HSC Public Health Agency

AGENDA

89th Meeting of the Public Health Agency board to be held on Thursday 17 November 2016, at 1:30pm, Conference Rooms, 12/22 Linenhall Street Belfast, BT2 8BS

No	Time	Item	Paper	Sponsor
1.	1.30	Welcome and Apologies		Chair
2.	1.30	Declaration of Interests		Chair
3.	1.30	Minutes of previous meeting held on 20 October 2016		Chair
4.	1.35	Matters Arising		Chair
5.	1.35	Chair's Business To include: • Ministerial Statement of 25 October and launch of "Health and Wellbeing 2026: Delivering Together" • Launch of Bengoa Report, "Systems, Not Structures - Changing Health and Social Care" • NICON Meeting of 2 November with Minister		Chair
6.	1.40	Chief Executive's Business		Chief Executive
7.	1.50	PHA Financial Performance Report	**PHA/01/11/16 (for Noting)**	Mr Cummings
8.	2.00	Public Health Agency Corporate Plan 2017/21	**PHA/02/11/16 (for Approval)**	Chair
9.	2.25	Performance Management Report – Corporate Business Plan Targets for Period Ending 30 September 2016	**PHA/03/11/16 (for Noting)**	Mr McClean

10.	2.40	Briefing on new Healthcare Associated Infections / Anti-Microbial Resistance Improvement Board		Dr Harper
11.	3.10	Outbreak of Serious Pneumococcal Disease in a Belfast Shipyard April-May 2015	**PHA/04/11/16 (for Noting)**	Dr Harper
12.	3.25	Any Other Business		

13. **Date, Time and Venue of Next Meeting**
    Thursday 15 December 2016
    1:30pm
    Conference Rooms 3+4
    12/22 Linenhall Street
    Belfast
    BT2 8BS

HSC Public Health Agency

MINUTES

Minutes of the 88th Meeting of the Public Health Agency board held on Thursday 20th October 2016 at 1:30pm, Conference Rooms 3 and 4, 12/22 Linenhall Street Belfast, BT2 8BS

PRESENT:

Mr Andrew Dougal	-	Chair
Mrs Valerie Watts	-	Interim Chief Executive
Mrs Mary Hinds	-	Director of Nursing and Allied Health Professionals
Dr Adrian Mairs	-	Assistant Director, Screening and Professional Standards (*on behalf of Dr Harper*)
Mr Edmond McClean	-	Director of Operations
Councillor William Ashe	-	Non-Executive Director
Mr Brian Coulter	-	Non-Executive Director
Mr Leslie Drew	-	Non-Executive Director
Mrs Julie Erskine	-	Non-Executive Director
Mr Thomas Mahaffy	-	Non-Executive Director
Ms Deepa Mann-Kler	-	Non-Executive Director
Alderman Paul Porter	-	Non-Executive Director

IN ATTENDANCE:

Mr Paul Cummings	-	Director of Finance, HSCB
Mrs Fionnuala McAndrew	-	Director of Social Care and Children, HSCB
Mr Robert Graham	-	Secretariat

APOLOGIES:

Dr Carolyn Harper	-	Director of Public Health/Medical Director
Mrs Joanne McKissick	-	External Relations Manager, PCC

		Action
101/16	**Item 1 – Welcome and Apologies**	
101/16.1	The Chair welcomed everyone to the meeting, and extended a particular welcome to Valerie Watts who has now taken on the role of Interim Chief Executive.	
101/16.2	The Chair noted apologies from Dr Carolyn Harper and Mrs Joanne McKissick.	

102/16	**Item 2 - Declaration of Interests**
102/16.1	The Chair asked if anyone had interests to declare relevant to any items on the agenda. No interests were declared.
103/16	**Item 3 – Minutes of previous meeting held on 15 September 2016**
103/16.1	The minutes of the previous meeting, held on 15 September 2016, were **approved** as an accurate record of the meeting, subject to an amendment in paragraph 96/16.4, "reliance" instead of "reliability".
104/16	**Item 4 – Matters Arising**
104/16.1	There were no matters arising.
104/16	**Item 5 – Chair's Business**
104/16.1	The Chair informed members that he had attended the "Your Approach to Palliative Care" conference during Palliative Care week.
104/16.2	The Chair said that he had been present at a briefing at the Department of Health on 19 October where the Permanent Secretary outlined the timetable for the publication of the Bengoa report.
104/16.3	The Chair advised that there had been a meeting of the Corporate Strategy Project Board this week and that the draft report will be presented to the November 2016 meeting of the Board and after that will be subject to public consultation.
104/16.4	The Chair told members that following a two day conference in Belfast regarding Outcomes Based Accountability, he had contacted the HSC Leadership Centre to enquire about the possibility of training for Non-Executive Directors.
104/16.5	The Chair said that he had been invited to speak at a summit conference organised by the UK Public Health Network on the consequences of Brexit for Public Health.

105/16	**Item 6 – Chief Executive's Business**
105/16.1	The Interim Chief Executive thanked members for the warm welcome extended to her at her first Board meeting.
105/16.2	The Interim Chief Executive said that it was a privilege to be asked to take on this role and that it is a considerable challenge to lead both organisations, but that she has been assured that she will receive the required support to accomplish this. She added that a Deputy Chief Executive will be appointed and that with the support of Board members, she will work to further realise the PHA's objectives as well as contributing to the transformation of the HSC over the next few years.
105/16.3	The Interim Chief Executive said that it was not her intention to fill the shoes of the previous Chief Executive and she felt that the send-off for Dr Eddie Rooney, which took place on 14 October was very fitting.
105/16.4	The Interim Chief Executive advised that, along with the Chair, she was called to a meeting with the Permanent Secretary for a private briefing with regard to the Minister's plans and the forthcoming announcement on 25 October. She said that Professor Bengoa will be present at the announcement and that the focus will be on the Minister's wider vision and the transformation moving forward. She indicated that she had been led to believe there would be a further reaffirmation that the HSCB will be closing and the PHA will refocus and grow, but that the detail still requires to be worked up. She went on to say that there is a communication plan being developed and it is intended that an e-mail will be issued to all HSC staff and furthermore, the Minister intends to meet with staff over a period of time. The Interim Chief Executive said that she will also issue an e-mail to all HSCB and PHA staff and ask Directors to pick this up in their own briefings with staff.
105/16.5	The Interim Chief Executive informed members that GPs in Northern Ireland are being asked by the British Medical Association (BMA) to consider submitting resignation letters to the Department of Health. She said that a similar initiative in England had seen GPs receiving additional funding.
105/16.6	The Interim Chief Executive said that PHA and HSCB have joint

	responsibility for unscheduled care and resilience planning for winter pressures. She advised that HSCB has received resilience plans from locality groups and that a meeting had been held with each Trust to look at these.
105/15.7	The Interim Chief Executive gave members an update on community planning. She reminded members that each of the 11 Councils is required to develop a Community Plan and that health and wellbeing is an important aspect of this in the context of Programme for Government and Making Life Better. She said that it is important that PHA sees the draft Plans to ensure that the aims and objectives expected of the health and social care sector can be achieved.
105/15.8	The Chair asked about the locality network groups. Mrs Hinds explained that there is one in each Trust. In response to Ms Mann-Kler's query, she explained that they differ from ICPs in that they are focused on unscheduled care and have a broader membership.
105/15.9	Ms Mann-Kler asked about timescales for the implementation of HSC restructuring following the Minister's announcement. The Interim Chief Executive advised that there was no specific timeframe at this point, but that she had written to both the Minister and the Permanent Secretary urging early action. She said the Permanent Secretary had indicated that work will commence as soon as the Minister's announcement is made and that the Department will be handing over the implementation to others and holding them to account. She said that to date, the focus has been on the Minister's vision document and her speech, but not on the workstreams.
106/16	**Item 7 – Finance Update** *PHA Financial Performance Report (PHA/01/10/16)*
106/16.1	Mr Cummings presented the Finance Report for the period up to 31 August 2016 and noted that the overall surplus has increased. He advised that this is as much to do with profiling as being able to spend the money. He added that the management team are currently conducting a review of all budgets, and that budget managers are saying that all funding has been committed.

106/16.2	Mr Cummings said that the overall HSC system is not in a balanced position and that there are pressures within pharmacy and clinical negligence. Therefore any PHA funding that is not committed will be utilised to ease these pressures.
106/16.3	Mr Drew asked about the underlying reasons for the surplus and suggested a resourcing issue. Mr McClean said that there is not one key factor, but suggested that additional allocations from the June monitoring round, together with the loss of some staff may be creating a slight delay.
106/16.4	Mr Cummings advised that all HSC organisations, expect PHA, have received correspondence asking about contingency planning. Mr Drew asked whether there is the potential for patients and end users to lose out. Mr Cummings said that all HSC spend is for the benefit of patients and end users. Mr McClean pointed out that it is important to differentiate between natural slippage and that which is a result of actively stopping or standing down initiatives. Mr Cummings said that the only funding that may be handed back to the Department is natural slippage.
106/16.5	Alderman Porter said that if PHA has developed a plan and that plan has a cost, then PHA should implement that plan, because if money has to be handed back, there is a possibility that PHA may not be able to secure that funding in future. Mr Cummings said that if PHA receives a letter regarding contingency planning, then the Interim Chief Executive will have to implement a contingency plan.
106/16.6	Mr Mahaffy asked about the Trust contingency plans. Mr Cummings confirmed that these have been received.
106/16.7	Mr Coulter asked about the management and administration budget and whether PHA would break even, given the potential for reduction. Mr Cummings said that he was confident that PHA can live within its resources, and noted that the contingency plans are not for implementation, but to give suggestions to the Department as to how savings could be made.
106/16.8	Mrs Erskine said that she was disappointed and concerned that PHA had fought to secure the funding that it has, and that there is the potential that the budget may be reduced if money is

	handed back. Mr Cummings advised that there has never been a situation where an organisation has been penalised for not spending its allocation and had its budget reduced. He said that PHA is facing a challenge in terms of recruiting in specialist areas and getting funding spent in a timely manner.
106/16.9	Ms Mann-Kler asked whether the Minister's statement would have any impact on the overall HSC financial situation, in terms of achieving balance or re-profiling. The Interim Chief Executive said that there will be a Transformation and Reform fund, but there will be no new money, with the Minister requesting additional funds from the Assembly.
106/16.10	Ms Mann-Kler asked about the workforce issues. The Interim Chief Executive said that there are workstreams to look at these and she felt that this issue needs to be prioritised, and looked at along with succession planning.
106/16.11	Mr Drew noted that there have been many change initiatives in recent years, but none of them have been fully implemented.
106/16.12	Members noted the Finance Report.
	Fraud and Bribery Policy and Response Plan Review (PHA/02/10/16)
106/16.13	Mr Cummings advised members that the Fraud and Bribery Policy and Response Plan had been reviewed and had been approved by the Governance and Audit Committee at its meeting on 6 October.
106/16.14	Members **approved** the revised policy.
	Revision of Delegated Limits – HSC(F)52-2016 (PHA/03/10/16)
106.16.15	Mr Cummings presented the updated Circular relating to the revision of delegated limits. The Chair noted that there had been a substantial increase in the delegated limits.
106.16.16	Members noted the circular.
107/16	**Item 8 – Governance and Audit Committee Update (PHA/04/10/16)**

107/16.1	Mr Coulter advised members that the minutes of the meeting of 3 June were available for noting. He reminded members that there had been discussion at the meeting regarding the unsatisfactory level of assurance on the BSO Internal Audit reports relating to recruitment and payroll Shared Services and that as a result, the Chief Executive of BSO had been invited to attend the last Governance and Audit Committee meeting on 6 October. He also noted that the Committee had met privately with the External Auditors and one of the areas of discussion was the impact of VES, which was the subject of a recent Northern Ireland Audit Office report.
107/16.2	Councillor Ashe expressed concern about the wording of the minutes where a suggestion was made of the PHA having a “less significant” risk than other HSC organisations with regard to recruitment. Mr Cummings clarified his comment saying that PHA has a stable workforce and a much lower rate of turnover than other HSC organisations. Councillor Ashe said that while he accepted the explanation, the wording lent a different perception. The Interim Chief Executive said that it was not her belief that the Director of Finance would mislead members and that she would review this. Mr Coulter noted that the issue is dealt with in the Mid-Year Assurance Statement.
107/16.3	Mr Coulter moved on to give members an overview of the meeting of 6 October. He made reference again to the fact that the BSO Chief Executive and Acting Head of Shared Services had attended the meeting and spoke openly about the issues and how they were seeking to resolve these. He said that he felt more assured, but Mr Cummings advised that despite the actions being taken, the payroll system almost collapsed last week potentially causing a delay in salary payments across the HSC; however the issue was immediately resolved.
107/16.4	Mr Coulter summarised some of the recent Internal Audit reports that had been considered by the Committee, including the progress report and follow up reports on previous recommendations and reports on recently conducted audits in the areas of contracts and connected health.
107/16.5	Mr Coulter advised that the Committee had considered the

	Corporate Risk Register and the revised Assurance Framework. The Committee had also approved the Mid-Year Assurance Statement and Freedom of Information Review procedures, both of which have been brought to the PHA Board today for approval.
107/16.6	The Chair thanked Mr Coulter and the Committee for their work in considering all of these papers.
108/16	**Item 9 – Mid-Year Assurance Statement (PHA/05/10/16)**
108/16.1	The Chief Executive presented the Mid-Year Assurance Statement and advised that the Department of Health had written to PHA on 1 September requesting submission by 14 October. She advised that the draft statement approved by the Agency Management Team on 27 September and by the Governance and Audit Committee on 6 October
108/16.2	The Interim Chief Executive said that following approval by the PHA Board, she would sign the statement and it would be formally returned to the Department of Health.
108/16.3	Members **approved** the Mid-Year Assurance Statement.
109/16	**Item 10 – Freedom of Information Internal Review Procedures (PHA/06/10/16)**
109/16.1	Mr McClean informed members that the Freedom of Information Internal Review Procedures had been approved by the Governance and Audit Committee and there had been very minor changes made to the previous procedures.
109/16.2	Members **approved** the Freedom of Information Internal Review Procedures.
	At this point Mrs McAndrew left the meeting.
110/16	**Item 11 – Annual Quality Report (PHA/07/10/16)**
110/16.1	Mrs Hinds introduced the Annual Quality Report and said that it is a joint report because much of the work is done in conjunction with colleagues in HSCB. She explained that PHA is working to reduce the length of the report and produce one page summaries on each of the five strategic goals. She invited Lynne Charlton,

	Head of Nursing, Quality, Safety and Patient Experience to give members an overview of the report.
110/16.2	Ms Charlton advised that this is the third Annual Quality Report and it is written under the five themes of Quality 2020. She picked out some highlights under each of the key themes. Under "Transforming the Culture", she gave an overview of work done to revise SAI procedures by engaging with families and service users and work undertaken by the Safety Forum with nursing homes around palliative and end of life care. She also highlighted improvements in access to mental health services.
110/16.3	Within "Strengthening the Workforce", Ms Charlton advised that there is now a staff health and wellbeing group within PHA. Under "Measuring the Improvement", she referenced work in mental health service frameworks and complaints within maternity services and within "Raising the Standards", she highlighted the 10,000 Voices project and an re-audit of the Sensemaker tool. Finally, under "Integrating the Care", Ms Charlton advised of the eye-care partnerships operating within both primary and secondary care.
110/16.4	Ms Charlton said that the report will be published in advance of World Quality Day on 10 November.
110/16.5	Mr Drew said that he appreciated the work put into the Report, but asked if there was an action plan. Mrs Hinds said that for every project referenced within the report, there is a team working to take forward improvements.
110/16.6	Dr Mairs noted that there is a brief overview of screening programmes within the report and nothing on professional standards and the training of public health trainees. Mrs Hinds acknowledged this and said that there is a lot more that could be put in the report, but that it was necessary to keep it concise.
110/16.7	Ms Mann-Kler asked about initiatives where learning should be shared across the wider HSC and cited the example of the Nursing Home In-Reach Project in the Northern Trust. Ms Charlton said that the Trust is being invited to a future meeting of the Unscheduled Care group to present this project with a view to it being embedded across other Trusts.

110/16.8	Ms Mann-Kler asked about the atmosphere amongst staff of eastern European origin post the Brexit vote and whether any issues had been highlighted. Mrs Hinds said that she was not aware of any issue but that Trusts have made every effort to ensure that staff feel safe and welcome.
110/16.9	The Chair asked whether the private sector was experiencing difficulties with regard to recruitment within domiciliary care providers. Mrs Hinds said that there are issues as these workers tend to move to the HSC within 6/8 months. She added that there have been discussions with Four Seasons and the Independent Healthcare Providers (IHCP) to see what, if any, assistance we can provide to improve retention rates.
110/16.10	Mrs Erskine said that she appreciated the Report as it is important that the PHA Board receives this type of information to fulfil its governance responsibilities with regard to safety and quality. Mrs Hinds thanked Mrs Erskine and acknowledged that there is a lot of detail, but in the context of the Donaldson Review and the Mid Staffordshire report it is important that non-executive Directors receive this.
110/16.11	Alderman Porter asked if this Report helps PHA in terms of identifying future projects and funding streams. Mrs Hinds said that this Report helps PHA reflect on what it does and the impact and highlighted 10,000 Voices as an example of a project where service users and carers can say what is needed.
110/16.12	Mr Coulter noted that there is a vast amount of work put into the compilation of this Report, but questioned its usefulness. He asked whether PHA should be spending the time engaging in this type of work and what the key implications are, from the Report, for PHA. Mrs Hinds acknowledged that there is a lot of effort put into the preparation, but she said that over the last 10 years the NHS has been criticised for not paying attention to these areas. She said that the learning from SAIs and 10,000 voices is invaluable and it is worth putting this together in this type of report. She added that a shorter version is being prepared and that the format is constantly under review.
110/16.13	Mr Drew said that he supported Mr Coulter's view saying that the Report needed outcome measures and KPIs and that this type of information should be brought to the Board twice a year. Mrs

	Hinds responded saying that there is a lot of statistical data available which is considered by the Safety and Quality group and can be brought to the Board if requested. Mrs Hinds advised that regular monitoring is conducted by the HSCB.
110/16.14	The Interim Chief Executive said that she was taking on board all of the comments being made. She said that it is no bad thing for an organisation to highlight the depth of work that it does, but perhaps to focus more on outcomes. She added that introducing Outcomes Based Accountability would put PHA ahead of the game.
110/16.15	With no further comments on the Report, members approved the Annual Quality Report.
111/16	**Item 12 – Any Other Business**
111/16.1	Alderman Porter returned to the issue of funding and sought clarity that if PHA stopped certain programmes, other initiatives would take their place. Mr McClean said that where there are valid proposals or different ways of doing something, PHA would seek every opportunity to progress these given the Minister's priorities around MLB and addressing health inequalities.
112/16	**Item 13 – Date and Time of Next Meeting**
	Date: Thursday 17 November 2016 Time: 1:30pm Venue: Conference Rooms 3+4 12/22 Linenhall Street Belfast BT2 8BS
	Signed by Chair:
	Date:

Public Health Agency

Finance Report, including Mid-Year Statement of Financial Position (Balance Sheet) and Capital Position

2016-17

Month 6 - September 2016

Public Health Agency
2016-17 Summary Position - September 2016

	Annual Budget				Year to Date			
	Programme		Mgt & Admin	Total	Programme		Mgt & Admin	Total
	Trust	Non-Trust			Trust	Non-Trust		
	£'000	£'000	£'000	£'000	£'000	£'000	£'000	£'000
Available Resources								
Departmental Revenue Allocation	31,930	46,281	18,761	**96,972**	15,638	18,050	9,009	**42,697**
Revenue Income from Other Sources	-	13	384	**396**	-	13	159	**172**
Capital Grant Allocation & Income	6,621	5,757	-	**12,378**	3,311	1,418	-	**4,728**
Total Available Resources	38,551	52,051	19,145	**109,747**	18,949	19,481	9,168	**47,597**
Expenditure								
Trusts	38,551	-	-	**38,551**	19,276	-	-	**19,276**
Non-Trust Programme *	-	52,051	-	**52,051**	-	17,160	-	**17,160**
PHA Administration	-	-	19,145	**19,145**	-	-	9,123	**9,123**
Total Proposed Budgets	38,551	52,051	19,145	**109,747**	19,276	17,160	9,123	**45,559**
Surplus/(Deficit) - Revenue	-	-	-	-	(274)	2,308	44	**2,078**
Surplus/(Deficit) - Capital	-	-	-	**-**	(53)	13	-	**(40)**

** Non-Trust Programme includes amounts which may transfer to Trusts later in the year*

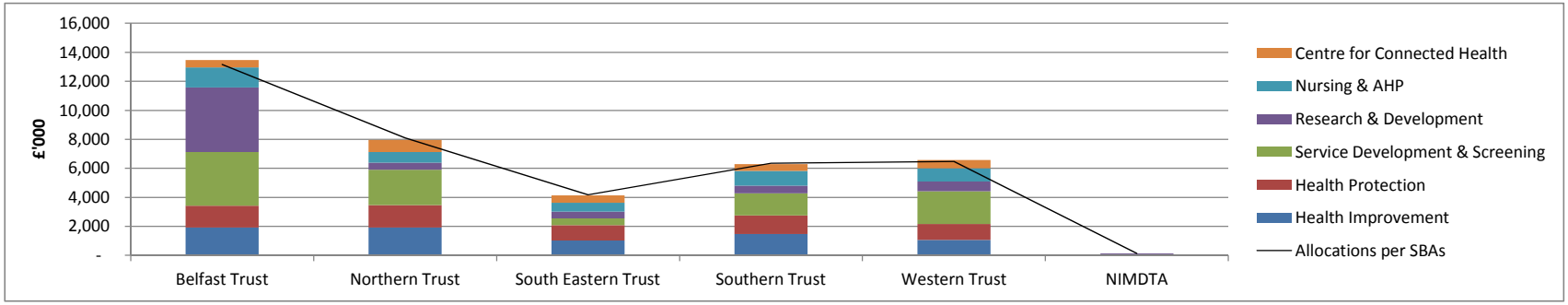
As advised in the opening Budget paper, revised Departmental guidance means the vast majority of PHA's Research & Development (R&D) expenditure will now be funded from a DoH capital budget (CRL), rather than a revenue budget (RRL) as was previously the case. Total CRL allocations received for R&D now total £11.4m, with additional receipts of £1.0m bringing the total to £12.4m. As a result of this change the majority of R&D programme will no longer form part of PHA's revenue breakeven requirement. However, total funds and expenditure will be shown within the Finance Reports in a combined manner, but the individual CRL and RRL breakeven targets will be monitored and highlighted separately.

Since the last report in month 5, £0.5m of funding from NIMDTA which was expected to be received as revenue income has now been classified as Departmental Allocation within the Available Resources section above.

The year to date financial position for the PHA shows an underspend against profiled budget of approximately £2m, mainly due to spend behind profile on Revenue Budgets (RRL) within Health Improvement and Service Development & Screening as detailed on pages 2 and 3 of this report. It is currently anticipated that the PHA will breakeven on its full year budget, however a formal mid-year review is being undertaken and updates will be provided in future reports.

In addition, a mid-year Statement of Financial Position (Balance Sheet) and Capital budget position is provided on pages 6 and 7.

Programme Expenditure with Trusts

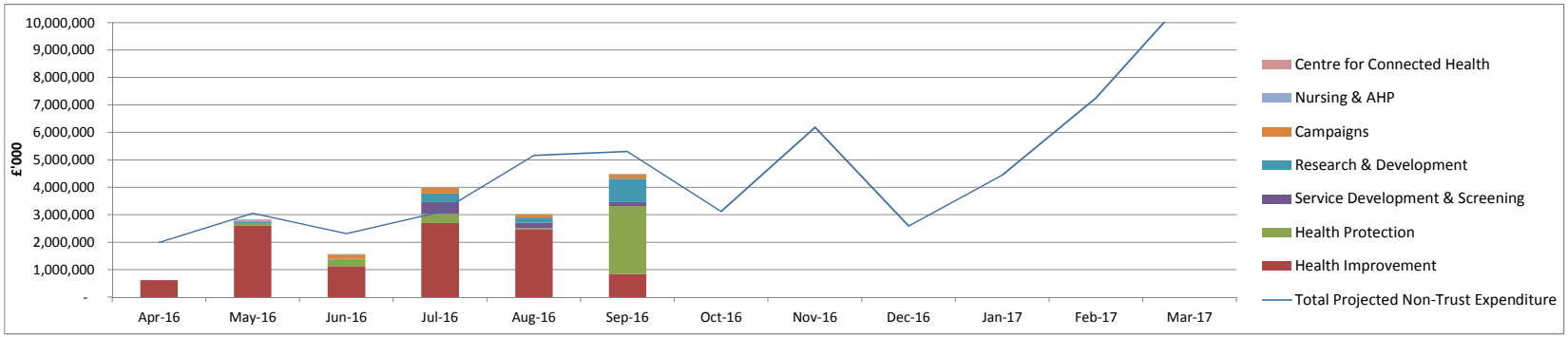


Current Trust RRLs	Belfast Trust £'000	Northern Trust £'000	South Eastern Trust £'000	Southern Trust £'000	Western Trust £'000	NIMDTA £'000	Total Planned Expenditure £'000	YTD Budget £'000	YTD Expenditure £'000	YTD Surplus / (Deficit) £'000
Health Improvement	1,914	1,923	1,030	1,477	1,068	-	**7,411**	3,426	3,705	(280)
Health Protection	1,511	1,534	1,044	1,268	1,101	-	**6,457**	3,200	3,229	(29)
Service Development & Screening	3,701	2,454	467	1,536	2,253	-	**10,411**	5,249	5,205	44
Research & Development	4,452	489	477	517	660	132	**6,728**	3,311	3,364	(53)
Nursing & AHP	1,374	721	601	1,031	916	-	**4,643**	2,321	2,321	(0)
Centre for Connected Health	522	832	510	460	577	-	**2,902**	1,442	1,451	(9)
Total current RRLs	**13,474**	**7,953**	**4,129**	**6,289**	**6,575**	**132**	**38,551**	**18,949**	**19,276**	**(327)**
Opening Allocations	**12,876**	**6,816**	**3,498**	**5,798**	**5,993**	**25**	**35,006**			

The above table shows the current Trust allocations split by budget area. These amounts are primarily Revenue Resource Limits (RRL) but also include the Capital Resource Limit (CRL) for Research and Development.

Approximately £3.5m has been issued to Trusts since the Opening Allocations, and £3.1m of this was in the current month (Sept 2016). The year to date position shows a small amount of expenditure in advance of profile, but this is a timing issue only and a breakeven position is expected for the full year. The net Programme position over both Trust and Non-Trust budgets (Page 3) is a £2.0m underspend at month 6.

Non-Trust Programme Expenditure



	Apr-16 £'000	May-16 £'000	Jun-16 £'000	Jul-16 £'000	Aug-16 £'000	Sep-16 £'000	Oct-16 £'000	Nov-16 £'000	Dec-16 £'000	Jan-17 £'000	Feb-17 £'000	Mar-17 £'000	Total £'000	YTD Budget £'000	YTD Spend £'000	Variance £'000
Projected Expenditure																
Health Improvement	1,246	2,368	1,389	1,582	2,674	1,658	1,557	3,711	656	2,868	3,322	1,971	**25,001**	10,918	9,283	1,635
Lifeline	225	225	225	225	225	225	225	225	225	225	225	225	**2,700**	1,350	1,118	233
Health Protection	27	29	25	275	611	2,493	611	612	612	617	1,816	1,382	**9,110**	3,459	3,658	(199)
Service Development & Screening	217	148	392	157	102	375	102	112	374	126	168	509	**2,780**	1,390	997	393
Research & Development (CRL)	8	8	8	372	1,002	21	8	948	132	8	1,147	5,129	**8,789**	1,418	1,404	13
Campaigns	115	115	115	115	187	165	165	165	165	165	165	215	**1,856**	814	711	103
Nursing & AHP	4	4	4	49	49	11	124	124	124	124	124	123	**864**	121	75	46
Safeguarding Board	-	-	-	-	-	12	-	-	-	-	-	12	**24**	12	-	12
Centre for Connected Health	-	-	-	-	-	-	-	-	-	-	157	50	**207**	-	-	-
Other	-	-	-	-	-	-	50	50	50	50	50	469	**719**	-	(86)	86
Total Projected Non-Trust Expenditure	**1,842**	**2,897**	**2,157**	**2,775**	**4,850**	**4,959**	**2,841**	**5,948**	**2,339**	**4,182**	**7,175**	**10,086**	**52,052**	**19,481**	**17,160**	**2,321**
Actual Expenditure	**620**	**2,914**	**1,663**	**4,127**	**3,040**	**4,795**	**-**	**-**	**-**	**-**	**-**	**-**	**17,160**			
Variance	**1,222**	**(18)**	**494**	**(1,351)**	**1,810**	**165**	**-**	**-**	**-**	**-**	**-**	**-**	**2,321**			

The budgets and profiles are based on the opening budgets with adjustments made as a result of additional allocations received subsequently. Expenditure against Non-Trust Programme budgets shows as £2.3m behind profile for the year to date, however commitments have been issued to Trusts which are contributing to the overspend on page 2, leaving a net £2.0m underspend. Budget managers have advised that the majority of the year to date variance is slippage against profile, primarily within Health Improvement and Service Development & Screening. A formal mid-year review of all programme budgets has been planned to ensure on-going focus on the financial position.

PHA Administration
2016-17 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	2,713	3,353	9,186	452	316	507	**16,527**
Goods & Services	97	1,315	388	482	49	287	**2,618**
Total Budget	**2,810**	**4,669**	**9,574**	**934**	**365**	**794**	**19,145**
Budget profiled to date							
Salaries	1,335	1,676	4,581	207	158	222	**8,178**
Goods & Services	48	661	167	15	24	72	**989**
Total	**1,383**	**2,337**	**4,748**	**222**	**182**	**294**	**9,168**
Actual expenditure to date							
Salaries	1,403	1,644	4,672	131	157	222	**8,230**
Goods & Services	64	622	147	(19)	7	72	**893**
Total	**1,467**	**2,267**	**4,819**	**112**	**164**	**294**	**9,123**
Surplus/(Deficit) to date							
Salaries	(69)	32	(91)	75	1	(0)	**(52)**
Goods & Services	(15)	39	20	35	17	0	**96**
Surplus/(Deficit)	**(84)**	**71**	**(71)**	**110**	**18**	**(0)**	**44**

The total PHA funding allocation from the DoH in 2016-17 has been reduced by 10%, which equates to £1.6m. Although this reduction has initially been set against Commissioning funds by the DoH as an interim measure, the PHA Investment Plan requires the Administration budgets to deliver a contribution towards this reduction to enable PHA to achieve breakeven in-year.

The Administration savings target is based on anticipated savings as a result of restructuring following the VES 2015-16 process, the implementation of which is estimated to generate a net £0.45m after funded other pressures and priorities. Salaries budgets have been updated in line with these plans.

The year-to-date salaries budgets of both Nursing and Public Health remain under pressure. This is due to a number of issues including incremental drift and in-year costs of 2015-16 VES posts, the position is expected to improve as the year progresses. The surplus shown under PHA Board relates to slippage on investments in Making Life Better which have been slower than anticipated. All Directorate surpluses and deficits are being closely reviewed to enable the overall PHA Administration budget to breakeven in 2016-17.

PHA Prompt Payment

Prompt Payment Statistics

	September 2016 Value	September 2016 Volume	Cumulative position as at 30 September 2016 Value	Cumulative position as at 30 September 2016 Volume
Total bills paid (relating to Prompt Payment target)	£3,807,287	337	£22,303,565	2,595
Total bills paid on time (within 30 days or under other agreed terms)	£3,713,693	300	£21,180,205	2,433
Percentage of bills paid on time	**97.5%**	**89.0%**	**95.0%**	**93.8%**

Prompt Payment performance for the year to dates shows that on value the PHA is achieving its 30 day target of 95%, although on volume performance is slightly below target. This is mainly as a result of poor performance in August and September, which is a typical annual pattern, resulting in 90.2% of invoices by volume being paid within 30 days for terms in these two months.

The 10 day prompt payment performance remained strong at 88% by value for the year to date, which significantly exceeds the 10 day DHSSPS target for 2016-17 of 60%.

Public Health Agency

Statement of Financial Position as at 30th September 2016

	30th September 2016 (Month 6) £000	31st March 2016 (Published Accounts) £000
Non-current assets		
Property, plant and equipment	267	352
Intangible assets	137	157
Total non-current assets	404	509
Current assets		
Trade and other receivables	135	579
Other current assets	77	27
Cash and Cash Equivalents	437	310
	649	916
Current liabilities		
Trade and other payables	(4,766)	(7,773)
Provisions	(371)	(5)
Total current liabilities	(5,137)	(7,778)
Provisions	-	-
Total non-current liabilities	-	-
Total assets employed	**(4,084)**	**(6,353)**
Financed by taxpayers' equity		
Revaluation reserve	35	36
SoCNE * reserve	(4,119)	(6,389)
Total taxpayers' equity	**(4,084)**	**(6,353)**

The movement in payables relates to payment of invoices for a range of liabilities which had been listed at the year end in line with budget profiles.

The mid-year Statement of Financial Position (Balance Sheet) is displayed against the audited position as at 31 March 2016.

* Statement of Comprehensive Net Expenditure

PHA Capital Expenditure Position

2016-17 - Month 6 (September 2016)

Capital Scheme	Annual Budget £000	Allocation/ Spend Year to Date £000	Annual Forecast Expenditure £000	Annual projected variance £000	Notes
ICT	36	-	36	-	This allocation is for ICT capital directly expended by the PHA. The amount covers 4 minor schemes and is expected to be fully utilised.
Capital Grants and 3rd party income					Permission has been received from DOH to receipt £1m of 3rd party receipt for R&D
Research & Development - MRC - Cell Therapy	750	280	750	-	This R&D allocation relates to a development with the Medical Research Council and is forecast to be fully spent in 2016/17. It was approved separately from the main R&D budget below.
Research & Development	11,601	4,448	11,601	-	This allocation relates to PHA's R&D funding that is expended with 3rd parties (eg Queens University) and Trusts. This is a change from previous years when all R&D funding was disseminated through resource allocations as revenue, whereas R&D is now classified as capital following changes in European legislation. A breakeven position is expected for the year.
Assumed Capital Grant	26	0	26	-	Awaiting formal confirmation from DOH
Total	**12,413**	**4,728**	**12,413**	**-**	

The PHA receives Capital Resource Limit (CRL) allocations for a range of capital initiatives, both those which create assets in the PHA's accounts and those which are provided to HSC Trusts, other providers, and academic bodies. R&D Capital Grants are shown in summary in the body of this report but have been detailed above for completeness of the CRL position. This mid-year review highlights the latest financial position against actual allocations received and all CRL budgets are expected to breakeven.

HSC Public Health Agency

PUBLIC HEALTH AGENCY BOARD PAPER

Date of Meeting	17 November 2016
Title of Paper	Performance Management Report – Corporate Business Plan Targets for Period Ending 30 September 2016
Agenda Item	9
Reference	PHA/03/11/16

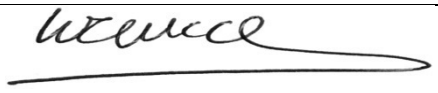
Summary

This report provides an initial update on achievement of the targets identified in the PHA Annual Business Plan 2016-17.

There are a total of **90 targets** in the Annual Business Plan.

The updates provided are for the period ending 30th September 2016. These updates on progress toward achievement of the targets were provided by the Lead Officers responsible for each target.

- **76** are coded as green for achievability
- **14** are coded as amber.
- There are no targets with a red status.

Equality Screening / Equality Impact Assessment	N/A
Audit Trail	This report was approved by AMT on 8 November 2016.
Recommendation / Resolution	For Noting
Director's Signature	
Title	Director of Operations
Date	8 November 2016

DRAFT

PERFORMANCE MANAGEMENT REPORT

Monitoring of Targets Identified in

The Annual Business Plan 2016 – 2017

September 2016

Overview

This report provides an initial update on achievement of the targets identified in the PHA Annual Business Plan 2016-17.

The updates provided are for the period ending 30th September 2016. These updates on progress toward achievement of the targets were provided by the Lead Officers responsible for each target.

There are a total of **90 targets** in the Annual Business Plan.

Of these 90 targets – **76** are coded as green for achievability, **14** as amber and **0** as red.

The previous update for the period ending 30th June 2016 detailed 77 Green and 13 Amber assessments. Six assessments have moved from Green to Amber, whilst five moved from Amber to Green.

The Amber targets are 1.1; 2.4; 2.7; 2.8; 3.1; 3.2; 3.8; 3.11; 3.12; 3.14; 4.2; 4.3; 5.3 and 6.5.

1. PROTECTING HEALTH						
Target from Business Plan	**Progress**	**Achievability** Jun	Sep	Dec	Mar	**Mitigating actions where performance is Amber / Red**
1.1) The Agency will continue to work with Trusts to secure a further reduction of 25% in the total number of in-patient episodes of Clostridium difficile infection in patients aged 2 years and over and in-patient episodes of MRSA bloodstream infection. *(Commissioning Plan Direction Target – By March 2017, secure a reduction of 25% in MRSA and Clostridium Difficile infections compared to 2015/16)*	This HCAI reduction target is a composite target comprising individual Trust reductions in MRSA and CDI cases to be delivered during 2016-17. *Note –CDI and MRSA position at 30 June 2016 is provisional pending C Ex sign-off of enhanced surveillance data.* As of 30 June 2016 13 cases of MRSA have been reported. As of 30 June 2016 76 cases of CDI have been reported	G	A			At this stage the targets are still potentially achievable. A range of measures are being undertaken to assist the Trust achieve their targets: Healthcare associated infection improvement workshop being planned to identify more effective approaches to reducing infections. Regular feedback of infection surveillance data to HSC Trusts (IPC teams and senior management) to enable targeting of their control measures. Monitoring and provision of assistance for any HCAI outbreaks that occur.

Target from Business Plan	Progress	Achievability Jun	Sep	Dec	Mar	Mitigating actions where performance is Amber / Red
1.2) In line with DoH priorities, continue to work on the development/introduction of a surveillance system for anti-microbial resistance (AMR) in Northern Ireland and bring NI in line with the rest of the UK.	Recruitment of 2 fixed term posts agreed by Scrutiny Committee is now commencing. The band 6 and 8A AMR Epi scientist posts have been banded by HR and will be advertised within the next month.	A	G			
1.3) During 2016/17 achieve uptake targets for seasonal influenza vaccinations set by DoH.	Work is progressing as planned to meet DoH vaccination targets. Seasonal flu vaccine programme for 2016-17 only commenced in late Sept 2016 so too early to have uptake figures	G	G			
1.4) Continue to work with HSCNI organisations to vaccinate against Men B and Men ACWY and encourage uptake rates through information/educational campaigns.	Work is progressing as planned.	G	G			

2. IMPROVING HEALTH AND WELLBEING & TACKLING HEALTH INEQUALITIES

Target from Business Plan	Progress	Achievability Jun	Sep	Dec	Mar	Mitigating actions where performance is Amber / Red
2.1) Develop and deliver a range of integrated public information campaign solutions to target audiences in line with key PHA priorities.	Campaigns part delivered for obesity and smoking, dementia, mental health and sexual health. Media planning underway for programme remainder – obesity, smoking, dementia and sexual health Breastfeeding development underway (advertising tender). Development and part production required – on course Bowel cancer campaign development and production completed however implementation on hold due to service issues.	G	G			
Giving Every Child the Best Start - Theme 1 Making Life Better						
2.2) Ensure that implementation of Early Intervention Transformation Programme Work Stream One is in keeping with business goals and implementation plan.	Progress is being made in relation to the three key elements of EITP WS1: I. Alignment of HV to preschool settings – implementation commenced April 2016 II. 3+ health review in pre-school education settings – extension of pilot involving a target of 20% of children availing of DE funded preschool places commenced Sept 2016. III. Antenatal group based care and education – Group base care and education programmes commenced in all five HSCTs.	A	G			

Target from Business Plan	Progress	Achievability Jun	Sep	Dec	Mar	Mitigating actions where performance is Amber / Red
2.3) Implement Early Intervention service linking with family support hubs. (Early Intervention Transformation programme Work Stream Two).	Early Intervention Support Services are operational across NI and complementary Parenting Programmes and Family Group Conferencing contracts in place. Programme implementation proceeding. QUB research to be instigated to enable a Control Group research programme [to be established].	G	G			
2.4) Implement the regional Infant Mental Health plan and commission training to HSC and early years workforce.	Multi-agency Infant Mental Health Implementation Group established and workgroups being formed to support specified actions within 2016/17. Regional Infant Mental Health Plan produced and issued. Infant Mental Health service development on the agenda of HSCB and plans produced by CAMHS Commissioners.	G	A			Infant Mental Health 2016/17 training programme identified and resources required to deliver to be secured. Solihull Approach Training Plan being developed informed by regional workshop in March 2016. Plan expected by December 2016.
2.5) Implement the Action Plan of the Breastfeeding Strategy for Northern Ireland.	Breastfeeding Strategy Implementation Steering Group (BSISG) meeting took place on 3 October 2016, with the next meeting scheduled to take place on 8 February 2017. Action plan updated and RAG ratings for each of the 10 Work strands recorded.	G	G			

Target from Business Plan	Progress	Achievability Jun	Sep	Dec	Mar	Mitigating actions where performance is Amber / Red
2.6) Ensure regional implementation of Family Nurse Partnership in keeping with Family Nurse Partnership specification and licence requirement	Work is continuing as planned.	G	G			
2.7) Promote the health, wellbeing and safeguarding of children through implementation of Healthy Child Healthy Future and Healthy Futures policy.	Summary report on Delivering Care Phase 4 (health visiting) submitted to DoH; Additional investment made by HSCB for one additional health visitor to all HSCTs and seven Child Health Assistants (CHA) between three of the five HSCTs based on existing CHA workforce; GAIN audit Every Child Counts – recommendations being taken forward by Healthy Futures Programme Board; Three monthly reporting on CHPP compliance (DH IoP) indicates regional compliance rate of 84.8% against seven of nine contacts (Quarter ending June 2016) - some improvement but significant health visiting capacity issue has emerged in Western HSCT; Other areas of work include school health profiling including Special Schools, Speech and Language Therapy Implementation plan and development of a Vision Screening Protocol.	G	A			Pilot of eCAT system for health visitor caseloads continues and consideration being given to applicability of eCAT for school nursing; 46 student health visitors commenced training Sept 2016;

Target from Business Plan	Progress	Achievability Jun	Sep	Dec	Mar	Mitigating actions where performance is Amber / Red
Equipped Throughout Life – Theme 2 Making Life Better						
2.8) Procure a range of suicide prevention and mental health promotion services, including a focus on more vulnerable groups. Commission and/or procure the 24/7 Lifeline crisis intervention service. *(Commissioning Plan Direction Target – By March 2020, to reduce the differential in the suicide rates across NI and the differential in suicide rates between the 20% most deprived areas and the NI average. Areas of focus for 2016/17 should include early intervention and prevention activities, for example through improvement of self-harm care pathways and appropriate follow up services in line with NICE guidance.)*	Engagement element of procurement plan has commenced. The regional team has carried out engagement workshops in the areas of Mental Health and Suicide Prevention, community capacity and bereavement support. Current scoping exercise is underway with health intelligence regarding current services who are commissioned to deliver counselling services. Further engagement with young people is scheduled ad full consultation on all planned procured services will take place winter 2016. It is envisaged at this stage that the new Protect Life Strategy will be published. Currently awaiting decision of Health Minister on the next step in relation to the procurement of the Lifeline service.	G	A			Engagement sessions with young people have commenced. Full consultation has been delayed until the publication of the new Protect Life Strategy which is currently out for consultation. At this stage, it is unlikely to be available within the financial year. Awaiting decision from the Health Minister on next steps relating to the procurement of the Lifeline service

Target from Business Plan	Progress	Achievability Jun	Sep	Dec	Mar	Mitigating actions where performance is Amber / Red
2.9) Provide strategic leadership and co-ordinate the Regional Learning Disability Health Care & Improvement Steering Group on behalf of PHA & HSCB to ensure that good practice is promoted, health inequalities are identified and addressed and that services are responsive and make adequate adaptation to meet the health care needs of people with a learning disability.	The Regional Learning Disability Healthcare & Improvement Steering Group is continuing to progress improvement in the healthcare and health & social wellbeing of people with learning disabilities and to reduce inequalities in health for this client group. There are three Forums for specific areas of improvement. Workplans for each forum have been agreed and 2016/17 objectives are being progressed as follows: **Health Care Facilitators (HCF) Forum** 1. **Revised Electronic Health Check Form:** HCFs are sending this form to the GPs providing the LD enhanced service and encouraging use of same. Tailored excel training for HCFs being provided by HSC Leadership Centre in September 2016 to enable valuable data capture from the new electronic Health Check Form. 2. **Health and Wellbeing Action Plans:** The Health and Wellbeing Action Plan for people with Learning Disabilities has been reviewed, a set of guidance notes to support have been developed as well as a pathway to illustrate process. These papers have been presented to the Bamford Review Group for discussion and approval.	G	G			

	The Regional Health & Social Wellbeing Improvement Forum This forum are taking forward a number of objectives in 2016/17, to include focus on: • Promotion of healthy eating within Day Centres for adults with a learning disability; • Measures to promote healthy personal and sexual relationships for adults with a learning disability; • Promotion of physical activity for people with a learning disability and their families/ carers. **The Regional General Hospital Care Forum: Learning Disability** **Development of Regional Hospital Passport** • Draft Passport developed and piloted across all Trusts, with support from the HSC Safety Forum. • Feedback excellent, full endorsement across clients, carers and staff • Official launch is expected late 2016 / early 2017 The forum continue to monitor any potential risk of Trusts failing to progress with implementation of recommendations from the RQIA Report & GAIN Guidelines. A progress report from all 3 Forums is being collated for October 2016 and March 2017.					

Target from Business Plan	Progress	Achievability Jun	Sep	Dec	Mar	Mitigating actions where performance is Amber / Red
Empowering Healthy Living – Theme 3 Making Life Better						
2.10) Implement the Tobacco Control implementation plan including Brief Intervention Training, smoking cessation services, enforcement control and Public Information. *(Commissioning Plan Direction Target – In line with the Department's ten year Tobacco Control Strategy, by March 2020 reduce the proportion of 11-16 year old children who smoke to 3%; reduce the proportion of adults who smoke to 15%; and reduce the proportion of pregnant women who smoke to 9%*	The Tobacco Strategy Implementation Plan is being rolled out with KPI monitoring presented to Tobacco Strategy Implementation Steering Group (TSISG). Smoking cessation services information for Q2 not yet available. Q1 services information will be shared with TSISG on 12 October 2016. Brief intervention training is being offered in HSCTs and with other groups, such as optometrists. 'Smoke Free' was launched in health and social care sites in March 2016. Enforcement work is progressing well across the region. Preliminary work is underway on a public information campaign. TSISG continues to meet thrice per year with specific actions updated with 'RAG' ratings. Currently, the proportion of: • 11-16 year old children who smoke is 5% • Adults who smoke is 22% • Pregnant women who smoke is 14.7%	G	G			

Target from Business Plan	Progress	Achievability Jun	Sep	Dec	Mar	Mitigating actions where performance is Amber / Red
2.11) Support and lead multi-agency partnerships to oversee regional and local delivery of Protect Life and Mental and Emotional Wellbeing strategies including the regional Bamford structures and local Protecting Life Implementation Groups' Action Plans.	Thematic plan 2016-17 complete, with local implementation plans in place and continues to be monitored closely. Regional Bamford group continues to be chaired by PHA and meets thrice per year. Regional programmes are presented at these meetings. PHA awaits clarification on the future role of Bamford in the new Protect Life Strategy. Five local areas have Protect Life Implementation multi-agency partnerships who share information locally and contribute to the regional Bamford group. Local implementation plans are in place and continue to be closely monitored.	G	G			

Target from Business Plan	Progress	Achievability Jun	Sep	Dec	Mar	Mitigating actions where performance is Amber / Red
2.12) Implement the obesity prevention action plan including: weight management programmes for children, adults and pregnant women, development of a common regional Physical Activity Referral programme, implementation of Active Travel programme in schools, implementation of Active Travel Plan Belfast and public information and awareness. *(Commissioning Plan Direction Target – In line with Departmental strategy A Fitter Future For All, by March 2022 reduce the level of obesity by 4% points and overweight and obesity by 3% points for adults and by 3% points and 2% points for children)*	Year 3 of the Childhood Obesity campaign launched in NI on 12 May 2016 with focus on treats and sugary treats at this stage. The campaign will be re-launched again during the year focusing also on portion sizes. *'Weigh to a Healthy Pregnancy'* pilot and evaluation completed. Intervention now being mainstreamed for 2016/17. Specification drafted and IT system being developed for Physical Activity Referral Programme, new scheme and system to be fully operational in 16/17. Active Schools Programme commissioned with Department of Infrastructure for 2016/17 – 2019/20.	G	G			

Target from Business Plan	Progress	Achievability Jun	Sep	Dec	Mar	Mitigating actions where performance is Amber / Red
2.13) Take forward recommendations of the RQIA 'Review of Specialist Sexual Health services in Northern Ireland' in partnership with DoH, HSCB and HSC Trusts.	Specialist Sexual Health commissioning group has been established to take forward the RQIA recommendations. An action plan for commissioning of sexual health services, taking RQIA recommendations into account, was finalised at the HSC Trust liaison meeting which took place in 2015. Preparations for a workshop in October 2016 progressed well during Q2 of 2016/17 and are on target, to deliver a revised RQIA review implementation and strategic action plan addressing all recommendations by the end of Q3.	G	G			
2.14) Ensure Trusts continue to deliver Telehealth and Telecare services including through the Telemonitoring NI contract, to targets set by the PHA.	Detailed plans for achievement of Trust targets are currently being developed by Trusts for consideration by CCHSC. The use of Telemonitoring is being expanded in new areas including renal patient monitoring, obesity management during pregnancy, malnutrition monitoring and head and neck cancer.	G	G			

Target from Business Plan	Progress	Achievability Apr	Sep	Dec	Mar	Mitigating actions where performance is Amber / Red
Creating the Conditions – Theme 4 Making Life Better						
2.15) Develop and implement a consistent approach to workplace health and wellbeing programmes working with local government and other partners.	A new workplace health and wellbeing service has been commissioned. Contracts have been awarded to: • Health Matters – Belfast, Southern and south east. • NICHS – northern area • Derry Healthy Cities – western area Monitoring arrangements agreed with local offices. First Regional meeting with provider has been scheduled to promote and share good practice. Workplace health conference proposed for 2nd March 2017 in Riddell hall. Theme for next year requested by BITC Challenges of an Ageing Workforce.	G	G			
2.16) Lead AHPs in the development of Public Health Strategies for Children & Older People	AHP working group meets regularly and are working on the development of AHP public health messages for older people. Key health promotion for children and young people have been agreed and amended following wide consultation. These messages are being developed with appropriate graphics for dissemination across the region.	G	G			

Target from Business Plan	Progress	Achievability Jun	Sep	Dec	Mar	Mitigating actions where performance is Amber / Red
Empowering Communities – Theme 5 Making Life Better						
2.17) Further develop the Travellers Health and Wellbeing Forum and delivery of the regional Action Plan.	Revised 2016/17 Thematic Plan developed and new services commissioned including local health and employability schemes with Travellers and a new Mental Health and Emotional Wellbeing programme. Regional multi-agency Travellers Health and Wellbeing Forum has agreed a further set of meetings for 2016/17	G	G			
2.18) Work with local communities and community based organisations to develop integrated approaches to improving health.	Work continues with local communities and community based organisations to develop integrated approaches to improving health and wellbeing. This includes agreeing shared aims and objectives for Healthy Living Centres on a number of key thematic areas, as well as contributing to the Community Planning Partnerships across each council area to develop joint goals and shared outcomes for communities.	G	G			

Target from Business Plan	Progress	Achievability Jun	Sep	Dec	Mar	Mitigating actions where performance is Amber / Red
2.19) Encourage, facilitate and support the active involvement and participation of service users, carers and the public in the planning, delivery and evaluation of health to enable people to take more ownership of and self-responsibility for their own health and social well-being	The PHA continue to encourage, facilitate and support the active involvement and participation of service users, carers and the public through a number of work streams, including: • Facilitation and support of service users and carers on the Regional HSC PPI Forum to participate at a high level in the planning delivery and evaluation of HSC services. This includes: • Participation in the Strategic meeting of the Regional HSC PPI Forum. • Establishment of agreed processes to embed PPI monitoring recommendations into Trust Action Plans. • The co-production of a structure to involve service users and carers in the Unscheduled Care programme of work. • Encourage HSC Trusts to implement agreed PPI Standards and use best practice in PPI. • Support HSC Trusts to create opportunities for the involvement, including a regional agreed communication plan • Share best practice and develop understanding of PPI through promotion, e.g. PPI Conference, Articles and photographs and social media.	G	G			

Target from Business Plan	Progress	Achievability Jun	Sep	Dec	Mar	Mitigating actions where performance is Amber / Red
2.20) Continue to work with local government on the alignment and development of community planning and PHA planning and to initiate a range of demonstration projects in each council area embedding the key drivers of 'Making Life Better'	Work continues with local government on the alignment and development of community planning and PHA planning. PHA continues to work with councils, individually and collectively, as well as contributing to each of the community planning partnerships to develop joint goals and shared outcomes for communities. Work has also begun to consider the alignment of indicators and data to monitor and measure impact and implementation. PHA identified, proposed and agreed the following four areas of joint working with all HSC organisations at the Making Life Better Autumn Forum as the key areas for HSC in community planning: • Healthy lives – physical activity and healthy weight; • early years and early interventions; • mental health and wellbeing; • active ageing and age friendly This shared programme, based on local need and regional direction, is currently being developed to consolidate Making Life Better and community planning goals and demonstrate collaboration and impact.	G	G			

Target from Business Plan	Progress	Achievability Jun	Sep	Dec	Mar	Mitigating actions where performance is Amber / Red
Developing Collaboration – Theme 6 Making Life Better						
2.21) Continue to work with key stakeholders to lead and coordinate implementation of Making Life Better through the Regional Project Board, local partnerships and Health and Social Care Northern Ireland	Work continues with key stakeholders to lead and coordinate implementation of Making Life better. The Regional Project Board continues to meet regularly with a current focus on developing a programme of action to demonstrate collaboration and impact. The Regional Project Board has agreed an outline programme of joint work areas for further development of actions and recent discussions have considered older people and healthy active ageing as a key area. Making Life Better communications and branding is also being considered with partners within and external to HSC. The second annual MLB HSC Autumn Forum took place on 30 September 2016. HSC organisations came together to discuss priorities and implementation of Making Life Better within HSC and agreed four key areas for HSC joint working with and input into community planning: • Healthy lives – physical activity and healthy weight; • early years and early interventions; • mental health and wellbeing; • active ageing and age friendly. Engagement with local government is also underway through existing partnerships and community planning processes to identify key areas of joint working in line with community planning and Making Life Better.	G	G			

Target from Business Plan	Progress	Achievability Jun	Sep	Dec	Mar	Mitigating actions where performance is Amber / Red
2.22) As professional Lead in development and implementation of Regional e-Health and Care Strategy, engage with nursing and AHP workforce as part of strategy implementation; agree action plan and monitoring process	The regional eHealth and Care Strategy was launched in March 2016. Work continues to engage nursing and AHP workforce in • raising awareness of the use of eHealth in care delivery • the need to standardise care pathways in preparation for digital transformation An outline business case is currently being developed for a single digital electronic health and care record for NI. A nursing Informatics network to shape the design and development of initiatives in the future will be established in November 2016	G	G			

3. IMPROVING THE QUALITY OF HSC SERVICES						
Target from Business Plan	**Progress**	**Achievability** Jun	Sep	Dec	Mar	**Mitigating actions where performance is Amber / Red**
3.1) Work with the HSCB to take forward the review of the Cancer Services Framework and implementation of the revised Framework during 2016/17 (staff and financial resource dependant.)	Review of the Cancer Services Framework was submitted to DoH Oct 15. HSCB and PHA have amended that document such that it is now a Cancer Services Indicator Framework. Subject to formal approval this will be forwarded to DoH.	G	A			DoH has requested further draft amendments which are in progress.
3.2) Work with the HSCB to take forward the Cardiovascular Services Framework Implementation Plan.	Work proceeding more slowly than planned.	A	A			CVSFW Lead has been on unexpected leave which has made progress on the Framework more difficult. However, the end of year 2 progress report was drafted, approved by AMT and SMT and submitted to Service Framework Programme Board.
3.3) Take forward the Implementation Plan for the Respiratory Service Framework, following consultation.	The Respiratory Framework implementation plan was formally approved by the DoH in February 2016. We are now in the first year of implementation cycle and currently working with Trusts to collect data on the first year KPIs. We are hoping to submit our first year report to the DoH in early September.	G	G			

Target from Business Plan	Progress	Achievability Jun	Sep	Dec	Mar	Mitigating actions where performance is Amber / Red
3.4) Continue to Lead the Long Term Conditions Regional Implementation Group to deliver on its action plan, and commission patient and self –management programmes as outlined in PfG, (subject to funding).	Ongoing. Additional investment is planned for diabetes and cardiac rehabilitation.	A	G			
3.5) In collaboration with the DoH, DoJ, HSCB and HSC Trusts provide Public Health leadership and professional nursing advice to the Joint Health Care & Criminal Justice Strategy. Work alongside YJA, PSNI and HSCB colleagues to identify health care model for the provision of health care in Police custody and Woodlands Juvenile Justice Centre.	Engagement in the Joint Health Care & Criminal Justice Strategy which is Departmental led. Determination that Healthcare in Custody will not transfer to healthcare at this time. PHA working with PSNI to develop a new model for healthcare in custody including skill mix of nurses and Forensic Medical Officers. Project lead appointed to drive workplan forward The C/EX YJA escalated nurse staffing shortage to the Board and PHA due to the significant risks. PHA nursing advice, support and recommendations provided to newly appointed Director at Woodlands in relation to nursing workforce and practice standards. Responsibility for health care at Woodlands remains with Juvenile Justice (JJ). Arrangements are in place so that JJ can avail of professional nursing support when this is required.	G	G			

Target from Business Plan	Progress	Achievability Jun	Sep	Dec	Mar	Mitigating actions where performance is Amber / Red
3.6) Produce final report for issue to Department on the mental health nursing framework, 'Developing Excellence, Supporting Recovery' including impact of implementing a Recovery model for service improvement.	The final report on the DESR Action Plan was agreed and sent to the CNO for approval in June 2016. The DESR Implementation Group await guidance on the future of the strategy. The DESR Group continue to meet on a quarterly basis to assist in taking forward several identified key pieces of work for Mental Health Nursing in the near future, which includes: **1.** Co-Production in Mental Health **2.** Literature Review concerning the role of the MH Nurse **3.** PHA – MH Nursing Normative Staffing Review Mental Health Nursing Therapeutic and Psychological Therapy Interventions Key Performance Indicator	G	G			

Target from Business Plan	Progress	Achievability Jun	Sep	Dec	Mar	Mitigating actions where performance is Amber / Red
3.7) Along with HSCB lead the implementation of the NI Dementia Strategy and lead the OFMDFM/AP funded Dementia Signature Project (due to complete June 2017).	• Information, support and advice including media campaign PHA launched 'Still Me' dementia public awareness campaign in September 7/10 Dementia Navigators have been recruited. • Training A NI Dementia Learning and Development Framework was launched by Health Minister in Sept 2016. Work is continuing on a Delirium Collaborative in acute wards as well as ED. Targets have been agreed to implement a delirium bundle over the next two years. Over 700 staff have been trained and a delirium animation app is now available. Training commenced in June for Dementia Champions. Aim is to have 300 staff trained by Nov 2017. The first cohort will complete training by Jan 17. Carers training commenced in June following contracts being awarded to Alzheimer's Society and 352 Skills. • Innovative short breaks and respite Contracts have been awarded for four pilots: home support, extended domiciliary care, emergency support and enhanced day opportunities. • Regional Review of memory OP services This work is due to complete in October 2016.	G	G			

Target from Business Plan	Progress	Achievability Jun	Sep	Dec	Mar	Mitigating actions where performance is Amber / Red
3.8) Take forward recommendations on the DoH District Nursing Framework.	Contribution made to drafting and progress made on Delivering Care element.	A	A			Awaiting the final publication of the Framework
3.9) Continue to lead on the implementation of PPI policy in HSC, with a focus on promotion of the new PPI Standards, extension of the PPI Monitoring function and roll out of the PHA led PPI Training Programme for staff.	The PHA continues to lead on the implementation of PPI policy across the HSC system. In recent times this has included: • Commissioning the printing and distribution of 10,000 more PPI Standards leaflets for Trusts and HSC partners. • Embedding of PPI Standards as the framework for PPI monitoring and as a structure for action plans. • Active and widespread promotion of the PHA led PPI training programme for HSC organisations and staff	G	G			
3.10) Progress existing programs of quality improvement, continue to build capacity and knowledge on patient safety, improvement science and human factors, and explore future options for collaboration in QI and safety with CAWT partners.	Work is continuing as planned.	G	G			

Target from Business Plan	Progress	Achievability Jun	Sep	Dec	Mar	Mitigating actions where performance is Amber / Red
3.11) The HSC Safety Forum will work with HSC Trusts to support the further spread of the Sepsis 6 bundle beyond the pilot areas identified in the 2014/15 period.	Some trusts have had difficulty with engagement but all trusts now collecting at least baseline data	A	A			Meeting held on the 17th June and agreement reached to work with all Trusts on a regional assessment tool for Sepsis screening in the in-patient adult setting
3.12) The HSC Safety Forum will work with the Regional Learning Disability Healthcare and Improvement Group to identify potential future opportunities to work collaboratively in quality and safety improvement.	Meeting held in Spring with several potential areas for work. Unable to progress currently due to lack of capacity	A	A			Safety Forum facilitated a quality improvement workshop for the Regional General Hospital Forum in Feb 16 in relation to planning work for the Hospital Passport for LD. Further meeting in August with Regional Health Facilitators to raise awareness of Safety Forum to begin to explore work in the longer term
3.13) Continue the review of school nursing using a needs led, child focused and evidence based approach to service developments.	A pilot has been completed to test a school health profile across a small number of primary and post primary schools in each HSCT in partnership with education to identify health needs. A report on the data and views of the users will be drafted once all feedback is received from Trusts. Initial feedback has been very positive from teachers. Work on a system to consider workforce make-up and a method of determining staffing requirements has commenced. Development of regionally consistent practices across four levels of need is progressing.	G	G			

Target from Business Plan	Progress	Achievability Jun	Sep	Dec	Mar	Mitigating actions where performance is Amber / Red
3.14) Continue to develop the methodology and models for phases 2–4 of the Delivering Safe and Effective Care Project (ED, DN and HV), and progress monitoring arrangement with HSCB for implementation of Phase 1.	Progress good. Phase 2, 3 & 4 draft papers approved at Delivering Care Working Group and Steering Group. Awaiting response from CNO office re policy and publication of agreed models. Phase 1 returns due in September/October as part of the HSCB/PHA monitoring returns.	A	A			Awaiting the final publication of the District Nursing Framework. Skill mix for district nursing to be agreed to determine financial analysis of required teams based on 80/20 skill mix principle.

Target from Business Plan	Progress	Achievability Jun	Sep	Dec	Mar	Mitigating actions where performance is Amber / Red
3.15) Ensure adherence to statutory midwifery supervision and provide professional leadership in relation to the development of high quality, safe and effective midwifery services in keeping with the Maternity Strategy.	In accordance with the NMC Midwives rules and standards (2012) **(Rule 3& 4)** All Midwives practising in NI have submitted a notification of practice to their Supervisor of midwives this has been recorded on the LSA database which was successfully uploaded to the NMC on the 31st of January 2016. **(Rule 5)** 7 Supervisors of midwives have successfully completed the Preparation for Supervision of Midwives Modules at QUB in June 2016 and have been appointed as Supervisors of Midwives within the H&SCT's. 8 new students have commenced the course on the 26th of September 2016 at QUB. **(Rule 8)** A supervisory investigation workshop was held on the 15th of January and an LSA Conference held on the 14th of April 2016 to ensure that all supervisors of midwives meet their 6 hours of CPD per practice year for Midwifery supervision. Supervisors are able to draw on other forms of CPD which will contribute to their 6 hours. **(Rule 9)** The NI overall Ratio of Supervisors to midwives has been maintained at 1:14 which is a slight increase from the last update this still remains below that of the recommended NMC ratio of 1:15. However in the Southern Trust the ratio is 1:19 this is due to a number of retirements, a secondment and a leave of absence. The Belfast, South Eastern and the Western trust have agreed to take 35	G	G			

	Supervisees between them to assist with the annual reviews until the ratio improves for the Southern Trust. Improvement should begin to take effect in November 2016. NMC have been informed of this plan of action. **(Rule 10)** Following 2 Supervisory investigations one midwife has been suspended from practice and has been referred to the NMC for Fitness to practice, the other midwife will complete a supervised practice programme when she returns form sick leave. At present there are 3 supervisory investigations in progress and a further 1 to commence. **(Rule 11)** 5 Annual Audits of the H&SCT's have been completed for 2016 service users were part of the audit team and reports have been circulated to all Trusts. Audits are undertaken to ensure the maintenance of the standards of practice by midwives and the standards of Supervision of the practice of midwives are met according to Rule 11 of the NMC midwives Rules and Standards. **(Rule 13)** LSA Annual report was approved by AMT in July and presented to PHA Board and has been upload to the NMC on the 29th of July 2016. **(Rule 14)** Following a supervisory investigation undertaken in January 2016 a midwife has been suspended from practice on the 7th of April 2016 with referral to the NMC for fitness to practice issues. The midwife is on an interim suspension order which will be reviewed by the NMC on the 17th of November 2016.					

Target from Business Plan	Progress	Achievability Jun	Sep	Dec	Mar	Mitigating actions where performance is Amber / Red
3.16) Q2020 – Lead the development of the Annual Quality Report in conjunction with the HSCB.	Work is continuing as planned.	G	G			
3.17) Lead on the professional issues relating to the transition of HSCB/PHA Medicines Management Model from HSCB to PHA.	The business plan entry refers to an action that will be taken forward by Nursing and Allied Health Professions within the agency regarding learning and transition from the non-current model to a recurrent model. Currently work is ongoing between the HSCB, PHA and NHSCT to progress the commissioning of this recurrent model. The commissioning and service specifications have now been finalised and agreed between HSCB, the Public Health Agency and Northern HSC Trust, and the aim is to transfer the service from 1st January 2017. NHSCT will be the host Trust for the Regional Management Medicine Dietetic service of 5 Dieticians with support from Prescribing support assistants. The team will work in Primary Care to identify, assess and provide recommendations to patients and relevant Health Care professionals, including GPs on the appropriate use of oral nutritional supplements, promoting a food first approach.	A	G			

Target from Business Plan	Progress	Achievability Jun	Sep	Dec	Mar	Mitigating actions where performance is Amber / Red
3.18) Work with Trusts to integrate the Patient Client Experience work programme and 10,000 Voices Initiative to develop systems to listen to, learn from and act upon patient and client experience.	Work is continuing as planned.	G	G			
3.19) Ensure professional readiness of Therapeutic Workforce in WHSCT Radiotherapy Unit.	The workforce is in place, correct skill mix, appropriately trained Links established within and external to trust to ensure professional governance Links and professional support being offered by the PHA and accepted by professional staff	G	G			
3.20) Lead a programme of work to drive reform of Allied Health Professionals Services including • Improving data quality; • Development of Care Pathways	The PHA is continuing to work alongside the HSCB to complete the final capacity and demand project with BHSCT. All other Trusts have received correspondence from Director of Commissioning outlining gaps and HSCB expectations on filling the gaps. Work has also been completed on the development of elective pathways in key areas constituting highest levels of demand.	G	G			

Target from Business Plan	Progress	Achievability Jun	Sep	Dec	Mar	Mitigating actions where performance is Amber / Red
3.21) Lead development and implementation of year 4 Allied Health Professionals Strategy Action Plan	A final report was compiled and presented to DOH outlining key achievements in line with the 4 themes of the Strategy. The report included a number of areas which would require further development and to achieve this proposed to the DOH the need for an extension to the current strategy for their consideration.	A	G			
3.22) Lead the development of Palliative Care services	The Regional Palliative Care structures consist of a Programme Board, Clinical Engagement Group and a Service User and Carers Engagement Group. The Programme Board consists of members from across the five localities coterminous with HSC Trust boundaries in NI. Membership also include representatives from DoH, HSCB/PHA, Northern Ireland Ambulance Service, Hospice and independent palliative care providers, community and voluntary sector, Integrated Care, ICPs, Primary Care and service users and carers. The Programme Board is co-chaired by Mary Hinds, Executive Director of Nursing and AHPs, PHA and Dean Sullivan, Director of Commissioning, HSCB. The key work areas for 16/17 ; <u>Identification</u> To improve the identification of people with palliative care needs, <u>Keyworker</u> To ensure everyone identified as being in their possible last year of life has an allocated keyworker	G	G			

	<u>Advance Care Planning</u> To ensure everyone identified as being in their possible last year of life has the opportunity to discuss <u>Planning for Specialist Palliative Care Services</u> Working with the Clinical Engagement Group, a report on workforce planning relating to Specialist Palliative Care across the region for: Medicine Consultants, AHPs, Nurses and Social Workers. Other Workstreams in 2016 The work areas commenced under the 'Transforming Your Palliative and End of Life Care' initiative, and some outstanding work from LMDM will continue to be progressed in 2016/17 namely: • Palliative Care Tools • Pharmacy • Hospital Discharge • Carers Support • Training for Nursing Homes • Ambulance Service • Monitoring and Measures • Raising Awareness And in addition, the eight recommendations of the RQIA Review of the Implementation of the Palliative and End of Life Care Strategy (LMDM). Communication					

Target from Business Plan	Progress	Achievability Jun	Sep	Dec	Mar	Mitigating actions where performance is Amber / Red
3.23) In support of safe and effective person centred care, Commissioners through the Director of Nursing PHA should require of organisations and bodies from which services are commissioned, that appropriate systems are in place to ensure that nurses and midwives are appropriately supported to fulfil regulatory requirements of the NMC, in particular the introduction of revalidation for Nurses and midwives.	In accordance with the NMC Midwives rules and standards (2012) **(Rule 3& 4)** All Midwives practising in NI have submitted a notification of practice to their Supervisor of midwives this has been recorded on the LSA database which was successfully uploaded to the NMC on the 31st of January 2016. Midwives are required to have an annual review completed which ensures that their date for revalidation is noted at the time of entry onto the LSA database. The supervisor discusses their revalidation to ensure that the midwife has their portfolio of evidence and professional discussions completed for the revalidation process. The supervisor also signposts the midwife to the support available within their respective Trust and resources available from the NMC website to enable them to successfully complete their revalidation. Revalidation dates are reviewed by the supervisor and updated on the LSA database. Line managers in Trusts also have the responsibility to update the Trust database and ensure their staff have successfully revalidated. Revalidation Lead provides ongoing support, resources and Face to face awareness sessions to all nurses (HSCB/PHA) and their line managers. Established an Xl database of Nurses in HSCB/PHA shared with HR	G	G			

	PHA commissioned the RCN to deliver update session to practice nurses, this has now been completed and on-going support is available from PHA to GP practice nurses. Professional Forum offers regular opportunity for update. All communication from NMC/NIPEC cascaded to HSCB/PHA.					

Target from Business Plan	Progress	Achievability Jun	Sep	Dec	Mar	Mitigating actions where performance is Amber / Red
3.24) Develop framework for primary care nursing.	Primary Care Framework completed in partnership with RCGP, BMA and RCN. Report shared at regional event in October 2016 by senior nurses including CNO. To agree process for Implementation with PHA/HSCB. Agreement to fund additional Advanced Nurse Practitioner places for primary care nurses agreed. Funding from DOH / GP led review to be determined for additional posts. Numbers to be confirmed with PHA.	G	G			
3.25) Develop and take forward regional service improvement within older peoples environment focusing on initiative regarding workforce recruitment/and education.	A Vision statement and paper focusing on the role of nurses in the care and support of Older People developed in partnership with Age NI. Action plan being considered. Each Trust is in process of developing a work plan and progress will be monitored via the Band 7 older peoples nurse which PHA funded non recurrently. Discussions are underway with each Trust to develop older persons/dementia networks which will eventually develop into a regional nursing network. These networks will discuss service improvements within elderly wards and any staff education needs will be identified.	G	G			

Target from Business Plan	Progress	Achievability Jun	Sep	Dec	Mar	Mitigating actions where performance is Amber / Red
3.26) To complete the review of AHP support for children with statements of special educational needs, agreeing a proposed framework and implementation plan for consideration by the Minister of Health, Social Services and Public Safety.	The review is now complete. The proposed framework, implementation plan, findings report and equality screening have been signed off by the Project Board and submitted to DoH.	G	G			

4. IMPROVING THE EARLY DETECTION OF ILLNESS						
Target from Business Plan	**Progress**	**Achievability** Jun	Sep	Dec	Mar	**Mitigating actions where performance is Amber / Red**
4.1) Rolling programme of analysis by health intelligence of screening data and evidence reviews of actions elsewhere to better inform targeting of screening in lower uptake populations.	Work has commenced on breast screening re evidence, quantitative information on uptake / non-attenders and qualitative information. This will act as the pilot process for other screening programmes. Some ad hoc work was done on diabetic eye screening to feed the review and this will be returned to when the new DESP information system has bedded down.	G	G			

Target from Business Plan	Progress	Achievability Jun	Sep	Dec	Mar	Mitigating actions where performance is Amber / Red
4.2) Implement actions to address the recommendations in the RQIA review of Diabetic Eye Screening Programme.	Of the 40 recommendations from RQIA there are 28 completed and 12 outstanding. The 12 outstanding recommendations have not been completed within the timeframes set by RQIA which is why performance has been marked as amber.	A	A			Of the outstanding items there is work on-going with significant progress which is dependent on a range of factors. For example - Priorities and progress of on-going modernisation programme Developing Eye-care Partnerships Programme Embedding of failsafe protocols and training of failsafe officers Embedding of software solutions in other parts of Ophthalmology in HSC Trusts, and establishing reliable ICT links between services. Identification of routine, reliable data sources for audit, which includes the merging (and cleansing) of databases in Q3 (2016/17) On-going work with Public Health England with respect to conducting external Quality Assurance of the programme. This work is being overseen by the DESP Modernisation Project.

Target from Business Plan	Progress	Achievability Jun	Sep	Dec	Mar	Mitigating actions where performance is Amber / Red
4.3) Maintain all existing screening programmes and the quality assurance function.	Workforce issues have had a significant impact on population screening work in the PHA. All existing programmes are being maintained. Some quality improvement work is being scaled back and some quality assurance work has been postponed e.g. the triennial QA visit to the breast screening unit in the SHSCT.	A	A			Focussing on essential QA functions. Working through scrutiny committee and HR to progress and resolve workforce issues but there will be a staffing shortfall for a few more months.
4.4) Develop a TVU service for the early detection of Ovarian Cancer.	Training complete and on going Referral pathway being developed Regional reporting guidelines being developed Patient information – communications team Primary /integrated care involved NICaN gyna group to ratify regional referral & scanning protocols at October clinical reference group Financial plan – commissioning plan	G	G			
4.5) Develop a system to prioritise the X-ray reports of Older people from Nursing Homes.	Scoping work on going to define acceptability and operational feasibility work ongoing in radiology and ED may address this independently – RAG status amber but on track for green by the end of the year	G	G			

5. USING EVIDENCE, FOSTERING INNOVATION AND REFORM						
Target from Business Plan	**Progress**	**Achievability** Jun	Sep	Dec	Mar	**Mitigating actions where performance is Amber / Red**
5.1) Lead on the implementation of the new HSC R&D Strategy: *Research for Better Health & Social Care (2015-2025).*	A plan for the review of the infrastructure is currently being finalised and will commence with an electronic consultation with key stakeholders in the New Year. The findings from this consultation will inform the second stage of the Review. A project manager will be recruited to lead this work pending budget confirmation.	G	G			
5.2) Support researchers to secure research funding from external sources including NIHR evaluation, trials and studies co-ordinating centre (NETSCC), Horizon 2020 & other EU sources.	Since the investment began there have been 22 successful NI-led applications to research programmes. Three of these with a total value of £4.01 million were awarded during this reporting period. A further award was made to an application with a NI Co-investigator (£1.57 million) TO-REACH (Transfer of Organisational innovations for Resilient, Effective, equitable, Accessible, sustainable and Comprehensive Health Services and Systems): successful application led by Istituto Superiore di Sanita, Italy in response to H2020 call SC1-HCO-06-2016 Towards an ERA-NET for building sustainable and resilient health system models (total value approximately €2 million, NI value €41,000, 29 partners, including HSC R&D Division). CHITIN (Cross-Border Healthcare Intervention Trials in Ireland Network) Project: positive outcome from INTERREG VA Health Evaluation Panel meeting, awaiting confirmation of budget availability (€9.27 million, 2 partners (HSC R&D Division (LEAD) and HRB).	G	G			

Target from Business Plan	Progress	Achievability Jun	Sep	Dec	Mar	Mitigating actions where performance is Amber / Red
5.3) Support the Northern Ireland Public Health Research Network (NIPHRN) to identify opportunities for research in PHA priority areas.	Continuing to work with the NIPHRN and its stakeholders to identify potential research opportunities in areas of interest to the PHA. Changes in staffing relating to the NIPHRN Co-ordinator post may lead to reduced activity in the remaining period of 17/18 until full input is resumed.	G	A			A resolution to staffing issue is being pursued.
5.4) Continue to work with the Social Work community to support and encourage research within Social Work/Care.	Commissioned local research e.g. Early Intervention Transformation Programme Call has actively encouraged applications from multidisciplinary teams and priority setting exercises have commenced led by Social Work Strategic Advisory Group with input from HSC R&D Division. Opportunities to showcase local research are planned for the 4th Research Conference to be held on 1 March 2017	G	G			

Target from Business Plan	Progress	Achievability Jun	Sep	Dec	Mar	Mitigating actions where performance is Amber / Red
5.5) Working with CCHSC to facilitate service development and service improvement within Telemonitoring NI: • Contribute to the redesign of patient pathways sharing examples of local good practice regionally • Provide professional nursing advice to the specification and implementation process for TMNI replacement	CCHSC continue to work with Trusts to implement new and innovative uses of telehealth and to plan for the specification and implementation of services to replace the existing Telemonitoring service.	G	G			
5.6) Establish new and support existing expert nursing groups, for example Cancer, Neurology and District Nursing, Stroke and Palliative and End of Life Care.	A number of nursing groups have been newly established: Regional DN Group to include palliative and end of life care Diabetes Nursing Group & Neurology Group. Discussions have started regionally with older persons/dementia nurses to agree a network mechanism.	G	G			

Target from Business Plan	Progress	Achievability Jun	Sep	Dec	Mar	Mitigating actions where performance is Amber / Red
5.7) Host a HSC wide Conference on PPI, highlighting best involvement practice, reflecting on the new involvement Standards, sharing findings from the PPI research initiative and examining how to address the report recommendations for the benefit of service users and carers.	The PHA, in partnership with QUB and HSC partners, held a PPI conference, Involving you, improving care' on the 22nd of June 2016. The conference was attended by over 200. A key note address was given by the Minster for Health, Michelle O'Neill. The event also included the awarding of the annual PPI awards for best practice in delivering PPI. Key findings from the PHA and PCC commissioned PPI Research were referenced at the conference, with the aim of launching the final report before the end of the calendar year 201	G	G			
5.8) Ensure that the learning from PHA/SBNI/QUB research on infant death is embedded into SCPHN and midwifery practice	Meeting held with communication department 18th July 2016. Costing underway for development of agreed materials. John Devaney (QUB) updating Research paper following recent feedback from peer review. Briefing paper will be available by November. Following this it is hoped the new materials and research evidence can be disseminated across Trusts for implementation	G	G			

Target from Business Plan	Progress	Achievability Jun	Sep	Dec	Mar	Mitigating actions where performance is Amber / Red
5.9) CCHSC will have specified and commenced the implementation of service(s) to replace Telemonitoring NI.	CCHSC have commenced an engagement exercise with relevant stakeholders to develop a shared understanding of the strength and weakness of current service and to elicit views on arrangements which should replace the current Telemonitoring NI service. The outputs from the engagement process are being consolidated taking into account the findings of the QUB evaluation of Telemonitoring to develop a model for technology enabling healthcare (TEHC) in relation to: • Supporting Healthy People • Enable people to look after their condition • Supporting people to reduce use of health service • Support people to stay safe and independent	G	G			

Target from Business Plan	Progress	Achievability Jun	Sep	Dec	Mar	Mitigating actions where performance is Amber / Red
5.10) CCHSC will seek opportunities to develop and utilise innovative technologies to improve health and wellbeing including leading the NI input to EIP AHA; EU and other sources of funding and working collaboratively with HSCNI and other key stakeholders	CCHSC continue to contribute to the work of the European Innovation Partnership on Active and Healthy Ageing (EIP AHA) through involvement in a number of action groups to improve the health of older people in Northern Ireland and across Europe; CCHSC coordinates the EU-funded project called Beyond Silos which aims to improve the integration of service delivery by building on the Northern Ireland Electronic Care Record and implementing an interactive Shared Care Summary. CCHSC is a partner in an EU-funded project entitled ACT@Scale which aims to enhance mainstream the roll out of Telemonitoring. CCHSC is a partner in an EU-funded project entitled SUNFRAIL which aims to improve the identification, prevention and management of frailty and care of multimorbidity. Further opportunities to participate in EU projects are under continual review and development.	G	G			

Target from Business Plan	Progress	Achievability Jun	Sep	Dec	Mar	Mitigating actions where performance is Amber / Red
5.11) To lead work on the implementation of the eHealth and Care Strategy objectives: • Supporting People; • Using Information and Analytics; • Fostering Innovation. Which will contribute to the development of a regional EHCR.	CCHSC anticipate that the new services specified as part of the future telemonitoring service will progress the Supporting People objective set out in the draft *eHealth & Care Strategy* and will feed into the "HSC Connected Caring Communities" established under the auspice of *Making Life Better*. Work is ongoing with regard to the development of an Information and Analytics Plan in partnership with HSCB and DoH The continuing involvement and partnership gained form contributing to EU work acts as a foundation for developing local innovation.	G	G			
5.12) Commence process to benchmark AHP input against National Findings for Unscheduled Care	• Subscription to NHS Benchmarking data giving access to UK database. • Consideration of UK data for transferability to NI Unscheduled Care. • Align with work emerging from NI Unscheduled Care Network structures. • Currently working on a draft USC workforce paper to define the process	G	G			

6. DEVELOPING OUR STAFF AND ENSURING EFFECTIVE PROCESSES						
Target from Business Plan	**Progress**	**Achievability** Jun	Sep	Dec	Mar	**Mitigating actions where performance is Amber / Red**
6.1) Manage the process of organisational change in line with further clarification from the DHSSPS, ensuring appropriate and timely internal and external communication.	PHA senior staff have participated in a series of workshops focused on future HSC structures Further details are expected after the Minister's announcement on the outcome of the Bengoa report (October 2016). The PHA will continue to work with DoH, and will communicate with and support staff during this period of change.	G	G			
6.2) Maintain capacity to deliver core duties and deliverables identified for the PHA in 2016/17.	Recent key retirements, together with 37 staff leaving by June 2016 on VES in order to meet management and administration cost reduction targets, have reduced PHA capacity and capability. This continues to be managed through management focus on core deliverables, prioritising staff time, active consideration of the need for and form of vacant posts by Scrutiny Committee and close liaison with DoH through sponsorship review and other meetings.	G	G			
6.3) Achieve substantive compliance for all 15 controls assurance standards applicable to the Public Health Agency.	On target to achieve substantive compliance for all 15 controls assurance standards applicable to PHA	G	G			

Target from Business Plan	Progress	Achievability Jun	Sep	Dec	Mar	Mitigating actions where performance is Amber / Red
6.4) Test and review the PHA business continuity management plan to ensure arrangements to maintain services to a pre-defined level through a business disruption.	The annual test will be conducted during Exercise Cygnus 18-20 October. The Business Continuity Plan will be reviewed and updated accordingly at the conclusion of this exercise.	G	G			
6.5) Explore an electronic records management solution in line with Controls Assurance Standards.	Initial alternative options to a full EDRMS have been explored by PHA.	A	A			HSCB E-Health have advised that this will be taken forward on a regional HSC basis. While PHA will work with other HSC colleagues, this is likely to mean that timescales for introduction of an EDRMS will be delayed.
6.6) Continue to take forward implementation of the PHA Procurement Plan.	The PHA continues to progress the procurement plan within the resources available. Tender for Active Travel has been completed. Work is continuing on preparing for Mental Health and Suicide Prevention Phases II & III.	G	G			

Target from Business Plan	Progress	Achievability Jun	Sep	Dec	Mar	Mitigating actions where performance is Amber / Red
6.7) Finalise the new PHA Corporate Strategy and the PHA Annual Business Plan for 2017/18 in line with DoH requirements and timescales. (when notified)	Work continues to develop the PHA Corporate Strategy, building on the engagement exercise carried out in 2014/15. The PHA Corporate Priorities and Strategy Project Board continues to meet to take forward the development of the new strategy. Following guidance from DoH, the corporate strategy is being developed in line with Making Life Better and the new draft Programme for Government. Work is underway to prepare the draft Corporate Plan for approval by PHA board in November 2016 and then for consultation (November 2016 – February 2017).	G	G			
6.8) Develop and agree a new Internal communications strategy and action plan to ensure PHA business is supported by efficient and effective internal communication systems.	Internal Communications Action Plan - Several actions completed and under way including introduction of new weekly update for PHA staff, erection of digital signage on 4th Floor, Linenhall St, Belfast, redevelopment of Connect, introduction of generic email addresses for improved internal email communication, email branding, standard corporate auto signature.	G	G			
6.9) Review and Revise PHA digital assets including PHA Corporate and Intranet sites.	Paper developed on road map for PHA web presence. AMT approval of migration of health topic information to NI Direct. Process to redevelop PHA Intranet site Connect to progress through the TPA.	G	G			

Target from Business Plan	Progress	Achievability Jun	Sep	Dec	Mar	Mitigating actions where performance is Amber / Red
6.10) Continue to enhance social media activity, extending the agency's reach through its online channels and broadening the types of content used.	Development of social media activities continues, with follower numbers increasing and integration of rich media content ongoing to deliver strong engagement. To make dissemination of messaging more effective, a range of content is created to reflect target audiences and approaches. The new digital signage on 4th Floor Linenhall Street, Belfast has a live Twitter feed.	G	G			
6.11) Extend the range of communications tools used by the agency e.g. infographics and audio recordings, to support its work to convey key messages to target audiences.	A range of new approaches to delivering agency messaging are being deployed, including recording and sending audio clips to journalists along with news releases, developing video and stop motion content for social media, and creating animated GIFs. This is kept under constant review to keep abreast of trends and to 'meet' target audiences where they go to access information.	G	G			
6.12) Build on the suicide awareness media and engagement work which has been developed by the agency.	The monitoring of coverage of suicide continues, with articles in breach of Samaritans guidelines being actioned. The method of monitoring is kept under review to help ensure it is as effective as possible. Engagement with journalists and journalism students also continues, to increase awareness of the Samaritans guidelines and encourage responsible reporting.	G	G			

Target from Business Plan	Progress	Achievability Jun	Sep	Dec	Mar	Mitigating actions where performance is Amber / Red
6.13) Ensure that by 30th June 2016 90% of staff will have had an annual appraisal of their performance during 2015/16.	Over 90% of staff have received their annual appraisal as at 30th June 2016.	G	G			
6.14) Ensure that by 31 March 2017 we meet the 95% target that doctors working in PHA have been subject to an annual appraisal.	All doctors who were due medical appraisal have successfully completed the process.	G	G			
6.15) Continue to provide professional leadership, advice and guidance on PPI.	The PPI team continue to provide strategic and operational professional leadership, advice and guidance in relation to PPI. This includes continued input into areas of strategic importance to PHA and HSC e.g. EITP, Unscheduled Care, Older People's Nursing, E-Health, Medicines Management, EHCR, etc. Work has also commenced on some of the foundation work to develop 'Engage' as a repository of information for PPI, available to HSC organisations, staff and the public. The PHA continues to seek funding to maximise the Engage outreach learning and development resource for PPI.	G	G			

Target from Business Plan	Progress	Achievability Jun	Sep	Dec	Mar	Mitigating actions where performance is Amber / Red
6.16) Utilize Safety Forum QI expertise to aid the delivery of training to HSC staff as envisioned by the Attributes Framework and facilitate entry to Scottish Quality and Safety Fellowship programme.	Work is continuing as planned.	G	G			
6.17) Ensure that PHA duties and responsibilities in relation to Local Supervising Authority Midwifery Officer are evidenced in annual report presented to AMT & PHA Board.	The Annual report has been completed and submitted to AMT. Annual report will also be submitted to PHA Board.	G	G			
6.18) Revalidation champions will provide on-going support to registrants and managers across the PHA and HSCB, as well as engaging with GP employed nurses.	Revalidation Lead provides ongoing support, resources and Face to face awareness sessions to all nurses (HSCB/PHA) and their line managers. Established an Xl database of Nurses in HSCB/PHA shared with HR PHA commissioned the RCN to deliver update session to practice nurses, this has now been completed and on-going support is available from PHA to GP practice nurses. Professional Forum offers regular opportunity for updates to be provided. All communication from NMC/NIPEC cascaded to HSCB/PHA	G	G			

Target from Business Plan	Progress	Achievability Jun	Sep	Dec	Mar	Mitigating actions where performance is Amber / Red
6.19) Provide professional support to Nurses/midwives through the quarterly Professional Forum.	Professional Nursing and Midwifery Forum held 1/4ly Network of nurses across HSCB.PHA, attend and invitation extended to MOD, PSNI, NIBTS. Topic specific 'Learning sets' arranged for professional updates.	G	G			
6.20) Develop and implement the Nurses and Midwives verification of NMC policy through HRPTS system.	Policy for the Verification of NMC registration developed HRPTS to implement changes before verification policy can be implemented. Interim solution: reminder system developed - 3mths prior to renewal (by directorate of Nursing staff). System established to remind staff of revalidation renewal System established to update internal records.	G	G			
6.21) Meet DHSSPS financial, budget and reporting requirements.	All deadlines in relation to Monthly monitoring to the DoH have been met and the year-end annual accounts completed.	G	G			

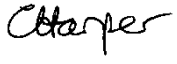
HSC Public Health Agency

PUBLIC HEALTH AGENCY BOARD PAPER

Date of Meeting	17 November 2016
Title of Paper	Outbreak of Serious Pneumococcal Disease in a Belfast Shipyard April-May 2015
Agenda Item	11
Reference	PHA/04/11/16

Summary

This is the report of the interagency Outbreak Control Team of an investigation of an outbreak of serious pneumococcal disease which occurred during April to May 2015 in a shipyard in Belfast.

Equality Screening / Equality Impact Assessment	Not applicable
Recommendation / Resolution	For Noting
Director's Signature	
Title	Director of Public Health
Date	9 November 2016

HSC Public Health Agency

Outbreak of Serious Pneumococcal Disease in a Belfast Shipyard April-May 2015

Final Report

Contents

1. Introduction

This is the report of the interagency Outbreak Control Team (OCT) of an investigation of an outbreak of serious pneumococcal disease which occurred during April to May 2015 in a shipyard in Belfast. Organisations and individuals represented on the OCT are provided in Appendix 1.

The report describes the chronology of the outbreak, control measures implemented, and the outcome of epidemiological, environmental health and microbiological investigations. The report concludes with recommendations for Health and Safety Executive Northern Ireland (HSENI) to ensure all companies employing welders are aware of the guidance around personal protective equipment (PPE) and vaccinations, and for shipyard management and other employers of large transient multinational workforces to ensure provision of local occupational health services and general practice registration.

2. Background on Pneumococcal Disease

Pneumococcal disease is caused by the bacterium *Streptococcus pneumoniae* (pneumococcus)[1], an encapsulated Gram-positive coccus, of which there are more than 90 serotypes. Infections caused by *S. pneumoniae* are associated with a spectrum of disease, ranging from milder illnesses such as otitis media and sinusitis, to presentations such as pneumonia, bacteraemia and meningitis. Invasive pneumococcal disease (IPD) is defined as pneumococcal infection of any usually sterile site and includes pneumococcal meningitis, bacteraemia, empyema, arthritis and peritonitis[2]. The case fatality rate for hospitalised adults is estimated at 12%[3]. Serious pneumococcal disease is defined as either invasive disease, or pneumococcal pneumonia.

The bacteria can be carried asymptomatically in the nasopharynx, with carriage rates estimated at >40% in pre-school children, falling to <10% in young adults[2]. Pneumococci are spread via respiratory droplets or direct contact with respiratory secretions of cases or carriers. Transmission typically requires close or prolonged contact. The incubation period is generally accepted to be between 1 and 3 days.

Invasive pneumococcal disease (IPD) affects all age groups, however the very young and elderly are particularly at risk, as are those with splenic dysfunction, solid organ (e.g. lung, heart, liver and kidney) dysfunction and impaired immunity[4]. In the United Kingdom (UK), vaccination is recommended for infants as part of the routine schedule, as well as for over 65 year olds and those in clinical risk groups. There is a recognised association between exposure to metal fumes and pneumonia, and between welding and IPD. UK immunisation guidance recommends that consideration should be given to vaccinating those at risk of frequent or continuous occupational exposure to metal fume, taking into account the exposure control measures in place[4].

[1] Public Health England - Pneumococcal disease: guidance, data and analysis.
[2] Interim UK guidelines for the public health management of clusters of serious pneumococcal disease in closed settings. Health Protection Agency. 2008.
[3] Ludwig, E., et al. The remaining challenges of pneumococcal disease in adults. European Respiratory Review 21.123 (2012): 57-65.
[4] Pneumococcal Disease – Chapter 25, 'The Green Book', Public Health England

In Northern Ireland (NI), *S. pneumoniae* isolates from usually sterile sites (e.g. blood, cerebrospinal fluid) are reported to the Public Health Agency (PHA) through routine voluntary laboratory reporting arrangements. Based on laboratory reporting, the average annual background incidence of invasive pneumococcal disease in NI was 6 cases per 100,000 population during 2010–2014, with higher rates in the very young and in those aged over 65 years[5].

An outbreak of serious pneumococcal infection is defined as two or more cases of pneumococcal pneumonia or IPD being reported from a closed setting within a two-week period. Outbreaks of serious pneumococcal disease are relatively rare, and the majority that have been reported occurred in hospitals or long-term care facilities[6]. Outbreaks in children's day-care centres, schools and military barracks have also been reported.

[5] Patterson, L., et al. Outbreak of invasive pneumococcal disease at a Belfast shipyard in men exposed to welding fumes, Northern Ireland, April–May 2015: preliminary report. Euro surveillance: bulletin 20.21 (2015).
[6] Interim UK guidelines for the public health management of clusters of serious pneumococcal disease in closed settings. Health Protection Agency. 2008.

3. Chronology of the Outbreak

Wednesday 29th April 2015

The PHA Health Protection Duty Room is notified by Belfast Health and Social Care Trust (BHSCT) microbiology laboratory of two cases of IPD, with *S. pneumoniae* isolated on blood culture. Both cases presented to Mater Infirmorum Hospital (MIH), Belfast on 28th April and are foreign nationals temporarily working on the same oil rig in a shipyard in Belfast. One case is working as a welder, the other as a supervisor.

Additional information is obtained from cases and the shipyard regarding occupational roles and working patterns. No evidence of close contact between the two cases is elicited. It is identified that there are up to 700 employees working on the oil rig at any time. Shipyard management confirm that employees exposed to metal fumes are provided with individualised personal protective equipment (PPE). PHA emphasise the importance of compliance with PPE and sign-poste senior management staff at the shipyard to the relevant Health and Safety Executive (HSE) guidance[7]. Case isolates are sent to the reference laboratory for typing.

Wednesday 13th May 2015

Notification is received to the duty room of two further cases of IPD (a welder and a heat treatment technician) who have been working on the same oil rig as the previous cases. One of the cases has been admitted to ICU. Both became unwell on 6th May. One case had *S. pneumoniae* isolated from blood cultures; the other had a positive pneumococcal urinary antigen test.

PHA makes further contact with senior management staff at the shipyard to establish links between these cases in the working environment and a site visit is conducted to inform the risk assessment and understand employee working patterns. An Outbreak

[7] Pneumonia vaccination for employees exposed to welding and metal fume. Health and Safety Executive. January 2014.

Control Team (OCT) is convened and first meeting arranged for next morning, with request for specialist input from Public Health England (PHE).

Thursday 14th May 2015

The OCT, chaired by PHA, has its first meeting. The working patterns and roles of the confirmed cases are reviewed, including extent of exposure to metal fumes. It is identified that all of the confirmed cases are welders, or worked closely with welders, on the oil rig, however no subgroup of close contacts can be identified. Following consideration of the available evidence and multi-agency discussion, a decision is made that a core group at highest risk (i.e. those working on the rig who are exposed to metal fumes) is to be identified and offered antibiotic chemoprophylaxis and pneumococcal vaccination. Other employees will be provided with information and advice. A tailored information leaflet on pneumococcal disease for employees is developed, and a holding press statement is agreed.

Friday 15th May 2015

Senior shipyard staff are asked to identify employees who fall into the high risk occupational category and to provide them with information and invite them to attend prophylaxis and vaccination clinics. A further site visit is conducted by PHA to inform logistics of clinics.

PHA liaises with Health and Social Care Board (HSCB) and Belfast Health and Social Care Trust (BHSCT) to arrange procurement of antibiotics and vaccine via pharmacy department, as well as medical and nursing staff to prescribe and administer these and pharmacists to give pharmaceutical advice to medical staff. Interpreters are arranged via the shipyard and Business Services Organisation (BSO) as approximately one third of employees are foreign nationals, from a range of European countries including Poland, Russia, Lithuania and Norway. Staffing rotas for clinics are agreed and relevant documentation collated, including consent forms and prescribing guidance.

A European Early Warning and Response System (EWRS) alert is issued to inform other countries of the outbreak and encourage reporting of potential cases that may have already left Northern Ireland.

Saturday 16th May – Monday 18th May 2015

Daily vaccination and antibiotics clinics, staffed by PHA and BHSCT employees, are held on site at the shipyard with approximately 200-300 shipyard employees attending per day. A revised risk assessment on 17th May identified additional occupational categories deemed to be at increased risk. Overall, 680 individuals are provided with information and offered antibiotic prophylaxis and vaccination.

Some attendees who appear unwell are clinically examined at the clinics and four are referred to the emergency department for further assessment. Notification is also received of workers who reported having recently been diagnosed with chest infections, both from HR and self-reporting at the vaccine clinic. All of these individuals are followed up to assess whether they meet the case definition. Five people are subsequently agreed as probable cases during the course of the investigation.

A PHA incident management meeting is held on 18th May 2015. It is acknowledged that the PHA Duty Room is receiving significant volumes of calls from members of the public and shipyard employees who are concerned about their risk. Guidance is developed to aid risk assessment and standardise advice.

Further correspondence is issued to HSC Trusts, out-of-hours GP services and GPs in Northern Ireland to provide an update on the situation (Appendix 3).

Tuesday 19th May 2015

HSENI carry out a compliance assessment visit to shipyard. No major issues are identified. PHA follows up any potential cases identified at clinics or notified from Trusts/GPs to ascertain if there is evidence of pneumococcal disease.

Thursday 21st May 2015

A further OCT meeting takes place. It is agreed that PHA will continue to review the risk assessment and provide advice to management staff at the shipyard. Shipyard management are arranging further vaccination clinics delivered by private companies for employees who missed PHA clinics. HSENI agree to take forward promotion of HSE guidance on pneumococcal vaccination[8] with large companies employing welders in Northern Ireland.

Wednesday 27th May 2015

A 'hot debrief' event is held to encourage reflection and capture learning from the outbreak, with representatives from PHA, HSCB, BHSCT, PHE and Port Health.

Tuesday 9th June 2015

A further PHA incident management team meeting is held. No further confirmed cases have been identified.

Wednesday 10th June 2015

The PHA duty room is notified of a patient who works as a cleaner/labourer on the oil rig who was admitted on 9/6/15 via the Emergency Department with evidence of pulmonary consolidation on chest radiograph. It is agreed that this case meets the definition of a probable case. This case was on leave from the shipyard during the vaccination and antibiotic clinics, but would have met the definition for inclusion at the clinics because of his occupation.

[8] Pneumonia vaccination for employees exposed to welding and metal fume. Health and Safety Executive. January 2014.

Friday 12th June 2015

Microbiological testing (blood culture and urinary antigen) is negative for *S. pneumoniae.* Following discussion between PHA, microbiology and the respiratory physician it is agreed that pneumococcal disease remains the most likely diagnosis.

Tuesday 7th July 2015

From the end of May work on the oil rig was nearing completion and the shipyard informed PHA that workers leaving the site were now not being replaced. The oil rig leaves the shipyard on 7th July. The outbreak is declared over.

4. Methods

4.1 Epidemiological

4.1.1 Case definitions

Specific case definitions were agreed for the purpose of the outbreak investigation and case finding. Confirmed, probable and possible cases were defined as follows:

Confirmed case: *An individual who has worked at the Belfast shipyard since19 January 2015 and presents with a clinical diagnosis of IPD or pneumococcal pneumonia AND at least one of the following: pneumococcus isolated from normally sterile site (blood, cerebrospinal fluid (CSF), joint, peritoneum, pleural fluid or other, but not sites such as eye), pneumococcal DNA or antigen detected in fluid from a normally sterile site or pneumococcal antigen detected in urine.*

Probable case: *An individual who has worked at the Belfast shipyard since 19 January 2015 and presents with a clinical diagnosis of IPD or pneumonia (supported by radiographic imaging) where serious pneumococcal disease based on available clinical, microbiological and epidemiological evidence is the most likely diagnosis, in the absence of laboratory confirmation.*

Possible case: *An individual who has worked at the Belfast shipyard since 19 January 2015 and presents with a clinical diagnosis of IPD or pneumococcal pneumonia (supported by radiographic imaging) where diagnoses other than serious pneumococcal disease are at least as likely.*

4.1.2 Data collection

Information was collected on confirmed and probable cases including patient identifiers and demographic characteristics, risk factors for IPD, clinical details, microbiological investigations, vaccination status and onsite working patterns of the occupational groups at increased risk. Information was obtained on all individuals who attended the prophylaxis and vaccination clinics, including relevant medical history (to inform appropriate prophylaxis choice) and current smoking status, enabling further characterisation of this group.

4.1.3 Case finding

Retrospective case finding was conducted through examination of laboratory-confirmed reports of IPD in males aged 18-64 years with specimen dates in 2015. Telephone contact was made with the cases' general practitioners (GPs), or the cases directly to ascertain their occupation and ascertain if there was any link to the shipyard.

Prospective case finding was undertaken through local, national and international alerting. Communications were sent to all Health and Social Care Trusts and General Practitioners in Northern Ireland, alerting them to the outbreak and encouraging reporting of potentially linked cases (Appendix 2). Further cases of laboratory confirmed IPD up until the end of July 2015 would be examined for links with the shipyard. As many of the employees were ordinarily resident in other parts of the UK and Europe, an Early Warning Response System (EWRS) European alert was also issued, advising of the outbreak and encouraging reporting of potentially linked cases.

4.2 Microbiological

Microbiological samples from suspected cases were collected and processed according to routine clinical and microbiological protocols, via BHSCT Laboratories. Isolates from confirmed cases were forwarded to the PHE Respiratory and Vaccine Preventable Bacteria Reference Unit (RVPBRU) for further characterisation.

In order to provide information about current circulating serotypes in the community, other isolates of *S. pneumoniae* from sterile sites obtained between March and May 2015 in Belfast HSC Trust from patients not known to be associated with the outbreak (including males and females of all ages) were identified and forwarded to RVPBRU for typing.

4.3 Environmental Health

A site visit was conducted on the evening of 13th May by PHA and port health to inform the risk assessment. During this visit there was a discussion with the shipyard health and safety officers regarding the general working patterns on the site, as well as the cases working patterns specifically.

A tour of the dockside facilities for the workers was also undertaken to investigate whether any groups of close contacts of the cases could be identified either at the dockside facilities where the workers ate or changed clothes, or on the rig itself.

An HSENI team, including a microbiologist and a staff member with particular experience of welding / ship building environments conducted a site visit on 19th May. Air handling equipment and the number of air changes were discussed. Confined space entry protocols and PPE were reviewed. Welfare facilities on the site were discussed and a sample checked. A follow up meeting was conducted on the 17th of June to review management of risks associated with dust and fumes and the use of RPE (Respiratory Protective Equipment).

5. Results

5.1 Epidemiological

5.1.1 Descriptive epidemiology

Four confirmed cases of IPD were identified, with dates of onset of illness between 28th April 2015 and 6th May 2015. All were male, with a median age of 39, and were either UK or other European country nationals. All had evidence of acute pneumonic changes based on radiographic findings. All required significant periods of hospitalisation, ranging from 6 to 19 days. One case had treatment in an intensive care unit as part of their inpatient stay. Two of the confirmed cases had underlying risk factors, and all of the confirmed cases were current smokers. Three of the confirmed cases were welders; the other reported working closely alongside welders in enclosed spaces on the rig.

An additional five individuals met the probable case definition. All presented to hospital between 23rd April and 9th June 2015. All were male and in occupations exposed to metal fumes, working in enclosed spaces on the rig. All had radiographic changes of pulmonary consolidation. Two required treatment with IV antibiotics, with the other three receiving oral antibiotic therapy only. None had microbiological confirmation of pneumococcal disease. The characteristics of the confirmed and probable cases are summarised in Table 1. Both of the cases who presented after the vaccine and prophylaxis clinics were off work during the clinic period.

A further 16 symptomatic shipyard workers were notified to PHA in association with the outbreak, reported either through attendance at vaccine and prophylaxis clinics, or notification from clinicians in primary or secondary care. All were followed up with regard to clinical diagnosis and laboratory results. None of these met the case definitions.

680 individuals attended prophylaxis and vaccination clinics. The median age of attendees was 41 years (range 19 – 72 years). 656 (96%) received antibiotic prophylaxis, with azithromycin being the agent of choice for 92% (605/656) . 630 (93%) received PPV vaccination. Although not collected systematically, it was noted

that a significant proportion complained of current or recent respiratory symptoms; 109 (16.0%) reported respiratory symptoms within the last 2 months. 289 (42.5%) of those attending reported that they currently smoked and 43 (6.3%) had medical comorbidities associated with increased risk of IPD. Five individuals (0.8%) recalled having previously received vaccination against pneumococcal disease.

5.1.2 Case finding

Sixteen further cases of IPD in males of age 18-64 were identified through routine laboratory surveillance reports to PHA from 1st January to end July 2015 across Northern Ireland microbiology laboratories. None were identified as having any link with the shipyard; however, two were identified as welders working elsewhere. Advice was given regarding the association between welding and IPD, and consideration of vaccination recommended to reduce the risk of IPD in the future.

Table 1. Summary of confirmed and probable cases identified in shipyard outbreak of invasive pneumococcal disease

	Source of notification	Presentation	Admitted to hospital	Welder	Smoker	Radiographic findings	Microbiological findings
Confirmed cases	Microbiology laboratory	Acute pneumonia	Yes	No*	Yes	Left lower lobe pneumonia with associated effusion	S. pneumoniae serotype 4 isolated from blood culture
	Microbiology laboratory	Acute pneumonia	Yes	Yes	Yes	Left lower lobe consolidation with associated effusion	S. pneumoniae serotype 4 isolated from blood culture
	Microbiology laboratory	Acute pneumonia	Yes	No*	Yes	Left lower lobe consolidation	S. pneumoniae serotype 4 isolated from blood culture
	Microbiology laboratory	Acute pneumonia	Yes	Yes	Yes	Multi-lobar right sided consolidation	Positive pneumococcal urinary antigen test - not able to be typed
Probable cases	Retrospective notification from HR department at shipyard	Acute pneumonia	Yes	No*	Unknown	Right sided consolidation	Blood cultures - negative
	Reported at vaccination clinic	Acute pneumonia	Yes	Yes	Unknown	Consolidation left lower lobe, left lingual lobe and pleural effusion	Sputum – no significant growth Blood cultures - negative
	Reported at vaccination clinic	Acute pneumonia	No	No*	Unknown	Consolidation at base of right upper zone	Sputum – no significant growth
	Emergency department	Acute pneumonia	No	No*	Unknown	Air space opacification in the right lower lobe	No sputum or blood cultures sent
	Microbiology laboratory	Acute pneumonia	Yes	No*	Yes	Left lower zone consolidation	Blood culture – coag. Negative *staphylococcus*– likely contaminant Urinary antigen negative

*Occupations of those who were not welders included roughneck, heat treatment technician, rigger, foreman, metal fitter and cleaner. All of the probable or confirmed cases who were not welders gave a history of working closely alongside welders, in enclosed spaces on the oil rig.

5.2 Microbiology

S. pneumoniae was isolated from blood cultures from three cases. All isolates were identified as *S .pneumoniae* serotype 4, a strain which has previously been associated with outbreaks[9]. Isolates were fully sensitive to penicillin and erythromycin. A fourth case was confirmed through a positive urinary antigen test. The urinary antigen positive sample was not able to be typed by the reference laboratory.

Ten *S. pneumoniae* sterile site isolates with specimen dates between March and May 2015 from cases not associated with the outbreak were also typed. These cases comprised 4 males and 6 females, with a median age of 67.5 years. The serotypes identified are summarised in table 2. None of the isolates were identified as serotype 4, suggesting that serotype 4 was not circulating widely in the community at the time of the outbreak.

Table 2. Typing of *S. pneumoniae* isolated between March and May 2015 from sterile sites of cases not associated with outbreak

Sample Date	Isolation Site	*S. pneumoniae* Serotype Identified
03/2015	Blood culture	Serotype 11A
03/2015	Blood culture	Serotype 35B
03/2015	Blood culture	Serotype 22F
03/2015	Blood culture	Serotype 12F
03/2015	Blood culture	Serotype 11A
04/2015	Blood culture	Serotype 8
04/2015	Blood culture	Serotype 35B
05/2015	Blood culture	Serotype 8
05/2015	Joint Fluid	Serotype 12F
05/2015	Blood culture	Serotype 24F

[9] Hausdorff, William P., Daniel R. Feikin, and Keith P. Klugman. Epidemiological differences among pneumococcal serotypes. The Lancet infectious diseases 5.2 (2005): 83-93.

5.3 Environmental Health

5.3.1 Date of Commencement

The oil rig arrived in the Belfast shipyard on 19th January 2015, for major refurbishment works.

5.3.2 Description of the Site

The shipyard site has a dockside area containing office blocks and large warehouses, as well as permanent and temporary amenities blocks where groups of workers change their clothes and eat. The oil rig itself was located in a dry dock adjacent to the dockside area and workers access the oil rig by means of a lift on the outside of the rig.

Access to the site is strictly controlled by security at the entrance.

5.3.3 Description of the Workforce

The make up of the workforce was extremely complex due to the scale of the project and the highly skilled workforce required.

During the site visit on 13th May the shipyard estimated that approximately 3000 people had been employed on the project so far, with around 1500 people on the shipyard site at any one time. Workers on the site were mainly either working exclusively dockside in the warehouses, offices and amenity blocks, or exclusively on the oil rig itself. It was estimated that approximately 700 people worked on the oil rig during the day and 400 at night time. Those working on the rig were welders, standby firemen, labourers, electricians, cleaners and supervisors. Work was being carried out all over the rig, so workers could be on the top of the rig working outside, or inside the rig, in the enclosed spaces of the pontoons at the bottom, the legs of the rig and the cross-brace. Workers on the oil rig returned to the dockside amenities blocks for break times and workers each had a specifically allocated amenities block.

Some workers were employed directly by the shipyard company or the oil rig owner, but many were employed by six large contractors, and some by one of the many minor contractors. Approximately a third of the workers were resident in Northern

Ireland, a third from other parts of the UK and a third from outside the UK, including EU and non-EU countries.

Workers had a variety of shift patters, usually working 12 hours a day with 5 or 6 days “on” and 1-2 days “off”, or 2 to 3 weeks “on” and 1-2 weeks “off” depending on their contractor.

5.3.4 Provision of Occupational Health and other healthcare services

Occupational Health services were provided to the workers by their contractor. As many of the contractors were not based in Northern Ireland, most of the occupational health services were not provided locally or were not easily accessible at the time of the outbreak. As only a third of the workers lived in Northern Ireland, most were not registered with a General Practitioner in Belfast. Usual practice was that if workers became ill at work, they were sent to a hospital emergency department for assessment.

5.3.5 Assessment by HSENI

Inspection of work activities on the rig indicated that, at the time of inspection, they were adequately managed

Air handling equipment was observed in use where confined space work was being undertaken in areas such as the cross bracing and the rig legs. The number of air changes in these confined spaces was also discussed. Confined space entry protocols were in place and operating effectively, however HSENI staff did not enter confined spaces for operational reasons. The types of Respiratory Protective Equipment (RPE) used on the rig, including face fit testing was reviewed.

A number of minor issues were raised with the site safety team and subsequently were reviewed with site management.

6. Control Measures

6.1 Co-ordination and management of the outbreak

All OCT meetings were chaired by PHA. Membership and organisations represented on the OCT are provided in Appendix 1.

Key roles were provided as follows:

- Epidemiological investigation of cases coordinated by PHA
- Microbiological investigation coordinated by BHSCT Laboratories, with further characterisation carried out by PHE Respiratory and Vaccine Preventable Reference Unit (RVPBRU).
- Environmental investigation coordinated by HSENI
- Media communications and spokesperson provided by PHA
- Administrative support provided by PHA

6.2 Prevention of further cases

The Interim UK guidelines for the Public Health Management of Clusters of Serious Pneumococcal Disease in Closed Settings (2008) identify primary intervention strategies as:

- Providing information
- Offering antimicrobial prophylaxis and vaccination (with conjugate or polysaccharide vaccines) to defined close contacts.

The OCT agreed that those at greatest risk in the context of this outbreak were those exposed to metal fumes and working on the rig during the outbreak. It was identified that the job roles which met these criteria included welders, pipe fitters, steel workers, supervisors of welders and any others who are exposed to metal fumes and working in confined spaces on the rig.

The OCT agreed that to provide both immediate and longer term protection, the most appropriate strategy would be to offer those in the high risk group antibiotic chemoprophylaxis and vaccination. Information and advice would also be provided to all employees.

A dedicated information leaflet was developed and made available to the entire workforce, prior to and during antibiotic/vaccination clinics (Appendix 5).

6.3 Antimicrobial Prophylaxis

Those in the high risk occupational groups were offered antimicrobial prophylaxis with the aim of reducing carriage of the outbreak serotype of pneumococcus amongst close contacts and thereby interrupting transmission in the group[10]. It is also thought to offer a degree of individual protection against serious disease amongst any who may be in the incubation phase of pneumococcal infection. Azithromycin (500mg OD orally for 3 days) was selected as the primary choice as it was felt the relative short, once-daily dosing regime would aid compliance. For those with contraindications to azithromycin, amoxicillin (500mg BD orally for 7 days) was used as an alternative. Prophylaxis was prescribed and dispensed at dedicated clinics, with doctors assessing suitability for antibiotic therapy, and explaining the rationale, dosing schedule and potential side effects, via interpreting staff where necessary. Pharmacists were required to provide advice on drug information, interactions or contraindications due to other medications individuals were taking

6.4 Vaccination

Vaccination was offered at the same time as antimicrobial prophylaxis to those at risk with the aim of providing longer term protection. This is thought to take approximately 10-14 days to develop, hence the need for antimicrobial prophylaxis to provide more immediate protection. Two types of pneumococcal vaccine are presently licensed in the UK, which include a variable number of capsular serotypes: the 23-valent-pneumococcal polysaccharide vaccine (PPV) and the 13-valent pneumococcal conjugate vaccine (PCV). National guidance recommends that the PCV13 is used when the outbreak serotype is represented in the vaccine. However, the OCT agreed that PPV23 vaccine should be used in order to protect not only

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Interim UK guidelines for the public health management of clusters of serious pneumococcal disease in closed settings. Health Protection Agency, 2008.

against the outbreak serotype, but also the greatest number of additional serotypes given that this occupational group would be at ongoing risk from pneumococcal disease. As vaccine effectiveness of PPV23 is estimated at 50–70%, it was emphasised to employees receiving the vaccine that they should continue to be aware of the signs and symptoms of pneumococcal disease, and comply with use of PPE and other occupational control measures.

6.5 Public Information

A media statement was issued by PHA communications team on 15th May 2015 (Appendix 4).

7. Discussion

This is the first outbreak of IPD in the context of an oil rig or ship yard setting that we are aware of. Outbreaks of pneumococcal disease have been described in other settings including nursing homes, hospitals, schools, military camps and prisons[11], and there are reports of outbreaks of other pathogens, including Influenza B, on an oil rig[12]. Factors thought to have contributed to this outbreak include large numbers of individuals with increased susceptibility to IPD (due to metal fume exposure) working in close proximity, for prolonged periods in small, confined spaces on the oil rig, combined with the circulation of *S. pneumoniae* serotype 4, a serotype known to be associated with outbreaks.

The setting of this outbreak led to a number of complexities with regard to implementation of control measures. One of the particular difficulties was the identification of close contacts at high risk, as recommended as part of PHE guidance. There was no evidence of the four confirmed cases being part of a particular subgroup of oil rig workers. All employees worked across all sections of the oil rig and did not operate in fixed groups. The cases also did not share a single amenity block or employer. Following discussion, it was agreed that all of those working on the rig with exposure to metal fumes (include welders, pipe fitters, steel workers and supervisors working closely with welders) should be offered antibiotic chemoprophylaxis and vaccination. This amounted to an estimated 300 individuals, with the final total being significantly greater (680) due to widening of the occupational groups felt to be at increased risk.

The oil rig did not constitute a ‘closed setting’ in the way that a hospital or nursing home might, as the employees were only there during their working hours; other time was spent in the wider community, with overnight stays taking place in hotels across Belfast or private households. Rig workers also shared common facilities with other dockside workers. This mixing decreased the likelihood that clearance of the organism would be fully achieved from the administration of chemoprophylaxis.

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[11] Ihekweazu, Chikwe, et al. Outbreaks of serious pneumococcal disease in closed settings in the post-antibiotic era: a systematic review. Journal of Infection 61.1 (2010): 21-27.

[12] Johnston, F., et al. An outbreak of influenza B among workers on an oil rig. Communicable diseases intelligence 21.8 (1997): 106-106.

Additional difficulty in the implementation of control measures and management of symptomatic workers arose from the multi-national nature of the group at risk. Of those working on the rig, approximately one third were ordinarily resident outside of the UK and a further third were resident in other parts of the UK outside Northern Ireland. As a result, the majority of rig workers were not registered with a primary care provider in Northern Ireland. This, combined with the large size of the group needing prophylaxis and vaccination, meant that it was not appropriate to advise those in risk groups to attend primary care to arrange prophylaxis or vaccination.

Dedicated clinics were developed to ensure chemoprophylaxis and vaccination could be offered to all in the target group. To complement the clinical workforce, interpreters were required to ensure adequate communication in a variety of languages, including Lithuanian, Polish and Russian. While the majority of interpreters were obtained via BSO (Business Services Organisation), on occasion employees nominated a colleague to interpret for them, particularly for the less well represented languages e.g. Bulgarian. Availability of an appropriate interpreter was often noted to be the rate-limiting step at the clinics. Over the course of the clinics, greater efficiency was achieved by ensuring those invited to the clinic matched interpreter availability for that particular time.

Many workers were on regular medications which required identification as they had been prescribed outside the UK and brought over by the worker. Azithromycin is contraindicated with a number of routine medications so on site pharmacist advice provided assistance to prescribers where there was uncertainty.

An additional issue encountered was the lack of overarching occupational health oversight structures for the site. Workers on the oil rig were provided by numerous different employers, including the shipyard, oil rig owner, six major and many minor contractors from across Europe. Each employer had its own occupational health department; the majority of which were not located in Belfast. As a result, there was a lack of easily accessible occupational health support for the cohort of individuals working on the oil rig in Belfast.

National guidance recommends that consideration be given to the need for vaccination of welders with PPV 23 pneumococcal vaccine, taking into account occupational exposure control measures in place. Based on information collected

from those attending the vaccination and prophylaxis clinics, only a small proportion (0.8%) recalled having received vaccination previously. While it is emphasised that vaccination is not a substitute for PPE and other risk reduction measures, this outbreak suggests that exposure control measures alone may not always be sufficient to reduce the risk of pneumococcal disease. Furthermore, welders may move between numerous workplaces, often across different countries, and the control measures in place may vary between locations. It should also be noted that all of the confirmed cases and 42.5% of the employees attending the outbreak clinics were current smokers. Smoking is also known to increase the risk of pneumococcal disease and so this may have increased the susceptibility to disease of those who became unwell. Employers of welders should be encouraged to offer smoking cessation services to their employees which may further reduce the risk of IPD in this susceptible group.

Two probable cases of IPD were reported in shipyard workers after the implementation of control measures. Although in at risk occupational groups these individuals had not received chemoprophylaxis or vaccination as they were off work at the time of the clinics. Although we are unable to account for the impact of the (planned) downscaling of the project workforce soon after the outbreak was recognised, these additional cases would appear to support the risk assessment and range of control measures as reported.

8. Recommendations

8.1 For the shipyard:

- The shipyard should review its occupational health structures, particularly for those who are temporarily contracted and do not have a local GP.
- The adequacy of PPE should be reviewed, including assessment of compliance, and consideration given to vaccination against pneumococcal disease for staff exposed to metal fumes.
- The shipyard should consider offering smoking cessation services to employees to improve their general health and further reduce the risk of IPD.

8.2 For HSENI:

- Ensure companies employing welders are aware of guidance, and have adequate systems of occupational health management.

8.3 For employers of large transient multinational workforces:

- Other employers of large transient multinational workforces should also note the lessons from this outbreak about the importance of provision of local occupational health services and information on temporary registration with a general practitioner where they are working.

Appendix 1 – Membership of Outbreak Control Team

Dr L Doherty (Chair) Dr L Jessop (Incident Lead) Dr L Patterson Dr A Wilson Dr N Irvine Ms V Johnston	Public Health Agency
Mr M Dolan Ms B Bradley	Health and Social Care Board
Dr A Loughrey Dr E Dorgan Ms C Parkes	Belfast Health and Social Care Trust
Mr T Hutchinson Mr P Beattie Mr H McIlvenny	Shipyard
Mr B Monson Mr C Anderson	Health and Safety Executive, Northern Ireland
Mr D McClenaghan Mr T McKillen	Belfast City Council
Dr M Ramsay Dr S Mandal	Public Health England
Prof A Scott	London School of Hygiene and Tropical Medicine

The following individuals also represented the core OCT organisations at some OCT Meetings: Public Health Agency Staff - Dr A Baker, Dr J Ewing, Ms G Reid, Ms H Crookshanks, Ms S Kelly, Ms S Wilton, Dr R Smithson .. Belfast Health and Social Care Trust Staff - Ms M Carey, Ms J Tolan, Ms C Conroy, Ms Rhona Fair and Mr D Knott (Belfast Harbour)

Acknowledgements

The OCT would like to gratefully acknowledge the assistance of all the clinical, administrative and interpreting staff who assisted in the running of the clinics, to Dr Joe Kidney for reviewing the probable cases and RVPBSU for undertaking the typing work.

Appendix 2 – Communication to Health and Social Care Trusts and General Practitioners in Northern Ireland

HSC Public Health Agency

12-22 Linenhall Street
Belfast
BT2 8HS

T: 028 95363474
F: 028 95363947
Web Site: www.publichealth.hscni.net

By email

15th May 2015

Trust Medical Directors
All GPs
GP OOHs

Dear Colleagues

Cluster of cases of invasive pneumococcal disease associated with [redacted] Shipyard site

I am writing to alert you that PHA and partners are investigating a cluster of four cases of invasive pneumococcal disease in people who are workers at the [redacted], Belfast shipyard site.

Cases had disease onset dates between 28th April 2015 and 6th May 2015. Clinical presentations included bacteraemia and lobar pneumonia.

I would ask colleagues to be vigilant for cases of possible invasive pneumococcal disease in shipyard workers, and consider early treatment and investigation.

I would be grateful if any cases of possible invasive pneumococcal disease associated with the shipyard could be reported to the PHA Duty Room on 0300 555 0119.

Kind regards

Lorraine Doherty

Dr Lorraine Doherty
Assistant Director of Public Health (Health Protection)

Cc Dr C Harper, DPH
PHA Duty Room

Appendix 3 – Further Communication to Health and Social Care Trusts and General Practitioners in Northern Ireland

HSC Public Health Agency

12-22 Linenhall Street
Belfast
BT2 8HS

By email

T: 0300 555 0119
F: 028 95363947
Web Site: *www.publichealth.hscni.net*

18th May 2015

Trust Medical Directors
Trust Nursing Directors
All GPs
GP OOHs

Dear Colleagues

Outbreak of invasive pneumococcal disease associated with [redacted] (Belfast) Shipyard site

Further to my letter of May 15th, I am writing to update you on the outbreak of pneumococcal disease associated with the [redacted], Belfast shipyard site. The Health Protection Service, Public Health Agency, identified four cases of invasive pneumococcal disease in people who are workers at the ship yard and initiated an investigation.

Cases had disease onset dates between 28th April 2015 and 6th May 2015. Clinical presentations included bacteraemia and lobar pneumonia. No further cases have been identified since my last letter on this issue.

Public Health Management

A detailed risk assessment was undertaken between PHA medical staff, [redacted], HSENI and supported by experts in pneumococcal disease from Public Health England. It is known that welders and people exposed to welding dust are more susceptible to pneumococcal disease. The risk assessment enabled identification of the workers considered to be most vulnerable to

pneumococcal disease, by way of their occupation and working environment at the shipyard. These workers have been offered antibiotic prophylaxis and pneumococcal polysaccharide vaccine.

Over the weekend of May 16-17 PHA and Belfast Trust worked together to give antibiotic prophylaxis and pneumococcal vaccine to 450 workers at [redacted] shipyard. Further workers are being assessed and offered the intervention today. First line antibiotic used was azithromycin 500 mg OD for 3 days and second line was amoxicillin 500 mg BD for 7 days.

I would ask colleagues to continue to be vigilant for cases of possible invasive pneumococcal disease in shipyard workers, who also describe exposure to metal fumes and/or dusts associated with welding, and consider early treatment and investigation.

I would be grateful if any cases of possible invasive pneumococcal disease associated with the shipyard could be reported to the PHA Duty Room on 0300 555 0119.

Further information on pneumococcal disease available at -
https://www.gov.uk/government/collections/pneumococcal-disease-guidance-data-and-analysis

Kind regards

Lorraine Doherty

Dr Lorraine Doherty

Assistant Director of Public Health (Health Protection)

cc. Dr Carolyn Harper
Dr Michael Mc Bride, CMO
Dr Anne Kilgallen, DCMO
Dr Elizabeth Reaney, SMO
Mr Seamus Camplisson, DHSSPS
PHA Duty Room

Appendix 4 – Press Release Issued 15th May 2015 regarding IPD Outbreak

Pneumococcal disease cluster - [redacted]

The Public Health Agency (PHA) is working with the Health & Safety Executive Northern Ireland (HSENI) and Port Health colleagues to investigate a cluster outbreak of pneumococcal disease at [redacted], Belfast.

A small number of employees working at [redacted] have been confirmed as having pneumococcal disease.

The PHA is working closely with [redacted] and hygiene advice has been given to employees. Vaccination is being offered to employees working in high risk exposure areas as a preventative measure.

There is no wider risk to the public from pneumococcal disease as regards this cluster.

Appendix 5 – Employee Information Leaflet

Questions & Answers on Pneumococcal Disease

Q. What is Pneumococcal disease?

Pneumococcal disease is a term used to describe the range of infections which can be caused by a bacterium called *Streptococcus pneumonia*

Q. What kind of illness do the bacteria cause?

The bacteria can cause a variety of infections ranging from sinusitis and ear infections to more serious illnesses such as pneumonia, meningitis and blood-poisoning.

Q. How do you catch it?

The bacteria which cause pneumococcal infections can be spread by close contact with someone who is carrying the bacteria when that person coughs or sneezes. They can also be spread by direct contact with respiratory secretions from an infected person, such as used paper tissues.

Some people can carry the bacteria in the backs of their noses and throats without ever becoming ill while others can go on to develop a pneumococcal infection. It is not known why it only affects some people but it is known that some groups of people are more at risk than others of developing it. These groups include:

- the very young or the very old
- people with a chronic illness such as diseases of heart, lung, kidneys, liver or diabetes mellitus
- people without a spleen or with a damaged spleen
- people whose immune system is not working properly
- welders or people exposed to welding fumes in their job

Q. What measures can I take to prevent the spread of pneumococcal infection?

Taking simple hygiene precautions is encouraged. This includes:

- washing your hands thoroughly and regularly- this is particularly important after touching your nose and mouth and before handling food
- coughing and sneezing into a tissue, throwing it away immediately and washing your hands
- using your own cups and utensils and not sharing these with others

Q. Can you catch a pneumococcal infection from close contact with someone who has it?

The vast majority of people who come into contact with someone with a pneumococcal infection remain well and symptom free. However, it is possible to contract pneumococcal disease from close contact with an infected person.

Q. Can people be immunised against pneumococcal disease?

Yes, pneumococcal vaccination is very effective at preventing pneumococcal infection. However, the vaccines only protect against certain types of pneumococcal disease. Vaccination may reduce the risk of pneumococcal disease, but should not replace measures to prevent or reduce exposure.

Q. Why are some workers being offered vaccination and antibiotics and others not?

At present, only individuals who have been identified in this situation, as having an increased risk of developing a pneumococcal infection will be offered vaccination and antibiotics.

Q. What are the symptoms of pneumococcal disease?

Most people come into contact with the bacteria which can cause pneumococcal disease every so often and remain well. Developing a serious pneumococcal infection after coming into contact with an infected person is rare.

However, if you develop any of the following symptoms over the next few weeks you should seek medical attention, show this leaflet to the doctor or nurse assessing you and explain that there have been people in your workplace recently who have had pneumococcal disease. The symptoms to watch out for are:

- a severe cough
- shortness of breath
- chest pains
- confusion or drowsiness
- a severe prolonged headache
- stiff neck, aversion to light
- fever
- seizures