birth outcomes; supporting child development across the life course; improving the management of short and long term medical conditions; promoting positive mental health and emotional wellbeing; and improving the care provided to children with disability and children and young people in special circumstances.

The draft framework was submitted to the DHSSPS on the 14 May 2014 and will go out for public consultation before being launched by the Minister for Health. The framework will be implemented over three years.

## Social care

The HSCB Directorate of Social Care and Children's (DSCC) primary duty is to ensure the social welfare of the population of Northern Ireland. We do this by commissioning social work and social care services which are provided mainly by the HSCTs and are delivered by social workers and social care staff.

Social work and social care services are there to help individuals take control and make choices that enable them to have lives that are comfortable and fulfilled. Social work and social care services place an emphasis on those individuals who require a certain level of extra practical and physical help, and intervention which often has to focus on safeguarding and the protection of health and well-being.

The efforts of those involved in social work and social care can be seen throughout many different communities across the whole of Northern Ireland. As a specialist profession dedicated to effecting social change for the better, social work constantly seeks to address and resolve the challenges faced by vulnerable individuals or those made vulnerable by their social circumstances. As the commissioner of these services, the HSCB is in a constant cycle of reviewing goals and searching for ways to improve the quality of life and achieve the best possible results for the population we serve.

### Improving and safeguarding social wellbeing: a strategy for social work in Northern Ireland

The first strategy for social work in Northern Ireland was developed in response to a number of key challenges that threaten to compromise the quality of social work in Northern Ireland, including: growing and changing demand and need; major changes in the health and social care system; resource pressures and the need to make the best use of resources; and high, and at times unrealistic, expectations about social work. To this effect, the social work strategy has identified 10 priorities that will build upon strong foundations to increase the quality of social work across three broad themes: strengthening the capacity of the workforce; improving social work services; and building leadership and trust.

These are encompassed within a framework for social work practice which is illustrated below:

**Figure 34: A framework for social work practice**



Social work is a skilled profession that works to improve and safeguard the social wellbeing of individuals, families and communities by promoting their independence, supporting their social inclusion and participation in society, empowering them to take control over their lives and helping them to keep safe.



## Quality in social care

Identifying and ensuring quality in social work and social care is a complex task. The bedrock of all social work is based on relationships. Effective communication, a non-judgemental approach, building trust and maintaining strong relationships are crucial to enabling change. Social work is therefore practised, whenever possible, in partnership with children, adults, families, communities and other agencies.

Although quality in social work and social care can be difficult to pin down, there are a range of quality measures that can be applied. A key feature of the quality of services is focused on the experience of users, families and experienced staff. Where services are being delivered in partnership the experience of communities will also inform quality. Social care services involve close interaction between the service provider and the user so the central role and relationship between the two become fundamental to any assessment of quality.

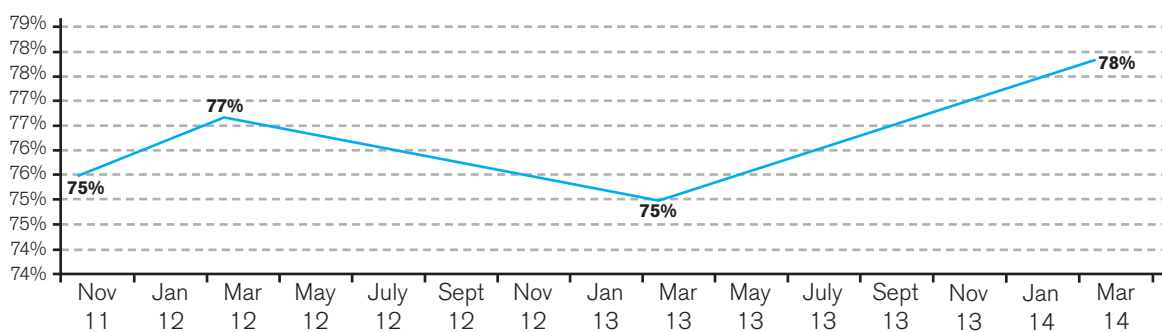
## Children and young people

The Northern Ireland strategy for children and young people *Our children and young people: Our pledge*, sets out six outcomes for all children. These outcomes inform the work of the HSCB, PHA and the multi-agency children and young people's strategic partnership.

Two of these, 'enjoying learning and achieving' and 'experiencing economic and environmental wellbeing' have informed our focus on the outcomes for care leavers.

Following an investment in employability workers we have been able to sustain the percentage of care leavers in education, training and employment between 75% and 78% over the past five years. This has significant outcomes for our young people.

**Figure 35: % of care leavers aged 19 who are in education, training or employment**



The reason for the majority of care leavers not being in education, training or employment is being unemployed, sick or disabled or pregnant. These care leavers are prioritised in being offered opportunities under the dedicated employability scheme working in each Trust.

## Mental health and learning disability

The resettlement of people from long stay hospitals has been a programme supported by the HSCB and PHA to ensure that individuals have the opportunity to live in community settings, thus promoting greater independence and social inclusion.

**Table 12: The number of people resettled in community settings**

	2007/0 8	2008/0 9	2009/1 0	2010/1 1	2011/1 2	2012/1 3	2013/1 4	Total
Learning disability	39	36	14	27	24	42	74	256
Mental health	7	86	56	38	25	27	29	268
Total	46	122	70	65	49	69	103	524

Since this commenced in 2007 people have started a new life outside a hospital setting.

In addition to achieving this target the HSCB, through the community integration project, has adopted quality of life measures to assess the outcomes for those individuals with learning disability who have been resettled.

These measures are used to ensure that there is improvement in the lives of people being resettled once they are in the community and that the commitments given to the people and their families are realised.

Independent advocacy organisations are involved in completing the measures alongside staff in hospital and community settings for each individual who is undergoing resettlement.

The measures include:

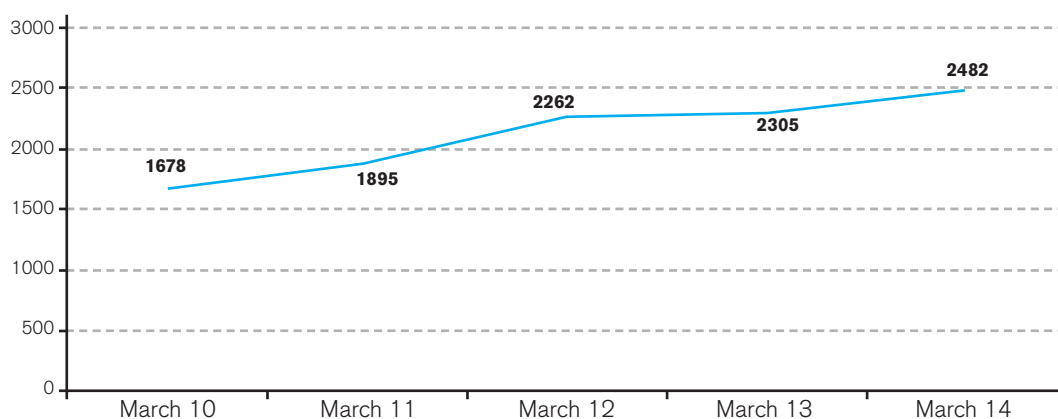
- relationships/friendships;
- choice;
- safety;
- being part of the community.

The Patient Client Council published a report in 2013 on the experiences of people with a learning disability and their families who felt that their lives had improved since leaving hospital and they enjoyed their new surroundings.

## Adult services

Since March 2010 the number of people receiving direct payment has increased from 1,678 to 2,482. Direct payments allow people to choose cash payments in lieu of services and as such support greater independence, flexibility and personal choice. By using direct payments, people can develop a package of care that best meets their own individual needs and which gives them greater control over the services they receive. The increasing numbers of people receiving direct payments is welcome and is evidence of the growing awareness and interest in this approach to meeting need. The HSCB is committed to the promotion of direct payments as one of the means by which people can access to the support they need.

**Figure 36: Number of people receiving direct payments (all Programmes of Care)**



## Statutory reporting

Within our comprehensive reporting on delegated statutory functions more emphasis is being placed on areas where the HSCTs are experiencing difficulty in delivering expected services and how these challenges are being addressed. Specific reporting is also required in each Programme of Care describing the actions HSCTs take to adopt a human rights based approach in their service delivery.

## Research

To be at the leading edge in the design, commissioning and provision of quality services requires an 'excellence' approach, whereby research, evidence and critical appraisal and reflection are promoted throughout the whole organisation.

With support from senior managers we are putting in place a social work research strategy (2015-2020). This is an ambitious plan which will contribute to the development of a workforce with the capacity and confidence to understand the centrality of research evidence in developing and sustaining quality services. Our social work staff will be supported to develop the skills of applying the knowledge about what works, in what settings and with whom to promote quality.

## Supervision

For social workers to be more effective they need to receive good quality supervision. Supervision must enable social workers to build effective professional relationships, develop informed practice, and exercise both professional judgement and discretion in decision-making. For supervision to be effective it needs to combine performance management with a strong reflective element to improve the quality of practice and allow staff to understand the dynamics of their relationships with service users when not simultaneously engaging with them.

All social workers must receive professional supervision and we are currently refining the regional standards for training professional supervisors, and have set new requirements for all POCs which are being rolled out across all HSCTs.

## Risk

Accepting that it is difficult to disentangle the providers' influence on the quality of service due to the unique interaction and relationships that exist with the user, we are beginning to look at better ways to understand the quality of the decisions social workers make. The high degree of service diversity means that there are elements of uncertainty in all decision making, and we must accept that sometimes harm will occur, no matter how good the decision making. Often the decision is judged by the outcome, not by the process.

We are taking forward work to develop a systemic approach within decision making that establishes the precepts by which professional risk taking will be judged. This is not to condone poor practice, but to allow us to learn and improve the overall quality of decision making.

## Practice learning opportunities

Practice learning opportunities (PLO) are an essential part of preparing students to be eligible to register and work as qualified and accountable social workers.

The regional strategy for practice learning provision in Northern Ireland has a target that every social work student at level 3 will have a PLO with a social work practitioner based on site and every social work student at level 2 will have experience of working alongside other social work practitioners during their PLO. This is based on an evidence base that such proximity to direct social work practice enables students to acquire the required standard of proficiency in practice and prepares them to undertake the full range of professional activities expected of a newly qualified social worker.

Since 2011, each Trust has developed their practice learning provision to ensure this qualitative target is achieved with 100% compliance at both levels.

**Table 13: Experience of working alongside other social work practitioners during their PLO.**

	<b>Aug 2011 &amp; Jan 2012</b>	<b>Aug 2012 &amp; Jan 2013</b>	<b>Aug 2013 &amp; Jan 2014</b>
BHSCT	98%	100%	100%
NHSCT	100%	100%	100%
SEHSCT	91%	100%	100%
SHSCT	100%	100%	100%
WHSCT	100%	97%	100%



# **Patient client focus**

# Complaints and service user feedback

The HSCB is required to monitor how they or those providing care on their behalf deal with and respond to complaints. The HSCB maintains oversight of all complaints received by the Family Practitioner Services (FPS) and HSCTs.

## Family Practitioner Services

**Table 14: Subject of complaints received by FPS**

Subject of complaint	Number received
Clinical diagnosis	9
Clinical treatment	1
Communication	62
Confidentially	3
Date for appointment	1
Failure to follow agreed procedures	1
Other	17
Records	1
Policy and commercial decisions	3
Premises	3
Staff attitude	42
Staff availability	2
Treatment and care	182
<b>Total</b>	<b>327</b>

**Table 15: Complaints received by Family practitioner services (FPS)**

Complaints received by FPS			
Year	Local resolution	Honest broker	Total
2009/10	213	38	251
2010/11	216	86	302
2011/12	212	70	282
2012/13	247	116	363
2013/14	255	72	327

The majority of 'honest broker' complaints each year are regarding general practitioners (57 during 2013/14).

While the total number of complaints received from FPS practices has decreased slightly this year, an increased number of practices approached the Board for advice and assistance in helping them resolve complaints at local level.

The top three subjects of complaint are; staff attitude, communication and treatment and care.

**Table 16: Top three subjects of complaints to FPS**

Top three subjects of complaints	2009/10	2010/11	2011/12	2012/13	2013/14
Treatment and care	100	122	106	131	182
Staff attitude	71	90	88	93	61
Communication	21	52	53	79	42

## Health and social care trusts

A total of 6,836 issues of complaint were received by the six HSCTs during last year. This continues the increasing trend of complaints and compares with 4,733 received in 2009/10, 5,053 in 2010/11, 5,485 in 2011/12 and 5,998 in 2012/13.



**Table 17: Top three subjects of complaints to HSCT**

Top three subjects of complaints	2009/10	2010/11	2011/12	2012/13	2013/14
Treatment and care	1159	1294	1290	1562	1691
Staff attitude	790	772	857	913	1103
Communication	498	528	726	787	896

## Facts and figures

Last year we received the following number of complaints:

- 6836 from HSCTs
- 327 from FPS
- 255 resolved through local resolution
- The Board acted as 'honest broker' on 72 occasions
- 4 resolved by an independent Lay Person
- 9 concerning the HSCB
- 0 concerning the PHA

## Learning arising from complaints

The board welcomes and encourages complaints, using feedback to ensure learning and service improvements are made.

Learning arising from complaints has identified:

- the requirement of training programmes regarding the administration of drugs for domiciliary care staff;
- the importance of early recognition of a stroke to ensure patients are assessed quickly for thrombolysis;
- 'promoting positive attitude' has been proposed as a work stream within the Quality 2020 work plan.

## Service user feedback

Last year two service user focus groups were held which were aimed at those who had either made complaints since April 2009, or wanted to, but did not. Service users were asked to express their views in relation to the HSC Complaints Procedure, identifying what works well, what does not and how the procedure can be improved.

Feedback collated so far has demonstrated that service users have a lack of awareness of the complaints procedure and what advocacy support is available within the process. A complaints awareness campaign was conducted during June 2014 to ensure that service users are aware of how to make a complaint, what support services are currently available and where they can access additional information.

## Next steps

A new complaints leaflet has been designed with clear and concise information, explaining to the public 'how to make a complaint' and to whom. The leaflet will be provided to members of the public at 'complaints awareness posts' which will be scheduled across Northern Ireland in a variety of non-health care facilities. Additional focus groups will be held across Northern Ireland during 2014 as a means of continually receiving service user feedback.

## Making the difference

When we are in need of healthcare, we are often at our most vulnerable. Therefore we want to ensure that throughout the entire patient experience people are treated with compassion, dignity and respect.

The PHA lead on the monitoring and implementation of the DHSSPS Patient and Client Experience Standards and a comprehensive programme of work is in place with all six HSCTs to support the implementation of these standards.

Patient and client experiences provide vital information on how services are working for those who use them. Therefore a triangulated approach has been adopted to gather patient and client experiences across a range of settings through questionnaires, patient stories and observation of practice.

### DHSSPS patient and client experience standards:


- Respect
- Attitude
- Behaviour
- Communication
- Privacy and dignity

Following analysis of this information; the PHA identified four key regional priorities for improvement which patients had said would make a difference to their experience:

- Staff introductions
- Interruptions during treatment and care
- Communication and information
- Meals and drinks

HSCTs have identified a range of improvements to address these themes.

1. **Staff introductions** were highlighted in all HSCTs as requiring improvement. The HSCB, PHA and HSCTs have endorsed the 'hello my name is' campaign to highlight the importance of introductions to patients. Plans are in place to officially launch this campaign in 2014.



#hello my name is...

This campaign was launched by Dr Kate Granger, a medical registrar from Yorkshire, who has terminal cancer. She noted that staff were so busy caring for patients that they often forgot to introduce themselves before beginning to administer the care and started a campaign to highlight how simple introductions can go a long way to making patients feel at ease and is the first step in providing compassionate care.

2. To further improve communication, all HSCTs have established plans in place to secure **name and designation badges** for frontline staff.

3. Knowing **'who was looking after you'** has continually been identified as being important to the patient/client experience. All HSCTs have developed processes to ensure that the nurse in charge of the ward, on each shift, will undertake to speak to each patient to reflect on their experience.

4. **Meals and drinks** were also highlighted by patients as an area for improvement; all HSCTs have implemented measures to 'protect mealtimes' so that staff are available to provide assistance to patients when required.

During 2014/15 the HSCTs will continue to focus on priorities and provide assurance to the PHA on the implementation. Emerging themes which have been identified locally in order to identify sustain improvement.

## 10,000 Voices

10,000 Voices is an initiative that was established to give patients, carers and their families the opportunity to share their experience of health services and highlight what was important to them. It is an opportunity for patients to shape the way services are delivered and commissioned; building on the current work on patient and client experience.

Phase one of the initiative began in September 2013 and focused on unscheduled care services (GP out-of-hours service, minor injuries units, emergency departments and the Northern Ireland Ambulance Service).

Phase two commenced in February 2014 and focused on services which are provided for patients in their home.



A survey aimed to gather experiences of nursing and midwifery experiences is currently running alongside phase one and phase two of the project. In addition a bespoke survey has been designed to gather experiences specifically for the Northern Ireland Ambulance Service (NIAS).

Last year, over 3,000 patients, clients and carers took the time to tell us their story.

### Examples of actions to date throughout HSCTs include:

- Development of a teaching pack about experience-led commissioning, this has been delivered to student nurses and medical students;
- Improved information for patients while waiting;
- More pillows and blankets made available in EDs;
- Increased cleaning regimes and checks in waiting areas;
- Increased portering and security patrols in ED waiting areas;
- Development of service user group in EDs;
- Review of the management of babies and young children in EDs.

# Personal and Public Involvement

We know that Health and Social Care (HSC) services are better quality and more responsive to need when working in genuine partnership with users, carers and communities. In 2009 the HSC Reform Act introduced a new statutory duty of involvement for all the main HSC bodies. This requires them to involve people at a personal and public level in making decisions about service design and delivery.

**Personal and Public Involvement (PPI) is about involving and empowering people and communities to give them more confidence and more opportunities to influence the planning, commissioning, delivery and evaluation of services in ways that are relevant and meaningful to them.**

In 2009, the Public Health Agency was given lead responsibility for PPI implementation across HSC in Northern Ireland. To date, the PHA PPI Team has focused on:

- **Engaging partners and sharing good practice** – to provide leadership and support to drive forward PPI in Northern Ireland, the PHA established the Regional PPI Forum with representation from all HSC organisations, service users and carers.
- **Developing PPI training** – to support organisations to increase awareness and develop the skills to undertake PPI.
- **Supporting PPI in practice** – investing £300,000 to support PPI projects across Health and Social Care organisations, of which a number have received recognition for good practice. For example the BHSCT, AHP services have worked closely with service users to produce on-line resources to share information with health and social care professionals on choking while eating and drinking. Regionally, the Neonatal Network engaged with service users to strengthen the Network and input into the development of the care pathway.
- **Developing indicative PPI standards for the DHSSPS** - to guide HSC organisations and provide a tool to measure progress on how we are involving people and communities the foundations. A standards workshop was held in November 2013 which brought together HSC organisations, service users and carers to identify the key components for PPI standards.

The HSCB and PHA recognise that PPI is core to the effective and efficient commissioning, delivery and evaluation of Health and Social Care Services. All commissioning teams and local commissioning groups actively consider PPI in all aspects of their work.

There are many examples of good practice:

- Lifeline is a project led by the PHA to provide crisis support to people who are at risk of suicide. Service users and carers have been recruited to sit on the Lifeline clinical and social care governance group contributing to their decision making process.
- Integrated care partnerships (ICPs) - recruitment of service users and carers has been undertaken. A minimum of two service users will be actively involved on the partnership committees and the working groups.

- Promoting the needs of looked after children through the active participation of young people and carers of looked after young people, in the development of a personal health journal called *About Me* which has helped to shape the development of services.
- Northern Ireland Formulary Pharmacy and Medicines Management - The HSCB has run a series of public workshops in relation to medicines. Feedback from service users and carers has shaped the production of a number of patient leaflets aimed at improving medicines safety and compliance and reducing waste: *Your Child's Medicines*; *Medication Reviews*; *Your Medicines – Your Responsibility (adult)*; *Your Medicines (partners in care)*.

However, we also acknowledge that there are still areas where we can strengthen what we do and the PHA and HSCB are working together to implement the joint strategy developed in 2012 and increase the capacity of both staff and service users to become involved.



# **Staff health and wellbeing**

The HSCB and PHA are determined to invest in the development of our staff and the creation of a working environment that enables everyone to make their best contribution. The HSCB and PHA employ over 900 staff (590 in HSCB and 320 in PHA) throughout Northern Ireland and recognise that their employees are their greatest resource.

The percentage absence in respect of staff sickness for 2013/14 was 3.36% for the HSCB and 3.56% for the PHA; this was a reduction for both organisations from 2012/13.

Sickness absences have an impact on quality, productivity and affect service delivery and are therefore an important factor when measuring an organisations culture of quality.

The PHA and HSCB have taken a number of steps in order to reduce staff sickness rates and increase productivity by promoting a healthier organisational culture. These include:

## Staff health fairs

During 2013/14, HSCB and PHA staff in each of the four main HSCB offices were provided with an opportunity to participate in an annual Health Fair which had been organised by occupational health and human resources, BSO. This provided staff with a range of information on how to improve their health and wellbeing.

There was a wide range of exhibitors and occupational health nurses carried out cholesterol and blood pressure checks.

Over 80% of staff who attended the health fair reported that the health information they received would encourage them to make lifestyle changes such as improving their diet, increased exercise, improved mindfulness.

## The cycle to work scheme

The cycle to work scheme supports the public health strategy by encouraging staff to take physical exercise and the consequential improvement in their health. It also supports environmental improvement for all in Northern Ireland.

## Health and Social Care Board

A key theme of the *HSCB Corporate Plan* is to "...maximise the potential of our staff by ensuring that they are skilled, motivated and valued".

The HSCB *Human Resources Strategy* is underpinned by policies and guidance including flexible working policies to enable staff to achieve a work/life balance. The attendance at work protocol has been developed in recognition of the critical contribution that the health and wellbeing of the workforce is to the effective functioning of the organisation.

### Health fair exhibitors

- **Blood pressure checks**
- **Cholesterol checks**
- **Information sessions:**
  - an introduction to mindfulness
  - an introduction to self-care at work
- **Information on:**
  - healthy eating
  - cycle to work scheme
  - drugs and alcohol consumption
- **Information from:**
  - Care Call
  - Cancer Research
  - physiotherapist
  - LA Fitness
  - Staff Services

An occupational health service is available to all staff, which may be accessed through self or managerial referral, and provides professional advice on work-related health and safety and wellbeing issues affecting employees, as well as on fitness for work.

In recognition of the importance of mental and emotional health and wellbeing in the workplace, Carecall, a commercial subsidiary of the Northern Ireland Association for Mental Health, provides a service to all staff and its employee assistance programme includes Freephone 24 hour immediate support as well as structured face-to-face counselling. Staff may also avail of a number of joint wellbeing programmes organised by PHA or BSO.

An annual programme of health and safety training was delivered to HSCB, PHA and BSO staff located in a main HSCB office.

In order to encourage staff to take physical exercise, a small gym is located in 12/22 Linenhall Street for use by HSCB, PHA and BSO staff.

### Staff appraisal

The HSCB has implemented an appraisal scheme for staff which provides each individual with: an understanding of their role and contribution to the organisation; identifies specific training and personal development needs of staff which ensures they are able to maximise their contribution to the objectives of the organisation. The scheme also demonstrates the commitment of HSCB to equality and diversity.

### Public Health Agency

The PHA launched the **'emphasis on people'** branding during 2013 to support the organisational workforce development programme.



Four key building blocks for development have been identified:



A staff health and wellbeing group is being established under the auspices of the organisational workforce development group (OWDG) in order to enforce the Public Health Agency's commitment to the health and wellbeing of its employees.

In addition to Care Call, occupational health and ongoing line management, a number of initiatives have previously been offered to staff which have focussed on improving mental health and wellbeing, physical activity and nutrition, as well as enhancing communication and working relationships among staff. This has included 'My Mood Matters' and 'Living Life to the Full' – tailored programmes to empower employees to recognise and adapt mood and promote personal resilience; walking and cycling programmes – promoted throughout the year and with particular significance at the time of Giro d'Italia; and the '£ for lb' initiative – a weight loss programme piloted in local offices in PHA and supported by Business in the Community.



Team away days have also provided the opportunity for staff to engage with colleagues and enjoy time away from the office to build team cohesion.

A forum for lesbian, gay, bisexual and transgender (LGB&T) staff has also been established, providing confidential and informal support for LGB&T staff in the HSC workplace. An e-learning facility has been developed and widely promoted within HSC settings; this can be accessed via the following link: <http://lgbtelearning.hscni.net/>

A draft Terms of Reference has been approved by the Agency Management Team. Membership of the group has been encouraged across directorates, divisions and locations to ensure representation from each area of the PHA. The group will also seek to draw upon good practice and benchmark ideas within other organisations.

The work will encourage two way communication among colleagues in order that they may inform the work of the group and offer appropriate support to staff. The first meeting of the group is aimed to take place by end of July 2014.

### **Appraisal, revalidation and supervision**

The PHA has in place an appraisal scheme which all staff participate in. In addition since December 2012 all medical staff are subject to revalidation through the GMC. The PHA has a responsible officer and deputy who support staff through annual appraisal to progress to revalidation. An appraisal policy is being developed. In 2013 11 staff were put forward to revalidate. The process is ongoing and is in a five year cycle. Doctors in training are also subject to revalidation and an annual review of their progression in training. NIMDTA made a formal visit to assess the quality of the Public Health Training programme and received a very complimentary report in 2013.

In addition regular one-to-one contact offers support and supervision to medical and nursing staff and provides the opportunity through discussion to identify solutions to issues, improve practice and to work together to support individuals to achieve their maximum potential and enabling staff to take care of themselves, become more self-aware and skilled in their roles.

### **HSC staff influenza vaccine uptake rates March 2014**

Seasonal flu vaccine protects against the three most common types of flu each year. Health professionals and other HSC Staff are encouraged to receive the flu vaccination annually. The PHA vaccination programme runs annually from October to March.

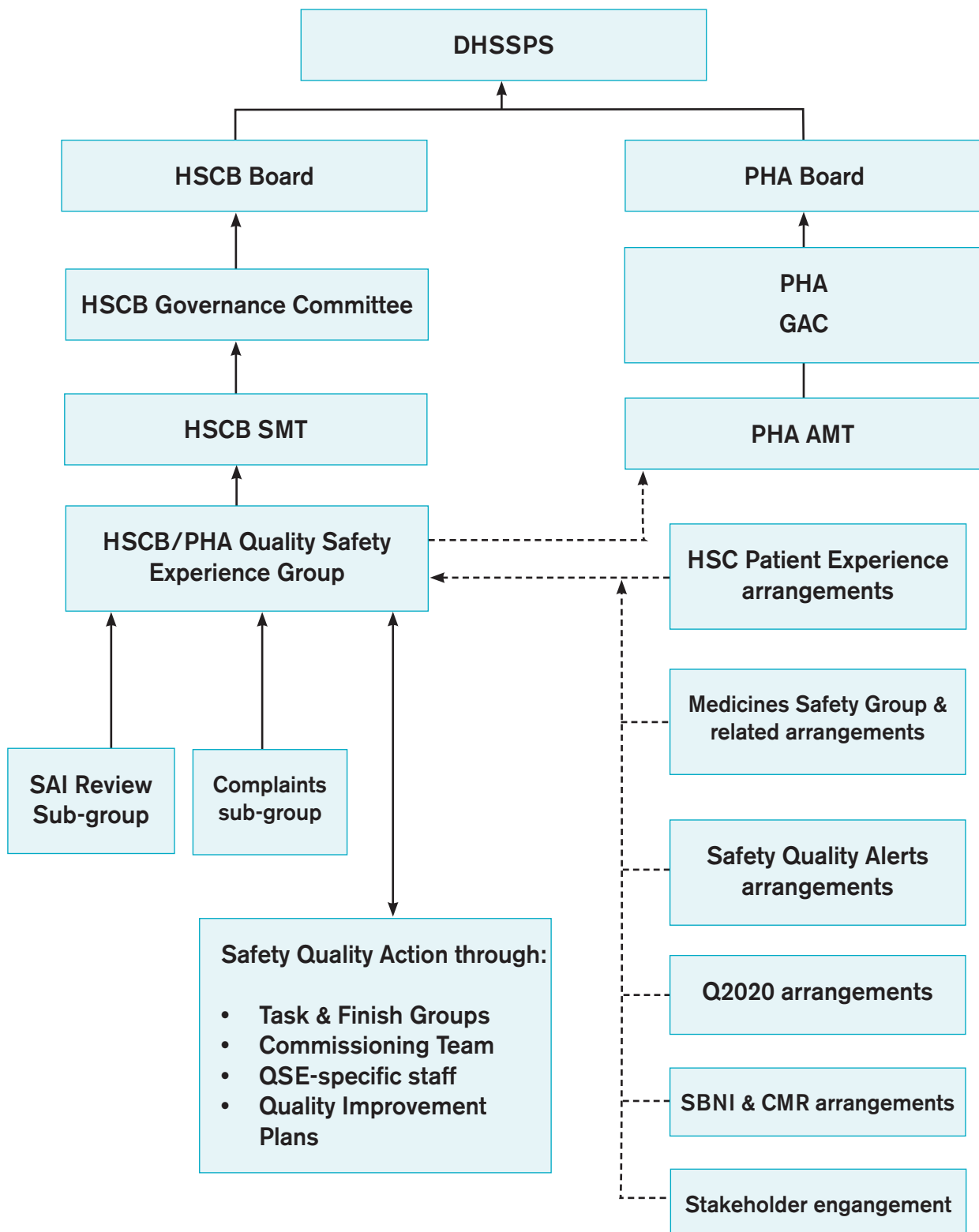
The table on flu vaccine update is divided into 'frontline' and 'other' staff. Frontline staff are those who have direct patient contact and the vaccine is recommended for them for this reason. While it is not specifically recommended for 'other' staff we have nevertheless offered it to all staff for a number of years now for their own protection. Uptake is shown for the winter 2013/14 and for the previous year for comparison purposes and has increased in this period.

**Table 18: HSC staff flu vaccine uptake to March 2014**

Occupational Health Seasonal flu Vaccine data 1 October 2013 to 31 January 2014	Belfast HSCT	South Eastern HSCT	Northern HSCT	Southern HSCT	Western HSCT	Northern Ireland
<b>HSCT frontline staff Population</b>	<b>13794</b>	<b>7382</b>	<b>7240</b>	<b>7414</b>	<b>5462</b>	<b>41292</b>
Frontline staff receiving vaccine 1 October 2013 to 31 March 2014	3751	1402	2225	1304	1236	9918
Uptake rate frontline staff 1 October 2013 to 31 March 2014	27.2%	19.0%	30.7%	17.6%	22.6%	24.0%
Uptake rate frontline staff 1 October 2012 to 31 March 2013	19.5%	15.5%	26.0%	18.3%	24.2%	20.4%
<b>HSCT other staff population</b>	<b>6072</b>	<b>3655</b>	<b>4153</b>	<b>4128</b>	<b>4215</b>	<b>22223</b>
HSCT other staff receiving vaccine 1 October 2013 to 31 March 2014	1386	826	1162	1038	914	5326
Uptake rate other staff 1 October 2013 to 31 March 2014	22.8%	22.6%	28.0%	25.1%	21.7%	24.0%
Uptake rate other staff 1 October 2012 to 31 March 2013	18.4%	13.6%	27.0%	17.6%	22.2%	19.4%

# Appendix 1

## Overview of HSCB and PHA quality safety experience internal coordination arrangements



## Appendix 2

Organisations that report more SAIs typically have a better understanding and a more effective safety culture.

In May 2010 the responsibility for the management and follow up of SAIs transferred from the DHSSPS to the HSCB (working jointly with the PHA and collaboratively with RQIA) and a procedure for the reporting and follow up of SAIs was developed.

This procedure was revised in 2013 and fully implemented in April 2014. The 2013 revisions included:

- An additional criterion for defining an SAI : “Any death of a child in receipt of HSC services (up to the eighteenth birthday)”.
- The reporting of SAIs involving a service user known to or referred to mental health services was reduced from 24 months to 12 months. This timescale is now comparative with England and Scotland.
- Three levels of investigation were introduced, to reflect the complexity of incidents and to facilitate timely identification of learning.
- The timescales for conducting investigations were revised in line with the level of investigation to be undertaken. However to date there have been a number of investigation reports that are outstanding beyond their submission date. This was raised during 2013/14 with Trusts at Director level meetings and further steps are being taken to improve the timeliness of these report

## Act FAST when Stroke suspected

A residential home contacted the GP out of hours service about one of their residents who had developed arm weakness and slurred speech but who appeared to be getting better. The GP advised the home to wait an hour and if the symptoms persisted to contact the patient's GP.

In this case, the residential home should have dialled 999 and the patient should have gone directly to hospital, or the GP out of hours should have advised the home to dial 999 and send the patient to hospital.

The importance of early recognition of stroke is that it allows patients to be assessed quickly for thrombolysis. Thrombolysis can be given up to 4.5 hours after the onset of an ischaemic stroke which has been confirmed by CT scan. The earlier it is given to suitable patients the better the outcomes (i.e. less disability) for stroke survivors. Currently the thrombolysis rate for ischaemic stroke in Northern Ireland is 12%, but expert opinion used by National Institute for Health and Care Excellence (NICE) suggests that this could be as high as 20% in the next 5 to 10 years.



### Key Learning

The **FAST** campaign describes the common signs of stroke

**F**acial weakness – can the person smile? Has their mouth or eye dropped?

**A**rm weakness – can the person raise both arms

**S**peech problems – can the person speak clearly and understand what you say

**T**ime to call 999 if you see any one of these signs

### Introduction

Welcome to the second issue of Learning Matters Newsletter.

Health and Social Care in Northern Ireland endeavours to provide the highest quality service to those in its care and we recognise that we need to use a variety of ways to share learning such as learning letters, alerts and reports. The purpose of our newsletter is to complement the existing methods by providing staff with short examples of incidents where learning has been identified.

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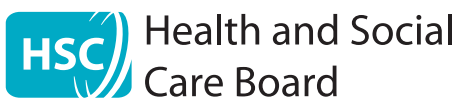
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# Appendix 4

## Glossary of Terms

AAA	Abdominal Aortic Aneurysm
AMT	Agency Management Team
BHSCT	Belfast Health and Social Care Trust
BSO	Business Services Organisation
C-Section	Caesarean – Section
CAUTI	Catheter associated urinary tract infections
CLABSA	Central Line associated infections
CNO	Chief Nursing Officer
CDI	Clostridium difficile infections
CHT	Congenital hypothyroidism
CF	Cystic Fibrosis
DVT	Deep vein thrombosis
DHSSPS	Department of Health Social Services and Public Safety
DRO	Designated Review Officer
DAI	Device associated infection
DPH	Director of Public Health
DSCC	Directorate of Social Care and Children
FPS	Family Practitioner Services
GOS	General Ophthalmic Service
GP	General Practitioner
GAC	Governance and Audit Committee
GAIN	Guidance and Audit Implementation Network
HSC	Health and Social Care
HSCB	Health and Social Care Board
HSCT	Health and Social Care Trust
HCAI	Healthcare associated infections
HSMR	Hospital Standardised Mortality Ratios
HPV	Human Papilloma Virus
IPASS	Illness Severity/Patient Summary/Action List/Situation Awareness & Contingency Planning/Synthesis by Receiver
ImROC	Implementing Recovery through Organisational Change
KPI	Key performance indicator
LGB&T	Lesbian, Gay, Bisexual and Transgender
MMDT	Medicines Management Dietician Team
MCADD	Medium-chain acyl-CoA dehydrogenase deficiency
MRSA	Meticillin resistant Staphylococcus aureus
MDT	Multidisciplinary Team
NCEPOD	National Confidential Enquiry into Patient Outcome and Death
NEWS	National Early Warning Scores

NICE	National Institute for Health and Care Excellence
NHSCT	Northern Health and Social Care Trust
NI	Northern Ireland
NIAS	Northern Ireland Ambulance Service
NIMDTA	Northern Ireland Medical and Dental Training Agency
OWDG	Organisational Workforce Development Group
OOH	Out of Hours
PCC	Patient and Client Council
PPI	Personal and Public Involvement
PMMT	Pharmacy Medicines Management Team
PKU	Phenylketonuria
PBL	Practice Based Learning
PLO	Practice Learning Opportunities
NIPMPL	Primary Medical Performers List
PGN	Promoting Good Nutrition
PHA	Public Health Agency
PE	Pulmonary embolism
Q2020	Quality 2020 Strategy, 2012
QA	Quality Assurance
QIP	Quality Improvement Plan
QSE	Quality, Safety and Experience Group
RDS	Referral Dental Service
RPP	Regional Professional Panel
RQIA	Regulation and Quality Improvement Authority
RO	Responsible Officer
RPA	Review of Public Administration
RAMI	Risk Adjusted Mortality Indices
SBNI	Safeguarding Board Northern Ireland
SQAT	Safety and Quality Alerts Team
SchARR	School of Health and Related Research
SMT	Senior Management Team
SAI	Serious Adverse Incident
SEA	Significant Event Audit
SBAR	Situation Background Assessment Recommendation
SEHST	South Eastern Health and Social Care Trust
SHSCT	Southern Health and Social Care Trust
SSP	Specialist Screening Practitioner
SOP	Standard Operating Procedure
SHMI	Summary Hospital Mortality Indicator
SSI	Surgical Site Infection
CHKS	UK based provider of healthcare analysis
UK	United Kingdom
VTE	Venous Thromboembolism
VAP	Ventilator associated pneumonia
WHST	Western Health and Social Care Trust
WHO	World Health Organisation



Health and Social Care Board  
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**PUBLIC HEALTH AGENCY BOARD PAPER**

<b>Date of Meeting</b>	18 September 2014
<b>Title of Paper</b>	Perinatal Mortality Report
<b>Agenda Item</b>	13
<b>Reference</b>	PHA/05/09/14

**Summary**


The Health Care Quality Improvement Partnership (HQIP), on behalf of the UK administrations commission four Clinical Outcome Review Programmes (previously known as confidential enquiries). These programmes normally include elements of both surveillance and confidential enquiry through detailed case note review.

Northern Ireland takes part in all four enquiries, two of which are co-ordinated by the NIMACH office which sits within the PHA namely; the Maternal, Newborn and Infant programme and the Child Health Programme. A regional steering group, chaired by the Chief Medical Officer, provides strategic direction to NIMACH in respect of the Maternal, Newborn and infant programme.

Data provided by Trusts, is collated on all maternal deaths, stillbirths, neonatal and infant deaths. This information is anonymised before onward submission to the national programme which is currently provided by a consortium called MBRRACE – headed by the National Perinatal Unit in Oxford. In addition to this surveillance function, NIMACH also facilitates confidential case note enquiry on all maternal deaths and topics associated with both the maternal and perinatal programmes. The topics for 2013 were maternal sepsis and congenital diaphragmatic hernia.

Due to a break in national data collection between 2009 and 2012, a national report on 2013 perinatal mortality will not be available until mid-2015. As is the case in Scotland and Wales, Northern Ireland has been in a position to continue to collect and report on data. The report on 2012 data was shared with the NI Maternal and Infant Steering Group (NIMI) where all recommendations were approved. The 2012 report on perinatal mortality is appended.

A summary of the key findings and overview of recommendations is provided at the beginning of the document.

<b>Equality Screening / Equality Impact Assessment</b>	N/A
<b>Audit Trail</b>	This report was brought to AMT on 17 June 2014.
<b>Recommendation / Resolution</b>	For Noting
<b>Director's Signature</b>	
<b>Title</b>	Director of Public Health
<b>Date</b>	9 September 2014



Health and  
Social Care



# **Perinatal Mortality**

**Northern Ireland  
2012**

**[including Late Fetal Losses and Late Neonatal Mortality]**

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## Foreword

The impact of stillbirth and infant death is devastating for families and distressing for the staff who care for them. Within Northern Ireland, as elsewhere in the UK, there has been a growing momentum to improve our local surveillance and understanding of perinatal mortality.

There has been only slight decrease in perinatal mortality rates over the past decade. Whilst there is no significant difference in rates between UK administrations, as a whole we continue to lag behind many of our European counterparts in making improvements in this area.

A significant body of research and surveillance clearly links increased risk of perinatal mortality with deprivation, maternal smoking, obesity and older maternal age.

With this in mind, it is important that current work in both service improvement and public health initiatives is focused and harnessed to further improve maternal and infant health and deliver on a reduction in perinatal mortality.

I welcome this report, which highlights the importance of high quality information and collaborative working in the delivery of initiatives to improve public health and reduce perinatal mortality.

A handwritten signature in black ink, appearing to read 'Michael McBride', written in a cursive style.

Dr Michael McBride  
Chief Medical Officer for Northern Ireland

## **Acknowledgements**

The work of NIMACH is only possible because of the support and involvement of a wide range of clinicians, including midwives, paediatricians and obstetricians. In particular we would wish to acknowledge the contribution of the Maternity Unit Coordinators who are pivotal to the enquiry programme.

NIMACH thanks the many staff who make this report possible and is committed to continuing and further strengthening these relationships to work towards a common goal of improving outcomes for mothers and children.

Within the Public Health Agency (PHA) and Health and Social Services Board (HSCB), NIMACH would also like to acknowledge the input and support from colleagues in the provision of denominator data to facilitate analysis, and in particular the PHA Health Intelligence Unit.

## Definitions

Stillbirth*	A baby delivered without signs of life after 23+6 weeks of pregnancy.
Live birth (WHO)	Live birth refers to the complete expulsion or extraction from its mother of a product of conception, irrespective of the duration of the pregnancy, which, after such separation, breathes or shows any other evidence of life.
Neonatal Death MBRRACE definition for notification to enquiry programme	Death of a live born baby (born at 20 weeks gestation of pregnancy or later or 400g where an accurate estimate of gestation is not available) occurring before 28 completed days after birth.
Early neonatal death	Death of a live born baby occurring less than 7 days from the time of birth.
Late neonatal death	Death of a live born baby occurring after the 7th day and before 28 completed days from the time of birth.
Post neonatal death	Death occurring from the 28th day and before 1 year after birth.
Stillbirth rate	Number of stillbirths per 1000 live births and stillbirths.
Late fetal loss*:	A baby delivered without signs of life from 22+0 to 23+6 weeks of pregnancy.
Perinatal mortality rate	Number of stillbirths and early neonatal deaths per 1000 live births and stillbirths.
Neonatal mortality rate	Number of neonatal deaths per 1000 live births.

\*If the birth occurred unattended and there was no lung aeration seen at Post Mortem and no other circumstantial evidence of life at birth, it should be assumed that the baby was a late fetal loss or stillbirth.



## Abbreviations

CMACE	Centre for Maternal and Child Enquiry (legacy organisation)
CORP	Clinical Outcome Review Programme
DHSSPSNI	Department of Health and Social Services Northern Ireland
ENND	Early Neonatal Death
HQIP	Healthcare Quality Improvement Partnership
IUGR	Intra Uterine Growth Restriction
LNND	Late Neonatal Death
MBRRACE	Mothers and Babies – Reducing Risk through Audit and Confidential Enquiry
NIMACH	Northern Ireland Maternal and Child Health
NIMATS	Northern Ireland Maternity System
NIMI	Northern Ireland Maternal and Infant Regional Steering Group
NISRA	Northern Ireland Statistics and Research Agency
NPEU	National Perinatal Epidemiology Unit
ONS	Office of National Statistics
PHA	Public Health Agency
SB	Stillbirth

## **Summary of recommendations**

### **Recommendation 1**

NIMI should consider how best to direct and support co-ordinated regional action to reduce perinatal mortality in Northern Ireland working closely, where possible, with key stakeholders including the Maternity Strategy Implementation Group, Safety Forum's Maternity Quality Improvement Group, PHA Health Improvement leads and relevant service leads.

### **Recommendation 2**

NIMATS should be used as the main database interface to provide denominator data for NIMACH and MBRRACE.

### **Recommendation 3**

In order to ensure that factors which cause or may be associated with perinatal and neonatal deaths in Northern Ireland are more thoroughly understood, it is recommended that a perinatal coding group be established to agree and develop a more robust system of coding.

### **Recommendation 4**

In addition to surveillance of individual unit data, NIMACH should work closely with both MBRRACE and the Neonatal Network Northern Ireland (NNNI) to ensure that the reporting of neonatal mortality rates reflects relevant clinical pathways through local and regional services, with joint reporting where appropriate.

### **Recommendation 5**

- By the end of 2015, services should aim to ensure that placental histology is requested for all infants who are stillborn, die in the neonatal period or who are admitted to a neonatal unit. NIMACH should work with the Neonatal Network Northern Ireland in the implementation of this recommendation.

- The benefits of a post mortem examination should be explained to all parents whose baby is either stillborn or dies in the neonatal period by an appropriately trained health care professional.

### **Recommendation 6**

- With input from relevant clinicians, NIMACH should work with NIMATS in improving current processes to identify (retrospectively) IUGR for all notifications (stillbirths and neonatal deaths) to facilitate improved reporting of IUGR associated mortality in the context of the wider maternal population.
- All notifications to NIMACH office should be accompanied by a copy of the completed customised growth chart for the case.

## Summary of key findings

### Perinatal and Neonatal Mortality, Northern Ireland 2012

#### 1 Total births and deaths, 2012

Total births (live+still)	25682
Total live births	25563
Stillbirth	119
Early neonatal death	64
Perinatal death	183
Late Neonatal Death	10
Neonatal death	74
Late fetal loss	33

There has been no significant change to the number of total births over the past 5 years.

#### 2 Mortality Rates, 2012

Year on year fluctuations remain. There is a suggestion of a downward trend over the past decade, however this is not significant. The lowest rate of neonatal mortality in past decade was recorded in 2012.

	All (crude)	Singleton	Multiple
Stillbirth <sup>^</sup>	4.6 (3.8 - 5.54)	4.5 (3.7 - 5.5)	7.6 (2.8 - 16.6)
Perinatal <sup>^</sup>	7.1 (6.1 - 8.2)	6.9 (5.9 - 8.0)	15.3 (7.9 - 26.7)
Neonatal <sup>*</sup>	2.9 (2.3 - 3.6)	2.7 (2.1 - 3.5)	7.7 (2.8 - 16.8)

<sup>^</sup> Stillbirth Rates per 1000 births (live and still)

<sup>\*</sup> Neonatal rates per 1000 live births

#### 3 Main causes of death, 2012

In Northern Ireland major congenital anomaly (MCA) as the main cause of death remains a significant cause of mortality, accounting for approximately 20% of all stillbirths. Chromosomal disorders account for over 50% of stillbirths associated with MCAs.

Northern Ireland generally has a higher proportion of stillbirths and neonatal deaths due to MCA than other UK countries. This is largely due to differences in access to terminations of pregnancy.

Placental causes including specific placental conditions and infection also remain important causes of death in stillbirths.

The vast majority of neonatal mortality is associated with prematurity. MCAs also represent a significant cause of mortality in neonates with about 50% of notifications listing MCA as the main cause of death. In neonates, these are mostly associated with chromosomal disorders as well as the central nervous and cardiovascular systems.

Significant variation remains between countries in how deaths are coded and classified, thus making comparisons difficult.

#### **4 Post Mortems**

Post mortems and pathology reports are essential in understanding cause of death. In 2012 a post mortem report was received for 54% of stillbirths and 30% of neonatal deaths. Placental histology reports were available for 93% of stillbirths and 77% of early neonatal deaths.

Post mortem was not offered in 7 (3%) out of 193 notifications of stillbirth or neonatal death. There was a small rise in the proportion of post mortems undertaken in neonatal deaths from 2011.

#### **5 Other findings**

Whilst there are differences in how deaths are identified and registered, which may account for some variation, it is generally accepted that UK countries have higher levels of stillbirth and perinatal mortality than European counterparts.

The provision of robust surveillance information on perinatal mortality is only one step reducing the number of preventable stillbirths and early neonatal deaths. Evidence and research show that:

- Increased rates of perinatal mortality are closely linked with deprivation, older mothers, maternal smoking and obesity.
- Potentially significant numbers of stillbirths are associated with intrauterine growth restriction (IUGR). Whilst there is limited means to treat IUGR in utero, research suggests that early detection of fetal growth problems can substantially reduce the risk of stillbirth<sup>1</sup>.
- Previous national enquiries and quality improvement programmes focused on improving perinatal mortality also report on the need to support and drive service improvements<sup>2</sup>.

If Northern Ireland is to reduce perinatal mortality, in addition to the wider public health initiatives, a further focus may also be required on the current maternal pathway for women known to be at higher risk in order to identify and mitigate increased risk where

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<sup>1</sup> Maternal and fetal risk factors for stillbirth: population based study, Gardosi et al, BMJ 2013; 346:f108 doi 10.1136/bmj.f108

<sup>2</sup> CESDI report, 1999 identified a significant proportion of stillbirths being associated with suboptimal care, work of Perinatal Institute on fetal growth <http://www.perinatal.org.uk/fetalgrowth/fetalgrowth.aspx>

possible. Much work is already being done in areas which may have a potential effect on perinatal mortality (e.g. Maternity Strategy implementation, Maternity Improvement Group, Public Health initiatives and local Trust review).

*Recommendation:*

*NIMI should consider how best to direct and support co-ordinated regional action to reduce perinatal mortality in Northern Ireland working closely, where possible, with key stakeholders including the Maternity Strategy Implementation Group, Safety Forum's Maternity Quality Improvement Group, PHA Health Improvement leads and relevant service leads.*

## 1 Introduction

This report provides an overview of perinatal and neonatal mortality in Northern Ireland over the past decade with a focus on 2012 data in particular. Information is collated via the Maternal and Newborn and Infant Clinical Outcome Review Programme (previously known as the Confidential Enquiry into Maternal and Child Health).

This enquiry is one of a number of programmes commissioned nationally by Health Care Quality Improvement Partnership<sup>3</sup> (HQIP) which aims to support the delivery of safe and high quality maternal and newborn services. Along with the rest of the UK administrations, the Department of Health and Social Services (DHSPPSNI), works closely with HQIP in the national development of these programmes.

The Maternal and Newborn and Infant Clinical Outcome Review Programmes are co-ordinated by the Northern Ireland Maternal and Child Health (NIMACH) office which sits within the Public Health Agency (PHA). A consortium led by the Perinatal Unit in Oxford – MBRRACE-UK (Mothers and Babies – Reducing Risk through Audits and Confidential Enquiries across the UK) assumed responsibility for managing the Maternal and Newborn Programme in April 2012<sup>4</sup>. The first UK report on perinatal mortality is scheduled to be published in mid- 2015.

In addition to surveillance on mortality, MBRRACE is also undertaking a confidential enquiry yearly for each programme. Maternal sepsis and Congenital Diaphragmatic Hernia are the focus of the 2012 enquiries which will report in December 2014 and mid 2015 respectively.

As well as contributing to the National programme, NIMACH aims to work with key stakeholders under the guidance of the Northern Ireland Maternal and Infant (NIMI) Regional Steering Group, in local activity to further support mortality reduction. Whilst year on year there may not be significant variation in mortality rates, analysis of data and examining trends over a longer period of time is likely to yield more valuable information.

Please note that all 2011 - 2012 data referred to in this report has not been externally quality assured.

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<sup>3</sup> <http://www.hqip.org.uk/clinical-outcome-review-programmes-2/>

<sup>4</sup> <https://www.npeu.ox.ac.uk/mbrpace-uk>

## 2 Methods

Data on all notifications of late fetal loss, stillbirths, neonatal deaths<sup>5</sup> and post neonatal deaths<sup>6</sup> is collated via the Northern Ireland Maternal and Child Health (NIMACH) office and submitted, after anonymisation, to MBRRACE.

As there is no legal requirement in Northern Ireland to register either stillbirths or late fetal deaths, the survey will continue to be dependent on the recognition and reporting of these by the unit coordinators.

Case ascertainment for stillbirths is quality assured through the Northern Ireland Maternity System (NIMATS).

All stillbirths and neonatal deaths are assigned to a geographical area – normally the maternity unit and Trust where death was recorded. Any deaths associated with home births or those born before hospital are allocated to the Trust that provided the antenatal care.

### Denominator data

Nationally, denominator data is provided to MBRRACE by the Office of National Statistics (ONS). Historically within Northern Ireland, regional mortality rates have been calculated using data from the Northern Ireland Statistics and Research Agency (NISRA)<sup>7</sup>. Prior to 2012, denominator data used to provide analysis at unit level was based on births reported to the child health system.

After review of relevant systems and databases, the Northern Ireland Maternity System (NIMATS) is found to provide the most appropriate interface in terms of quality assurance of notifications as well as the provision of denominator data. Through NIMATS, aggregate data may also be accessed on key variables from the wider maternal population which in turn may be used to support analysis and make comparisons between different maternal populations for specific outcomes including stillbirth.

### *Recommendation:*

*NIMATS should be used as the main database interface to provide denominator data for NIMACH and MBRRACE.*

### 2.1 Coding and classification of cause of death

Over the years, a number of different classification systems have been used in perinatal reporting. There are over 30 classifications in existence, each with limitations in use and interpretation. The system used can have a significant impact on reporting of cause of

<sup>5</sup> Definition for notification of neonatal deaths to programme changed in 2012 – data collected on all neonatal deaths of 20 weeks gestation or more (or 500g where accurate EDD not available)

<sup>6</sup> Notifications for post neonatal death commenced in 2013 for all deaths up to 1 year in neonatal units only. Plans to expand to all post neonatal deaths are currently under development.

<sup>7</sup> NISRA only relates to Northern Ireland residents and as such births to mothers residing in the Republic of Ireland are excluded



death. Moving forward, MBRRACE plans to use the CODAC coding system which, it is hoped, will address previous issues related to significant numbers of cases being classified as having an unknown cause. This system will be used nationally to code data collected in 2013.

As this system is not yet operational in terms of reporting, for the purposes of this report, the legacy classification system (CMACE – adapted Wigglesworth) has been maintained for 2011 – 12. To support discussion and understanding, the CMACE system has been further expanded to take advantage of local availability of pathology reporting.

It should also be noted that coding of deaths is also reliant on the experience of the coder and information available to them. The availability of either post mortem or placental histology reports is therefore particularly important in improving coding accuracy.

*Recommendation:*

*In order to ensure that factors which cause or may be associated with perinatal and neonatal deaths in Northern Ireland are more thoroughly understood, it is recommended that a perinatal coding group be established to agree and develop a more robust system of coding.*

## **2.2 Adjusting methodology**

Historically there have been a number of variations to adjusting methodology used in the reporting of perinatal mortality across the UK.

Mortality rates are often adjusted to take account of mortality associated with deaths reported around the limits of viability and allow for a better evaluation of maternity care. There are significant differences nationally and internationally on the methods used for adjustment which continues to cause challenges for comparison. In this report information on both crude and adjust perinatal mortality rates is provided for information.

It should be noted that any methodology which takes account of major congenital anomaly as a main cause of death, potentially has a differential impact on Northern Ireland where, due to different laws from the rest of the UK in relation to terminations of pregnancy, there are generally higher rates of stillbirths and early neonatal deaths associated with congenital anomaly.

MBRRACE is currently considering adjustment methodology moving forward.

## **2.3 Limitations of data**

Underpinning all analysis is a requirement to have accurate data and thus minimise the risk of drawing flawed conclusions. We are acutely aware of the challenges in ensuring data sets are as accurate as possible and that appropriate steps are taken to quality assure data and ensure that any limitations are highlighted and accounted for.

As indicated, over the years a number of changes have been made to how data is collected and questions asked<sup>8</sup>, thus reducing the ability to compare a number of variables directly across time and across regions and countries.

Due to relatively small numbers of mortality notifications in Northern Ireland each year, using cohorts of data over a number of years will strengthen any conclusions drawn.

Limitations of data should be taken into account in the interpretation and reporting of mortality rates.

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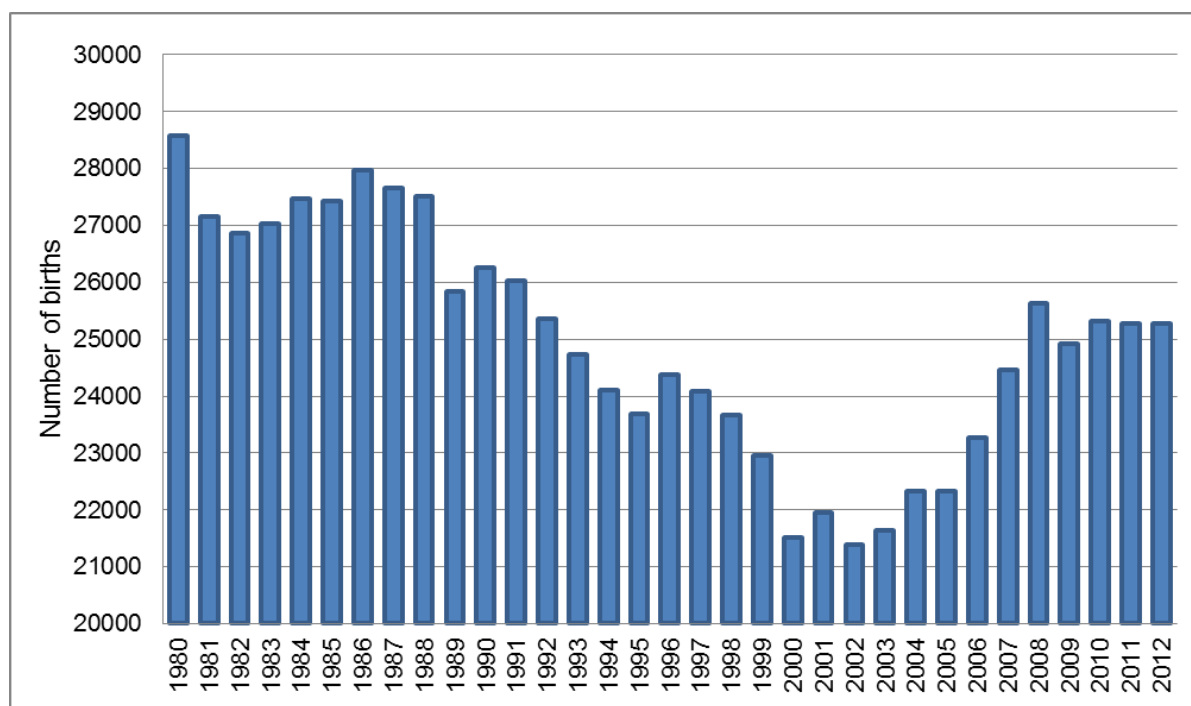
<sup>8</sup> A complete list of definitional and data collection changes made since 2000 is available on request from the NIMACH office

### 3 Trends over time – births

#### 3.1 Total Births

The total number of births in Northern Ireland has fluctuated over the past decade (figure 1). A record low of 21,507 was recorded in 2002 rising to 25,746 in 2008. This rise represented a 20% increase in just six years. 2009 saw the first reverse of the upward trend. Registered births have remained relatively stable over the past four years, with 25,114 births registered in 2012. NIMATS reported live births in 2012 was 25,420 (includes ROI).

**Figure 1. Live births: Northern Ireland ~ 1980 and 2012**



Source NISRA

#### 3.2 Births to mothers from outside the United Kingdom or Republic of Ireland

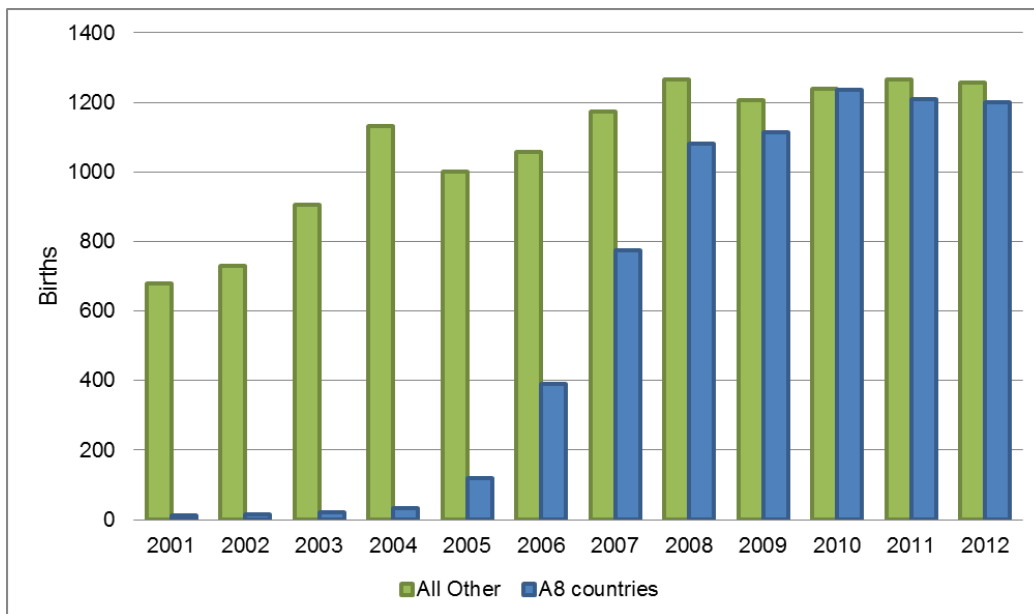
Whilst the majority of births in Northern Ireland are to mothers who were born here (82% in 2012), this has fallen from 86% in 2001. This shift is largely due to increased levels of migration in Northern Ireland. In 1997 less than 7% of registered births to mothers from outside Northern Ireland were born in the A8<sup>9</sup> countries, by 2012 this figure had risen to over 37%. Births from these mothers rose from 5 in 2000 to a peak of 1235 in 2010 and have dropped slightly in 2012 to 1,202 (figure 2).

Generally mothers born in the A8 countries are younger than their Northern Ireland born counterparts. In 2010, 73% of A8 born mothers were aged in their twenties compared to 45% of mothers born in Northern Ireland.

<sup>9</sup> A8 countries are those that joined the EU in 2004 – Estonia, Hungary, Latvia, Lithuania, Poland, Slovenia, Slovakia and The Czech Republic

The change is not limited to A8 countries. The number of births to mothers from other foreign countries has also doubled in the past decade (from 678 in 2001 to 1,258 in 2012). (figure 2)

**Figure 2: Births to mothers from A8 and all other countries: Northern Ireland ~ 2001 – 2012**

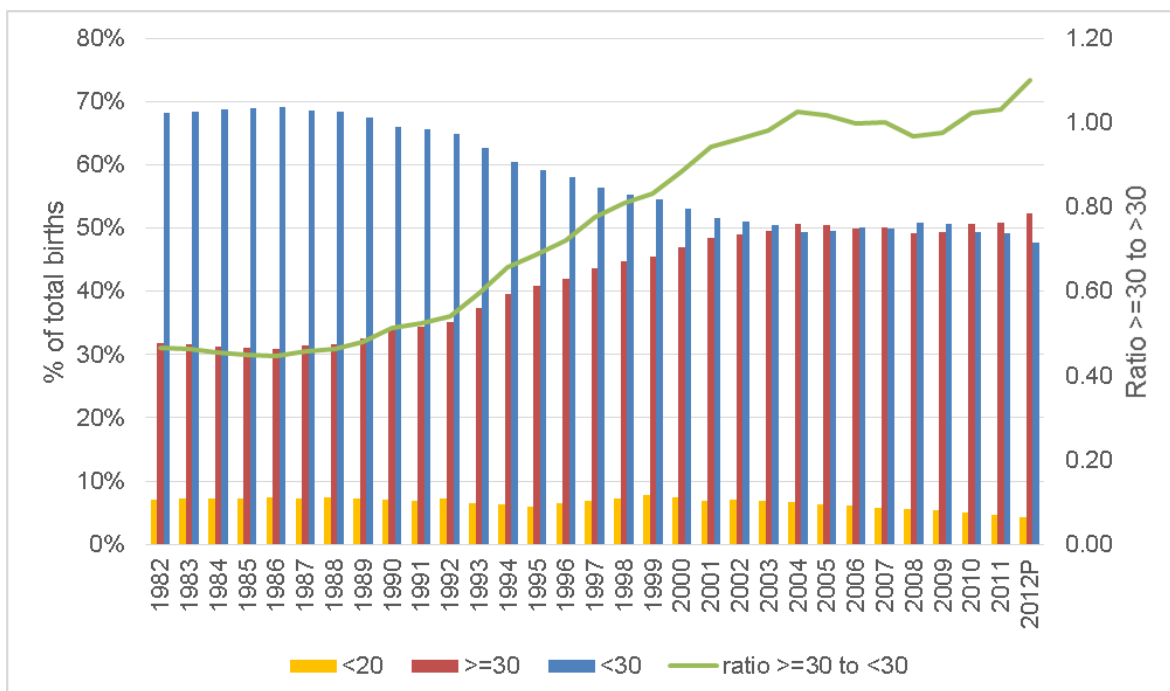


Source: NISRA

### 3.3 Maternal Age

As with other parts of the UK, the age of women giving birth in Northern Ireland has changed over recent decades, with more women having families later in life (figure 3).

**Figure 3. Live births by mother's age: Northern Ireland ~ 1982 and 2012**



Source: NISRA

#### 4 Trends over time – Late Fetal Loss, Stillbirths and Neonatal deaths

Total numbers and rates of late fetal losses, stillbirths and neonatal deaths for Northern Ireland are shown in Appendix 2 for the years 2003 – 2012. The rates, including confidence intervals, are also provided in table 1 for the years 2010 to 2012.

**Table 1: Perinatal mortality (all cases i.e. crude rates): Northern Ireland ~ 2010 - 2012**

	Numbers		
	2010	2011	2012
Total births (live+still)	25992	25688	25682
Total live births	25886	25595	25563
Stillbirth	106	93	119
Early neonatal death	92	68	64
Perinatal death	198	161	183
Late Neonatal Death	14	16	10
Neonatal death	106	84	74
Late fetal loss	27	26	33

	Rates [95% CIs]		
	2010	2011	2012
Total births (live+still)	25992	25688	25682
Stillbirth <sup>a</sup>	4.08 [3.34 - 4.93]	3.62 [2.92 - 4.44]	4.63 [3.84 - 5.54]
Early neonatal death <sup>b</sup>	3.55 [2.87 - 4.36]	2.66 [2.06 - 3.37]	2.50 [1.93 - 3.20]
Perinatal mortality <sup>a</sup>	7.62 [6.59 - 8.76]	6.27 [5.34 - 7.31]	7.13 [6.06 - 8.15]
Late Neonatal Death <sup>b</sup>	0.54 [0.30 - 0.91]	0.63 [0.36 - 1.02]	0.39 [0.19 - 0.72]
Neonatal mortality <sup>b</sup>	4.09 [3.35 - 4.95]	3.28 [2.62 - 4.06]	2.89 [2.27 - 3.63]

Source: CHS / NIMATS / NIMACH

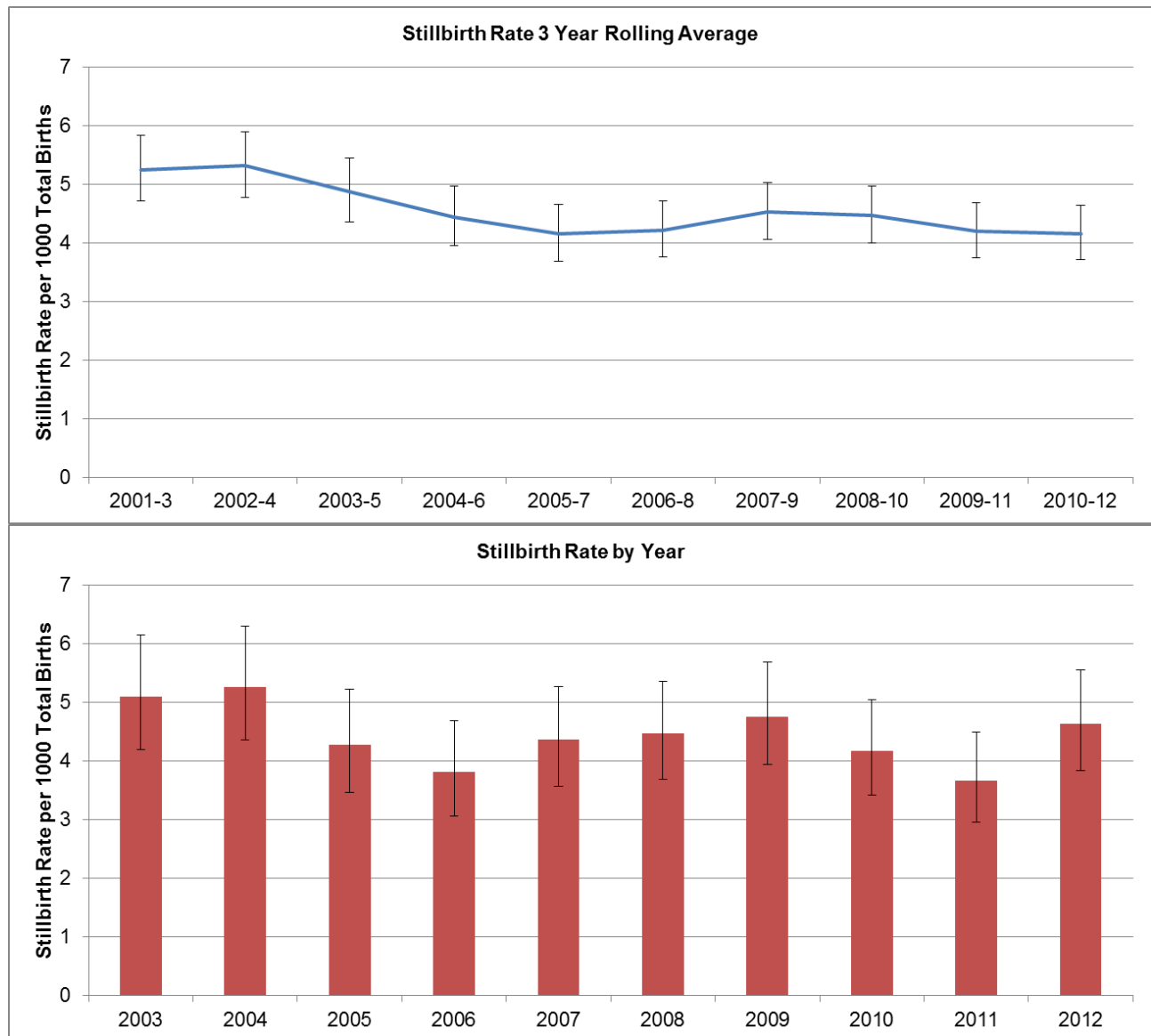
a – rate per 1000 total births (live and still)

b – rate per 1000 live births

Figures 4, 5 and 6 provide an overall picture of mortality trends in Northern Ireland over the past decade. In addition to yearly rates, a three year rolling average has been added. This has the effect of ‘smoothing’ the data across yearly fluctuations, thus making it easier to observe patterns over a longer period of time.

## 4.1 Stillbirths

**Figure 4: Stillbirth rate per 1000 total births and 3 year rolling average, all cases: Northern Ireland ~ 2003 – 2012**



Source: NIMACH

Although there is a suggestion of a downward trend, there has been no significant drop in stillbirth rates over the past ten years (figure 4). Year to year fluctuations in these relatively small numbers remain.

In 2012 there was an increase of 26 to 119 in the number of stillbirths reported to NIMACH from 2011 which had the lowest recorded stillbirth rate during the past decade of 3.62 per 1,000 total births.

The stillbirth rate for Northern Ireland in 2012 of 4.6 per 1,000 total births (95% CI 3.8 – 5.5) is in line with reported rates in other UK administrations. Scotland<sup>10</sup> reported a

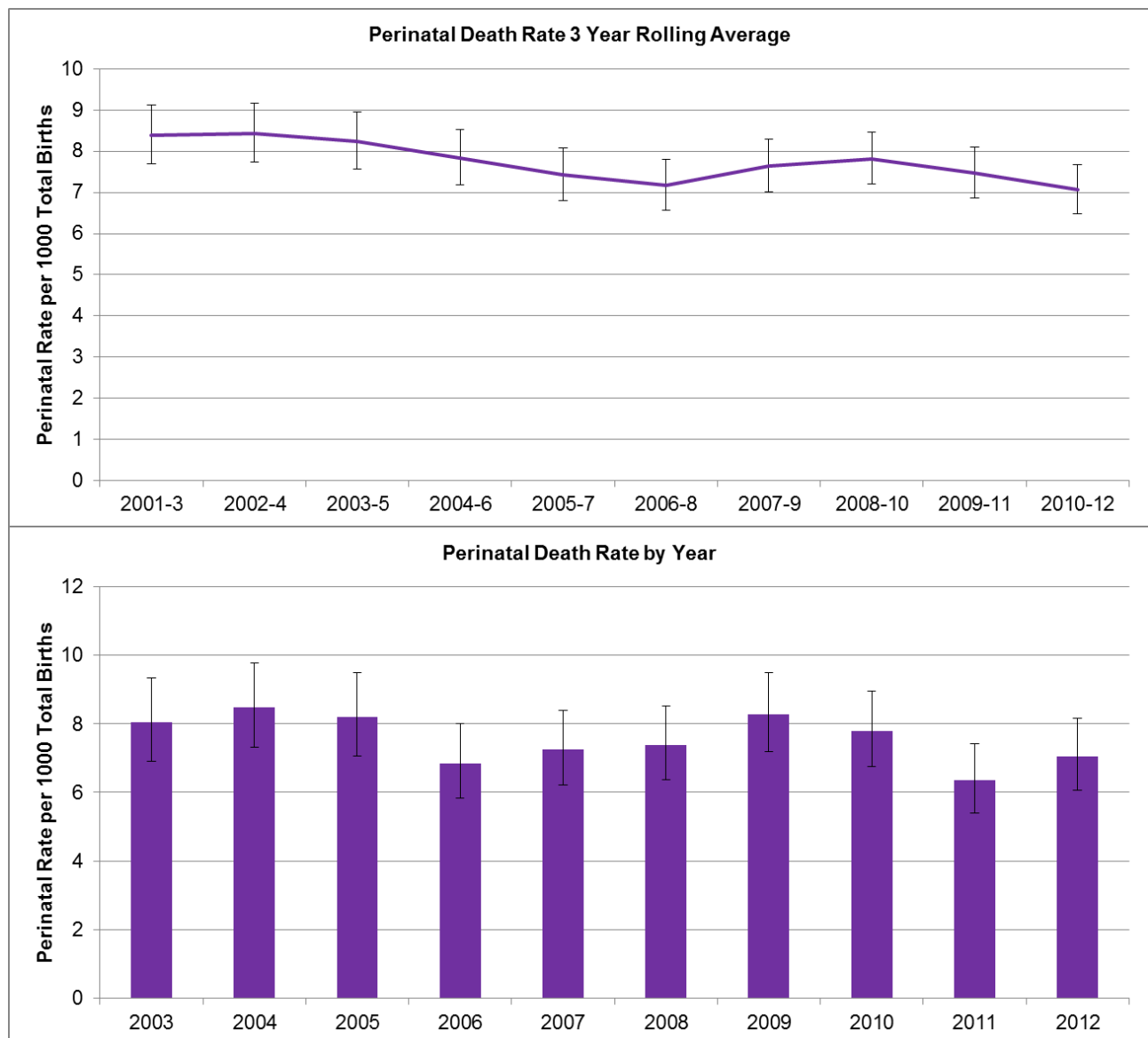
<sup>10</sup> Scottish Perinatal and Infant Mortality and Morbidity Report, 2012, Health Care Improvement, Scotland.

stillbirth rate of 4.7 (95% CI 4.2 – 5.3) and Wales<sup>11</sup> 4.5 (95% CI 3.8 – 5.3) for 2012 notifications. Early indications show a reduction in the 2013 stillbirth rate for Northern Ireland on 2012 rates.

In 2012, eight (6.7%) intrapartum stillbirths were notified. This compares with 3 in 2011 and 8 in 2010.

## 4.2 Perinatal mortality

**Figure 5: Perinatal death rate and 3 year rolling average per 1000 total births, all cases: Northern Ireland ~ 2003 – 2012**



Source: NIMACH

<sup>11</sup> All Wales Perinatal Survey, 2012 Annual Report

Stillbirths and deaths that occur in the first week of life (early neonatal deaths) often have many common causes and determinants which might somehow be attributed to obstetric events. These deaths are jointly referred to as perinatal deaths. The perinatal mortality rate provides information needed to improve the health status of pregnant women, new mothers and newborns.

This measure also has the advantage of removing any potential variation in the definition of live birth, as both stillbirths (SBs) and early neonatal deaths (ENNDs) are included.

Perinatal mortality rates over the past decade in Northern Ireland show a very similar pattern to stillbirths of there being a hint of an overall downward trend (figure 5).

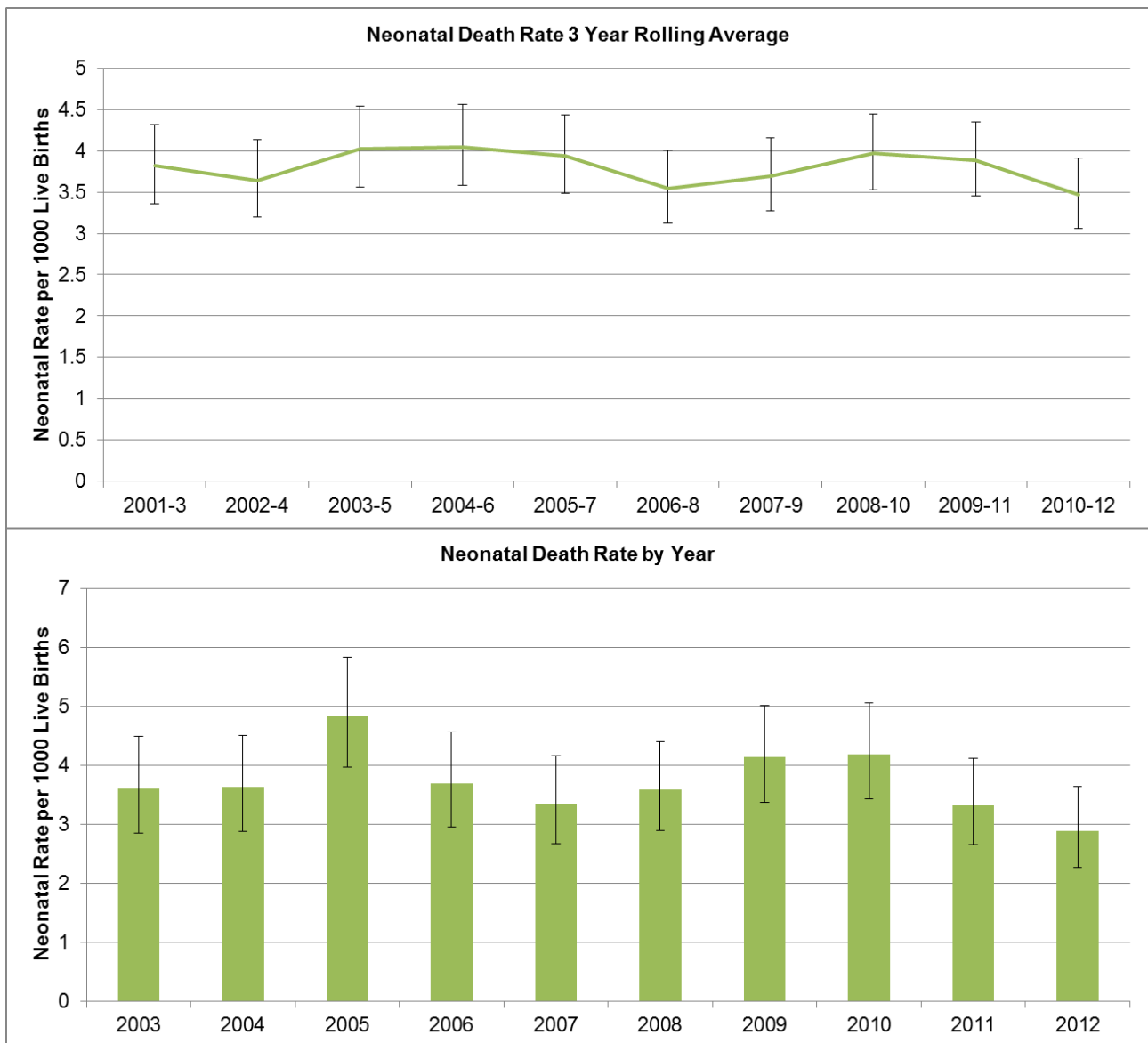
In contrast to the rise in the number of stillbirths reported from 2011 to 2012, there was a small decrease in the number of early neonatal deaths from 68 to 64. However due to the increase in stillbirths reported, the perinatal mortality rate was slightly up at 7.13 in 2012 (6.27 in 2011).

As previously noted, variations in reporting of neonatal deaths can have a significant impact on overall crude rates. Over the past number of years there has been some variation across Trusts in Northern Ireland on the reporting of early neonatal deaths, particularly around the limits of viability. In 2012, 6 babies were reported as early neonatal deaths that were less than 20 weeks gestation. The new definition for notification of a neonatal death issued by MBRRACE, which came into effect in 2013, will address these inconsistencies.



### 4.3 Neonatal Mortality

**Figure 6: Neonatal death rate and 3 year rolling average per 1000 live births, all cases: Northern Ireland ~ 2003 – 2012**



Source: NIMACH

Notifications of neonatal mortality reduced between 2011 and 2012 from 84 to 74. The neonatal mortality rate in 2012 was 2.89 per 1,000 live births. Although rates have fluctuated year on year, the lowest neonatal mortality rate over the past decade was recorded in 2012 (figure 6).

Plans for the expansion of the Clinical Outcome review Programme for maternal, newborn and infant mortality surveillance under the co-ordination of MBRRACE are underway. In 2013, data will also be collected on all babies who die in neonatal units up to the age of one year. This will also be expanded beyond neonatal units in the following years to include all infant deaths up to one year, regardless of place of death, once an appropriate data collection methodology has been agreed.

#### 4.4 Adjusted Mortality Rates

As outlined in the methodology section, in order to provide more accurate data which can be used to compare rates across services and countries, crude mortality rates are often adjusted to take account of different definitions and notification systems.

The methodology for adjustment has not as yet been decided by MBRRACE as the programme moves forward; however table 2 provides an overview of how mortality rates have changed over the past few years using the methodology reported in the legacy CMACE report (2009) and replicated for Northern Ireland rates in 2010, 2011 and 2012.

**Table 2: Adjusted mortality rates: Northern Ireland ~ 2005 - 2012 (using CMACE legacy adjustment methodology)**

	Stillbirth rate a,b [95% CI]	Perinatal mortality rate a,b [95% CI]	Neonatal mortality rate a,c [95% CI]
2005*	3.8 [3.1, 4.7]	7.0 [6.0, 8.2]	4.0 [3.3, 5.0]
2006*	3.7 [3.0, 4.6]	6.3 [5.4, 7.4]	3.2 [2.6, 4.0]
2007*	3.9 [3.2, 4.7]	6.2 [5.3, 7.3]	2.8 [2.2, 3.6]
2008*	4.2 [3.4, 5.0]	6.4 [5.5, 7.5]	3.0 [2.4, 3.8]
2009*	4.7 [3.9, 5.6]	7.5 [6.5, 8.7]	3.5 [2.8, 4.3]
2010^	4.1 [3.3, 5.0]	5.9 [5.0, 6.9]	4.2 [3.4, 4.3]
2011^	3.5 [2.8, 4.3]	5.2 [4.4, 6.2]	2.3 [1.8, 3.0]
2012^	4.6 [3.8, 5.5]	6.7 [5.7, 7.7]	2.5 [1.9, 3.2]

<sup>a</sup> Adjusted by removing terminations of pregnancy, babies born live at less than 22 weeks' gestation and baby delivered without signs of life at less than 24 weeks' gestation.

<sup>b</sup> Rate per 1,000 total births

<sup>c</sup> Rate per 1,000 live births

\* Legacy CMACE report

^ NIMACH report

Occurrences in Northern Ireland of recognised high risk factors that are often used in adjusting local rates are provided in table 3.

**Table 3: Deaths associated with factors known to increase risk of mortality: Northern Ireland ~ 2007 – 2012**

	Stillbirths					
	2007	2008	2009	2010	2011	2012
<b>MCA ^*</b>	13	13	16	12	16	24
<b>Birth Weight &lt;500g^</b>	5	3	7	8	8	9
	Early Neonatal Deaths					
<b>Gestation &lt;22 weeks^</b>	6	1	12	10	19	10
<b>MCA ^*</b>	27	16	34	37	31	29
<b>Birth Weight &lt;500g^</b>	7	11	16	20	28	12
	Late Neonatal Deaths					
<b>Gestation &lt;22 weeks^</b>	0	0	0	0	0	0
<b>MCA ^*</b>	8	7	9	6	7	5
<b>Birth Weight &lt;500g^</b>	0	0	0	0	1	0

^ Overlap in some cases

\* where MCA is reported as main cause of death.

Terminations of pregnancy not reported in NI (all such cases will be reflected in other high risk categories for purposes of adjustment)

In previous national reports, major congenital anomaly listed as the main cause of death was also used as an adjustment variable. This variable is particularly important in Northern Ireland, given the higher proportional rates of MCA as compared to the rest of the UK.

Figures 7 and 8 show the number of notifications that would be removed by adjusting for major congenital anomaly being reported as the main cause of death as well as weight < 500g, gest age < 22 weeks. The figures also provide detail on the impact on the corresponding mortality rates.

Neonatal rates in particular are significantly affected by adjusting for major congenital anomaly, of which Northern Ireland generally has higher rates.

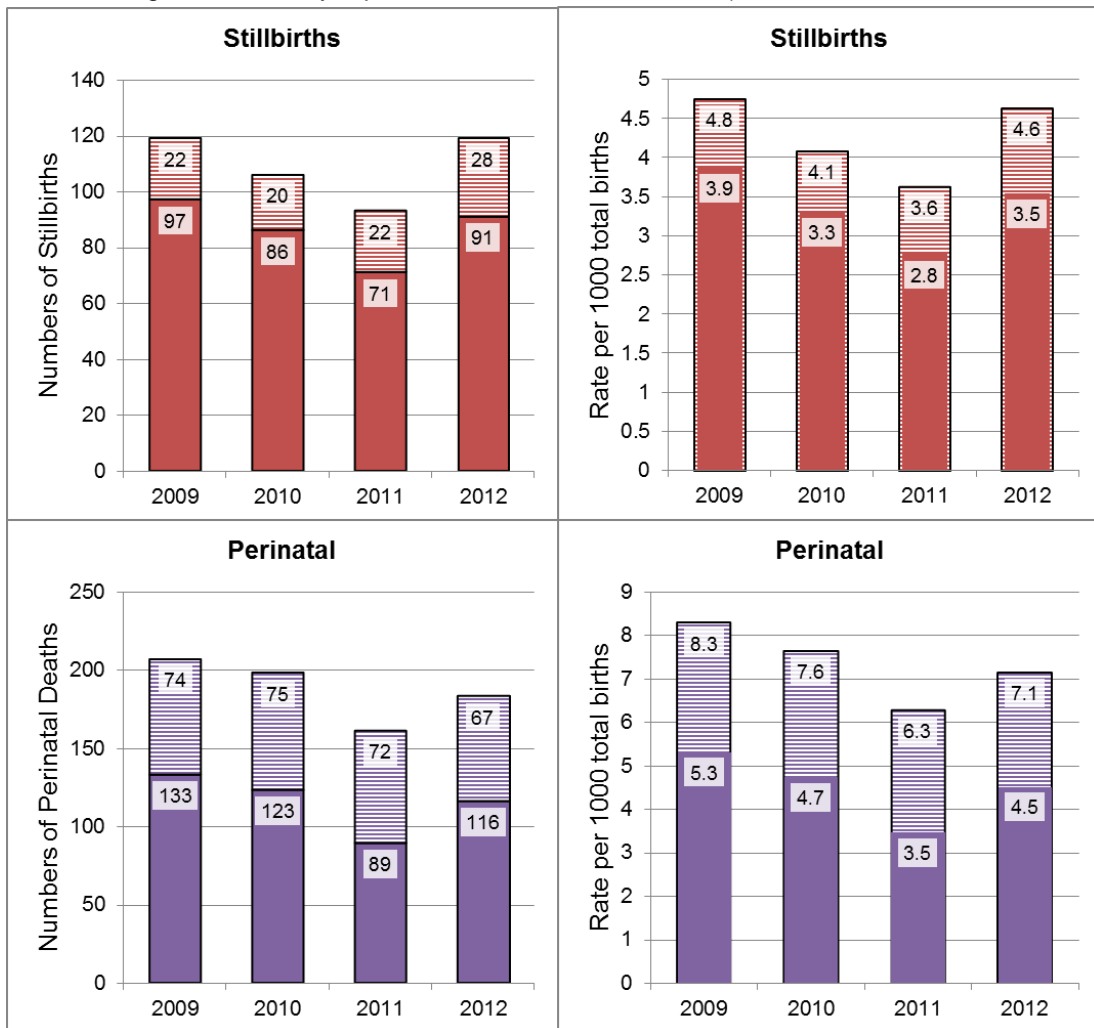
The proportion of stillbirths removed using this adjustment methodology has remained relatively similar over the past four years (figure 7) although slightly increasing in 2012. This increase is largely due to increased numbers of stillbirths with MCA listed as the main cause of death.

In 2012, 20% of stillbirths were reported with MCA as main cause of death and 45% of ENND were reported with MCA as main cause of death.

Interestingly, although the overall (crude) neonatal mortality has decreased between 2011 and 2012, the adjusted mortality rate has increased slightly from 1 per 1,000 total births to 1.2 per 1,000 total births (figure 8). This is due to a smaller proportion of early neonatal deaths falling into the adjustment category in 2012 as compared with 2011.

**Figure 7: Neonatal, ENN and LNN mortality: Numbers and rates (crude and adjusted): Northern Ireland ~ 2009 – 2012**

(Adjusted by removing notifications of birthweight <500g, gestation <22 weeks and major congenital anomaly reported as main cause of death.)

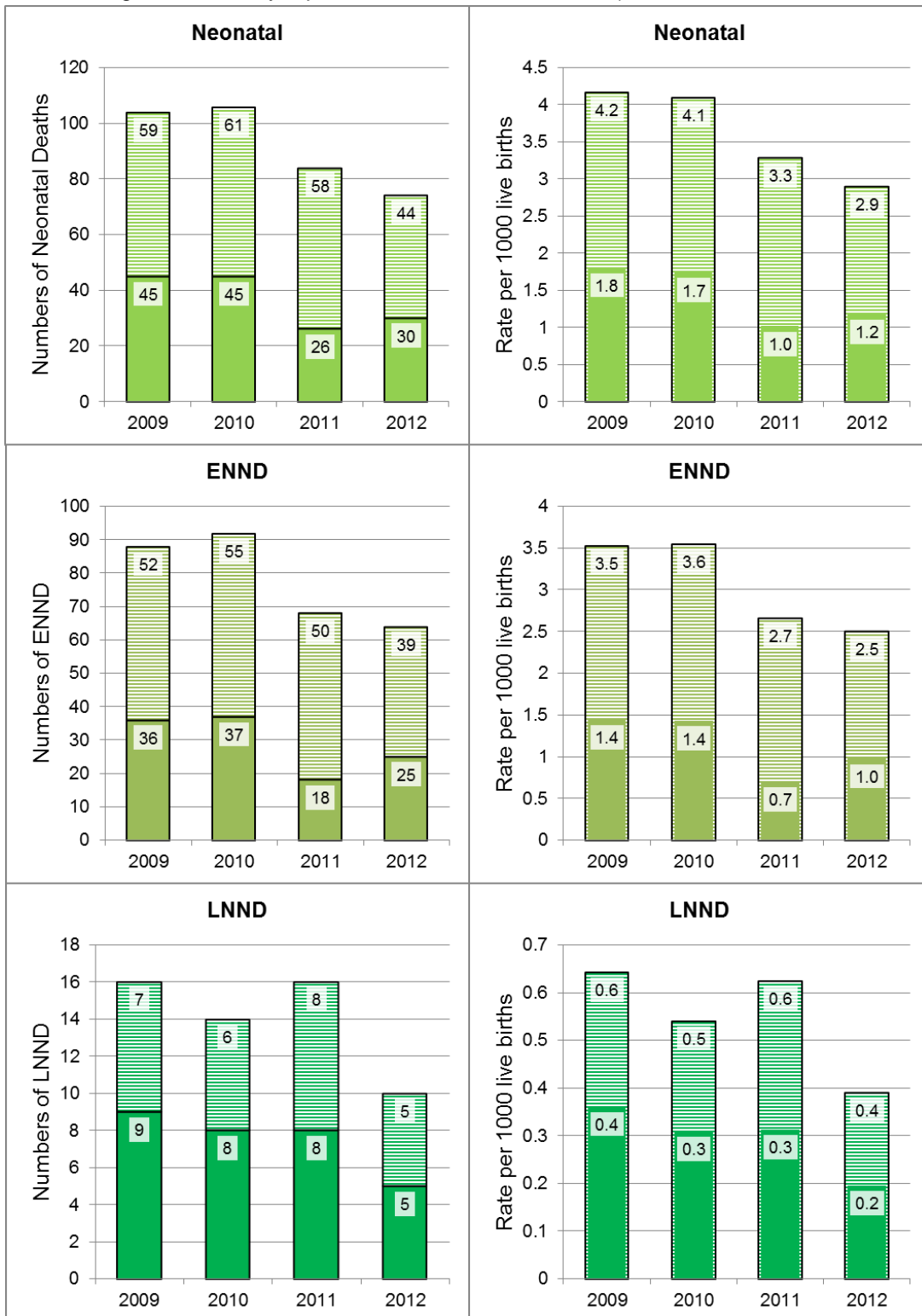


Total height of bars show the crude numbers; the solid portion is the number remaining after the adjustment; the striped portion is the number removed by the adjustment

Total height of bars show the crude rate; the solid portion is the rate remaining following adjustment

**Figure 8: Neonatal, ENN and LNN mortality: Numbers and rates (crude and adjusted): Northern Ireland ~ 2009 – 2012**

(Adjusted by removing notifications of birthweight <500g, gestation <22 weeks and major congenital anomaly reported as main cause of death.)



Total height of bars show the crude numbers; the solid portion is the number remaining after the adjustment; the striped portion is the number removed by the adjustment

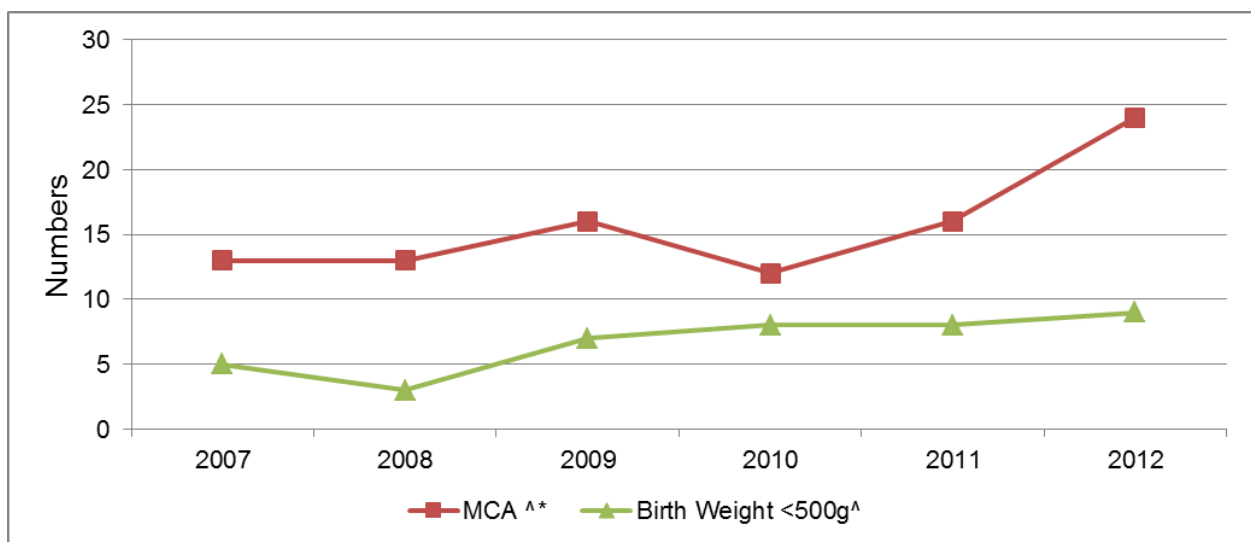
Total height of bars show the crude rate; the solid portion is the rate remaining following adjustment

There has been an increase in the number of stillbirths reported with MCA as the main cause of deaths from 12 in 2010 to 24 in 2012 (figure 9).

Numbers of early neonatal deaths reported with a gestation of less than 22 weeks rose steadily between 2008 and 2011 before dropping off in 2012 (figure 10). Moving forward, early neonatal deaths will not be notified less than 20 weeks.

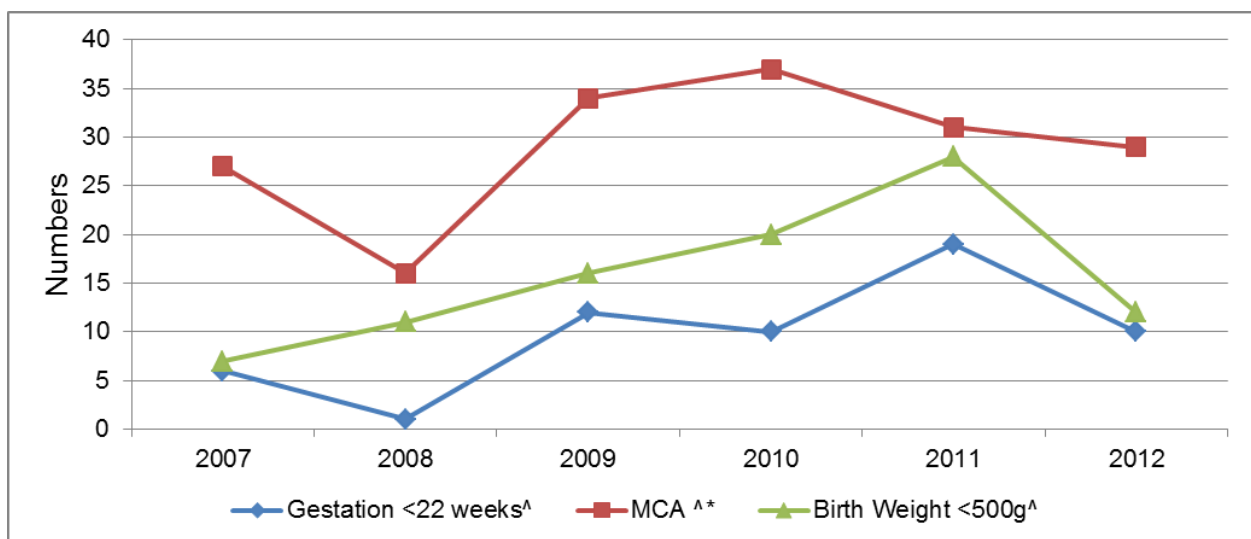
In 2012, 29 early neonatal death notifications listed MCA as the main cause of death, compared with a low of 16 in 2008. Conversely, there has been a reduction in the number of late neonatal deaths due to MCA (figure 11), however, as numbers are so small, it would be difficult to know if this is an anomaly or related to improved survival.

**Figure 9: Trend in numbers of stillbirths associated with factors known to increase risk of mortality: Northern Ireland ~ 2007 – 2012**



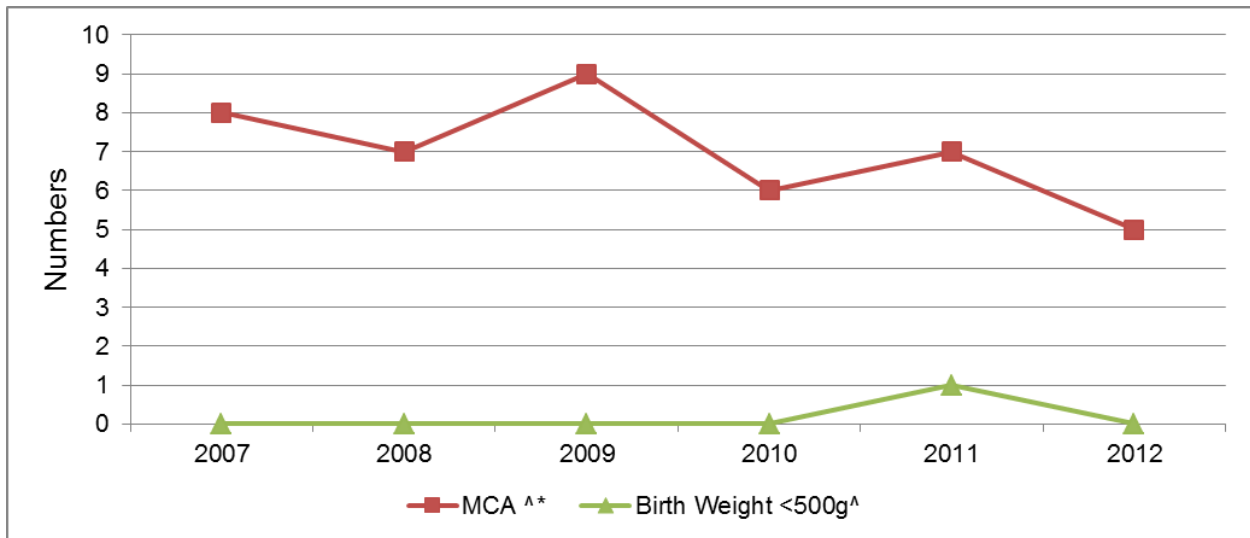
Source: NIMACH

**Figure 10: Trend in numbers of early neonatal deaths associated with factors known to increase risk of mortality: Northern Ireland ~ 2007 – 2012**



Source: NIMACH

**Figure 11: Trend in numbers of late neonatal deaths associated with factors known to increase risk of mortality: Northern Ireland ~ 2007 – 2012**



Source: NIMACH

## 5 Perinatal and Neonatal mortality ~ Northern Ireland, 2012

Notifications of deaths reported to NIMACH in 2012 are shown in table 4. Adjusted numbers and rates are also shown, where notifications <500g, < 22 wks and MCA listed as main cause of death have been removed. 2012 saw an increase in the number of stillbirths notified from 93 in 2011. The number of early and late neonatal deaths dropped from 68 and 16 respectively in 2011.

**Table 4: Stillbirth and neonatal mortality numbers and rates (crude and adjusted): Northern Ireland ~ 2012**

	2012	
	Numbers	
	Crude	Adjusted
<b>Total births (live+still)</b>	25682	25682
<b>Total live births</b>	25563	25563
<b>Stillbirth</b>	119	91
<b>Early neonatal death</b>	64	25
<b>Perinatal death</b>	183	116
<b>Late Neonatal Death</b>	10	5
<b>Neonatal death</b>	74	30
	Rates [95% CIs]	
	Crude	Adjusted
<b>Total births (live+still)</b>	25682	25682
<b>Stillbirth<sup>a</sup></b>	4.63 [3.8-5.5]	3.5 [2.9 - 4.4]
<b>Early neonatal death<sup>b</sup></b>	2.50 [1.9-3.2]	1.0 [0.6 - 1.4]
<b>Perinatal mortality<sup>a</sup></b>	7.13 [6.1-8.1]	4.5 [3.7 - 5.4]
<b>Late Neonatal Death<sup>b</sup></b>	0.39 [0.2-0.7]	0.2 [0.1 - 0.5]
<b>Neonatal mortality<sup>b</sup></b>	2.89 [2.3-3.6]	1.2 [0.8 - 1.7]

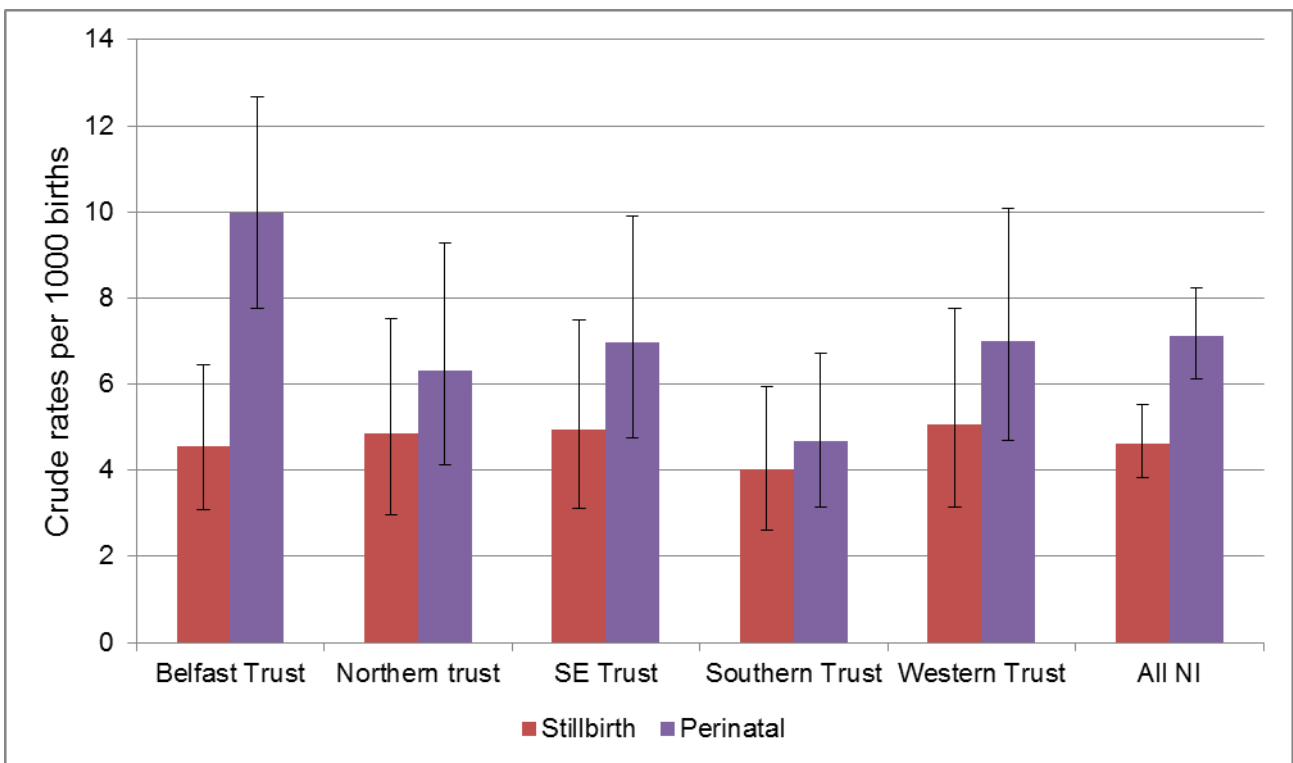
Figures 12 and 13 provide data on stillbirth and perinatal mortality rates by Trust in Northern Ireland. Data is not reported on neonatal mortality for individual units as movement of babies between different obstetric and neonatal units to access specialist services would impact on the assignment of mortality rates.

### *Recommendation:*

*In addition to surveillance of individual unit data, NIMACH should work closely with both MBRRACE and the Neonatal Network Northern Ireland (NINI) to ensure that the reporting of neonatal mortality rates reflects relevant clinical pathways through local and regional services, with joint reporting where appropriate.*

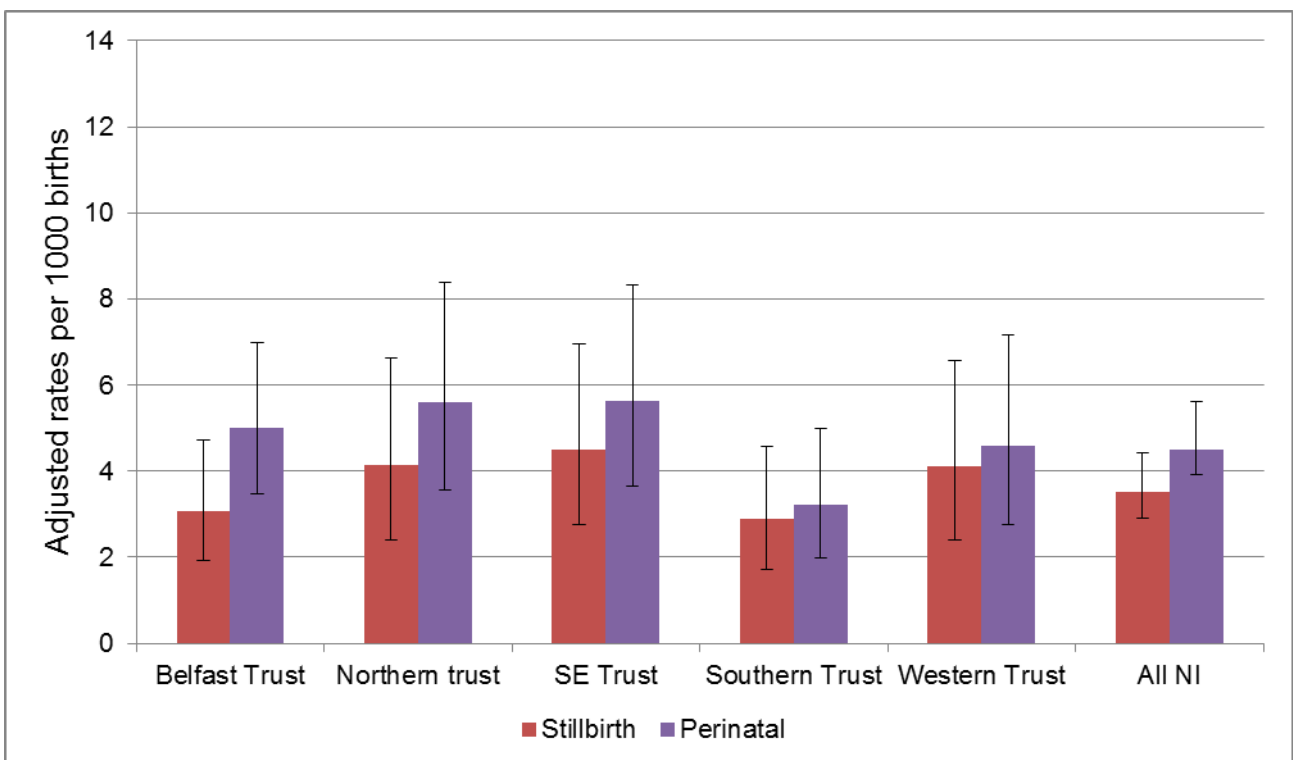


**Figure 12: Stillbirth and perinatal mortality rates (crude) by Trust: Northern Ireland ~ 2012**



Source NIMATS and NIMACH

**Figure 13: Stillbirth and perinatal mortality rates (adjusted) by Trust: Northern Ireland ~ 2012**



Source NIMATS and NIMACH

Adjustment removes those with birthweight < 500g, gestation <22 weeks, and MCA and main cause of death.

## 5.1 Pathology

Access to placental histology (PH) reporting may be of significant benefit in understanding both mortality and morbidity associated with infants.

The ability to code and classify cause of death accurately is significantly enhanced by access to information from laboratory reports from placental histology and post mortem reports, particularly where cause of death is unclear or open to interpretation from the information readily available at birth.

Additional information provided through PH reporting may also support clinical care of the neonate.

Currently in Northern Ireland placental histology is available and carried out for virtually all stillbirths (table 5). In 2012 93% of stillbirths had placental histology report, an increase on the 90% taking place in 2011.

Whilst Northern Ireland has historically performed well in terms of the proportion of pathology reports received in relation to stillbirths and neonatal deaths, further improvement should be possible.

### *Recommendation:*

- *By the end of 2015, services should aim to ensure that placental histology is requested for all infants who are stillborn, die in the neonatal period or who are admitted to a neonatal unit. NIMACH should also work with the Neonatal Network Northern Ireland in the implementation of this recommendation.*
- *The benefits of a post mortem examination should also be explained to all parents whose baby is either stillborn or dies in the neonatal period by an appropriately trained health care professional.*

**Table 5: Placental histology for stillbirths and neonatal deaths: Northern Ireland ~2012**

	n (%)			Grand Total
	Stillbirth	Early neonatal death	Late neonatal death	
No	8, (7)	15, (23)	8, (80)	31, (16)
Yes	111, (93)	49, (77)	2, (20)	162, (84)
Grand Total	119	64	10	193

**Table 6: Post mortems (PM) for stillbirths and neonatal deaths: Northern Ireland ~ 2012**

	n (%)			
	Stillbirth		Neonatal	
	2011	2012	2011	2012
<b>PM Held</b>	50 (54)	64 (54)	20 (24)	22 (30)
<b>PM Received</b>	50 (54)	64 (54)	19 (23)	22 (30)
<b>PM not offered</b>	6 (6)	1 (1)	5 (6)	6 (8)
<b>PM not consented</b>	36 (39)	49 (41)	55 (65)	41 (55)

In 2012 there was an increase in the proportion of neonatal deaths where consent was given for a Post mortem (table 6).

Post mortem is now offered in the majority of cases; however more detailed information would be required to understand why the consent rate has not changed significantly over recent years. There does not appear to be any association between gestational age and consent for post mortem.

Of deaths in 2012, where no consent was given for a post mortem, about a third had major congenital anomaly listed as the main cause of death.

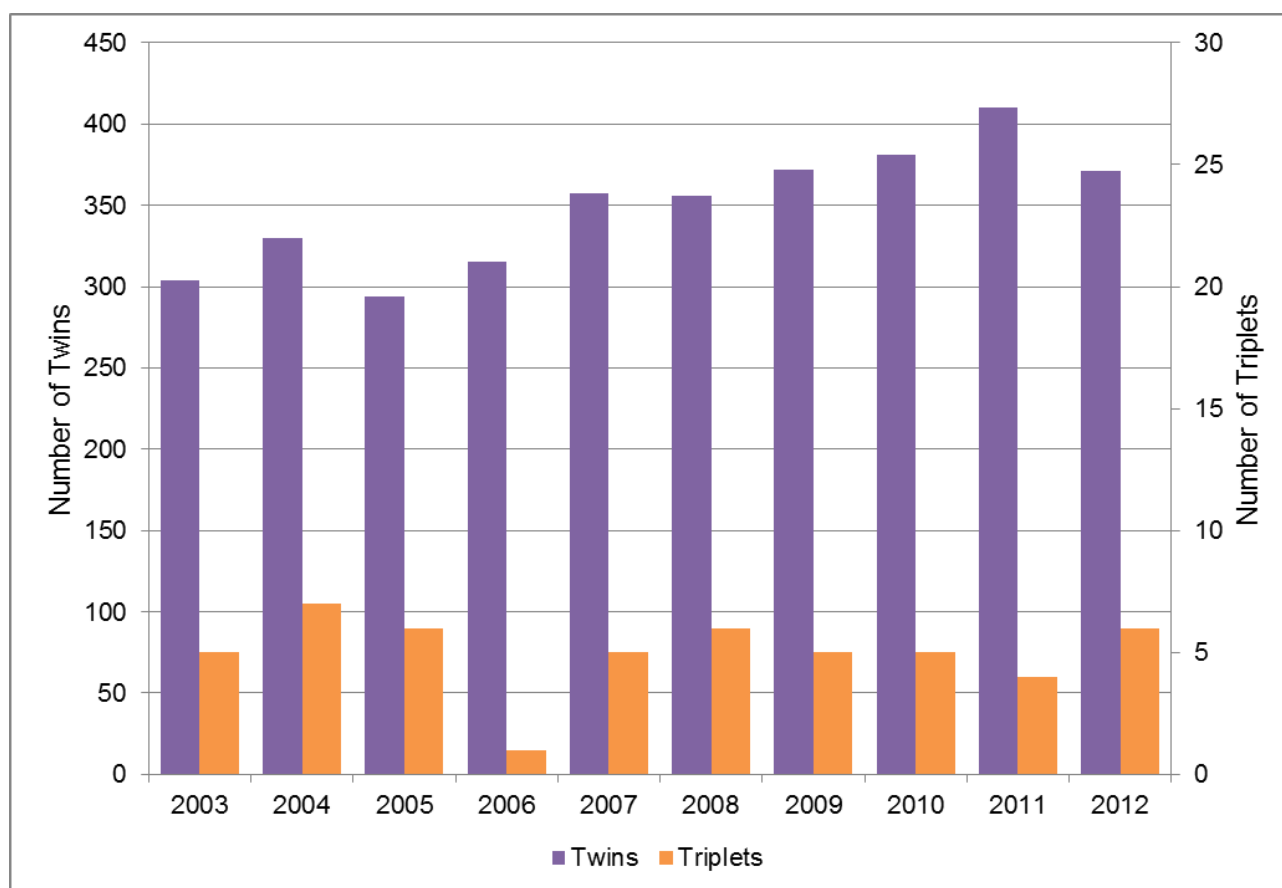
Less than a quarter of deaths where a post mortem was carried out had major congenital anomaly noted as main cause of death (23%) of these deaths 45% were neonatal and 16% were stillbirths.

## 6 Multiple Births

In 2012, 384 women gave birth to twins and 6 women had triplets. Thus around 1 maternity in every 66 resulted in a multiple birth which equates to 1.5% of all maternities. This is less than the peak recorded in 2011. The main reason is most likely the number of older mothers giving birth. In 2012, 1.1% of mothers in their twenties had a multiple birth compared with 2.8% of women in their forties. It is thought that this difference is due to higher levels of assisted fertility in older mothers.

There was a decrease in the number of multiple births registered with 371 sets of twins and 6 sets of triplets registered in 2012 as compared with 2011, the trend having been upwards between 2005 and 2011 (figure 14).

**Figure 14: Sets of Twins and Triplets born to mothers resident in Northern Ireland ~ 2003-2012**



Source: NISRA

### 6.1 Multiple Births and Gestation

Due to a number of factors, there is a different profile for the gestation at birth for twins and singletons. NICE Guidance for multiple pregnancies also states that preterm birth occurs more frequently in multiple pregnancies compared to singleton pregnancies, and that over

50% of twins and nearly all triplets are born before 37 weeks gestation. Extreme preterm birth (before 28 weeks) also occurs more often in multiple pregnancies.

In keeping with NICE guidance, in 2012, 94% of singleton births had a gestation of 37 weeks or more, whereas 58% of twins were born with a gestation of less than 37 weeks (figure 15).

In 2012, 10.4% of twins were born before 32 weeks gestation. 2.9% of twins were born before 28 weeks (extremely premature), compared to 0.4% of singletons.

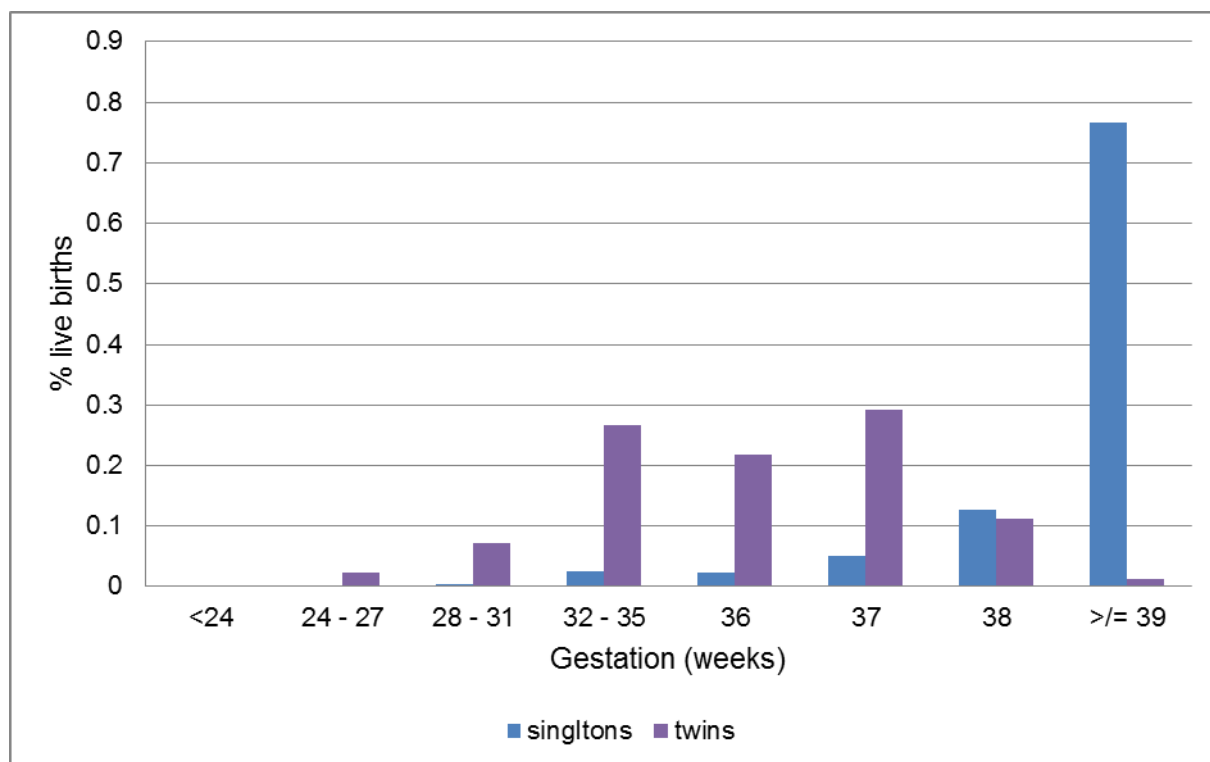
No stillbirths or neonatal deaths occurred in twins of gestation 36 weeks or more.

The average age of mothers who experienced either a stillbirth or neonatal death was 26.75 years for twin pregnancies as compared to 29.5 years for singleton pregnancies.

Sixty-six per cent of mortalities in twins (stillbirth or NND) were to mothers in their 20's, there were no mortalities in twins to mothers in their 40's.

A similar number of twins were born to mothers in the 20-24 years old and the 40-44 years old ranges.

**Figure 15: Percentage of Births by Gestation in twins and singletons: Northern Ireland ~ 2012**



Source NIMATS

## 6.2 Perinatal and Neonatal mortality in Multiple Births

Twins and higher order pregnancies are at substantially higher risk of complications including stillbirth. The CMACE Perinatal report of 2009 reported twins as having 2.5 times higher risk of stillbirth and 6.4 times higher risk of neonatal death.

Perinatal mortality rate for twins in 2012 in Northern Ireland was 15.3 per 1,000 births as compared to 6.9 for singleton births (table 7).

**Table 7: Multiplicity specific stillbirth, perinatal and neonatal mortality rates: Northern Ireland ~ 2012**

	Stillbirth <sup>^</sup>	Perinatal mortality <sup>^</sup>	Neonatal mortality <sup>*</sup>
<b>Singleton</b>	4.5 (3.7 - 5.5)	6.9 (5.9 - 8.0)	2.7 (2.1 - 3.5)
<b>Twins</b>	7.6 (2.8 - 16.6)	15.3 (7.9 - 26.7)	7.7 (2.8 - 16.8)
<b>Triplets and higher</b>	0	0	0

<sup>^</sup> Stillbirth Rates per 1000 births (live and still), <sup>\*</sup> Neonatal rates per 1000 live births

Source: NIMACH

**Table 8. Odds ratio of Stillbirth and Perinatal Deaths to total births, and Neonatal Deaths to live births for both single and twins: Northern Ireland 2011 - 2012**

	Stillbirth <sup>^</sup>		Perinatal mortality <sup>^</sup>		Neonatal mortality <sup>*</sup>	
	mortality rate (numbers)					
	2011	2012	2011	2012	2011	2012
<b>Singleton</b>	3.5 (88)	4.5 (113)	5.7 (141)	6.9 (171)	2.7 (68)	2.7 (68)
<b>Twins</b>	5.8 (5)	7.6 (6)	23.4 (20)	15.3 (12)	18.8 (16)	7.7 (6)
	twin:singleton (95% Cis)					
<b>odds ratio</b>	1.7 (0.7 - 4.2)	1.7 (0.7 - 3.8)	4.3 (2.7 - 6.8)	2.2 (1.2 - 4.0)	6.8 (4.0 - 11.8)	2.8 (1.2 - 6.5)

<sup>^</sup> rate per 1000 total births

<sup>\*</sup> rate per 1000 live births

Source: NIMACH

The risk of neonatal mortality in twins compared to singletons has dropped from 6.8 in 2011 to 2.8 in 2012 (table 8).

Table 9 provides detail on the number of stillbirths and neonatal deaths associated with multiple pregnancies over the past few years. The data is further illustrated in figures 16 and 17.

Looking at stillbirth deaths,, the rise in notifications between 2011 and 2012 was only associated with singleton births.

The number of multiple pregnancies resulting in one or more stillbirths or neonatal deaths has remained relatively stable in recent years with a small downward trend evident, however the small numbers involved would warrant caution in drawing any conclusions. This trend would support previous CMACE findings which stated that although multiple pregnancies remained at significantly higher risk of an adverse outcome including death,

the overall reduction in mortality rates for twins or higher order multiples was greater than that for singletons<sup>12</sup>.

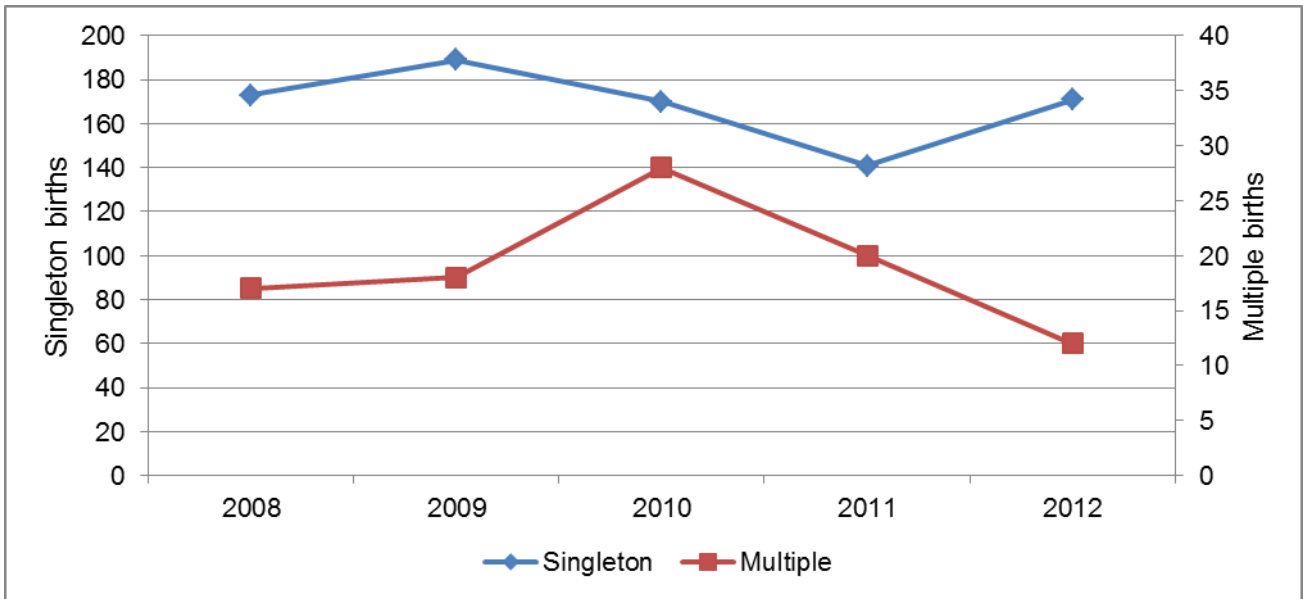
**Table 9: Stillbirths and neonatal deaths by multiplicity; Northern Ireland: 2008 – 2012**

	<b>Stillbirths, numbers (maternities)</b>				
	<b>2008</b>	<b>2009</b>	<b>2010</b>	<b>2011</b>	<b>2012</b>
<b>Singleton</b>	109	112	98	88	113
<b>Twin</b>	6 (4)	7 (6)	8 (6)	5 (5)	6 (5)
<b>Triplets</b>	0	0	0	0	0
	<b>Perinatal mortalities, numbers (maternities)</b>				
	<b>2008</b>	<b>2009</b>	<b>2010</b>	<b>2011</b>	<b>2012</b>
<b>Singleton</b>	173	189	170	141	171
<b>Twin</b>	17 (11)	18 (13)	22 (14)	20 (16)	12 (9)
<b>Triplets</b>	0	0	6 (2)	0	0
	<b>Neonatal mortalities, numbers (maternities)</b>				
	<b>2008</b>	<b>2009</b>	<b>2010</b>	<b>2011</b>	<b>2012</b>
<b>Singleton</b>	80	91	82	68	68
<b>Twin</b>	12 (9)	13 (9)	17 (11)	16 (12)	6 (4)
<b>Triplets</b>	1 (1)	0	7 (3)	0	0
	<b>ENN mortalities, numbers (maternities)</b>				
	<b>2008</b>	<b>2009</b>	<b>2010</b>	<b>2011</b>	<b>2012</b>
<b>Singleton</b>	64	77	72	53	58
<b>Twin</b>	11 (7)	11 (8)	14 (11)	15 (11)	6 (4)
<b>Triplets</b>	0	0	6 (2)	0	0
	<b>LNN mortalities, numbers (maternities)</b>				
	<b>2008</b>	<b>2009</b>	<b>2010</b>	<b>2011</b>	<b>2012</b>
<b>Singleton</b>	16	14	10	15	10
<b>Twin</b>	1 (1)	2 (2)	3 (3)	1 (1)	0
<b>Triplets</b>	1 (1)	0	1 (1)	0	0

Source NIMACH

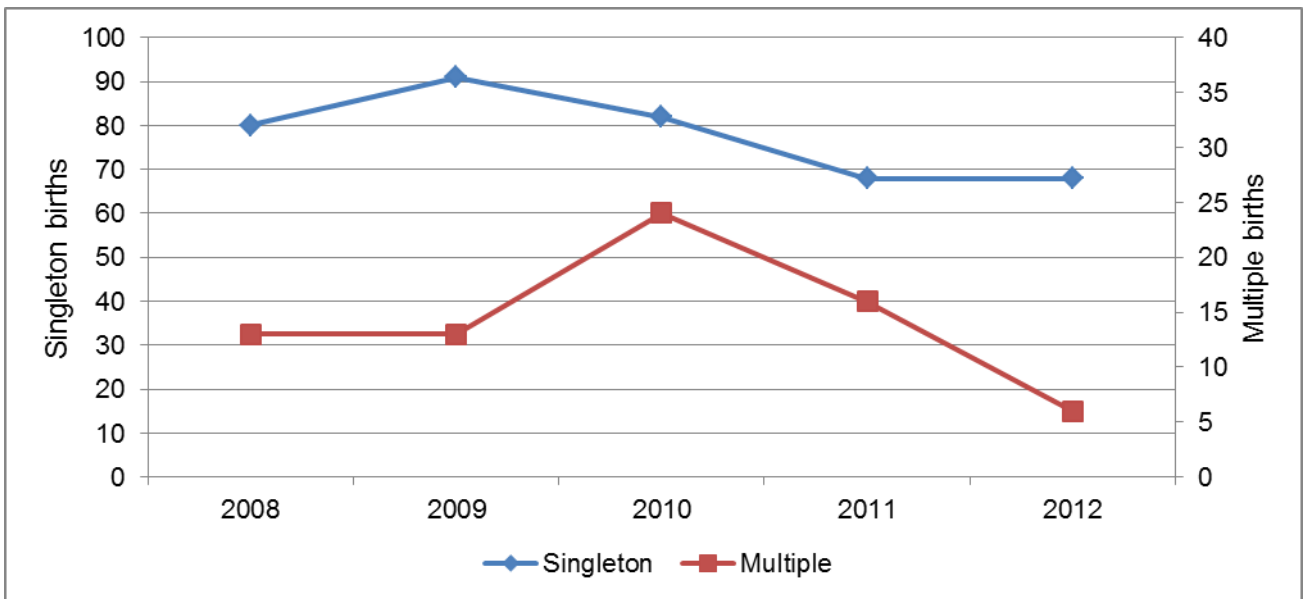
<sup>12</sup> CMACE Perinatal Mortality Report 2009 (published, March 2011) – focus on Singleton and twin births, pg 62 – 66.

**Figure 16: Perinatal mortality by multiplicity: Northern Ireland ~ 2007 – 2012**



Source: NIMACH

**Figure 17 Neonatal mortality by multiplicity: Northern Ireland ~ 2007 ~ 2012**



Source: NIMACH



### 6.3 Cause of stillbirth and neonatal death in multiple pregnancies

There were 12 mortalities in twins during 2012, and although a PM was offered, consent was only given in 4 cases. The cause of death for deaths associated with twin pregnancies in 2012 is provided in table 10.

No deaths in twin pregnancies during 2012 had MCA listed as main cause of death. Of those deaths notified, using the legacy CMACE classification – 10 out of 12 would have been listed as unclassified, with a further 2 deaths listed as being due to specific fetal condition and antepartum or intrapartum haemorrhage.

However, making use of local access to pathology reports, 4 of the unclassified deaths were linked to infection and a further 1 to IUGR, thus leaving 5 unclassified.

**Table 10 Cause of death for mortalities in twins: Northern Ireland: ~ 2012**

	No	Yes	Grand Total
<b>Antepartum or intrapartum haemorrhage</b>	1		1
<b>Infection</b>	4		4
<b>Intra-uterine growth restriction</b>		1	1
<b>Specific fetal conditions</b>	1		1
<b>Unclassified</b>	4	1	5
<b>Grand Total</b>	<b>10</b>	<b>2</b>	<b>12</b>

## 7 Socio-demographic and clinical features

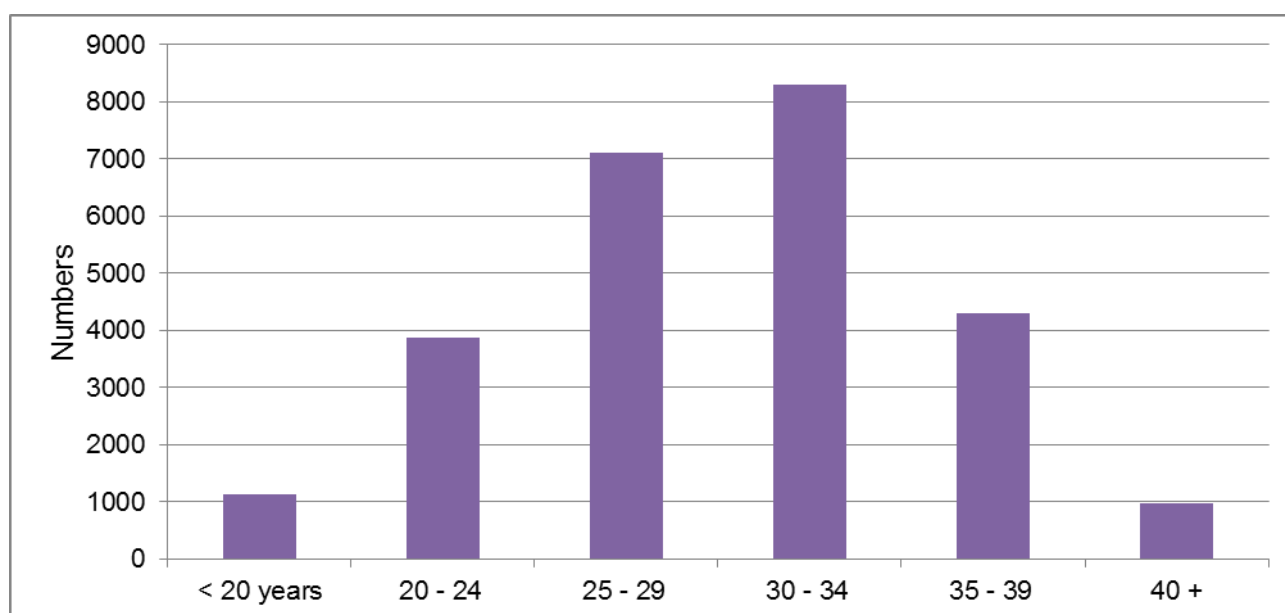
This section provides further information on socio-demographic features associated with notifications of perinatal and neonatal mortality in 2012. Where possible, comment is also provided in the context of the wider maternal population using aggregated data supplied by the NIMATS system.

### 7.1 Characteristics of mothers and pregnancy

#### 7.1.1 Maternal Age

The age of mothers giving birth in 2012 is shown in figure 18. In 2012 over half of all babies born in Northern Ireland had mothers over the age of 30.

**Figure 18 Births to mothers in Northern Ireland by age band: ~ 2012**

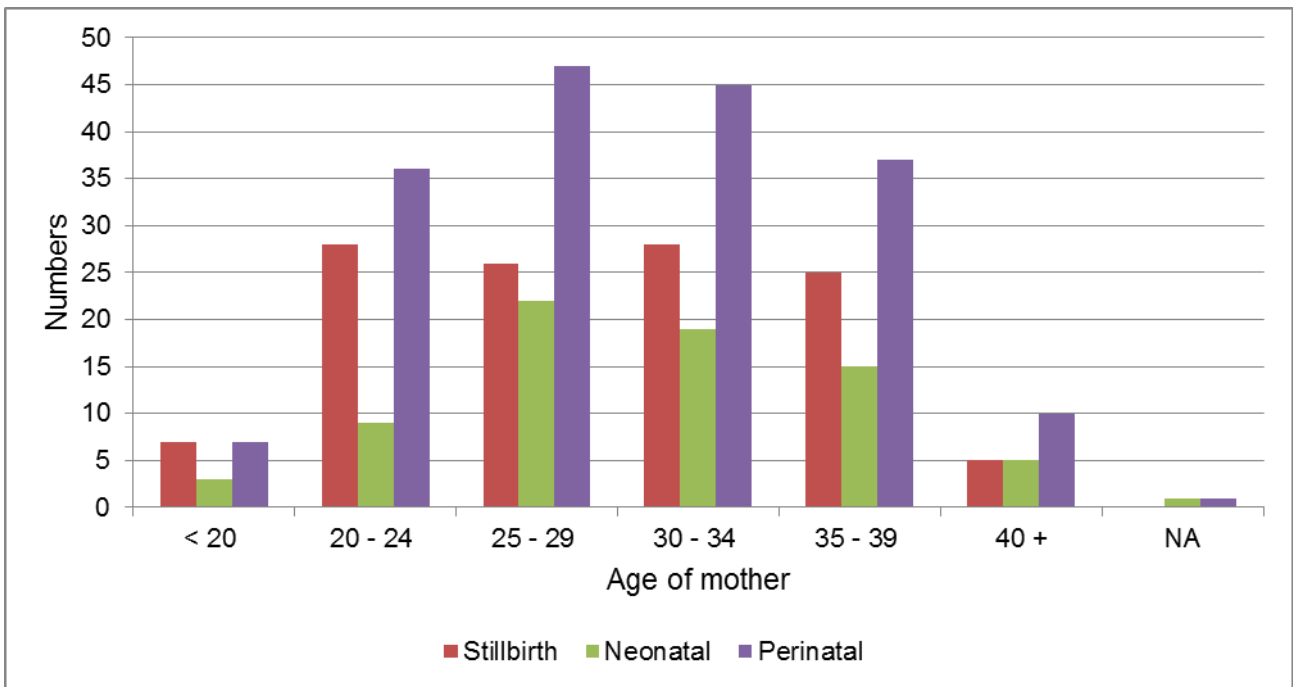


Source: NIMATS

National findings indicate that older mums are more likely to experience an adverse outcome in terms of stillbirth (CMACE Perinatal Mortality Report 2009). More recently the Scottish 2012 perinatal report shows a significantly higher risk of stillbirth in mothers over the age of 40 as compared to mothers aged 25-34.

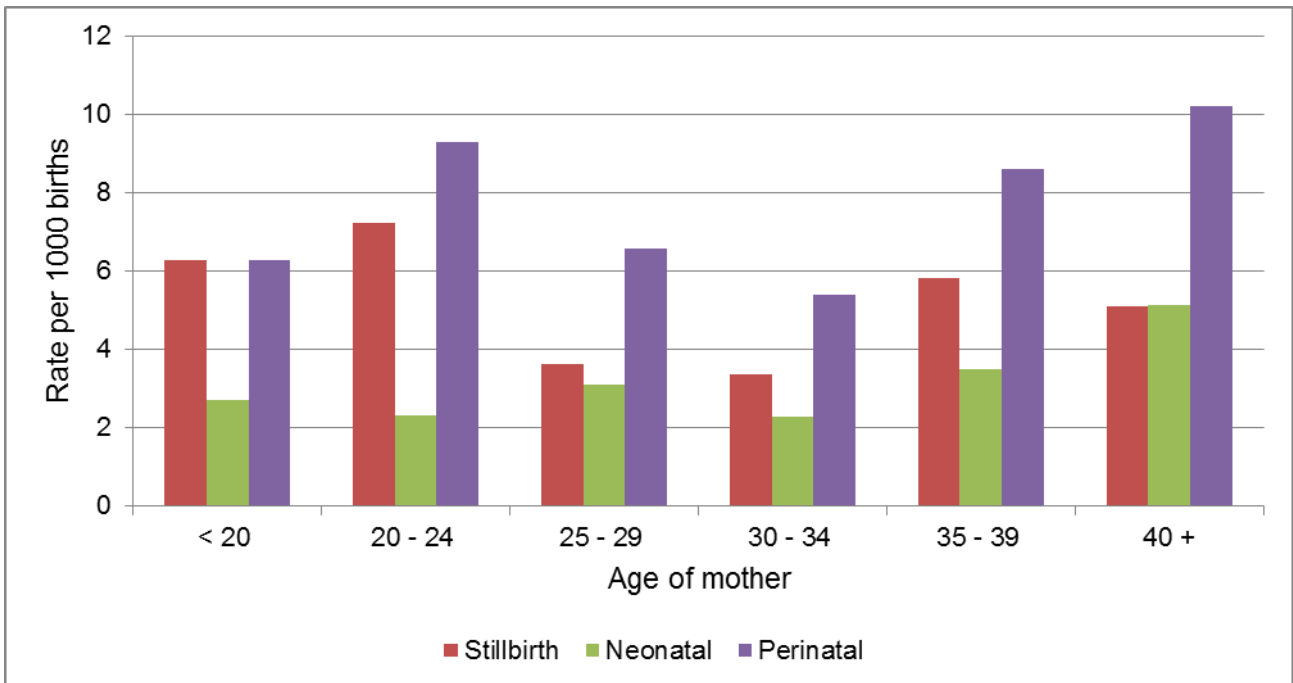
Numbers and rates of stillbirth, perinatal and neonatal death by maternal age-band in 2012 is shown in figures 19 and 20. Whilst the largest proportion of mortalities are found in the 25-35 age bands, those mothers over the age of 40 experience the highest perinatal mortality rate. Stillbirth rates are also higher in the younger age groups under 25 as compared with those aged 25-35.

**Figure 19** Numbers of stillbirths, perinatal and neonatal deaths by age of mother: Northern Ireland ~ 2012



Source: NIMATS

**Figure 20** Rates of stillbirth, Births to mothers in Northern Ireland by age band: ~ 2012



Source: NIMATS / NIMACH

Stillbirth and perinatal per 1000 total births, neonatal per 1000 live births

### 7.1.2 Deprivation

In terms of deprivation, the 2009 CMACE report indicated that mothers in the most deprived areas of England were more likely to have a stillbirth (1.6 more times as likely) or neonatal death (1.6 times as likely) when compared to those living in the least deprived areas.

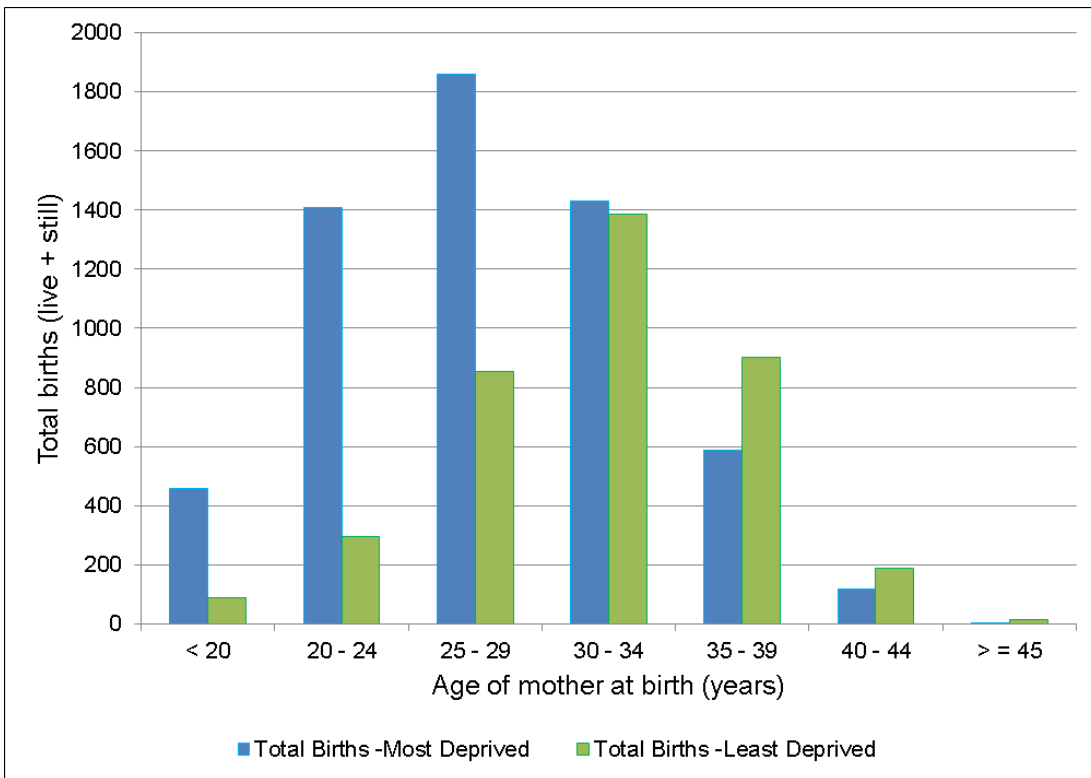
Although the total numbers of births and deaths are relatively small in Northern Ireland, similar trends may be demonstrated in Northern Ireland.

Figures 21 and 22 describe numbers of births and corresponding rates of stillbirth, comparing the most deprived quintile of the maternal population (5866 births) in 2012 with those in the least deprived quintile (3734 births). The proportion of all births by super output area quintile is provided in appendix 4.

Figure 21 reveals that the peak birth rate in the most deprived areas occurs in mothers of 25-29 years old whereas the peak rate of stillbirth is found at the two extremes, less than 20 years, and 40 years or greater (figure 22).

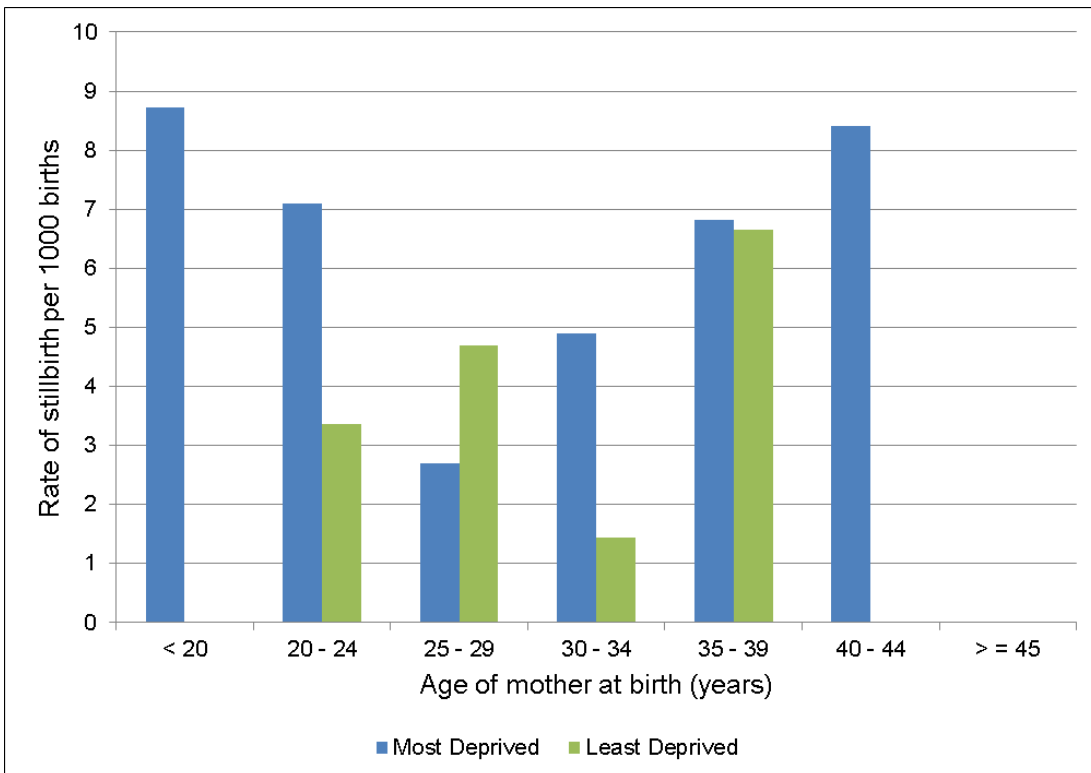
Looking at mothers in the 30 to 34 age band, although this population band has similar numbers of births (figure 21), those in the least deprived quintile experience a much higher stillbirth rate (figure 22). Further work linking these cohorts over a longer period of time to include more cases would help to strengthen these conclusions and provide opportunities to make more accurate comparisons with other UK countries regarding the impact of deprivation on adverse outcomes in pregnancy.

**Figure 21 Total births to mothers from most and least deprived areas by age group: Northern Ireland ~ 2012**



Source NIMATS, Most and least deprived refer to the upper and lower quintile of the Super Output Area

**Figure 22 Rate of stillbirth to mothers from most and least deprived areas by age group: Northern Ireland ~ 2012**



Source NIMATS, Most and least deprived refer to the upper and lower quintile of the Super Output Area

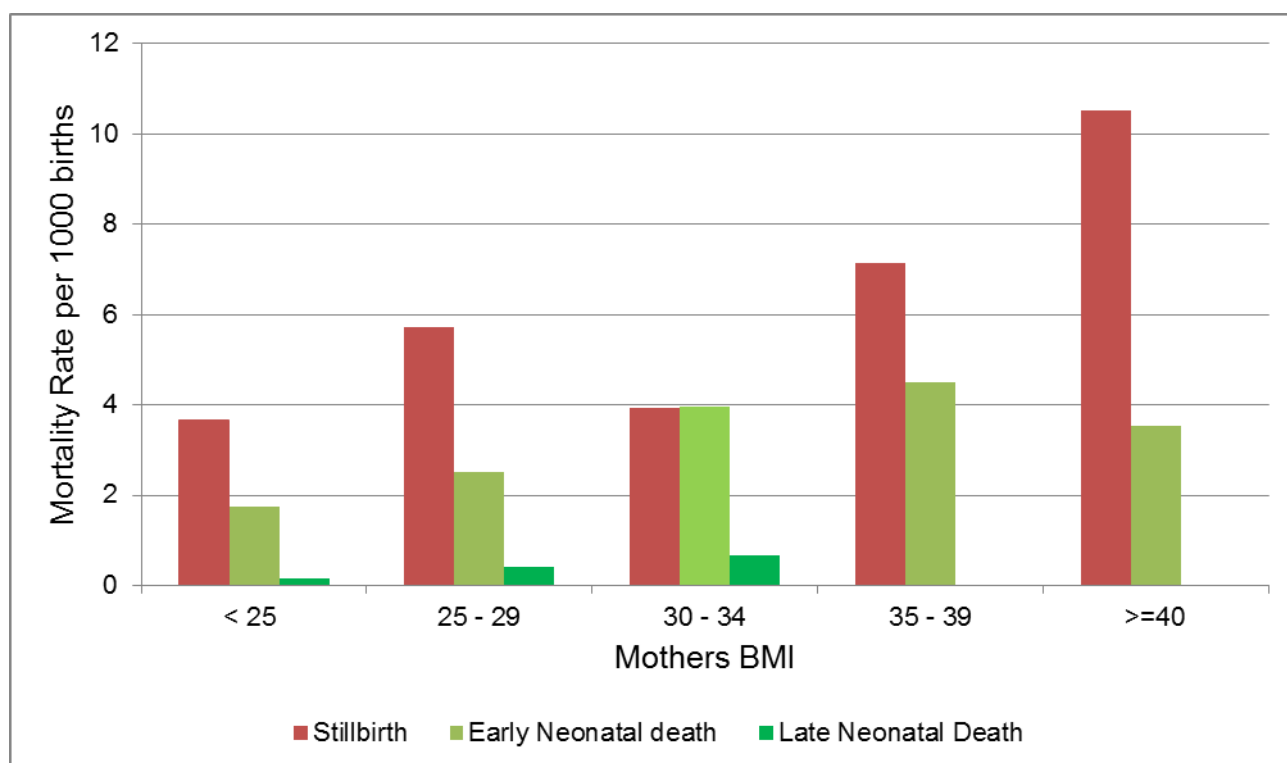
### 7.1.3 BMI at Booking

Obesity as a risk factor for adverse pregnancy outcome is well established with mothers who are significantly overweight experiencing higher incidence for almost all of the pregnancy-related complications and outcomes, even after adjustment for potentially confounding variables.<sup>13</sup> Looking at the total maternal population in 2012, whilst younger mothers are less likely to be obese than their older counterparts, there is much less variation across deprivation quintiles (appendix 5)

In Northern Ireland during 2012, 52% of mothers had a BMI of less than 25 at booking. These mothers were found to have a significantly lower incidence of perinatal mortality than those with a BMI of 25 and greater ( $X^2 P<0.002$ )<sup>14</sup>. Mothers with a BMI of 35 or greater had a significantly higher incidence of perinatal mortality than those with a lower BMI ( $X^2 P<0.01$ ). (figure 23)

In Northern Ireland during 2012, 7% of all women who gave birth had a BMI of 35 or more. This is greater than the 5% reported by CMACE in December 2010 reporting on a 3 year study.

**Figure 23: Mortality rate by mothers BMI at booking: Northern Ireland ~ 2012**



Source: NIMATS and NIMACH

<sup>13</sup> CMACE report on Obesity in Pregnancy, December 2010

<sup>14</sup> Chi Square  $X^2$  is a test which may be used to compare variation between two sets of data. A 'p' value < 0.05 is considered to be significant.

#### 7.1.4 Smoking

Smoking status data on the general maternity population is collected at booking and recorded on the NIMATS system. Smoking rates are self-reported and cannot be guaranteed as an accurate reflection of the proportion of women who smoked during their pregnancy.

Within the general maternal population, smoking is more likely to be reported in younger mothers or those living in areas of higher deprivation (appendix 6).

Table 11 shows that the smoking status has a significant negative impact on mortality rates, smoking mothers having double the perinatal mortality rate of non-smoking mothers.

**Table 11: Reported smoking status and mortality rate: Northern Ireland ~ 2012**

Smoking Status	Still	ENND	LNND	Perinatal
No	3.9 (3.1 - 4.9)	2.1 (1.5 - 2.8)	0.2 (0.1 - 0.5)	6 (5 - 7.1)
YES	7.9 (5.7 - 11.3)	4.2 (2.5 - 6.7)	0.7 (0.1 - 2.1)	12.4 (9.3 - 16.2)

Stillbirth Significant <0.001

ENND Significant <0.02

LNND not significant

Perinatal Significant <0.001

#### 7.1.5. Labour and Type of delivery

Appendix 7 provides a breakdown of stillbirths and neonatal deaths by type of delivery and type of labour. Figures closely mirror those reported by Scotland.

## 7.2 Characteristics of babies

### 7.2.1 Gender

**Table 12: Stillbirth and neonatal death rate by sex of babies: Northern Ireland ~ 2012**

Gender	Numbers (%)	Rates			
	Live Births	Stillbirth <sup>^</sup>	ENND <sup>*</sup>	LNND <sup>*</sup>	Neonatal <sup>*</sup>
Female	12477 (48.8)	4.71	2.48	0.16	2.63
Male	13084 (51.2)	4.49	2.64	0.64	3.27

Source: NIMACH & NIMATS

<sup>^</sup> Rates per 1000 births (live and still)

<sup>\*</sup> Rates per 1000 live births

There is very little difference in the numbers and rate of stillbirth between male and female (table 12). A higher proportion of neonatal deaths were male in line with previous national findings. Across the UK, in 2009 CMACE reported that male babies were 1.2 times more likely to die than female babies.

### 7.2.2 Gestation and birthweight

An exponentially increased risk of death with lower gestational age and lower birthweight is well recognised. Babies born pre-term (<37 weeks) have a much higher risk of mortality than those born at term (37+ weeks).

The numbers of gestation and weight specific mortalities for cases notified to NIMACH during 2012 are provided in tables 13 and 14 graphically represented in figures 24 and 25.

A significant number of neonatal death notifications to NIMACH were in babies born at gestational ages before recognised stage of viability.

Moving forward to 2013, data will only be collected on neonatal deaths with a gestational age of 20 weeks or more (or >400 grams where an accurate estimation of gestation is not available) occurring before 28 completed days of birth.



**Table 13: Numbers of gestation specific stillbirth, perinatal and neonatal mortality (all cases): Northern Ireland ~ 2012**

	Gestation (weeks)						
	<24	24-27	28-30	31-33	34-36	37-41	42+
<b>Stillbirth</b>	N/A	28	18	16	23	34	0
<b>Early Neonatal death</b>	24	7	5	3	6	18	1
<b>Late Neonatal Death</b>	2	1	2	0	0	5	0

Source: NIMACH

**Table 14: Numbers stillbirths and neonatal deaths by birthweight (all cases): Northern Ireland ~ 2012**

Birth Weight	Stillbirth	ENND	LNND	Grand Total
<b>&lt;1000g</b>	35	29	2	<b>66</b>
<b>1000 - 1499g</b>	24	8	2	<b>34</b>
<b>1500 -1999g</b>	15	4	1	<b>20</b>
<b>2000 - 2499g</b>	9	3	1	<b>13</b>
<b>2500 - 2999g</b>	13	10	1	<b>24</b>
<b>3000 - 3499g</b>	13	4	3	<b>20</b>
<b>3500 - 3999g</b>	5	4		<b>9</b>
<b>&gt;=4000g</b>	4	1		<b>5</b>
<b>Grand Total</b>	<b>118</b>	<b>63</b>	<b>10</b>	<b>191</b>

Source: NIMACH

Weight was not recorded in 1 SB and 1 ENND

More than 70% of all perinatal deaths notified in 2012 were in babies with a gestation age of 37 weeks or less. Thirty four (56%) of all early neonatal death notifications in 2012 died within 6 hours of birth.

All babies notified that were born at 22 weeks gestation or earlier died within six hours of delivery.

It is also interesting to note that of the 61 early neonatal deaths, where recorded, 46 (75%) were notified as having absent or ineffective respiratory activity at 5 minutes after birth<sup>15</sup> hence indicating respiratory difficulties at delivery. 22 of these babies went on to be admitted to a neonatal unit.

Just less than half(29) of all early neonatal deaths in 2012 were admitted to a neonatal unit.

<sup>15</sup> Artificial ventilation or apgar of 0 is also recorded as absent/ineffective spontaneous respiratory activity

**Table 15 Number of stillbirths and neonatal deaths as a proportion of total births by weight banding: Northern Ireland ~ 2012**

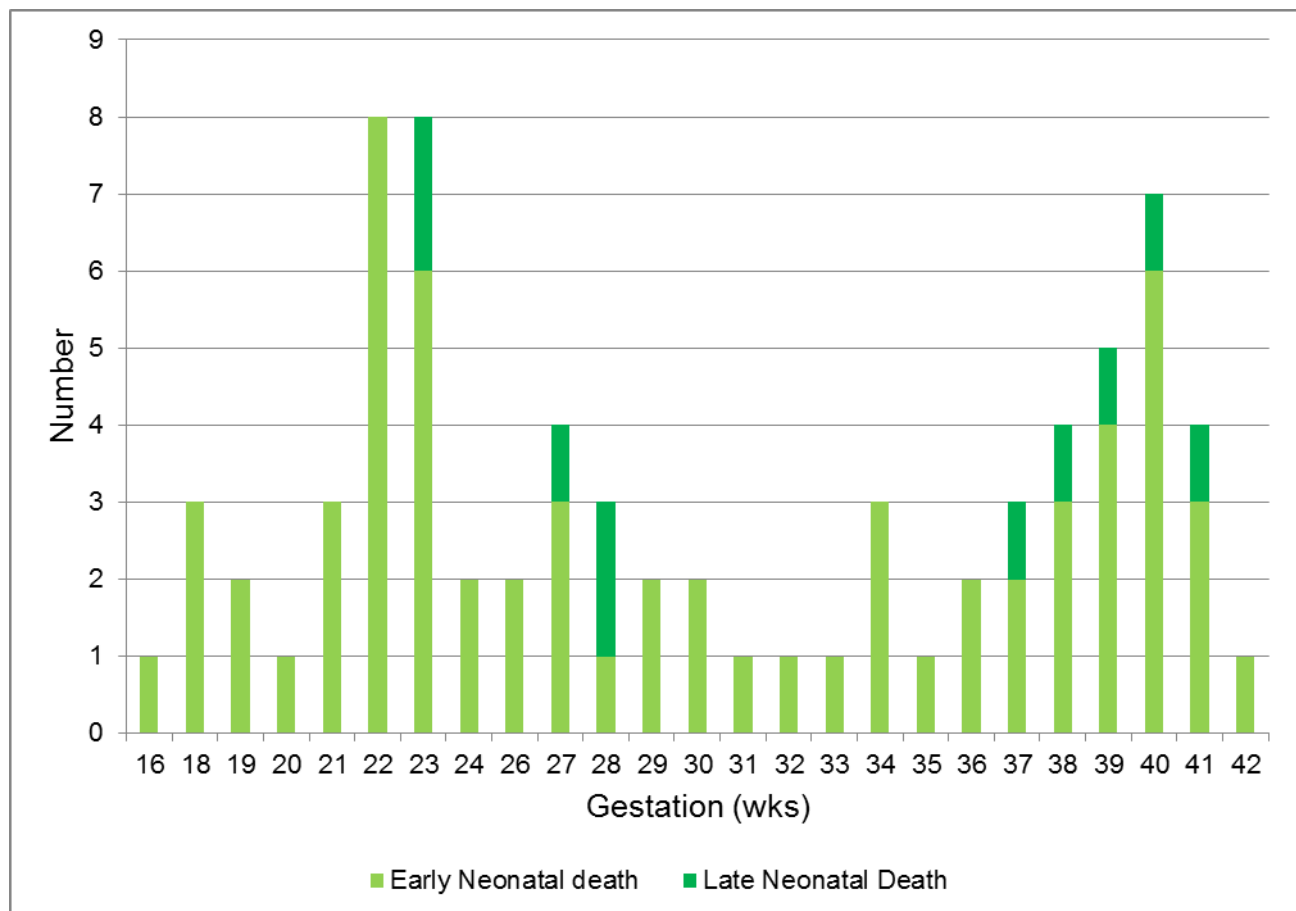
	Total births NI – live + still	Stillbirths (% of total births)	Neonatal deaths
Less than 1500g	286	59 (20.6%)	41 (14.3%)
1500g – 2499g	1243	24 (1.9%)	9 (0.7%)
2500g +	23992	35 (0.15%)	23 (0.1%)
Total	25521	118	73

Source: NIMATS and NIMACH

Weight was not reported in 1 stillbirth, 1 neonatal and 42 live births

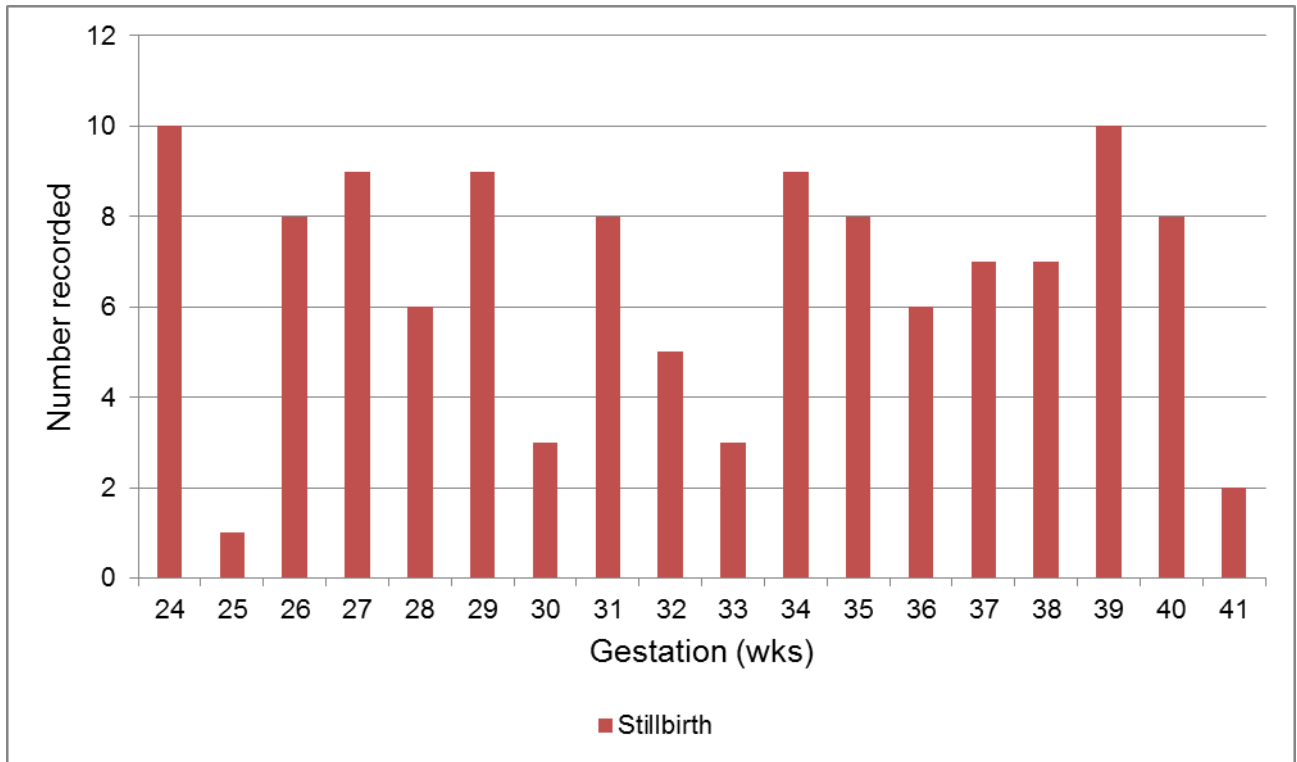
Table 15 shows stillbirths and neonatal deaths as a proportion of total births within weight bandings, illustrating the exponential risk associated with small birthweight.

**Figure 24: Neonatal death by gestation (all cases): Northern Ireland ~ 2012**



Source: NIMACH

**Figure 25: Stillbirth by gestation (all cases): Northern Ireland ~ 2012**



Source: NIMACH

## **8 Cause of Stillbirths and Neonatal deaths**

### **8.1 Importance of post mortem and placental histology in coding cause of death**

As previously indicated, accurate coding is reliant on interpretation of the detail provided on the notification forms along with additional coding tools such as post mortem and placental histology.

The main cause of death, for the most part, is reasonably clear in some areas including; major congenital anomaly, mechanical, ante or intra-partum haemorrhage. However, for other causes such as specific maternal or placental conditions and infection, identification of the main cause of death is often not possible based solely on information received on notification forms, thus increasing reliance on the availability of specialist pathology.

### **8.2 Importance of classification system**

The best classification system to use to describe cause of death has been the subject of debate for many years both nationally and internationally. A number of changes have already been made to the systems used by the confidential enquiry process over the years. This has obvious challenges in terms of comparison of data over time.

The choice of classification system is in large part driven by its ability to identify and quantify preventable deaths, although, it is clear that no one system will provide a complete picture to understand all root and associated causes of perinatal mortality. Moving forward to 2013, MBRRACE will use the CODAC system to assign cause of death within the enquiry programme. This will see a change from the previous system as used by CMACE (adapted Wigglesworth).

### **8.3 Cause of death – Stillbirths 2011-2012**

Table 16 shows cause of death of singleton 2012 notifications to NIMACH using the legacy CMACE classification (all cases) extended to take account of local pathology reporting where available.

As previously reported, placental histology (PH) is available for the majority of stillbirths and as such, cause of death reporting is very much guided by these findings. CMACE reported rates of histology reporting as being fewer than 40% in 2009 across the UK.

In 2012 in Northern Ireland, major congenital anomaly accounted for 21% (25 cases) of notified stillbirths in singleton births using CMACE classification. Using PH as a coding tool, further information was provided which identified infection, not MCA, as the main cause of death in one of these 25 cases. This proportion of deaths assigned to MCA is slightly higher than the 17% recorded in 2011. This figure compares to 6.6% in Wales<sup>16</sup> (singleton and multiple births) and 11% in Scotland<sup>17</sup> (singleton births).

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<sup>16</sup> 2011 All Wales Perinatal Survey, Annual Report (reports on causes for all deaths – singleton and multiple)

<sup>17</sup> Scottish Perinatal and Infant Mortality and Morbidity Report 2010 (Scotland uses a different classification system)

MCA is one of the most important causes of mortality identified in stillbirths, with proportions assigned to this category being similar regardless of the classification system used.

Other causes of mortality are also largely unaffected by variation in interpretation of coding including; antepartum haemorrhage, associated obstetric factors, maternal disorders, hypertensive disorders of pregnancy, specific fetal conditions and mechanical causes.

It should be noted that some variations do exist in the in the reported proportions of stillbirths associated with these causes between NI and other UK countries. This would warrant further investigation to see if any differences were real or due to variance in local approaches to coding.

The categories which are particularly susceptible to interpretation include placental causes and unclassified. Forty-four (37%) of reported stillbirths in 2012 would be deemed unclassified using the CMACE system, however, again drawing on PH reports – 11 of these deaths were noted as being attributed to placental conditions, 1 to IUGR and a further 22 to infection<sup>18</sup>.

### IUGR

Intrauterine Growth Restriction (IUGR) is not identified as a main cause of death in the 2012 data. This reflects CMACE guidance that IUGR is not in itself a cause of death but rather the result of an underlying condition e.g. placental condition or hypertensive disorder of pregnancy. IUGR would therefore only be recorded in the presence of a confirmatory post mortem in legacy reporting.

Research and national reporting show that current methods of surveillance and classification do not identify the fact that many stillborn fetuses have not reached their growth potential. Other UK administrations have announced a focus on IUGR, often placental related, as a cause of stillbirth.

#### *Recommendation:*

*With input from relevant clinicians, NIMACH should work with NIMATS in improving current processes to identify (retrospectively) IUGR for all notifications (stillbirths and neonatal deaths) to facilitate improved reporting of IUGR associated mortality in the context of the wider maternal population.*

*All notifications to NIMACH office should be accompanied by a copy of the completed customised growth chart for the case.*

### Late stillbirths > 37 weeks gestation

Thirty four (30%) stillbirths were reported in 2012 with a gestation greater than 37 weeks. The range of causes of death assigned is provided in table 18. This cohort of stillbirths

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<sup>18</sup> CMACE definition of infection required evidence of maternal pyrexia and 2 sets of positive blood cultures. This level of detail is rarely available via the notification systems.

would warrant further investigation using a number of years data to identify potential patterns and variations in cause of death as compared to those with earlier gestations.

#### **8.4 Cause of death – Neonatal, 2012**

In legacy CMACE reports, neonatal deaths were coded using two systems - the CMACE Maternal /Fetal classification system and the CMACE Neonatal Classification system. While the neonatal system considers cause related to the pathology of the infant, the maternal/fetal system considers the obstetric factors that may have contributed to the death.

##### **8.4.1 Maternal Fetal classification (tables 18 & 19)**

Using the maternal fetal classification, over half of neonatal deaths reported - 35 (30 ENNDs and 5 LNNDs) had MCA listed as the main cause of death.

Antepartum haemorrhage accounted for another 5 deaths and a further 4 were associated with obstetric factors. Twenty two deaths (32%) were unclassified using CMACE classification, however for 19 of these deaths, placental histology reports indicated that infection was the main cause of death with a further one death being assigned to specific placental condition.

##### **8.4.2 Neonatal classification (tables 20 & 21)**

The legacy CMACE neonatal classification system has been used to code cause of death for Northern Ireland 2012 neonatal cases. Information is also included that takes into account local PH reporting.

Using the neonatal classification system, the main causes of death reported in 2012 mainly relate to prematurity and MCA.

Just over half of all neonatal deaths (30 ENNDs and 5 LNNDs) had MCA listed as the main cause of death. Extreme prematurity (8 cases) or respiratory conditions (17 cases) were also listed as main causes.

Twelve per cent of all neonatal deaths reported in 2012 were born prior to 22 weeks (compared with 25% in 2011).

**Table 16 Main Cause of Death (Maternal / Fetal) for Stillbirths in singletons: Northern Ireland ~ 2012**

CMACE coding which has been expanded to reflect local information provided by placental histology & post-mortem, where available, in an attempt to further aid understanding of the high proportion of stillbirths with an unclassified cause of death (NIMACH) →

CMACE ↓

	Infection	Intra-uterine growth restriction	Antepartum or intrapartum haemorrhage	Associated obstetric factors	Major congenital anomaly	Maternal disorder	No antecedent or associated obstetric factors	Mechanical	Pre-eclampsia toxemia/Hypertensive disorders of pregnancy	Specific fetal conditions	Specific placental conditions	Unclassified	Grand Total
<b>Antepartum or intrapartum haemorrhage</b>			10										10
<b>Associated obstetric factors</b>				1									1
<b>Major congenital anomaly</b>	1				24								25
<b>Maternal disorder</b>						3							3
<b>Mechanical</b>								10					10
<b>No antecedent or associated obstetric factors</b>									2				2
<b>Pre-eclampsia toxemia/Hypertensive disorders of pregnancy</b>										8			8
<b>Specific fetal conditions</b>											3		3
<b>Specific placental conditions</b>												7	7
<b>Unclassified</b>	22	1										11	10
<b>Grand Total</b>	23	1	10	1	24	3	10	2	8	3	18	10	113

- Highlighted boxes show values where coding is consistent between the two systems. Values outside these boxes are where additional information has been used in the Expanded CMACE (NIMACH)
- Legacy CMACE coding based on adapted Wigglesworth classification

**Table 17 Main Cause of Death (Maternal / Fetal) for Stillbirths of gestation 37weeks or greater: Northern Ireland ~ 2012**

	Stillbirth >=37wks
Associated obstetric factors	1
Infection	10
Intra-uterine growth restriction	1
Major congenital anomaly	4
Maternal disorder	1
Mechanical	4
Pre-eclampsia toxemia/Hypertensive disorders of pregnancy	2
Specific fetal conditions	2
Specific placental conditions	4
Unclassified	3
Antepartum or intrapartum haemorrhage	2
<b>Grand Total</b>	<b>34</b>

Source NIMACH

Expanded CMACE coding (NIMACH) has been used



**Table 18 Cause of Death (Maternal / Fetal) for Early Neonatal Death in singletons: Northern Ireland ~ 2012**

CMACE coding which has been expanded to reflect local information provided by placental histology & post-mortem, where available, in an attempt to further aid understanding of the high proportion of ENND with an unclassified cause of death (NIMACH) →

CMACE ↓

	Infection	Antepartum or intrapartum haemorrhage	Associated obstetric factors	Major congenital anomaly	Specific placental conditions	Unclassified	Grand Total
<b>Antepartum or intrapartum haemorrhage</b>		4					4
<b>Associated obstetric factors</b>			4				4
<b>Major congenital anomaly</b>	1			29			30
<b>Specific placental conditions</b>					1		1
<b>Unclassified</b>	16				1	2	19
<b>Grand Total</b>	17	4	4	29	2	2	58

- Highlighted boxes show values where coding is consistent between the two systems. Values outside these boxes are where additional information has been used in the Expanded CMACE (NIMACH)
- Legacy CMACE coding based on adapted Wigglesworth classification

**Table 19 Cause of Death (Maternal / Fetal) for Late Neonatal Death in singletons: Northern Ireland ~ 2012**

CMACE coding which has been expanded to reflect local information provided by placental histology & post-mortem, where available, in an attempt to further aid understanding of the high proportion of LNND with an unclassified cause of death (NIMACH) →

CMACE ↓

	<i>Infection</i>	<i>Antepartum or intrapartum haemorrhage</i>	<i>Major congenital anomaly</i>	<i>No antecedent or associated obstetric factors</i>	<i>Grand Total</i>
<b>Antepartum or intrapartum haemorrhage</b>		1			1
<b>Major congenital anomaly</b>			5		5
<b>No antecedent or associated obstetric factors</b>				1	1
<b>Unclassified</b>	3				3
<b>Grand Total</b>	3	1	5	1	10

- Highlighted boxes show values where coding is consistent between the two systems. Values outside these boxes are where additional information has been used in the Expanded CMACE (NIMACH)
- Legacy CMACE coding based on adapted Wigglesworth classification

**Table 20 Cause of Death (Neonatal) for Early Neonatal Death in singletons: Northern Ireland ~ 2012**

CMACE coding which has been expanded to reflect local information provided by placental histology & post-mortem, where available, in an attempt to further aid understanding of the high proportion of ENND with an unclassified cause of death (NIMACH)

CMACE ↓

→

	Extreme prematurity (<22 weeks)	Infection	Major congenital anomaly	Neurological disorder	Other specific causes	Respiratory disorders	Unclassified	Grand Total
Extreme prematurity (<22 weeks)	8							8
Infection		2						2
Major congenital anomaly			30					30
Neurological disorder				1				1
Other specific causes					1			1
Respiratory disorders		1				13		14
Unclassified		1					1	2
Grand Total	8	4	30	1	1	13	1	58

- Highlighted boxes show values where coding is consistent between the two systems. Values outside these boxes are where additional information has been used in the Expanded CMACE (NIMACH)
- Legacy CMACE coding based on adapted Wigglesworth classification

**Table 21 Cause of Death (Neonatal) for Late Neonatal Death in singletons: Northern Ireland ~ 2012**

CMACE coding which has been expanded to reflect local information provided by placental histology & post-mortem, where available, in an attempt to further aid understanding of the high proportion of LNND with an unclassified cause of death (NIMACH)

CMACE ↓

→

	Infection	Major congenital anomaly	Respiratory disorders	Sudden unexpected deaths	Grand Total
Infection	1				1
Major congenital anomaly		5			5
Respiratory disorders			3		3
Sudden unexpected deaths				1	1
Grand Total	1	5	3	1	10

- Highlighted boxes show values where coding is consistent between the two systems. Values outside these boxes are where additional information has been used in the Expanded CMACE (NIMACH)
- Legacy CMACE coding based on adapted Wigglesworth classification

## Appendices

### Appendix 1

#### CMACE Classification

<b>Maternal and fetal classification</b>	
<b>Major congenital anomaly</b>	
Central nervous system	1.1
Cardiovascular system	1.2
Respiratory system	1.3
Gastro-intestinal system	1.4
Urinary tract	1.5
Musculo-skeletal anomalies	1.6
Multiple anomalies	1.7
Chromosomal disorders	1.8
Metabolic disorders	1.9
Other, specify	1.10
Rhesus	2.1
Other, specify	2.2
<b>Pre-eclampsia toxemia/Hypertensive disorders of pregnancy</b>	
Pregnancy induced hypertension	2.3
Pre-eclampsia toxemia	2.4
Gestational hypertension	3.1
HELLP syndrome	3.2
Eclampsia	3.3
<b>Antepartum or intrapartum haemorrhage</b>	
Praevia	4.1
Abruption	4.2
Uncertain	4.3
<b>Mechanical</b>	
Prolapse cord	5.1
Cord around neck	5.2
Other cord entanglement or knot	5.3
Uterine rupture before labour	5.4
Uterine rupture during labour	5.5
Breech presentation	5.6
Face presentation	5.7
Compound presentation	5.8
Other, specify	5.9

<b>Maternal disorder</b>	
Pre-existing hypertensive disease	6.1
Diabetes	6.2
Endocrine diseases	6.3
Primary thrombophilias/Thrombophilias	6.4
Cholestasis	6.5
Drug misuse	6.6
Uterine anomalies	6.7
Other, specify	6.8
<b>Infection</b>	
Bacterial	7.1
Syphilis	7.2
Viral diseases	7.3
Protozoal	7.4
Other, specify	7.5
Chorioamnionitis	7.6
Other, specify	7.7
Specify organism	7.8
<b>Specific fetal conditions</b>	
Twin-twin transfusion	8.1
Feto-maternal haemorrhage	8.2
Non immune hydrops	8.3
Other, specify	8.4
Iso-immunisation	8.5
<b>Specific placental conditions</b>	
Placental infarction	9.1
Massive perivillous fibrin deposition	9.2
Vasa praevia	9.3
Velamentous insertion	9.4
Other, specify	9.5
<b>Intrauterine growth restriction</b>	10

<b>Associated obstetric factors</b>	
Intracranial haemorrhage	11.1
Birth injury to scalp	11.2
Other birth trauma, specify	11.3
Intrapartum asphyxia	11.4
Polyhydramnios	11.5
Oligohydramnios	11.6
Premature rupture of membranes	11.7
Other, specify	11.8
Spontaneous premature labour	11.9
<b>No antecedent or associated obstetric factors</b>	12
<b>Unclassified</b>	13

<b>Neonatal classification</b>	
<b>Major congenital anomaly</b>	
Central nervous system	1.1
Cardiovascular system	1.2
Respiratory system	1.3
Gastro-intestinal system	1.4
Urinary tract	1.5
Musculo-skeletal anomalies	1.6
Multiple anomalies	1.7
Chromosomal disorders	1.8
Metabolic disorders	1.9
Other, specify	1.10
<b>Extreme prematurity (&lt;22 weeks)</b>	2
<b>Respiratory disorders</b>	

Severe pulmonary immaturity	3.1
Surfactant deficiency lung disease	3.2
Pulmonary hypoplasia	3.3
Meconium aspiration syndrome	3.4
Primary persistent pulmonary hypertension	3.5
Chronic lung disease/bronchopulmonary dysplasia	3.6
Other, specify	3.7
<b>Gastro-intestinal disease</b>	
Necrotising enterocolitis	4.1
Other, specify	4.2
<b>Neurological disorder</b>	
Hypoxic-ischaemic encephalopathy	5.1
Intraventricular/periventricular haemorrhage	5.2
Other, specify	5.3
<b>Infection</b>	
Generalised (sepsis)	6.1
Pneumonia	6.2
Meningitis	6.3
Other, specify	6.4
<b>Injury/trauma</b>	
	7
<b>Other specific causes</b>	
Specific conditions	8.1
Malignancies/tumours	8.2
<b>Sudden unexpected deaths</b>	
SIDS	9.1
Infant deaths - cause unascertained	9.2
<b>Unclassified</b>	
	10



## Appendix 2

	2003*	2004*	2005*	2006*	2007*	2008*	2009*	2010^	2011^	2012^
<b>Numbers</b>										
<b>Total births (live+still)</b>	21759	22436	22424	23361	24558	25746	25029	25992	25688	25682
<b>Total live births</b>	21648	22318	22328	23272	24451	25631	24910	25886	25595	25563
<b>Stillbirth</b>	111	118	96	89	107	115	119	106	93	119
<b>Early neonatal death</b>	64	72	88	71	71	75	88	92	68	64
<b>Perinatal death</b>	175	190	184	160	178	190	207	198	161	183
<b>Late Neonatal Death</b>	14	9	20	15	11	18	15	14	16	10
<b>Neonatal death</b>	78	81	108	86	82	92	103	106	84	74
<b>Late fetal loss</b>	47	25	23	26	29	28	18	27	26	33
	<b>2003</b>	<b>2004</b>	<b>2005</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>	<b>2009</b>	<b>2010</b>	<b>2011</b>	<b>2012</b>
<b>Rates</b>										
<b>Total births (live+still)</b>	21759	22436	22424	23361	24558	25746	25029	25992	25688	25682
<b>Stillbirth<sup>a</sup></b>	5.10	5.26	4.28	3.81	4.36	4.47	4.75	4.08	3.62	4.63
<b>Early neonatal death<sup>b</sup></b>	2.96	3.23	3.94	3.05	2.90	2.93	3.53	3.55	2.66	2.50
<b>Perinatal mortality<sup>a</sup></b>	8.04	8.47	8.21	6.85	7.25	7.38	8.27	7.62	6.27	7.13
<b>Late Neonatal Death<sup>b</sup></b>	0.65	0.40	0.90	0.64	0.45	0.70	0.60	0.54	0.63	0.39
<b>Neonatal mortality<sup>b</sup></b>	3.60	3.63	4.84	3.70	3.35	3.59	4.13	4.09	3.28	2.89

\* Source: NISRA / NIMACH

^ Source: CHS / NIMATS / NIMACH

a – rate per 1000 total births (live and still)

b – rate per 1000 live births

## Appendix 3

Stillbirth and perinatal mortality rates (crude and adjusted) by Trust: Northern Ireland ~ 2012

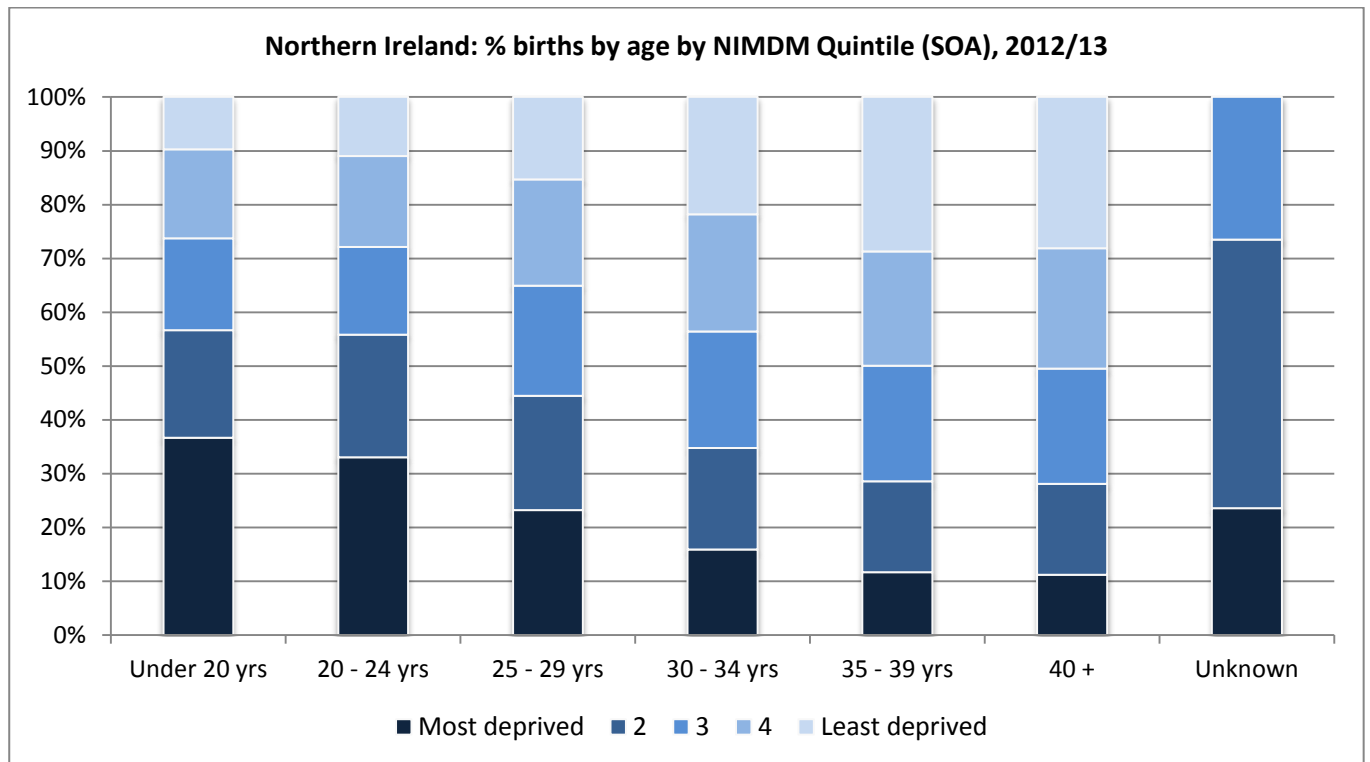
	Crude		Adjusted	
	Stillbirth	Perinatal	Stillbirth	Perinatal
Belfast Trust	4.6 [3.1-6.5]	10.0 [7.8-12.7]	3.1 [1.9-4.7]	5.0 [3.5-7.0]
Northern trust	4.9 [3.0-7.5]	6.3 [4.1-9.3]	4.1 [2.4-6.6]	5.6 [3.5-8.4]
SE Trust	5.0 [3.1-7.5]	7.0 [4.7-9.9]	4.5 [2.8-7.0]	5.6 [3.6-8.3]
Southern Trust	4.0 [2.6-5.9]	4.7 [3.1-6.7]	2.9 [1.7-4.6]	3.2 [2.0-5.0]
Western Trust	5.1 [3.1-7.8]	7.0 [4.7-10.1]	4.1 [2.4-6.6]	4.6 [2.8-7.2]
<b>All NI</b>	<b>4.6 [3.8-5.5]</b>	<b>7.1 [6.1-8.2]</b>	<b>3.5 [2.9-4.4]</b>	<b>4.5 [3.7-5.4]</b>

Source NIMATS and NIMACH

Adjustment removes those with birthweight < 500g, gestation <22 weeks, and MCA as main cause of death

## Appendix 4

### Percentage total births (live & still) by age per Super Output Area Quintile, 2012/13

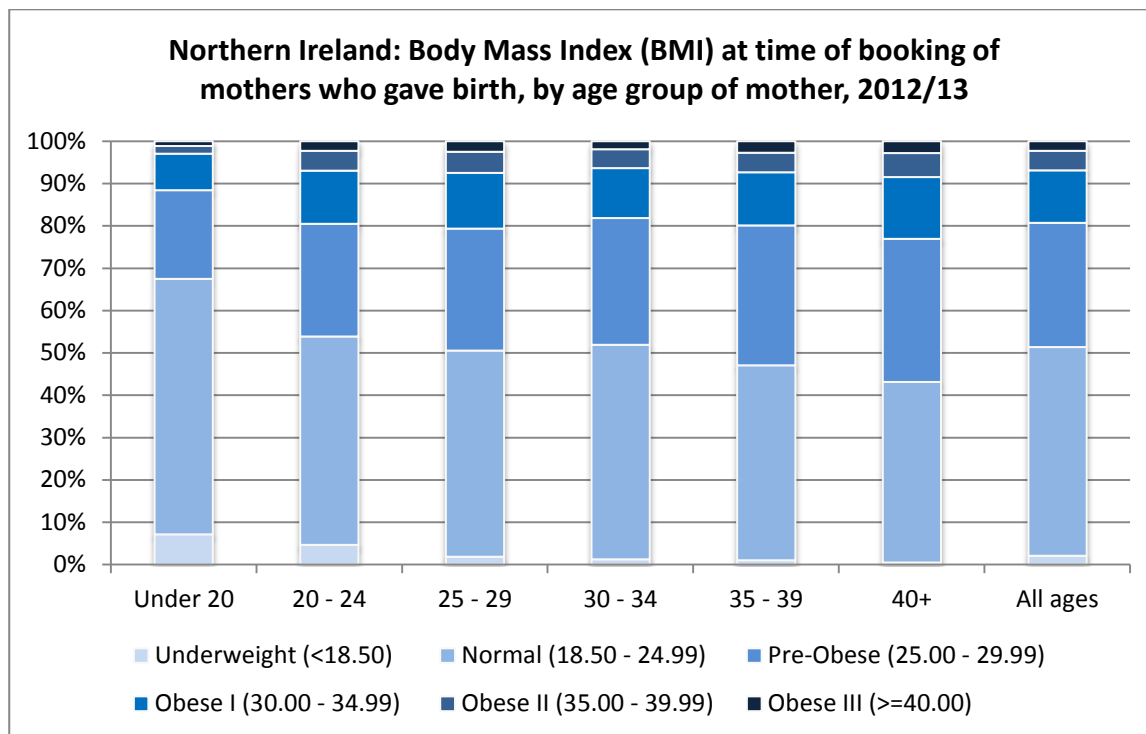


Source: Child Health System & NISRA, NI Multiple Deprivation Measure 2010 ([http://www.nisra.gov.uk/deprivation/nimdm\\_2010.htm](http://www.nisra.gov.uk/deprivation/nimdm_2010.htm))

Provided by Health Intelligence Unit, PHA

## Appendix 5

### Body Mass Index (BMI), at time of booking, of mothers who gave birth in Northern Ireland by age group of mother, 2012/13

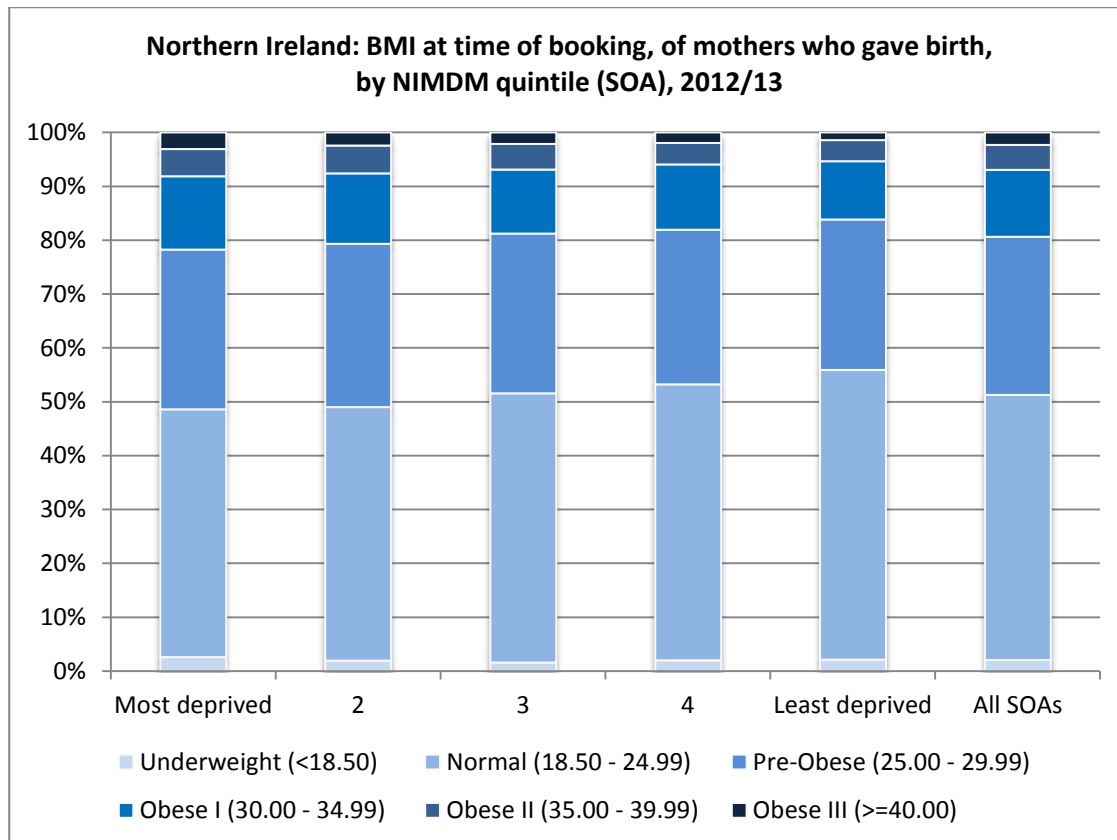


Source: NIMATS

2012/13: 599 births where mother's BMI was not recorded

2012/13: 7 births where age of mother is not known

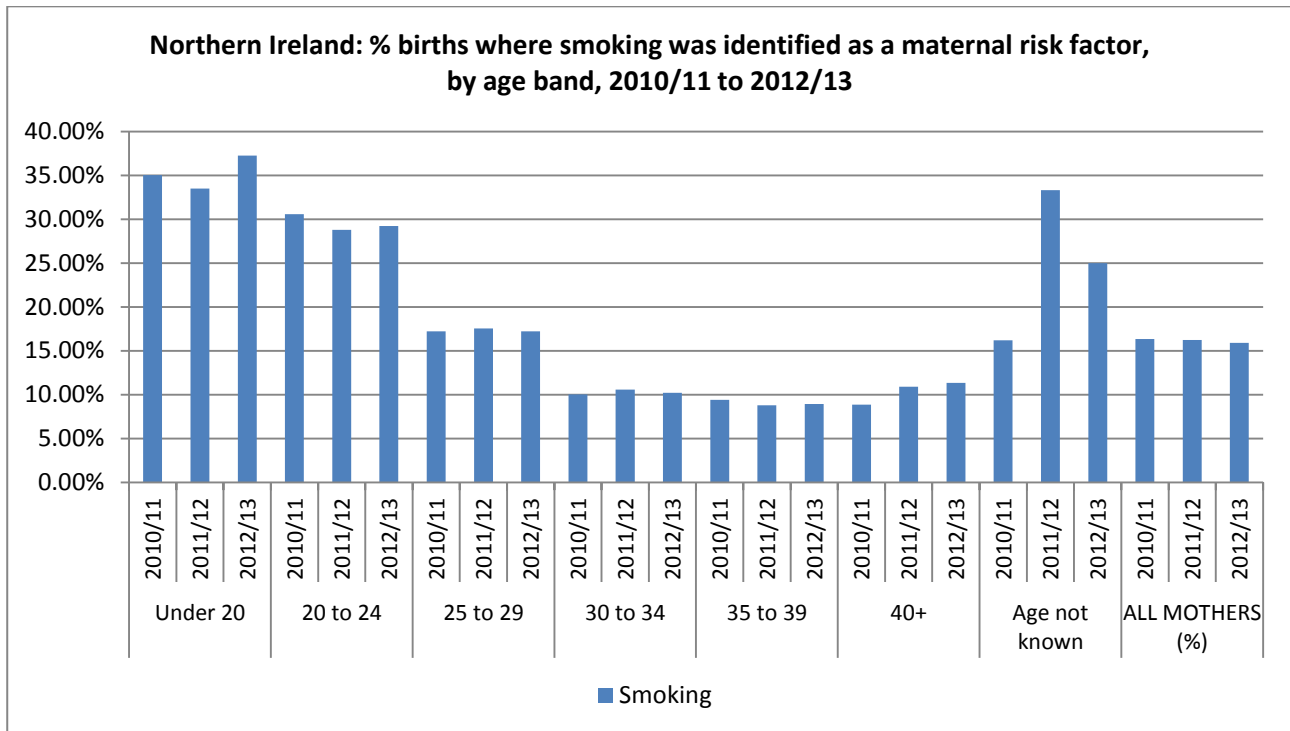
**Body Mass Index (BMI), at time of booking, of mothers who gave birth in Northern Ireland by NI Multiple Deprivation Measure quintile (SOA), 2012/13**



Source: NIMATS & NISRA, NI Multiple Deprivation Measure 2010 ([http://www.nisra.gov.uk/deprivation/nimdm\\_2010.htm](http://www.nisra.gov.uk/deprivation/nimdm_2010.htm))  
 2012/13: 599 births where mother's BMI was not recorded  
 2012/13: 22 births where postcode was not recognised and so could not be allocated to SOA and 279 births where postcode was blank = 301 births Provided by Health Intelligence Unit, PHA

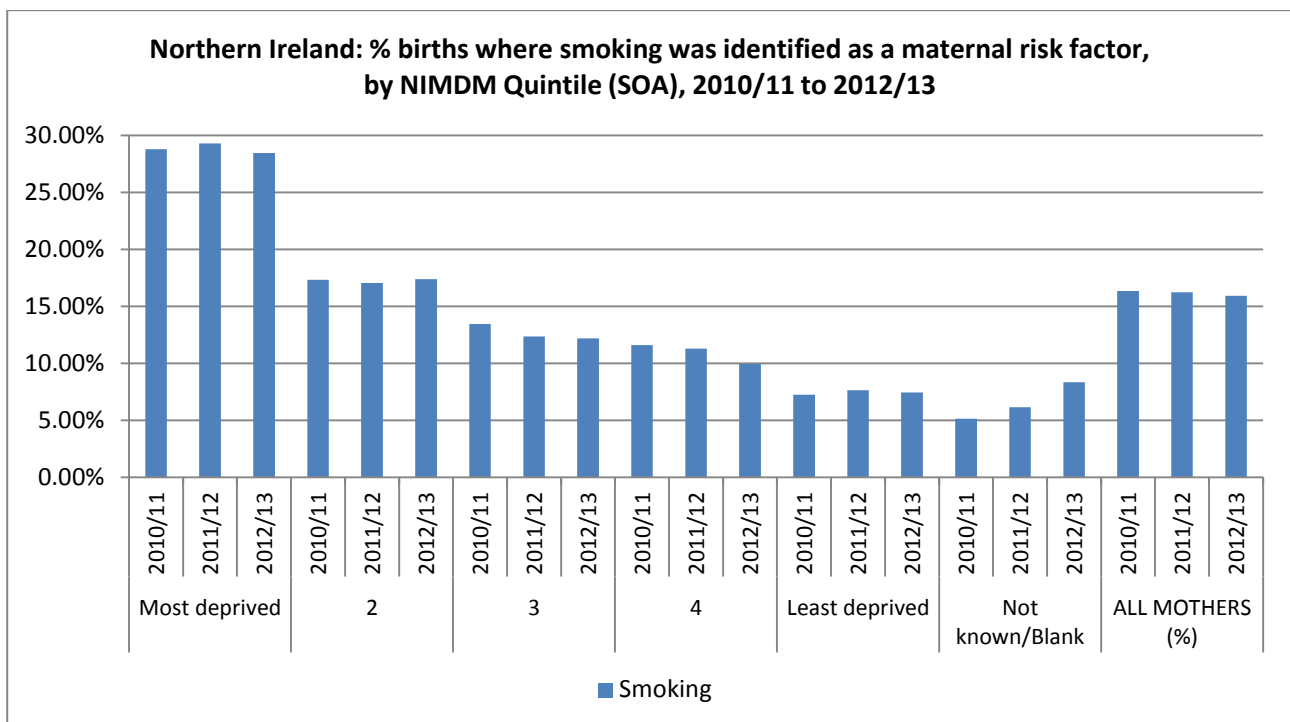
## Appendix 6

### % births where smoking was identified as a maternal risk factor, by age band, 2010/11 to 2012/13



Source: Child Health System, Provided by Health Intelligence Unit, PHA

### % births where smoking was identified as a maternal risk factor, by NIMDM quintile (SOA), 2010/11 to 2012/13

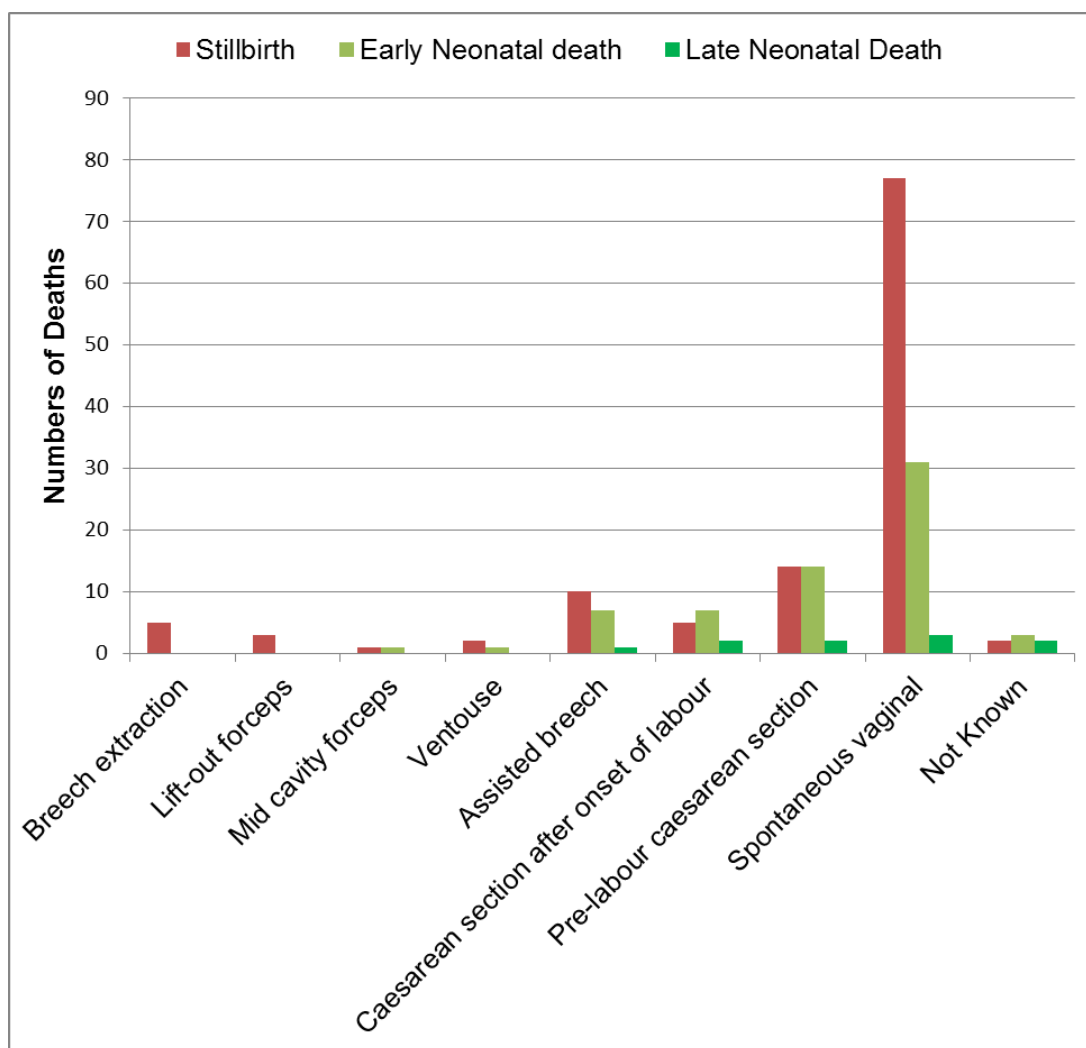


Source: Child Health System & NISRA, NI Multiple Deprivation Measure 2010 ([http://www.nisra.gov.uk/deprivation/nimdm\\_2010.htm](http://www.nisra.gov.uk/deprivation/nimdm_2010.htm))  
 Provided by Health Intelligence Unit, PHA

## Appendix 7

### Stillbirth and Neonatal Deaths by Type of Delivery: Northern Ireland ~ 2012

	Stillbirth	ENND	LNND	Northern Ireland
Normal - spontaneous vertex	64.7%	48.4%	30.0%	57.0%
Pre-labour caesarean section	11.8%	21.9%	20.0%	15.3%
Labour caesarean section	4.2%	10.9%	20.0%	14.5%
Other	19.3%	18.8%	30.0%	13.2%



### Percentage of Stillbirth and ENN and LNN by type of labour: Northern Ireland ~ 2012

	Spontaneous	Induced	Never in labour	Not Known
Stillbirth (119)	16.8%	69.7%	11.8%	1.7%
ENND (64)	54.7%	21.9%	21.9%	1.6%
LNND (10)	50.0%	30.0%	20.0%	0.0%

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