agenda

Title of Meeting	124th Meeting of the Public Health Agency Board
Date	20 August 2020 at 1.30pm
Venue	Fifth Floor Meeting Room, 12/22 Linenhall Street, Belfast

standing items

1 1.30	Welcome and apologies		Chair
2 1.30	Declaration of Interests		Chair
3 1.30	Minutes of Previous Meetings • Minutes of Meeting held on 18 June 2020 • Minutes of Special Meeting held on 7 July 2020		Chair
4 1.35	Matters Arising		Chair
5 1.40	Chair's Business		Chair
6 1.45	Chief Executive's Report		Chief Executive
7 1.55	Finance Report	**PHA/01/08/20**	Mr Cummings

items for approval

8 2.05	PHA Rural Needs Act Annual Report 2019/20	**PHA/02/08/20**	Mr McClean

items for noting

9 2.10	Working Together to Reduce Stillbirth	**PHA/03/08/20**	Mr Morton
10 2.25	Maternity Strategy Implementation Group End of Strategy Report and Recommendations	**PHA/04/08/20**	Mr Morton

11 2.40	Re-establishment of Population Screening Programmes	**PHA/05/08/20**	Professor van Woerden
12 2.50	Proposal for COVID-19 Survey in People Living in Homelessness Hostels	**PHA/06/08/20**	Professor van Woerden
13 3.00	Update on HSCQI Network (Hub and Regional QI Leads Group)	**PHA/07/08/20**	Dr Keaney

closing items

14 Any Other Business
3.10

15 Details of next meeting:

Thursday 17 September 2020 at 1.30pm

Fifth Floor Meeting Room, 12/22 Linenhall Street, Belfast, BT2 8BS

HSC Public Health Agency

minutes

Title of Meeting	123rd Meeting of the Public Health Agency Board
Date	18 June 2020 at 1.30pm
Venue	Fifth Floor Meeting Room, 12/22 Linenhall Street, Belfast

Present

Mr Andrew Dougal	-	Chair
Mrs Olive MacLeod	-	Interim Chief Executive
Mr Edmond McClean	-	Interim Deputy Chief Executive / Director of Operations
Professor Hugo van Woerden	-	Director of Public Health
Alderman William Ashe	-	Non-Executive Director (*via video link*)
Mr John-Patrick Clayton	-	Non-Executive Director (*via video link*)
Ms Deepa Mann-Kler	-	Non-Executive Director
Alderman Paul Porter	-	Non-Executive Director (*via video link*)
Professor Nichola Rooney	-	Non-Executive Director
Mr Joseph Stewart	-	Non-Executive Director

In Attendance

Mr Paul Cummings	-	Director of Finance, HSCB
Ms Marie Roulston	-	Director of Social Care and Children, HSCB *(via video link)*
Ms Jenny Redman	-	Boardroom Apprentice *(via telephone link)*
Mr Robert Graham	-	Secretariat

Apologies

Mr Rodney Morton	-	Director of Nursing and Allied Health Professionals
Dr Aideen Keaney	-	Director of Quality Improvement

60/20 **Item 1 – Welcome and Apologies**

60/20.1 The Chair welcomed everyone to the meeting. Apologies were noted from Rodney Morton and Dr Aideen Keaney.

61/20 **Item 2 – Declaration of Interests**

61/20.1 The Chair asked if anyone had interests to declare relevant to any items on the agenda. No interests were declared.

62/20 **Item 3 – Minutes of previous meeting held on 21 May 2020**

62/20.1 The minutes of the Board meeting held on 21 May 2020, were approved as an accurate record of that meeting, subject to an amendment from Mr Clayton in paragraph 57/20.28. The section, "passed on concerns about the failure of certain types of respirator masks. He said that data from Trusts in this are unclear" should be replaced with, “passed on concerns about high failure rates in fit testing for certain types of respirator masks and that whilst not all Trusts had provided data on this, the data which were available indicated that this was in issue disproportionately affecting women.”

63/20 **Item 4 – Matters Arising**

63/20.1 Ms Mann-Kler noted that it has been four weeks since the last Board meeting when the Board had begun to meet on a fortnightly basis and if a decision had been made to stand down fortnightly meetings. Mr Stewart supported these views and added that consideration had also been given to having more frequent meetings of the Governance and Audit Committee, but he was mindful of Directors’ time. The Chair sought to make a differentiation between a formal meeting and a briefing session. Ms Mann-Kler said that we are now in a new phase and the role of the Board is to provide scrutiny and challenge.

63/20.2 Mr Cummings advised members that the establishment of the new Programme Board chaired by the Permanent Secretary places extra demands on the Chief Executive as it is meeting on a weekly basis.

63/20.3 Mr McClean said that this new Board has only begun to meet, but all members of the PHA Board have to consider the implications of its establishment, because ultimately the PHA Board is responsible for the strategic direction of the PHA. He added that the present focus of this new group is on services, not only in Trusts but in the community, and that is where PHA has a role. He said that we may be coming out of the first phase of COVID-19, but that COVID-19 remains with us.

64/20 **Item 5 – Chair’s Business**

64/20.1 The Chair expressed concern about a recent statement that up to 30% of COVID-19 tests can produce false negatives. He said that this would need to be evidenced by hard data. He added that the public may need further guidance on how to access a test. The Interim Chief Executive said that there is a workstream specific to testing.

64/20.2 The Chair said that for the first time he had seen data showing the number of deaths per 100,000 in each Council area in Northern Ireland and while he was not surprised that Belfast showed the highest, he felt that the figure for Derry and Strabane would have been higher. Professor van Woerden noted that a part of that Council area is rural where the cases are generally lower. The Chair advised that he had

begun to undertake a comparison between countries and noted a significant difference in the death rate between Northern Ireland and Scotland which he felt may be worth investigating. Professor van Woerden said that if there was such a difference it would be useful to look at this and unpick the data.

65/20 **Item 6 – Chief Executive's Business**

65/20.1 The Interim Chief Executive informed members that PHA staff are continuing to work very hard in dealing with all of the demands being placed on them, but that Directors are starting to take some leave. She said that she had shared with members an update on the contact tracing programme to give them an overview of all of the workstreams.

65/20.2 The Interim Chief Executive advised members that the new Management Board established by the Department of Health has 25 priorities, and that for PHA one of these relates to screening and another relates to innovation and learning which will be taken forward by Dr Keaney. She acknowledged that there are limitations in restarting some services due to social distancing issues.

65/20.3 The Interim Chief Executive advised that Dr Damian Bennett is involved in a workstream to look at preparing information for the Department on contact tracing, and that Dr Brid Farrell and Dr Sinéad McGuinness are leading on work relating to testing on behalf of the Department. She added that Professor van Woerden is working on how to get all of his staff who are working on COVID-19 related work back to their main roles.

65/20.4 The Interim Chief Executive said that the Directors had attended a Sponsorship Review Meeting with the Chief Medical Officer on Wednesday and that there had been discussion around the health protection function and how this could be strengthened.

66/20 **Item 7 – Finance Report – PHA Draft Budget 2020/21 (PHA/01/06/20)**

66/20.1 Mr Cummings presented the draft PHA budget for 2020/21 and explained that this had been prepared in response to PHA's allocation letter which has a total opening allocation of £105m, and £3.9m of ring-fenced additional funding. He noted that this will be a unique year given that many staff will have been moved from specific projects to work in COVID-19 related areas. He added that a second surge of COVID-19 could result in further slippage. He also pointed out that PHA funds a range of third sector organisations, but that these organisations may be furloughing staff.

66/20.2 Mr Cummings said that his approach in preparing the budget was to roll forward last year's budget. He advised that there is a £12m capital budget for research and development and he explained that the management and administration budget has an additional assumed

allocation of £0.5m, but it should be noted that PHA will have to fund the first 1% of any pay award. He went on to explain that with the number of vacant posts having been filled and additional public health consultants recruited to assist with COVID-19, there will not be the same underspend as there has been in previous years.

66/20.3 Mr Stewart expressed his concern that the Board is being asked to approve a budget in these very different circumstances without having the necessary assurances that the Department of Health will cover any additional expenditure incurred as a result of COVID-19. Mr Cummings explained that there is a process which must be followed, including the completion of a business case pro forma, for any expenditure related to COVID-19. He added that this current budget excludes COVID-19 and that the PHA has a statutory responsibility to set a budget. He said that any additional expenditure would have to be agreed with PHA's sponsor branch in the Department of Health. Mr Stewart said he understood the statutory responsibility but he wished to ensure that his concerns were recorded and that PHA is not incurring expenditure for which it is not covered. Mr Cummings said that the HSC as a whole is facing a deficit of over £150m in relation to COVID-19.

66/20.4 The Chair asked if there was opportunity for virement. Mr Cummings said that in the event of an underspend PHA does not have permission to redeploy funding.

66/20.5 Mr McClean advised members that a risk around funding is in the latest iteration of the corporate risk register.

66/20.6 Mr Clayton said that he shared Mr Stewart's concerns and he asked if PHA has been set any savings targets. Mr Cummings advised that there were no savings targets for PHA this year. Alderman Porter asked whether programmes like Lifeline will continue to be monitored and if they are not as fully utilised, will that funding be reallocated. Mr Cummings explained that for the independent sector, PHA has continued to fund organisations at the same levels as in previous years. The Chair asked whether PHA is monitoring whether these organisations have furloughed staff. Professor van Woerden said that PHA is in close discussion with a number of the organisations with which it works.

66/20.7 Members **APPROVED** the draft budget for 2020/21.

67/20 Item 8 – Update on PHD Response to COVID-19 (PHA/02/06/20)

67/20.1 Professor van Woerden said that as the pandemic moves to the recovery stage the focus will be restarting services and the associated challenges. He cited mental health and wellbeing as being a particular challenge. The Chair noted that PHA can offer services, but it is up to individuals to be proactive in availing of these. Professor van Woerden said that PHA's social media reach has increased greatly over the last

	few months so people are aware of the services that are available.
67/20.2	Ms Mann-Kler asked what the biggest challenges and risks are to public behaviours once lockdown restrictions begin to ease? She asked how the needs of those groups who are particularly vulnerable to Covid-19 will be managed e.g. BAME, women who are pregnant, older people and men with underlying health conditions. Professor van Woerden said that from a societal perspective, the greatest risk is in the area of mental health given the economic consequences which will potentially see a rise in unemployment and debt. He added that there is a risk of increased incidence of domestic violence, and there is also the impact of the education time lost. He said that are issues around anxiety about social isolation and there remains a significant amount of people who are shielding.
67/20.3	Professor van Woerden said that the situation with regard to BME groups is widely recognised and that Queen's University is doing some analysis on this. He highlighted two other vulnerable groups, domiciliary care workers and care workers who are on the frontline. He said that Mr Morton and Ms Roulston had been doing excellent work to support these sectors. He noted that the threat of COVID-19 has not fully gone away, but control measures e.g. social bubbles are beginning to be put in place.
67/20.4	Ms Mann-Kler noted that the Equality Commission has been in touch with NISRA regarding a lack of data around BAME workers in the health and social care system in NI. Mr Stewart said that NISRA had done some work looking at BME representation in the population and that the impact of COVID-19 seems to be in line with the overall population data. He added that some other work has been undertaken in looking at different employment types and there are certain sectors where the rates are higher in BME. Mr Clayton said that this is an important point; given there is a potentially higher number of BME staff in care homes.
67/20.5	Mr Clayton thanked Professor van Woerden for the detailed paper, but he expressed concerns about equality, what policies were going to be put in place, and what PHA can do to influence the wider Government agenda. He noted that COVID-19 has had a disproportionate effect on the lower socio-economic groups, and he expressed concern about the impact of a second surge. Professor van Woerden advised that health improvement funding is focused on the inequalities agenda and maximising the use of voluntary organisations at this time in looking at issues such as deliveries of food to vulnerable groups, childcare, the physical environment, cycling, walking and access to transport. He added that PHA has been working with the Department for Communities, more than, for example, the Department for the Economy. He noted that PHA the communications team has been arranging meetings with representatives of political parties.
67/20.6	Mr McClean said that over the next 3/6 months it will be important for

PHA to focus on those groups that will have the greatest needs. He added that it will be useful for PHA to work with other Government departments and with local government, as well as with the third sector.

67/20.7 The Chair asked why the bowel screening programme had been stopped as this is a self-administered test. Professor van Woerden explained that the programme was paused as it would not have been possible to provide any follow up treatment. He conceded that if it was known at the time how long the programme would have been paused, arrangements could have been put in place. Furthermore, he added that hospitals may not have had the staff to treat people.

67/20.8 The Chair asked whether the European directive of obtaining treatment in another EU country still applied to Northern Ireland residents. Professor van Woerden advised that this arrangement will be place until at least 31 December 2020.

67/20.9 The Board noted the update on the response to COVID-19.

68/20 Item 9 – Update on Contact Tracing Programme (PHA/03/06/20)

68/20.1 The Interim Chief Executive said that she had prepared a short paper in order to bring members up to date with the contact tracing programme. She advised that interviews were taking place to recruit staff and that a good mix of people had applied. The Chair noted that Northern Ireland was the first part of the United Kingdom to get such a programme up and running.

68/20.2 The Interim Chief Executive said that there is now a focus on reaching those harder to reach groups and Ms Deidre Webb has been working with homeless groups and with the Roma community to inform them of contact tracing and how it can meet their needs.

68/20.3 Mr Stewart asked about a digital platform and whether this was different to an app. The Interim Chief Executive explained that PHA is carrying out traditional contact tracing by telephone, but that if an app were to become available, it would require 80% of the population to download it to make it worthwhile. She said that the current message is that if an individual has symptoms they should contact their GP, but soon they will be able to call NI Direct who will be able to arrange for them to book a test. She anticipated that this service will go live on 30 June, and this is referred to as Tier 3. She said that Tier 2 is nursing staff. She noted that individuals may choose to go private to get a test so PHA needs to ensure that it has access to all of those data for its programme.

68/20.4 Ms Mann-Kler wished to record her thanks for the tremendous amount of work that has been done on this programme to date. She asked whether PHA's communications plan is being updated as we move into this new phase. The Interim Chief Executive said that the next phase will highlight the moral obligation on individuals to get themselves tested

if they have symptoms. She said that a campaign is being finalised similar to that being used in Scotland. She also advised members that there is a programme under way to get all care home residents and staff tested by the end of June.

68/20.5 The Chair asked whether this campaign will then result in an increased demand for testing. The Interim Chief Executive assured members that the testing service will have the capacity.

68/20.6 Mr Clayton asked about the app and whether PHA was developing it, and also covering those costs. He also asked about testing and how frequently this was going to be undertaken in care homes. The Interim Chief Executive explained that there are 16,000 care home beds in Northern Ireland, but that the rate of positive tests is very low. Professor van Woerden added that the programme is being done on a prioritisation approach as the rate of case varies from home to home.

68/20.7 Mr Clayton noted that the capacity to undertake testing has increased but it is not being fully utilised and he asked how this could be perceived. Professor van Woerden said that he has been linking with Integrated Care in HSCB to encourage GPs to lower the threshold for recommending testing so as to increase the number of tests.

68/20.8 Ms Mann-Kler asked about links with the Republic of Ireland and if there is cross-border working. Professor van Woerden explained that there are established links and a mutual exchange of information. The Interim Chief Executive added that there are also weekly telecalls.

68/20.9 The Board noted the update on the contact tracing programme.

69/20 Item 10 – Update on Vaccination Programme (PHA/04/06/20)

69/20.1 Professor van Woerden said that it was important that the Board is sighted on issues relating to immunisation. He explained that there will be an increased demand on services this year with not only the flu vaccine, but a potential COVID-19 vaccine. He said that Northern Ireland is taking part in a trial. The Chair asked whether it was correct that any potential vaccine would require two administrations. Professor van Woerden confirmed that this was the case.

69/20.2 Mr Stewart said that the Board should be cognisant of the challenge represented in this paper, given that in England there will be an expansion of the flu vaccine programme in terms of those who will be eligible for testing, and there is then the challenge of administering that test in a social distancing environment.

69/20.3 Professor Rooney asked if PHA has submitted a business case for any additional resource. The Interim Chief Executive advised that a business case has been put in for 31 WTE for the contact tracing programme and that there nurses could also assist with vaccinations.

	Mr Cummings noted that the HSCB primary care team would lead the administration of the vaccination.
69/20.4	The Chair asked whether the age for those receiving the vaccine would be lowered. Professor van Woerden confirmed this.
69/20.5	The Board noted the update on vaccination programmes.
70/20	**Item 11 – PPI Update Report (PHA/05/06/20)**
70/20.1	The Chair welcomed Ms Michelle Tennyson to the meeting and invited her to present the update on PPI.
70/20.2	Ms Tennyson began by saying that the COVID-19 pandemic has had an impact on the work of the team, but it has also represented an opportunity. She said that PPI staff have been working with the contact tracing programme, the staff health and wellbeing groups, communications staff and also the knowledge management cell. She added that two of team continue to work with the Department on the IHRD workstream and there has recently been a focus on how to better involve service users and carers in the SAI process.
70/20.3	Ms Tennyson advised that there has been a workshop with service users and carers on the Department's urgent and emergency care work. She said that there has been links with the Pathfinder project in the Western Trust. She advised that funding had been received through Transformation monies for PPI-related work and the team has been monitoring how this is being utilised.
70/20.4	Ms Tennyson gave members an overview of training and development. She said that the PPI leadership programme is going from strength to strength and is currently oversubscribed. She said that other training in areas such as how to consult effectively and facilitation skills has taken place in partnership with both Queen's University and Ulster University. She said that the regional PPI forum continues to meet, and there is work ongoing looking at the area of remuneration for service users.
70/20.5	Ms Tennyson said that in terms of work internal to PHA, the team has been liaising with each directorate to look at pieces of work they have been doing and ensuring that there is co-production. She highlighted work in terms of Protect Life 2 and other areas of suicide prevention. She gave an overview of PPI Communities of Practice, and said that they group delivered a presentation in Dublin.
70/20.6	Ms Tennyson said that the PPI team has been linking with MDTs (multi-disciplinary teams), and she said that work is ongoing on the Engage website.
70/20.7	Ms Tennyson finished with an overview of priorities for the next 6 months and the post-pandemic phase. She said that involvement will be

	key as part of the restart agenda, but there is a need to be innovative in the use of technologies. She noted that in terms of the partnership agenda, there should be a link between PPI on one hand and patient experience on the other.
70/20.8	Ms Mann-Kler said that she was pleased to note that PPI is being used in terms of evidence-based outcomes, and that research is being commissioned. She queried what the impact of involvement has been. She added that it is important that PPI is part of the development of the next PHA Corporate Plan. Professor Rooney added that it should be used to ensure that what the PHA Board does is effective.
70/20.9	The Chair conveyed his appreciation on behalf of the Board to the PPI team for their work.
70/20.10	The Board noted the PPI update.
71/20	**Item 12 – Any Other Business**
71/20.1	Alderman Ashe raised an issue on behalf of Alderman Porter about the inadequacy of the facilities to conduct meetings online as he was unable to participate fully in the meeting and that these issues need to be resolved for future meetings. Mr Cummings advised that a number of Zoom licenses has been procured, but that the issue is not with the software, but with the HSC bandwidth and the number of users using it at any one time.
72/20	**Item 13 – Details of Next Meeting** *Tuesday 7 July 2020 at 1:30pm (Special Meeting)* *Fifth Floor Meeting Room, 12/22 Linenhall Street, Belfast, BT2 7ES* Signed by Chair: Date:

Public Health Agency

Finance Report

2020-21

Month - June 2020

PHA Financial Report - Executive Summary

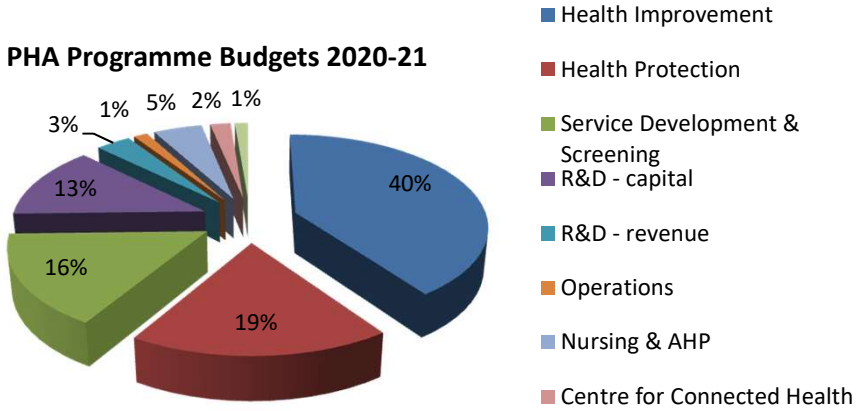
Year to Date Financial Position (page 2)

At the end of month 3 PHA is reporting an underspend (£0.8m) against its profiled budget. This underspend is primarily the result of year-to-date underspends on PHA Direct budgets (page 4) and Administration budgets due to vacant posts (see page 5).

Budget managers continue to be encouraged to closely review their profiles and financial positions to ensure the PHA meets its breakeven obligations at year-end.

Programme Budgets (pages 3&4)

The chart below illustrates how the Programme budget is broken down across the main areas of expenditure.

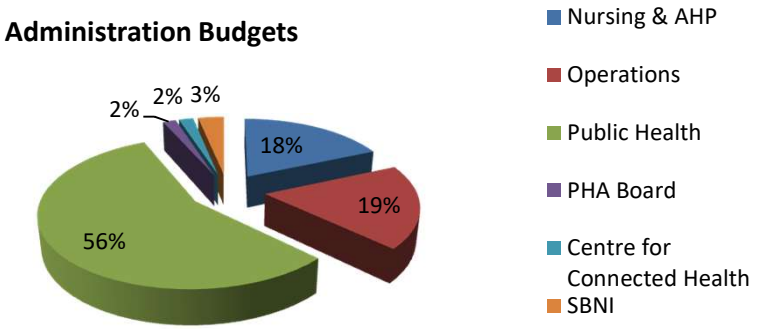


Administration Budgets (page 5)

Approximately half of the Administration budget relates to the Directorate of Public Health, as shown in the chart below.

A significant number of vacant posts remain within PHA, and this is creating slippage on the Administration budget.

Management is proactively working to fill vacant posts and to ensure business needs continue to be met.



Full Year Forecast Position & Risks (page 2)

PHA is currently forecasting a breakeven position for the full year. Slippage is expected to arise from Administration budgets in particular, however management expect this to be used to fund a range of in-year pressures and initiatives. Ringfenced funds, including COVID-19 and Transformation Funds, are being monitored closely to ensure full spend by year end.

Public Health Agency
2020-21 Summary Position - June 2020

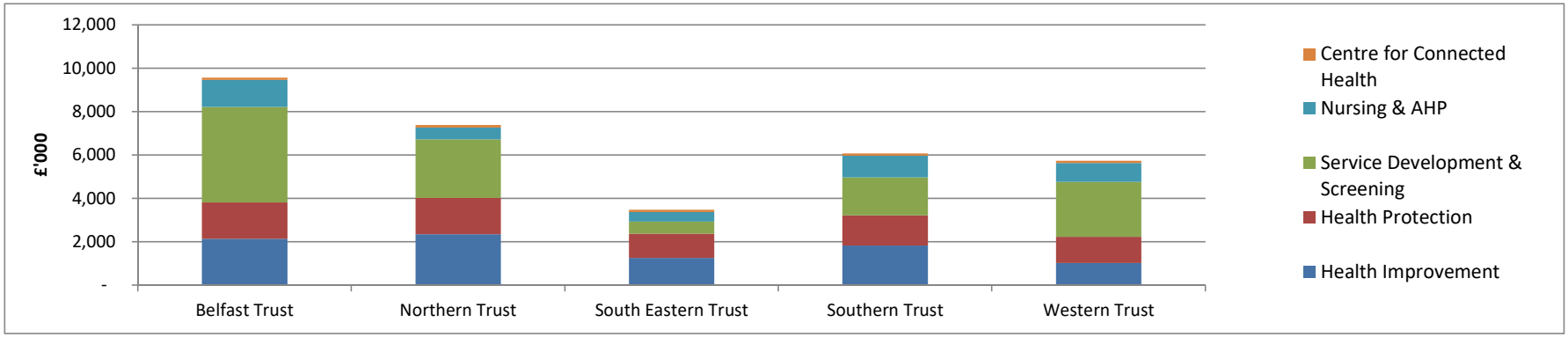
	Annual Budget					Year to Date				
	Programme		Ringfenced incl. COVID & Transformation	Mgt & Admin	Total	Programme		Ringfenced incl. COVID & Transformation	Mgt & Admin	Total
	Trust £'000	PHA Direct £'000	£'000	£'000	£'000	Trust £'000	PHA Direct £'000	£'000	£'000	£'000
Available Resources										
Departmental Revenue Allocation	32,249	50,444	2,606	21,898	**107,198**	8,062	7,225	60	5,395	**20,743**
Revenue Income from Other Sources	-	19	-	755	**774**	-	19	-	179	**198**
Total Available Resources	32,249	50,463	2,606	22,653	**107,972**	8,062	7,244	60	5,574	**20,940**
Expenditure										
Trusts	32,249	-	-	-	**32,249**	8,062	-	-	-	**8,062**
PHA Direct Programme *	-	51,143	2,606	-	**53,749**	-	6,278	368	-	**6,647**
PHA Administration	-	-	-	21,973	**21,973**	-	-		5,381	**5,381**
Total Proposed Budgets	32,249	51,143	2,606	21,973	**107,972**	8,062	6,278	368	5,381	**20,090**
Surplus/(Deficit) - Revenue	-	(680)	-	680	-	-	966	(308)	193	**850**
Cumulative variance (%)						***0.00%***	***13.33%***	***-513.82%***	***3.46%***	***4.06%***

The year to date financial position for the PHA shows an underspend of £0.8m, which consists primarily of year-to-date underspends on PHA Direct Budgets, combined with slippage Administration budgets due to vacancies (see pages 4 & 5).

The current year-end breakeven forecast is predicated on the in-year delivery of non-recurrent programmes in line with PHA priorities. This expenditure will balance out the forecast surplus in the Administration budget, and ensure the organisation achieves its breakeven obligation.

** PHA Direct Programme includes amounts which may transfer to Trusts later in the year*

Programme Expenditure with Trusts

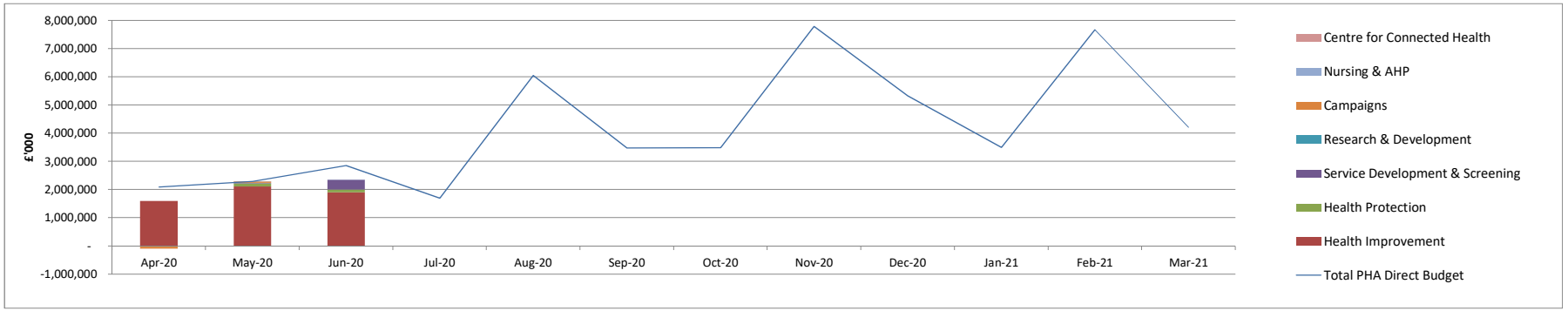


Current Trust RRLs	Belfast Trust £'000	Northern Trust £'000	South Eastern Trust £'000	Southern Trust £'000	Western Trust £'000	Total Planned Expenditure £'000	YTD Budget £'000	YTD Expenditure £'000	YTD Surplus / (Deficit) £'000
Health Improvement	2,142	2,344	1,252	1,831	1,021	**8,590**	2,148	2,148	-
Health Protection	1,670	1,684	1,119	1,392	1,207	**7,073**	1,768	1,768	-
Service Development & Screening	4,408	2,702	555	1,751	2,538	**11,954**	2,988	2,988	-
Nursing & AHP	1,241	544	446	990	868	**4,089**	1,022	1,022	-
Centre for Connected Health	109	117	109	104	104	**543**	136	136	-
Other	-	-	-	-	-	**0**	-	0	-
Total current RRLs	**9,571**	**7,390**	**3,481**	**6,069**	**5,738**	**32,249**	**8,062**	**8,062**	**-**
Cumulative variance (%)									***0.00%***

The above table shows the current Trust allocations split by budget area. During the current month an exercise to re-align budgets between Trusts and PHA Direct budgets has been carried out, and profiles have been amended accordingly. This has created the year-to-date breakeven position.

The Other line relates to general allocations to Trusts for items such as the Apprenticeship Levy and Inflation.

PHA Direct Programme Expenditure



	Apr-20 £'000	May-20 £'000	Jun-20 £'000	Jul-20 £'000	Aug-20 £'000	Sep-20 £'000	Oct-20 £'000	Nov-20 £'000	Dec-20 £'000	Jan-21 £'000	Feb-21 £'000	Mar-21 £'000	Total £'000	YTD Budget £'000	YTD Spend £'000	Variance £'000	
Profiled Budget																	
Health Improvement	2,096	2,096	2,096	1,239	5,360	964	964	5,060	1,114	1,260	5,452	1,758	**29,459**	6,288	5,617	671	*10.7%*
Health Protection	-	100	160	192	270	2,213	2,213	2,242	2,213	242	270	283	**10,399**	260	199	61	*23.5%*
Service Development & Screening	-	95	562	215	364	215	215	364	215	215	364	352	**3,176**	657	488	169	*25.7%*
Research & Development	-	-	-	-	-	-	-	-	1,000	1,000	1,211	-	**3,211**	-	-	-	*0.0%*
Campaigns	-	-	-	10	20	45	60	85	350	345	332	30	**1,277**	-	(37)	37	*#DIV/0!*
Nursing & AHP	13	13	13	39	39	39	39	39	39	39	39	41	**395**	39	10	29	*100.0%*
Centre for Connected Health	-	-	-	-	-	-	-	-	400	400	-	537	**1,337**	-	-	-	*100.0%*
Other	-	-	-	-	-	-	-	-	-	-	-	1,208	**1,208**	-	2	(2)	*100.0%*
Total PHA Direct Budget	**2,109**	**2,304**	**2,831**	**1,695**	**6,054**	**3,477**	**3,492**	**7,791**	**5,332**	**3,501**	**7,669**	**4,208**	**50,463**	**7,244**	**6,278**	**966**	
Cumulative variance (%)																***13.33%***	
Actual Expenditure	**1,504**	**2,380**	**2,394**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**6,278**				
Variance	**605**	**(76)**	**437**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**966**				

Ringfenced Budgets	Apr-20 £'000	May-20 £'000	Jun-20 £'000	Jul-20 £'000	Aug-20 £'000	Sep-20 £'000	Oct-20 £'000	Nov-20 £'000	Dec-20 £'000	Jan-21 £'000	Feb-21 £'000	Mar-21 £'000	Total £'000	YTD Budget £'000	YTD Spend £'000	Variance £'000
Ringfenced Budget (COVID, Transformation etc.)	20	20	20	20	20	20	20	20	20	20	20	2,386	**2,606**	**60**	**368**	**(308)**
																-513.82%
Actual Expenditure	-	98	271										**368**			
Variance	**20**	**(78)**	**(251)**													

The year-to-date position shows an easement position, mainly as a result of slippage on a number of Health Improvement budgets and Service Development & Screening budgets.

The budgets and profiles are shown after adjusting for retractions and new allocations from DoH.

Approximately £2.6m of ringfenced funding has been received to date (£2.4m COVID-19 and £0.2m Early Intervention Transformation Programme). Further funding is anticipated from DoH for the continuation of some Transformation projects (£3.3m) and this will be included in this section when it is received. Most of the budget is currently held in March pending the provision of monthly profiles from budget managers.

PHA Administration

2019-20 Directorate Budgets

	Nursing & AHP £'000	Operations £'000	Public Health £'000	PHA Board £'000	Centre for Connected Health £'000	SBNI £'000	Total £'000
Annual Budget							
Salaries	4,017	2,901	12,345	315	348	542	**20,468**
Goods & Services	166	1,307	407	54	58	193	**2,185**
Total Budget	**4,183**	**4,208**	**12,752**	**370**	**406**	**735**	**22,653**
Budget profiled to date							
Salaries	1,003	714	3,095	63	88	135	**5,097**
Goods & Services	41	327	32	14	14	48	**477**
Total	**1,044**	**1,040**	**3,127**	**76**	**102**	**184**	**5,574**
Actual expenditure to date							
Salaries	946	662	3,063	68	96	95	**4,930**
Goods & Services	66	268	40	6	55	17	**452**
Total	**1,012**	**929**	**3,102**	**74**	**152**	**113**	**5,381**
Surplus/(Deficit) to date							
Salaries	57	52	32	(5)	(9)	40	**168**
Goods & Services	(24)	59	(7)	8	(41)	31	**25**
Surplus/(Deficit)	**33**	**111**	**25**	**2**	**(50)**	**71**	**193**
Cumulative variance (%)	*3.15%*	*10.68%*	*0.80%*	*3.19%*	*-48.43%*	*38.72%*	***3.46%***

PHA's administration budget is showing a year to date surplus, which has been generated by a number of long standing vacancies. Although efforts continue to fill vacant posts as far as possible, this has proved to be challenging, and there will continue to be a surplus on the salaries budget. In it's opening allocation letter, DoH required PHA to meet the cost of the first 1% of the 2020-21 pay award.

Senior management continue to monitor the position closely in the context of the PHA's obligation to achieve a breakeven position for the financial year. The SBNI budget is ringfenced and any underspend will be returned to DoH prior to year end.

June 2020

Public Health Agency
2019-20 Capital Position

	Annual Budget				Year to Date			
	Programme		Mgt & Admin		Programme		Mgt & Admin	
	Trust £'000	PHA Direct £'000	£'000	Total £'000	Trust £'000	PHA Direct £'000	£'000	Total £'000
Available Resources								
Capital Grant Allocation & Income	7,826	4,174	-	**12,000**	-	704	-	**704**
Expenditure								
Capital Expenditure - Trusts	7,826	-	-	**7,826**	-	-	-	**-**
Capital Expenditure - PHA Direct	-	4,174	-	**4,174**	-	704	-	**704**
	7,826	4,174	-	**12,000**	-	704	-	**704**
Surplus/(Deficit) - Capital	-	-	-	-	-	-	-	-
Cumulative variance (%)								

PHA is to receive a Capital budget of £12.0m including income in 2020-21, most of which relates to Research & Development projects in Trusts and other organisations. Expenditure of £0.7m is shown for the year to date, and a breakeven position is anticipated for the full year.

PHA Prompt Payment

Prompt Payment Statistics

	June 2020 Value	June 2020 Volume	Cumulative position as at 30 June 2020 Value	Cumulative position as at 30 June 2020 Volume
Total bills paid (relating to Prompt Payment target)	£1,852,640	280	£11,384,932	1,115
Total bills paid on time (within 30 days or under other agreed terms)	£1,820,700	266	£10,972,058	1,040
Percentage of bills paid on time	**98.3%**	**95.0%**	**96.4%**	**93.3%**

Prompt Payment performance for the year to date shows that on value the PHA is achieving its 30 day target of 95.0%, although performance on volume is below target cumulatively at June. Overall PHA is making progress on ensuring invoices are processed promptly, and efforts to maintain this good performance will continue for the remainder of the year.

The 10 day prompt payment performance remained strong at 92.1% by value for the year to date, which significantly exceeds the 10 day DoH target for 2020-21 of 60%.

HSC Public Health Agency

item 8

Title of Meeting	PHA Board Meeting
Date	20 August 2020
Title of paper	PHA Rural Needs Act Annual Report 2019/20
Reference	PHA/02/08/20
Prepared by	Lynda Kernohan
Lead Director	Ed McClean
Recommendation	For **Approval** ☒ For **Noting** ☐

1 Purpose

The purpose of this paper is to seek approval of the PHA's Rural Needs Act Annual Report for 2019/20.

2 Background Information

The Rural Needs Act (Northern Ireland) 2016 came into operation for public authorities including the Public Health Agency (PHA) on 1 June 2018. The purpose of the Act is to ensure that public authorities have 'due regard' to the social and economic needs of people in rural areas and to provide a mechanism for ensuring greater transparency in relation to how public authorities consider rural needs when developing, adopting, implementing or revising policies, strategies and plans and when designing and delivering public services. The Act seeks to help deliver fairer and more equitable treatment for people in rural areas which will deliver better outcomes and make rural communities more sustainable.

The Rural Needs Act has been embedded into the PHA's processes; the completion of the Rural Needs Impact Assessments has focused minds on the importance of the needs of rural dwellers, so that these are considered from an early stage in any project. In particular, ensuring consultation with rural dwellers when planning services and consideration given to alternative service delivery methods where appropriate to meet their needs.

The Act sets out that Public Authorities must complete an annual report to be published in their own Annual Report and submitted to DAERA for inclusion in the Rural Needs Annual Monitoring Report.

3 Key Issues

During 2019/20, a total of four Rural Needs Assessments were carried out, details of which are contained in the Report.

4 Next Steps

Following approval by the Board, PHA will submit its Annual Monitoring Return to DAERA, in advance of the deadline of 11 September 2020.

The PHA will continue to ensure that the Rural Needs Act is taken into consideration as part of its work and a Report on progress in 2020/21 will be brought to the Board in June 2021.

Appendix 2 - Template for Information to be Compiled

Information to be compiled by Public Authorities under Section 3(1)(a) of the Rural Needs Act (NI) 2016.

(To be completed and included in public authorities' own annual reports and submitted to DAERA for inclusion in the Rural Needs Annual Monitoring Report).

Name of Public Authority: **Public Health Agency**

Reporting Period: April 20 **19** to March 20 **20**

The following information should be compiled in respect of each policy, strategy and plan which has been developed, adopted, implemented or revised and each public service which has been designed or delivered by the public authority during the reporting period.

Description of the activity undertaken by the public authority which is subject to section 1(1) of the Rural Needs Act (NI) 2016[1].	*The rural policy area(s) which the activity relates to[2].*	*Describe how the public authority has had due regard to rural needs when developing, adopting, implementing or revising the policy, strategy or plan or when designing or delivering the public service[3].*
Expansion of the Northern Ireland Newborn Blood Spot Screening Programme (NBSP)	N/A	Every baby in NI will have access to community midwifery and health visiting services following discharge from hospital. Midwives will visit babies in their own homes regardless of where they live/their postcode to carry out newborn blood spot screening. Babies who remain in hospital on day 5 of life will have screening carried out by hospital midwives or nurses. Babies in a rural area receive the same care with regards to blood spot screening as those in towns and cities.
Regional procurement of Smart4Hearing - a service to aid delivery of the Newborn Hearing Screening Programme in Northern Ireland	N/A	The procurement of the Smart4Hearing service will have no impact on the newborn hearing screening service that is currently provided to all babies, within each geographical Trust area. Newborn hearing screening generally takes place in a hospital setting, pre-discharge (for approximately 70% of

		babies). If baby is returning to attend a clinic for an outpatient / follow-up appointment, the person with parental responsibility will be asked where is the most suitable location for newborn hearing screening to take place as there is flexibility within the programme for a baby to be screened within another Trust locality. With this in mind, the programme already seeks to promote equality of opportunity in terms of uptake, irrespective of location in Northern Ireland.
Implementation of Regional Age Friendly Programme	Cross Cutting	The Tackling Rural Poverty and Social Isolation Framework recognises that those living in rural areas often experience poverty and social isolation differently to urban dwellers due to issues relating to geographical isolation & lower population density. It Provides a broad frame work within which public sector organisations and the rural sector can work collaboratively to lever additional resources and develop/pilot new ways to help alleviate the effects of poverty and social isolation in rural areas, particularly among vulnerable groups. Living in rural areas can exacerbate the effects of poverty for certain groups such as older people and people with a disability. The Interdepartmental Committee on Rural Policy oversees the implementation of the framework. Research has established a link between loneliness in elderly people and population density in rural areas and social isolation was ranked third in the list of key disadvantages for older people in rural areas in Northern Ireland. Jack and Patten (2014). As outlined the PHA recognises health as a basic human right for older people and a key predictor of satisfaction and quality of life as people age both in rural and urban areas. It determines an individual's ability to remain independent and to continue to contribute in a meaningful way to society. Given the fact that older people become increasingly reliant on health and social care services as they age there is an opportunity to reduce the impact of sickness on care services by maintaining a healthier population into old age. The focus for the PHA in addressing the needs of older people will therefore be to work collaboratively with partners from across the community, statutory, voluntary and private sectors to; a) advance health and wellbeing into older age b) reduce the inequalities experienced by older people c) promote the inclusion and full involvement of older people within society and their local communities d) improve the provision, quality and safety of services and care to address the needs of older people as they age and e) safeguard those people who are or may become vulnerable as they get older

		Following the process of development and engagement in shaping this programme, consulting in rural and other areas, key themes have emerged which have led to our conclusions and recommended actions. The proposed model will enable the development of a programme based on the WHO Age Friendly model across the Southern and Western areas. The co-ordinators will work collaboratively with a range of stakeholders and establish Age Friendly Strategic Alliance from relevant organisations e.g. Council, Health, Housing, C&V Sector organisations supporting older people. The post holder will co-ordinate and carry out additional consultations with older people and key stakeholders. The Age Friendly programme will provide a mechanism for a variety of organisations (Council, HSC, Transport, Housing, C&V sector, older peoples networks etc. to work together to promote and improve the health and wellbeing of older people, whilst also valuing the positive contribution they can make.
Retender of the Workplace Health and Well-being Service	Cross Cutting	This is a Regional project and the services will be equally available to employees from urban and rural areas. The PHA Workplace Health service is Regional and offered to all small and medium businesses across urban and rural enterprises. In the retender providers will be asked to specifically target businesses in rural areas and those with larger numbers of employees living in rural areas.

NOTES

1. This information should normally be contained in section 1B of the RNIA Template completed in respect of the activity.

2. This information should normally be contained in section 2D of the RNIA Template completed in respect of the activity.

3. The information contained in sections 3D, 4A & 5B of the RNIA Template should be considered when completing this section.

HSC Public Health Agency

item 9

Title of Meeting	PHA Board Meeting
Date	20 August 2020
Title of paper	Working Together to Reduce Stillbirths
Reference	PHA/03/08/20
Prepared by	Dr Alison Little and Dr Catherine Coyle
Lead Director	Rodney Morton
Recommendation	For **Approval** ☐ For **Noting** ☒

1 Purpose

The purpose of this paper is to bring the Working Together to Reduce Stillbirths report to the PHA Board for noting.

2 Background Information

In June 2019 the Chief Medical Officer wrote to the then Director of Nursing asking that the PHA undertake an assessment of the extent to which work to reduce stillbirth is embedded across the HSC.

The CMO's request followed an inquest into the death of a stillborn baby which occurred in 2014. The Coroner wrote to the Permanent Secretary of the Department of Health (DOH) in 2019 following the inquest. In the course of the inquest the issue of variation in practice and policy across Northern Ireland was identified as an issue of concern and the Coroner asked for information on what action was being taken to prevent similar cases in the future. CMO asked that the report consider the issues raised by the coroner and include an appraisal of compliance with national guidance in each Trust in relation to:

- Risk assessment and management
- Management of reduced fetal movements
- Use and interpretation of cardiotocographs
- Fetal growth monitoring and management of intra uterine growth restriction
- Identification and management of diabetes in pregnancy.

A detailed survey was developed, based on the quality standards set out in the *Saving Babies Lives* care bundle, and circulated to the five Trusts.

3 Key Issues

The attached report collates the Trust responses to this survey, in addition to the work of the Maternity Strategy Implementation Group (MSIG), the Maternity Collaborative and other key stakeholders and provides an assessment of the work done to date along with suggested areas for action to further reduce stillbirth in Northern Ireland.

The conclusion of this assessment is that work to reduce stillbirth is well embedded within maternity services across Northern Ireland and that there is a strong ethos of taking a regional approach to these challenging issues. While stillbirth figures have plateaued in the past decade this trend is comparable to the rest of the UK and given the increasing risk profile of the maternity population is likely to reflect a degree of progress.

However, there is clearly further work to be done. In each of the report sections 'Areas for Action' have been identified which would further support stillbirth prevention.

4 Next Steps

The report has been sent to the CMOT and a response is awaited which will inform the process for next steps. Moving to the Saving Babies' Lives care bundle Version 2 would represent the next step for Northern Ireland in reducing stillbirths; this will require investment and service development. The areas for action identified in the report should be addressed. A follow-up audit of perinatal mortality review processes and structures at Trust level is planned within the next year.

Working Together

To

Reduce Stillbirth

Alison Little **Midwife Consultant**

Dr Catherine Coyle **Consultant, Public Health Medicine**

25 June 2020

CONTENTS

Executive Summary

Stillbirth is a devastating event for women, couples, their families and the healthcare professionals who care for them. In addition to supporting those who experience this loss, maternity services and regional bodies in Northern Ireland are dedicated to stillbirth prevention.

This review of the extent to which work to reduce stillbirth is embedded across HSC has been compiled by the Public Health Agency (PHA) in consultation with HSC Trusts. It was requested by the Chief Medical Officer (CMO) in response to a letter from the Coroner highlighting the issue of variation in practice and policy across Northern Ireland. This issue arose as part of an inquest into a stillbirth which occurred in 2014.

In reviewing the information provided it is clear that there has been a substantial amount of work carried out to reduce stillbirth and perinatal morbidity in each of the Trusts, focusing on the major risk factors as set out in the national Saving Babies' Lives care bundle.

Carbon monoxide testing is well embedded within maternity services and smoking prevalence in pregnant women has reduced by 2.5% since 2013/14. Postnatal carbon monoxide testing is in the process of being embedded and will provide further opportunities to reduce smoking in pregnancy, as will improving the percentage of women referred to stop smoking services.

Intrauterine growth restriction is one of the major risk factors for stillbirth. All Trusts monitor fetal growth using customised growth charts. Training in fetal growth monitoring is undertaken and training records are maintained by each Trust. Audit data is benchmarked nationally and the proportion of small for gestational age babies detected antenatally and referred in Northern Ireland compares favourably with participating units across the UK.

The implementation of three-weekly growth scans in line with the Saving Babies' Lives care bundle has placed pressure on antenatal service provision. The second iteration of the national care bundle recommends a focus on three areas of improvement; risk assessment, prescription of aspirin and effective measurement and recording of symphysis fundal height (SFH) to further improve the management of fetal growth restriction (FGR). Implementation of Version 2 of the care bundle would require further work to agree the pathway for third trimester growth surveillance given the suggestion to use uterine artery Doppler scanning.

Management of women presenting with reduced fetal movement has been underpinned by policy and guidance development by each Trust and accompanied by standardised information provision in the maternal hand held record. Further

work is required to audit and investigate how well the messaging and advice about reduced fetal movement is understood by women.

Effective fetal monitoring during labour has been a focus for work both regionally and at Trust level. There are now regional plans to move to a physiological approach to cardiotocography (CTG) interpretation. This work is being led by the maternity collaborative.

Diabetes in pregnancy is becoming an increasing challenge for maternity and diabetes services with almost 1 in 10 pregnant women diagnosed with diabetes. While there has been investment in this area services continue to report pressure. The Diabetes in Pregnancy sub-group of the regional Diabetes Network takes the lead in regional work in this area and is the vehicle through which protocols and standards are agreed. A major focus has been the National Institute for Health and Care Excellence (NICE) guidance on diabetes in pregnancy.

The conclusion of this assessment is that work to reduce stillbirth is well embedded within maternity services across Northern Ireland and that there is a strong ethos of taking a regional approach to these challenging issues. While stillbirth figures have plateaued in the past decade this trend is comparable to the rest of the UK and given the increasing risk profile of the maternity population is likely to reflect a degree of progress.

However, there is clearly further work to be done. In each of the report sections ‘Areas for Action’ have been identified which would further support stillbirth prevention. Moving to the Saving Babies’ Lives care bundle Version 2 would represent the next step for Northern Ireland in reducing stillbirths. This will require investment and service development.

Background

The quality of maternity services is a reflection on the value we place on how we care for women and on giving each child the best start in life. The importance of providing safe, high quality maternity services cannot be underestimated. Considerable efforts have been undertaken in recent years to ensure that an ethos of continuous quality improvement is well embedded in maternity services in Northern Ireland.

Each year around 23,000 babies are born in Northern Ireland. However there are also on average 95-100 families each year whose baby is stillborn. This is a devastating event for those families and the healthcare professionals who care for them. Reducing the number of families who experience this is a priority for maternity services and for the region, as well as working to support those families who do experience this loss.

The Coroner wrote to the Permanent Secretary of the Department of Health (DOH) in 2019 following the inquest into the death of a stillborn baby which occurred in 2014. The findings of the inquest suggested that the tragic death of this baby could not have been prevented. However in the course of the inquest the issue of variation in practice and policy across Northern Ireland was identified as an issue of concern and the Coroner asked for information on what action was being taken to prevent similar cases in the future.

Given the Coroner's findings the Department of Health (DOH) asked that the PHA assess the extent to which work to reduce stillbirth has been embedded across HSC trusts in Northern Ireland be produced.

The following report has been produced by the Public Health Agency (PHA) in response to the DOH request.

The report considers Trust compliance with national guidance on:

- Risk assessment and management
- Management of reduced fetal movements
- Use and interpretation of cardiotocographs
- Fetal growth monitoring and the management of intra uterine growth restriction
- Identification and management of diabetes in pregnancy.

Introduction

In November 2015, the Secretary of State for Health announced a national ambition to halve the rate of stillbirths, neonatal and maternal deaths and intrapartum brain injuries by 2030, with a 20% reduction by 2020[1]. As part of the drive to halve the rate of stillbirth by 2030, the Saving Babies' Lives Care Bundle was published in March 2016.[2] The guidance was developed with clinicians, commissioners, charities and Royal Colleges and was based on the best available evidence. It also supports the delivery of safer maternity care, as described by the National Maternity Review, in Better Births.[3]

Reducing stillbirth is likewise a priority for the HSC. In Northern Ireland the Maternity Quality Improvement Collaborative, working in conjunction with the Maternity Strategy Implementation Group (MSIG) continues to act as the focus and driving force for safety and service quality improvement work in maternity services across the region. This work includes reducing unexplained variation in policies and clinical practice, improving systems to learn from adverse events and implementation of national guidance related to evidence based care.

The work below may arise from a range of sources including; the Maternity Strategy objectives, priorities identified by clinical teams, or learning from the regional Serious Adverse Incident (SAI) process. Designated Review Officers (DRO) in PHA review all of the reports from SAIs in the maternity programme of care and are in a position to identify regional learning. This learning can be shared in a variety of ways, including being referred to the maternity collaborative for consideration of regional work.

Significant progress has been made in a number of areas through the work of the regional MSIG and its associated sub-groups. This includes:

- Development and issue of the Antenatal Care Core Pathway which ensures that all women in Northern Ireland receive a minimum standard of care, including a risk assessment at booking to identify the category of care they should receive.
- The Maternity Hand Held record (MHHR) is regionally agreed and continues to be updated as per the evidence base
- Pregnancy and Birth to 5 books are updated annually in line with new evidence or information and provided to every woman at booking.
- GAIN (Guidelines and Audit Implementation Network) guidelines on admission to and transfer from midwife led units and Home births.
- Early Intervention Transformation Programme (EITP) Getting Ready for Baby programme provides group based antenatal care and education to women having their first baby with a straightforward pregnancy.
- NIMATs: The Northern Ireland Maternity System is the computerised record for all women in Northern Ireland and documents a woman's medical, social and maternity history at various points in her pregnancy. Previously this

system was largely used as a data collection tool but with advances and changes to the system it is now possible to use this information to inform type of care for women and also utilise data collected to make improvements in care provision across maternity services in Northern Ireland.

The Maternity Quality Improvement Collaborative (introduced in 2009 and now a sub group of MSIG) has cross trust and multi professional input. Since the introduction of the collaborative there has been a range of outputs all of which are implemented on a regional basis, including:

- Regional Induction of labour leaflet
- Regional maternity dashboard to facilitate Trusts to monitor their activity, trends and compare themselves against other units leading to sharing of best practice and learning
- Development of Maternity Key Performance Indicators to monitor Trust performance and inform future safety and quality initiatives.
- Regional Maternity Early warning score system for early pregnancy, antenatal and postnatal
- Regional access to Robson group data which can inform work on variation in caesarean section rates
- Regional syntocinon regime which means each unit now uses the same dosing and delivery protocol. This enhances safety for women and is to be accompanied by a set of standards
- Work on informed consent so that all women are given the same advice and information (added to pregnancy book) regarding instrumental and caesarean births.
- Regional CTG stickers for antenatal and intrapartum based on NICE guidance.
- Development of a patient-held wallet to carry the MHHR and other key documents. This wallet highlights the key messages around public health and bonding.

In 2016 it was agreed that the Department of Health England's Saving Babies' Lives Care Bundle would be implemented in all Trusts.[2]

There were 4 elements to the bundle:

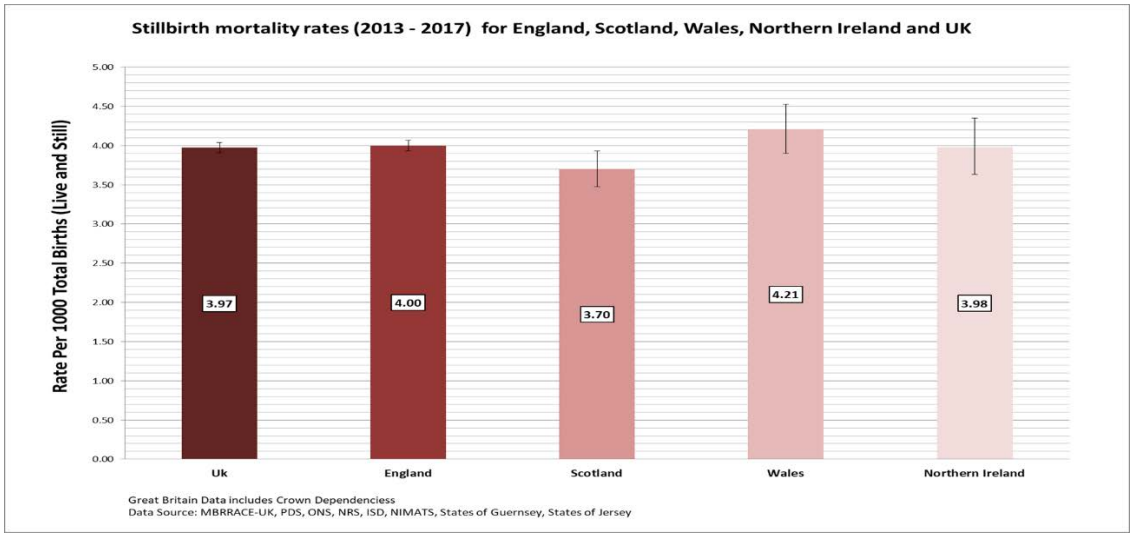
- Reducing smoking in pregnancy
- Risk assessment and surveillance for fetal growth restriction
- Raising awareness of reduced fetal movement
- Effective fetal monitoring in labour

Since the introduction of the bundle much work has been done regionally on these elements of care. Further information on each element can be found in the relevant section throughout this report.

Northern Ireland Stillbirth Trends

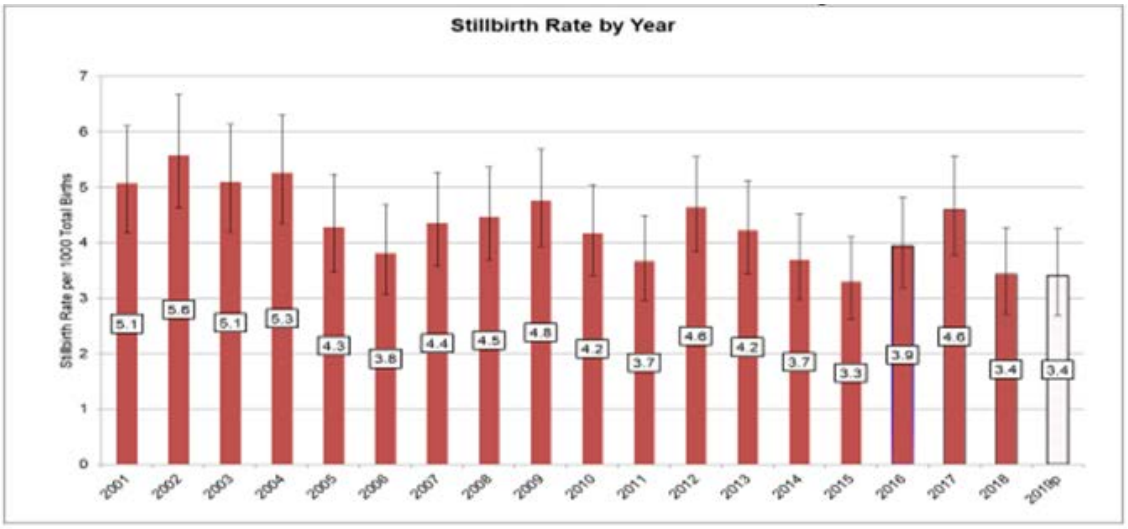
Stillbirth rates are important indicators of safety and quality in maternity services. Figure 1 demonstrates a 5 year comparison of stillbirth mortality rates from 2013-2017 across the UK. During this timeframe Northern Ireland had a stillbirth rate of 3.98 per 1000 births which demonstrates no statistical difference with the rest of the UK.

Figure 1: Still birth rate- 5 year comparison with UK



As shown in figures 2 and 3, whilst there is an overall decrease in the rate of stillbirth since 2001, the rate has remained relatively static in Northern Ireland over the past decade.

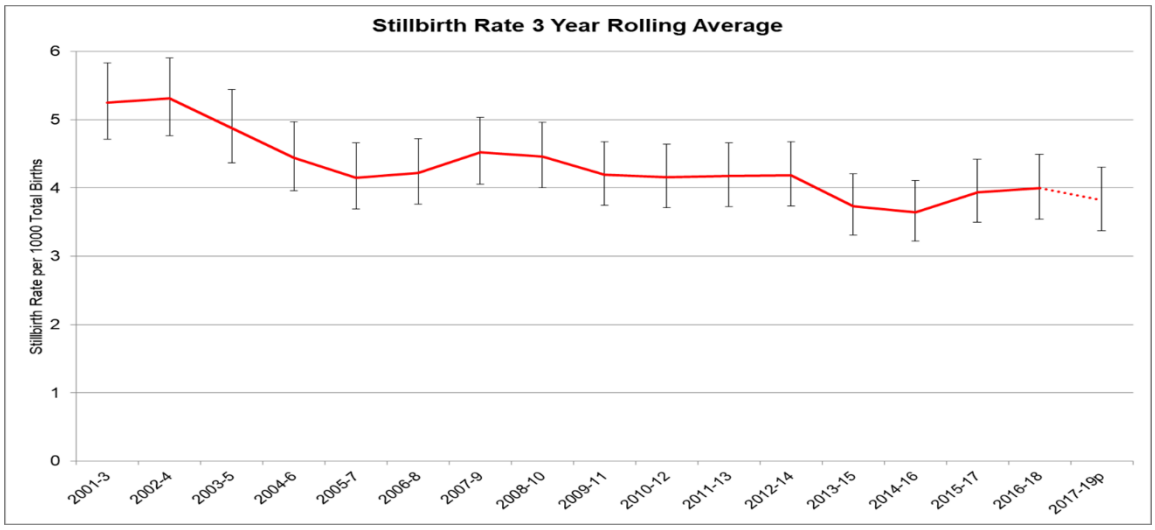
Figure 2: Stillbirth rate by year



Source NIMACH

*Note – 2019 data provisional

Figure 3: Stillbirth rate rolling average



Source NIMACH
*Note – 2019 data provisional

Table 1 shows the number of stillbirths over the past 10 years in the context of total numbers of stillbirths. In 2016, almost 40% of stillbirths were at 37 weeks or greater. This number fell to 24% in 2018, with provisional figures demonstrating an increase to 31% in 2019. Approximately one-third of stillbirths across the UK are in term pregnancies. The rates of congenital anomaly are also low in this cohort. Caution must be shown in drawing conclusions from data with small numbers. Some year to year variation is to be expected.

Table 1: Late Stillbirths >=37 weeks: Northern Ireland 2009-2019*

	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019p
Total stillbirths	**119**	**106**	**93**	**119**	**103**	**91**	**81**	**96**	**108**	**79**	**77**
Stillbirths >/= 37	**46 (38.7)**	**39 (36.8)**	**38 (40.9)**	**34 (28.6)**	**35 (34.0)**	**24 (26.4)**	**24 (29.6)**	**38 (39.6)**	**32 (29.6)**	**19 (24.o)**	**24 (31.2)**

Source: NIMACH and NIMATS
*2019 provisional figures
Note: Limitations in interpreting rates/numbers due to small numbers and caution is advised.
All SBs born in NI hospitals – irrespective of residency

Perinatal mortality review

Reviewing and learning from the circumstances surrounding all perinatal deaths has been established custom and practice for some time. In more recent years, efforts to improve and standardise the process have been pursued.

The SCOR (Standardised Clinical Outcome Review) tool which was developed by the Perinatal Institute was made available across the region in January 2018 to provide a framework for mortality review. This tool was used, in conjunction with

external experts, to undertake the Stillbirth Audit of 2016 Term Stillbirths published by the Regulation and Quality Improvement Authority (RQIA) in 2018.[4]

In recent years, the PHA has worked closely with the National Perinatal Epidemiology Unit in Oxford to adapt and implement a national perinatal mortality review tool (PMRT). This web based tool is linked to relevant national evidence based clinical guidelines and covers the maternal pathway from booking to postnatal and bereavement care. Information is also gathered on wider organisational and environmental variables. Regional use of PMRT also supports opportunities for data comparisons across the UK. Training for Trust staff on the use of PMRT was provided in June 2019 and roll out was completed in October 2019. A follow up audit of perinatal mortality review processes and structures at Trust level will be completed within the next year to assess implementation.

METHODOLOGY

As set out in the background section the Chief Medical Officer wrote to the then PHA Director of Nursing requesting that an assessment of the extent to which work to reduce stillbirth is embedded across the HSC. The excerpt from the letter is shown below:

"…I am conscious that the Maternity Collaborative has undertaken a significant body of work in this area, notably in promoting the Saving Babies Lives care bundle. I am therefore writing to ask you to undertake an assessment of the extent to which work to reduce stillbirth is embedded across the HSC. This should consider the issues raised by the coroner and include appraisal of compliance with national guidance in each Trust in relation to:

1. *Risk assessment and management*
2. *Management of reduced fetal movements*
3. *Use and interpretation of cardiotocographs*
4. *Fetal growth monitoring and management of intra uterine growth restriction*
5. *Identification and management of diabetes in pregnancy.*

The assessment should also report on the findings of the standardised mortality review by Trusts of all stillbirths which occurred during 2018.

The assessment report should identify what further action is required to improve care."

In order to answer these questions a pro-forma was developed which reflected the elements of the Saving Babies Lives care bundle along with the process and outcome indicators where available. A section on diabetes in pregnancy was also included. The pro-forma was shared with Trusts and a return was requested outlining for each section what policies and guidance the Trust had in place, what information was available to evidence implementation of actions and policies and what supporting data were available.

The Saving Babies Lives care bundle (Version One) has four elements:

- Reducing smoking in pregnancy;
- Risk assessment an surveillance for fetal growth restriction;
- Raising awareness of reduced fetal movement;
- Effective fetal monitoring in labour.

Trust responses were sought by end December 2019. A number of Trusts requested an extension to this deadline. Due to the impact of the COVID-19 pandemic a further delay was encountered with the final Trust return received by 24th April 2020. Therefore Trust returns reflect the position as at the time of their return which range from December 2019 to April 2020.

Once received the Trust returns were reviewed and compiled. Within each section a regional overview is provided on actions which have been taken, followed by each Trust's response. Each section concludes with the identified areas for action.

RISK ASSESSMENT AND MANAGEMENT

Regional overview

The report of the confidential case note audit of term stillbirths in Northern Ireland during 2016 (RQIA, 2018) found that in almost 40% of the cases (15 of 38) issues were identified in relation to risk assessment and management.[4] This included risk factors for venous thromboembolism, gestational diabetes, smoking, obesity and intra-uterine growth restriction.

Risk assessment is a core part of the antenatal care pathway and supports early identification of risks and actions to be taken to manage and mitigate risks. At the booking interview all woman are risk assessed to establish the type of care they require during pregnancy. This may be changed at any stage as a risk assessment is carried out at each contact with a midwife or doctor during pregnancy. Any change in type of care is formally communicated between teams on a regionally agreed History, Assessment, Referral, Transfer (HART) form.

The following types of risk assessment and management are included in the maternity handheld record (MHHR) and completed with each woman during pregnancy:

- Smoking and smoking cessation
- VTE in pregnancy
- Hypertension in pregnancy
- Weigh to Healthy Pregnancy
- Aspirin prophylaxis of pre-eclampsia
- Domestic violence
- Diabetes in pregnancy

All Trusts also risk assess women for substance and alcohol misuse during pregnancy.

An updated version of the MHHR has been designed and co-produced with midwives and obstetricians. A pilot for this update commenced in in May 2020 and will be evaluated using a quality improvement approach. The layout of the revised version supports the use of the standardised risk assessment tools.

REDUCING SMOKING IN PREGNANCY

Regional Overview

There is strong evidence that reducing smoking in pregnancy reduces the chance of stillbirth. It also has additional benefits on other smoking-related pregnancy complications such as premature birth, miscarriage, low birth-weight and Sudden Infant Death Syndrome (SIDS). Whether or not a woman smokes during her pregnancy has a far reaching impact on the health of the child throughout his or her life.[2]

In Northern Ireland the prevalence of smoking among pregnant women is 13.2%, down from 15.7% in 2013/14. Smoking is higher among women who are younger and who come from more deprived areas.[5]

In 2018/19 at the time of booking 97% of current smokers and 96% of ex-smokers were given advice on risks of smoking to their unborn baby and the health benefits of stopping smoking. Of current smokers, 81% of current smokers were referred to stop smoking services and 87% of those women referred accepted the referral.

Since 2016 all pregnant women are offered Carbon Monoxide (CO) testing at booking. Funding was provided to Trusts in 2019 to support the introduction of CO testing in the postnatal period.

BHSCT: Reducing smoking in pregnancy

Belfast HSC Trust operates a Smoke Free Policy but the Trust does not have a specific guideline on carbon monoxide testing in pregnancy. The Trust employs two smoking cessation midwives (WTE 1.6) who provide smoking cessation brief interventions and support for women to stop smoking during pregnancy. All women have their smoking status recorded in the Northern Ireland Maternity System (NIMATS) at their booking appointment. The smoking status of the woman's partner is also recorded (if available).

Carbon monoxide testing is offered to all women at their booking appointment and uptake in 2018 was 97.5%. Currently smoking rates at time of delivery are not collected. The Trust plans (early 2020) to offer carbon monoxide testing, smoking cessation support and signposting to smoking cessation services postnatally in both hospital and community service areas. All trust staff working in antenatal booking areas have been provided with brief intervention training.

NHSCT: Reducing smoking in pregnancy

The Northern HSC Trust does not currently have a policy on smoking cessation. The Trust has established a working group for the implementation of Saving Babies Lives care bundle 2 and that group's remit will include the development of smoking cessation guidance.

Each woman's smoking status is recorded at their booking appointment. A Stop Smoking in Pregnancy service is one element of the care package for pregnant women identified as smokers at booking and referrals are made to one of Northern HSC Trust's three smoking cessation midwives. Quarterly monitoring reports are submitted to the Public Health Agency (PHA).

Carbon monoxide testing is offered to all women (over 99% women in Q1 and Q2 of 2019/20) and monitoring is now completed on all women postnatally. Smoking rates at time of delivery are not currently collected.

Northern HSC Trust notes that educating midwives in motivational interviewing and brief intervention techniques is highly beneficial in ensuring positive outcomes. This training is provided by the Public Health Agency.

SEHSCT: Reducing smoking in pregnancy

SEHSCT operates a smoke free policy which aims to provide assistance for people to stop smoking and promote non-smoking as the norm in society.

SEHSCT has an embedded service called '*Smokefree Wombs'*. This is an opt out service which provides a 12 week programme compliant with NICE guidance. Two Health Improvement Midwives provide staff training, manage referrals of women and their partners, staff clinics and manage the caseload.

Each pregnant woman who books within the South Eastern HSCT will have her carbon monoxide level monitored at booking. If the reading >4ppm and the woman is a smoker, she is referred to the Health Improvement Clinic for specialist support, following a brief advice conversation regarding the harmful effects of smoking in pregnancy. 100% women who are identified with a CO reading >4ppm are contacted by the Health Improvement Midwives.

In the second quarter of 2019 97% of pregnant women had their smoking status recorded. In the second quarter of 2019 97% of pregnant women had their CO reading recorded.

Recent data shows approximately 12% were recorded as smokers at their booking appointment, smoking rates at booking had previously been 15%. Data on smoking status at time of delivery is not collected.

South Eastern HSC Trust has recently begun to CO test postnatally. Carbon monoxide monitors have been ordered for the postnatal ward and training of midwives is ongoing.

SHSCT: Reducing smoking in pregnancy

The Southern HSC Trust report that the following resources are present and in use in all antenatal areas:

- Integrated Maternity and Women's Health Division Referral Pathway from Maternity Service to Stop Smoking Services 2019;
- Nicotine Replacement Therapy Standard Operating Procedure (SOP) including Patient Group Directions to enable prescribing by midwives;
- SOP on referral to smoking cessation services;
- SOP on How Operate a Carbon Monoxide Monitor May 2019.

Policy implementation included a presentation given by the smoking cessation midwives as part of a quality improvement exercise in February, March and May 2018 coupled with rolling presentations to midwives involved in antenatal care. Information presented included information about carbon monoxide, its effects, referral pathways and education on CO monitors.

A specialist midwife for smoking cessation provides two sessions per week on the Craigavon site for antenatal patients. Postnatal patients are referred to the community smoking cessation team.

Between April 2019 and June 2019 381 (100%) women had their smoking status recorded. Between April 2019 and June 2019 381 (100%) women had their carbon monoxide reading recorded.

Statistics are not available for referrals to smoking cessation or other services but local perception is that the referral rate is high. Between April 2019 and June 2019 101 women (27%) were recorded as smoking at booking. Data on the rate of smoking at time of delivery is not available.

Every booking room in SHSCT is equipped with a CO monitor. Midwives are aware of local referral processes but at the time the Trust response was submitted numbers

of women who decline were not formally captured. Two smoking cessation midwives are employed in the Southern Trust and provide 15 hours on each site.

WHSCT: Reducing smoking in pregnancy

Western HSC Trust is smoke-free and this includes a no vaping policy.

Carbon monoxide levels are measured at all antenatal booking appointments and women identified as smokers are referred to smoking cessation services. Booking Clinics have access to all consumables and CO monitors.

All Community Midwives receive initial training and regular updates from the smoking cessation officer.

Summary: reducing smoking in pregnancy

Each Trust has a wider smoke-free policy however not all Trusts have a policy specific to smoking cessation among pregnant women. Smoking cessation or health improvement midwives are reported by 4 out of 5 Trusts to support staff and women in smoking cessation.

Regional figures indicate 81% of pregnant smokers are referred to smoking cessation services with the majority accepting the referral. Work to improve referral rate closer to 100% would ensure more women are supported towards smoking cessation.

Each Trust has indicated work is underway or already in place to introduce postnatal CO testing. This will provide a further opportunity to identify women who smoke and support them and their partners towards smoking cessation which will have a benefit on their newborn babies as well as their own health and any future pregnancies they may have.

Areas for Action:

- Improve referral rates to smoking cessation services for women who smoke
- Implement postnatal CO testing and onward referral

RISK ASSESSMENT AND SURVEILLANCE FOR FETAL GROWTH RESTRICTION

Regional Overview

Fetal growth restriction is one of the biggest risk factors for stillbirth. Antenatal detection is vital as it influences decision making on the optimal timing of delivery for these babies.[2]

All women in Northern Ireland have a customised fetal growth chart generated at booking. Women are risk assessed as to type of growth monitoring required at this stage according to the Saving Babies Lives algorithm; i.e. Symphysis fundal height (SFH) from 26 weeks or serial growth scans. This algorithm is included in the MHHR.

All babies' birthweight centiles are calculated at birth and the percentage born below the 10th centile detected in the antenatal period is 52%. This will continue to be monitored as part of the maternity KPI report.

A best practice letter was issued to all Trusts in December 2017 in order to standardise the approach to calculating fetal growth during USS in the third trimester to the Hadlock formula. This is now happening in all Trusts.

Regional training events have been provided by the Perinatal Institute on SFH measurement.

The Obstetric Imaging Improvement Group continues to press for a regional approach for the purchase of Obstetric software, so that images can be archived. This is important for audit and learning where growth restriction is missed and a stillbirth occurs.

BHSCT: Risk assessment and surveillance for fetal growth restriction

Belfast HSC Trust currently uses the risk assessment tool included in the Maternity Hand Held Record (MHHR) and this is completed at booking for all women. Belfast HSC Trust reports that local Fetal Growth Surveillance guidelines have been drafted.

Customised grow charts are generated for each woman at their booking appointment. These charts should be updated at each subsequent antenatal appointment. Serial ultrasound scans (USS) should be performed for women identified as being at high risk of small for gestational age (SGA) from 26-28 weeks gestation. Maternity services in Belfast HSC Trust use the Hadlock 4 formula to calculate estimated fetal weight (EFW) by ultrasound scan.

All midwifery staff using symphysial fundal height measurements undertake training and are competency assessed by the Midwifery Practice Education Team. Fetal growth surveillance is a mandatory component of Maternity Matters which all midwives are expected to attend on an annual basis. Training records are available.

Birthweight centiles for all babies are generated and recorded on NIMATs. Undetected SGA (birthweight <10th centile) triggers a Datix incident report and Belfast HSC Trust audits undetected SGA (5 cases per month) on an ongoing basis to identify barriers. Audit findings are presented at Mortality and Morbidity meetings attended by Obstetric, Neonatal and Midwifery staff.

Belfast HSC Trust does not currently collect data on the proportion of pregnancies appropriately screened and monitored according to risk, though screening and monitoring of risk is assessed at every antenatal consultation.

SGA/FGR quarterly referral and detection rates for BHSCT for 2018/19 range from 48.1 – 57.3% for detection which are above the Gap User Average. Referral rates range from 52.6 – 55.3% and are also above the Gap User Average.

A stillbirth working group review all stillbirths.

NHSCT: Risk assessment and surveillance for fetal growth restriction

Northern HSC Trust has an Assessment of Fetal Growth guideline relevant to all healthcare professionals involved in the care of pregnant women. All women receive a customised growth chart at booking. The use of estimated fetal weight charts and of symphysis fundal height charts have been implemented. The Trust utilises the Perinatal Institute's e-learning programme for the use, interpretation and referral of fetal weight and fundal height charts.

Staff competency in the use of estimated fetal weight charts is monitored via midwifery supervision, Trust based training and competence records.

The Trust SGA audit cycle utilises the Perinatal Institute pro-forma and several members of the team review cases of SGA. A Consultant Midwife reviews Northern HSC Trust data from the Perinatal Institute website.

An audit of 20 fetal growth cases in November 2018 – January 2019 showed that 100% had a risk assessment documented in the MHHR. Of the cases audited 26% had SFH incorrectly plotted. This represented a reduction in plotting errors from a previous audit in 2016. The 2018/2019 audit noted 6% of cases audited were not correctly identified as SGA. Four (20%) ultrasound scans had no clear indication of SGA. Sixteen percent of the cases audited were incorrectly plotted on graph (down

from 21% in 2016). The audit found that 4% of scans not correctly identified as SGA. The SGA detection rate was 35%.

SEHSCT: Risk assessment and surveillance for fetal growth restriction

South Eastern HSC Trust operates a Management of Small Gestational Age policy which outlines the methods used to assess fetal growth and referral pathways utilising customised growth charts.

An algorithm to aid decision making is part of the regional Maternity Hand Held Record to ensure standardisation of approach. High risk women are signposted to Consultant led care. Serial ultrasound scans are used to monitor growth, which is plotted on the customised growth chart to monitor appropriate growth velocity. Women deemed low risk are signposted to Midwifery Led care and growth is monitored using symphysis-fundal height measurements.

SEHSCT use the GROW audit tool. Undetected cases of SGA are reviewed by the Trust Practice Development and Governance team. Training is adapted annually to address areas where improvement is required. Undetected cases of intrauterine growth restriction (IUGR) are randomly selected and data uploaded to the Perinatal Institute's nationwide audit. Undetected IUGR infants delivered in midwifery led units are recorded.

Annual training in the use of estimated fetal weight charts is mandatory for midwifery staff. Training is provided for medical trainees and is offered to GP practices in the South Eastern HSC Trust. Annual training in the use of symphysis fundal height charts is mandatory for midwifery staff. SEHSCT does not have a process in place to identify staff in need of further training and does not collect evidence of completion of re-training or competence records.

SHSCT: Risk assessment and surveillance for fetal growth restriction

The Southern HSC Trust uses the risk algorithm in the MHHR and has policies in place for fundal height measurement (2016) and for referral to the Day Obstetric Unit for growth scans (2016).

Six monthly audit of SGA detection and missed cases has been added to the rolling audit agenda to identify current issues and therefore address training requirements.

SHSCT report 113 midwives have attended GROW training since 2016 and note that all staff are able to avail of this training. The Trust response did not detail the percentage of relevant staff trained in the use of the algorithm.

SGA/FGR referral and detection rates show that SHSCT is above the GAP user average (the average rate for all participating Units across the UK) in SGA babies detected and referred antenatally.

In a 2019 audit of risk assessments (n=20 charts) 85% had the growth risk assessment pro-forma completed. SHSCT points out that the 15% with no pro-forma completed did have an appropriate plan documented in the notes.

The Trust carried out an audit of all <10th centile babies delivered in September 2019. Twenty charts of <10th centile babies were included, both detected and undetected. SHSCT note that missed IUGR cases are not easily identified at local level with current IT systems (NIMATs).

The implementation of 3 weekly growth scans for detection of IUGR has changed the profile of antenatal clinics. An increased number of growth scans carried out by suitably trained practitioners has been required.

Previously trainees have contributed significant service provision at antenatal clinic which is no longer appropriate; however there has been no increase in funding to implement Saving Babies Lives. To provide high quality scanning for all appropriate women would require further investment and training.

WHSCT: Risk assessment and surveillance for fetal growth restriction

Western HSC Trust began using the Saving Babies Lives Risk Assessment Tool 'Screening and Surveillance of Fetal Growth in Singleton Pregnancies' in 2017. The Saving Babies Lives Risk Assessment Tool is included in all Maternity Hand Held Records in Northern Ireland.

WHSCT use the Perinatal Institute's customised growth charts and ongoing training (e-learning and face to face) is mandatory for all midwives and trainee medical staff.

All Trainees have a competency booklet that is signed off to confirm USS skills and all medical staff are GAP trained via e-learning. No data on number or proportion of staff trained were provided.

A selection of missed SGA are audited regularly using the Perinatal Institute missed SGA audit tool. There has been a delay in completing this audit due to staff turnover.

Evidence was provided of the provision and use of customised growth charts and the use of audits to assess how well growth charts are completed however the detail and outcomes of audit were not provided.

A project was completed to improve quality of third trimester USS and fetal growth measurement performed by Obstetrics and Gynaecology trainees in accordance with ISUOG criteria (International Society for Ultrasound in Obstetrics and Gynaecology).

The Western Trust places in the top 10 units in the UK for its detection rates using the GROW/GAP protocols. The average UK detection rate is 42% compared to the Western Trust which averages 52%. The non-GAP units' detection rates are as little as 19%. This is a result of the programme being fully implemented at the Trust for at least three years; however it has been an ongoing quality improvement project since 2004.

Summary: risk assessment and surveillance for fetal growth restriction

All Trusts have guidelines or policies in place to support staff in managing fetal growth restriction. As the risk assessment tool is included in the MHHR all Trusts utilise the same approach to identifying higher risk pregnancies which require serial ultrasound scans to monitor fetal weight.

All Trusts are part of the Growth Assessment Protocol (GAP) programme. The GAP programme offers a template, evidence-based protocol to standardise practice in the use of customised growth charts and referral criteria, which clinicians can adapt and integrate in their Trust based protocols. It follows the latest RCOG guidelines for thorough risk assessment and management planning for women in relation to fetal growth surveillance. Audit data is benchmarked nationally and the proportion of SGA babies detected antenatally and referred in Northern Ireland compares favourably with participating units across the UK.

There is evidence of audit and learning from cases which were not detected antenatally across the Trusts with variable amounts of detail provided. It is clear however that improving detection and management of fetal growth restriction is a priority area. Training in fetal growth measurement and surveillance is provided by all maternity services. Training records are also maintained across each of the Trusts although there was variation in information provided about this.

A number of Trusts highlighted that the implementation of three-weekly growth scans for detection of IUGR has had an impact on antenatal service provision as the use of the care bundle has identified a group of women requiring regular scans from staff appropriately trained to do this.

While there has been a major focus on antenatal growth monitoring both regionally and within each Trust there is still further to do as shown by the findings of the RQIA confidential case note audit of term stillbirths in Northern Ireland during 2016.[4] This identified that in two thirds (25 of 38 cases) a lack of appropriate fetal growth monitoring was identified. Fetal growth restriction was not detected in 21% (8 of 38) of cases. In a further five cases, fetal growth restriction was deemed not to have been appropriately managed.

The Saving Babies Lives Care Bundle Version 2 was published in 2019.[6] In respect of fetal growth maternity services are advised to focus improvement efforts in the following three areas:

i. Appropriate risk assessment at the beginning of pregnancy for placental dysfunction and the associated potential for growth restriction and robust referral processes to appropriate care pathways following this.
ii. Appropriate prescribing of aspirin in line with this risk assessment in women at risk of placental dysfunction.
iii. Effective measurement and recording of SFH.

A new aspect of the care bundle on fetal growth is the suggestion of a second trimester risk assessment using uterine artery Doppler measurement to risk stratify women to the appropriate frequency and type of growth monitoring for the third trimester. This represents a service development and Trusts would not have the infrastructure to implement this aspect of the care bundle.

Areas for Action:

- Focus on the three areas of improvement in the care bundle on risk assessment, prescription of aspirin and effective measurement and recording of SFH to further improve the management of FGR
- Regional work to agree the pathway for third trimester growth surveillance

RAISING AWARENESS OF REDUCED FETAL MOVEMENTS

Regional overview

Enquiries into stillbirth have consistently described a relationship between episodes of reduced fetal movement and stillbirth.[7,8] In all of these case reviews unrecognised or poorly managed episodes of RFM have been highlighted as contributory factors to avoidable stillbirths. In addition, a growing number of studies have confirmed a correlation between episodes of RFM and stillbirth.[9,10] This relationship increases in strength when women have multiple episodes of RFM in late pregnancy (after 28 weeks' gestation).[11,13]

The report of the confidential case note audit of term stillbirths in Northern Ireland during 2016 found in four cases (4 out of 38) there was inappropriate management of reduced fetal movement, with learning identified in three out of four of the cases which may have led to a different outcome.[4]

Element 3 of the Saving Babies' Lives (V1) care bundle adopted by the Trusts, encourages raising awareness amongst pregnant women of the importance of detecting and reporting reduced fetal movement (RFM), and ensuring providers have protocols in place, based on best available evidence, to manage care for women who report RFM.

A reminder of best practice letter was sent to all clinicians on the management of reduced fetal movement on 14th March 2017. The Royal College of Obstetricians & Gynaecologists (RCOG) leaflet for women was incorporated into the new Maternity Hand Held Record (MHHR).Women are advised of the importance of fetal movement at antenatal appointments and the need to seek advice if any changes occur. This element and its interventions are aligned with the RCOG Green Top Guideline 57 which is the best evidence summary and set of recommendations.

BHSCT: Raising awareness of reduced fetal movements

Belfast HSC Trust guidance was due for review in 2013. Current evidence based guidance is in draft format and going through the ratification process.

Belfast HSC Trust's maternity service participated in the fetal monitoring AFFIRM study between 2014 and 2017. A research study in Norway found that encouraging women to pay attention to their babies' movements, combined with a care package and early delivery of babies at risk, helped to cut rates of stillbirth by 30%. The AFFIRM study was a large randomised clinical trial research trial to see if the same

effect could be found again in a more stringent study. It used data from 400,000 women at 33 hospitals around the UK and Ireland.

The aim of the AFFIRM study was to test the hypothesis that the introduction of a care package for antenatal women that increased awareness of the need for prompt reporting of reduced fetal movement (RFM), and standardised management, including timely delivery would alter the incidence of stillbirths.

The charity Tommy's funds research into miscarriage, stillbirth and premature birth. , and provide pregnancy health information to parents. In partnership with NHS England Tommy's has developed a guide to baby movements in pregnancy. This guide is given to, and discussed with, all pregnant women by their 24th week of pregnancy. Information with regard to fetal movement is currently contained in the MHHR and fetal movement is assessed and discussed at every antenatal appointment after 25 weeks gestation.

Belfast HSC Trust does not currently collect data on the percentage of women reporting RFM who understood the information provided or the messages given in regard to RFM.

Belfast HSC Trust reports that care for all women who report reduced fetal movement is managed according to the AFFIRM algorithm. Data for 2018 shows a decrease in the stillbirth rate within BHSCT and induction of labour rates for 2018/19 also showed a decrease.

Induction of labour was an action in 4% of documented entries when women presented to Admissions with reduced fetal movement in 2018. All women who attended with reduced fetal movement had further management undertaken (e.g. CTG, USS, SFH, urine testing, observations, review by medical staff).

NHSCT: Raising awareness of reduced fetal movements

Northern HSC Trust utilises a telephone triage pathway and a management flowchart for handling reports of reduced fetal movement. Advice on reduced fetal movement is included in MHHR following regional work on reduced fetal movement and the review of regional serious adverse incidents (SAIs).

Northern HSC Trust does not collect data on the percentage of women reporting RFM who understood the message given. However, the Trust suggests that the substantial number of women attending the fetal maternal assessment unit with reduced fetal movement is evidence of the efficacy of the communication with pregnant women.

Northern HSC Trust references anecdotal evidence that suggests that reduced fetal movement has increased the induction of labour rate.

SEHSCT: Raising awareness of reduced fetal movements

The South Eastern HSC Trust Management of Women Presenting with Reduced Fetal Movement policy makes recommendations regarding the management of women presenting with reduced fetal movements, identifying pregnancies at risk of fetal compromise and preventing adverse pregnancy outcomes whilst avoiding unnecessary interventions. The policy also aims to standardise information given to women about fetal movement.

RCOG Information for "Your baby's movements in pregnancy" is placed in all Maternity Hand Held Records at the booking appointment and fetal movements are discussed with the woman at each antenatal visit.

SEHSCT does not collect data on the percentage of women reporting reduced fetal movement who have received the information, nor does the Trust collect data on the percentage of women reporting reduced fetal movement who understood the message provided.

An audit conducted in 2017 identified that 989 women had presented with reduced fetal movement. In 86.5% of women (n=855) no further action was taken. Further management was required in 13.5% (n=134).

SHSCT: Raising awareness of reduced fetal movements

The Southern HSC Trust guideline (2016) on reduced fetal movement includes a checklist for management of pregnant women who present with reduced fetal movement.

SHSCT has no formal policy on the provision of information leaflets or advice sheets regarding reduced fetal movement. The MHHR contains a section on reduced fetal movement and a pro-forma is completed at 16 weeks to ensure this has been highlighted or discussed. An RCOG patient information leaflet is also available.

An audit was carried out (2019) of 48 charts to assess whether the RCOG patient information leaflet had been inserted 2019. The RCOG information leaflet on reduced fetal movement had been included in 83% (n=40) of charts. All MHHR contain antenatal advice on reduced fetal movement.

In 2019 ten members of midwifery staff working in maternity assessment unit were interviewed to determine their knowledge and understanding of the local guideline on reduced fetal movement and the advice to pregnant women who contacted the unit with reduced fetal movement. All staff gave the correct advice with regards the management of RFM. However two staff did not take a history to identify risk factors for stillbirth until prompted.

Feedback was obtained from sample of women to gauge whether the messages on RFM had been assimilated as intended. Feedback showed that 19/20 women recalled receiving advice about accessing information on reduced fetal movement.

Ten percent of women reporting RFM had received the RCOG leaflet and 50% of women reporting RFM understood the message.

WHSCT: Raising awareness of reduced fetal movements

Western HSC Trust's Reduced Fetal Movement Policy includes a checklist for care for pregnant women who report RFM.

The Maternity Hand Held Record is issued the woman's dating ultrasound appointment (8-14weeks). As there is a section on fetal movement included in the MHHR WHSCT report no need for a specific leaflet. Fetal movement is discussed at the dating appointment and the conversation around fetal movement continues at each antenatal appointment.

Western HSC Trust report 100% of women as receiving the information on fetal movement contained in the MHHR.

No data is available on the percentage of women reporting RFM who understood the message and feedback is not sought to gauge whether messages have been assimilated.

No data is available on the percentage of women reporting RFM who required further action or for whom no further action was necessary.

Summary: raising awareness of reduced fetal movements

All Trusts now have local guidelines on the management of reduced fetal movements. Reduced Fetal Movement policy makes recommendations regarding the management of women presenting with reduced fetal movements, identifying

pregnancies at risk of fetal compromise and preventing adverse pregnancy outcomes whilst avoiding unnecessary interventions. The policy also aims to standardise information given to women about fetal movement.

Following regional work, information on fetal movements has been added to the maternity hand held record (MHHR) for every pregnant woman in Northern Ireland and discussed at every antenatal appointment after 25 weeks gestation. Four out of 5 of the Trusts supplement this information with additional leaflets. The latest updated version of the new MHHR provided to all pregnant women contains advice for women on reduced fetal movement including advice on when to contact maternity services.

None of the Trusts currently collate data on the percentage of women reporting RFM who understood the information provided or messages given in regard to RFM. However one of the Trusts carried out a small audit and feedback was obtained from a sample of women to gauge whether the messages on RFM had been assimilated as intended. Feedback showed that 19/20 women recalled receiving advice about accessing information on reduced fetal movement.

Several of the Trusts have carried out audit to explore the management and outcomes for women who have attended maternity services reporting RFM for learning.

Prior to October 2019 all the Trusts used the Standardised Clinical Outcome Review Tool (SCOR) to review all cases of stillbirth and neonatal death within pre-determined criteria. The SCOR tool included a dedicated section on reduced fetal movement. SCOR also included questions on reduced fetal movement information given to women and the appropriateness of how reduced fetal movement was managed. The SCOR tool has now been replaced regionally and nationally with the Perinatal Mortality Review Tool (PMRT). PMRT also includes a dedicated section on reduced fetal movement.

Areas for Action

- Trusts should develop a robust methodology to check, record and collate data on the percentage of women reporting RFM who understand the information provided
- Trusts should audit the management and outcomes for women who have attended maternity services for RFM

EFFECTIVE FETAL MONITORING DURING LABOUR

Regional overview

Cardiotocography (CTG) monitoring is a well-established method of confirming fetal wellbeing and screening for fetal hypoxia. It is the best method available to monitor a fetus during a high risk labour. However, CTG interpretation is a high level skill and is susceptible to variation in judgment between clinicians and by the same clinician over time. These variations can lead to inappropriate care planning and may subsequently impact on perinatal outcomes.[6]

Element 4 of the Saving Babies Lives care bundle (V1) identifies the requirement for effective fetal monitoring in labour. This element requires all staff who care for women in labour to undertake an annual training and competency assessment on cardiotocograph (CTG) interpretation and use of auscultation. No member of staff should care for women in a birth setting without evidence of training and competence within the last year.

As part of the Maternity Quality Improvement Collaborative CTG stickers for both the antenatal and intrapartum period have been developed in line with NICE guidance and implemented in all Trusts.

A buddy system should also be in place for review of cardiotocograph (CTG) interpretation, with a protocol for escalation if concerns are raised. All staff should be trained in the review system and escalation protocol.

BHSCT Effective fetal monitoring during labour

Belfast HSC Trust staff attend an in-house ‘Maternity Matters’ study day annually. The day includes a two-hour teaching session on fetal monitoring which covers both Intelligent Intermittent Auscultation and Continuous Electronic Fetal Monitoring. A pre and post-test assessment on Fetal Monitoring is administered. The assessment pass mark is 80%.

All staff working in the antenatal and intrapartum environments are required to complete annually the E-learning K2 Fetal Monitoring Training Programme. E-learning using K2 has been replaced with a Physiological CTG e-learning tool. Completion of this training is a mandatory annual requirement for all midwives and obstetricians.

A two-day CTG Master Class is arranged and attended by antenatal and intrapartum staff on a six monthly basis.

The quality improvement project – CTG Café Expresso Learning enables weekly multi-professional CTG case discussions in delivery suite setting. Transition to using Physiological CTG within the Trust is also a Quality Improvement Project. The learning from this project is now being implemented regionally.

175 staff (100%) have received training on CTG interpretation and auscultation.

175 staff (100%) are deemed competent in CTG interpretation and auscultation.

175 staff (100%) have successfully completed mandatory annual updates on CTG interpretation and auscultation.

'Fresh Eyes' review of the intrapartum CTG occurs 2 hourly. A central monitoring system is also available and in use in delivery suite.

The Regional Intrapartum CTG Evaluation sticker based on NICE Clinical Guideline CG190 (2014 updated 2017) was used hourly in labour to evaluate the intrapartum CTG up until early August 2019, when Physiological CTG checklist and Intrapartum CTG evaluation stickers were tested and implemented alongside the launch of Physiological CTG within Belfast HSC Trust.

Guidance on escalation is given in the Fetal Monitoring Guidelines Policies.

NHSCT Effective fetal monitoring during labour

The Northern HSC Trust Intermittent Auscultation and Continuous Electronic Fetal Monitoring Guideline encourages a consistent approach in the use of intermittent auscultation and the interpretation of electronic fetal monitoring (EFM) in antenatal and intrapartum fetal surveillance by medical and midwifery staff. NHSCT is currently working with the Regional Maternity Collaborative to implement the Regional Physiological CTG guidance.

K2 training is part of mandatory training for all members of maternity team and NHSCT reports 39 Doctors and 242 midwives enrolled on the programme. The percentage of doctors and midwives enrolled was not supplied. Monthly CTG meetings occur across both maternity sites.

Northern HSC Trust did not provide information on numbers of staff deemed competent in CTG interpretation and auscultation.

Northern HSC Trust did not provide information on numbers of staff who had successfully completed mandatory annual updates on CTG interpretation and

auscultation. The Trust is in the early stages of implementing CTG training based on physiological CTG approach.

NHSCT report that the 'buddy system' is embedded in both antenatal and intrapartum setting. The CTG "buddy" approach will be used to assist in interpretation and confirming definition and classification. Thus in the Antenatal period two members of the multidisciplinary team should review and sign the CTG.

The Trust utilises regional CTG stickers for all women in labour undergoing CTG monitoring.

SEHSCT Effective fetal monitoring during labour

The South Eastern HSC Trust Electronic Fetal Monitoring (EFM) in the Antepartum and Intrapartum Period policy provides guidance to staff as to when it is appropriate to use EFM.

Maternity staff complete either K2 or physiological CTG training and competency assessment. However it is only in the last year that records have been kept of training.

SEHSCT encourages the 'buddy system' be used all intrapartum CTG interpretation but recognises that it is not universal and is dependent on capacity. A Clinical Skills Facilitator role is well established to assist.

There is no specific protocol for escalation of CTG concerns but a jump call policy exists for any escalation issues.

Data shows that 93% of midwifery staff, 100% of Registrar level medical staff and 91.6% of Consultants have received training and completed mandatory annual updates on CTG interpretation and auscultation and are deemed competent in CTG interpretation and auscultation.

South Eastern HSC Trust uses the regional sticker system on an hourly basis for all women in labour undergoing CTG monitoring.

SHSCT Effective fetal monitoring during labour

The Southern HSC Trust follows NICE (2017) guidance for intrapartum CTG interpretation and uses the regional evaluation tool (sticker) to classify intrapartum CTGs. The regional antenatal sticker is used for all antenatal CTGs.

It is Trust policy that all members of staff who care for women in labour complete K2 or e-learning for health on an annual basis. Midwives are required to attend annual face to face training with the CTG co-ordinator or Clinical Education Centre (CEC). All members of the obstetric staff are able to avail of the twice monthly CTG meetings.

A SHSCT fetal monitoring guideline was developed in 2018 and is available on the Trust intranet. This guideline includes an escalation protocol.

Implementation of current policy based on the regional CTG sticker involved small group training sessions which were mandatory for all staff involved with CTG interpretation.

All CTGs are assessed independently by two midwives and this assessment is documented in the patients MHHR. CTGs not categorised as normal are escalated to the obstetric team ST3 or above as per the escalation policy.

Craigavon Area Hospital has agreed to move with the rest of the region to introduce physiological interpretation of CTG by August 2020. Several senior staff attended the regional masterclass in November 2019. It is planned to roll out the training with all staff from April 2020. When physiological CTG interpretation has been introduced SHSCT will follow the regional guideline and evaluation tools.

An e-learning CTG education package is available to all staff. During the year October 2018 – October 2019 this self-directed learning was completed by:

- 85% of midwives;
- 85% of registrars; and
- 44% of consultants.

Staff await the introduction of a new teaching package to reflect the transition to physiological interpretation of CTG. During the year October 2018-October 2019 65% of hospital based midwives in Craigavon completed annual small group training. This session includes intermittent auscultation training. There is no assessment involved but unsafe practice is highlighted.

An audit of 20 charts conducted in December 2019 identified that 98.5% of CTG stickers had been interpreted using the buddy system and either required no escalation or were escalated correctly. The audit identified that 6% of CTG stickers were incorrectly completed. Errors were no record of maternal pulse, no record of the number of contractions or signature omitted.

The Southern Trust is currently undergoing significant change in CTG interpretation in line with regional approach. The Trust is currently moving towards physiological

CTG interpretation which should be implemented in July 2020 prior to commencement of new trainees in August 2020. Therefore rather than undertaking K2 e-learning training this year many staff have either completed physiological training or have a date confirmed for this. The data above therefore does not reflect the current numbers trained. All consultant staff have either completed physiological CTG training or have a date to do so. The Trust has established a working group to plan implementation.

WHSCT Effective fetal monitoring during labour

Western HSC Trust staff currently undertake K2 training yearly which includes the following:

- Fetal Physiology
- Antenatal CTG
- Intrapartum CTG
- Cord Blood Gas
- Errors and limitations in Fetal monitoring
- Intrapartum intermittent Auscultation

Midwives are expected to attend a CTG workshop annually provided by the Clinical Education Centre. At present staff are not competency assessed on CTG interpretation. Twenty-nine staff (91%) were reported as having received training on CTG interpretation and auscultation. Competence in CTG interpretation and auscultation is not assessed.

Training Records from K2

- Ongoing audit on CTG stickers intrapartum, antepartum
- CTG interpretation Study day annual
- CTG workshops and monthly Multidisciplinary Departmental CTG meetings
- Dawes Redman System in place
- CTG machines all updated 2019 to include continuous recording of maternal pulse

Staff who have successfully completed mandatory annual updates on CTG interpretation and auscultation K2 CTG 72%.

WHSCT report a buddy system Standard Operating Procedure in place which includes an escalation process. The Trust accepts this system is dependent on staff being available but advises this is unusual and that someone will buddy as soon as they become available.

WHSCT report that a CTG sticker system guideline is used for all women in labour undergoing CTG monitoring.

Summary

There is currently a significant change in CTG interpretation regionally moving towards a physiological interpretation approach. Currently one trust is piloting implementation of physiological CTG interpretation with the other 4 trusts aiming to implement this approach by August 2020. In light of COVID-19 a reviewed timeframe for regional implementation may be required. At the time of collecting the data for this report all trusts demonstrate they have fetal monitoring guidelines and either have a policy for escalation of concerns or jump call policy. All Trusts embed annual mandatory training for all maternity staff providing antenatal or intrapartum care, however not all trusts currently carry out competency assessment. All trusts use a buddy or fresh eyes approach to review CTG tracings.

Areas for Action: effective fetal monitoring during labour

- Trusts must be able to demonstrate that all qualified staff who care for women in labour are competent to interpret CTG, use the buddy system at all times and escalate accordingly when concerns arise or risks develop
- Trusts must identify appropriate training packages and be able to assess competence as defined locally
- All Trusts to move to physiological CTG to provide a regionally consistent approach to CTG interpretation

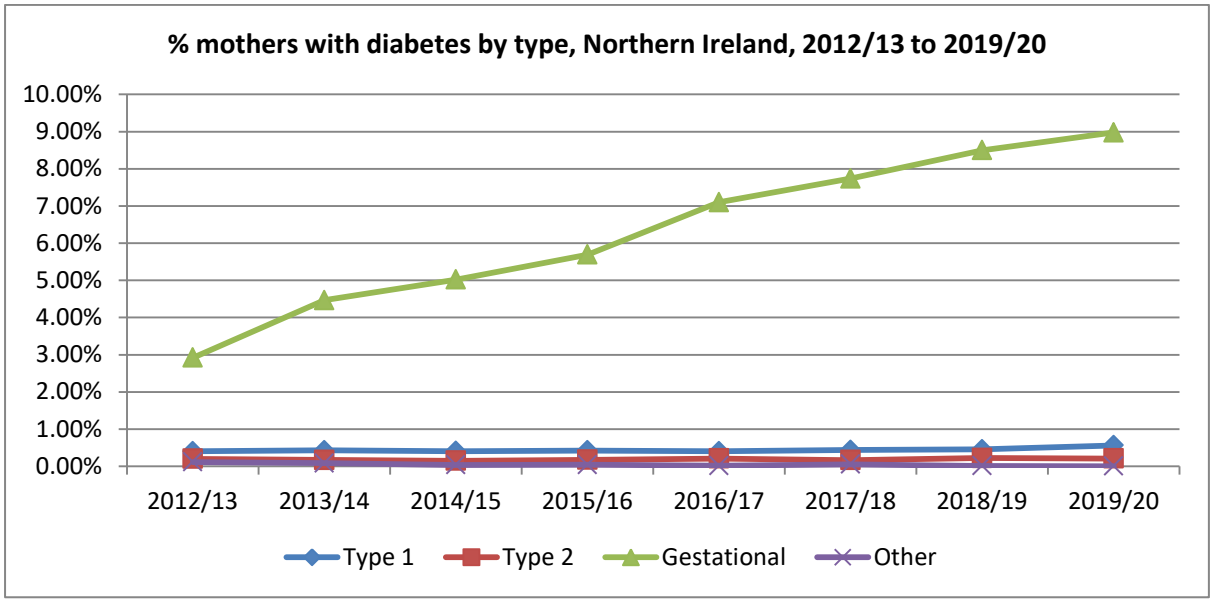
IDENTIFICATION AND MANAGEMENT OF DIABETES IN PREGNANCY

Regional overview

Diabetes in pregnancy is becoming increasingly common and now affects almost 1 in 10 pregnant women in Northern Ireland. Advanced age (≥35 yrs.), obesity, excessive central body fat deposition and a more sedentary lifestyle are known risk factors for gestational diabetes.[12] The table below shows that over the past 8 years there has been almost a three-fold increase in the percentage of mothers who have diabetes, and a doubling of the number of mothers with diabetes. Some of this increase was due to improved monitoring but a significant proportion of this increase driven by a rise in mothers with gestational diabetes (GDM).

Year	Mothers			Mothers with diabetes by type (% of all mothers)							
	Giving birth	With diabetes		Type 1		Type 2		Gestational		Other	
	n	n	%	n	%	n	%	n	%	n	%
2012/13	24,843	904	3.64%	100	0.40%	50	0.20%	726	2.92%	28	0.11%
2013/14	24,074	1,239	5.15%	103	0.43%	41	0.17%	1,075	4.47%	20	0.08%
2014/15	24,184	1,357	5.61%	98	0.41%	36	0.15%	1,214	5.02%	9	0.04%
2015/16	24,217	1,534	6.33%	103	0.43%	42	0.17%	1,379	5.69%	10	0.04%
2016/17	23,859	1,844	7.73%	96	0.40%	50	0.21%	1,694	7.10%	4	0.02%
2017/18	22,839	1,917	8.39%	100	0.44%	38	0.17%	1,767	7.74%	12	0.05%
2018/19	22,709	2,085	9.18%	103	0.45%	50	0.22%	1,930	8.50%	2	0.01%
2019/20	22,211	2,165	9.75%	125	0.56%	46	0.21%	1,994	8.98%	0	0.00%

Source: NIMATS via Business Objects



Source: NIMATS via Business Objects

Diabetes in pregnancy is associated with risks to the woman and to the developing fetus. Miscarriage, pre-eclampsia and preterm labour are more common in women with pre-existing diabetes. In addition, diabetic retinopathy can worsen rapidly during pregnancy. Stillbirth, congenital malformations, macrosomia, birth injury, perinatal mortality and postnatal adaptation problems (such as hypoglycaemia) are more common in babies born to women with pre-existing diabetes.[13]

There has been investment in Trusts over recent years to recognise the significant increase in the number of women with diabetes in pregnancy. Most recently c£230k was allocated non-recurrently in 2019/20 from Transformation funding to support pressures in this service, however services remain under pressure.

Pre-pregnancy clinics for women with diabetes are available in all Trusts. One of the key aims is to ensure that women with diabetes are referred immediately on diagnosis of pregnancy; a CCG referral mechanism or equivalent is now in place across all Trusts to facilitate to support timely referral.

Trusts were asked to provide details of local policies for the identification and management of diabetes in pregnancy and to provide an update on how the Trust meets NICE guidance NG3 (2015) Diabetes in pregnancy: management of diabetes and its complications from preconception to the postnatal period.

Trust responses indicate that the vast majority of recommendations from NICE NG3 (>90%) have been implemented. For a small number of the NICE recommendations not implemented an alternative regionally agreed positon has been reached via the Diabetes in Pregnancy sub-group of the Diabetes Network. These issues include the use of the IADPSG/WHO 2013 values for diagnosis of GDM on OGTT rather

than the NICE thresholds. The sub-group made this decision based on the evidence and on the ability to compare NI data internationally which using these diagnostic values affords. The use of glibenclamide in pregnancy where metformin is not suitable is recommended by NICE however there are concerns among the sub-group that there have been safety issues raised about the use of this drug in pregnancy.

Postnatal testing of women with GDM to test for diabetes varies between Trusts, with a number of units continuing to offer OGTT at 6 weeks post-partum as it is viewed as the gold standard test. NICE NG3 recommends that a fasting plasma glucose test be checked at 6 – 13 weeks or an HbA1c test if fasting plasma glucose is not possible, and that OGTT is not offered routinely.

Trusts report undertaking audit activity in this area including:

- Completion of diabetes in pregnancy risk assessment
- OGTT activity
- Joint clinic waiting times
- Review of stillbirths associated with diabetes

A protocol dealing with steroid administration in patients with diabetes in pregnancy is being audited on a regional basis with results to be brought back to the Diabetes Network sub-group.

This report focuses on the work to prevent stillbirths within Trusts which is appropriate for those as aspects where GPs have no involvement, however for diabetes care much of the pre-pregnancy care is undertaken by GPs. Care to support management of diabetes, provide education and to refer patients will have an impact on the patient's pregnancy and outcomes.

The Diabetes in Pregnancy sub-group of the Diabetes Network has developed literature which has been distributed to GPs across Northern Ireland and has worked to streamline group education for all newly diagnosed women.

The main challenges highlighted by the Trusts are those of staffing and resource to care for the rapidly growing population of women with diabetes in pregnancy. This includes capacity for direct care as well as capacity for service improvement, to develop training materials and to undertake training activity.

Challenges highlighted by the Diabetes in Pregnancy sub-group of the Diabetes Network include data management such as the update to the pregnancy module of the Northern Ireland Electronic Care Record (NIECR diabetes) pathway which has been designed but still not implemented.

CONCLUSION

Stillbirth is a devastating event for women, couples, their families and the healthcare professionals looking after them. Work to reduce stillbirth has been a priority for Northern Ireland as evidenced by the volume of work carried out by HSC Trusts and regional bodies under the auspices of the maternity collaborative and MSIG.

Regional surveillance of perinatal mortality is co-ordinated by the Northern Ireland Maternal and Child Health (NIMACH) office which sits within the Public Health Agency (PHA). NIMACH also facilitates submission of Health and Social Care (HSC) Trust data to the national Clinical Outcome Review Programmes (CORP) for Maternal and Infant Health which is currently run by Mothers and Babies: Reducing Risk through Audit and Confidential Enquiry (MBRRACE-UK).

A regional steering group, chaired by the Chief Medical Officer, guides the work of NIMACH in supporting perinatal mortality surveillance and improvement.

The figures suggest a stillbirth rate in Northern Ireland which is comparable to the rest of the UK with a gradual reduction in the stillbirth rate over the past 20 years. This trend in the context of a maternal population with ever increasing complexity is positive. However we know that the rate has somewhat plateaued in Northern Ireland over the second half of this 20 year period. We also know from the RQIA audit of term stillbirths in 2016 that in 29% of those cases a conclusion was reached that different care may have made a difference to the outcome. It is therefore clear that there is more work to do to further reduce stillbirths in Northern Ireland.

Midwifery and obstetrics staff face challenges operating within complex environments and working with a population in which the prevalence of factors associated with an increased risk of poorer outcomes in pregnancy are rising, such as obesity, diabetes, complex co-morbidities, older mothers, deprivation, social complexity, smoking and substance misuse. In addition Trusts report ongoing challenges in recruitment and retention of skilled staff. It is well recognised that a fully staffed and appropriately skilled workforce is essential; first and foremost, in the delivery of safe clinical care but also importantly, to invest in leadership and the ongoing support of a culture of improvement

In assessing the extent to which work to reduce stillbirth is embedded across the HSC it is clear that a substantial amount of work has and continues to be done. The evidence provided by Trusts of audit results, policies, data and training records indicates a service focused on reducing factors associated with stillbirth.

The structures to support implementation of the maternity strategy have greatly supported the development of a regional approach to the delivery of maternity care, with a ‘Once for Northern Ireland’ ethos at its core. The process of continuous

quality improvement is firmly embedded within each of the maternity services and is visible regionally in the continued and wide clinical engagement with the maternity collaborative. This regional approach is also evidenced by the agreement to implement the Saving Babies' Lives Care Bundle Version 1. The next iteration of this care bundle was released in 2019 and work to implement this is required.

There are challenges with this including the requirement for service development, investment and workforce. However formally moving to Version 2 of the care bundle would represent the next step in the regional pursuit to reduce stillbirths.

In each section of this report Areas for Action have been captured to highlight areas of focus to further embed actions to reduce stillbirth. In addition to moving to version 2 of the care bundle the areas for further work include:

- Improve referral rates to smoking cessation services for women who smoke
- Implement postnatal CO testing and onward referral
- Focus on the three areas of improvement in the care bundle on risk assessment, prescription of aspirin and effective measurement and recording of SFH to further improve the management of FGR
- Regional work to agree the pathway for third trimester growth surveillance
- Trusts should collate data on the percentage of women reporting RFM who understand the information provided
- Trusts should audit the management and outcomes for women who have attended maternity services for RFM
- Trusts must be able to demonstrate that all qualified staff who care for women in labour are competent to interpret CTG, use the buddy system at all times and escalate accordingly when concerns arise or risks develop
- Trusts must identify appropriate training packages and be able to assess competence as defined locally
- All Trusts to move to physiological CTG to provide a regionally consistent approach to CTG interpretation

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Appendix One Glossary

auscultation	Process of listening to the internal sounds of the body
carbon monoxide	Colourless, odourless, tasteless, poisonous gas produced by incomplete burning of carbon-based fuels. Carbon monoxide affects a growing baby's access to oxygen, needed for healthy growth and development.
cardiotocograph	Electronic fetal monitor
cardiotocography	Technical means of recording the fetal heartbeat and the uterine contractions during pregnancy.
continuous electronic fetal monitoring	See cardiotocography
Dawes Redman system	Computerised numerical analysis of cardiotocography
diabetic retinopathy	Complication of diabetes, caused by high blood sugar levels damaging the back of the eye (retina).
estimated fetal weight	An estimate of the weight of a fetus based on ultrasonographic measurement and the use of standard reference tables.
fetal growth chart	Customised antenatal charts for plotting fundal height and estimated fetal weight
fetal growth restriction	Condition in which a baby's growth slows or stops during pregnancy.
fetal hypoxia	Deficiency of oxygen that can influence the fetal heart rate
fundal height measurement	Distance from the woman's pubic bone to the top of her uterus in centimetres Used to estimate baby's size.
Growth assessment protocol	The Perinatal Institute's programme of accreditation, training, and implementation of protocols in fetal growth assessment
gestational diabetes	High blood sugar that develops during pregnancy and usually disappears after giving birth. More common in the second or third trimester.
glibenclamide	Also known as glyburide. A medication used to treat diabetes mellitus type 2.
GROW system	customised growth chart software (Gestation Related Optimal Weight)
Hadlock formula	Formula to calculate estimated fetal weight and the corresponding percentile
intelligent intermittent auscultation	Method of fetal monitoring for all women who are considered at low risk of fetal hypoxia during labour

intra uterine growth restriction	See fetal growth restriction
K2 training	Online e-learning tool covering an array of topics in fetal monitoring
macrosomia	Term used to describe a baby who is born much larger than average for their gestational age
Oral Glucose Tolerance Test	Test to diagnose instances of diabetes mellitus or insulin resistance. The test is a more substantial indicator of diabetes than finger prick testing
perinatal mortality	Stillbirths and deaths in the first week of life
physiological CTG	Method of interpreting the mechanical and hypoxic stresses a fetus is exposed to during labour.
placental dysfunction	Complication of pregnancy which occurs when the placenta does not develop properly, or is damaged.
reduced fetal movement	Maternal perception of reduced or absent fetal movements.
small for gestational age	Term used to describe a baby who is smaller than the usual amount for the number of weeks of pregnancy, usually birthweights below the 10th percentile for babies of the same gestational age.
stillbirth	Death or loss of a baby before or during delivery.
symphysis fundal height	Common screening method used to estimate the gestational age and fetal growth after 24 weeks gestation. See fundal height measurement.
uterine artery Doppler	An ultrasound measurement used to check the blood flow between mother and fetus.
venous thromboembolism	Condition in which a blood clot forms, often in the deep veins of the leg, groin or arm, and travels in the circulation, lodging in the lungs

Appendix Two Acronyms

AFFIRM	Awareness of Fetal movements and Focussing Interventions Reduce fetal Mortality
BHSCT	Belfast Health & Social Care Trust
CEC	Clinical Education Centre
CO	Carbon Monoxide
CTG	Cardiotocography
DOH	Department of Health
EITP	Early Intervention Transformation Programme
GAIN	Guidelines and Audit Implementation Network
GAP	Growth Assessment Protocol
GROW	Gestation Related Optimal Weight
HART	History, Assessment, Referral, Transfer
HSC	Health & Social Care: umbrella term to describe the National Health Service in Northern Ireland
IADPSG	International Association of Diabetes and Pregnancy Study Groups
ISUOG	International Society for Ultrasound in Obstetrics and Gynaecology
KPI	Key Performance Indicators
MBRRACE-UK	Mothers and Babies: Reducing Risk through Audit and Confidential Enquiry
MHHR	Maternity Hand Held Record
MSIG	Maternity Strategy Implementation Group
NHSCT	Northern Health & Social Care Trust
NICE	National Institute for Health and Care Excellence
NIECR	Northern Ireland Electronic Care Record
NIMACH	Northern Ireland Maternal and Child Health

NIMATS	Northern Ireland Maternity System
OGTT	Oral Glucose Tolerance Test
PHA	Public Health Agency
PMRT	Perinatal Mortality Review Tool
RCOG	Royal College of Obstetricians & Gynaecologists
RFM	Reduced Fetal Movement
RQIA	Regulation and Quality Improvement Authority
SAI	Serious Adverse Incident
SCOR	Standardised Clinical Outcome Review
SEHSCT	South Eastern Health & Social Care Trust
SFH	Symphysis fundal height
SHSCT	Southern Health & Social Care Trust
SIDS	Sudden Infant Death Syndrome
SOP	Standard Operating Procedure
USS	Ultra Sound Scan
VTE	Venous Thromboembolism
WHO	World Health Organisation
WHSCT	Western Health & Social Care Trust
WTE	Whole Time Equivalent

HSC Public Health Agency

item 10

Title of Meeting	PHA Board Meeting
Date	20 August 2020
Title of paper	Maternity Strategy Implementation Group End of Strategy Report and Recommendations
Reference	PHA/04/08/20
Prepared by	Deirdre Webb
Lead Director	Rodney Morton
Recommendation	For **Approval** ☐ For **Noting** ☒

1 Purpose

The purpose of this paper is to bring the Maternity Strategy Implementation Group End of Strategy Report and Recommendations to the PHA Board for noting.

2 Background Information

In March 2010, the Regulation and Quality Improvement Authority (RQIA) published the *Review of Intrapartum Care*. The review highlighted the absence of an overarching maternity strategy for Northern Ireland.

In response to the RQIA review, the Department of Health, Social Services and Public Safety (DHSSPS) carried out a review of policy on maternity service provision in Northern Ireland. Following extensive consultation with service colleagues and services users the *Strategy for Maternity Care in Northern Ireland 2012-2018* was published in July 2012. The document set out the strategic direction for maternity care in Northern Ireland for the next six years and aimed to promote a culture of normalisation of pregnancy and birth.

Following the launch of the Strategy the Department of Health Social Services and Public Safety asked the Health and Social Care Board (HSCB) and Public Health Agency (PHA) to co-lead on Strategy implementation. These organisations would work with local health economies to include Local Commissioning Groups (LCGs), HSC trusts, primary care practitioners, and other providers of maternity care. The HSCB/PHA would be responsible for development of a regional action plan using the twenty-two objectives in the Strategy. Each objective required the HSCB/PHA to develop a number of actions. Improvements were to be made in line with the best

possible, up-to date evidence and research. Performance measures to demonstrate improvement in service provision and outcomes for women and the wider family circle were an obligatory element of the action plan.

The Maternity Strategy Implementation Group (MSIG) was set up in 2011 to provide leadership and coordination to the implementation of the *Strategy for Maternity Care in Northern Ireland 2012 - 2018* on behalf of the Public Health Agency and Health and Social Care Board.

Structural, procedural and financial difficulties continue to affect and challenge the development of maternity services. Furthermore, the landscape in which maternity services operate has changed markedly. While the number of births in Northern Ireland has been dropping, there are older mothers, greater co-morbidity, higher numbers of obese mothers, and increased social complexity and ethnic diversity.

3 Key Issues

It is now eight years since the *Strategy for Maternity Care in Northern Ireland* was published. MSIG has made significant progress against the majority of the Strategy's objectives. The attached report details this progress and highlights those objectives requiring additional attention.

4 Next Steps

The report has been sent to the Chief Medical Officer and Chief Nursing Officer at the Department of Health highlighting the main key areas requiring attention in the future; workforce planning, social complexity, the need for outcomes-focused commissioning and perinatal mental health services.

There is a planned review of maternity and neonatal services led by DoH; the timescale for this is uncertain due to the funding position. In the meantime the PHA has been asked to complete a population health needs assessment to inform the regional review. A plan for this work is in development.

While future strategic direction for maternity services will be set by the planned maternity and neonatal services review, in the interim the Maternity Strategy Implementation Group will continue to meet. This will allow continued work on the strategy objectives rated as amber / red in the attached report as well as providing a regional forum for maternity service leads to consider important and emerging issues. This approach continues to be highly valued by group members.

Maternity Strategy Implementation Group

End of Strategy Report and Recommendations

Contents

Executive Summary

In March 2010, the Regulation and Quality Improvement Authority (RQIA) published the *Review of Intrapartum Care*. The review noted that no documented maternity service strategies existed in any of the five health and social care trusts and highlighted the absence of an overarching maternity strategy for Northern Ireland.

In response to the RQIA review, the Department of Health, Social Services and Public Safety (DHSSPS) carried out a review of policy on maternity service provision in Northern Ireland. Following extensive consultation with service colleagues and services users the *Strategy for Maternity Care in Northern Ireland 2012-2018* was published in July 2012. The Strategy aimed to promote a culture of normalisation of pregnancy and birth.

The *Strategy for Maternity Care in Northern Ireland 2012-2018* set out the strategic direction for maternity care in Northern Ireland for the next six years. The Strategy adopted an outcomes approach to maternity care. The six desired outcomes were to:

- give every baby and family the best start in life;
- ensure effective communication and high-quality maternity care;
- have healthier women at the start of pregnancy (preconception care);
- provide effective, locally accessible, antenatal care and a positive experience for prospective parents;
- provide safe labour and birth (intrapartum) care with improved experiences for mothers and babies; and
- provide appropriate advice, and support for parents and baby after birth.

The Department of Health Social Services and Public Safety asked the Health and Social Care Board (HSCB) and Public Health Agency (PHA) to co-lead on Strategy implementation, working with local health economies to include Local Commissioning Groups (LCGs), HSC trusts, primary care practitioners, and other providers of maternity care. The HSCB/PHA were to be responsible for the development of a regional action plan based on the Strategy's six desired outcomes and associated objectives.

In March 2017, RQIA conducted and published a review of the progress of implementation of the Strategy for Maternity Care in Northern Ireland 2012-18. The review found that a wide range of health initiatives have been developed within trusts to promote healthy lifestyles and to support women before and during their

pregnancy. RQIA recognised that significant progress had been made in antenatal care and for safe labour and birth, but also highlighted workforce issues in relation to maternity services.

This document outlines the significant progress achieved by MSIG against the majority of the Strategy's objectives. However, it must be noted that structural, procedural and financial challenges affected progress in a number of areas.
It is almost a decade since the Department of Health, Social Services and Public Safety (DHSSPS) carried out its review of policy on maternity service provision in Northern Ireland. Just as in others areas of service provision the landscape in which maternity services operates has changed markedly. This end of strategy report outlines some of those changes and makes a number of recommendations for the future.

Background

In March 2010, the Regulation and Quality Improvement Authority (RQIA) published the *Review of Intrapartum Care*. The review noted that no specific documented maternity service strategies existed at the time in any of the five health and social care trusts. The review team also noted the absence of an overarching maternity strategy for Northern Ireland.

In response, in 2010, the Department of Health, Social Services and Public Safety (DHSSPS) carried out a review of policy on maternity service provision in Northern Ireland. This review focused on the best available evidence for the care and treatment of mothers-to-be; quality, safety and service sustainability; wider workforce issues and professional roles and responsibilities.

A multi-professional group was established led by the secondary care directorate and co-chaired by Dr Paul Fogarty (representing the Royal College of Obstetricians and Gynaecologists) and Professor Cathy Warwick (representing the Royal College of Midwives). Extensive consultation with service colleagues and services users resulted in the development of *A Strategy for Maternity Care in Northern Ireland 2012-2018*, published in July 2012. The Strategy aimed to promote a culture of normalisation of pregnancy and birth.

This document set out the strategic direction for maternity care in Northern Ireland for the next six years. It followed public consultation in late 2011 when four workshops were held and 132 responses were received. The Strategy adopts an outcomes approach to maternity care. The six desired outcomes are to:

- give every baby and family the best start in life;
- ensure effective communication and high-quality maternity care;
- have healthier women at the start of pregnancy (preconception care);
- provide effective, locally accessible, antenatal care and a positive experience for prospective parents;
- provide safe labour and birth (intrapartum) care with improved experiences for mothers and babies; and
- provide appropriate advice, and support for parents and baby after birth.

Each outcome is underpinned by a number of objectives which are documented throughout the Strategy.

Introduction

Pregnancy is a normal physiological process, and for the vast majority of women is a safe event. Crucially, women should be as healthy as possible before considering pregnancy. That is why this Strategy links to a number of other public health strategies in order to promote, protect and improve the health and wellbeing of women and girls of childbearing age.

Some people are born into complex and difficult situations which can disadvantage them throughout their lives. Evidence shows that many of the determinants of health are complex and often interlinked. These include the general socio-economic, cultural and environmental conditions in which people live, as well as the lifestyle choices they make, their emotional health and other clinical and biological factors. All these have the potential to contribute to adverse outcomes for the woman, her new baby and the wider family. The Strategy recognises that much can be done to improve life chances. Nevertheless, it needs a partnership approach, not just in health and social care organisations and other government departments, but in society more generally.

How was the strategy implemented?

Following the launch of the Strategy the Department of Health Social Services and Public Safety asked the Health and Social Care Board (HSCB) and Public Health Agency (PHA) to co-lead on Strategy implementation. These organisations would work with local health economies to include Local Commissioning Groups (LCGs), HSC trusts, primary care practitioners, and other providers of maternity care. The HSCB/PHA would be responsible for development of a regional action plan using the twenty-two objectives in the Strategy and linked to the six desired outcomes as identified in the document. Each objective required the HSCB/PHA to develop a number of actions. Improvements were to be made in line with the best possible, up-to date evidence from research. Performance measures to demonstrate improvement in service provision and outcomes for women and the wider family circle were an obligatory element of the Action Plan.

The Maternity Strategy Implementation Group (MSIG) was set up in 2011 to provide leadership and coordination to the implementation of the *Strategy for Maternity Care in Northern Ireland 2012 - 2018* (Maternity Strategy) on behalf of the Public Health Agency and Health and Social Care Board.

MSIG is chaired by the Director of Nursing and the Director of Public Health within the PHA and includes senior staff from both obstetrics and midwifery within all the

HSC trusts, the HSCB, both commissioning and integrated care, the Department of Health, both from midwifery, secondary care and general practice representatives. A project manager was appointed by the HSCB and was in post until June 2018. Project management of the group was then taken over by the Nursing and Allied Health Professions Directorate within the PHA.

The group meets three times per year and receives updates from all the MSIG sub-groups and other areas of maternity which contribute to the implementation of the strategy while not sitting directly within the remit of MSIG. The sub-groups and contributory areas are outlined in Figure One and Figure Two.

The contribution of the sub-groups has been significant as shown by the following examples.

Community Maternity Care Sub-Group

This group is chaired by the Director of Nursing in the Northern Health and Social Care Trust (NHSCT) and includes members from midwifery, health visiting, obstetrics, general practice and user representatives. The initial focus of the group was the development of an antenatal care pathway in line with National Institute for Health and Care Excellence (NICE) guidance and to outline the **minimum** care that all women and their families should receive during their pregnancy. The focus was not merely on clinical care but also on social issues, mental health, public health and on relationship building between the woman, her partner and their baby before birth. The focus of the pathway was also to ensure that women received the appropriate clinical care by professionals adequately trained in the woman's specific needs. In May 2016 the *Northern Ireland Health and Social Care Maternity Services Core Pathway for Antenatal Care* was issued to the service and has since been incorporated into the regional Maternity Hand Held Record (MHHR).

Following the work on antenatal care the group has focused on the development of a postnatal core care pathway which will also outline the minimum visits and care to be provided for each woman and baby. Midwives should also focus on providing individualised care to the woman and her baby for any other visits required. It is hoped this pathway will be completed by summer 2019.

NIMATS

The Northern Ireland Maternity System (NIMATS) is the computerised maternity record for all women in Northern Ireland and allows midwives to document a woman's medical, social and maternity history at various points in her pregnancy. Previously this system was largely used as a data collection tool but with advances and changes made to the system it is now possible to use this information to inform the type of care required for women. The ongoing development of the system also

means that the data collected can be used to direct and inform quality improvement across maternity services in Northern Ireland. The update to the system is ongoing and involves both clinical staff and system managers.

Maternity Quality Improvement Collaborative

The Maternity Quality Improvement Collaborative (introduced in 2009 and now a sub-group of MSIG) has cross-trust and multi-professional input. Since the introduction of the collaborative there have been many outputs all of which are implemented on a regional basis. Outputs include:

- regional Induction of Labour leaflet;
- regional maternity dashboard (allows all trusts to monitor their activity and compare themselves against other units);
- regional Maternity Early Warning Score for antenatal and postnatal care;
- regional access to Robson Group data (this can inform work on variation in caesarean section rates);
- regional syntocinon regime (means each unit uses the same regime improving safety for women. The regime is accompanied by a set of standards to be signed off at the next advisory group meeting on 29th April 2019);
- work on informed consent so that all women are given the same advice and information (added to *The Pregnancy Book*) regarding instrumental and caesarean births;
- development of maternity Key Performance Indicators (KPIs) to improve safety and quality of care;
- regional cardiotocography (CTG) stickers for antenatal and intrapartum care based on NICE guidance.

In 2016 NHS England published *Saving Babies' Lives: a care bundle for reducing stillbirth.* Saving Babies Lives aimed to reduce stillbirths and as part of the Maternity Quality Improvement Collaborative in Northern Ireland all trusts agreed to endorse and utilise this care bundle. The care bundle had four elements, namely:

- reducing smoking in pregnancy;
- risk assessment and surveillance for fetal growth restriction;
- raising awareness of reduced fetal movement;
- effective fetal monitoring in labour.

Since the introduction of the bundle much work has been done regionally on these elements. Examples of this work are listed below.

Smoking in pregnancy

- All women are offered carbon monoxide testing at booking and, if positive, are referred to smoking cessation services.
- From summer 2019 those women who were positive at booking will have a further test in the postnatal period and further support will be offered if still positive.

Management of reduced fetal movements

- The PHA has issued a “reminder of best practice” letter to trusts and primary care regarding management of reduced fetal movement.
- Advice in MHHR has been updated in line with the Royal College of Obstetricians and Gynaecologists (RCOG) guidance.
- At each antenatal visit women are asked about fetal movements and advised what to do if there is a change in movements.

Cardiotocography (CTG) interpretation

- CTG stickers for both the antenatal and intrapartum periods have been developed in line with NICE guidance. These stickers have been updated as required and are in use in all units.
- All staff in Northern Ireland undergo K2 training for interpretation of CTGs on an annual basis.
- Study day facilitated by the HSC Safety Forum in June 2018.
- Regionally CTG interpretation is now moving towards a physiological interpretation approach. Currently the BHSCT trust is piloting implementation of physiological CTG interpretation with the other 4 trusts aiming to implement this approach by August 2020.

Identification and management of Small for Gestational Age babies

- All women in Northern Ireland have a customised fetal growth chart generated at booking. Women are risk assessed as to the type of growth monitoring required at this stage according to the Saving Babies Lives algorithm; i.e. symphysis fundal height (SFH) from 26 weeks or serial growth scans.
- All babies’ centiles are calculated at birth and the number born below the 10th centile detected in the antenatal period is improving.
- Growth scanning clinics are being established in all trusts.
- A “learning letter” on using the same standards for growth scanning was issued to all trusts and all trusts are now using these standards.
- Training on SFH measurement has been conducted by the Perinatal Institute.
- On-going training and education within trusts.

Figure One: Maternity Strategy Implementation Group – Sub Groups

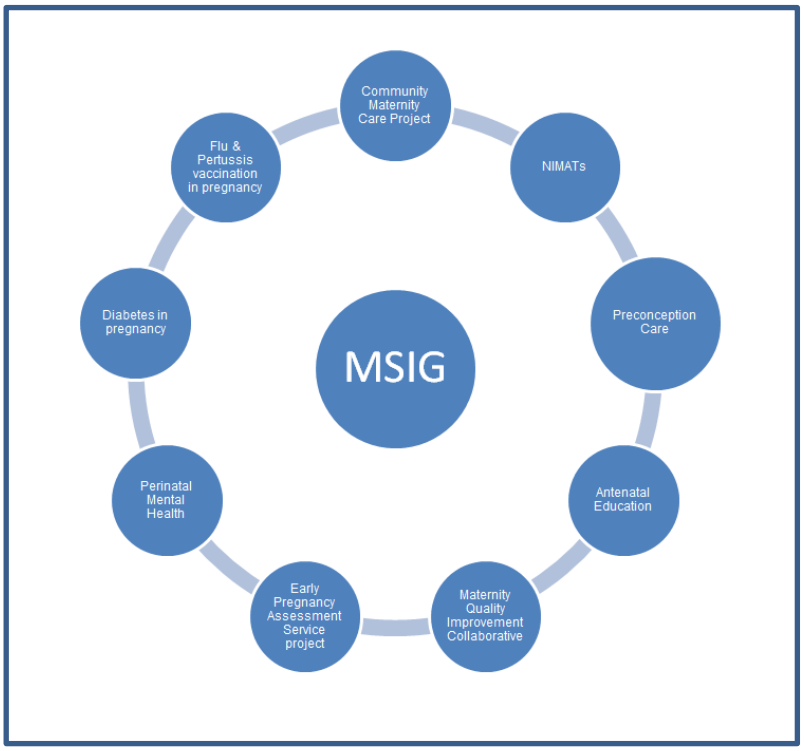


Figure Two: Maternity Strategy Implementation Group – contributory work (not formally reporting to MSIG)

Review of objectives

The Maternity Strategy outcomes were underpinned by 22 objectives (Appendix 1). The Maternity Strategy Implementation Group has achieved significant progress against the majority of these objectives. However, it must be noted that structural, procedural and financial challenges affected progress in a number of areas.

The objectives are outlined below in numerical order. The progress achieved is highlighted using red, amber, green colour coding.

Status	Definition	Count
Red	Significant delay or risk associated with this objective	1
Amber	Some delay or risk associated with this objective	2
Green	Progress on track	19

Objective 1	Green
A universal approach to major public health messages for women and girls of childbearing age will be promoted. This includes the importance of healthy life styles, and a focus on the social factors and clinical conditions which are known to have an adverse impact on outcomes for mother and baby.	

Public health messages for women and girls of childbearing age are widespread and available in many arenas. Many policy documents including *Making Life Better* have "give every baby the best start in life" as a priority.

The antenatal and neonatal screening programmes help focus the public health advice given to women during pregnancy and for their baby e.g.

- booking bloods to assess risks for HIV/ Hepatitis B and anaemia;
- offering all women CO monitoring at booking. (Shortly those testing positive at this stage will be offered a further test postnatally in order that advice can be tailored);

- carrying out risk assessments for diabetes, venous thromboembolism and hypertension;
- conducting risk assessments for growth monitoring in pregnancy
- encouraging vaccinations for flu and pertussis in antenatal period;
- providing MMR vaccines as required in postnatal period;
- giving advice to all women on reducing the risks of Sudden Infant Death Syndrome (SIDS);
- Offering the Family Nurse Partnership to first time young parents. The programme involves intensive home visiting by a Family Nurse from early pregnancy until the child reaches their second birthday.
- Offering the Getting Ready for Baby programme first time mothers with a straightforward pregnancy. The programme consists of group based antenatal care and education together with a Solihull antenatal programme which focusses on the relationship building between the woman, her baby and her family.
- Offering virtual antenatal and postnatal education Solihull programmes for all women and partners
- Delivering population-wide public health messages which also apply to pregnant women or women considering pregnancy – obesity risk, smoking, drugs/alcohol, etc.
- Working with e-health colleagues to develop maternity information on nidirect. It is anticipated that this will also include some public health information when the websites are available.
- Working with communication team colleagues to promote public health messaging on social media platforms, including info graphic video clips.
- Development of a Northern Ireland Maternity and Parenting website to communicate service changes and public health advice

Specific public health advice is also provided to all women via

- *The Pregnancy Book*
- *The Birth to Five Book*
- *Folic Acid – One of Life's Essentials* leaflet and poster
- *Safer sleeping - Reducing the risk of sudden infant death* leaflet
- *NI Maternity and Parenting website- www.ni-maternity.com*

In collaboration with the University of Ulster a maternity folder has been designed to hold the hand held notes. This has prominently displayed the key public health messages for pregnant women and references *The Pregnancy Book*.

Objective 2	Green
A culture of 'normalisation' of pregnancy and birth will be promoted as part of population planning and the commissioning and provision of maternity care. The principles outlined in Transforming Your Care will inform how access to maternity services and maternity care is best promoted and provided.	

Normalising pregnancy and birth is an important strand of the strategy and is part of ensuring every woman receives the right care in the right place at the right time delivered by the right person. A number of initiatives help to promote this:

- Midwife led care is available across Northern Ireland, and midwife led birthing facilities are available in almost all of the units (Northern Trust does not at present have alongside midwife led facilities but they are working towards this in the future)
- Guidelines and Audit Implementation Network (GAIN) guideline on admission to, and transfer from *freestanding* and *alongside* midwife led units has been issued and is being adhered to by all units.
- GAIN has developed home birth guidance which should be issued early 2019.
- The maternity collaborative has engaged with all trusts to promote normalising pregnancy. This has resulted in the introduction of a number of Birth Choice clinics throughout the region.
- The regional maternity dashboard records the number of vaginal births after a caesarean in each unit.
- NIMATS is now able to record the Robson 10 group classification for local interpretation and review of the reason for caesarean sections. The proportion of deliveries by caesarean section has remained relatively static at a regional level. However, this must be taken within the context of an increasingly complex maternal population with higher BMI and rates of diabetes than at the beginning of the strategy.

Objective 3	Green
Prospective parents will be considered as partners in maternity care and given all relevant information, in appropriate formats, to make informed choices about what is best for them and their baby.	

Maternity services engage with prospective parents throughout their pregnancy and birth journey ensuring they can make safe informed choices about their care. They are given information continuously regarding their care and what is available.

The development and issue of the antenatal care core pathway ensures all women in Northern Ireland receive a minimum standard of care including a risk assessment at booking as to the type of care they should receive, e.g.

- Assess type of care for women
    - Midwife led (this will include *Getting Ready for Baby*);
    - Consultant led;
    - Consultant led - shared (the woman's care is led by her consultant obstetrician but some care may be provided by her midwife/GP - this is a change from old shared care model);
    - Private antenatal care;
    - Self-referral form available in all trusts for women to refer themselves directly to a midwife.
- The Maternity Hand Held Record, which every woman in Northern Ireland carries continues to be updated as per evidence base;
- *The Pregnancy Book* and *The Birth to Five Book* are updated annually in line with new evidence or information. The books are provided to every woman at booking.
- GAIN guidelines on admission to and transfer from midwife led units and home births;
- The Early Intervention Transformation Programme (EITP) *Getting Ready for Baby* programme provides group based antenatal care and education to women with a straightforward pregnancy having their first baby.
- The Northern Ireland Maternity System is the computerised record for all women in Northern Ireland and documents a woman's medical, social and maternity history at various points in her pregnancy. Previously this system was largely used as a data collection tool but with advances and changes made to the system it is now possible to use this information to inform type of care for women and utilise data collected to make improvements in care provision across maternity services in Northern Ireland.

- The new Maternity Folder has been developed with generic language to engage all parents regardless of gender.
- All women in Northern Ireland carry their own maternity record which gives them the ability to be partners in their own care.
- The new record has a “maternal concerns” section where women can record their issues or queries for discussion with the professionals at each visit.

Objective 4	Green
A maternity communication protocol/pathway will be developed outlining the principles for communication and information sharing across the primary, community and hospital interface. As part of this process, each should understand respective roles and responsibilities especially on ‘who’ and ‘how’ a pregnant woman contacts the health service in the event of a concern or clinical emergency.	

All women in NI receive their Maternity Hand Held Record at booking, which they should carry with them at all times. This is the communication record for all professionals responsible for a woman’s care and all care she receives should be documented in this record. Other work to ensure good communication between women and professionals includes:

- The issuing of the Antenatal Core Care Pathway and its incorporation into the MHHR.
- The development of a self-referral form which allows women to refer themselves to see a midwife early in pregnancy.
- The addition of a “what matters to me” section to the MHHR where women can record their issues or queries for discussion with the professionals at each visit.
- NIMATs documents information regarding a woman’s medical, obstetric and social history at booking, delivery and postnatal. The information pertinent to the baby at birth is uploaded to the Child Health System to initiate this record. Recent advances allow some information to upload on to BadgerNet Maternity (neonatal system). The reports from NIMATs are uploaded to the Northern Ireland Electronic Care Record (NIECR) and can be viewed by other professionals caring for the woman (e.g. health visitor).

Objective 5	Green
Maternity services must show good clinical leadership and communication, including in the use of the maternity hand-held record, Labour Ward Forum and other multidisciplinary groups.	

As detailed above the Maternity Quality Improvement Collaborative has cross trust, multi-professional input which provides leadership to all of maternity services and contributes to a Northern Ireland model for maternity services.

It continues to be a central point where obstetric and midwifery staff meet to discuss and review practice. It has supported regional changes in documentation and policy development and supports the implementation of new professional guidelines and policy.

Any additional professional input to the work of the collaborative e.g. anaesthetists or paediatricians are asked to contribute as required. A joint meeting of the maternity collaborative and neonatal network has also taken place.

The maternity hand held record is carried by all women in Northern Ireland and is constantly updated in line with new evidence.

Objective 6	Green
Work will progress to agree minimum data sets, definitions and contributing data to a regional dashboard in order to promote quality improvement and influence choice.	

A minimum data set and definitions have been agreed. A regional maternity dashboard is now in operation and is shared across the Trusts on a quarterly basis.

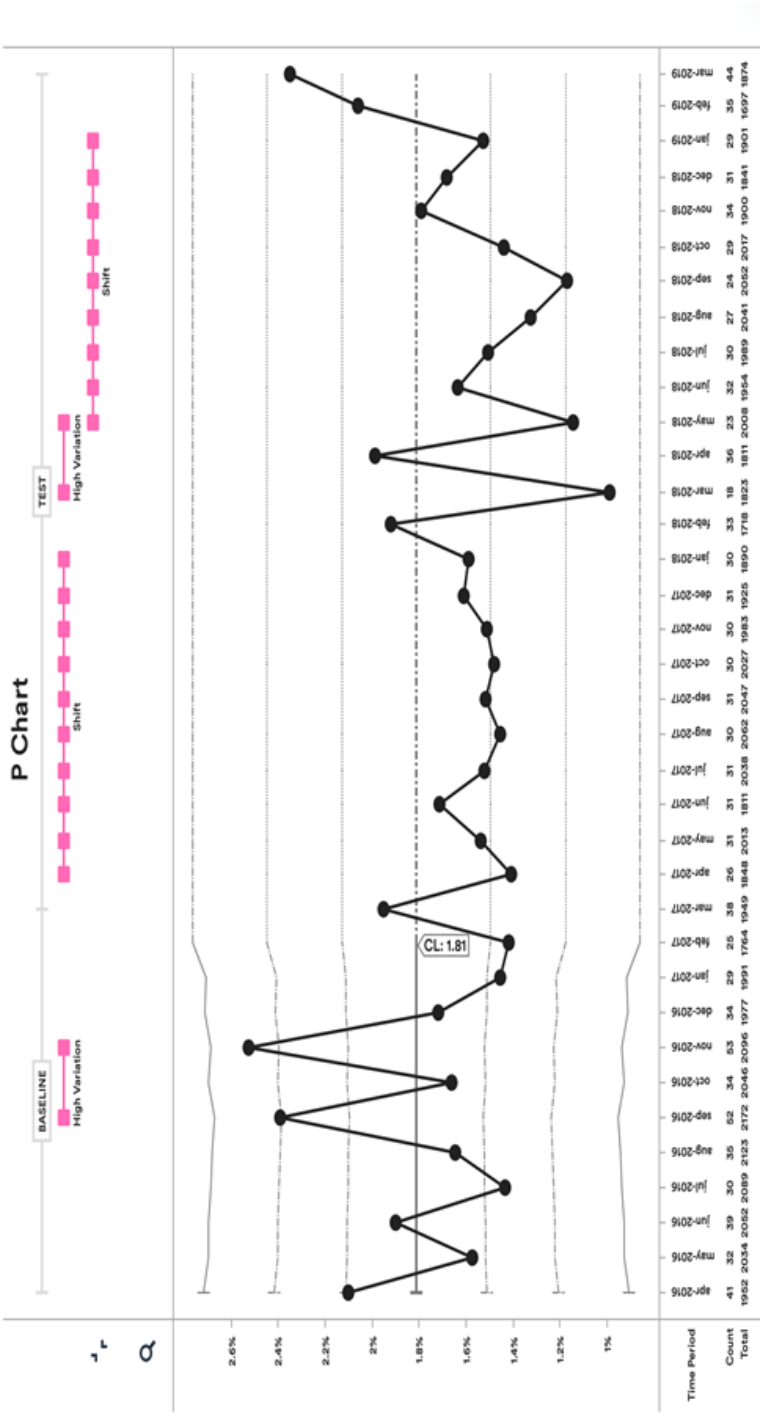
A number of presentations have been given to MSIG highlighting ways in which the regional dashboard has had a positive influence on quality improvement.

Obstetric Anal Sphincter Injury (OASI).
The project delivered improved outcomes and safety for women having a vaginal birth in BHSCT with no financial burden. The project demonstrated an example of collaborative working in respect of the MDT involvement, extensive service user engagement and adoption and development by clinicians in practice.

Reduction in Caesarean Sections Rates
A project to increase the normal birth rate and reduce unnecessary caesarean sections was successful, improving quality of care to women and reducing associated morbidity.

Small for Gestation Age Detection rates
The maternity dashboard allowed a trust to identify issues with regard to its growth assessment protocol. Routine audits were introduced and simple, cost effective solutions to problems put in place and staff have been facilitated in carrying out more accurate chart plotting.

Regional % 3rd and 4th degree tears



Objective 7	Green
The NIMAT system will be continually reviewed and updated to ensure it is 'fit for purpose' to promote coordinated regional data collection, in line with data protection principles and information governance.	

The Northern Ireland Maternity System is the computerised record for all women in Northern Ireland and documents a woman's medical, social and maternity history at various points in her pregnancy. Previously this system was largely used as a data collection tool but with advances and changes made to the system it is now possible to use this information to inform type of care for women and also utilise data collected to make improvements in care provision across maternity services in Northern Ireland.

The information pertinent to the baby at birth is uploaded to the Child Health System in order that a record can be created. Recent advances allow some information to be uploaded on to BadgerNet Maternity (neonatal system) and reports from NIMATS are uploaded to the Northern Ireland Electronic Care Record system, where they can be viewed by other professionals caring for the woman.

Robson 10 group classification data can now be generated by each trust from NIMATS and some regional figures were presented to MSIG in October 2017. The first regional Robson group dashboard draft report was provided to the February 2018 Maternity Strategy Implementation Group (MSIG) meeting.

A new antenatal module has been developed and will be ready for testing in July 2019 which will allow information to be added to NIMATs throughout pregnancy either for scheduled antenatal appointments of unscheduled attendances.

From summer 2019 changes to NIMATs will enable gathering of outcome information for all pregnancies with more than 1 fetal heart at booking

Objective 8	Amber
Women of childbearing age who have long-term conditions, even those not planning a pregnancy, who are on regular medication or who have other risk factors will be proactively given tailored advice by their GP and specialists about pregnancy as part of their general management.	

HSC promotes the “Making Every Contact Count” approach to behavioural change. The approach uses the routine interactions that service users have with organisations and individuals to opportunistically deliver healthy lifestyle information.

Population-wide public health messages for women and girls of childbearing age are widespread and available in many arenas. The information includes advice on obesity, smoking, drugs, alcohol, etc.

The regional Perinatal Mental Health Care Pathway (2017) reflects guidance in NICE Clinical Guideline CG192 with regard to recognising, assessing and treating mental health problems in women who are planning to have a baby, including the use of valproate.

Objective 9	Amber
A clear pathway of care will be available for individuals with long-term conditions who are planning a pregnancy and throughout the pregnancy.	

A Pre-Conceptual Care Sub-Group of MSIG was established and held its first meeting in early 2018. This group includes GP and Pharmacy representation and the group’s focus has been on the RQIA mid-strategy report recommendations. Moving forward the group will address the need for a care pathway for women with long-term conditions who are planning to conceive or who are pregnant. The group will also agree with Primary Care colleagues the health messages and advice these women should receive.

- Preconception care leaflet has been developed with public health messages and signposting

Objective 10	Green
When a woman becomes pregnant she will be facilitated to make early direct contact with a midwife.	

All women can now self-refer for maternity care via their midwife when they find out they are pregnant. This allows women to have early contact with maternity services and ensures the core public health messages they require are explained as soon as possible.

A downloadable self-referral form has been developed. This form allows women to refer themselves directly to a midwife at the start of their pregnancy.

The Core Antenatal Care Pathway, based on NICE guidance, has been agreed and issued to all care providers. The pathway was issued with correspondence which emphasised the need to ensure appropriate competencies to provide antenatal care in line with the pathway.

Objective 11	Green
There will be appropriate access to booking scans and the NIMAT system in community and non-acute hospital settings.	

The Review of Diagnostic Imaging Services in Northern Ireland has been published as part of the DoH *Strategic Framework for Imaging Services in Health and Social Care* (subject to Ministerial approval). An Obstetric Imaging Working Group is taking forward recommendations of the Imaging Review, including protocols, training and competency issues.

The evidence base has developed since the writing of this objective. While some appointments will take place in the local community it is essential that the dating scan is carried out with the correct equipment by a suitably trained professional. Therefore most scans will appropriately continue to be carried out in hospital settings.

- HSC Protocol for Dating Scans has been developed and was issued by MSIG Chairs.
- HSC Protocol for Growth Scans has been developed and was issued by MSIG Chairs.
- Monitoring of both the dating and growth scan protocols is carried out by the Safety Quality Alerts Team within the PHA.
- Some Transformation funding has been secured which will ensure improved mentorship for those staff undertaking an ultrasound training programme, therefore ensuring signing off their competencies post-training.

Objective 12	Green
For women with straightforward pregnancies antenatal care will be provided primarily by the midwife in the local community.	

The antenatal core care pathway outlines the care that should be provided for those women with a straightforward pregnancy, ensuring they have their care provided by midwives, but with referral as necessary to obstetric colleagues.

Getting Ready for Baby is a programme of group based antenatal care which should be offered to all primigravid women with a straightforward pregnancy. Numbers attending this programme are increasing and it is becoming mainstreamed into antenatal care.

Objective 13	Green
Women with complex obstetric conditions will have care led by a consultant obstetrician.	

The antenatal core care pathway helps to identify those women who require some or all of their care by an obstetrician and ensures that this care is provided in line with individual needs.

Objective 14	Green
Women will be encouraged to contact their midwife if a problem develops to ensure only women who require to be seen by an obstetrician are referred to the Maternity Assessment Unit.	

All women have contact details made available for their midwife if they are receiving midwifery led care and Obstetrician details if they are receiving Consultant Led care in the MHHR. The new version of the MHHR (May 2020) has QR codes available to access pregnancy information which includes when to contact your midwife or Maternity Assessment Unit. Social media messaging and info graphic video clips have been promoted to encourage women to attend their maternity unit if they have any concerns regarding their pregnancy.

Objective 15	Green
Antenatal education will be enhanced and active involvement of prospective parents will be encouraged; this education will primarily be women-centred and developed to ensure all women and their partners receive the advice they require to prepare them for parenthood as well as for birth.	

All antenatal education should now be provided in line with the Solihull Approach. This approach emphasises improving emotional health and wellbeing through relationships from the antenatal period through childhood into adulthood. Solihull recognises that the interaction with a pregnant woman and her family in the antenatal and postnatal period can have a significant impact on how the parents feels about the pregnancy, labour, birth and the first few months with their baby.

All primigravid women with a straightforward pregnancy are offered the "*Getting Ready for Baby*" programme. The programme is currently targeted at first time mothers with no health or pregnancy complications and was introduced to Northern Ireland through the Early Intervention Transformation Programme (EITP). *Getting Ready for Baby* includes the same information as traditional antenatal education but also emphasizes emotional health and wellbeing, helping parents to get to develop relationships with their baby and equipping them to give their child the best start in life.

Getting Ready for Baby is currently offered only to first time mothers with no health or pregnancy complications. Upscaling to allow the programme's benefits to be

offered to all pregnant women is likely to require additional funding. This funding requirement will have to be investigated.

The online version of the Solihull antenatal and postnatal education classes has been provided for all women and partners

Objective 16	Green
Women will be supported to make an informed decision about their place of birth by providing a balanced description of the benefits and risks of the different types of maternity settings. This will include information on midwife-led units, homebirth and consultant-led units.	

The leaflet *Now You are Pregnant - Choices for Maternity Care in Northern Ireland* produced in collaboration with the "Better Births" campaign outlines the place of birth options available, namely:

- Freestanding midwife-led units;
- Alongside midwife-led units;
- Home Birth;
- Obstetric unit.

For pregnancies which are not straightforward the leaflet suggests that best place of birth option is likely to be in hospital under the care of an obstetrician, supported by a multidisciplinary team including midwives.

Guidelines have been issued by GAIN providing specific criteria on admission to and transfer from standalone and alongside midwife led units. RQIA are currently developing guidelines home births and NICE birthplace tables which outline the types of places of birth and their suitability for women are available in the MHHR.

Objective 17	Green
The HSC will consider how best to maximise choice in intrapartum care while also meeting other key priorities and statutory obligations. A networked approach to maternity care, with cross-boundary flows between HSC organisations, and possibly other jurisdictions, will be necessary.	

- Trusts to ensure regular promotion of appropriate materials, including online information sources as these come available

- Birth Choices leaflet and any updates.
- Trusts to monitor use and effectiveness of CCG referral letters and ensure that all maternity staff triaging referrals are clear on when it is advisable to recommend midwife-led care. Monitor uptake by women. Trusts to monitor uptake of option to have early direct contact with midwives and use of the Self-referral letters.
- Promotion of early direct contact with midwife (self-referral letter) should help provide information to women on their options.
- A letter has been sent to GPs from MSIG Chairs to clarify the position in respect of referral to midwife led care.
- Guidelines have been issued by GAIN on admission to and transfer from standalone and alongside midwife led units
- RQIA are currently developing guidelines home births.

Objective 18	Red
Where a consultant-led unit is provided, a midwife-led unit will be available on the same site. As well as providing services for the local population, the Belfast Trust will provide the regional centre for Northern Ireland to care for the most complex cases.	

In Northern Ireland there are currently nine midwife-led units (MLUs). Six of these units are “alongside” units (adjacent to consultant-led units) and three are freestanding midwife-led units.

The Northern HSC Trust does not have a specific “alongside” MLU at either of its maternity units (Antrim Area and Causeway Hospitals). However, both these units now have birthing pool delivery rooms which are midwife-led. Births in these facilities are now recorded against this category of birth.

The Northern HSC Trust continues to seek ways to address this issue. It has not been possible to date to identify either space or funding to establish a designated facility on the Antrim Hospital site.

Alongside MLU facilities in both NHSCT units are not achievable in the timescale. The objective will be kept on the MSIG agenda for regular review and every effort made to support initiatives

Objective 19	Green
Freestanding midwife-led units will be considered as an option for the provision of accessible, high-quality, sustainable, and effective maternity care.	

The freestanding midwife led units at Lagan Valley Hospital and Downe Hospital have been evaluated very positively and continue to receive good feedback from the women who use the units.

The Mater Infirmorum receives equally good feedback and continues to have increasing numbers of births. Births in 2018 totalled 303.

Objective 20	Green
Inappropriate variation in practice will be reduced by examining all intervention rates, and benchmarking against comparable units across Northern Ireland, the rest of the UK and Republic of Ireland.	

- The regional Maternity Dashboard has been developed, agreed and reviewed by the maternity collaborative. This is now being further refined to include information on Robson Groups.
- The Dashboard is now presented in run chart format with a median line for ease of interpretation
- Trusts are able to compare their data with other units and make improvements as needed
- The Maternity Quality Improvement Collaborative continues to work with all Trusts on areas of Quality Improvement

Objective 21	Green
Postnatal care, provided by the maternity team in the community, will offer a woman-centred home visiting schedule which will be responsive to need for a period of not less than 10 days and will include visiting by midwives and maternity support workers.	

A Postnatal Care Pathway is in development and an initial briefing on this work presented to the Maternity Strategy Implementation Group. Useful comments and suggestions from MSIG were noted and the work continues.

Objective 22	Green
Women will be advised and encouraged to attend their six-week postnatal appointment, with the appropriate clinician(s).	

While the post-natal core care pathway advises that all women should be encouraged to attend for their six week appointment (generally with their GP) currently this appointment is not part of the GP contract and therefore discussions will be required with primary care colleagues to progress this as part of normal practice.

RQIA Review of a Strategy for Maternity Care in Northern Ireland (2012 – 18)

In March 2017, as part of its Three Year Review Programme 2015-18, RQIA conducted and published a review of the progress of implementation of the Strategy for Maternity Care in Northern Ireland 2012-18.

The report found that a wide range of health initiatives have been developed within trusts to promote healthy lifestyles and to support women before and during their pregnancy. RQIA recognised that significant progress had been made in antenatal care and for safe labour and birth. However, it recommended the establishment of midwifery-led care at every obstetric unit in Northern Ireland, in addition to the freestanding midwifery-led units in some hospitals.

The RQIA review highlighted committed leadership and evidence of multi-disciplinary working. However, workforce issues were highlighted in all aspects of the service. Particular attention was drawn to two issues; (i) the heavy reliance on locum staff and (ii) the retirement of midwives. The RQIA noted that these two issues had the potential to impact significantly on maternity services across Northern Ireland.

RQIA recognised important achievements in relation to both regional public health programmes and local initiatives. Nonetheless RQIA noted there remained major challenges in tackling inequalities in health. These challenges impacted on both particular groups in society and also on particular areas of high deprivation.

While recognising the work already done in regard to improving pre-conceptual care, RQIA believed that additional focus was required in the second half of the implementation period.

Among the leadership challenges identified by the RQIA review team were:

- the promotion of pathways of care in pregnancy, involving midwife and mother;
- support for vaginal birth;
- the need for better inter-professional relationships and respect between teams.

The RQIA team was told that General Practitioners (GPs) were not familiar with the maternity strategy objectives. In addition, RQIA reported, key stakeholders such as Northern Ireland Ambulance Service (NIAS) and service users have not been represented on MSIG. RQIA emphasised a need for wider representation and involvement for all key stakeholders on MSIG.

Since the publication of the maternity strategy, significant progress has been made in taking forward the fourth outcome (safe labour and birth care with improved experiences for mothers and babies) with the development of the regional Core Pathway for Antenatal Care. This pathway has been an important development in progressing the objectives relating to this outcome.

RQIA concluded that despite developments, Safe Labour and Birth (Intrapartum) Care should remain a key focus for the rest of the strategic planning period.

RQIA's review makes 19 recommendations in relation to the implementation of the Maternity Strategy to support improvements in Maternity Services in Northern Ireland. Implementation of these recommendations has been monitored as part of the MSIG Action Plan.

Legacy

Recognition must be given to all those who contributed to and supported the work of the Maternity Strategy Implementation Group, not only the MSIG sub-groups but those working in a myriad of HSC areas who contributed to the implementation of the strategy. It should be noted that the significant progress made against the majority of the original 22 objectives has been made with minimal additional resources. However, there were instances when meaningful progress was restricted because of a lack of funding. It must be recognised that to drive forward some of the changes set out in the strategy funding streams must be identified.

It is almost a decade since the Department of Health, Social Services and Public Safety (DHSSPS) carried out its review of policy on maternity service provision in Northern Ireland. Just as in others areas of service provision the landscape in which maternity services operates has changed markedly. In the first six months of 2019 NICE published two new clinical guidelines and updated at least ten guidelines or pathways relating to maternity care.

Women are giving birth later. There has been a steady increase in the average age of first time mothers. The proportion of women who have conditions such as diabetes in pregnancy has also increased. In line with these changing trends a higher proportion of births involve more complex care, which requires high quality risk management and more interventions.

Despite the increasing complexity of cases, the quality and outcomes of maternity services have improved significantly over the last decade although variation still exists across the region.

Better Births set out a comprehensive view of what future maternity services should look like in the future. The vision is clear: maternity services should be woman-centred, professional and safe. Women should be facilitated to make informed personal choices about how they plan their pregnancy, birth and postnatal care. Personalising care which meets emotional, psychological and social as well as physical needs should lead to a more positive patient experience.

Societal changes have led to maternity services having to manage ever more complex social issues in pregnancy, e.g. alcohol or drug misuse, recent migrant or asylum seeker status, literacy or language problems or domestic abuse). Women affected by these issues require access to care, continuity of contact with antenatal carers, and additional information and support.

Since the Strategy was published service delivery has become outcome-focused. This approach requires the identification of outcomes which require improvement

and the development, testing and ongoing measurement of a range of performance indicators.

Ongoing changes to the maternity services landscape will require changes to how services are delivered. A strategy will be needed to develop new staffing models and to support the workforce through necessary changes.

An initial scoping of the midwifery workforce highlighted the potential for workforce issues given the age profile of the workforce currently. In addition, a recent survey of midwives in England and Wales, conducted by researchers at the University of Birmingham, identified resistance to changes in working patterns. More than 40% of those responding stated they were unable to work a different pattern to their existing role.

Appendix One

MATERNITY STRATEGY OUTCOMES AND OBJECTIVES

Outcomes

- Give every baby and family the best start in life;
- Effective communication and high-quality maternity care;
- Healthier women at the start of pregnancy (preconception care);
- Effective, locally accessible, antenatal care and a positive experience for prospective parents;
- Safe labour and birth (intrapartum) care with improved experiences for mothers and babies
- Appropriate advice, and support for parents and baby after birth.

Objectives

1. A universal approach to major public health messages for women and girls of childbearing age will be promoted. This includes the importance of healthy life styles, and a focus on the social factors and clinical conditions which are known to have an adverse impact on outcomes for mother and baby.

2. A culture of 'normalisation' of pregnancy and birth will be promoted as part of population planning and the commissioning and provision of maternity care. The principles outlined in *Transforming Your Care* will inform how access to maternity services and maternity care is best promoted and provided.

3. Prospective parents will be considered as partners in maternity care and given all relevant information, in appropriate formats, to make informed choices about what is best for them and their baby.

4. A maternity communication protocol/pathway will be developed outlining the principles for communication and information sharing across the primary, community and hospital interface. As part of this process, each should understand respective roles and responsibilities especially on 'who' and 'how' a pregnant woman contacts the health service in the event of a concern or clinical emergency.

5. Maternity services must show good clinical leadership and communication, including in the use of the maternity hand-held record, Labour Ward Forum and other multidisciplinary groups.

6. Work will progress to agree minimum data sets, definitions and contributing data to a regional dashboard in order to promote quality improvement and influence choice.

7. The NIMAT system will be continually reviewed and updated to ensure it is 'fit for purpose' to promote coordinated regional data collection, in line with data protection principles and information governance.

8. Women of childbearing age who have long-term conditions, even those not planning a pregnancy, who are on regular medication or who have other risk factors will be proactively given tailored advice by their GP and specialists about pregnancy as part of their general management.

9. A clear pathway of care will be available for individuals with long-term conditions who are planning a pregnancy and throughout the pregnancy.

10. When a woman becomes pregnant she will be facilitated to make early direct contact with a midwife.

11. There will be appropriate access to booking scans and the NIMAT system in community and non-acute hospital settings.

12. For women with straightforward pregnancies antenatal care will be provided primarily by the midwife in the local community.

13. Women with complex obstetric conditions will have care led by a consultant obstetrician.

14. Women will be encouraged to contact their midwife if a problem develops to ensure only women who require to be seen by an obstetrician are referred to the Maternity Assessment Unit.

15. Antenatal education will be enhanced and active involvement of prospective parents will be encouraged; this education will primarily be women-centred and developed to ensure all women and their partners receive the advice they require to prepare them for parenthood as well as for birth.

16. Women will be supported to make an informed decision about their place of birth by providing a balanced description of the benefits and risks of the different types of maternity settings. This will include information on midwife-led units, homebirth and consultant-led units.

17. The HSC will consider how best to maximise choice in intrapartum care while also meeting other key priorities and statutory obligations. A

networked approach to maternity care, with cross-boundary flows between HSC organisations, and possibly other jurisdictions, will be necessary.

18. Where a consultant-led unit is provided, a midwife-led unit will be available on the same site. As well as providing services for the local population, the Belfast Trust will provide the regional centre for Northern Ireland to care for the most complex cases.

19. Freestanding midwife-led units will be considered as an option for the provision of accessible, high-quality, sustainable, and effective maternity care.

20. Inappropriate variation in practice will be reduced by examining all intervention rates, and benchmarking against comparable units across Northern Ireland, the rest of the UK and Republic of Ireland.

21. Postnatal care, provided by the maternity team in the community, will offer a woman- centred home visiting schedule which will be responsive to need for a period of not less than 10 days and will include visiting by midwives and maternity support workers.

22. Women will be advised and encouraged to attend their six-week postnatal appointment, with the appropriate clinician(s).

HSC Public Health Agency

item 11

Title of Meeting	PHA Board Meeting
Date	20 August 2020
Title of paper	Reestablishment of Population Screening Programmes
Reference	PHA/05/08/20
Prepared by	Dr Stephen Bergin
Lead Director	Professor Hugo van Woerden
Recommendation	For **Approval** ☐ For **Noting** ☒

1 Purpose

The purpose of this paper is to provide Board members with an update on population screening programmes.

2 Background Information

Public health screening programmes play a vital role in the early detection of a range of conditions. Early detection can vastly improve outcomes for these conditions. The Public Health Agency commissions and quality assures eight programmes for the NI population. The recently published revised Framework document notes that screening programmes for cancer services will resume as soon as possible.

3 Key Issues

As a result of the impact of the pandemic emergency, five screening programmes were paused in order to reduce the risk of infection to civilians and staff and to redirect healthcare and laboratory resources to the emergency response. As we rebuild HSC services, screening programmes must also now recommence.

A paper is attached at Annex A (Regional Update 23.06.20) setting out the approach to reintroducing all paused screening programme to full capacity. A risk-assessed, evidence based approach is recommended – with those citizens most at risk invited to attend in the first instance (rather than those who simply have waited longest). Some people most at risk from the screened conditions may also be particularly

vulnerable to COVID-19. It is therefore important to take account of both the risks and benefits associated with screening.

PHA estimates that in excess of 100k invitations for screening have been paused during the pandemic. This would equate to about a four-month delay in normal circumstances. However, practice will be altered as a result of the pandemic – for example, the need to maintain social distancing and PPE requirements – and as such it is more realistic assessment that a six-month delay has resulted.

4 Next Steps

In order to allow screening programmes to operate on a robust and sustainable footing, additional staffing resources will be required. Two public health consultants who previously oversaw elements of the programme have been redeployed to COVID-related activity. A separate paper on resources will be brought to the Regional Management Board.

23.06.20

ANNEX A: UPDATE ON RESTORATION OF POPULATION SCREENING PROGRAMMES

PROGRAMME	Update	Comments / issues
BOWEL CANCER	Screening invitations paused from week beginning 23 March 2020. However, previously issued kits, which can be submitted up to 6 months following issue, continue to be received and reported by the screening laboratory, but actual numbers are very small (result letters continue to be issued for these). No pre-assessments, screening colonoscopy or CTC investigations have been undertaken from the above date. SCREENING RESTORATION: the process to plan for the re-commencement of screening has commenced. In line with elsewhere in the UK, the initial aim will be to reduce the backlog in those waiting for screening colonoscopy prior to issuing new screening invitations. Trusts have recommenced screening colonoscopy at a reduced throughput; some Trusts are using qFIT as a means to risk stratify patients for this procedure (similar to the symptomatic service). The ability to substantially address the backlog in colonoscopy across all Trusts will determine scheduling of invites thereafter.	
BREAST CANCER	Screening was formally paused on 24 March 2020 (Southern Trust paused on 16 March; Western Trust paused in one of their two mobile units on 16 March). Higher Risk Breast Screening continued, but no out of area screening option is provided: all higher risk screening is undertaken at the Northern Trust unit, but uptake decreased during the pandemic with some women electing to cancel or not to attend. SCREENING RESTORATION: The breast screening team is working	

	closely with the relevant Trusts. Technical guidance for restart and a restart checklist have been developed and have been sent to Trusts on the 23 June 20. Individual Trusts are developing their restoration plans. The PHA is arranging to meet with each of the Trusts week beginning 29 June to discuss their responses to the checklist with the aim of signing off their restoration plans. However, there are considerable logistical issues regarding the capacity to screen safely within fixed and mobile screening facilities. Capacity will be significantly reduced, compared with pre-COVID levels, due to social distancing. Instead of 6 minute appointments; it is likely that 15 – 20 minute appointments will be required initially. Redesign of mobile units is under consideration. However, if social distancing rules are changed from 2m to 1m shorter appointments will be possible.	
CERVICAL CANCER	Invites for March and April (usually sent in the middle of the month in a batch) were paused: women already invited were able to attend their GP for screening, with cervical smear samples being processed and managed as usual. SCREENING RESTORATION: planning for the re-commencement of screening is progressing. The first cohort of women will be issued with invitation letters the week beginning 22 June – this will be those who are currently coded as suspended or with a previous inadequate result in the screening program (approx.. 5,000 women). Letters were issued to primary care to advise of this step last week. It is anticipated the next group to be invited (mid-July) will be women where either colposcopy or laboratories have requested a repeat smear test. Routine recall invitations (eg. 3 or 5 yearly recall) will begin to be issued by	

	mid-August. A longer term catch-up exercise is being considered.	
DIABETIC EYE	Newly diagnosed, routine and surveillance screening invitations and clinics paused from week beginning 23 March 2020: screening continued to be offered to pregnant women only. All image reading was completed and referrals to ophthalmology triaged to identify any requiring emergency follow up. SCREENING RESTORATION: the process to plan for the re-commencement of screening has commenced. Patients will be invited for screening, based on their due date for screening and their assessed risk of progression to sight threatening retinopathy. Clinic workflow will be significantly altered with a reduced throughput being an inevitable consequence – planning for a reduction from 15 patients per clinic to 7 patients per session. Options for new screening venues are being explored as screening in primary care settings is unlikely to continue to be viable. Modelling is being undertaken to map out potential timescales for this phased restart.	
ABDOMINAL AORTIC ANEURYSM	This programme was paused in March 2020, with neither screening being undertaken nor active surveillance of men with small or medium sized AAA. This position reflected national guidance, ie. in light of COVID, the view of the clinical leads in each of the 4 UK nations was that the programme should remain paused due to the potential risks associated with COVID for this population of older men (in particular, the increased risks of peri-operative mortality). SCREENING RESTORATION: the AAA Screening Programme is now working closely with Belfast Trust on a phased restoration of screening based on clinical priority. The PHA has produced a draft strategic plan, while a draft operational plan is being progressed by Belfast Trust; relevant standard operating procedures for restart are being reviewed or	

	produced. Approval for the PHA strategic plan and Trust operational plan will be sought through each organisation's respective governance processes. From the 23.06.20, in keeping with a risk-stratified approach, the Trust has initiated the process to recommence quarterly surveillance of men with medium AAAs (≥5-5.4cms). They are being invited for their scan, at the RVH site, on either the 10, 17th or 24th July, with the possibility of a fourth date being offered in early August. Screening programme staff continue to engage with all AAA screening venues across Northern Ireland to establish potential timescales and capacity for supporting a phased return of surveillance and routine screening. While this will present considerable logistical issues, which will include ensuring all appropriate infection control and risk assessment requirements have been met, it will ensure compliance with a phased restoration based on clinical priority and help inform planning for ongoing recovery of the programme. A clinical prioritisation process similarly remains in place for men referred with a large AAA. They are being reviewed every two weeks by consultant vascular staff, but none have yet reached the required threshold for surgery.	

HSC Public Health Agency

item 12

Title of Meeting	PHA Board Meeting
Date	20 August 2020
Title of paper	Proposal for COVID-19 Survey in People Living in Homelessness Hostels
Reference	PHA/06/08/20
Prepared by	Dr Gillian Armstrong
Lead Director	Hugo van Woerden
Recommendation	For **Approval** ☐ For **Noting** ☒

1 Purpose

The purpose of this paper is to inform Board members about a proposed survey in people living in homelessness hostels.

2 Background Information

COVID-19 disproportionately affects certain groups, including those who are most socio-economically disadvantaged, people living in congregate settings, and those with underlying health conditions. Severe disease and death is also more likely in these groups.

Hostel residents are likely to be at increased risk of COVID-19 infection due to congregate living environments, challenges with social distancing and self-isolation, and of poor outcomes including death due to their co-morbidities. Hostels have also been identified as important settings for outbreaks.

A number of serious COVID-19 outbreaks have been reported in homeless populations across the world. Locally, the PHA have not identified any outbreaks in the homeless during the first wave of infections (source: PHA). It is not clear why this may be the case, but may reflect a number of factors including a relatively low level of community transmission, the rapid actions taken to provide housing and support, and to shield those who are most vulnerable, or a lack of standardised information gathered on people's housing status.

3 Aims

This survey will provide information on the prevalence of COVID-19 in hostel residents and staff in a number of facilities in Belfast. This will be useful in evaluating interventions to date to protect this population. It will also be informative in planning for any second wave, and inform future infection, prevention and control strategies and testing strategies for COVID-19 in this population.

4 Objectives

The main objectives are:

1. to estimate the current prevalence of COVID-19 in hostel residents and staff

2. to estimate the proportion of hostel residents and staff who have already been infected with COVID-19 during 2020

5 Ethics

This survey has been identified as a key service delivery project by the Expert Advisory Group on Testing. Participation is voluntary, and informed consent will be sought. As this is a routine service delivery project, ethical approval is not required.

All data will be held and managed in confidence in accordance with the Data Protection Act 2018 and as such the General Data Protection Regulations, and Caldicott Principles. The dataset will be pseudo-anonymised and no personal identifiers will be retained in the dataset or used in the communication or publication of study findings.

6 Methods

A convenience sample of a number of large hostels in inner city Belfast will be identified by the Homeless Nursing Team. All residents and hostel staff will be invited to participate. The number of residents present in the hostel on the night before the testing commenced will be the denominator for the number of residents, and the hostels will be asked to provide the total number of staff working in the hostel, including those not on duty that day. This will be used to calculate a response rate.

Participation is entirely voluntary. They will receive an information leaflet (appendix 1).

If they consent to participate, basic demographic information will be collected to include age, sex, ethnicity and gender as per the template in appendix 2. The participants will be asked if they have had any symptoms of COVID-19 (new continuous cough, fever, or anosmia) during 2020, and in the last 14 days.

They will also take biological samples for SARS-CoV2 using appropriate PPE:

- perform an oro-pharyngeal swab
- antibody testing (whole blood sample or finger prick capillary blood testing if available)

The homeless nursing team will also offer blood borne virus testing to service users who have ever injected drugs, or have other risk factors. Informed consent will be obtained, in line with standard practice. The BBV testing will be carried out on the same blood sample used for SARS-CoV2 antibodies, so no additional sample will be required. Targeted testing for BBVs was largely paused during early 2020, and this will permit the service users to receive a test without requiring an additional blood sample. The homeless nursing team will inform the service users of their results, and arrange any clinical follow up required, in line with their standard protocols.

The samples will be taken over a one to two day period in each hostel, and sent to the Regional Virology Lab for testing using the Homeless Nursing Team source code. The results will be shared with the individuals who participated, and the homeless nursing team for action. Anyone with a positive swab result for COVID-19 will be assessed by the Homeless Nursing Team and asked to self-isolate for 10 days. COVID-19 is a notifiable disease, therefore positive swab results will be shared with the PHA, and public health follow up of individuals will be conducted via the Northern Ireland Contact Tracing Service.

PHA will analyse the data for descriptive frequencies relating to COVID-19:

- Total number of residents/staff per hostel
- Total number of residents/staff tested per hostel
- Total number PCR positive (residents vs staff)
- Total number antibody positive (residents vs staff)

Analysis will also include stratification by age, sex, ethnicity and hostel.

If two or more cases are identified in one setting, the PHA Health Protection Team will provide advice and support on the outbreak control measures required to interrupt transmission of COVID-19.

7 Next Steps

The homeless nursing team have proposed completing the sampling during August 2020 to fit with other work programmes.

Appendix 1

INFORMATION LEAFLET FOR PARTICIPANTS

Survey of COVID-19 in people living and working in hostels

Why are we doing this study?

Coronavirus is having a major impact in Northern Ireland. We need to learn more about how it affects people, particularly those who might be at increased risk, and have already looked at hospital staff and care home residents and patients. This study will look at infection levels in people living and working in hostels.

Why have I been asked to take part?

As a person either living or working in a hostel, you have been invited to take part. Taking part is voluntary and you should not be placed under any pressure - it is up to you to decide whether or not to take part. If you do decide to take part you will be given this information sheet to keep.

What do you want me to do?

The Homeless Nursing Team will ask you a couple of questions about any symptoms of coronavirus, and collect some basic information. We would like to collect 2 samples from you:

1) A swab from your nose and throat to check if you currently have coronavirus infection
2) A sample of blood for coronavirus antibodies to check if you have ever been infected with coronavirus

By taking both swab and blood tests together we can check whether participants in the study have COVID19 infection, or have had COVID19 in the past.

If you would also like to have your blood test checked for HIV, Hepatitis B and C, the nursing team will arrange to do that on the one blood sample.

What will happen with my results?

You will receive your results via a phonecall from the nursing team, who will also arrange any follow-up you might need. If you do have active coronavirus infection, you will be asked to self-isolate for 10 days. You will also receive a call from the NI Contact Tracing Service to follow up anyone you may have been in close contact with.

Your personal data will be stored in accordance with the General Data Protection Regulations (GDPR) and the Data Protection Act 2018.

What are the benefits?

You will find out if you have ever been infected with coronavirus. The information we gather will help us to understand coronavirus better, and will inform plans for fighting coronavirus in the future.

Appendix 1. Data collection form

SURVEY IDENTIFIER	
HOSTEL IDENTIFIER	
DEMOGRAPHIC DETAILS	
NAME	
RECEIVED INFORMATION LEAFLET	
CONSENTED TO PARTICIPATION IN THE SURVEY	
TELEPHONE NUMBER	
RESIDENT (Y/N)	
STAFF MEMBER (Y/N)	
HOSTEL NAME	
DATE OF BIRTH	
GENDER (M / F/OTHER)	
ETHNICITY	
COUNTRY OF ORIGIN	
LENGTH OF TIME LIVING IN UK	
H&C NUMBER	
CONSENT FOR RETENTION OF CONTACT DETAILS FOR FOLLOW UP (Y/N)	
SYMPTOMS	
At any point in 2020, did you develop	High temperature □

either of the common symptoms of COVID-19, that is a high temperature, a new continuous cough or anosmia (loss of smell or taste)?	New continuous cough □ Anosmia □
In the last 14 days, have you had any of these symptoms? (Y/N/Not sure)	
SPECIMENS OBTAINED	
NASOPHARYNGEAL SWAB FOR SARS-COV2	
BLOOD FOR ANTIBODY TESTING FOR SARS-COV2	
BLOOD FOR BBV SCREEN (residents only)	
RESULTS FOR COVID-19	
SWAB – POSITIVE OR NEGATIVE	
BLOOD FOR ANTIBODY TESTING FOR SARS-COV2 – POSITIVE OR NEGATIVE	
CAPILLARY SAMPLE FOR ANTIBODY TESTING FOR SARS-COV2 – POSITIVE OR NEGATIVE	
RESULTS FOR BBV	

HSC Public Health Agency

item 13

Title of Meeting	PHA Board Meeting
Date	20 August 2020
Title of paper	Update on HSCQI Network (Hub and Regional QI Leads Group)
Reference	PHA/07/08/20
Prepared by	Dr Aideen Keaney
Lead Director	Dr Aideen Keaney
Recommendation	For **Approval** ☐ For **Noting** ☒

1. Purpose

The purpose of this paper is:

- To provide an update on the current HSCQI infrastructure.
- To provide an update on the programmes of work that HSCQI has been leading and supporting since it was established in April 2019.
- To review the impact of COVID-19 on HSCQI.
- To outline HSCQI's role in supporting the emergency response to COVID-19.
- To explore how HSCQI can continue to support the Northern Ireland Health and Social Care System during the on-going COVID-19 pandemic and beyond.

2. Background Information

HSCQI has its origins in the Donaldson report "**The Right Time, The Right Place"** (2014). This report made 10 recommendations one of which was that Northern Ireland should develop a Northern Ireland Patient Safety Institute.

A commitment to the establishment of this Institute was stated within the Northern Ireland Health and Social Care 10-year strategy **"Health and Well-Being 2026: Delivering Together".** This commitment is described in 2 key action points:

1. To identify current innovative Health and Social Care projects at the local level and develop a rolling programme and implementation plan to scale up these projects across the system. (*Action point 10: Health and Well Being 2026: Delivering Together*).

2. To complete the initial design work for the Improvement Institute (HSCQI). (*Action Point 15: Health and Well Being 2026: Delivering Together*).

During the 2-year period 2017 – 2019 (i.e. the design and development phase of the Improvement Institute), HSCQI received a funding allocation from the Department of Health's Transformation funding stream. This funding was non –recurrent and ceased on 31st March 2020.

In February 2020 Northern Ireland had its first COVID-19 case. Since then the entire Northern Ireland Health and Social Care system, including HSCQI, has been focused on delivering a unified Northern Ireland Health and Social Care system emergency response to COVID19. In recent weeks this focus has shifted to rebuilding services whilst continuing to plan for a second surge. Therefore, HSCQI has shifted its focus to supporting the NI HSC system to both rebuild services and to plan for a second surge.

A timeline of the evolution of HSCQI is listed in **Appendix 1** in the report and the context in which this evolution took place is described in the summary section of the report and in **Appendix 2.**

Update on HSCQI Network (Hub and Regional QI Leads group)

August 7

2020

Contents

Summary

1.Safety Forum (Launched 2007 – pre April 2019)	2.HSCQI (Design & Development Phase) (2016 - April 2019)	3.HSCQI (Pre - COVID19) (Launched April 2019 - Feb 2020) (Funded largely through C&S)	4.HSCQI (COVID19 Emergency Response) (9 March 2020 - May 2020)	5.HSCQI (COVID19 Recovery & Rebuild) (9 May 2020 onwards)
2007 Lisburn HC / SEHSCT 2010 Lisburn HC PHA Nursing 2017 Linen Hall St PHA Nursing Safety Forum staff (WTE) • CD 0.6 • CL 0.3 • IA 1.0 • IA 1.0 • BM 1.0 • Admin 1.0 2003: Stat Duty of Quality 2005 RQIA 2009: Stat Duty of involvement 2011: Quality 2020 **Programmes of work:** • Learning Collaboratives • Capability • Engagement / Partnerships	**Donaldson** (Dec 2014) "Patient Safety Institute" **Bengoa** (Oct 2016) **Health & Wellbeing 2026: Delivering Together** (Oct 2016) "Improvement Institute" QI is a key enabler of Transformation. **Design Collaborative consisting of system-wide QI Leads and experts:** ➢ HSCQI Regional QI Leads Group ➢ Communities of Practice ➢ Critical Friends ➢ Senior system leaders ➢ HSCQI Senior Leadership Alliance	Staff **(Directorate HSCQI, PHA)** **HSCQI Network (1, 2, & 3)** **1. HSCQI Improvement Hub (WTE)** • **Director 0.8** • CD 0.6 • CL 0.3 • IA 1.0 • IA 0.6 • BM 1.0 • Admin 1.0 • **Comms Lead 1.0** • **Data Analyst 0.6 (temp)** **&** **2. HSCQI Regional QI Leads** **3. HSCQI Senior Leadership Alliance** **Programmes of work (in addition to legacy Safety Forum Programmes of work):** • Collaboratives / Regional Scale up Prototypes • Capability: Regional ScILs • Partnerships: RoI, HIAE, Health Foundation/Q Community	**Frontline support:** • Director – Clinical: Anaesthesia/PICU • CD – Clinical: Care of the Elderly **PHA/HSCB Support:** • CL – Health Protection PHA • Comms Lead – Joint PHA/HSCB Silver Communications Cell. • Implementation of the joint PHA/HSCB Executive Team Daily "Huddle" – QI approach • Application of a QI approach to the implementation of joint PHA/HSCB environmental cleanliness initiative. **Programmes of work:** • Collaboratives / Regional Scale up Prototypes – paused • Capability – paused • Partnerships – maintained & focused on COVID19 learning.	**(Directorate HSCQI, PHA)** **HSCQI Network (1, 2 & 3)** **1. HSCQI Improvement Hub (WTE)** • **Director 0.8** • CD 0.6 • CL 0.3 • IA 1.0 • IA 0.6 • BM 1.0 • Admin 1.0 • **Comms Lead 1.0** • **Data Analyst 0.6 (temp)** **2. HSCQI Regional QI Leads HSCQI** **3. Senior Leadership Alliance** **Programmes of work** • Pre-COVID19 Collaboratives/Regional Scale up Prototypes/ Capability work : to be reviewed • Pre-COVID19 Partnerships: to continue *Additional Rebuild Programmes of work*** • **Learning System for HSC** • **Covid19 Care Homes Rapid Learning Task & Finish Group** • **Care Home Enhancement work.**
Collaboratives: Maternity, Mental Health, Paediatrics, Sepsis, NIAS - Turnaround Times	**Communities of Practice:** Innovation, ICT/ Comms, PPI, Workforce, Evaluation	**Regional Scale up Prototypes:** Sepsis, Safety Planning – Towards Zero Suicide, Antimicrobial Stewardship. Safer connections 4 children	**QI Leads:** • QI Leads from 6 HSC Trusts • Primary Care • Service User/Carer	**Leadership Alliance:** • HSC Trust and System CEOs • Chief Professional Officers

June 2020 **DoH programme to rebuild HSC Services within prevailing COVID19 conditions: Leading on Cross-cutting work stream No 25:
Service Delivery Innovation implemented during COVID19 Emergency; SRO Dr A Kilgallen

Update on HSCQI Network (hub and regional QI leads group) July 2020

The purpose of this paper is:

1. To provide an update on the current HSCQI infrastructure.
2. To provide an update on the programmes of work that HSCQI has been leading and supporting since it was established in April 2019.
3. To review the impact of COVID-19 on HSCQI.
4. HSCQI and supporting the emergency response to COVID-19.
5. To explore how HSCQI can continue to support the Northern Ireland Health and Social Care System during the on-going COVID-19 pandemic and beyond.

Introduction:

HSCQI (Health and **S**ocial **C**are **Q**uality **I**mprovement) was established in April 2019 with a design intent to:

1. Provide an innovation and quality improvement infrastructure for the Northern Ireland Health and Social Care System
   And
2. Identify and scale up best practice across the Northern Ireland Health and Social Care System.

Background:

HSCQI has its origins in the Donaldson report "**The Right Time, The Right Place "(**2014).This report made 10 recommendations one of which was that Northern Ireland should develop a Northern Ireland Patient Safety Institute.

A commitment to the establishment of this Institute was stated within the Northern Ireland Health and Social Care 10-year strategy **"Health and Well-Being 2026: Delivering Together".** This commitment is described in 2 key action points:

1. To identify current innovative Health and Social Care projects at the local level and develop a rolling programme and implementation plan to scale up these projects across the system. (*Action point 10: Health and Well Being 2026: Delivering Together*).
2. To complete the initial design work for the Improvement Institute (HSCQI). (*Action Point 15: Health and Well Being 2026: Delivering Together*).

During the 2-year period 2017 – 2019 (i.e. the design and development phase of the Improvement Institute), HSCQI received a funding allocation from the Department of Health's Transformation funding stream. This funding was non –recurrent and ceased on 31st March 2020.

In February 2020 Northern Ireland had its first COVID-19 case. Since then the entire Northern Ireland Health and Social Care system, including HSCQI, has been focused on delivering a unified Northern Ireland Health and Social Care system emergency response to COVID19. In recent weeks this focus has shifted to rebuilding services whilst continuing to plan for a second surge. Therefore, HSCQI has shifted its focus to supporting the NI HSC system to both rebuild services and to plan for a second surge.

A timeline of the evolution of HSCQI is listed in **Appendix 1** and the context in which this evolution took place is described in the summary section of this paper (page3) and in **Appendix 2.**

1. Current HSCQI Infrastructure:

HSCQI consists of a small central team known as the "HSCQI Improvement Hub" and a regional group of QI leads and experts known as the "HSCQI Regional QI Leads Group". The HSCQI Improvement Hub and Regional QI Leads Group are supported by an overarching Senior Leadership Alliance known as the "HSCQI Senior Leadership Alliance" or the "Alliance". All Trust CEOs are members of the Alliance. Other members include CEOs from the PHA, HSCB and BSO and Departmental Chief Professional Officers. The HSCQI infrastructure and the relationships between these various groupings is described diagrammatically in **Appendix 3.**

At present the HSCQI Improvement Hub is located in the Public Health Agency (Level 4 Linen hall Street) and the Director of HSCQI is a member of the PHA Senior Management Team.

HSCQI Improvement Hub:

In keeping with its design intent HSCQI was established using existing system-wide QI resources.

The HSCQI Improvement Hub consists of the small team that were already working within the HSC Safety Forum. The HSC Safety Forum (which had been established in 2007) was a pre-existing regional QI resource. **Appendix 4.** During the HSCQI design and development phase the Safety Forum was re-constituted to form the HSCQI Improvement Hub (or iHub). **Appendix 3.** During the design and development phase it was acknowledged that in order for the Hub team to deliver on the design intent of HSCQI, a number of additional posts were required. These additional posts are listed in **Appendix 5.**

During 2019, 3 of these additional posts were recruited:

1. A Director of HSCQI (in post September 2019)
2. A HSCQI Communications Lead (in post August 2019)
3. A HSCQI Data Analyst (in temporary Agency post November 2019)

No other additional posts that were identified during the design and development phase were recruited. Therefore, the staffing level within the HSCQI Improvement Hub remains *fragile.*

Staff (excluding the Director of HSCQI) currently working in the Hub can be split into two groupings:

- Those who deliver QI support to the region (Clinical Director 0.6WTE, Clinical Lead 0.3WTE, x 2 Improvement Advisors 2 x 1.0 WTE - **total 2.9 WTEs**).
- Those who support the delivery of this QI support to the region (Business Manager 1.0 WTE, Communications and Engagement Lead 1.0 WTE, Admin 1.0 WTE, Data Analyst 0.6WTE - **total 3.6 WTEs**).

HSCQI Regional QI leads.

The Regional QI leads Groups consist of Trust and Primary Care QI Leads and has service user/ carer representation. All QI leads are funded through their Trust or Primary Care and report through local Trust/ Primary Care structures. **Appendix 3.**

HSCQI Leadership Alliance.

As stated above the Alliance membership consists of CEOs of Trusts and Arm's Length Bodies as well as representatives from primary care. **Appendix 3.** The Alliance also has service user / carer representation. The Terms of Reference for the HSCQI Senior Leadership Alliance are listed in **Appendix 6.**

2. HSCQI Programmes of Work since April 2019:

Since its launch in April 2019 HSCQI has been leading and supporting a number of legacy Safety Forum programmes of work which can be grouped into 3 categories:

- Learning Collaboratives
- Programmes and events to build system-wide QI capacity and capability
- Engagement (with patients, service users and carers) and Partnerships (to include local, national and international QI networks and communities).

(These are further described in the summary section of this document on page 3).

In January 2019 a regional workshop (hosted by the HSCQI Design and Development Project Manager), was held in order to identify a number of QI prototypes for scale up across the NI HSC system. At this time, it was agreed that the scale up of these prototypes would be supported by HSCQI in partnership with the Institute of Healthcare Improvement (IHI). 3 QI prototypes for scale-up were identified, namely:

- The Implementation of an Antibiotic Decision Aid tool in Care Homes
- The use of Safety Planning in Acute Mental Health settings
- The Implementation of the Sepsis 6 care bundle in Acute Healthcare settings.

In addition, it was also agreed that HSCQI and the IHI would provide support for a small QI project that crossed both the social care and primary care settings.

This work began in September 2019 with a plan to run at least until 31st March 2020. Three Face to Face regional workshops were planned. Two of these workshops took place (one in September 2019 and another in November 2019), however a third workshop planned for March 2020 had to be postponed due to COVID19. In addition to these face to face workshops this scale up work was also supported by a number of local and on-line project surgeries delivered by HSCQI Hub team and a number of IHI Faculty.

Therefore, since April 2019, HSCQI has been leading on legacy Safety Forum programmes of work and also the scale up of 4 regional QI initiatives.

See appendix 7 for details of Programmes of work.

3. **The impact of COVID-19 on HSCQI.**

Staffing Level.

During the COVID-19 pandemic emergency response those HSCQI Improvement Hub staff who are also doctors (including the Director of HSCQI) were redeployed to support either frontline direct patient care in Trusts or to support the Health Protection team within the Public Health Agency. In addition, the HSCQI Improvement Hub Communications Lead was redeployed to support the Joint HSCB / PHA Silver Communications Cell. During this time the fragility of the staffing level within the HSCQI Improvement Hub was apparent and was further exacerbated by staff sickness (non –COVID) and staff retirement. The staffing level within the HSCQI Improvement Hub (calculated as number of whole time equivalents) from April 2019 until July 2020 is described diagrammatically in **Appendix 8.** At the height of the pandemic the number of WTEs in the QI delivery team decreased from **2.9 to 0.6** and the number of WTEs in the QI delivery support team decreased from **3.6 to 2.6.**

Meetings.

During the COVID-19 pandemic emergency response all HSCQI Improvement Hub meetings, HSCQI Regional QI Leads Group meetings and HSCQI Senior leadership Alliance meetings were cancelled. Those staff within the HSCQI Improvement Hub who had not been redeployed remained connected on a daily basis via a virtual morning team meeting and supported two PHA/ HSCB initiatives during the emergency response. (These are described in section 4 below).

HSCQI Programmes of work pre- COVID19.

During the COVID-19 Emergency response all regional HSCQI programmes of work went into "hibernation". This included the Learning Collaboratives and the QI prototypes that had been identified for regional scale up in partnership with the IHI.

4. HSCQI and supporting the Emergency response to COVID-19.

- **PHA/ HSCB.** During the COVID-19 emergency response the HSCQI Improvement Hub supported the PHA and HSCB joint response to the pandemic by leading on the implementation of 2 key initiatives:
  1. The implementation of a Joint PHA / HSCB Executive Team morning Huddle. Using a QI approach, a *Joint PHA / HSCB Exec Team huddle* occurred on a number of mornings per week from 19/03/20 until 18/05/20. QI methodologies used included the Model for Improvement, Plan-Do-Study-Act cycles, Appreciative Inquiry and elements of Lean.
  2. A QI approach was also used in order to lead on a *Joint PHA/ HSCB environmental cleanliness initiative ("Operation Clean Up").* The QI approach used was the "5S" approach described within Lean. Over a 5- week period this initiative resulted in 80% of all open plan desks within the PHA and HSCB complying with the "Clean Desk Policy".

- **NI Primary Care / Geriatric Medicine interface support.** During the COVID- 19 emergency response the HSCQI Clinical Director led on the design of a pilot initiative to establish a NI

- HSC Primary Care / Geriatric Medicine single point of contact telephone helpline. By the time the initiative was established demand for this support had decreased and the initiative was therefore stood down. However, it was designed with sufficient agility and adaptability that if this support is required in the future it can be re-established. This initiative has also fed into a programme of work being led by the CNO and the Chief Executive of WHSCT that is looking at developing systems and processes to enhance support for care homes.

- **NI Care Home Rapid Learning Initiative. (RLI).** During the COVID-19 emergency response the DCNO invited the Director of HSCQI to become a member of a Care Home Rapid Learning Initiative (RLI) steering group. This RLI was supported by the IHI and consisted of the development of an on-line survey to harvest learning from care homes across all areas of the NI HSC system and included both statutory and independent care homes. This work is still on-going. A key output will be the production of RLI Report to be submitted to the CNO by the end of July 2020.

- **HSCQI Senior Leadership Alliance, HSC Trusts and Primary Care - Developing a HSCQI COVID-19 Regional Learning System.**

  On 24th April 2020 the Director of HSCQI received a request from the Chair of the Northern Ireland Trust CEOs Forum to *"call the QI leads to action"* and to*" create a regional learning system based on learning from the COVID-19 pandemic to date*". At a subsequent HSCQI Senior Leadership Alliance meeting this request was also supported by representatives from Primary Care and the Chief Professional Officers.

  Since 4th May the HSCQI Improvement Hub team and the Regional QI Leads Group have held weekly (virtually) meetings in order to share COVID-19 experiences and to explore how to develop a COVID-19 regional learning system. The approach agreed was the already well-established IHI 90-day learning cycle. It was agreed that this cycle would help to harvest and subsequently analyse learning with the intention to then identify learning that is suitable for sharing and potentially scaling up across the wider HSC system.
  (See appendix 9).

  Two HSCQI Learning System workshops were held (one in June and one in July) and two further workshops are planned for later in the summer (August and September). Learning themes identified so far include the use of virtual technology (particularly in the areas of virtual visiting and virtual consultations) and the use of a number of interventions to create a culture of staff psychological safety during COVID-19. This work will continue during the coming weeks with plans to share learning identified at a Regional workshop on 5th October and to follow this workshop with a series of monthly system-wide QI learning sessions via the NI Regional Project ECHO Forum.

- **HSC Service Rebuild Programme.**

  In June 2020 the Department of Health published the NI HSC Service Rebuild Programme. This Rebuild programme consists of 25 work streams **(Appendix 10).** One of the work streams identified as a priority was the Service Delivery Innovation work stream. **Appendix 11.** The SRO for this work stream approached the HSCQI network in order to explore how the HSCQI network might support this work stream. It is hoped that any learning identified

via the HSCQI Regional Learning System will include improvements and innovations that occurred during the pandemic to date and that these improvements and innovations will potentially help to support all 25 rebuild work streams.
HSCQI is creating a repository of tools to harvest regional learning and is connecting with other existing regional groups, e.g., the regional PHA "10,000 More Voices Group" and the regional PHA "Digital Innovation Steering Group".

5. HSCQI and providing on-going support during the on-going COVID-19 pandemic and beyond.

During the emergency phase of Covid19 much QI work was paused and many staff working in QI roles were redeployed to frontline areas. However, it is becoming clear that using a QI approach to harvesting learning during the response (both in real time and retrospectively) is now beneficial to the system as a whole. Using a QI approach to learning means asking what changes were made to service delivery and ways of working during COVID-19, what difference these changes made and how do we know that these changes made a difference. Using this approach requires data for improvement so that system leaders can make informed decisions about what changes or practices need to stop and what changes or practices now need to be amplified, shared and potentially scaled up across the region. Providing HSCQI with a mandate to support this work also means that HSCQI can continue to deliver on its design intent i.e. to provide a regional supporting infrastructure and to identify and scale up best practice.

Areas where HSCQI can further support the system during the COVID-19 pandemic and beyond are:

1. Evaluation of Initiatives:

Regional Scale Up

To lead on the evaluation of progress to date of the scale up of 3 regionally agreed QI prototypes (and 1 QI project) in partnership with the IHI. **Action:** A virtual meeting was held with the IHI on 8th July. Representatives from all project/ QI prototype teams participated in this meeting. A briefing paper describing discussions at this meeting is being prepared by the HSCQI Improvement Hub team. This paper will help to inform discussions at a future HSCQI Senior Leadership Alliance meeting in order to explore how best to support this work during the on-going COVID-19 era.

Regional Learning System.
The HSCQI Improvement Hub Clinical Lead has connected with Public Health Academics in relation to evaluating the approach being used to develop the Regional Learning system and the usefulness of the IHI 90-day learning system within the context of the NI HSC. **Action:** The Clinical Lead is preparing a paper to propose an approach to this evaluation to share with the HSCQI Senior Leadership Alliance.

Regional Learning Collaboratives.

A recent meeting with Health Improvement Scotland colleagues indicated that a true Learning Collaborative should have a defined aim and should last no longer that 12- 18 months. In contrast the HSCQI (Legacy Safety Forum) Collaboratives (i.e. Maternity, Paediatric and Mental Health) have been in existence for many years. This era of COVID19 provides a welcome opportunity for the HSCQI network to review and refresh these collaboratives going forward.

2. On –going support for HSC Rebuild agenda.

The SRO for the Service Delivery Innovation work stream of the Rebuild programme has offered QI support from HSCQI in relation to applying a QI approach to learning to each individual work stream, should they feel this help would be beneficial.
Action: A proposed approach is described in **Appendix 12.**

3. Further developing HSCQI infrastructure

HSCQI has been given a specific mandate to develop a regional COVID-19 Learning System. Therefore this COVID19 era has provided an opportunity to review the current HSCQI infrastructure and in particular the staffing level within the HSCQI Improvement Hub team.

It is also an opportune time to explore the possibility of creating a HSCQI Faculty. In order to do this the HSCQI Director has written to all Trust CEOs seeking clarity who their respective Trust QI lead is, how much time they can commit to HSCQI programmes of work.. The development of a HSCQI Faculty requires further discussion with the HSCQI Senior Leadership Alliance.

4. Reviewing HSCQI Programmes of Work

The COVID19 pandemic has also provided an opportunity to review the programmes of work that HSCQI was leading on prior to COVID19 and those it is currently leading on. Therefore, this is an ideal opportunity for HSCQI to clarify its vision, strategy and priority programmes of work. This will involve seeking clarity in relation to ongoing funding for HSCQI. **Action:** A combined HSCQI Improvement Hub and Regional QI Leads Group workshop to develop a HSCQI vision and strategy is planned for early September.

5.Establish connections with key individuals and teams across the system who are also working in areas of innovation, quality and improvement. These include:

- The “Quality 2020” team (in order to provide input and leadership in relation to the development of a quality improvement agenda beyond “Quality 2020”)
- Colleagues working within HSCB (PMSI, integrated care) and colleagues working within PHA (service delivery), and Director colleagues in HSC Trusts with responsibility for QI (in order to identify support for scale up of current and future QI prototypes).

6.Further development of a HSCQI Website and Regional platform to share learning

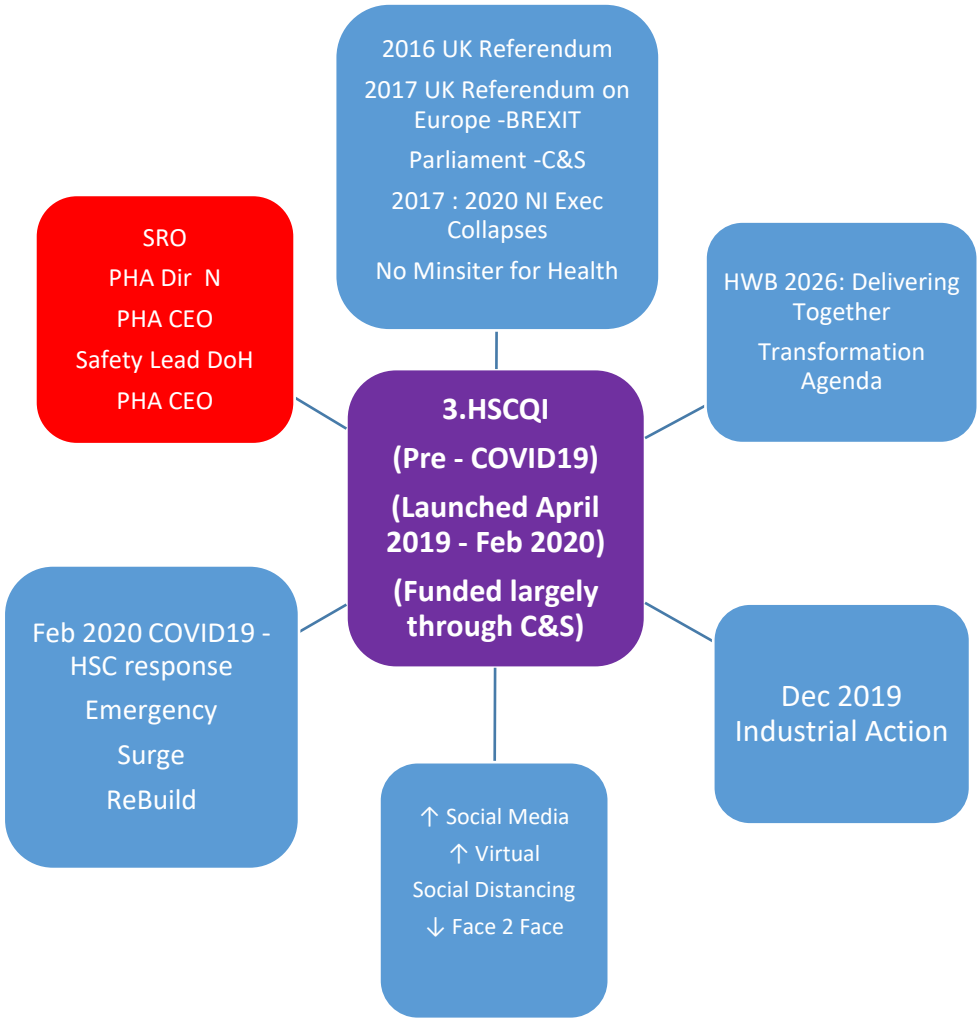
In order for HSCQI to support a regional learning system, a well- developed web site and virtual platform is needed. **Action:** The HSCQI Improvement Hub Communications and Engagement Lead is liaising with BSO ICT and Leadership Centre colleagues in order to further develop both.

Appendix 1 - Timeline of the evolution of HSCQI.

2003	**Statutory Duty of Quality**
2005	RQIA established
2007	**Safety Forum** established: Supports Boards & Trusts to deliver Safe high Quality Care. Located within Lisburn Health Centre under management of SEHSCT.
2009	Statutory Duty of Involvement (PPI).
2010	Safety Forum moves from SEHSCT management to PHA. Stays in Lisburn Health Centre
2011	**Quality 2020** : 10 year strategy designed to Protect and Improve Quality in Health Care
2014	**Donaldson Report:** "The Right Time The Right Place". Recommends establishment of a Patient Safety Institute for Northern Ireland.
2016	**Bengoa Report**: "Systems not structures". Transformation Agenda. QI identified as a key transformation" enabler"
2016	**Health and Well Being 2026: Delivering Together.** 2 key actions: • A Commitment to establish an "**Improvement Institute".** • A Commitment to identifying and scaling up best practice across NI HSC.
2016	A DoH SRO is assigned to lead on the Design and Development of a NI Imp Institute **Key people:** Project Manager, DoH Safety Lead, PHA Nursing Dir. PHA CEO Designed "by the system for the system" and need to "build on existing resources"
2016	UK referendum to leave European Union – BREXIT begins
2016	UK election Hung parliament. DUP & Cons **C&S arrangement.** NI Health Service receives Transformation funding: *some allocated to HSCQI.*
2017	January: NI Exec Government collapses (RHI), No Minister for Health
2017	March: Formal BREXIT process begins
2018	July: Safety Forum moves to Linenhall Street. Management: PHA Nursing Directorate
2019	Design & Development Phase of Improvement Institute continues. "**Institute" becomes" HSCQI"**. **" The Regional Innovation and Improvement infrastructure for the NI HSC system**
2019	**Jan: Regional Workshop agreement of Regional QI prototypes for scale up.**
2019	**April. HSCQI "soft" launch by DoH**
2019:	April. Safety Forum reconstituted to become **HSCQI improvement Hub (iHub)** Trust and Primary Care QI leads become **HSCQI Regional QI Leads Group.** Senior System leaders at CEO and CPO level form **HSCQI Leadership Alliance**
2019	August. **HSCQI Communications Lead** in post (1.0 WTE C&S)
2019	September: **Director of HSCQI** in post (0.8 WTE C&S) & is a member of PHA SMT.
2019	September: PHA Nursing Director retires
2019	September: DoH SRO retires
2019	September: IHI/ HSCQI partnership to **scale up 3 QI prototypes**. (+ 1 Imp Project).
2019	November: **HSCQI Data Analyst** appointed (0.6 WTE C&S – Temporary post).
2019	December: Industrial Action
2019	December: UK General Election
2020	January: NI Government re-instated. NI has Minister for Health for first time in 3 years
2020	January: CEO PHA announces retirement
2020	February: 1st COVID19 Case in NI
2021	March: NI COVID19 Pandemic Emergency response. **HSCQI Clinical staff redeployed to support frontline Trust & PHA Health Protection.** **HSCQI Communications Lead redeployed to support Silver Communications Cell.** **HSCQI leads 2 initiatives within PHA & HSCB to support COVID19 response:** • **Implementation of a daily Joint HSCB / PHA morning Huddle** • **Implementation of a cross organisational (PHA and HSCB) and cross Directorate environmental cleanliness initiative**
2020	March: New interim CEO PHA appointed
2020	April: **Request from HSCQI Alliance to "call QI leads to action"** & Develop a "**Regional Learning System focused on learning from COVID19 pandemic**". *C&S funding ceases - No DoH 20/21 funding allocated to HSCQI*
2020	May: **Request from SRO to support COVID19 HSC Rebuild Work stream 25**
2020	June: DoH Safety Lead retires
2020	June: HSCQI hosts first of a series of workshops to develop COVID19 Learning system.

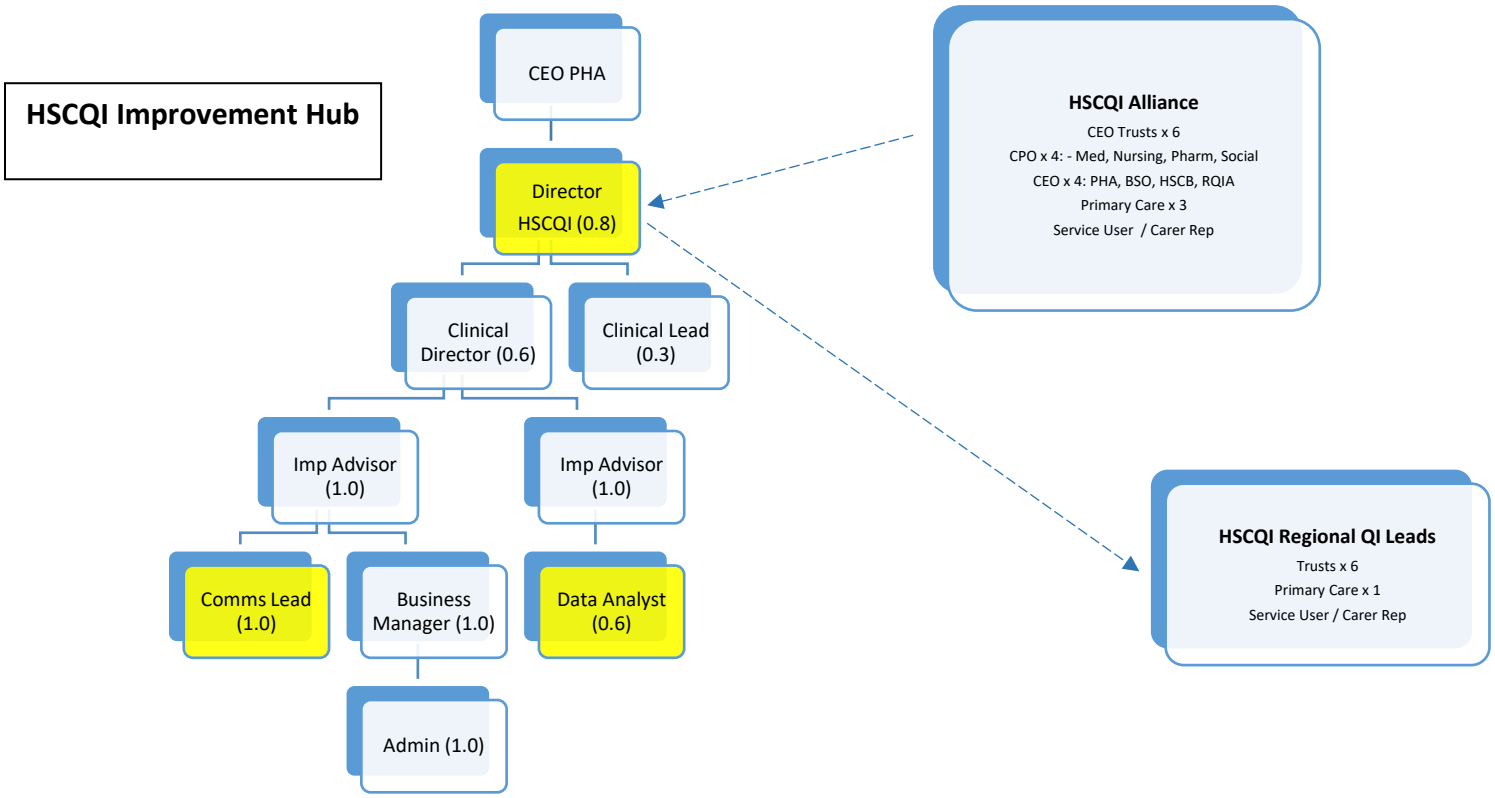
Appendix 2:

Context of the evolution of HSCQI:



Appendix 3:

Core Infrastructure of HSCQI



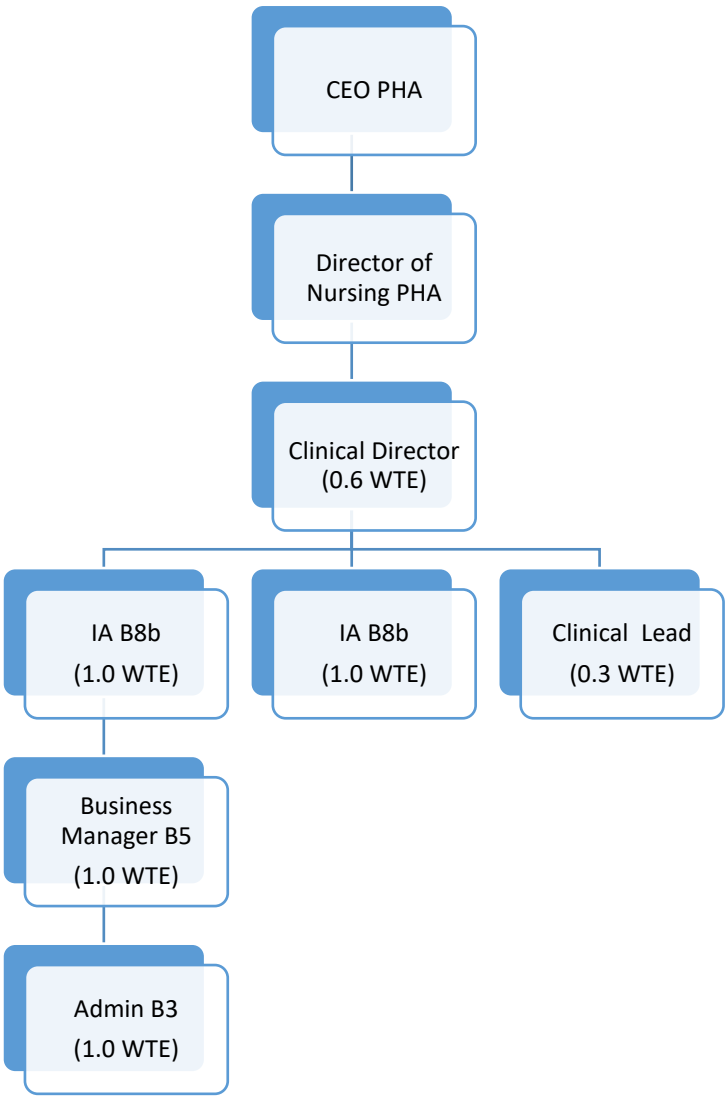
HSCQI Core Infrastructure:

- **Director of HSCQI,**
- **HSCQI Improvement Hub (iHub),**
- **HSCQI Regional QI Leads,**
- **HSCQI Alliance**

Yellow boxes indicate posts funded through Confidence and Supply. (i.e. non - recurrent Funding).

Appendix 4:

HSCQI Legacy HSC Safety Forum



Appendix: 5

Table taken from Discussion Paper for HSCQI Alliance held on 13th August 2018.

"Core Staffing Requirement for HSCQI"

Core Staffing	Proposed Banding for Discussion	
Director	Band 8D	This post holder will co-ordinate the work regionally, lead on strategic direction, liaison, with senior stakeholders, Chief Executives, incorporate key work streams from RQIA, DOH etc.
Assistant Director	Band 8C	An assistant Director to lead multi- professional &multi-agency regional scale up activity and ensure learning from HSC safety and quality systems.
Clinical Director x 0.6 WTE	-	Existing Patient Safety Forum Clinical Director to oversee specific pieces of clinical work.
Innovation and Improvement lead	TBC	Co-ordinate and promote innovation and improvement opportunities within HSC and across boundaries.
Part- time QI Professional Leads	Band 8C	5 QI leads, Professional Leads to link to QI activity- 1 day per week each. There is discussion regarding professional leads/ speciality leads. This requires further discussion.
Improvement Advisors x 2 WTE And Clinical Lead 0.3	Band 8A	Existing Patient Safety and Improvement Advisors and Existing Clinical Lead.
HSCQI QI Improvement Advisors/ Coaches	N/A	The importance of staff rotating through the hub has been unilaterally emphasised as an important feature of this new hub and spoke approach. The proposal is to have improvement leaders released from clinical/ professional duties for 1 day per week for a year to lead significant improvement projects. This will start with 5 in year 1, scaling to 10 and then to 20. A focus will be on developing a rolling programme of scale and spread initiatives.
Admin Support	Band 4	Existing Admin Support from Safety Forum to co-ordinate meetings for scale and spread, the work of the Institute, training sessions, seminars etc.
Admin Support	Band 3	Existing Admin Support from Safety Forum to co-ordinate meetings for scale and spread, the work of the Institute, training sessions, seminars etc.
Technical Staff		
Data Analyst x 2WTE	Band 5	One of the biggest gaps for most people working in improvement is support with understanding the need for baseline data, good data collection and rigorous data analysis. The need for this has been cited by all Cops particularly evaluation and outcomes, and by all the Scale and Spread clinical/ professional leads.
Media and Comms Officer	Band 5	Creating a social movement; joined up technology, supporting the new website to keep it fresh and updated will require significant work, as will updating different media platforms and expertise.
Research & knowledge Management	TBC	Linking with external research bodies (such as THIS Institute at University of Cambridge and local Universities), R&D within PHA and Trusts and other relevant functions. Consideration of journal articles and support with seeking publication etc.
Training & Events Co-Ordinator	TBC	With plans to run regular seminars, meet-ups, webinars, a couple of large conferences per year as well as a few substantial training programmes, support for training and events organisation will be key.

Appendix 6:

HSCQI Alliance: Terms of Reference – Draft V2 -10 May 2019

The work of HSCQI will be overseen and supported by a collective alliance of system partners known as the "HSCQI Alliance". Working arrangements between Alliance members and between the Alliance and HSCQI will reflect extant governance arrangements between their respective parent organisations.

Remit - The remit of the HSC Alliance is to:

1. Support the vision for quality improvement as set out in Q2020.
2. Model a collective leadership approach to the improvement of the quality of health and social care across the HSC.
3. Support and promote a coherent approach to the development and deployment of capability in quality improvement in addressing local and regional goals.
4. Inform regional goals/priorities for quality improvement.
5. Consider HSCQI annual work plan and monitor progress on the plan once agreed.
6. Link with those involved in quality improvement and innovation outside the HSC including primary care.

Membership
The HSCQI Alliance chair will be appointed for a period of two years initially and the nomination will be agreed by the HSCQI Alliance membership. The role of the HSCQI Chair is as proposed:

- To convene the HSCQI Alliance.
- To ensure that participants model leadership behaviours and a collective leadership approach, visibly working across boundaries.
- To ensure strategic alignment between DoH strategic direction with the work plan of HSCQI.

Membership will be constituted as follows:

- The Chief Executives of HSC Trusts.
- DoH representation shall comprise each of the Chief Professional Officers.
- 2 GP Representatives.
- Chief Executive of the Public Health Agency/HSCB.
- Chief Executive of the RQIA.
- Chief Executive of the Business Service Organisation.
- Expert Service user/carer rep.

Core members should attend meetings. Attendance by deputies should be exceptional but, if required, the lead Director for quality or quality improvement within their organisation may attend as a deputy. Membership will be reviewed periodically but at least every 2 years.

The HSCQI Director and/or other members of HSCQI, as required, may attend the HSCQI Alliance. During the development phase, the SRO for *Delivering Together* objectives 10 and 15, will attend Alliance meetings together with the operational leads.

Secretariat The secretariat for the HSCQI Alliance will be provided by HSCQI.

Meetings The HSCQI Alliance will normally meet four times per year but is empowered to call additional meetings as required.

Quorum No decisions shall be taken at a meeting unless at least one third of the membership of the HSCQI Alliance, as constituted at that time, is present. This should include representation from at least two HSC Trusts. Named deputies should be appointed to step in where a member is unable to attend.

Appendix 7

HSCQI Programmes of work active as of November 2019

Legacy safety forum programmes of work active November 2019 and continuing

Collaboratives:	
Maternity. Mental Health. Paediatric.	
Other Regional Work:	
Sepsis, NIAS Turnaround.	
Regional Scale Up work	Safeguarding, Towards Zero Suicide, Antibiotic Stewardship, & Sepsis. IHI / HSCQI partnership
QI Capability Training:	
Sepsis Train the Trainer, Data Masterclasses Using Life QI & Data Analyst HSCQI 1/12	
Scottish Quality and Safety Fellowship	
QUB Student Selected Study Module, Open University Nursing, Care Home teaching.	
Safety Forum Annual Awards	
Scottish Improvement Leaders Course (SCiLs)	
IHI Coaching Programme	
Regional Never Events Workshop – Supports Q2020	
Other bespoke Teaching / Training : (On request or in response to identified need/ episodic / opportunistic).	
SAI / Complaints. Annual event.	
Partnerships:	
NI	Regional QI Leads Group HSCQI Leadership Alliance Level 3 Alumni, NIMDAT, ? ADEPT Fellow
ROI	All Ireland HSCQI /HSEQI network. CAWT: X 2-5 Human Factors training sessions to complement Q2020 agenda
UK	Health Foundation/ NHS England Q Community National Event & NI Event. Q Exchange Programme: Yr 1 x1: Yr 2 x 2 THIS Institute. SPSP Fellwoship, SCiLs
IHI / HIAE	
CoP	
1. Innovation:? Active. 2. Evaluation: (RG). 3. Communications / IT: website and Communications Lead appointed. 4. PPI: Great Checklist. 5. Workforce: Attributes Framework & Career pathway for QI. 6. Primary Care Portadown 7.? Possible future CoP McMillan & ECHO and a CoP dedicated to CoP Facilitators.	
Other work funded through HSCQI – NB Transformation funding - ended 31st March 2020. **GP SHARE Programme (Level 2) Flow Coaching Academy (WHSCT) Waste Management (WHSCT)**	

Appendix 8:

HSCQI Staffing Level.

Number of Whole Time Equivalents (WTEs) within HSCQI Improvement Hub: Jan 2019 – July 2020.

Figure 1. Number of WTE within HSCQI Hub QI Delivery Team.

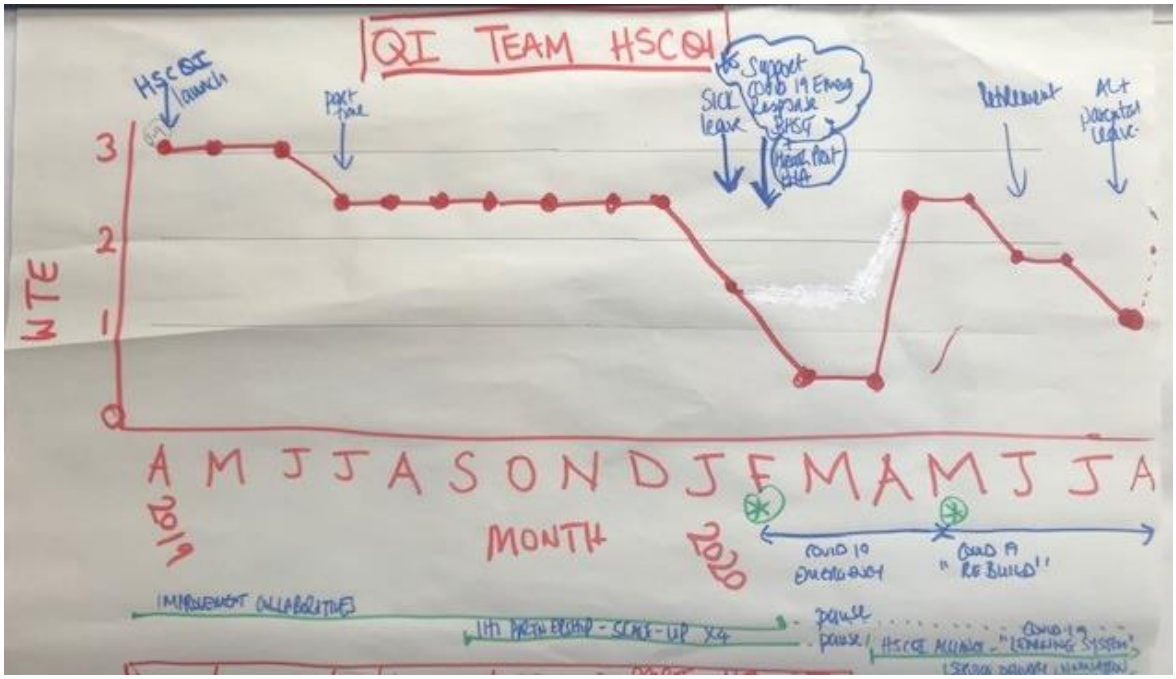
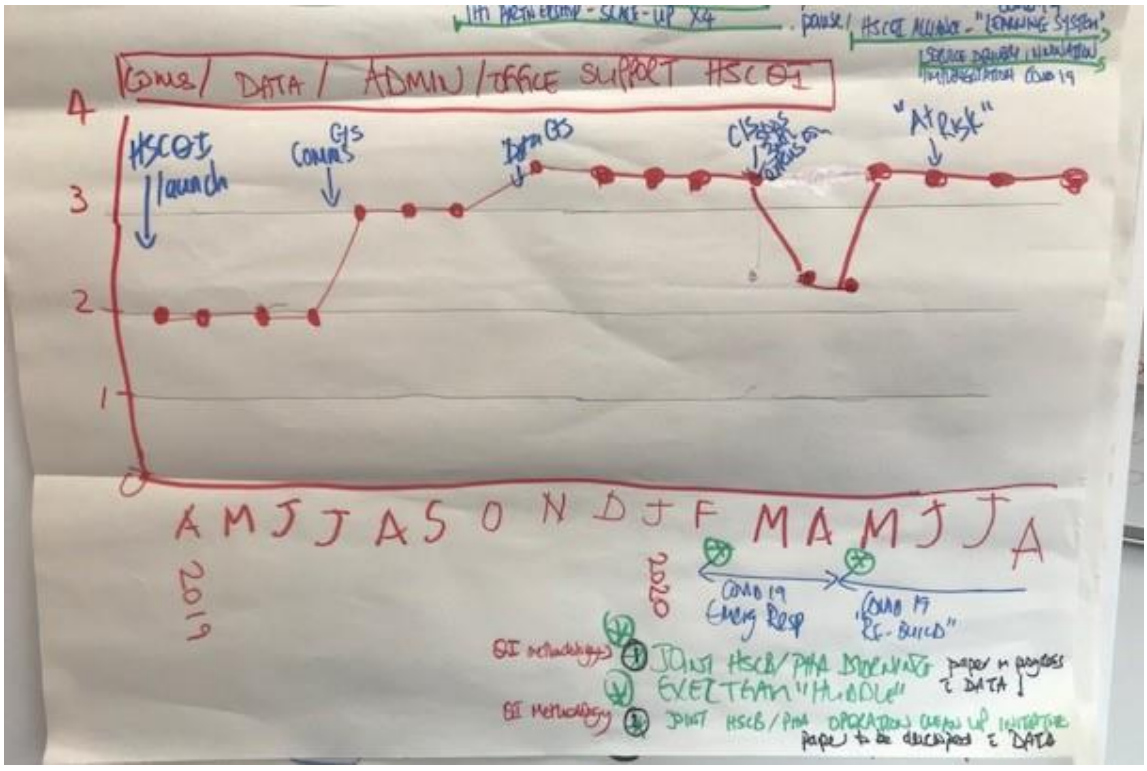


Figure 2: Number of WTE within HSCQI Hub QI Support Team.



Appendix 9:

IHI 90 Day cycle - What is it?

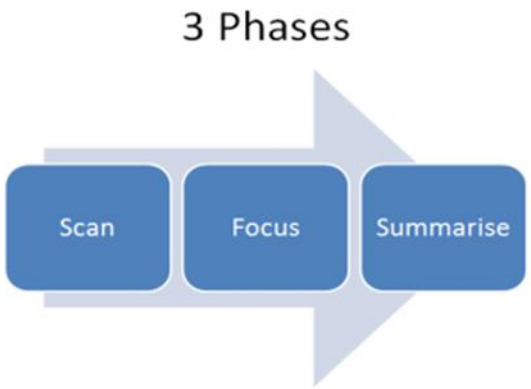
- IHI's primary engine for R&D
- Designed to provide a reliable and efficient way to research innovative ideas, assess their potential for advancing quality and safety in health care, and bring them to action

Learning System:

Phase 1: scan: 30 days to scan or harvest learning

Phase 2: focus: 30 days to focus on data and evidence to support learning

Phase 3: summarise: recommendations made in relation to potential scale up



Appendix 10:

Rebuild Management Board Rebuild Work Streams:

1. Adult Social Care
2. Ambulance Services CRM
3. Cancer Services (including the Breast Assessment Review and Cancer Strategy
4. Children's Social Care
5. Daycase Elective Care Review
6. Dental Services
7. Imaging Services
8. Mental Health and learning disability services
9. Ophthalmic Services
10. Orthopaedics Review
11. Pathology Services
12. Paediatric Health Services
13. Pharmacy Services
14. Planning for further Covid-19 Waves/Surges
15. Primary Care Services
16. Screening Services
17. Stroke Services Review
18. Trace, Track and Isolate
19. Urgent and Emergency Care Services

Cross-cutting

20. Coronavirus Testing
21. Encompass
22. Personal Protective Equipment (PPE)
23. Repurposing Covid-19 Centres
24. Safe Staffing
25. **Service delivery Innovation implemented during the Covid-19 Emergency (including digitisation and telemedicine)**

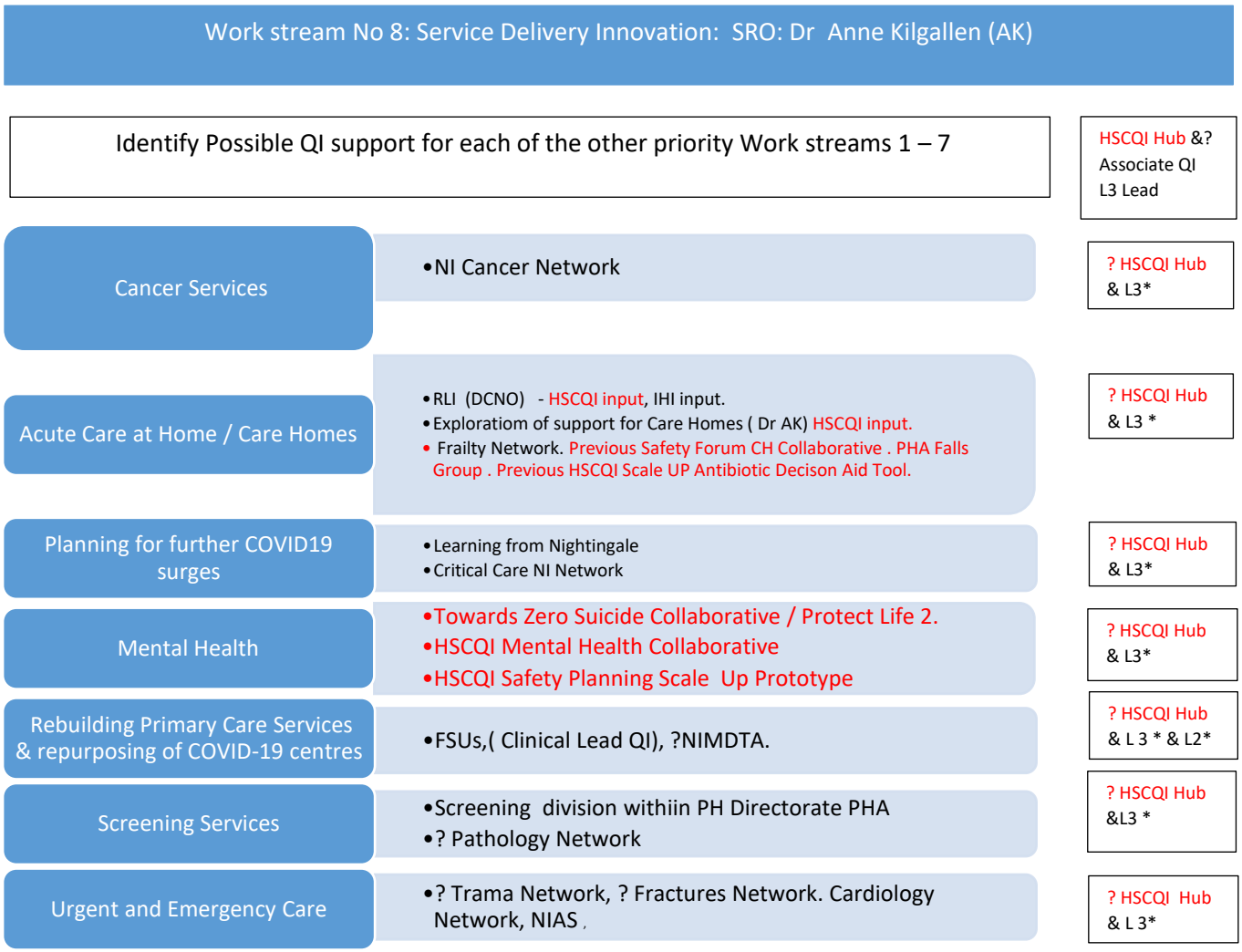
Appendix 11:

Top 8 Priority Work streams within this list of 25 work streams. They include:

1. Cancer
2. Acute Care at Home / Care Homes
3. Planning for further COVID19 Surge
4. Mental Health
5. Rebuild primary Care Services and re-purposing of COVID19 centres
6. Screening Services
7. Urgent and Emergency Care
8. **Service Delivery Innovation Implementation during COVID19 (including digitalisation and telemedicine).**

Appendix 12:

Proposal for how the HSCQI Network and wider NI QI community could support these 7 key work streams is explained diagrammatically below:



L3:"Level 3" QI Trained – HSCQI Regional QI Lead or Level 3 working elsewhere in system. See Level 3 "Alumni" and align with clinical area / Trust / and above work-streams. L2* Primary Care SHARE prog.

Data for all work streams: PMSI (HSCB), DoH, Trusts , NIAS, RQIA, DATIX (HSCB), HSCQI Data , Use of Digital Innovation (Dan West),

Qualitative & Quantitative. Input from HSCQI Data Analyst