HSC Public Health Agency

# agenda

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| **Title of Meeting** | 158th Meeting of the Public Health Agency Board |
| **Date** | 16 November 2023 at 1.30pm |
| **Venue** | Fifth Floor Meeting Room, 12/22 Linenhall Street, Belfast |

## standing items

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| 1<br>1.30 | Welcome and apologies | | Chair |
| 2<br>1.30 | Declaration of Interests | | Chair |
| 3<br>1.30 | Minutes of Previous Meeting held on 19 October 2023 | | Chair |
| 4<br>1.35 | Matters Arising | | Chair |
| 5<br>1.40 | Chair's Business | | Chair |
| 6<br>1.45 | Updates from Non-Executive Directors | | Chair |
| 7<br>1.50 | Chief Executive's Business | | Chief Executive |
| 8<br>2.05 | Update on Reshape and Refresh Programme | | Chief Executive |
| 9<br>2.15 | Finance Report | **PHA/01/11/23** | Director of Finance |

## items for noting

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| 10<br>2.25 | Performance Management Report | **PHA/02/11/23** | Mr Wilson |
| 11<br>2.40 | Surveillance of Antimicrobial Use and Resistance in Northern Ireland Annual Report 2019 – 2021 | **PHA/03/11/23** | Dr McClean |
| 12<br>2.55 | PHA Position Statement on "Stopping the Start: Our New Plan to Create a Smokefree Generation" | **PHA/04/11/23** | Dr McClean |

## closing items

13 Any Other Business
3.05

14 Details of next meeting:

*Thursday 14 December 2023 at 1.30pm*

*Fifth Floor Meeting Room, 12/22 Linenhall Street, Belfast*

HSC Public Health Agency

# minutes

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| **Title of Meeting** | 157th Meeting of the Public Health Agency Board |
| **Date** | 19 October 2023 at 1.00pm |
| **Venue** | Board Room, County Hall, Ballymena |

**Present**

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| Professor Nichola Rooney | - | Interim Chair |
| Mr Aidan Dawson | - | Chief Executive |
| Dr Joanne McClean | - | Director of Public Health |
| Ms Heather Reid | - | Interim Director of Nursing, Midwifery and Allied Health Professionals |
| Mr Stephen Wilson | - | Interim Director of Operations |
| Mr Craig Blaney | - | Non-Executive Director |
| Mr John Patrick Clayton | - | Non-Executive Director |
| Ms Anne Henderson | - | Non-Executive Director |
| Mr Robert Irvine | - | Non-Executive Director (*via video link*) |
| Mr Joseph Stewart | - | Non-Executive Director |

**In Attendance**

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| Ms Tracey McCaig | - | Director of Finance and Corporate Governance, SPPG |
| Mr Brendan Whittle | - | Director of Community Care, SPPG (*via video link*) |
| Mr Robert Graham | - | Secretariat |

**Apologies**

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| Ms Deepa Mann-Kler | - | Non-Executive Director |
| Dr Aideen Keaney | - | Director of Quality Improvement |

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| **108/23** | **Item 1 – Welcome and Apologies** |
| 108/23.1 | The Chair welcomed everyone to the meeting. Apologies were noted from Ms Deepa Mann-Kler and Dr Aideen Keaney. |
| **109/23** | **Item 2 – Declaration of Interests** |
| 109/23.1 | The Chair asked if anyone had interests to declare relevant to any items on the agenda. |
| 109/23.2 | Mr Clayton declared an interest in relation to Public Inquiries as Unison is engaging with the Inquiries. |

**110/23** **Item 3 – Minutes of previous meeting held on 17 August 2023**

110/23.1 The minutes of the Board meeting held on 17 August 2023 were **APPROVED** as an accurate record of that meeting.

**111/23** **Item 4 – Matters Arising**

111/23.1 Mr Graham advised that all of the actions from the last meeting were either completed or would be picked up as part of the discussion at today's meeting.

111/23.2 The Chair noted that the Chief Executive would pick up on one of the actions in the confidential session.

**112/23** **Item 5 – Chair's Business**

112/23.1 The Chair advised that since the last meeting she had attended a number of events, a list of which she had shared with members. She reported that the Chief Medical Officer had opened the 25th anniversary event for the Institute of Public Health in Ireland (IPH) and that at the event along with Professor Breda Smyth. The Chair of IPH is keen to have PHA representation on the IPH Board, following on from Dr Harper's previous attendance. The Chief Executive undertook to follow up on this **(Action 1 – Chief Executive)**.

112/23.2 The Chair said that with regard to the Reshape and Refresh Programme, the terms of reference of the Programme Board have been updated to emphasise its strategic role. She added that she had e-mailed the joint Chairs to stress that once EY has completed its work, the implementation of the operating model and structures should be the remit of the PHA Board and that and that the focus of the Programme Board should be more strategic, in terms of clarifying PHA's partnership working and its specific role in professional advice and service development.

112/23.3 The Chair reported that she has attended meetings of the Public Inquiries Programme Board and that she has seen the draft response the PHA is submitting for Module 3 of the COVID Inquiry. She recommended that all Non-Executive Directors read the response.

112/23.4 The Chair advised that she has met with Mr David Nicholl to discuss training on Board effectiveness, but added that following a meeting she attended this morning she learnt that the Leadership Centre is developing a CPD programme for Board members. She said that it is unlikely that this would be available soon enough for the planned Board effectiveness workshop, but that this training will be taken forward when the new Chair takes up post.

**113/23** **Item 6 – Updates from Non-Executive Directors**

113/23.1 Mr Clayton reported that he has recently attended two meetings of the Information Governance Steering Group (IGSG) where a lot of policies have recently been brought for approval following review. He said that at the meeting he was pleased to note that the Agency Management Team (AMT) oversaw a review of the PHA's FOI process following the recent PSNI data breach incident.

113/23.2 Ms Henderson asked if IGSG is an Executive meeting. Mr Clayton advised that it is a sub-group and that his role is to contribute to the discussions and ask questions. He added that there is an Information Governance Action Plan, reports of which are brought to the Group and to the Governance and Audit Committee.

113/23.3 Ms Henderson advised that she had attended a meeting of the Procurement Board and that there are some issues pertaining to procurement emanating from a recent Internal Audit. She advised that there was a discussion about GDPR and the need for a process to be developed for ensuring contracts are GDPR compliant because this is creating a bottleneck in the procurement process. She noted that some procurement exercises are being held up because of the current savings review, but Ms McCaig said that she was not aware of this. Mr Wilson explained that there are some issues for PHA in terms of new procurement exercises and he agreed that the GDPR issue is creating a bottleneck, but work is ongoing with Legal Services on this. He said that procurement is time consuming and this issue highlights the need for more legal capacity. He acknowledged that there is a need for good GDPR compliance, and that it is causing a delay, so there is a need to try to find a balance.

**114/23** **Item 7 – Chief Executive's Business**

114/23.1 The Chief Executive reported that a piece of work on falls in care homes, led by the PHA Frailty Network was awarded the overall winner in the service improvement section at the Advancing Healthcare Awards last Thursday. He outlined the outcomes of the work and said that the team will be presenting this at a future AMT meeting.

114/23.2 The Chief Executive updated members on the development of a protocol for the response to, and review of, Sudden and Unexpected Deaths in Infancy and Childhood (SUDIC). He advised that the draft protocol will be finalised by the end of December.

114/23.3 The Chief Executive advised that PHA has submitted to the Department a joint piece of work with SPPG around scoping the actions and costs associated with offering antenatal screening for fetal anomalies to all pregnant women which would be delivered as a managed, quality assured programme in line with UK NSC recommendations.

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| 114/23.4 | The Chief Executive said that following a piece of work led by Professor Ray Jones on Children's Social Care Services in Northern Ireland, there is a consultation on the recommendations of that review and PHA will be responding to it. |
| 114/23.5 | The Chief Executive advised that an action plan to deliver actions from the Mental Health Strategy has been signed off the Mental Health Strategy (MHS) Early Intervention and Prevention Steering Group and regional subgroups. He explained that there will be 3 subgroups and as part of this work there will be a conference held in March 2024 around public mental health and the need to prioritise prevention. |
| 114/23.6 | The Chief Executive announced that PHA's "Talking Really Helps" campaign was awarded runner up for Best Social Media Campaign in the Public Sector at the 2023 Northern Ireland Social Medial Awards on the back of picking up two UK Agency Awards and a bronze at the Drum Roses Awards. The Chair offered her congratulations for this. Mr Blaney asked if it is PHA staff who come up with the campaigns, but Mr Wilson explained that PHA works with an agency. |
| 114/23.7 | The Chief Executive reported that at the Advancing Healthcare Awards he had presented the public health award to a team in the Northern Trust. He advised that PHA has received an invitation from Mr Duncan Selbie to join the International Association of National Public Health Institutes (IANPHI) and attend a conference in Rwanda. |
| 114/23.8 | The Chief Executive said that PHA has nominated Ms Siobhan Rogan as its representative on a regional group looking at the Policy on Restrictive Practices. He noted that restrictive practices in an issue that has come up at the Muckamore Inquiry. |
| 114/23.9 | The Chief Executive advised that an international conference on Integrated Care will be taking place in Belfast from 22nd to 24th April 2024 and that PHA is considering participation at the event. |
| 114/23.10 | The Chief Executive said that there is currently a consultation taking place around the Area Integrated Programme Board regulations and PHA is responding to this. |
| 114/23.11 | The Chief Executive advised that he participated in a 4 Nations meeting last week which was informative. He said that following the Prime Minister's announcement on a smoking ban, Scotland and Wales issued statements of support and he felt that a similar statement should be issued in Northern Ireland. Ms Henderson noted that there is an ongoing consultation around smoking. Dr McClean agreed that a statement would be helpful and she advised that PHA is assisting partner organisations with their responses to the consultation by providing relevant information. |
| 114/23.11 | The Chief Executive said that at the 4 Nations meeting, it was agreed |

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| | that there should be a group formed to look at obesity. He added that there were also discussions around population health modelling and overdose prevention facilities. |
| 114/23.12 | The Chief Executive advised that he had attended the recent Integrated Care System (ICS) Steering Group meeting at which the Permanent Secretary indicated that he would welcome a discussion around the functions of a regional group. He said that Ms Martina Moore is going to follow up on this. He queried that if authority is given to a regional group, where would that leave Trust Boards. |
| 114/23.13 | The Chief Executive said that at the last meeting he had agreed to share the draft HSC Framework document but when he found the e-mail that had been sent to him, it noted that the draft was confidential and not for wider circulation. Mr Stewart asked that the Chief Executive go back to the Department to clarify this as the new Permanent Secretary has been saying there is a need for real partnership working. The Chief Executive agreed to do this **(Action 2 – Chief Executive)**. |
| 114/23.14 | The Chief Executive reported that the vaccination programme for flu and COVID is underway. Dr McClean advised that to date the uptake has not been high. The Chief Executive said that last year there was a good uptake and he would be disappointed if this was not maintained, but he felt that this may be due to "vaccine fatigue". Mr Blaney noted that there was a discussion around this at the Planning, Performance and Resources (PPR) Committee and how the lack of a campaign may impact on uptake. The Chief Executive advised that he has raised this with the Chief Medical Officer. |
| 114/23.15 | Mr Stewart advised that this was also discussed at the Governance and Audit Committee and one of the actions emanating from that was an action to bring a proposal to the Board that a letter should be sent by the Board to the Permanent Secretary saying that PHA should be treated differently and that campaigns should not be paused. The Chair agreed that having no campaigns restricts PHA. |
| 114/23.16 | Ms Henderson said that she would not consider going for a vaccination unless prompted to do so. She asked if PHA has considered doing interviews or other proactive media work. Mr Wilson advised that there is ongoing work and PHA is working to get messaging out using different approaches. Mr Clayton suggested that PHA should bring on board individuals with influence to get messages out. In order to increase uptake within the HSC workforce, he suggested that Trade Unions could help. Mr Wilson advised that PHA relies on comms partners within Trusts. He pointed out that PHA usually pushes its messages out at a later stage of the programme. |
| 114/23.17 | Dr McClean showed members a graph outlining the uptake to date. She added that there is an incentive for GPs to get both vaccinations done by 31 October in order to receive an additional payment. The Chief |

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| | Executive noted that one of the complications is around the definition of a frontline worker. |
| 114/23.18 | Mr Clayton recalled that during the pandemic people would have had concerns about getting vaccinated and he said that he would be happy to assist in terms of sharing information. Ms Reid noted that ECHO sessions were carried out with public consultants to debunk some of the myths around vaccination. She added that there are HSC staff who come from different countries where there is a different culture when it comes to vaccinations. The Chief Executive said that he would welcome assistance from the Trade Unions. He noted that there has also been discussion around making vaccinations mandatory and this being included in terms and conditions. Mr Clayton commented that this is where there would be a difference of opinion and that making vaccinations mandatory could be counter-productive. He suggested that it would be useful to find out why staff are not getting vaccinated. |
| 114/23.19 | Mr Stewart asked if the Board is content that a letter should be sent to the Permanent Secretary. Members agreed that correspondence should be sent **(Action 3 – Interim Chair)**. |
| 114/23.20 | The Chief Executive advised that PHA is supporting SPPG around issues with the ENT/maxillofacial cancer service |
| 114/23.21 | The Chief Executive reported that he had visited Cedar Integrated Primary School in Crossgar for the launch of a new organ donation educational resource pack. |
| **115/23** | **Item 8 - Update on Refresh and Reshape Programme** |
| 115/23.1 | The Chief Executive said that there has been a lot of discussion around the “life course” approach. He advised that there has been engagement with senior teams. He added that there was a meeting with Trade Unions after which a list of questions was submitted. He said that he would share those, and the responses, with the Chair. |
| 115/23.2 | The Chief Executive advised that work with EY will come to an end in November. He added that Mr Gary Loughran is now working temporarily with PHA to assist with a digital strategy. |
| 115/23.3 | Mr Clayton returned to the discussion in the previous item on the ICS Steering Board meeting and said that it would be useful to get a greater understanding of the direction of that work, particularly given PHA’s previous role in the development of the Commissioning Plan. He noted that the Department’s approach seems to be changing and reverting back to the original commissioning process so he said that he would helpful for the Board to understand the current position given PHA’s relationship with SPPG and how PHA then fits into the overall ICS framework. The Chief Executive said that there has been a major rethink and that he would be happy to have a conversation with the |

Chair about that. He added that there needs to be a discussion about what PHA's role is vis-à-vis commissioning as it does appear that it may revert back to the original process.

115/23.4 Ms McCaig commented that she is still trying to resolve it in her own mind saying that the process is about having a baseline, profiling, innovation and translating policy and aiming to ensure that all of those parts are working and that there are no gaps. The Chief Executive said that 12 months ago, it would have been envisaged that a regional group would have been setting the policies, but there is no legislation so there is no mandate. He added that PHA retains a significant interest in commissioning. He commented that the change in Permanent Secretary has also seen a change in direction. The Chair said that this is the type of strategic work that PHA should be involved in, so as to ensure that its actions do not impact on other areas.

115/23.5 Mr Stewart said that even after attending two sessions at the NICON conference on ICS, he felt no better informed. The Chief Executive advised that the implementation date for ICS has been pushed back until next September. He said that the plan was to have the legislation passed by this stage but in the absence of an Assembly this has not been possible.

**116/23 Item 9 – Finance Report (PHA/01/10/23)**

116/23.1 Ms McCaig advised that the latest Finance Report shows the position as at the end of August. She reminded members that PHA opened the year with a projected deficit of £650k, but this has now changed to a break-even position. She added that a mid-year review of the budget has been carried out.

116/23.2 Ms McCaig explained that the slippage has come about in areas such as campaigns and the management and administration budget. She said that while PHA is in a break-even position, work will be required to maintain this. She advised that she expects there to be slippage within the vaccine budget. She reported that PHA received good news this week with approval being given to the £3.2m of funding for the National Institute for Health Research.

116/23.3 Ms McCaig advised that work is ongoing to review the recurrent savings position. She outlined that £2.5m of savings has been identified and if the decision to pause campaigns is not reversed this will increase to £4.1m. She said that this is not an unreasonable position to hold while PHA goes through the outworking of the Reshape and Refresh Programme. She added that as the costing of the new structure is being worked out, PHA can determine what level of savings is available. She noted that there is a risk that further savings may be applied to PHA. She advised that there is a list of potential activities to manage cost pressures.

116/23.4 Ms Henderson asked about the inescapable pressures. Ms McCaig explained that for this year PHA has total slippage of £6.9m so once the £5.3m of savings is deducted, this leaves £1.6m. She advised that there is a list of pressures totalling £1.7m/£1.8m to be addressed so this leaves PHA in a break-even position, but this excludes any potential slippage relating to vaccination. She also noted that these figures include £1.5m relating to campaigns so there are many moving parts.

116/23.5 Ms Henderson noted that it will be difficult to use campaign funding this year. Mr Wilson agreed saying that the window is closing for media buying. Ms McCaig said that this should be highlighted to the Department.

116/23.6 Mr Blaney commented that the Vaccine Management System (VMS) incurs huge expenditure and it is unusual that it is not funded recurrently. Dr McClean advised that VMS is used all the time and can generate reports. Mr Blaney sought clarity on the £2.7m cost, and Dr McClean replied that this is to maintain the system this year. Mr Blaney said that he thought that there would be a one-off cost, but the Chief Executive explained there will be always be a revenue tail.

116/23.7 The Chief Executive advised that VMS was developed for the COVID vaccine but subsequently PHA has added the flu vaccine and is hoping to add childhood vaccinations. He explained that each year PHA has to submit a business case and this has to fit in with the Digital Health and Care Northern Ireland (DHCNI) strategy. He added that there is an assumption that much of what PHA does can be provided by Encompass, but although Encompass may have some of the functionality it cannot do everything. He explained that during COVID, VMS allowed PHA to dig into the data right down to looking at uptake among vulnerable groups and different postcodes which then allowed PHA to contact relevant Councils to get them to put out messaging to encourage uptake. He said that there is a team involved with VMS and that PHA would argue that as it developed the system, it should take control of it.

116/23.8 Dr McClean advised that VMS also facilitates delivery as it helps community pharmacies to upload information. Mr Blaney said it is an expensive piece of software and he would like to receive more clarity on how much it costs year-on-year and how long private companies can keep supporting it. Ms McCaig suggested that it may be helpful to bring a paper to show how PHA has mitigated these risks. The Chief Executive said that some of these vulnerabilities would exist no matter which company was running it and even if Encompass was being used.

116/23.9 Mr Clayton thanked Ms McCaig for the update. In relation to recurrent savings going forward, he noted that when considering the savings for 2023/24, proposals were given a low, medium or high risk rating so he asked what process is being taken forward in that regard and if an equality screening is being undertaken. Ms McCaig explained that there

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| | are no "forced" savings, any savings are those which have occurred naturally, for example there has been reduced demand for Nicotine Replacement Therapy (NRT), there is slippage within the management and administration budget, and there is general slippage. She said that these are areas where slippage has naturally occurred, and then there is the pause on campaigns which PHA has been instructed not to spend. She added that a process has not commenced for identifying other areas. She explained that some of the savings can be made recurrent because at present there are no plans to use that funding and she clarified that PHA has not made any decisions to stop any work. She said that at present there is £4.1m of potential savings, but noted that this is before any recruitment is undertaken following the Reshape and Refresh work. |
| 116/23.10 | Ms Henderson suggested that it would be useful for members to see the paper that went to the PPR Committee as it clearly set out the recurrent savings area. Ms McCaig said that she would be happy to share the paper **(Action 4 – Ms McCaig)**. |
| 116/23.11 | The Board noted the Finance Report. |
| **117/23** | **Item 13 – Annual Quality Report (PHA/03/10/23)**<br><br>*Ms Denise Boulter and Mr Brendan Forde joined the meeting for this item.* |
| 117/23.1 | Ms Boulter presented the Annual Quality Report (AQR) and explained that previously PHA would have developed this in conjunction with HSCB, but as HSCB no longer exists, this is PHA's first solo report. She said that the Report shows how much PHA does on its own and is as robust as any Report that has been produced before. She advised that following any final amendments, the Report will be submitted to the Department and published on World Quality Day on 9 November. She acknowledged the work of Mr Forde in compiling the Report and said that Page Setup designed the final Report. Ms Reid added that the Report is only a sample of the number of projects going on across PHA. The Chair said that the Report was easy to read and that a great deal of effort had been put into producing it. |
| 117/23.2 | Mr Stewart sought clarity on whether "Strengthening the Workforce" meant the PHA workforce or the HSC as a whole. Ms Boulter replied that the focus would primarily be on PHA, but there are pieces of work that PHA staff are involved in that could be replicated across the HSC. |
| 117/23.3 | Mr Clayton said that the part around PPI within the Transforming the Culture section was interesting because while a lot of work has been done, there is little about outcomes, and while there is narrative on service users and carers experience, there is not so much on outputs and policy change given there has been a lot of service change over the last year. Ms Reid advised that there has been discussion with the PPI |

team about strengthening how PHA engages with the public. She added that training has been provided for other organisations so there is a question about how that training has been put into practice. She advised that there is now NICE guidance around decision making. Mr Clayton said that engagement is important as part of any service change and community groups are currently not feeling involved.

117/23.4 Ms McCaig said that PHA is aiming to improve its performance management and while she liked this Report, she felt that there were elements of it that could be reported through the performance management reports. The Chair commented that this is linked to some of the discussions at the last PPR Committee and the need for PHA to be able to measure the difference that it is making.

117/23.5 Ms Henderson commented that the Report was very interesting and asked whether it is a PHA Report or a Report for the system, to which Ms Boulter replied that this is PHA's contribution to the system. In the section on Raising the Standards, Ms Henderson said that new models on prescribing will have a huge impact. She asked how the call is made for what to include in the Report and said that there needs to be a proper system for capturing all of this information. Ms Boulter explained that PHA receives a letter from the Department and on the back of that, in the absence of a formal system, a call is put out across the organisation for what to include in this Report. She acknowledged that there are other pieces of work which will not be included, but going forward the AQR will be a year-round task. Ms McCaig added that this process begins with the Business Plan and the Corporate Plan so this work is embedded in what PHA does.

117/23.6 Ms Reid said that there is a list of projects that PHA has done in relation to quality and commented that within quality and safety, quality can play second fiddle. She added that there have been ongoing conversations about what organisations can bring in terms of commissioning, but PHA has that joint role in terms of quality and safety. She advised that the Mealtime Matters resource was a finalist at the National Awards.

117/23.7 The Chair asked about HSCQI. Ms Boulter explained that there is a short narrative within the Report about HSCQI and a link to their own report. The Chief Executive advised that HSCQI develops its own report as it is focused across the whole HSC system.

117/23.8 The Chair congratulated all those involved in the production of this Report.

117/23.9 The Board **APPROVED** the Annual Quality Report.

**118/23 Item 10 – Update from Remuneration Committee**

118/23.1 Mr Stewart said that part of the role of the Remuneration Committee, as outlined in Standing Orders, is to approve job descriptions, and that the

job descriptions for the new Director posts were approved at a meeting of the Committee subject to clarification on a number of points and that he was not sure if these had been resolved. He noted that the structures beneath Director level have not yet been completed.

118/23.2 The Chief Executive advised that one of the issues that needs to be resolved around the job descriptions relates to SBNI and that there is ongoing dialogue with the Department to get that clarification. He explained that the Director of Public Health and Director of Nursing are 2 of 3 representatives on the SBNI Board, but that has never featured in any previous job description. He added that opening dialogue with the Department on this has now led to discussion around expectations of PHA vis-à-vis SBNI and the role of the PHA Board.

118/23.3 Ms Henderson asked when the structures between Director level will be finalised. The Chief Executive advised that under the current timetable, EY is due to complete its work in November and that part of their work is to develop a structure. The Chair added that there needs to be a discussion at the Programme Board with regard to professional advice and service development.

118/23.4 Ms McCaig said that as part of the finance training session in November, she would give an update on the transfer of finance staff to PHA.

118/23.5 The Board noted the update from the Chair of the Remuneration Committee.

**119/23 Item 11 – Update from Chair of Planning, Performance and Resources Committee**

119/23.1 The Chair advised that the Committee considered the mid-year Finance review which will be shared with members as above. She said that when looking at opportunities for utilising slippage, PHA needs to have a more strategic view informed by impact on health inequalities instead of funding individual short term initiatives year-on-year.

119/23.2 The Chair said that PHA needs to be more focused on performance and outcomes and that there is a need for more resource in the area of performance management given that this is an important area of responsibility for the organisation. She stated she was disappointed to learn that the senior staff who had been employed to develop a performance framework have been redeployed into other areas and given the importance of this area there is a need to think of another way of getting resources to bolster this work.

119/23.3 The Board noted the update from the Chair of the Planning, Performance and Resources Committee.

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| **120/23** | **Item 12 – Update from Chair of Governance and Audit Committee (PHA/02/10/23)** |
| 120/23.1 | Mr Stewart advised that the Governance and Audit Committee had met on two occasions since the last Board meeting and that the minutes of the September meeting were shared with members. |
| 120/23.2 | Following the September meeting, Mr Stewart highlighted that there were two audit reports, one on procurement and one on complaints, which both received a limited level of assurance. He advised that through the hard work of Mr Wilson's team many of the recommendations in these audits have been implemented. From the complaints audit, he advised that there was an issue with regard to how information on complaints was stored, but this has been resolved following the decision to move complaints management to Mr Wilson's directorate. |
| 120/23.3 | Mr Stewart said that following the audit on procurement, there is an issue that the Board needs to be sighted on and that is whether the review of all contracts can be completed by the target date of March 2026 because there are resource issues and process issues. He added that he had raised with the Head of Internal Audit. |
| 120/23.4 | Mr Stewart reported that the Committee had considered a General Report from Internal Audit which reports on all HSC organisations and it was worth noting that the percentage of audits across the HSC which received a satisfactory level of assurance fell below 50% for the first time, mainly due to process issues. |
| 120/23.5 | Mr Stewart advised that a number of policies were brought to the Committee for approval and these are included on today's agenda. He said that the Committee would recommend Board approval. |
| 120/23.6 | The Board noted the update from the Chair of the Governance and Audit Committee. |
| **121/23** | **Item 15 – Updated Policies and Procedures (PHA/05/10/23)**<br>- **Business Continuity Policy / Plan**<br>- **Risk Management Strategy and Policy**<br>- **Records Management Policy**<br><br>**Item 16 – Information Governance Strategy / Framework (PHA/06/10/23)** |
| 121/23.1 | Mr Wilson advised that work was undertaken to bring these policies up to date with a small number of changes made in each. |
| 121/23.2 | Mr Wilson said that the Risk Management Policy has been updated to reflect the introduction of the 3 Lines Assurance model. He added that the Information Governance Strategy has been updated to show how |

PHA is bringing GDPR on board.

121/23.3 Mr Clayton commented that there was discussion at IGSG and the Governance and Audit Committee about how these policies should be applied. He advised that there will be a training session for members on the 3 Lines Assurance Model. He noted that with the ongoing Reshape and Refresh programme, there could be staff moving so it is important that all staff are aware of their responsibilities under the Information Governance Strategy. He said that lines could become blurred so there is a need for clarity.

121/23.4 The Chief Executive suggested that on the back of the earlier discussion on procurement that there could be a joint session between the Procurement Board and the Governance and Audit Committee. Mr Stewart said that he had an issue regarding procurement that he wished to raise in the confidential session. The Chair noted that this was also mentioned at the Planning, Performance and Resources Committee.

121/23.5 The Board **APPROVED** the updated policies and procedures and the Information Governance Strategy.

**122/23 Item 14 – Mid-Year Assurance Statement (PHA/04/10/23)**

122/23.1 The Chief Executive advised that the Mid-Year Assurance Statement has been considered by the Governance and Audit Committee. Mr Stewart advised that the Committee had asked for some amendments to be made and these have been reflected in the updated version.

122/23.2 Mr Clayton noted that an amendment was made in the section on the Board Self-Assessment but asked about the process for completing this. The Chair advised that she has been speaking to Mr Graham about progressing this.

122/23.3 Ms McCaig suggested that given the recent events around cervical screening, there should be reference to that in the Statement. She acknowledged that the Statement is at 30 September, but given the Statement is still being amended, it should be included **(Action 5 – Mr Wilson)**.

122/23.4 Subject to the inclusion of narrative around cervical screening, the Board **APPROVED** the Mid-Year Assurance Statement.

**123/23 Item 17 – Equality and Disability Action Plans 2023/28 (PHA/07/10/23)**

123/23.1 Mr Wilson said that members will be familiar with the Equality and Disability Action Plans as they form part of the Annual Equality Report which is submitted to the Equality Commission. He advised that it is incumbent on PHA to develop new 5-year Equality and Disability Action Plans and that these draft Plans have been consulted on.

123/23.2 Mr Clayton said that there are a lot of good suggestions in the Plan, but the timelines could be tightened up as many of the actions have target dates at the end of the 5-year period. He added that some of the indicators in the Equality Action Plan seem vague and without clear targets, particularly in the Service Development and Screening section. He noted that while there is a target around an LGBTQ+ staff forum, there are plans in Trust to develop a forum for ethnic minorities. He added that there is a section about equality monitoring and noted that although PHA is developing policies, the number of equality screenings and EQIAs carried out on those seems to be out of sync. He said that while he is content with the Plan, there is a need to be able demonstrate progress towards completing it.

123/23.3 Mr Wilson said that he agreed with Mr Clayton's comments and that there is a need to further embed equality in PHA's work and to that end, a Steering Group is being established to look at equality and disability with representatives from all directorates. He added that PHA is keen to address this issue and going forward this new Group could link with the PPR Committee. He said that he would be happy to look at the timelines again and that he could report back to the Board once the Steering Group has been established.

123/23.4 The Chair said that equality should be part of the work of the Strategic Planning Teams and Mr Wilson agreed that it will form part of their agenda.

123/23.5 The Board **APPROVED** the Equality and Disability Actin Plans.

**124/23 Item 18 – Any Other Business**

124/23.1 There was no other business.

**125/23 Item 19 – Details of Next Meeting**

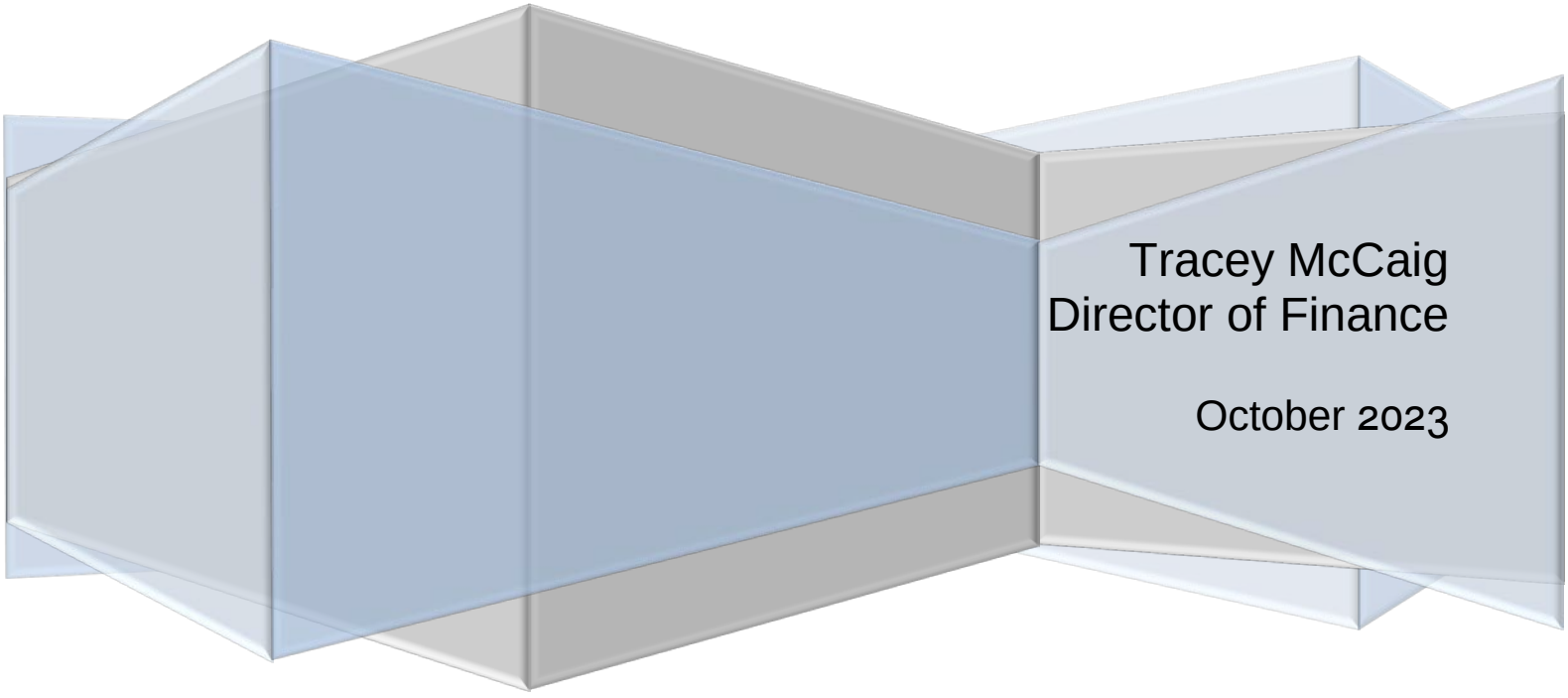
*Thursday 16 November 2023 at 1.30pm*

*Fifth Floor Meeting Room, 12/22 Linenhall Street, Belfast*

Signed by Chair:

Date:

# Finance Report
## September 2023



Tracey McCaig
Director of Finance

October 2023

## Section A: Introduction/Background

1. The PHA Financial Plan for 2023/24 has set out the funds notified as available, risks and uncertainties for the financial year and summarised the opening budgets against the high level reporting areas. It also outlined how the PHA would manage the overall funding available, in the context of cash releasing savings targets applied to the organisation. It received formal approval by the PHA Board in the June 2023 meeting.

2. The Financial Plan detailed the quantum of cash releasing savings targets (£5.3m, plus an additional £3.2m in respect of the area of Research and Development), the plans in place in year to address the target applied and the resultant opening forecast deficit of £0.65m. A focus on reducing and closing this gap is continuing as plans are required to meet the target both in-year and recurrently.

3. This executive summary report reflects the draft year-end position as at the end of September 2023 (month 6). Supplementary detail is provided in Annex A.

## Section B: Update – Revenue position

4. The Financial Plan indicated an opening position for the Agency of a £650k deficit for the year. This is summarised in Table 1.

**Table 1: Opening financial position 2023/24**

| | R&D £m | Other £m | Total £m |
|---|---|---|---|
| Savings targets applied | 3.20[1] | 5.30 | 8.50 |
| Actions (2023/24): | | | |
| R&D budget reduced pending DoH decision on expenditure (UK wider NIHR)[1] | 3.20[1] | | 3.20 |
| Programme: budget / expenditure reductions | | 3.60 | 3.60 |
| Management & Administration: anticipated net slippage | | 1.10 | 1.10 |
| **Subtotal deficit** | **-** | **0.60** | **0.60** |
| HSCQI budget provision (unfunded pressure) | | 0.05 | 0.05 |
| **Opening deficit position** | **-** | **0.65** | **0.65** |

*[1] Assumes funding in respect of R&D will be provided in line with DoH decision.*

5. The PHA has reported a deficit at September 2023 of £0.1m (August 2023, surplus of £0.3m) against the year to date budget position for 2023/24. The forecast year-end position is reported as breakeven (August 2023 forecast, breakeven).

6. The month 6 position is summarised in Table 2 below.

**Table 2: PHA Summary Financial Position – September 2023**

| | Annual Budget | YTD Budget | YTD Expenditure | YTD Variance | Projected year end surplus / (deficit) |
|---|---|---|---|---|---|
| | £'000 | £'000 | £'000 | £'000 | £'000 |
| Health Improvement | 12,792 | 6,396 | 6,396 | 0 | |
| Health Protection | 9,627 | 4,814 | 4,814 | 0 | |
| Service Development & Screening | 14,672 | 7,336 | 7,336 | 0 | |
| Nursing & AHP | 7,983 | 3,991 | 3,991 | 0 | |
| Centre for Connected Health | 0 | 0 | 0 | 0 | |
| Quality Improvement | 24 | 12 | 12 | 0 | |
| Other | 0 | 0 | 0 | 0 | |
| **Programme expenditure - Trusts** | **45,098** | **22,549** | **22,549** | **0** | **0** |
| Health Improvement | 29,300 | 11,279 | 11,571 | (292) | |
| Health Protection | 17,075 | 9,724 | 10,028 | (304) | |
| Service Development & Screening | 3,148 | 1,013 | 1,147 | (134) | |
| Research & Development | 52 | 0 | 0 | 0 | |
| Campaigns | 867 | 146 | 214 | (68) | |
| Nursing & AHP | 464 | 124 | 130 | (6) | |
| Quality Improvement | 243 | 18 | 19 | (1) | |
| Other | (476) | (213) | 19 | (232) | |
| **Programme expenditure - PHA** | **50,673** | **22,091** | **23,129** | **(1,038)** | **(2,029)** |
| **Subtotal Programme expenditure** | **95,771** | **44,640** | **45,678** | **(1,038)** | **(2,029)** |
| Public Health | 16,637 | 8,334 | 7,753 | 582 | |
| Nursing & AHP | 5,089 | 2,555 | 2,318 | 237 | |
| Operations | 5,367 | 2,682 | 2,606 | 77 | |
| Quality Improvement | 717 | 329 | 330 | (2) | |
| PHA Board | 456 | 191 | 166 | 25 | |
| Centre for Connected Health | 452 | 233 | 192 | 41 | |
| SBNI | 840 | 418 | 364 | 54 | |
| **Subtotal Management & Admin** | **29,557** | **14,742** | **13,729** | **1,013** | **2,029** |
| Trusts | 272 | 109 | 109 | 0 | |
| PHA Direct | 0 | (0) | (0) | 0 | |
| **Subtotal Transformation** | **272** | **109** | **109** | **0** | **0** |
| Trusts | 147 | 0 | 0 | 0 | |
| PHA Direct | 3,444 | 858 | 924 | (67) | |
| **Other ringfenced** | **3,591** | **858** | **924** | **(67)** | **0** |
| **TOTAL** | **129,191** | **60,348** | **60,441** | **(92)** | **0** |

*Note: Table may be subject to minor roundings*

7. In respect of the reported position:

- **Programme – Trusts**: A total of £44.1m has been allocated to Trusts at this point, with full spend against budget shown.

- **Programme – PHA**: The remaining annual programme budget is currently £49.8m.

- A cumulative overspend of £1.0m is shown to date (month 5, £0.7m) against the Programme budgets listed. This reflects some areas of spend ahead of current budget.
- In line with the Financial Plan, the anticipated overspend for the year is c£2.0m with the overspend being met in 2023/24 by a forecast underspend in Administration budgets. A mid-year review of the financial plan has completed which reported that £4.1m of recurrent budget reductions have been identified in year. Work is ongoing to fully identify the remaining savings measures to meet the full financial target applied to PHA in 2023/24 and recurrently, pending the out-workings of refreshed Directorate structures and any resultant impacts on baselines.
- Savings plans will continue to be closely monitored throughout the year and will be regularly reported to the AMT and PPR Committee.

- **Management & Administration**: Annual budget of £29.5m.
  - An underspend of £1.0m is reported to date (month 5, £1.0m), reflecting underspends in Public Health, Nursing & AHPs and Operations. The primary surplus to date relates to the area of Public Health where staff costs have reduced due to role vacancies. Expenditure against funded budgets are reviewed with Directorate budget holders to understand any ongoing trends and incorporate these into the year-end forecast position.
  - The forecast full year underspend has been updated to £2.0m (month 5, £2.4m). The level of anticipated underspend has decreased as initial forecasts were updated following a mid-year review and these will be subject to further refinement based on ongoing updates from Directorate budget managers and the review of assumptions made in the Financial plan in respect of anticipated cost pressures. Information has been received on the reduction of senior medical posts, however some assumptions have been made regarding the timing of the replacement or recruitment of these posts, which may have to be updated to increase expenditure forecasts if necessary.

- The anticipated underspend will offset, in-year, cash releasing savings applied fully to Programme budgets. The favourable movement has therefore enabled a reduction in the Agency's forecast deficit to report breakeven.

- **Ringfenced**: There is annual budget of c£3.9m in ringfenced budgets, the largest element of which relates to a Covid funding allocation for the Vaccine Management System (£2.7m), along with other funding allocations such as Safe Staffing (£0.3m) and Suicide Prevention (£0.3m) and smaller allocations for NI Protocol and for SBNI. A breakeven position is assumed against these budgets for the year, however they will be closely monitored for any risk to breakeven throughout the year.

8. As noted above, the projected year end position is a reduction in the overall deficit to breakeven (month 5, breakeven) and work will continue to identify measures to maintain this breakeven position.

**Section C: Risks**

9. The following significant assumptions, risks or uncertainties facing the organisation were outlined in the Financial Plan.

10. **Recurrent impact of savings made non-recurrently in-year**: The opening allocation letter has indicated that, whilst 2023/24 savings measures may be non-recurrent in nature, the funding reductions are recurrent and therefore PHA is expected to work to ensure savings are made recurrently going forward into 2024/25 where necessary. While PHA has identified a significant element of the £5.3m savings target applied, there remain challenges in delivering the full requirement recurrently. PHA colleagues have identified savings / budget reductions for £4.1m recurrently in-year following a mid-year review and are continuing to work on developing savings proposals to address the remaining gap pending costing of refreshed Directorate structures and any resulting impacts on baseline. Savings targets will continue to be monitored throughout the year with the identification of further recurrent savings plans finalised for 2024/25.

11. **R&D revenue retraction:** A further £3.2m funding retraction was initially applied in respect of the revenue Research & Development (R&D) budget, which eliminated this budget entirely. The Interim Chair wrote to the Permanent Secretary outlining the impacts for NI should the PHA not have funding to participate in the National Institute for Health and Care Research scheme and a decision has since been taken to allocate the £3.2m funding to PHA.

12. **EY Reshape & Refresh review and Management and Administration budgets**: The PHA is currently undergoing a significant review of its structures and processes, and the final report from EY will not be available until later in the year. There is a risk in implementing the outcomes of this review in a savings context, and careful management will be required at all stages of this process. In addition, there have been a number of material vacancies which are generating slippage and for which Directors are reviewing options for the remainder of the year.

13. **SEUPB / CHITIN income**: PHA receives income from EU partner organisations for the CHITIN R&D project. Claims are made on a quarterly basis, however PHA have not been receiving payments on a regular basis. At 31 March 2023, the value of funding due was c£4.3m however, PHA had an equal and opposite creditor listed for monies due to other organisations. Since year end a total of now c£2.1m has been received. R&D staff are continuing to work closely with colleagues in partner organisations and the relevant funding body to ensure the expected full reimbursement of all claims.

14. **Demand led services:** There are a number of demand led budgetary areas which are more difficult to predict funding requirements for, presenting challenges for the financial management of the Agency's budget. For example, smoking cessation / Nicotine Replacement Therapy (NRT) and Vaccines. The financial position of these budgets are being carefully tracked.

15. **Annual Leave:** PHA staff are still carrying a significant amount of annual leave, due to the demands of responding to the Covid-19 pandemic over the last two years. This balance of leave is being managed to a more normal level, and the assumption

that this is expected to be at pre-pandemic levels by the end of 2023/24 has been included in financial planning and will be kept under close review.

16. **Funding not yet allocated**: At the start of the financial year there are a number of areas where funding is anticipated but has not yet been released to the PHA. These include Pay awards for the 2023/24 financial year. No expenditure will be progressed for any pay award payments to staff until such pay awards are approved by DoH and funding identified and secured.

17. Due to the complex nature of Health & Social Care, there will undoubtedly be further challenges with financial impacts which will be presented going forward into the future. PHA will continue to monitor and manage these with DoH and Trust colleagues on an ongoing basis.

**Section D: Update - Capital position**

18. The PHA has a capital allocation (CRL) of £10.5m. This all relates to projects managed through the Research & Development (R&D) team. The overall summary position, as at September 2023, is reflected in Table 3, being a forecast breakeven position on capital funding.

19. R&D expenditure is managed through the R&D Division within PHA, and funds essential infrastructure for research such as information databanks, tissue banks, clinical research facilities, clinical trials units and research networks. The element relating to 'Trusts' is allocated throughout the financial year, and the allocation for 'Other Bodies' is used predominantly within universities – both allocations fund agreed projects that enable and support clinical and academic researchers.

20. CHITIN (Cross-border Healthcare Intervention Trials in Ireland Network) is a unique cross-border partnership between the Public Health Agency in Northern Ireland and the Health Research Board in the Republic of Ireland, to develop infrastructure and deliver Healthcare Intervention Trials (HITs). The CHITIN project is funded from the EU's INTERREG VA programme, and the funding for each financial year from the Special EU Programmes Body (SEUPB) matches expenditure claims, ensuring a

breakeven position. Further information on delays experienced in the reimbursement of costs is provided in Section C, above.

**Table 3: PHA Summary capital position – September 2023**

| Capital Summary | Total CRL<br>£'000 | Year to date spend<br>£'000 | Full year forecast<br>£'000 | Forecast Surplus / (Deficit)<br>£'000 |
|---|---|---|---|---|
| **HSC R&D:** | | | | |
| R&D - Other Bodies | 2,559 | 1,062 | 2,559 | 0 |
| R&D - Trusts | 6,224 | 0 | 6,224 | 0 |
| R&D - Capital Receipts | (1,074) | 0 | (1,074) | 0 |
| R&D - Other | 950 | 0 | 950 | 0 |
| **Subtotal HSC R&D** | **8,659** | **1,062** | **8,659** | **0** |
| **CHITIN Project:** | | | | |
| CHITIN - Other Bodies | 1,178 | 0 | 1,178 | 0 |
| CHITIN - Trusts | 0 | 0 | 0 | 0 |
| CHITIN - Capital Receipts | (1,178) | 0 | (1,178) | 0 |
| **Subtotal CHITIN** | **0** | **0** | **0** | **0** |
| **Other:** | | | | |
| Congenital Heart Disease Network | 683 | 0 | 683 | 0 |
| iReach Project | 405 | 0 | 405 | 0 |
| R&D - NICOLA | 731 | 0 | 731 | 0 |
| **Subtotal Other** | **1,819** | **0** | **1,819** | **0** |

21. PHA has also received three other smaller capital allocations for the Congenital Heart Disease (CHD) Network (£0.7m), iReach Project (£0.4m) and NICOLA (£0.7m), all of which are managed through the PHA R&D team.

22. The capital position will continue to be kept under close review throughout the financial year.

## Recommendation

23. The PHA Board are asked to note the PHA financial update as at September 2023.

# Public Health Agency

## Annex 1 - Finance Report

## 2023/24

Month 6 - September 2023

# PHA Financial Report - Executive Summary

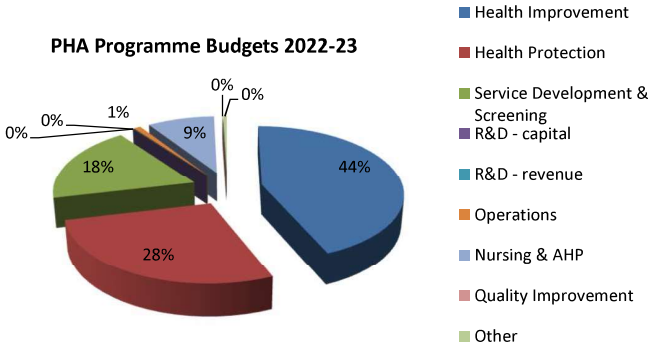
**Year to Date Financial Position (page 2)**

At the end of month 6, PHA is reporting an overspend of £0.1m against its profiled budget. This position is a result of PHA Direct programme budgets projected overspend for the financial year offset by underspends within Adminstration budgets (page 6).

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

**Programme Budgets (pages 3&4)**

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

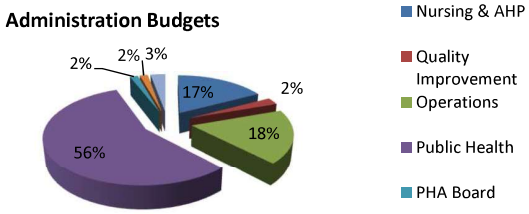



**Administration Budgets (page 5)**

The breakdown of the Administration budget by Directorate is shown in the chart below. Over half of the budget relates to the Directorate of Public Health.

A number of vacant posts remain within PHA, and this is creating slippage on the Administration budget which is offset by expenditure on the PHA Reshape and Refresh programme and other pressures noted in the Financial Plan.

Management will review the need for the recruitment of vacant posts to ensure business needs continue to be met.




**Full Year Forecast Position & Risks (page 2)**

PHA is currently forecasting a breakeven position for the full year.

This reflects the continued requirement to fully identify savings measures to meet the full cash releasing savings funding reductions applied to PHA in 2023/24.

## Public Health Agency
### 2023/24 Summary Position - September 2023

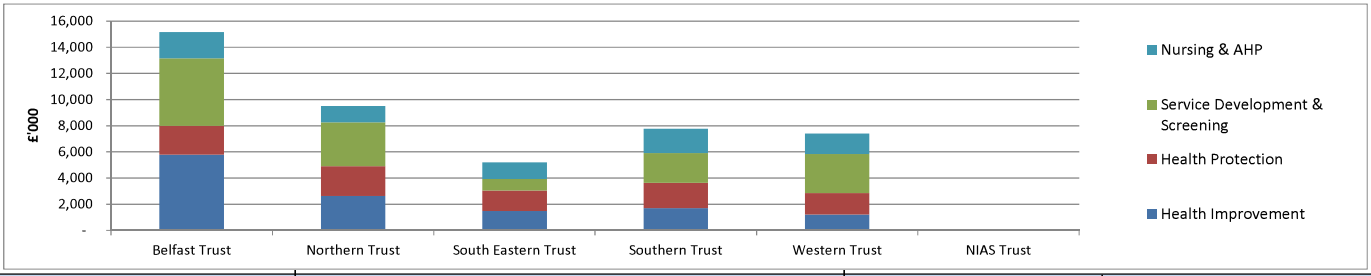
| | Annual Budget | | | | | Year to Date | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Programme | | Ringfenced | Mgt & | Total | Programme | | Ringfenced | Mgt & | Total |
| | Trust | PHA Direct | Trust & Direct | Admin | | Trust | PHA Direct | Trust & Direct | Admin | |
| | £'000 | £'000 | £'000 | £'000 | £'000 | £'000 | £'000 | £'000 | £'000 | £'000 |
| **Available Resources** | | | | | | | | | | |
| Departmental Revenue Allocation | 45,098 | 50,645 | 3,863 | 28,903 | **128,510** | 22,549 | 22,091 | 967 | 14,742 | **60,348** |
| Assumed Retraction | - | - | - | - | **-** | - | - | - | - | **-** |
| Revenue Income from Other Sources | - | 28 | - | 654 | **682** | - | - | - | - | **-** |
| **Total Available Resources** | 45,098 | 50,673 | 3,863 | 29,557 | **129,191** | 22,549 | 22,091 | 967 | 14,742 | **60,348** |
| **Expenditure** | | | | | | | | | | |
| Trusts | 45,098 | - | 359 | - | **45,457** | 22,549 | - | 183 | - | **22,732** |
| PHA Direct Programme * | - | 52,702 | 3,504 | - | **56,206** | - | 23,129 | 851 | - | **23,980** |
| PHA Administration | - | - | - | 27,528 | **27,528** | - | - | | 13,729 | **13,729** |
| **Total Proposed Budgets** | 45,098 | 52,702 | 3,863 | 27,528 | **129,191** | 22,549 | 23,129 | 1,034 | 13,729 | **60,441** |
| **Surplus/(Deficit) - Revenue** | - | (2,029) | - | 2,029 | **-** | - | (1,038) | (67) | 1,013 | (92) |
| ***Cumulative variance (%)*** | | | | | | ***0.00%*** | ***-4.70%*** | ***-6.92%*** | ***6.87%*** | ***-0.15%*** |

*Please note that a number of minor rounding's may appear throughout this report.*
** PHA Direct Programme may include amounts which transfer to Trusts later in the year*

The year to date financial position for the PHA shows an overspend £0.1m, which is a result of PHA Direct Programme expenditure being in an overspend position and being offset by an underspend within the area of Management & Admin.

The PHA is forecasting a breakeven position at year end, which includes the full absorption of the projected Management & Admin underspend.

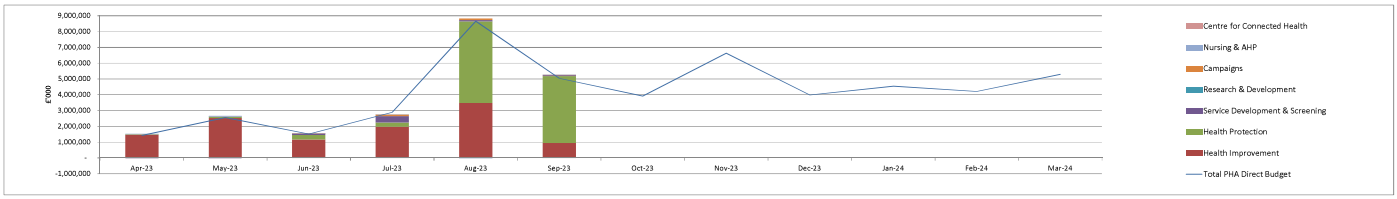
## Programme Expenditure with Trusts




| Current Trust RRLs | Belfast Trust | Northern Trust | South Eastern Trust | Southern Trust | Western Trust | NIAS Trust | Total Planned Expenditure | YTD Budget | YTD Expenditure | YTD Surplus / (Deficit) |
|---|---|---|---|---|---|---|---|---|---|---|
| | £'000 | £'000 | £'000 | £'000 | £'000 | £'000 | £'000 | £'000 | £'000 | £'000 |
| Health Improvement | 5,783 | 2,619 | 1,474 | 1,700 | 1,216 | - | **12,792** | 6,396 | 6,396 | - |
| Health Protection | 2,203 | 2,282 | 1,560 | 1,941 | 1,641 | - | **9,627** | 4,814 | 4,814 | - |
| Service Development & Screening | 5,164 | 3,356 | 889 | 2,278 | 2,985 | - | **14,672** | 7,336 | 7,336 | - |
| Nursing & AHP | 2,016 | 1,251 | 1,277 | 1,855 | 1,555 | 29 | **7,983** | 3,991 | 3,991 | - |
| Quality Improvement | 24 | - | - | - | - | - | **24** | 12 | 12 | - |
| Other | | | | | | | | - | | |
| **Total current RRLs** | **15,190** | **9,508** | **5,201** | **7,773** | **7,398** | **29** | **45,098** | **22,549** | **22,549** | **-** |
| ***Cumulative variance (%)*** | | | | | | | | | | ***0.00%*** |

The above table shows the current Trust allocations split by budget area. A breakeven position is shown for the year to date as funds have been issued to Trusts in July 2023.

## PHA Direct Programme Expenditure




| | Apr-23 | May-23 | Jun-23 | Jul-23 | Aug-23 | Sep-23 | Oct-23 | Nov-23 | Dec-23 | Jan-24 | Feb-24 | Mar-24 | Total | YTD Budget | YTD Spend | Variance | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | £'000 | £'000 | £'000 | £'000 | £'000 | £'000 | £'000 | £'000 | £'000 | £'000 | £'000 | £'000 | £'000 | £'000 | £'000 | £'000 | |
| **Profiled Budget** | | | | | | | | | | | | | | | | | |
| Health Improvement | 1,318 | 2,228 | 1,356 | 1,920 | 3,482 | 975 | 2,671 | 4,215 | 1,770 | 3,460 | 3,327 | 2,578 | **29,300** | 11,279 | 11,571 | (292) | *-2.6%* |
| Health Protection | 42 | 204 | 184 | 122 | 5,143 | 4,030 | 1,132 | 1,668 | 1,521 | 632 | 234 | 2,164 | **17,075** | 9,724 | 10,028 | (304) | *-3.1%* |
| Service Development & Screen | 29 | 73 | 219 | 493 | 93 | 105 | 21 | 609 | 517 | 269 | 436 | 283 | **3,148** | 1,013 | 1,147 | (134) | *-13.3%* |
| Research & Development | - | - | - | - | - | - | - | - | - | - | - | 52 | **52** | - | - | - | *0.0%* |
| Campaigns | 1 | 1 | 9 | 90 | 18 | 28 | 60 | 100 | 145 | 153 | 148 | 116 | **867** | 146 | 214 | (68) | *-47.1%* |
| Nursing & AHP | 32 | 53 | 33 | 21 | 26 | 26 | 35 | 37 | 30 | 24 | 70 | 143 | **464** | 124 | 130 | (6) | *-4.8%* |
| Quality Improvement | - | - | - | - | 18 | - | - | - | - | - | - | 225 | **243** | 18 | 19 | 1 | *-6.3%* |
| Other | - | - | (212) | 245 | 122 | 123 | - | - | 0 | 0 | 0 | (263) | **(476)** | (213) | 19 | (232) | *100.0%* |
| **Total PHA Direct Budget** | **1,421** | **2,558** | **1,522** | **2,890** | **8,658** | **5,041** | **3,920** | **6,628** | **3,982** | **4,539** | **4,215** | **5,298** | **50,673** | **22,091** | **23,129** | **(1,038)** | |
| ***Cumulative variance (%)*** | | | | | | | | | | | | | | | | ***-4.70%*** | |
| **Actual Expenditure** | **1,608** | **2,765** | **1,643** | **2,898** | **8,801** | **5,414** | **-** | **-** | **-** | **-** | **-** | **-** | **23,129** | | | | |
| **Variance** | **(187)** | **(207)** | **(121)** | **(7)** | **(143)** | **(373)** | | | | | | | **(1,038)** | | | | |

The year-to-date position shows an overspend of approximately £1.0m against profile. A year end overspend of c£2.0m is anticipated with the overspend being met in 2023/24 by a forecast underspend in Administration budgets. Whilst work has completed to identify £3.6m of budget reductions in-year, work is ongoing to fully identify the remaining savings measures to meet the full financial target applied to PHA in 2023/24 and recurrently.

Sept 23

# Public Health Agency
## 2023/24 Ringfenced Position

| | Annual Budget | | | | Year to Date | | | |
|---|---|---|---|---|---|---|---|---|
| | Covid | NDNA | Other ringfenced | Total | Covid | NDNA | Other ringfenced | Total |
| | £'000 | £'000 | £'000 | £'000 | £'000 | £'000 | £'000 | £'000 |
| **Available Resources** | | | | | | | | |
| DoH Allocation | 2,854 | 272 | 736 | **3,863** | 529 | 109 | 328 | **967** |
| Assumed Allocation/(Retraction) | - | - | - | - | - | - | - | - |
| Total | 2,854 | 272 | 736 | **3,863** | 529 | 109 | 328 | **967** |
| **Expenditure** | | | | | | | | |
| Trusts | - | 212 | 147 | **359** | - | 109 | 74 | **183** |
| PHA Direct | 2,854 | 60 | 589 | **3,504** | 584 | - 0 | 267 | **851** |
| Total | 2,854 | 272 | 736 | **3,863** | 584 | 109 | 340 | **1,034** |
| | | | | | | | | |
| **Surplus/(Deficit)** | - | - | - | - | (55) | - | (12) | (67) |

PHA has now received COVID allocation of £2.9m (£2.7m for Vaccine Management System & £0.2m for Vaccinators and Covid Vaccine Storage) for financial year 2023/24.

Transformation funding has been received for a Suicide Prevention project totalling £0.3m. This project is being monitored and reported on separately to DoH, and a breakeven position is anticipated for the year.

Other ringfenced areas include Farm Families (£0.2m), Safe Staffing (£0.3m), NI Protocol (£0.1m) and funding for SBNI relating to EITP (£0.1m). A breakeven position for each of these areas is expected for the year.

## PHA Administration
**2023/24 Directorate Budgets**

| | Nursing & AHP £'000 | Quality Improvement £'000 | Operations £'000 | Public Health £'000 | PHA Board £'000 | Centre for Connected Health £'000 | SBNI £'000 | Total £'000 |
|---|---|---|---|---|---|---|---|---|
| **Annual Budget** | | | | | | | | |
| Salaries | 4,905 | 705 | 4,242 | 16,395 | 343 | 405 | 589 | **27,584** |
| Goods & Services | 184 | 12 | 1,125 | 242 | 113 | 47 | 251 | **1,973** |
| **Total Budget** | **5,089** | **717** | **5,367** | **16,637** | **456** | **452** | **840** | **29,557** |
| **Budget profiled to date** | | | | | | | | |
| Salaries | 2,459 | 323 | 2,120 | 8,214 | 172 | 212 | 295 | **13,794** |
| Goods & Services | 95 | 6 | 562 | 120 | 19 | 21 | 123 | **947** |
| **Total** | **2,555** | **329** | **2,682** | **8,334** | **191** | **233** | **418** | **14,742** |
| **Actual expenditure to date** | | | | | | | | |
| Salaries | 2,226 | 328 | 1,597 | 7,309 | 154 | 180 | 290 | **12,085** |
| Goods & Services | 92 | 2 | 1,009 | 444 | 12 | 12 | 74 | **1,645** |
| **Total** | **2,318** | **330** | **2,606** | **7,753** | **166** | **192** | **364** | **13,729** |
| **Surplus/(Deficit) to date** | | | | | | | | |
| Salaries | 233 | (6) | 523 | 905 | 17 | 32 | 5 | **1,710** |
| Goods & Services | 4 | 4 | (447) | (324) | 7 | 9 | 49 | **(697)** |
| **Surplus/(Deficit)** | **237** | **(2)** | **77** | **582** | **25** | **41** | **54** | **1,013** |
| ***Cumulative variance (%)*** | *9.26%* | *-0.55%* | *2.86%* | *6.98%* | *12.88%* | *17.50%* | *12.89%* | ***6.87%*** |

PHA's administration budget is showing a year-to-date surplus of £1.0m, which is being generated by a number of vacancies, particularly within Public Health Directorate. Senior management continue to monitor the position closely in the context of the PHA's obligation to achieve a breakeven position for the financial year. The full year surplus is currently forecast to be c£2.0m, which is contributing towards PHAs forecast deficit in Programme expenditure in the financial year'

# PHA Prompt Payment

## Prompt Payment Statistics

| | Sept 23<br>Value | Sept 23<br>Volume | Cumulative position as at Sept 23<br>Value | Cumulative position as at Sept 23<br>Volume |
|---|---|---|---|---|
| Total bills paid (relating to Prompt Payment target) | £4,712,506 | 243 | £26,857,637 | 2,590 |
| Total bills paid on time (within 30 days or under other agreed terms) | £4,705,458 | 235 | £26,273,512 | 2,475 |
| **Percentage of bills paid on time** | **99.9%** | **96.7%** | **97.8%** | **95.6%** |

Prompt Payment performance for September shows that PHA achieved its prompt payment target on value and volume. The year to date position shows that on both value and volume, PHA is achieving its 30 day target of 95.0%. Prompt payment targets will continue to be monitored closely over the 2023/24 financial year.

The 10 day prompt payment performance remains very strong at 82.6% on volume for the year to date, which significantly exceeds the 10 day DoH target for 2023/24 of 70%.

HSC Public Health Agency

**item 10**

| | |
|---|---|
| **Title of Meeting** | PHA Board Meeting |
| **Date** | 16 November 2023 |
| **Title of paper** | Performance Management Report |
| **Reference** | PHA/02/11/23 |
| **Prepared by** | Stephen Murray / Rossa Keegan |
| **Lead Director** | Stephen Wilson |
| **Recommendation** | For **Approval** ☐ For **Noting** ☒ |

## 1 Purpose

The purpose of this paper is to provide the PHA Board with a report on progress against the objectives set out in the PHA Annual Business Plan 2023/24.

## 2 Background Information

PHA's Annual Business Plan was approved by the PHA Board in March 2023. Against this plan 37 actions were developed against 10 priorities for 2023/24.

## 3 Key Issues

The attached paper provides the progress report, including RAG status, on the actions set out in the PHA Annual Business Plan 2023/24 Part A as at 30 September 2023.

Of the 37 actions across 10 Key Priorities

- 1 action has been categorised as red (significantly behind target/will not be completed)
- 16 actions have been categorised as amber (will be completed, but with slight delay)
- 20 actions have been categorised as green (on target to be achieved/already completed).

For the Business Plan Part B, it was agreed that any actions rated Amber or Red would be reported on by exception to the Board.  As at 30 September 2023, 17 actions have been categorised as amber and 0 actions have been categorised as red – an exception report is included.

## 4 Next Steps

The next quarterly Performance Management Report update will be brought to the Board in February 2024.

# PERFORMANCE MANAGEMENT REPORT

## Monitoring of Targets Identified in

## The Annual Business Plan 2023 – 2024 Part A

As at 30 September 2023

This report provides an update on achievement of the actions identified in the PHA Annual Business Plan 2023-24 Part A.

The updates on progress toward achievement of the actions were provided by the Lead Officers responsible for each action.

There are a total of 37 actions across 10 Key Priorities in the Annual Business Plan. Each action has been given a RAG status as follows:

| | | | |
|---|---|---|---|
| | On target to be achieved or already completed | | Will be completed, but with slight delay |
| | Significantly behind target/will not be completed | | |

Of the 37 actions 16 are current rated with an Amber RAG status and 1 with a Red RAG status.

The progress summary for each of the actions is provided in the following pages.

| | Key Priorities | | | | | |
|---|---|---|---|---|---|---|
| | **Action from Business Plan:** | | **Progress** | **Achievability (RAG)** June | Sept | **Mitigating actions where performance is Amber / Red** |
| 1a | All children and young people have the best start in life | Vaccination<br><br>By December 2023, increase by 1% the uptake rates for pre-school immunisation (based on December 2022 position) | | | | Director of Public Health<br><br>Joanne McClean |

| COVER statistics | Q3 Oct-Dec 22 (%) | Q1 Jan-Mar 23 (%) | Difference (%) |
|---|---|---|---|
| 12 months | | | |
| DTaP/IPV/Hib/HepB | 92.5 | 92.4 | -0.1 |
| PCV | 94.6 | 94.6 | 0.0 |
| Rotavirus | 88.8 | 89.7 | +0.9 |
| MenB | 92.8 | 92.6 | -0.2 |
| **24 months** | | | |
| DTaP/IPV/Hib/HepB | 94.4 | 94.0 | -0.4 |
| MMR1 | 89.5 | 89.4 | -0.1 |
| PCV booster | 90.2 | 91.8 | +1.6 |
| Hib/Men C | 89.8 | 89.8 | 0.0 |
| Men B | 89.0 | 89.2 | +0.2 |
| **5 years** | | | |
| DTaP/IPV/Hib/HepB | 94.0 | 93.6 | -0.4 |
| DTaP/IPV/Hib/HepB (booster) | 87.9 | 86.9 | -1.0 |
| MMR1 | 93.9 | 93.5 | -0.4 |
| MMR2 | 87.5 | 86.4 | -1.1 |
| Hib/Men C booster | 93.3 | 92.9 | -0.4 |

Source: Cover of Vaccination Evaluated Rapidly (COVER) data (https://www.publichealth.hscni.net/directorate-public-health/health-protection/vaccination-coverage - accessed 06/10/2023

| | | Key Priorities | | | | |
|---|---|---|---|---|---|---|
| | **Action from Business Plan:** | | **Progress** | **Achievability (RAG)** June | Sept | **Mitigating actions where performance is Amber / Red** |
| 1b | | Family Support<br><br>Complete the re-tender of the regional Early Intervention Support Service for families by June 2023 and expand service to increase number of families supported from 630 to 800 by March 2024 (subject to additional funding from DoH being allocated, as planned) | Re-tender process complete; new contracted services scheduled to commence from 1st October 2023<br><br>Additional funding from DoH allocated and approved by AMT in August 2023; co-design process complete with providers re service enhancement/expansion and scheduled to commence from 1st October 2023. | | | Director of Public Health<br><br>Joanne McClean |
| 2a | All older Adults are entitled to live healthier and more fulfilling lives | Vaccination<br><br>Implement the 'Shingrix for All' vaccine programme with phased introduction from September 2023 | This programme is due to be implemented by 1st September 2023.<br><br>Preparation and planning underway and everything on schedule currently. There are some challenges which have been identified around reporting of Shingrix uptake but these are being addressed. | | | Director of Public Health<br><br>Joanne McClean |

| | Key Priorities | | | | | |
|---|---|---|---|---|---|---|
| | **Action from Business Plan:** | | **Progress** | **Achievability (RAG)** June | Sept | **Mitigating actions where performance is Amber / Red** |
| 2b | | Falls prevention<br><br>Implement the Regional Falls Pathway and Bundle for Care Homes in 10 % of care homes in each Trust area by March 2024 | On track<br><br>ECCF launched on 7 August 2023. Falls steering group meeting to plan implementation strategy including CEC training on products.<br><br>SEPT 23<br>Falls work continues to be implemented at a local level, however process delayed due to Falls resources launch being delayed from April 2023 to August 2023.<br><br>Enhancing Clinical Care Framework (ECCF) launched on 7 August 2023.<br><br>Falls steering group reconvened to plan implementation strategy. Sustainability, Spread and Scale Workplan shared.<br><br>PHA is progressing Care Home training module with CEC and has facilitated information sessions across the region. | | | Director of NMAHP<br>Heather Reid<br><br>Work to progress the implementation of resources continues with independent sector and Trust Care Home in reach teams. PHA Nursing/ AHP coordinating a regional approach to the implementation |

| | | Key Priorities | | | | |
|---|---|---|---|---|---|---|
| | **Action from Business Plan:** | | **Progress** | **Achievability (RAG)** June | Sept | **Mitigating actions where performance is Amber / Red** |
| 3a | All Individuals and communities are equipped and enabled to live long and healthy lives | Screening<br><br>Implement primary HPV testing into the cervical screening programme by March 2024 | Implementation of primary HPV – An implementation project structure has been established with the key organisations represented. A project team and board have been established and work is progressing across a number of workstreams. The PHA is leading the project with significant input from SPPG and the Pathology Network. While planning has progressed during 2022/23, it is anticipated that primary HPV testing will be introduced during 2023/24. | | | Director of Public Health<br><br>Joanne McClean |

| | | | | | | |
|---|---|---|---|---|---|---|
| 3b | | Alcohol and Drugs<br><br>Joint Draft Commissioning Framework for Alcohol and Drug services to be approved by PHA Board by May 2023 and procurement of phase 1 services completed by March 2024 | Substance Use Strategic Commissioning and Implementation Plan (The Plan) drafted. The Plan has been agreed by the SUS HSC Advisory Board, the SUS Programme Board and CMO.<br>The Plan has been approved at PHA AMT and SPPG SMT in June<br>The Plan was presented to PHA PPR Committee in early June and a number of issues were highlighted that required further clarification prior to the document being considered by PHA board.<br><br>Due to the delay in approving the document there will potentially be a short delay in completion of phase 1 of the procurement process.<br><br>Sept update:<br>The Plan was presented to PHA Board on 17 Aug and approved for public consultation. The consultation commenced 1 September and will run to 24 November. | | | Director of Public Health<br><br>Joanne McClean<br><br>The Plan will be presented to PHA PPR Committee on 3 Aug and full Board on 17 Aug. Once approved a 12 public consultation will take place from September 2023.<br><br>Internal resource has been agreed within health improvement with 3 staff transferring to the regional D&A team to support the planning of regional D&A procurement.<br><br>Sept update:<br>Two of the three intetnal staff resources have transferred to the regional D&A |

| | Key Priorities | | | | | |
|---|---|---|---|---|---|---|
| | **Action from Business Plan:** | | **Progress** | **Achievability (RAG)** June | Sept | **Mitigating actions where performance is Amber / Red** |
| | | | | | | team, with the third due to transfer on 1 Nov. the team are actively progressing with planing tasks in support of regional procurement, including the development of a regional PID and a position paper for Adult Step 2 and Workforce Development service areas. |

| | Key Priorities | | | | | |
|---|---|---|---|---|---|---|
| | **Action from Business Plan:** | | **Progress** | **Achievability (RAG)** June | Sept | **Mitigating actions where performance is Amber / Red** |
| 3c | | Mental Health / Suicide prevention<br><br>Draft PHA Mental Health, Emotional Wellbeing and Suicide Prevention commissioning framework developed by March 2024. | Initial work has been progressed to scope out the approach to developing the commissioning work taking into account several areas of work where PHA has already consulted on future priorities such as training and postvention services.<br><br>PID in development and due to be presented to Procurement Board in November 2023 | | | Director of Public Health<br><br>Joanne McClean |

| | Key Priorities | | | | | |
|---|---|---|---|---|---|---|
| | **Action from Business Plan:** | | **Progress** | **Achievability (RAG)** June | Sept | **Mitigating actions where performance is Amber / Red** |
| 3d | | Cardiovascular Disease prevention<br><br>Cardiovascular population health profile to be produced by March 2024 | Phase 1: The development of the NI population simulation module is advancing on schedule and progress aligns with projected milestones. The expectation is that by the Q2/ 2023, it will transition into the crucial validation, testing, and refinement stages to further enhance its efficacy and reliability.<br><br>Phase 2: The research component commences Q2/2023, a pivotal step that aims to furnish the model parameters necessary for seamless integration into the Population Simulation Model. This phase is expected to compete by the Q4/ 2024. Upon completion, the primary deliverable will be a sophisticated Cardiovascular Population predictive model. This advanced tool is designed to aid in intricate, multifaceted scenario planning and provide valuable metrics for measuring the success of interventions. | | | Director of Public Health<br><br>Joanne McClean |

| | | Key Priorities | | | | |
|---|---|---|---|---|---|---|
| | **Action from Business Plan:** | | **Progress** | **Achievability (RAG)** June | Sept | **Mitigating actions where performance is Amber / Red** |
| 3e | | Cancer Prevention<br><br>Mutli- disciplinary working group to be established by May 2023 to develop an action plan for addressing primary and secondary cancer prevention in line with the 2022 cancer strategy by March 2024 | Work to reorganise teams and establish multidisciplinary teams as the routine way of working is progressing well. While the team to implement this action is not in place it will be soon and on course to be completed on time. | | | Director of Public Health<br><br>Joanne McClean<br><br>While the team to implement this action is not in place it will be soon and on course to be completed on time. |
| 3f | | Smoking<br><br>Regional tobacco commissioning team to be established by June 2023 | Further to an internal process a regional tobacco commissioning team has been established. 1x B8a post & 2xBand 7 posts re-prioritised to focus on this Teams development in June 2023.<br><br>Team to be further expanded Sept - Dec 23 (+1 B7 &+ 1B6) | | | Director of Public Health<br><br>Joanne McClean<br><br>Team to be further expanded, internal HI Review process ongoing |
| 4a | All health and wellbeing services should be safe | Quality Improvement<br><br>HSCQI workplan agreed by the HSCQI Alliance by June 2023 | HSCQI workplan for 2023/24 is in draft. The workplan cannot currently be agreed as HSCQI have not been allocated a | | | Director of HSCQI<br><br>Aideen Keaney |

| | Key Priorities | | | | | |
|---|---|---|---|---|---|---|
| | **Action from Business Plan:** | | **Progress** | **Achievability (RAG)** June | Sept | **Mitigating actions where performance is Amber / Red** |
| | and high quality | | programme budget for 2023/24, as at end June 2023.<br><br>**September Update:**<br><br>HSCQI non recurrent programme funding for 2023/24 allocated by DoH in August 2023. HSCQI workplan has been agreed. | | | |
| 4b | | Infection/ prevention Control<br><br>Re-establish the HSCA/AMR improvement Board by May 2023 and agree an action plan by March 2024, for reducing anti-microbial use in line with regional targets set. | HCAI-AMR Improvement Board re-establishing Q3 2023 supported by Antimicrobial Resistance Programme Manager (started in post end of June 2023).<br><br>PHA HCAI-AMR team highly engaged with DoH and UKHSA in the development of the UK National Action Plan for AMR and on track to deliver by March 2024. | | | Director of Public Health<br><br>Joanne McClean |

| | | Key Priorities | | | | |
|---|---|---|---|---|---|---|
| | **Action from Business Plan:** | | **Progress** | **Achievability (RAG)** June | Sept | **Mitigating actions where performance is Amber / Red** |
| 4c | | Health Protection Response<br><br>All standard operating procedures for acute response to be reviewed and updated by March 2024. | Review of standard operating procedures has commenced. Progress delayed due to reduced Consultant capacity relating to long term sickness absence and resignations.<br><br>Permanent HP consultant posts have been advertised along with locum HP consultant posts. | | | Director of Public Health<br><br>Joanne McClean |
| 5a | Our organisation works effectively | Quarterly update reports on PHA Business Plan to be provided to PHA Board | First report brought to PHA Board Aug 23. Second report to be brought to PHA Board Nov 23. | | | Director of Operations<br><br>Stephen Wilson |

| | Key Priorities | | | | | |
|---|---|---|---|---|---|---|
| | **Action from Business Plan:** | | **Progress** | **Achievability (RAG)** June | Sept | **Mitigating actions where performance is Amber / Red** |
| 5b | Implement the agreed action plan for 2023/24 that sets out the key programmes of work that will be progressed by PHA officers in meeting Ministerial, DOH and PHA Corporate priorities. | 90% of actions in the 23/24 Action Plan to be RAG rated as Green and exception reports to be provided to PHA board to address those rated Red/Amber. | As at September 30th 2023 over 70% of the items on the Action Plan are rated as Green. | | | Director of Operations<br><br>Stephen Wilson<br><br>Directors working to bring at-risk actions back on track. |
| 6a | Continue to shape and influence the design and implementation of the proposed new Integrated Care system and ensure the | PHA to be appropriately represented on the 5 pilot Area Integrated Partnership Boards to be established in each Trust area | PHA has senior public health representation on the Southern Pilot AIPB.<br><br>Pilot AIPBs in other Trust areas have yet to formally commence | | | Director of Operations<br><br>Stephen Wilson<br><br>Director of Public Health<br><br>Joanne McClean |

| | | Key Priorities | | | | |
|---|---|---|---|---|---|---|
| | **Action from Business Plan:** | | **Progress** | **Achievability (RAG)** June | Sept | **Mitigating actions where performance is Amber / Red** |
| 6b | role of the Public Health Agency is embedded appropriately into the new planning and commissioning model being established. | Population health profile information to be produced by June 2023 to help inform the test model for the Southern AIPB. | An initial population health profile was presented to the AIPB in June 2023 setting out key issues impacting on the health and wellbeing of the local population. Further work is now being taken forward to help AIPB to identify core issues to be focus of AIPB actions going forward<br><br>PHA has senior public health representation on the Southern Pilot AIPB. | | | Director of Operations<br><br>Stephen Wilson<br><br>Director of Public Health<br><br>Joanne McClean |

| | Key Priorities | | | | | |
|---|---|---|---|---|---|---|
| | **Action from Business Plan:** | | **Progress** | **Achievability (RAG)** June | Sept | **Mitigating actions where performance is Amber / Red** |
| 6c | | Ensure PHA priorities relating to health protection, prevention and early intervention are reflected in draft AIPB plans | Pilot AIPBs in other Trust areas have yet to formally commence | | | Director of Operations<br><br>Stephen Wilson<br><br>Director of Public Health<br><br>Joanne McClean<br><br>PHA reps will continue to work with AIPB members and highlight key public health issues to be considered in setting the planning priorities. |

| | Key Priorities | | | | | |
|---|---|---|---|---|---|---|
| | **Action from Business Plan:** | | **Progress** | **Achievability (RAG)** June | Sept | **Mitigating actions where performance is Amber / Red** |
| 7a | Our Organisation Works Effectively<br><br>Work with DoH to implement phase 2 of the | Phase 2A of the Reshape and Refresh programme (Detailed implementation plan) completed by end of May 2023 | Phase 2a of the Reshape & Refresh programme was completed at end May 2023.<br>Key deliverables such as V1 Operating Model, Change & Transition status report and Functions Placement Roundtable outputs were signed off at Programme Board in July 23. | | | Chief Executive<br><br>Aidan Dawson |

| | Key Priorities | | | | | |
|---|---|---|---|---|---|---|
| | **Action from Business Plan:** | | **Progress** | **Achievability (RAG)** June | Sept | **Mitigating actions where performance is Amber / Red** |
| 7b | Reshape and Refresh of the PHA and agree a new operating model that will deliver a re-focused professional, high quality public health service for the population of NI | Implementation of phase 2B (Continue to Transform) to commence by end of May 23 and conclude by November 23. | Phase 2B is currently underway and will be delivered through 4 workstreams including:<br>- People & Organisation<br>- Change & Comms<br>- Transformation Management Office<br>- Data and Digital.<br><br>Phase 2B commenced in June 2023.The Data and digital aspect of the work began in October 2023. Additional funding has been secured to extend EY resource for 2 months to allow for further work on the operating model, org chart and detailed roadmap for implementation to be finalised. It is anticipated that Phase 2B will be completed in December 2023 with view to moving to Implementation of Operating Model in Jan 2024. | | | Chief Executive<br><br>Aidan Dawson<br><br>The timescales associated with phase 2b have been extended to allow a period of time over the summer months for senior management reflect on the operating model core components. A revised project plan with clearly defined timescales has been developed to support the smooth implementation. |

| | Key Priorities | | | | | |
|---|---|---|---|---|---|---|
| | **Action from Business Plan:** | | **Progress** | **Achievability (RAG)** June | Sept | **Mitigating actions where performance is Amber / Red** |
| 7c | | Monthly newsletters published to provide staff with regular updates of progress and key milestones. | An update on Reshape & Refresh has been featured in a variety of settings including CX virtual engagement session, weekly news bulletin..<br><br>A weekly change and comms group continue to meet and identify ways and methods to best communicate key messages. A variety of methods have been used during phase 2a & 2b including:<br>- large staff engagement sessions<br>- team sessions,<br>- newsletter,<br>- video series,<br>- updates on intranet site,<br>- integration with Organisation Development & Engagement Forum (ODEF).<br><br>A new virtual engagement tool is under development which will allow an opportunity for all staff to input into the programme. This will be launched in November 2023. | | | Chief Executive<br><br>Aidan Dawson. |

| | Key Priorities | | | | | |
|---|---|---|---|---|---|---|
| | **Action from Business Plan:** | | **Progress** | **Achievability (RAG)** June | Sept | **Mitigating actions where performance is Amber / Red** |
| 8a | Our Organisation Works Effectively<br><br>PHA will place additional focus on staff welfare and wellbeing and agree and implement a range of appropriate actions | 95% of Individual appraisals and personal development plans agreed by end of July 2023 which clearly demonstrate the staff member's role in helping to contribute to the Agency's ABP key priorities. (subject to sickness absence, maternity and those seconded out of the PHA) | At 30th June 2023 compliance stood at 63.24%.<br><br>At 31st July 2023 compliance stands at 82.84%<br><br>At 30th September 2023 compliance stands at 87.88%. | | | Director of Operations<br><br>Stephen Wilson<br><br>Director of HR<br><br>Robin Arbuthnot<br><br>Regular reports go to Directors on the outstanding appraisals with plans in place to have such completed. |

| | Key Priorities | | | | | |
|---|---|---|---|---|---|---|
| | **Action from Business Plan:** | | **Progress** | **Achievability (RAG)** June | Sept | **Mitigating actions where performance is Amber / Red** |
| 8b | | A recruitment strategy to be agreed by 30th June 2023 which will include the defined reasons for use of temporary contracts and exit strategy arrangements. | This is delayed although building blocks are all in place including key work on:<br>• a new internal Talent Mobility process implemented as a 'proof of concept' model to replace former EOI process.<br>• Full review of all temporary positions is completed (see 8c) which will be in keeping with any future parameters determined.<br>• An exit strategy is in place for all temporary posts which are being executed.<br>• A new process for onward management of temporary positions aligned to scrutiny process is in place.<br>• The 'recruitment strategy' has now been determined to be incorporated into the People Plan which is drafted and out with the ODEF members for initial consultation prior to going for wider consultation. It is expected the People Plan will be approved in Q4 . | | | Director of HR<br><br>Robin Arbuthnot<br><br>From the time of writing the business plan, it was decided the recruitment strategy should form part of the overall People Plan which is scheduled for implementation by Q 4 2024. |

| | | Key Priorities | | | | |
|---|---|---|---|---|---|---|
| | **Action from Business Plan:** | | **Progress** | **Achievability (RAG)** June | Sept | **Mitigating actions where performance is Amber / Red** |
| 8c | | All temporary contracts to be reviewed and aligned to the parameters within the agreed recruitment strategy by 30th September 2023. | An Exit strategy is in place for all temporary positions which will align with the parameters expected to be included in the recruitment element of the People Plan.<br><br>Exit strategies are being actively managed with a new process in place to ensure robust governance arrangements are in place and aligned to the scrutiny process. | | | All Directors |

| | | | | | | |
|---|---|---|---|---|---|---|
| 8d | | Staff absence will be effectively managed to ensure appropriate and timely support for staff and with the aim of working towards the agreed target | Staff absence is reported to AMT on a monthly basis.<br><br>Although overall sickness absence rates have increased (4.83% at end of Q1 23/24), all long term absence is actively managed with support from Occupational Health.<br><br>Short term absence is relatively low at 0.75% for Q1 of 23/24.<br><br>There are a range of HWB resources to support staff and the Staff Experience workstream of the Organisation Development Engagement Forum (ODEF) have staff health & well being as a key area in their action plan for the current year. Regular reports are provided to Directors on sickness absence in their Directorate to ensuring ongoing management of such.<br><br>At end of Q2 34/24 sickness absence rates show a further rise to 5.11% cumulatively in year. Long term absence is actively managed and is the greatest proportion of sick leave (4.40%) with short term absence remaining low at 0.91% for the month ending 30th September 2023.<br><br>As part of the work of ODEF a new H&WB survey has been approved for launch in November as part of the live well work well programme of work. This will see local champions identified alongside a | | | All Directors |

| | Key Priorities | | | | | |
|---|---|---|---|---|---|---|
| | **Action from Business Plan:** | | **Progress** | **Achievability (RAG)** June | Sept | **Mitigating actions where performance is Amber / Red** |
| | | | programme of work to ensure further development of the ongoing work to support staff H&WB. | | | |
| 8e | | Hybrid working pilot scheme to be fully implemented with evaluation undertaken which will feed into any future arrangements by March 2024 | The Pilot scheme moved to full implementation from 1st April 2023.<br><br>The working group continues to meet to consider next steps. A proposal on evaluation has been submitted and is under consideration by the Group to ensure availability of information which will facilitate a corporate decision on the future model by the end of the current financial year. | | | Director of HR<br><br>Robin Arbuthnot |

<table>
<tr><td></td><td colspan="4">Key Priorities</td></tr>
<tr><td></td><td colspan="2">Action from Business Plan:</td><td>Progress</td><td>Achievability (RAG)<br>June Sept</td><td>Mitigating actions where performance is Amber / Red</td></tr>
<tr><td>8f</td><td></td><td>Staff will have completed all mandatory training as required by the organisation. 90% compliance by end of December 2023</td><td>
<table>
<tr><th>Date</th><th>June 23</th><th>Sept 23</th></tr>
<tr><td>Cyber Sec</td><td>86.95%</td><td>92.08%</td></tr>
<tr><td>DSE</td><td>62.56%</td><td>81.19%</td></tr>
<tr><td>Equality</td><td>65.02%</td><td>84.16%</td></tr>
<tr><td>Equality- Line Mgr</td><td>44.35%</td><td>92.08%</td></tr>
<tr><td>Equality Screening</td><td>-</td><td>52.23%</td></tr>
<tr><td>Fire Safety</td><td>68.47%</td><td>81.68%</td></tr>
<tr><td>Fraud</td><td>62.56%</td><td>80.45%</td></tr>
<tr><td>Health & Safety</td><td>70.20%</td><td>83.66%</td></tr>
<tr><td>IG Awareness</td><td>49.51%</td><td>65.35%</td></tr>
<tr><td>Manual Handling</td><td>43.35%</td><td>67.82%</td></tr>
<tr><td>Risk Mgmt</td><td>79.06%</td><td>87.38%</td></tr>
</table>
</td><td></td><td>All Directors<br><br>Line managers are able to use the ‘MyTeam’ function on LearnHSCNI to identify staff who are not compliant so appropriate action can be taken. Directors are also provided with updated compliance reports on a monthly basis. DSE and Manual Handling are new modules. Equality Screening is newly monitored. IG Awareness has changed from last 3 years to 1 year.</td></tr>
</table>

| | Key Priorities | | | | | |
|---|---|---|---|---|---|---|
| | **Action from Business Plan:** | | **Progress** | **Achievability (RAG)** June | Sept | **Mitigating actions where performance is Amber / Red** |
| 8g | | To develop a People Plan by the 30th September 2023 to support the delivery of the PHA's strategic objectives and take forward implementation in line with agreed milestones. | This is under development. Closely aligned to the ODEF action plan, the latter is now agreed and in progress allowing for this plan to be developed over the summer months.<br><br>A draft People Plan was shared with ODEF members early September as the first stage of consultation. | | | Director of Operations<br><br>Stephen Wilson<br><br>Director of HR<br><br>Robin Arbuthnot<br><br>A draft People Plan will be further consulted on in Q3 with a view to having an approved document in Q4. |

| | Key Priorities | | | | | |
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| | **Action from Business Plan:** | | **Progress** | **Achievability (RAG)** June | Sept | **Mitigating actions where performance is Amber / Red** |
| 9a | Our Organisation Works Effectively<br><br>Ensure good financial governance and stewardship of PHA budgets and expenditure decisions and implement a new performance management framework for the organisation to establish clear processes of accountability and performance reporting | 90% of Internal Audit recommendations from 2022/23 addressed and progress reported to GAC by October 2023 | Mid-year internal audit follow up complete with 79% of outstanding recommendations complete overall and report was presented at GAC in October. Of these, 8 recommendations remained outstanding from 22/23 (67% of total recommendations issued during 22/23).. | | | Director of Operations<br><br>Stephen Wilson<br><br>Director of Finance<br><br>Tracey McCaig<br><br>Early engagement by relevant managers with Internal Audit colleagues to fully assess progress to implement Audit recommendations<br><br>Audit clinics have been set up for December 23 to progress towards completion |

| | Key Priorities | | | | | |
|---|---|---|---|---|---|---|
| | **Action from Business Plan:** | | **Progress** | **Achievability (RAG)** June | Sept | **Mitigating actions where performance is Amber / Red** |
| 9b | across all levels of the organisation. | 100% of Internal Audit recommendations from 2022/23 addressed and progress reported to GAC by March 2024 | Audit clinics have been set up for December 23 to progress remaining internal audit recommendations towards completion by end of March 2024. Two limited assurance reports have been issued in 2023/24 to date. Continued focus from all Directorates will be required in the remainder of the year to close outstanding recommendations to ensure the overall audit opinion for the year is maintained. | | | Director of Operations<br><br>Stephen Wilson<br><br>Director of Finance<br><br>Tracey McCaig<br><br>Early engagement by relevant managers with Internal Audit colleagues to fully assess progress to implement Audit recommendations |
| 9c | | All Directorate Business Plans approved by 30 May 2023 | Operations Directorate Plan complete<br>NMAHP Directorate Plan complete<br>PHD Directorate Plan complete<br>HSCQI Directorate Plan complete | | | All Directors |

| | Key Priorities | | | | | |
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| | **Action from Business Plan:** | | **Progress** | **Achievability (RAG)** June | Sept | **Mitigating actions where performance is Amber / Red** |
| 9d | | Delivery of a balanced Financial Plan by end of May 2023, taking into account budgetary uncertainties and agreed investment plan – approval by Board in June 2023 | Financial Plan approved by the PHA Board in June 2023, with a forecast financial deficit forecast (£0.65m).<br><br>A mid-year review of financial performance against the Board approved Financial plan was completed during October which was formally approved by AMT and presented to PPRC. The latest position indicates a breakeven forecast, due primarily to lower than anticipated management & administration costs due to staff turnover, campaign advertising and other baseline slippages. A number of demand led risks remain and this position will be closely monitored throughout the remainder of the year. | | | Director of Operations<br><br>Stephen Wilson<br><br>Director of Finance<br><br>Tracey McCaig<br><br>Work ongoing in respect of plans to address remaining savings gap in 2023/24. |

| | | Key Priorities | | | | |
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| | **Action from Business Plan:** | | **Progress** | **Achievability (RAG)** June | Sept | **Mitigating actions where performance is Amber / Red** |
| 9e | | Budget holders to manage their agreed budgets to support the statutory breakeven target of +0.25% or circa 0.3m within 2023/24 | Financial Plan approved by the PHA Board in June 2023, with a forecast financial deficit forecast (£0.65m).<br><br>A mid-year review of financial performance against the Board approved Financial plan was completed during October and indicated a breakeven forecast, due primarily to lower than anticipated management & administration costs. This position will be closely monitored by finance alongside budget holders throughout the remainder of the year. Accountability meetings have been held by the Chief Executive and Deputy Secretary with each Directorate and will continue in the remainder of 2023/24. | | | All Directors<br><br>Director of Finance<br><br>Tracey McCaig<br><br>Work ongoing in respect of plans to address remaining savings gap in 2023/24. Month 6 forecast deficit reduced to breakeven. |
| 9f | | 90% of quarterly PMRs for PHA contracts with external providers are submitted on time, KPIs are being achieved and next quarterly payments approved. | Process for tracking PMR returns and KPI achievement is currently being developed and will be in place for quarter ending December 2024. | | | All Directors |

| | Key Priorities | | | | | |
|---|---|---|---|---|---|---|
| | **Action from Business Plan:** | | **Progress** | **Achievability (RAG)** June | Sept | **Mitigating actions where performance is Amber / Red** |
| 10a | Our Organisation Works Effectively<br><br>Ensure that the level of public and professional awareness, recognition and confidence in the PHA as the leading Public Health organisation in Northern Ireland is maintained in order to encourage wider engagement with and support for | 2% year on year increase in unprompted and prompted public awareness levels of PHA (including role and functions) established through quantitative/qualitative research programme as at March 2024. | Follow up Omnibus survey (May 2023) confirms no significant change in recognition of PHA Brand and how it is perceived. Findings include:<br>- 2% decrease in PHA brand recognition (prompted)<br>- Respondents own opinion of PHA remains a tie between neutral and positive. Negative opinion is very low <2%.<br>- Respondents trust in the PHA and its values remains around 50%. High levels of uncertainty remain. | | | Director of Operations<br><br>Stephen Wilson<br><br>DoH pause in campaign advertising activity will undoubtedly impact on the feasibility of meeting the year on year target. |
| 10b | | PHA Public Inquiry team established by end of June 23. | A formal structure has now been put in place to govern public inquiry (PI) work within the Agency. As at September 23, the PHA PI response is co-ordinated through a PI Programme Management Board (chaired by Chief Executive) and a PI Steering Group (chaired by Director of Operations). These groups continue to meet in line with an agreed schedule and approved terms of reference. | | | Director of Operations<br><br>Stephen Wilson |

| | Key Priorities | | | | | |
|---|---|---|---|---|---|---|
| | **Action from Business Plan:** | | **Progress** | **Achievability (RAG)** June | Sept | **Mitigating actions where performance is Amber / Red** |
| 10c | public health priorities. | 100% of Inquiry Rule 9 statements are provided in a timely manner in accordance with agreed deadlines. | The receipt and onward progression of PI Rule 9 requests are now actively monitored within the formalised PI governance structure to ensure that the Agency can respond to any requests in a timely manner. During the preceding quarter, the Agency has successfully submitted finalised documentation in relation to module 2 of the Covid-19 Inquiry and draft documentation in respect of module 3 of the Covid-19 Inquiry. Work in respect of a Rule 9 request for the MAH Inquiry remains underway in line with an agreed submission date. | | | Director of Operations<br><br>Stephen Wilson |

HSC Public Health Agency

# PERFORMANCE MANAGEMENT REPORT

## Monitoring of Targets Identified in

## The Annual Business Plan 2023 – 2024 Part B

As at 30 September 2023

This report provides an update on achievement of the actions identified in the PHA Annual Business Plan 2023-24 Part B.

The updates on progress toward achievement of the actions were provided by the Lead Officers responsible for each action.

There are a total of 59 actions in the Annual Business Plan. Each action has been given a RAG status as follows:

| | | | |
|---|---|---|---|
| | On target to be achieved or already completed | | Will be completed, but with slight delay |
| | Significantly behind target/will not be completed | | |

Of these 59 actions 43 have been rated green, 16 as amber and 0 as red.

| Outcome | Red | Amber | Green | Total |
|---|---|---|---|---|
| **1) All children and young people have the best start in life** | | 0 | 5 | **5** |
| **2) All older adults are enabled to live healthier and more fulfilling lives** | | 2 | 2 | **4** |
| **3) All individuals and communities are equipped and enabled to live long and healthy lives** | | 8 | 7 | **15** |
| **4) All health and wellbeing services should be safe and high quality** | | 2 | 9 | **11** |
| **5) Our organisation works effectively** | | 5 | 19 | **24** |
| **Total** | | **17** | **42** | **59** |

The below report contains the 17 Actions that were identified as having an Amber RAG status as at September 30th 2023

| | | Outcome 2: All older adults are enabled to live healthier and more fulfilling lives | | | | |
|---|---|---|---|---|---|---|
| | **Priority** | **Action** | **Progress**<br>*(Performance measures from ABP in blue for reference)* | **Achievability (RAG)**<br>**Jun/Sep/Dec/Mar** | | **Mitigating actions where performance is Amber / Red** |
| **6** | 2 | Monitor District Nursing (DN) Compliance with Nursing Quality Indicator | Compliance with the SSKIN bundle for pressure ulcers: Q1 – 95 %, Q2 – 95 %, Q3 – 100 %, Q4 – 100 %<br>Compliance with all elements of MUST: Q1 – 75 %, Q2 – 75 %, Q3 – 85 %, Q4 – 95 %<br>Compliance with all elements of the Palliative Care Quality Indicator: Q1 – 60 %, Q2 – 60 %, Q3 – 75 %, Q4 – 80 %<br><br>Please note 2-month lag in monitoring.<br><br>MUST – target met | | | Quality Improvement plans in process against SSKIN Bundle for Pressure Ulcers and Palliative Care. Content with progress.<br><br>Director of NMAHP<br><br>Heather Reid |

| | | Outcome 2: All older adults are enabled to live healthier and more fulfilling lives | | | |
|---|---|---|---|---|---|
| | **Priority** | **Action** | **Progress**<br><br>*(Performance measures from ABP in blue for reference)* | **Achievability (RAG)**<br><br>**Jun/Sep/Dec/Mar** | **Mitigating actions where performance is Amber / Red** |
| | | | | | Sandra Aitcheson |
| **7** | 2 | During 2023/24 the PHA will work with key stakeholders to design a scale and spread plan for the implementation of the Regional Falls Pathway for Care Homes. | *Membership of Steering group to oversee implementation will be agreed by September 2023. Plan to scale up the Falls Pathway will be agreed by October 2023.*<br><br>*Building on the results of the pilot undertaken in 18 care homes during 2021/22 – the PHA will lead a programme to raise awareness and prepare the wider sector for rollout. This will be completed by March 2024.* | | Director of NMAHP<br><br>Heather Reid<br><br>Sandra Aitcheson<br><br>Work to progress the implementati |

| | | Outcome 2: All older adults are enabled to live healthier and more fulfilling lives | | | |
|---|---|---|---|---|---|
| | **Priority** | **Action** | **Progress**<br><br>*(Performance measures from ABP in blue for reference)* | **Achievability (RAG)**<br><br>**Jun/Sep/Dec/Mar** | **Mitigating actions where performance is Amber / Red** |
| | | | <u>SEPT 23</u><br><br>Falls work continues to be implemented at a local level, however process delayed due to Falls resources launch being delayed from April 2023 to August 2023.<br><br>• Enhancing Clinical Care Framework (ECCF) launched on 7 August 2023.<br><br>• Falls steering group reconvened to plan implementation strategy. Sustainability, Spread and Scale Workplan shared.<br><br>PHA is progressing Care Home training module with CEC and has facilitated information sessions across the region. | | on of resources continues with independent sector and Trust Care Home in reach teams. PHA Nursing/ AHP coordinating a regional approach to the implementation |

| | | Outcome 3: All individuals and communities are equipped and enabled to live long and healthy lives | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | **Priority** | **Action** | **Progress**<br><br>*(Performance measures from ABP in blue for reference)* | **Achievability (RAG)**<br><br>**Jun/Sep/Dec/Mar** | | | | **Mitigating actions where performance is Amber / Red** |
| **10** | 1 | Undertake review of current PHA arrangements for implementation of vaccine programmes and implement a PHA wide co-ordinated approach in partnership with SPPG and other stakeholders with appropriate oversight arrangements. By April<br><br>Implement recommendations to establish the new PHA model of vaccination arrangements<br><br>Review all immunisation programme uptake, looking at comparators with other UK administrations whether we are achieving WHO / JCVI / DoH recommended uptake for all vaccines in adult and children | *Completion of review of arrangements by April 2023*<br><br>*Establish project team to implement the recommendations by end of May 2023*<br><br>*Implement improved communications system to support workflow by end of June 2023*<br><br>*Implementation of recommendations from review of current arrangements for vaccination by March 2024*<br><br>PHA internal team meet on a weekly basis to review and implement recommendations.<br><br>AMT have approved the the establishment of a Vaccination oversight group to be chaired by the Chief Executibe to provide strategic leadership and governance for the regional immunisation programmes. | | | | | Director of Public Health<br><br>Joanne McClean<br><br>Louise Herron |

| | | Outcome 3: All individuals and communities are equipped and enabled to live long and healthy lives | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | Priority | **Action** | **Progress**<br><br>*(Performance measures from ABP in blue for reference)* | **Achievability (RAG)**<br><br>**Jun/Sep/Dec/Mar** | | | | **Mitigating actions where performance is Amber / Red** |
| | | | The team are in the process of moving immunisation workstreams on to JIRA board software (currently C-19, HPV, pre-school low uptake project on the board).<br><br>*Increase in uptake rates across all programmes (based on 22/23 baseline) by March 2024*<br><br>*Update:*<br><br>Downward trend in vaccine uptake over the last few years has continued. | | | | | |
| **13** | 1 | **Sexual Health**<br><br>Work with DoH in the development and implementation of the refreshed Sexual Health Action Plan including work towards becoming a HIV Fast Track City/Region<br><br>Undertake mapping of services currently commissioned by | *Refreshed Sexual Health Action Plan agreed by March 2024.*<br><br>*Contribute to development of SHAP refresh including identifying actions to be led by PHA*<br><br>- Update – PHA Health protection, health improvement service development have been involved in editing SHAP, participated in SHAP workshop March 2023, will be identified as led for various actions. | | | | | Director of Public health<br><br>Dr Joanne McClean<br><br>Rachel Coyle<br><br>Multi-media STI campaign Feb-March 2023 |

| | | Outcome 3: All individuals and communities are equipped and enabled to live long and healthy lives | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | Priority | **Action** | **Progress**<br><br>*(Performance measures from ABP in blue for reference)* | **Achievability (RAG)**<br><br>**Jun/Sep/Dec/Mar** | | | | **Mitigating actions where performance is Amber / Red** |
| | | PHA/SPPG for STI prevention and treatment<br><br>Work with HSC and SPPG to Develop plan to ensure HIV testing is in line with WHO testing thresholds | - Note consultation on SHAP will be led by DoH (by March 24)<br><br>*Sustained access to online testing for STI* (currently average 3600/month)<br><br>*Increased testing -* highest ever monthly online tests ordered March 2023 during STI campaign<br><br>*Reduction in incidence of Gonorrhoea and early syphilis diagnosis –*<br><br>- *Baseline GC 737 Q1/2 2022*<br>- *Baseline syphilis – 47 Q1/2 2022*<br><br>Sept 23 – GC diagnosis decreased slightly in Q1 2023, this will continue to be monitored closely | | | | | Mitigating - planned addition of pharyngeal GC for online testing in young people and to investigate role this may have in transmission. Note that if there is significant burden on undiagnosed throat GC this would initially lead to rise in diagnosis followed by decline. |

| | | Outcome 3: All individuals and communities are equipped and enabled to live long and healthy lives | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | Priority | **Action** | **Progress**<br><br>*(Performance measures from ABP in blue for reference)* | **Achievability (RAG)**<br><br>**Jun/Sep/Dec/Mar** | | | | **Mitigating actions where performance is Amber / Red** |
| **16** | 2 | **Migrant Health**<br><br>Continue to explore the regional expansion of NINES and develop business case. | *Produce report/position paper on unfunded activity relating to migrant health/NINES* ***Complete***<br><br>*Develop business case for regional expansion*<br>***UPDATE – SPPG have requested business cases from all trusts, deadline for submission was Sept 23, 3/5 trusts submitted with costs***<br><br>*Set up a task and finish group to be co-chaired by PHA/SPPG to look at provision of initial health assessment to vulnerable migrants accommodated in all trust areas.*<br><br>***Update – operational group chaired by regional lead for refugees and asylum seekers (DOH) and AD commissioning SPPG>***<br><br>*Service Measures:*<br><br>*Reduction in waiting times for*<br><br>- *Initial health assessment*<br>- *TB screening*<br>- *BBV screening*<br>- *BCG administration* | | | | | Director of Public health<br><br>Dr Joanne McClean<br><br>Rachel Coyle<br><br>Development of business case/service expansion is being led by regional lead for *RAS (DoH) and AD Commissioning (SPPG) - several bids in* to Home Office funding streams currently, expected outcomes to be |

| | | Outcome 3: All individuals and communities are equipped and enabled to live long and healthy lives | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | **Priority** | **Action** | **Progress**<br><br>*(Performance measures from ABP in blue for reference)* | **Achievability (RAG)**<br><br>**Jun/Sep/Dec/Mar** | | | | **Mitigating actions where performance is Amber / Red** |
| | | | *No./% of individuals supported with GP registration*<br><br>*No./%. of eligible individuals offered first dose of MMR*<br><br>*Infection/TB/BBV rates*<br><br>Data reporting to be agreed via operational group | | | | | known in early Sept 2023<br><br>Small amount non-recurrent funding allocated to all trusts July 2023 to begin/upscale initial screening work |
| **18** | 2 | Implement the PHA agreed actions in relation to commissioning of Protect Life 2 (PL2) Strategy | *Completed consultation report for postvention services by September 2023.*<br><br>*Consultation report for Postvention Services signed off by AMT in September 2023 and presented in Regional Protect Life 2 Steering Group in October 2023.*<br><br>*Service specification for postvention services agreed by March 2024*<br><br>*Business case for commissioning of training framework in draft.* | | | | | Director of Public Health<br><br>Dr Joanne McClean<br><br>**(Fiona Teague)**<br><br>PID to be presented at procurement Board setting |

| | | Outcome 3: All individuals and communities are equipped and enabled to live long and healthy lives | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | Priority | **Action** | **Progress**<br><br>*(Performance measures from ABP in blue for reference)* | **Achievability (RAG)**<br><br>**Jun/Sep/Dec/Mar** | | | | **Mitigating actions where performance is Amber / Red** |
| | | | *Service Specification(s) for training agreed by-March 2024.*<br><br>*Business case for commissioning of training framework in draft.*<br><br>*CBT Awareness course development – Specification in draft.*<br><br>*Commissioning priorities for community based suicide prevention services agreed by December 2023.*<br><br>Initial work has been progressed to scope out the approach to developing the commissioning work taking into account several areas of work where PHA has already consulted on future priorities such as training and postvention services. | | | | | out staged plan for PL2 procurement for next 3-5years |
| **19** | 2 | **Cardio Vascular Disease**<br><br>Establish baseline population profile and risk factors for Cardio Vascular Disease.<br><br>Establish baseline incidence of emergency admissions with | *Establish baseline population risk factors - relying on baseline GP QOF data or GPIP subject to access, regional health and wellbeing surveys conducted by NISRA and any other relevant information sources identified.* | | | | | Director of Public Health/Operations<br><br>Dr Joanne McClean<br>Declan Bradley |

| | | Outcome 3: All individuals and communities are equipped and enabled to live long and healthy lives | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | Priority | **Action** | **Progress**<br><br>*(Performance measures from ABP in blue for reference)* | **Achievability (RAG)**<br><br>**Jun/Sep/Dec/Mar** | | | | **Mitigating actions where performance is Amber / Red** |
| | | cardiovascular disease, and the distribution of severe cardiovascular disease in the population, using secondary care data.<br><br>Work to increase awareness of signs and symptoms of heart attacks and strokes so that people receive early treatment. | Mass media campaigns paused. Communications reach will be significantly reduced without mass media advertising. Campaign evaluation survey will not be commissioned if there isn't mass media campaign advertising. | | | | | Stephen Wilson<br>Gary McKeown |
| **20** | 2 | **Cancer prevention**<br><br>Develop an approach to primary and secondary prevention of cancer in line with 2022 cancer strategy. | *Improved performance against the suite of metrics as set out in the Baseline Health Survey 2021/22*<br><br>Working with NICAN clinical reference groups to assess the effectiveness of services | | | | | Director of Public Health<br><br>Dr Joanne McClean |
| **21** | 2 | **Tobacco**<br><br>Lead on Implementation of the Ten-Year Tobacco Control Strategy for NI and inform and support development of the new DoH Strategy (from 2024) | *Annual Smoking rates in NI - with particular focus on health inequalities*<br><br>*% of current smokers quitting - with a particular focus on children and young people, pregnant smokers and their partners and manual workers* | | | | | Director of Public Health<br><br>Joanne McClean<br><br>Colette Rogers |

| | | Outcome 3: All individuals and communities are equipped and enabled to live long and healthy lives | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | Priority | **Action** | **Progress**<br>*(Performance measures from ABP in blue for reference)* | **Achievability (RAG)**<br>**Jun/Sep/Dec/Mar** | | | | **Mitigating actions where performance is Amber / Red** |
| | | Undertake incentivized quitting in pregnancy programme in two locations in NI. Locations to be based on greatest need considering smoking prevalence and NIMATS data.<br><br>Progress regional rollout of smoking cessation services in Maghaberry and Magilligan prisons based on successful Hydebank Wood pilot.<br><br>Progress expansion of HSCT services to roll out the Ottawa model for smoking cessation in NI.<br><br>Progress a targeted small grants programme to enable roll out of shared service model in communities of increased socioeconomic deprivation and smoking prevalence.<br><br>Consider NICE guidelines NG209 and possible expansion of current | *Establish a regional PHA commissioning Tobacco Team to by Sept 23.*<br><br>B8a & 2xB7 secured June 2023.<br><br>Team to be further expanded Sept -Dec 23 (+1 B7 &+ 1B6) | | | | | End Term Review published Sept 23. Strategy Project Group being established. No further progress on service developments at this time. |

| | | Outcome 3: All individuals and communities are equipped and enabled to live long and healthy lives | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | Priority | **Action** | **Progress**<br><br>*(Performance measures from ABP in blue for reference)* | **Achievability (RAG)**<br><br>**Jun/Sep/Dec/Mar** | | | | **Mitigating actions where performance is Amber / Red** |
| | | services to offer nicotine dependency support regarding cessation of both tobacco cigarettes and/ or e cigarettes- depending on service user need.<br><br>Design and implementation of mixed methodology Health Intelligence study which will assess (a) knowledge, attitudes and behaviours of young people with regard to e-cig use/vaping and<br><br>(b) related observations of teaching staff on youth vaping within the school environment. | | | | | | |
| **23** | 3 | Lead on the coordination and Delivery of the Strengthening Communities for Health partnership by the delivery of PHASE 2 of the Community Development Action Plan that will increase communities capacity and will see the development of a commissioning framework for supporting | *Delivery of the ELEVATE programme to see minimum of 8 training sessions delivered*<br><br>*Continue to promote the online portal and review usage rates*<br><br>*5 engagement events with C&V and statutory sector to refine training needs* | | | | | Director of Public Health<br><br>Dr Joanne McClean<br><br>Diane McIntyre |

| | | Outcome 3: All individuals and communities are equipped and enabled to live long and healthy lives | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | Priority | **Action** | **Progress**<br>*(Performance measures from ABP in blue for reference)* | **Achievability (RAG)**<br>**Jun/Sep/Dec/Mar** | | | | **Mitigating actions where performance is Amber / Red** |
| | | Community-led approaches to addressing health inequalities, | *Provide support to development of guidance on Community level of the ICS through Strengthening Communities for Health Steering Group*<br><br>*6 Community Development Practitioners' Forum sessions delivered in partnership with Project Echo*<br><br>*Comprehensive map of investment produced in partnership with other funders* | | | | | The existing service is in place for 2023/24 providing continuity. Consultation has taken place with community partners regarding the future development of the service which will be reflected in the revised specification. A Community Centred Approaches Outcomes Framework has been presented as part of this consultation |

| | | Outcome 3: All individuals and communities are equipped and enabled to live long and healthy lives | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | Priority | Action | Progress<br><br>*(Performance measures from ABP in blue for reference)* | Achievability (RAG)<br><br>Jun/Sep/Dec/Mar | | | | Mitigating actions where performance is Amber / Red |
| | | | | | | | | and will now be further developed and incorporated within the revised specification. The initial investment map of capacity building for health funding is complete with approx.. 850 services identified totalling £46 million. This will be used within the revised specification to support the targeting of resources in the new service (post 2024/25 |

| | | Outcome 3: All individuals and communities are equipped and enabled to live long and healthy lives | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | Priority | Action | Progress<br><br>*(Performance measures from ABP in blue for reference)* | Achievability (RAG)<br><br>Jun/Sep/Dec/Mar | | | | Mitigating actions where performance is Amber / Red |
| | | | | | | | | onwards) to areas currently under invested in or with greater need for investment. |

| | | Outcome 4: All health and wellbeing services should be safe and high quality | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | Priority | Action | Progress<br><br>*(Performance measures from ABP in blue for reference)* | Achievability (RAG)<br><br>Jun/Sep/Dec/Mar | | | | Mitigating actions where performance is Amber / Red |
| 27 | 2 | Introduce Breast Screening Select software in Northern Ireland | *New system implemented and operational by Dec 23* | | | | | Director of Public Health<br><br>Dr Joanne McClean<br><br>(Tracy Owen)<br><br>Likely to be by March 24. This is a complex project involving multiple partner organisations including NHS England, (NHSE), Public Health Wales (PHW) and private |

| | | Outcome 4: All health and wellbeing services should be safe and high quality | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | Priority | **Action** | **Progress**<br>*(Performance measures from ABP in blue for reference)* | **Achievability (RAG)**<br>**Jun/Sep/Dec/Mar** | | | | **Mitigating actions where performance is Amber / Red** |
| | | | | | | | | sector companies. Mitigation is in accordance with the project risk and issues register. The Project Team is working closely with: the Department of Legal Services to finalise the information governance requirements and contracts; NHSE (who are part of the project |

| | | Outcome 4: All health and wellbeing services should be safe and high quality | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | **Priority** | **Action** | **Progress**<br>*(Performance measures from ABP in blue for reference)* | **Achievability (RAG)**<br>**Jun/Sep/Dec/Mar** | | | | **Mitigating actions where performance is Amber / Red** |
| | | | | | | | | structure) to modify the software to meets the requirements of the NI Breast Screening Programme and plan the necessary data migration and PHW to obtain the scripts required for such data migration. |
| **33** | 3 | The PHA will take a lead oversight role in the 2022 NICE Guidance and the DCMO Circular, HSC (SQSD) | PHA work with SPPG, trusts and other relevant stakeholders to facilitate and provide leadership across the HSC in regards to implementation of NICE guidance on shared decision making. | | | | | The PHA has brought in the Implementation Facilitator for NICE to |

| | | Outcome 4: All health and wellbeing services should be safe and high quality | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | Priority | **Action** | **Progress**<br>*(Performance measures from ABP in blue for reference)* | **Achievability (RAG)**<br>**Jun/Sep/Dec/Mar** | | | | **Mitigating actions where performance is Amber / Red** |
| | | (NICE NG197) 19/22 on Shared Decision Making in the HSC | HSC organisations will be encouraged to develop SDM plans (based on an agreed format) setting out roles, responsibilities and anticipated outcomes. | | | | | help advise the HSC in our collective endeavours to advance SDM.<br>An external stakeholders' group has been established.<br>Director of NMAHP<br>Heather Reid<br>Martin Quinn |

| | | Outcome 5: Our organisation works effectively | | | |
|---|---|---|---|---|---|
| | **Priority** | **Action** | **Progress**<br><br>*(Performance measures from ABP in blue for reference)* | **Achievability (RAG)**<br><br>**Jun/Sep/Dec/Mar** | **Mitigating actions where performance is Amber / Red** |
| **37** | 1 | Complete the transition of the acute health protection service, using learning from the COVID response, from interim arrangements put in place during the COVID pandemic to a business as usual arrangement which is consultant led, delivered by PHA staff with robust arrangements in place to respond appropriately to incidents and calls on a 24/7 basis. | *Agency use at Consultant level ( agenct currently working at 30% of overall capacity).*<br><br>*All SOPs used for acute response are reviewed and updated during 23/24 - Ongoing with MDT of soecialty doctors, SpR's and HP nurses*<br><br>*100% of outbreaks and incidents where an outbreak control or incident management team is convened have a named consultant lead - ongoing.*<br><br>*An outbreak / or incident report is completed for every outbreak or incident where an IMT or OCT are convened.*<br><br>*80% calls to the duty room are responded to on the same day.*<br><br>*User feedback system implemented in acute response service. Work with colleagues across PHA to implement a service user feedback system by September 2023.*<br><br>Bank staff are supporting the duty room resilience in the short-term. | | Director of Public Health<br><br>Dr Joanne McClean<br><br>Alison Griffiths |

| | | Outcome 5: Our organisation works effectively | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | **Priority** | **Action** | **Progress**<br><br>*(Performance measures from ABP in blue for reference)* | **Achievability (RAG)**<br><br>**Jun/Sep/Dec/Mar** | | | | | **Mitigating actions where performance is Amber / Red** |
| **38** | 1 | Review current policy requirements in relation to climate change and develop a PHA Plan setting out our organizational responsibilities and key actions that need to be progressed. | *Draft Plan developed by March 2024* | | | | | | Director of Public Health<br><br>Dr Joanne McClean<br><br>Further Discussion is needed about how we take this forward |
| **43** | 4 | Develop a new PHA Corporate Website providing greater functionality for engagement with target audiences. | *Corporate website redevelopment project team in place by end of August 2023. Project plan agreed by end of Nov 2023.*<br><br>An unsuccessful recruitment exercise to appoint a new Digital Communications manager has delayed the establishment of a project team to drive the project. | | | | | | Director of Operations<br><br>Stephen Wilson<br><br>Alternative job description |

| | | Outcome 5: Our organisation works effectively | | | |
|---|---|---|---|---|---|
| | **Priority** | **Action** | **Progress**<br><br>*(Performance measures from ABP in blue for reference)* | **Achievability (RAG)**<br><br>**Jun/Sep/Dec/Mar** | **Mitigating actions where performance is Amber / Red** |
| | | | | | under development.<br><br>New DAC to be developed to secure continuity of existing site and upgrades where possible. |
| **54** | 4 | Establish an Accommodation Review Project Board to oversee the development of an Accommodation Strategy that will set out options for securing suitable accommodation for the PHA. | *PHA Accommodation Review Project Board established by July 2023*<br><br>*By January 2024, Initial scoping of PHA accommodation needs completed and initial options for future accommodation models developed.*<br><br>*PHA accommodation needs are included in regional plans*<br><br>Terms of Reference for the Accommodation Review Project Board have been drafted but the first meeting | | Director of Operations<br><br>S Wilson<br><br>The broad requirements of the PHA in regard to accommodati |

| | | Outcome 5: Our organisation works effectively | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | Priority | Action | Progress<br><br>*(Performance measures from ABP in blue for reference)* | Achievability (RAG)<br><br>Jun/Sep/Dec/Mar | | | | | Mitigating actions where performance is Amber / Red |
| | | | is still to be arranged. AMT will be asked for nominations to the Board. The work that has been completed over the past few months in regard to the introduction of the Pilot Hybrid Working Scheme and the Desk Booking System will assist with much of the initial scoping work that needs to be completed. | | | | | | on are also detailed in the Property Asset Management Plan that was submitted to the Department in September |
| **58** | 4 | Deliver a sustained and varied programme of communication though PR, mass media advertising campaigns, features, social media, video and graphics on the range of health improvement portfolios to raise awareness, influence behaviour and signpost to support | PIC programme agreed with AMT / DoH<br><br>Cancer early diagnosis campaign in partnership with CRUK and NICaN in planning. Campaign to launch March 2024<br><br>Organ donation Deemed Consent legislation live on 1 June, with supporting awareness campaign, media coverage, and outreach programme delivered in support of this. Rolling programme of awareness continues. | | | | | | Director of Operations<br><br>Stephen Wilson<br><br>Proactive communicati ons activity |

| | | Outcome 5: Our organisation works effectively | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | Priority | **Action** | **Progress**<br><br>*(Performance measures from ABP in blue for reference)* | **Achievability (RAG)**<br><br>**Jun/Sep/Dec/Mar** | | | | **Mitigating actions where performance is Amber / Red** |
| | | | Publications trawl and plan complete. Publications produced in line with plan as well as a number of additional publications not logged<br><br>Ongoing updates to online information websites.<br><br>Living Well campaign programme approved. Eye health, Care in the sun and Immunisation protects campaigns developed and implemented. Living Well campaign evaluations in progress.<br><br>Quantitative surveys with a representative sample of the NI population will track public awareness, knowledge and reported behaviours.<br><br>The agency is undertaking a rolling programme of multi-channel communications on a range of subject areas, as well as managing significant media interest in PHA portfolios. | | | | | on going using non-paid channels including press and broadcast media,social media, print and online information and partnership work. However mass media campaign programme pause impacts significantly on ability to to raise awareness, influence |

| | | Outcome 5: Our organisation works effectively | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | Priority | **Action** | **Progress**<br>*(Performance measures from ABP in blue for reference)* | **Achievability (RAG)**<br>**Jun/Sep/Dec/Mar** | | | | **Mitigating actions where performance is Amber / Red** |
| | | | | | | | | behaviour and signpost to support on key health issues at a population level. Met with DoH colleagues to discuss, further meeting with DoH planned |

HSC Public Health Agency

# Item 11

| | |
|---|---|
| **Title of Meeting** | PHA Board Meeting |
| **Date** | 16 November 2023 |
| **Title of paper** | Surveillance of Antimicrobial Use and Resistance in Northern Ireland Annual Report 2019 - 2021 |
| **Reference** | PHA/03/11/23 |
| **Prepared by** | Miss Sarah-Jayne McKinstry, Mr Christopher Nugent, Dr Amanda McCullough, Dr Judith Ewing, Dr Declan Bradley |
| **Lead Director** | Dr Joanne McClean |
| **Recommendation** | For **Approval** ☐ For **Noting** ☒ |

## 1 Purpose

This is the fourth annual report in Northern Ireland describing trends for key organisms, including important gram-negative bacteraemias, antibiotic resistance and antimicrobial consumption. The report describes epidemiological trends for the years 2009-2021.

The report is being presented to the PHA Board for noting prior to publication in the public domain.

## 2 Background Information

PHA collates, analyses and reports on regional antimicrobial use and resistance surveillance data as part of the implementation of the UK National Action Plan for Antimicrobial Resistance 2019 to 2024, and the UK 20-year vision for antimicrobial resistance: *By 2040, our vision is of a world in which antimicrobial resistance is effectively contained, controlled and mitigated.*

The findings in this report are based on information derived from data submitted by Health and Social Care Trust microbiology and pharmacy staff.

## 3 Key Issues

Antibiotics have been one of the most important life-saving medical developments of the last century. However, they are not effective against all types of bacteria (so-called intrinsic resistance). In addition, some bacteria can develop tolerance to

certain antibiotics or develop ways to break them down (so-called extrinsic resistance). In either case, if these go on to cause an infection it can be much more difficult to treat. If the use of antibiotics remains unchecked, common infections will become more dangerous, and surgical procedures where antibiotics are used will become more difficult to perform safely. Antimicrobial-resistant infections already cause illness and death in patients, and also disrupt care in hospitals. Decreasing the use of antibiotics where they are not necessary will help keep antibiotics working in the future.

The first section of the report describes trends in antibiotic resistance in Northern Ireland and the second section describes the trends in antibiotic consumption in Northern Ireland.

Some of the key findings of the report are as follows:

- *E. coli* was the most commonly reported cause of bloodstream infection (bacteraemia) of the key selected organisms, accounting for more than 50% of those reported in 2021.
- *E. coli* bloodstream infection cases decreased from **1733** in 2019 to **1415** in 2020 before a slight increase to **1478** in 2021.
- Increases were noted between 2020 and 2021 for *Enterococcus* species (**275** to **312**), *Staphylococcus aureus (***460 to 506***)*, *Klebsiella oxytoca* (**61 to 106**) and *Pseudomonas* species (**92 to 111**).
- Increases were observed from 2020 to 2021 for the proportion of *Pseudomonas* species resistant to piperacillin/tazobactam (**10.9%** to **18.2%**) and *Streptococcus pneumoniae* resistant to penicillin (**5.8%** to **19.6%**).
- Decreases were noted between 2020 and 2021 for *E. coli*, *Klebsiella pneumoniae* and *K. oxytoca* resistance to piperacillin/tazobactam, Glycopeptide-resistant *Enterococcus* (GRE) and meticillin-resistant *S. aureus* (MRSA).
- Total antibiotic consumption decreased between 2019 and 2020 (**26.88** to **23.04** DDD per 1000 inhabitants per day), with a slight increase noted in 2021 (**25.04** DDD per 1000 inhabitants per day).
- Antibiotic prescribing in primary care (as % of total) decreased from **80.4%** in 2018 to **78.6%** in 2020, remaining relatively stable in 2021 (**78.7%**).
- Antibiotic prescribing in Out of hours (as % of total) decreased from **1.4%** in 2018 to **0.8%** in 2021.
- Antibiotic prescribing in secondary care (as % of total) remained relatively stable between 2018 (**13.7%**) and 2021 (**13.6%**).
- Antibiotic consumption in dental care accounted for **4.5%** of total antibiotic prescribing in 2019, increasing to **7.3%** in 2020 then decreasing slightly to **6.8%** in 2021.

## 4 Next Steps

Following this meeting the Report will be published on the PHA website.

Planned future work will include:

- Contributing to the development of the new UK National Action Plan for antimicrobial resistance 2024-29 and the development of a local implementation plan for NI.
- Contributing to the development of the new UK AWaRe antibiotic category list which will see NI move away from using the previous regional list (differing to UK).
- Continued provision of prescribing trend information to primary and secondary care prescribers.
- Further refinement of secondary care data capture and reporting processes to allow more timely and comprehensive information to help focus and reduce antibiotic use in secondary care services. This includes utilising the new EPIC electronic health and care record.
- Completion of the first public awareness survey of the NI population on antibiotic prescribing for respiratory infections and antimicrobial resistance in collaboration with UKHSA.
- Continued engagement in awareness raising activities during the European Antibiotic Awareness Day (EEAD) and World Antibiotic Awareness Week (WAAW).

# Surveillance of Antimicrobial Use and Resistance in Northern Ireland Report 2019 - 2021

# 1 Executive summary

## Background

Antimicrobial resistance (AMR) is one of the most pressing global challenges we face this century. It is listed on the UK government's National Risk Register and is among the World Health Organization's (WHO) top 10 global public health threats. In 2019, there were 4.95 million deaths associated with bacterial antimicrobial resistance across 204 countries, with 1.27 million of those directly attributed to antimicrobial resistance [1].

AMR develops when organisms develop the ability to survive exposure to antimicrobial drugs. Antimicrobials includes antibiotic, antiprotozoal, antiviral and antifungal medicines. Antibiotic consumption is the key driver for the emergence of antimicrobial resistance in healthcare. Antibiotics are prescribed across a range of settings including primary and secondary care, out-of-hours services and dental care.

The Public Health Agency (PHA) undertake surveillance of antibiotic resistance and antibiotic consumption for all healthcare settings in Northern Ireland (NI). The aim of this annual report is to describe trends in antibiotic resistance and antibiotic consumption in NI between 2019 and 2021.

## Key Results

### *Antibiotic Resistance*

*Escherichia coli* was the most commonly reported cause of bloodstream infection (bacteraemia) of the key selected organisms, accounting for more than 50% of those reported in 2021. Increases were also observed between 2020 and 2021 for *Enterococcus* species, *Staphylococcus aureus*, *Klebsiella oxytoca* and *Pseudomonas* species.

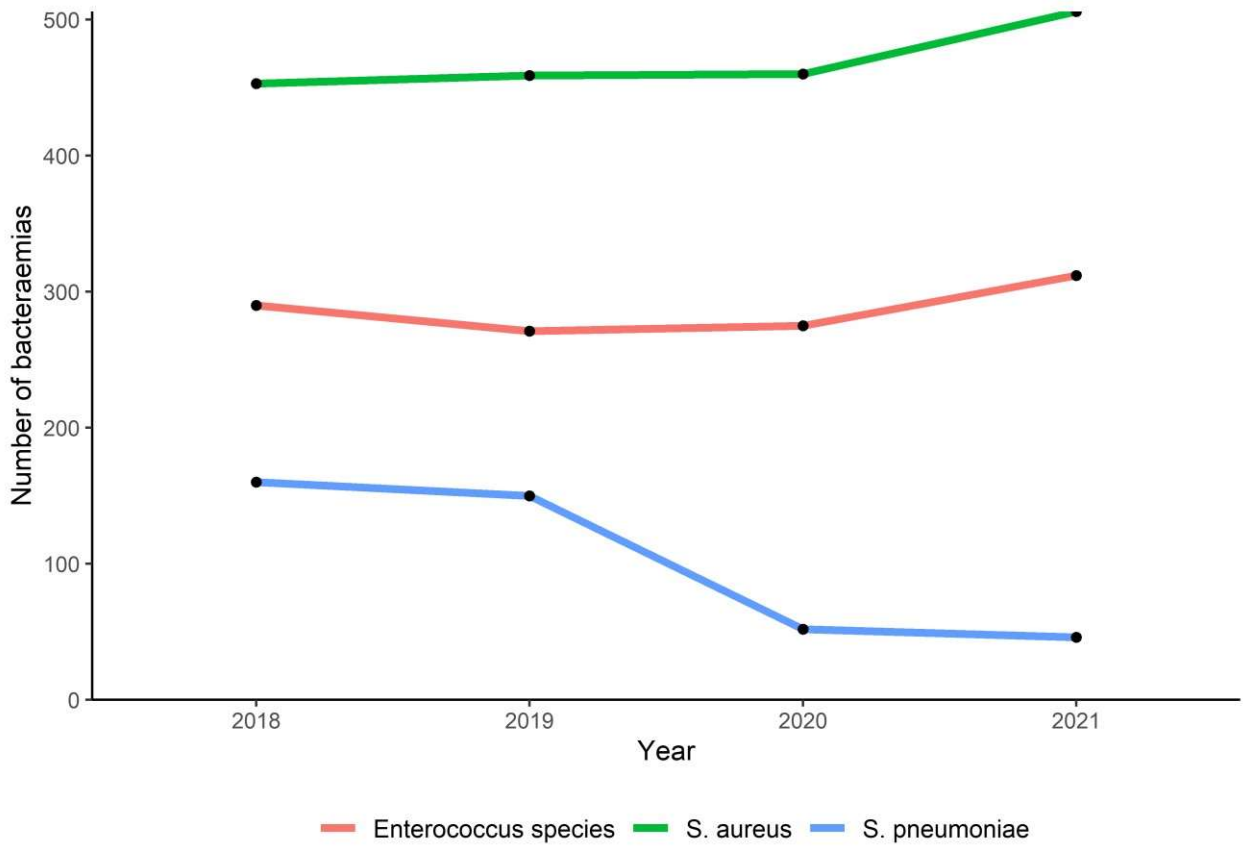


Figure 1.1: Number of Gram-positive bacteraemias reported in NI by organism, 2018 - 2021

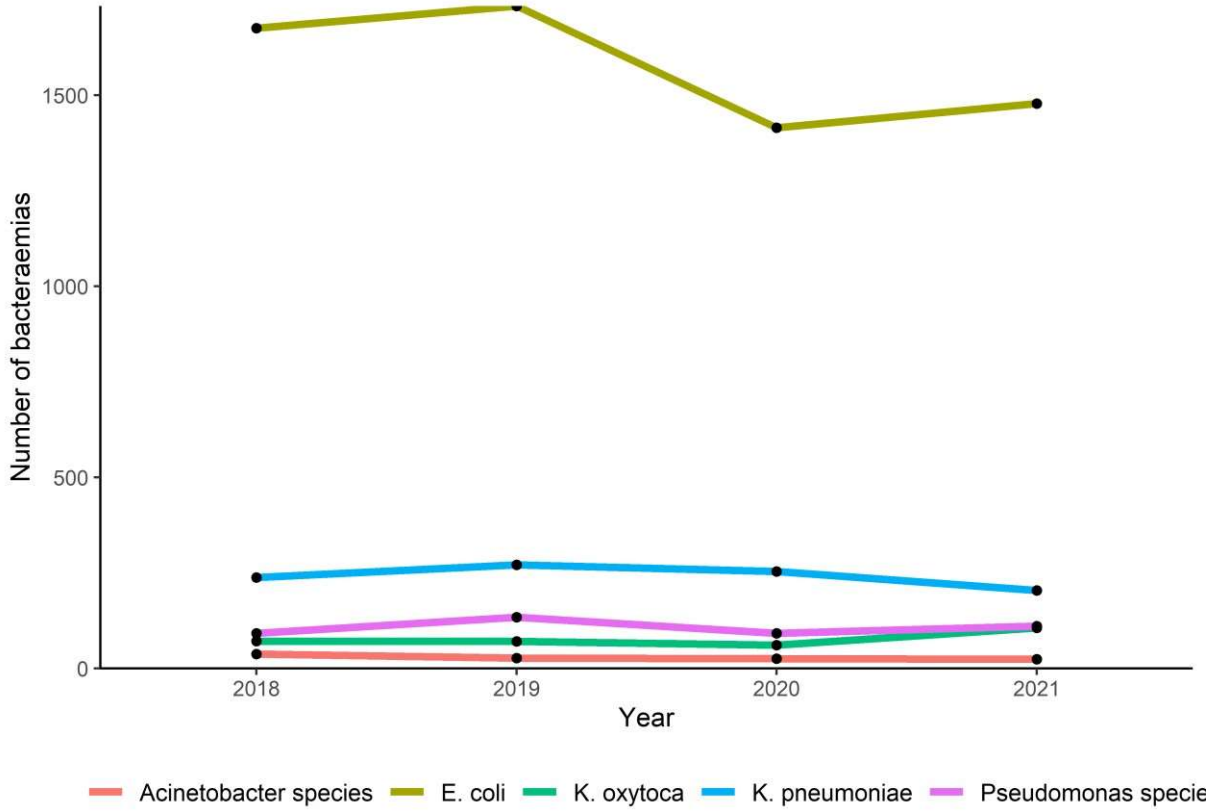


Figure 1.2: Number of Gram-negative bacteraemias reported in NI by organism, 2018 - 2021

In 2021, decreases were noted for *E. coli*, *Klebsiella pneumoniae* and *K. oxytoca* resistance to piperacillin/tazobactam, Glycopeptide-resistant *Enterococcus* (GRE) and meticillin resistant *S. aureus* (MRSA). Increases were observed for *Pseudomonas* sp resistance to piperacillin/tazobactam and *Streptococcus pneumoniae* resistance to penicillin. There have been no reported isolates of colistin resistant *Acinetobacter* since 2017.

Multi-drug resistance (resistance to three or more antibiotic classes) among the selected organisms and drug combinations increased slightly between 2018 and 2021 except for *K.oxytoca* which decreased.

*K. pneumoniae* were the most commonly reported carbapenemase-producing Enterobacterales (CPE) in 2021, with NDM and OXA-48 as the most commonly reported resistance mechanisms.

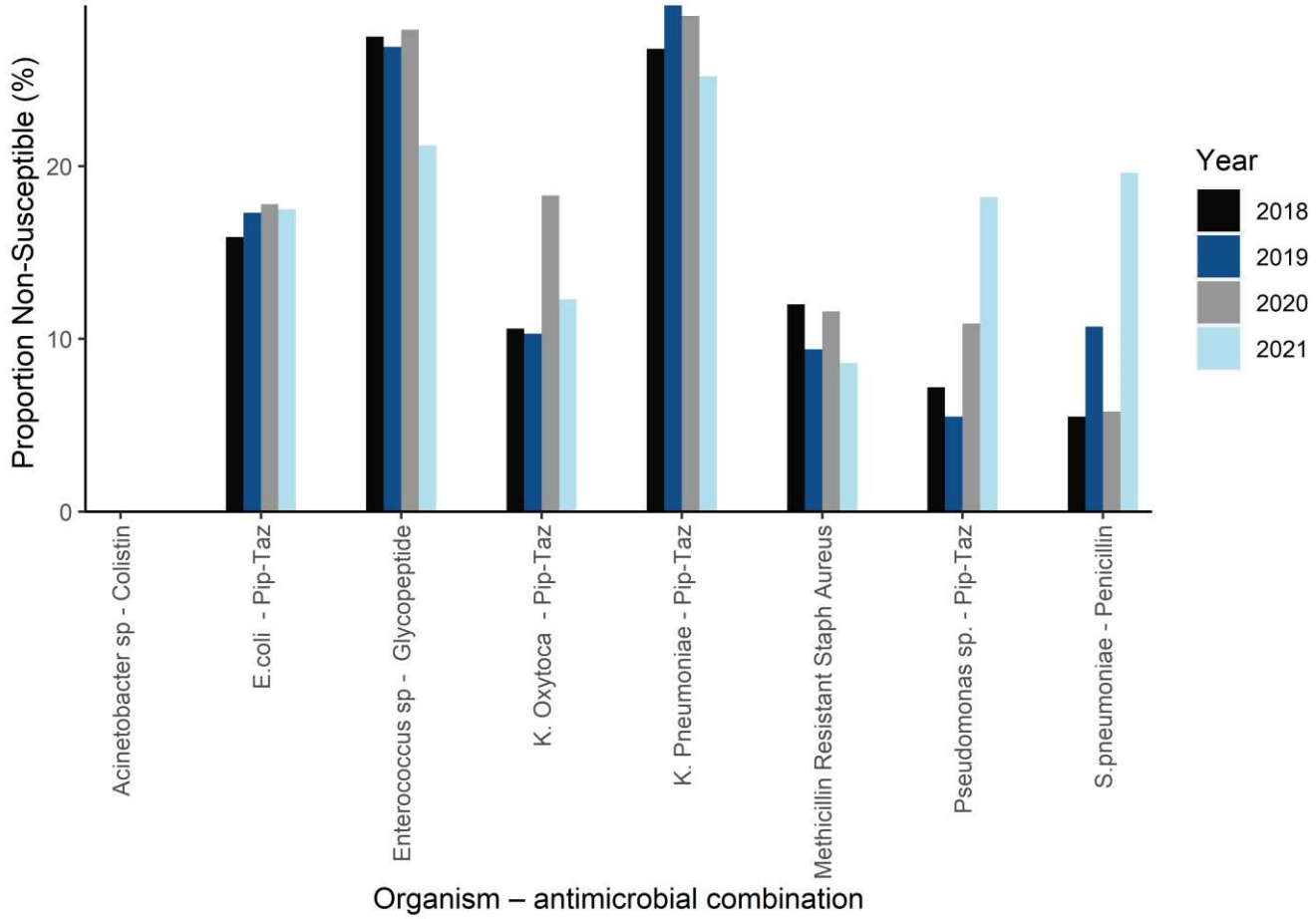


Figure 1.3: Proportion (%) of bacteraemias non-susceptible to selected antibiotics in NI, 2018 - 2021

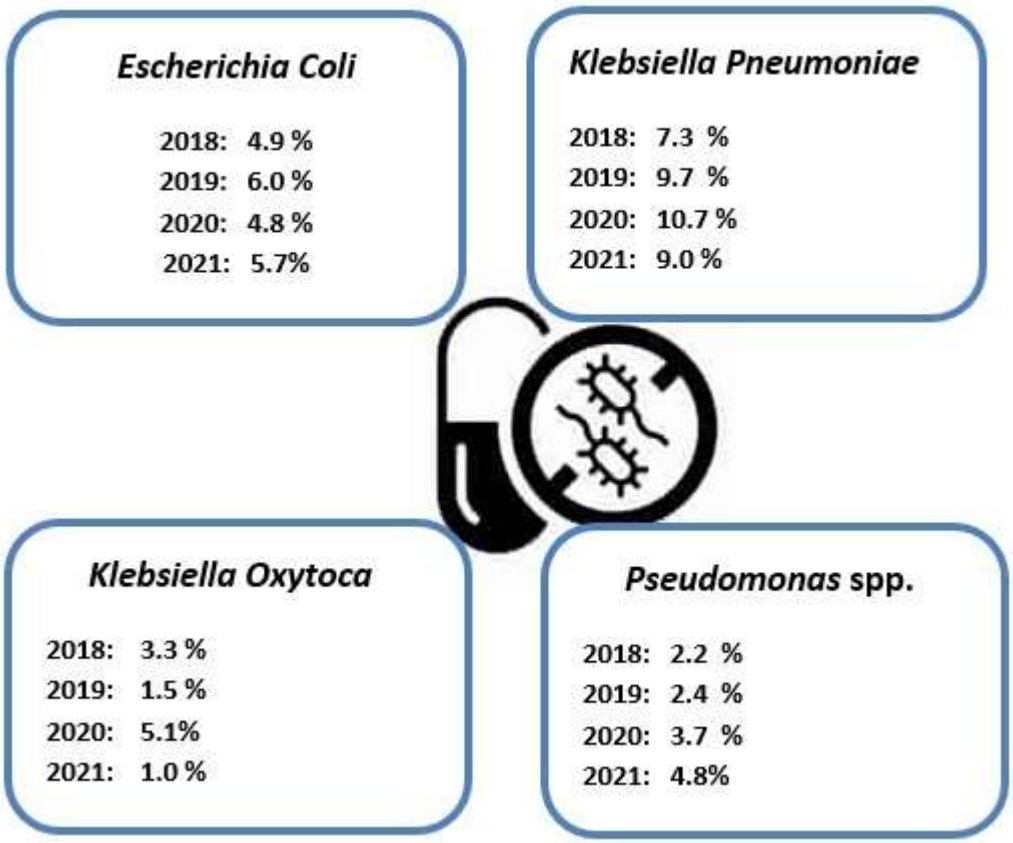


Figure 1.4: Proportion of isolates displaying multi-drug resistance (resistance to three or more antibiotic classes)

## Antibiotic Consumption

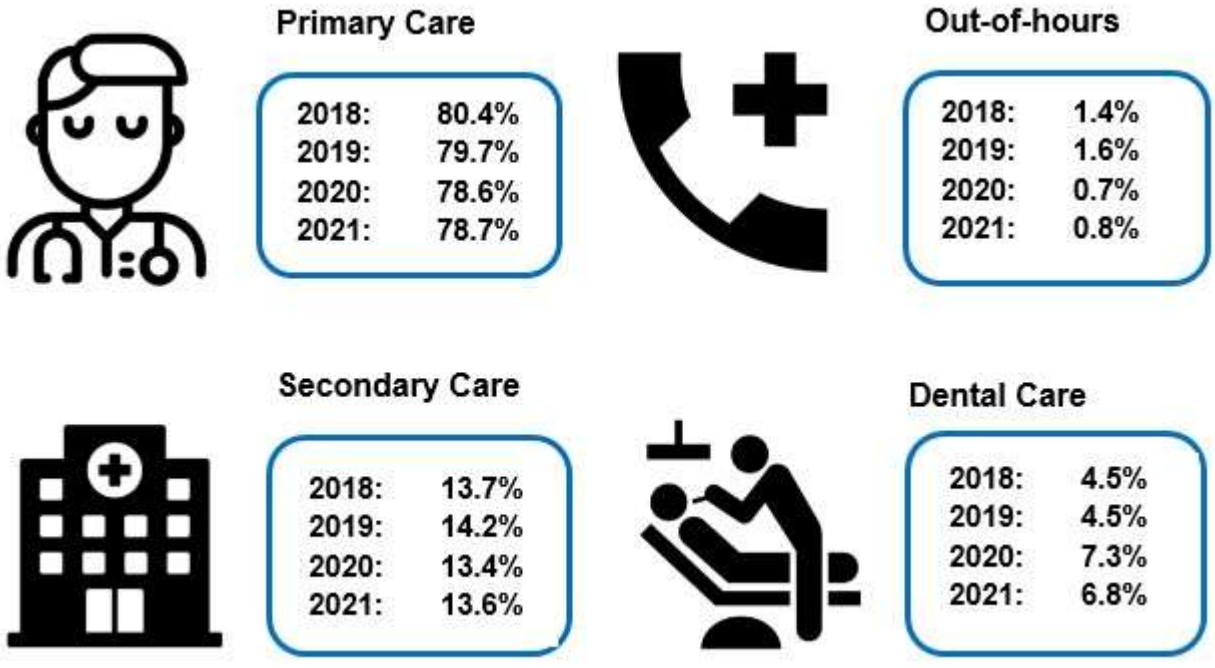


Figure 1.5: Proportion of total antibiotic consumption by setting

Total antibiotic consumption generally decreased between 2018 to 2021, with a slight increase noted from 2020 to 2021. Decreases were noted in both primary and secondary care settings with the majority of prescribing taking place in primary care. Prescribing from out-of-hours remained relatively stable between 2020 to 2021. Consumption of antibiotics in dental care accounted for less than 7% of total antibiotic consumption during 2021.

*Note: Primary care includes "in hours primary care" and out-of-hours includes "primary care out-of-hours".*

## Engagement Activities & Future Work

Despite barriers introduced by the COVID-19 pandemic in 2020, the PHA continued to work with healthcare trusts to monitor trends in gram-negative bloodstream infections and antibiotic prescribing and with partners within the Health and Social Care Board (now Strategic Planning and Performance Group) to deliver public campaigns and interventions to increase awareness of appropriate antibiotic use and reduce antimicrobial resistance. In 2023, the PHA will contribute to the development of the new UK National Action Plan for antimicrobial resistance and the development of a local implementation plan for NI.

## Authors

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Declan Bradley, Deputy Director of Public Health, Consultant in Public Health Medicine

## Date generated: 17/10/2023

# 2 Background

Antibiotics have been one of the most important life-saving medical developments of the last century. However, they are not effective against all types of bacteria (socalled intrinsic resistance). In addition, some bacteria can develop tolerance to certain antibiotics or develop ways to break them down (so-called extrinsic resistance). In either case, if these go on to cause an infection it can be much more difficult to treat. If the use of antibiotics remains unchecked, common infections will become more dangerous, and surgical procedures where antibiotics are used will become more difficult to perform safely. Antimicrobial-resistant infections already cause illness and death in patients and also disrupt care in hospitals. Reducing the use of antibiotics where they are not necessary will help keep antibiotics working in the future. In recognition of this the NI Department of Health, the Department of Agriculture, Environment and Rural Affairs, and the Food Standards Agency published an updated five-year action plan in 2019, using a whole system type approach to tackle antimicrobial resistance (Changing the culture 2019-2024: One Health) [2].

Policy for the reduction of antimicrobial-resistant infections and antimicrobial consumption is led by the One Health Strategic Antimicrobial Resistance and Healthcare-associated Infection (SAMRHAI) group. PHA leads a multi-agency group, the Healthcare-associated Infection and Antimicrobial Stewardship Improvement Board, for translating policy and strategy into action for human health which has a number of themed subgroups responsible for regional efforts to reduce harm from antimicrobial use and resistance in different settings.

The aim of the report is to describe trends in antibiotic resistance and antibiotic consumption in NI. The first section describes trends in antibiotic resistance using selected combinations of bacteria and antibiotics in line with those identified as key indicators as part of the UK antimicrobial resistance strategy [3]. In addition, bacteria-antibiotic combinations included in the English surveillance programme for antimicrobial utilisation and resistance (ESPAUR) report [4] were also chosen.

The second section describes the trends in antibiotic consumption in NI. Antibiotic consumption is the key driver for the emergence of resistance in healthcare. Antibiotics are prescribed across a range of settings including primary care, secondary care (hospitals) and by dentists. In this report, information from primary and secondary care, out-of-hours services and dental care are provided.

# 3 Results

# 3.1 Antibiotic resistance

## 3.1.1 *Escherichia coli* bacteraemia

The number of *Escherichia coli* bacteraemias has been generally increasing since 2009 but decreased between 2018 and 2021 from 1675 to 1478 (Figure 3.1). Between 2019 and 2020 the number of *E. coli* bacteraemias decreased from 1733 to 1415 before a slight increase in 2021. The proportion of isolates tested against key antibiotics during 2021 is shown in Appendix 3.

The overall proportion of *E. coli* bacteraemias non-susceptible to selected antibiotics decreased between 2018 to 2021 (19.2% to 16.7%).

Non-susceptibility to co-amoxiclav and third-generation cephalosporins remained relatively stable between 2018 and 2021 (55.9% to 53.7% and 10.8% to 10.4% respectively). Resistance to piperacillin/tazobactam has seen a slight increase over the same time period (15.9% to 17.5%). Gentamicin resistance increased from 2018 to 2019 (9.8% to 10.6%), decreased to 9.5% in 2020 before further decreasing to 8.3% in 2021. *E. coli* resistance to ciproflaxin steadily decreased from 17.9% in 2018 to 14.5% in 2021.

There were a total of five *E. coli* isolates non-susceptible to carbapenems detected from 2020 to 2021. This is an increase from the 3 non-susceptible isolates detected during the 2018-2019 reporting period (Figure 3.2).

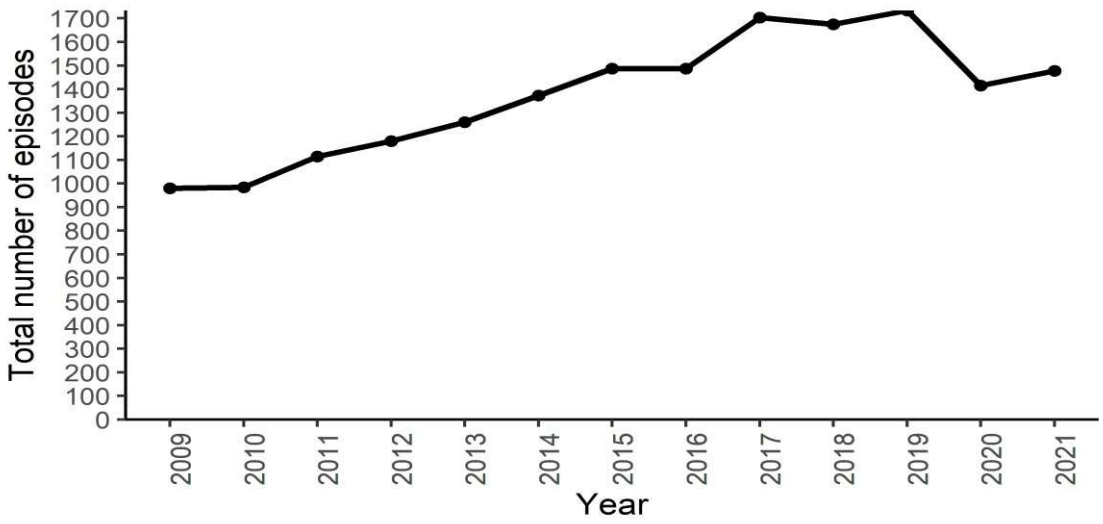


Figure 3.1: Number of *E. coli* bacteraemias reported to the PHA, 2009 - 2021

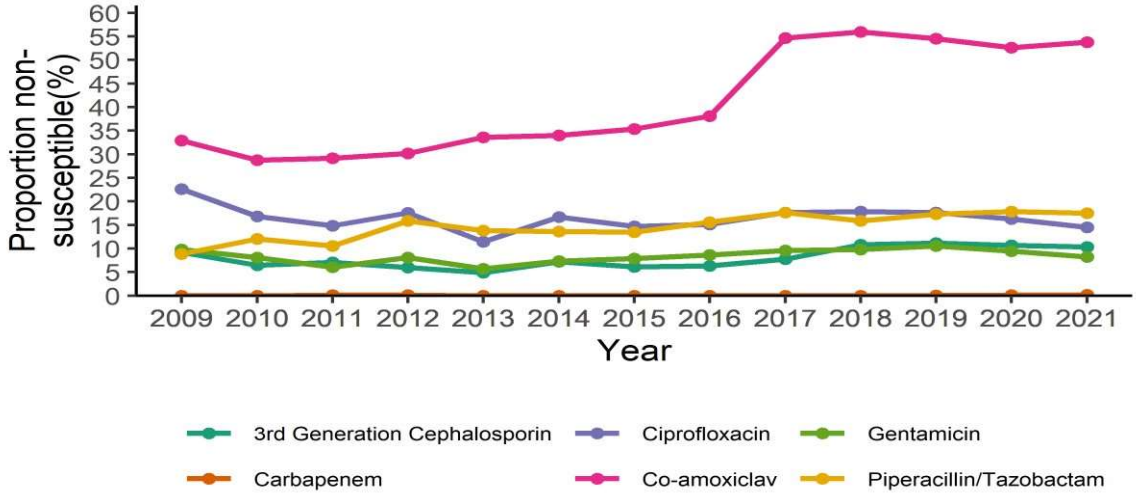


Figure 3.2: Proportion of *E. coli* bacteraemias non-susceptible to selected antibiotics in NI, 2009 - 2021

The proportion of *E. coli* bacteraemias showing multi-drug resistance slightly increased between 2018 to 2019 (4.9% to 6%), decreasing in 2020 (4.8%) before increasing to 5.7% in 2021. Within the combination of antibiotic classes, the highest proportion of non-susceptibility in 2021 was among third-generation cephalosporins, quinolones and aminglycosides (3.4%). This is a slight increase in comparison to 2020 during which 3% of *E. coli* were non-susceptible to third-generation cephalosporins, quinolones and aminoglycosides. The lowest proportion nonsusceptible in 2021 was observed for third-generation cephalosporins, aminoglycosides and piperacillin/tazobactam (1.8%), remaining relatively stable in comparison to 2020 (1.5%) (Figure 3.3).

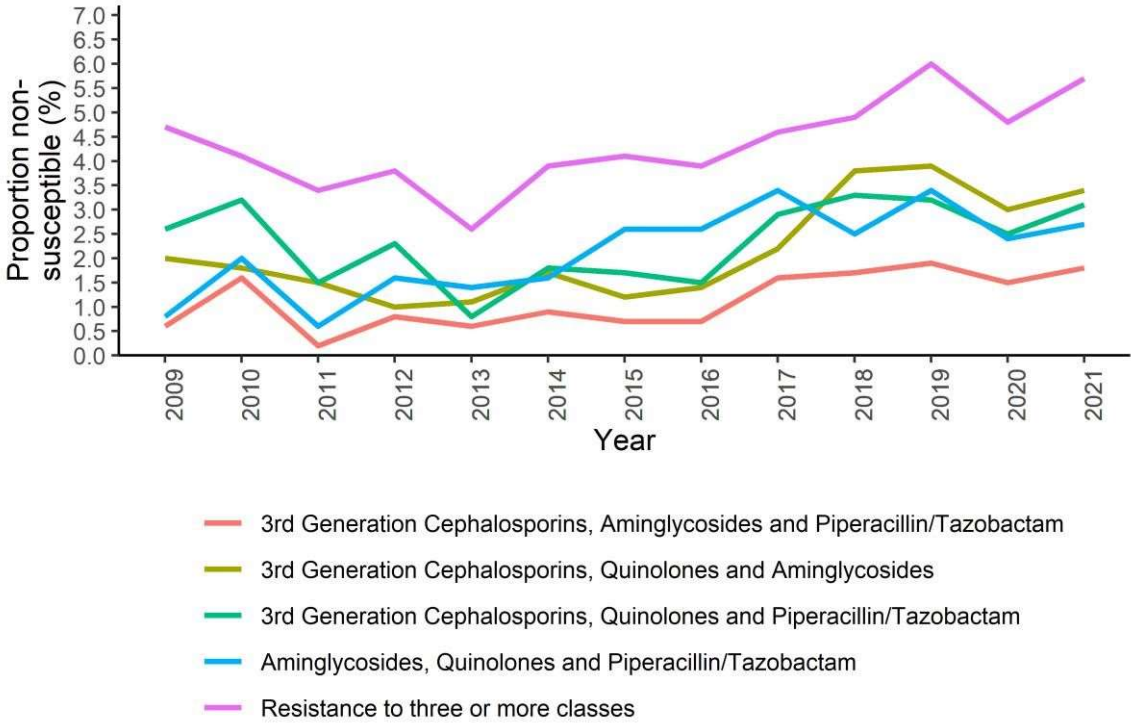


Figure 3.3: Proportion of *E. coli* bacteraemias reported to the PHA with multi-drug resistance, 2009 - 2021

### 3.1.2 *Klebsiella pneumoniae* bacteraemia

The number of *Klebsiella pneumoniae* bacteraemias has generally been increasing since 2009 but decreased between 2019 and 2021 from 238 cases to 204 (Figure 3.4). The proportion of isolates tested against key antibiotics during 2021 is shown in Appendix 3.

The overall proportion of *K. pneumoniae* bacteraemias non-susceptible to selected antibiotics increased from 16.5% in 2018 to 18.1% in 2020 before decreasing in 2021 (15.2%).

Specifically, resistance has decreased from 2018 to 2021 for; ciprofloxacin (19.4% to 16.3%); gentamicin (11% to 8.9%) and co-amoxiclav (29.1% to 25.9%). Cephalosporin resistance increased from 14% in 2018 to 19.8% in 2020 before decreasing to 14.5% in 2021. A similar trend was observed for piperacillin/tazobactam which also saw a slight increase in resistance from 2018 to 2020 (26.8% to 28.7%) before falling to 25.2% in 2021.

The number of isolates non-susceptible to carbapenems has increased between 2018-2021 from zero non-susceptible isolates detected in 2018 to 2 detected in 2021. In 2019, a single carbapenem non-susceptible *K. pneumoniae* isolate was detected with none detected during 2020 (Figure 3.5).

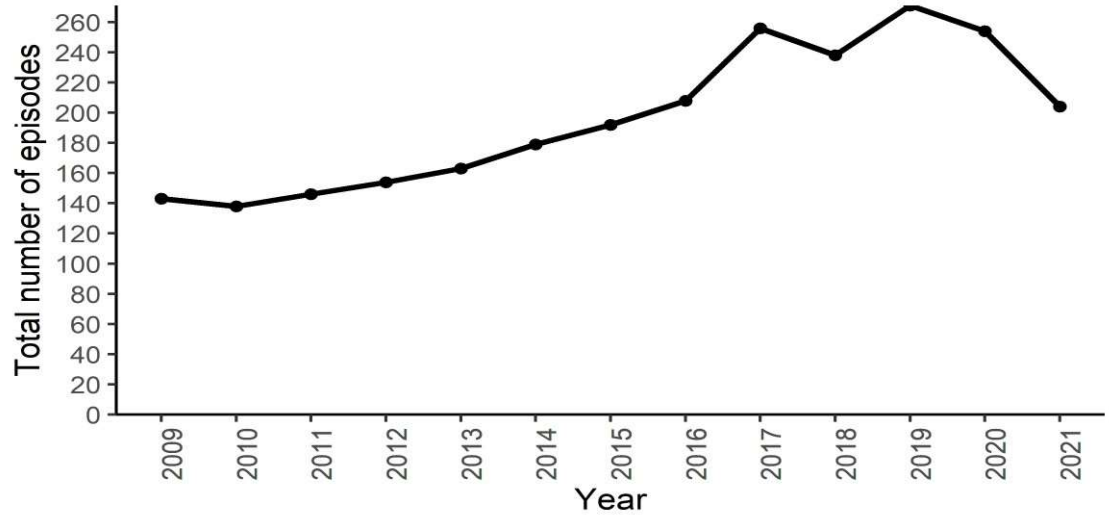


Figure 3.4: Number of *K. pneumoniae* bacteraemias reported to the PHA, 2009 - 2021

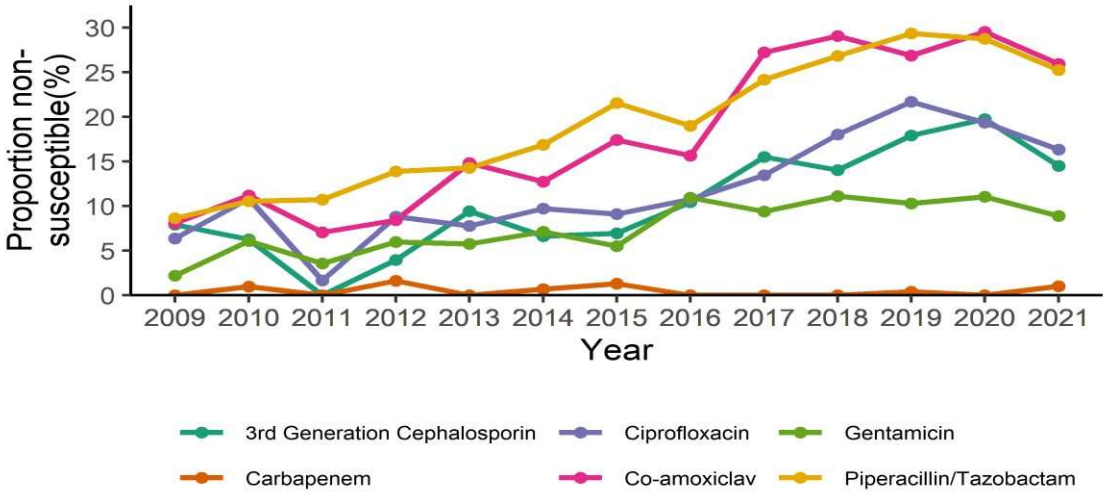


Figure 3.5: Proportion of *K. pneumoniae* bacteraemias non-susceptible to selected antibiotics in NI, 2009 - 2021

The proportion of *K. pneumoniae* bacteraemias showing multi-drug resistance increased slightly within the named antibiotic combinations from 2018 to 2019 (7.3% to 9.7%), increasing further to 10.7% in 2020 before decreasing to 9% in 2021. Within the named combinations of antibiotic classes, the highest proportion nonsusceptible during 2018-2020 was observed among third-generation cephalosporins, quinolones and piperacillin/tazobactam, which increased from 5.2% in 2018 to 6% in 2020. In 2021, the highest proportion non-susceptible was observed among thirdgeneration cephalosporins, aminoglycosides and piperacillin/tazobactam (6%).

The lowest proportion non-susceptible among the antibiotic class combinations has varied during the 2018-2021 period. In 2018, lowest proportion non-susceptible was observed for third-generation cephalosporins, aminoglycosides and piperacillin/tazobactam (4.5%), while in both 2019 and 2021 the lowest proportion non-susceptible was observed among aminoglycosides, quinolones and piperacillin/tazobactam (7.0% and 4.5% respectively). During 2020, 4.4% of *K. pneumoniae* isolates were non-susceptible to third-generation cephalosporins, quinolones and aminoglycosides (Figure 3.6).

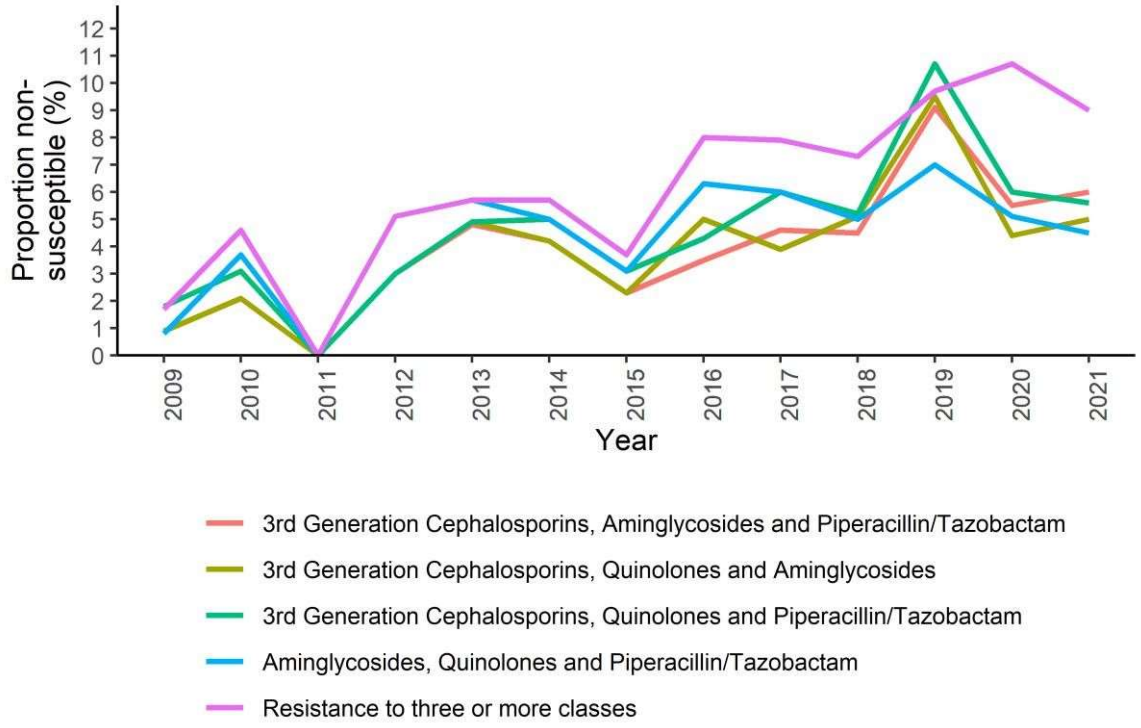


Figure 3.6: Proportion of *K. pneumoniae* bacteraemias reported to the PHA with multi-drug resistance, 2009 - 2021

### 3.1.3 *Klebsiella oxytoca* bacteraemia

The number of *Klebsiella oxytoca* bacteraemias had been generally stable between 2009-2017. This trend continued during 2018 and 2019 (72 and 71 isolates reported respectively) with a decrease noted in 2020 (61 reported isolates). During 2021 an increase in reported *K. oxytoca* bacteraemias was observed (106 isolates), the highest annual number reported since 2009 (Figure 3.7). The proportion of isolates tested against key antibiotics during the reporting period is shown in Appendix 3.

The overall proportion of *K. oxytoca* bacteraemias non-susceptible to selected antibiotics increased between 2018-2020, from 5.7% to 10.8%, before decreasing to 4.5% in 2021.

*K. oxytoca* resistance to co-amoxiclav remained relatively stable between 2018-2019 (10.7% and 10.3% respectively) before more than doubling to 24.6% in 2020. This trend however sharply decreased again in 2021, returning to the levels previously observed (10.6%). A similar trend was observed for *K. oxytoca* resistance to piperacillin/tazobactam which was relatively stable between 2018-2019 (10.6% and 10.3% respectively) before increasing in 2020 (18.3%), then decreasing again to 12.3% in 2021.

Within the combination of antibiotic classes, a decrease in resistance was observed between 2018 and 2021 for; third-generation cephalosporins (10.3% to 3.8%), ciprofloxacin (6.7% to 1% respectively), co-amoxiclav (24.6% to 10.6%) and piperacillin/tazobactam (18.3% to 12.3%). The number of *K. oxytoca* bacteraemias non-susceptible to gentamicin has fluctuated across the 2018-2021 period from zero to one in 2018-2019, increasing to 3 non-susceptible isolates in 2020. There were no *K. oxytoca* isolates non-susceptible to gentamicin reported in 2021. Carbapenem

non-susceptible isolates remained at zero during the 2018 to 2021 period (Figure 3.8).

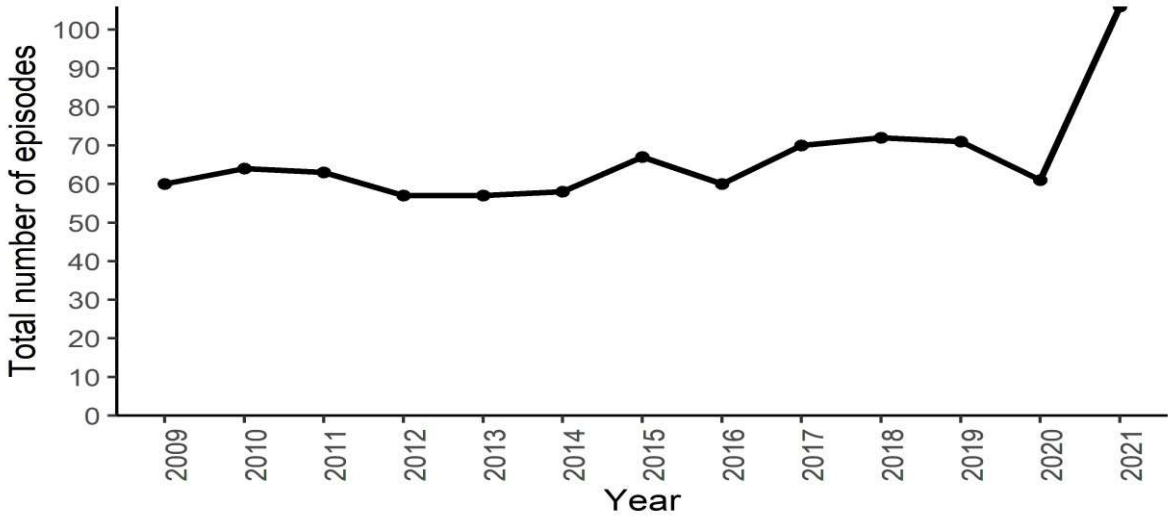


Figure 3.7: Number of *K. oxytoca* bacteraemias reported to the PHA, 2009 - 2021

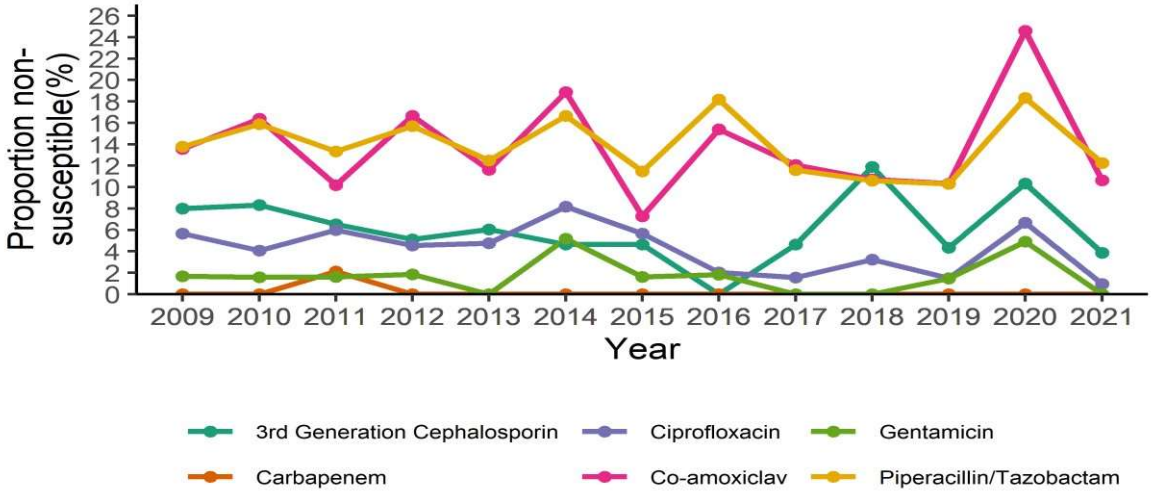


Figure 3.8: Proportion of *K. oxytoca* bacteraemias non-susceptible to selected antibiotics in NI, 2009 - 2021

### 3.1.4 *Pseudomonas* species bacteraemia

The number of reported *Pseudomonas* species bacteraemias increased from 92 cases in 2018 to 134 cases in 2019, decreasing again to 92 in 2020. During 2021 an increase in the number of *Pseudomonas* species bacteraemias was observed with 111 isolates reported to the PHA (Figure 3.9). The proportion of isolates tested against key antibiotics during 2021 is shown in Appendix 3.

The overall proportion of *Pseudomonas* species bacteraemias non-susceptible to selected antibiotics has slightly increased from 2018 to 2021 (10.2% to 13.3%). There has been a steady decrease in the proportion of *Pseudomonas* species isolates non-susceptible to gentamicin during the 2018-2021 period (6.9% to 1.9%), with a decrease observed in ciprofloxacin resistance (18.4 to 16.4%). *Pseudomonas*

species resistance to pipercillin/tazobactam decreased from 7.2% to 5.5% during 2018-2019, increasing in 2020 to 10.9% and further in 2021 to 18.2%. A similar trend was noted for isolates non-susceptible to third-generation cephalosporins. The proportion of *Pseudomonas* species bacteraemias non-susceptible to cephalosporins decreased during 2018-2019 (6.9% to 2.4%), before increasing during both 2020 and 2021 to 9.9 and 16.4% respectively. *Pseudomonas* resistance to carbapenems fluctuated between 2018 to 2021, increasing between 2018-2019 (11.5 to 18.7%) before decreasing in 2020 to 16.3% and further to 13.6% in 2021 (Figure 3.10).

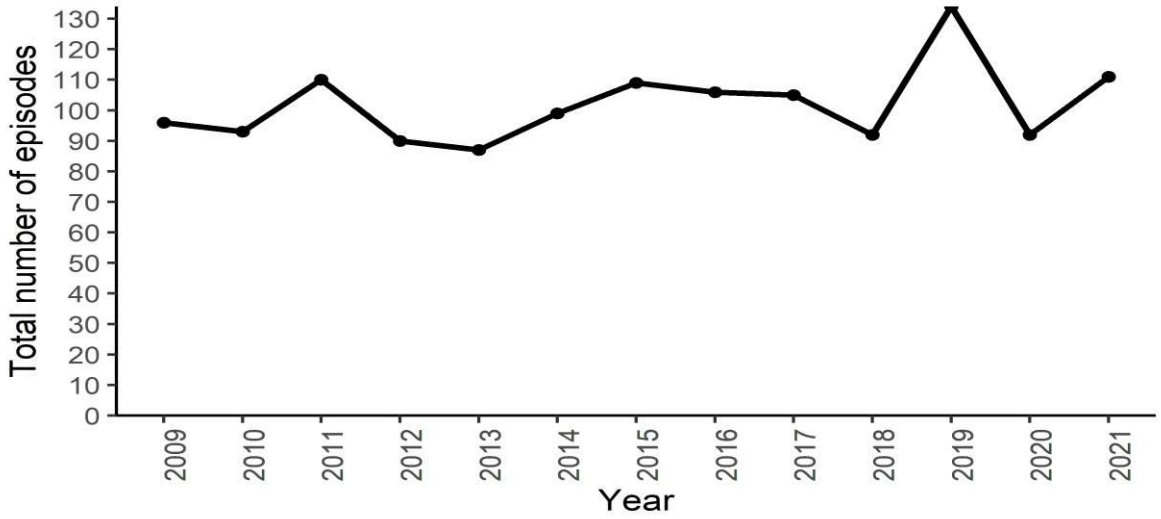


Figure 3.9: Number of *Pseudomonas* species bacteraemias reported to the PHA, 2009 - 2021

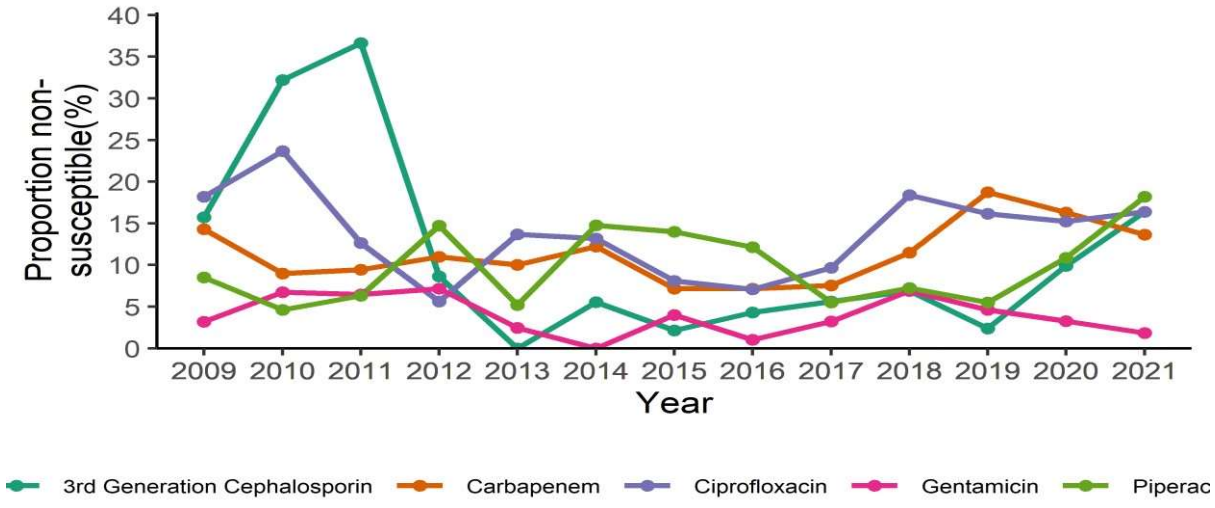


Figure 3.10: Proportion of *Pseudomonas* species bacteraemias non-susceptible to selected antibiotics in NI, 2009 - 2021

## 3.1.5 *Staphylococcus aureus* bacteraemia

The number of *Staphylococcus aureus* bacteraemias reported to the PHA has been increasing since 2014. The number reported increased from 453 in 2018 to 506 in

2021 (Figure 3.11). The proportion of isolates tested against key antibiotics during 2021 is shown in Appendix 3.

The proportion of *S. aureus* isolates non-susceptible to meticillin (MRSA) has steadily decreased from 2009 and remained below 12% during 2018-2021, with a low of 8.6% in 2021. A slight increase in the proportion of meticillin non-susceptible episodes was observed between 2019 to 2020 (9.4% in 2019 to 11.6% in 2020) before decreasing in 2021.

There were no *S. aureus* isolates non-susceptible to glycopeptides (eg. vancomycin or teicoplanin) detected during 2018 and 2019, with one reported in 2020 and 2021 respectively (Figure 3.12).

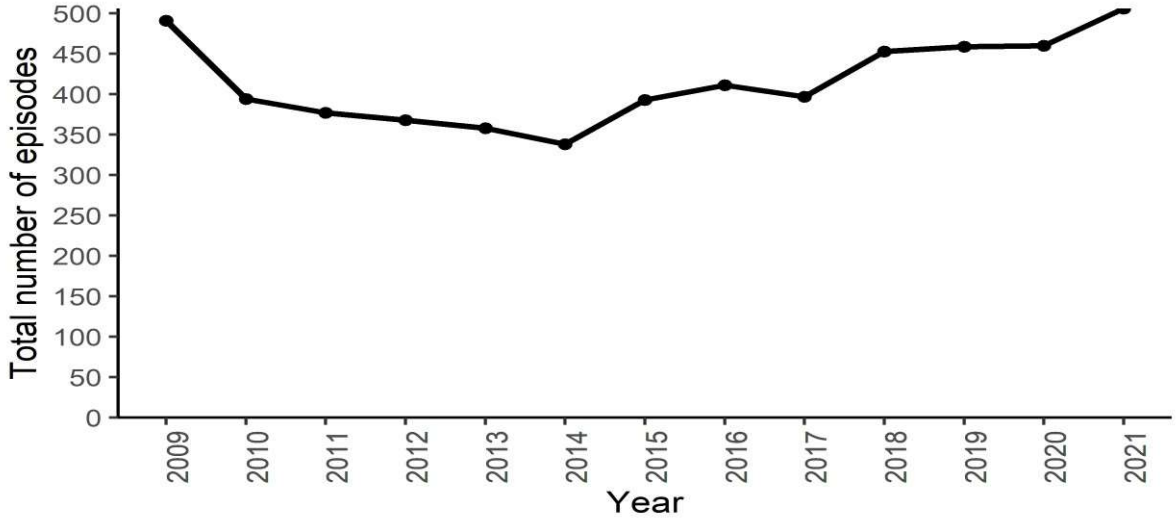


Figure 3.11: Number of *S. aureus* bacteraemias reported to the PHA, 2009 - 2021

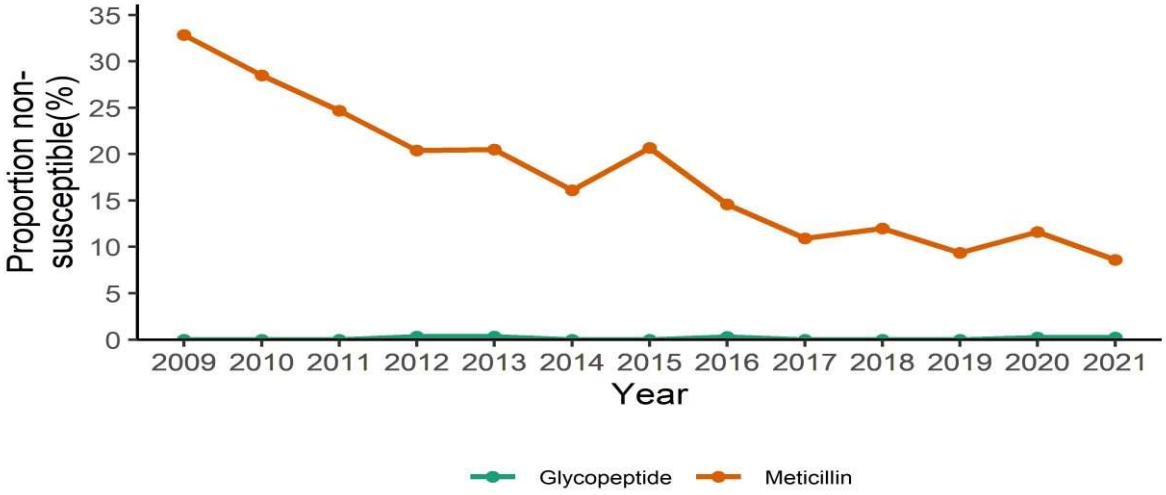


Figure 3.12: Proportion of *S. aureus* bacteraemias non-susceptible to selected antibiotics in NI, 2009 - 2021

### 3.1.6 *Enterococcus* species bacteraemia

The number of *Enterococcus* species bacteraemias has been generally increasing since 2009 but decreased slightly between 2018-2019 from 290 to 271 reported episodes. During 2020 and 2021 the number reported increased, to 275 in 2020 and further to 312 in 2021 (Figure 3.13). The proportion of *Enterococcus* species bacteraemias non-susceptible to glycopeptides remained relatively stable around 27% between 2018 and 2020, decreasing to 21.2% in 2021 (Figure 3.14).

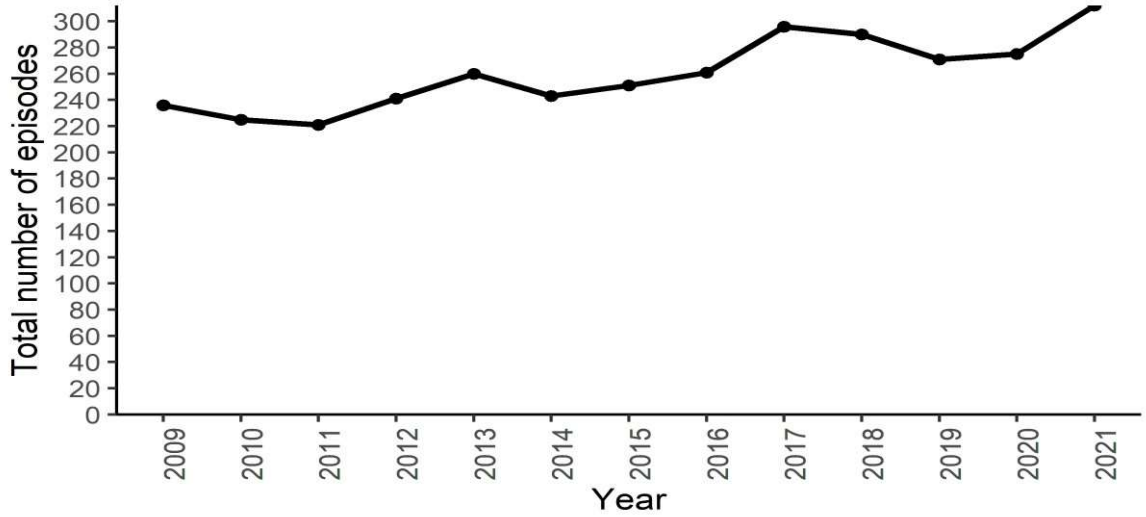


Figure 3.13: Number of *Enterococcus* species bacteraemias reported to the PHA, 2009 - 2021

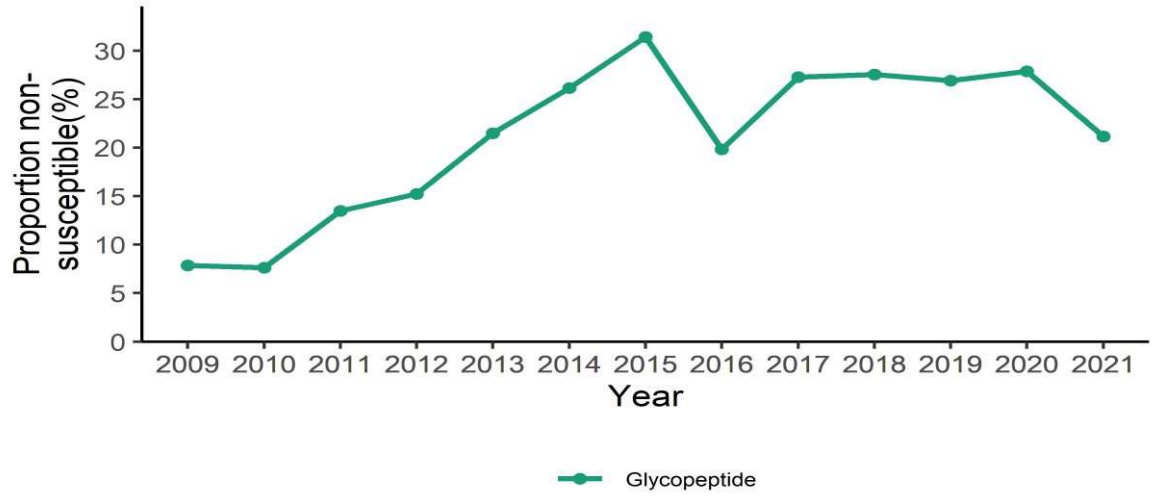


Figure 3.14: Proportion of *Enterococcus* species bacteraemias non-susceptible to selected antibiotics in NI, 2009 - 2021

Amongst the two key *Enterococcus* species, resistance to teicoplanin and vancomycin decreased for both *Enterococcus faecium* and *Enterococcus faecalis* between 2019 and 2021. No resistance to linezolid was detected among *Enterococcus faecalis* isolates during 2018 to 2021, with linezolid resistance detected amongst *Enterococcus faecium* isolates during only 2020 (0.78%) and 2021 (0.7%) (Figure 3.15).

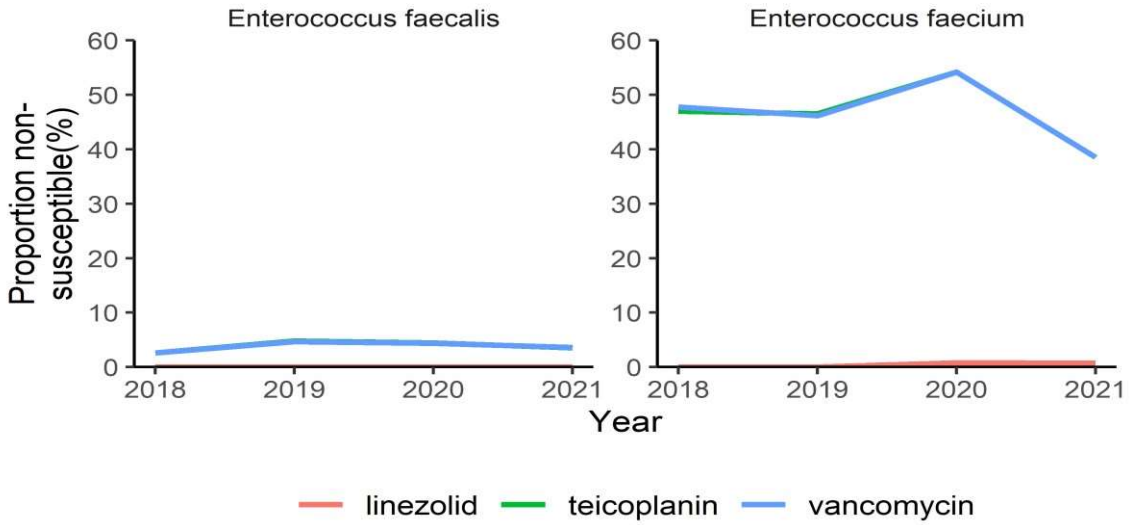


Figure 3.15: Proportion of *Enterococcus faecium* and *faecalis* species bacteraemias nonsusceptible to selected antibiotics in NI, 2009 - 2021

## 3.1.7 *Streptococcus pneumoniae* bacteraemia

The number of *Streptococcus pneumoniae* bacteraemias reported to PHA had been generally increasing between 2012 to 2019 but decreased sharply in 2020 (from 150 to 52 episodes), decreasing further to 46 episodes in 2021 (Figure 3.16). The proportion of isolates tested against key antibiotics during the reporting period is shown in Appendix 3.

The proportion of *S. pneumoniae* non-susceptible to macrolides decreased between 2018 and 2021 (8.2% to 5%). The proportion of isolates non-susceptible to penicillin has fluctuated throughout the same time period, doubling between 2018-2019 (5.5% to 10.7% of tested isolates) before decreasing to 5.8% in 2020, then increasing in 2021 (19.6%) (Figure 3.17).

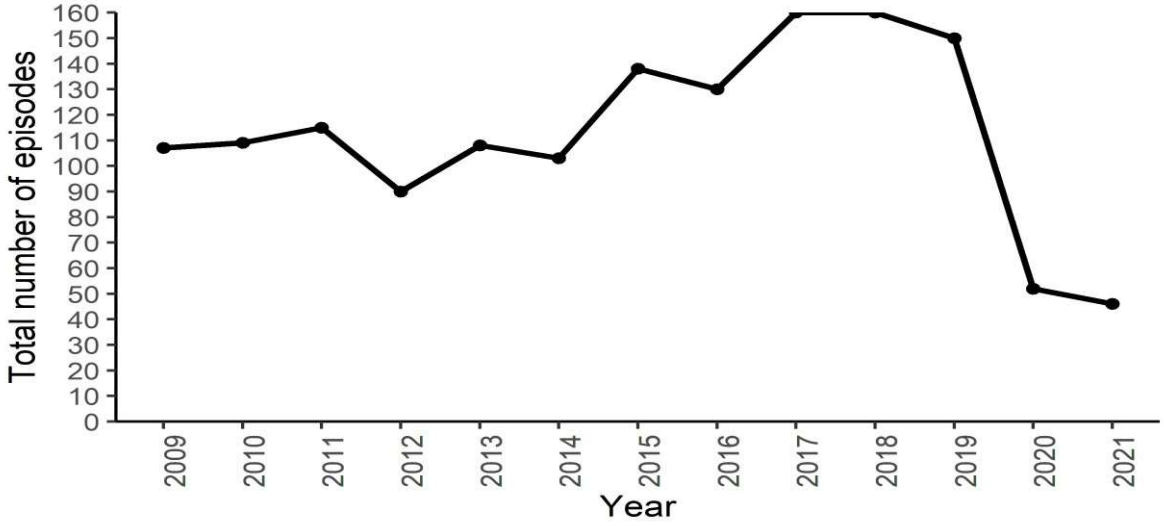


Figure 3.16: Number of *S. pneumoniae* bacteraemias reported to the PHA, 2009 - 2021

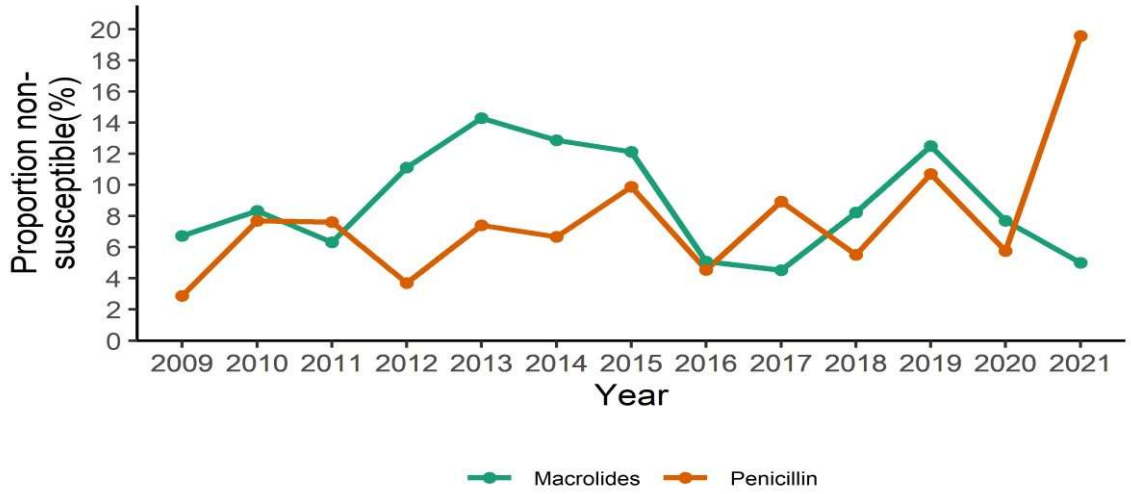


Figure 3.17: Proportion of *S. pneumoniae* bacteraemias non-susceptible to selected antibiotics in NI, 2009 - 2021

## 3.1.8 *Acinetobacter* species bacteraemia

The number of *Acinetobacter* species bacteraemias has decreased between 2009 and 2021, staying relatively stable from 2012 with a small spike observed during 2018. Between 2018 and 2021 the number of reported *Acinetobacter* species has steadily decreased, with 24 episodes in 2021 (Figure 3.18). There have been no *Acinetobacter* species isolates non-susceptible to colistin reported since 2017 (Figure 3.19).

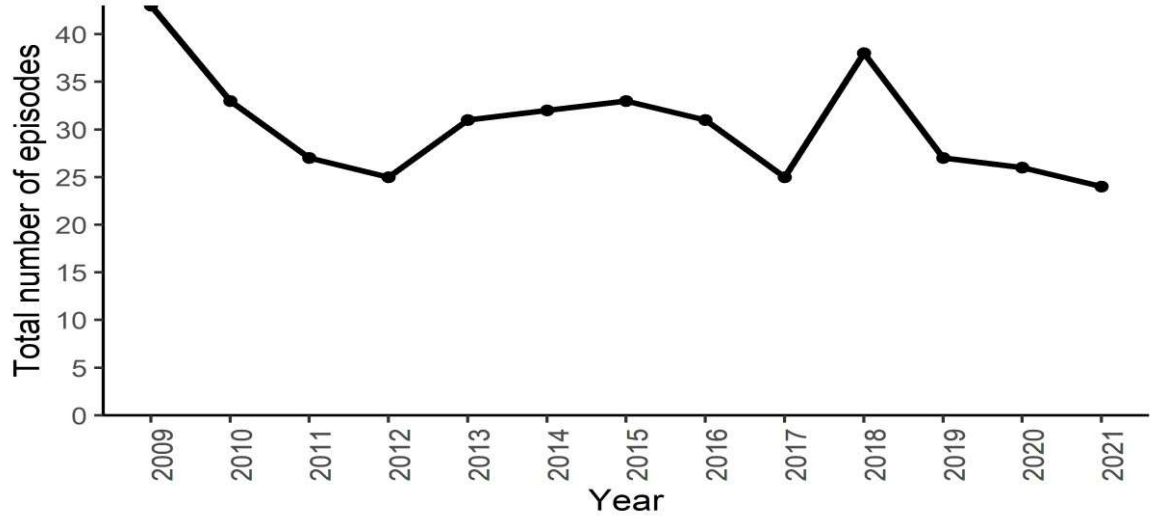


Figure 3.18: Number of *Acinetobacter* species bacteraemias reported to the PHA, 2009 - 2021

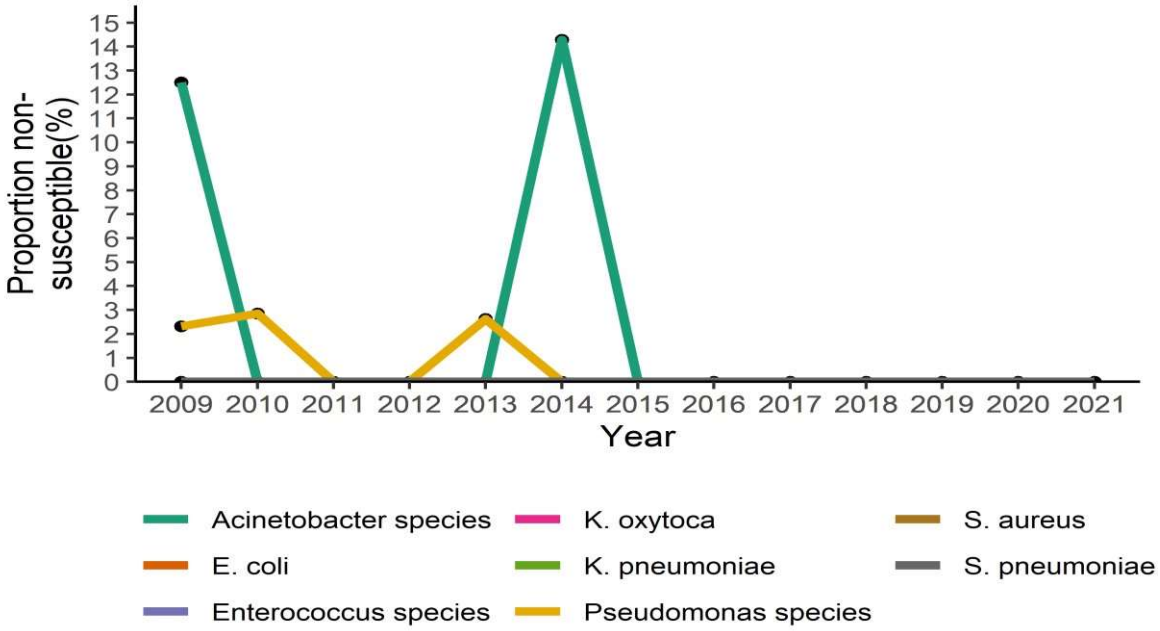


Figure 3.19: Proportion of selected bacteraemias non-susceptible to colistin in NI, 2009 - 2021

## 3.1.9 Carbapenamase-Producing Enterobacterales

The number of carbapenamase-producing Enterobacterales (CPE) voluntarily reported to the PHA increased between 2018 to 2019 but decreased during both 2020 and 2021.There were 24 CPE episodes reported during 2019, decreasing to 9 in 2020 and further to 5 episodes in 2021 (Figure 3.20).

In 2019 the most commonly reported mechanism of carbapenem resistance was New Delhi Metallo-β-lactamase (NDM) (11 episodes) while in 2020 the mechanism of resistance was mostly unknown. In 2021, NDM and OXA-48 were the most commonly reported resistance mechanisms (2 episodes each) with no reports of IMP (Imipenemase producers) or VIM (Verona integron-encoded Metallo-β-lactamase) mechanisms during 2021.

Similar to 2018, the most commonly reported CPE organism during both 2020 and 2021 was *Klebsiella pneumoniae* (3 episodes, respectively). In 2019, *Enterobacter cloacae* was the most commonly reported CPE (7 episodes) (Figure 3.21).

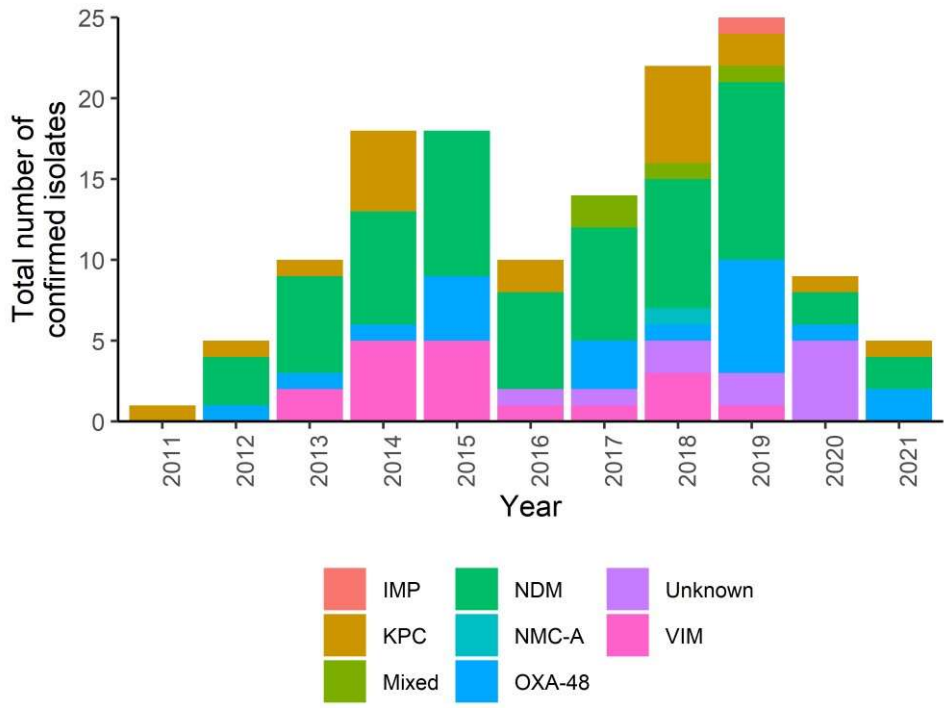


Figure 3.20: Number of carbapenemase-producing Enterobacterales confirmed isolates, by resistance mechanism, 2011 - 2021

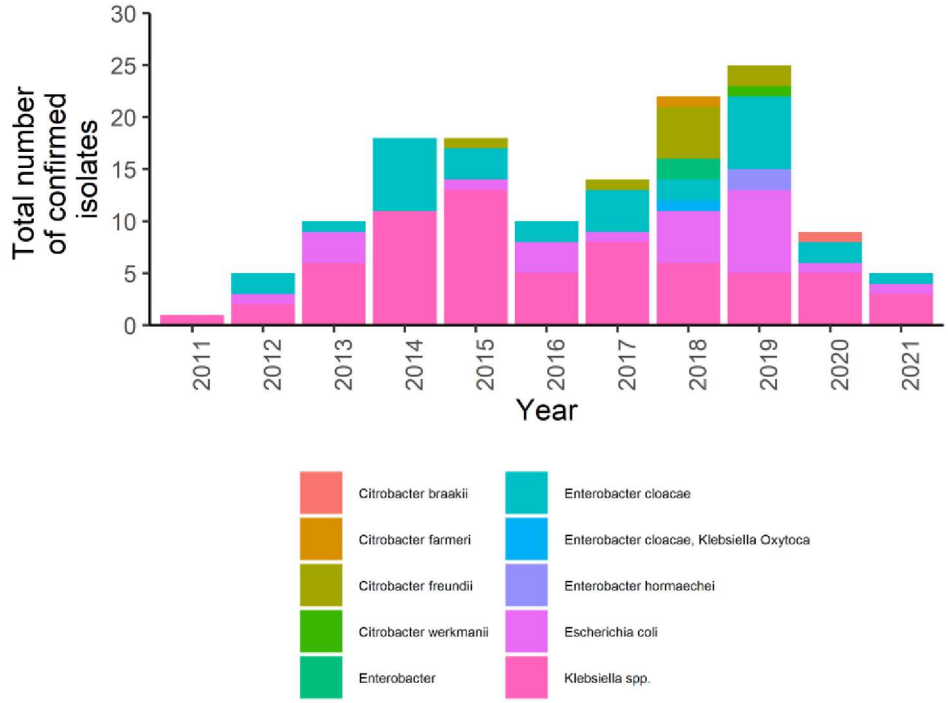


Figure 3.21: Carbapenamase-producing Enterobacterales confirmed isolates, 2011 - 2021

### 3.1.10 Antibiotic resistance in *Neisseria gonorrhoeae*

Gonorrhoea has been identified as at risk of becoming an untreatable disease due to the emergence of resistance to successive standard treatments [5]. This has necessitated changes to recommended antibiotic prescribing. In the UK, current

recommended treatment guidelines include the extended spectrum cephalosporin (ESC), ceftriaxone, along with routine test of cure [6]. Azithromycin is no longer recommended as co-treatment. Third-generation cephalosporins are the last remaining effective antibiotics but reports of treatment failures and increasing minimum inhibitory concentrations (MIC) levels have raised concerns that they will no longer be a suitable treatment option [7]. From 2021, PHA submitted *N. gonorrhoeae* antimicrobial susceptibility information directly to the WHO GLASS (Global Antimicrobial Resistance and Use Surveillance System) programme [8].

During 2021, 652 *Neisseria gonorrhoeae* diagnoses were made in Northern Ireland and sent to UKHSA for inclusion in GUMCAD (Genitourinary Medicine Clinic Activity Dataset). This is an increase in diagnoses in comparison to 2020, which saw 455 diagnoses. In 2021, 177 patients' samples were cultured and tested for antibiotic susceptibility. No isolates were resistant to ceftriaxone and 20.7% were resistant to azithromycin.

## 3.2 Antibiotic consumption

### 3.2.1 Rates of antibiotic consumption by healthcare setting

The total consumption of all antibiotics declined between 2018-2020 with the rate steadily decreasing from 28.5 DDD per 1000 inhabitants per day in 2018 to 23.99 DDD per 1000 inhabitants per day in 2020. During 2021, the total consumption rate slightly increased to 25.04 DDD per 1000 inhabitants per day.

The majority of antibiotic consumption between 2018 and 2021 took place in the primary care setting. While primary care has remained the highest prescriber of antibiotics, the proportion of total consumption accounted for by primary care continued to decline from 83.3% in 2014 to 78.7% in 2021. The proportion of total antibiotic consumption accounted for by dental settings remained relatively low and stable from 2014 (4.8%) to 2019 (4.5%). However, an increase was noted in 2020 (7.3%) before a slight decrease in 2021 (6.8%). Out-of-hours consumption decreased from 1.4% in 2018 to 0.8% in 2021.

The proportion of total antibiotic consumption accounted for by secondary care increased slightly from 11.4% in 2014 to 13.6% in 2021 (Figure 3.22). The proportion of antibiotic consumption accounted for by primary care remained relatively stable between 2020 and 2021 (78.6% and 78.7% respectively), while the primary care consumption rate increased from 18.85 per 1000 inhabitants per day in 2020 to 19.71 DDD per 1000 inhabitants per day in 2021. The secondary care antibiotic consumption rate remained relatively stable between 2014 and 2021 (3.43 to 3.41 DDD per 1000 inhabitants per day). Dental prescribing rates saw a steady decrease from 2014-2019 (1.44 to 1.26 DDD per 1000 inhabitants per day) before increasing in 2020 (1.76 DDD per 1000 inhabitants per day) but remaining relatively stable in 2021 (1.71 per 1000 inhabitants per day). Fluctuations were observed for prescribing rates in the out-of-hours setting with steady rates of 0.4 per 1000 inhabitants noted for 2017-2019, before decreases in 2020 and 2021 (to 0.16 and 0.2 per 1000 inhabitants per day respectively).

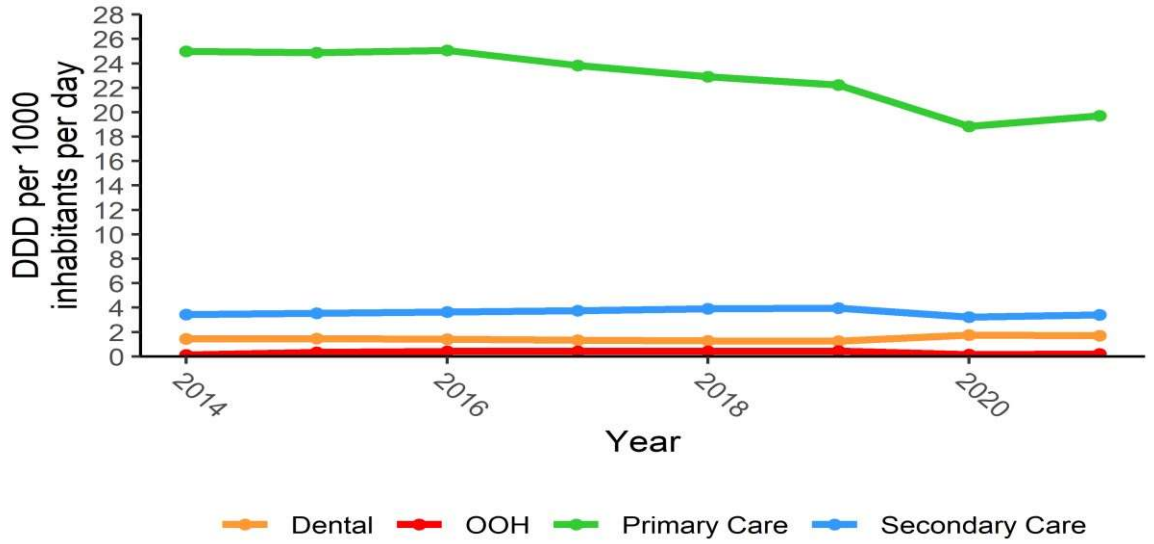


Figure 3.22: Total antibiotic consumption, expressed as DDD per 1000 inhabitants per day, NI, 2014 - 2021

### Rates of antibiotic consumption in Secondary care

There has been a general increase in the rate of secondary care antibiotic consumption expressed as DDD per 1000 admissions between 2018-2021, with the rate increasing from 9138 DDD per 1000 admissions in 2018 to 9626 DDD per 1000 admissions in 2021. The secondary care antibiotic consumption rate had been relatively stable between 2019 and 2020 (9398 to 9379 DDD per 1000 admissions respectively) (Figure 3.23).

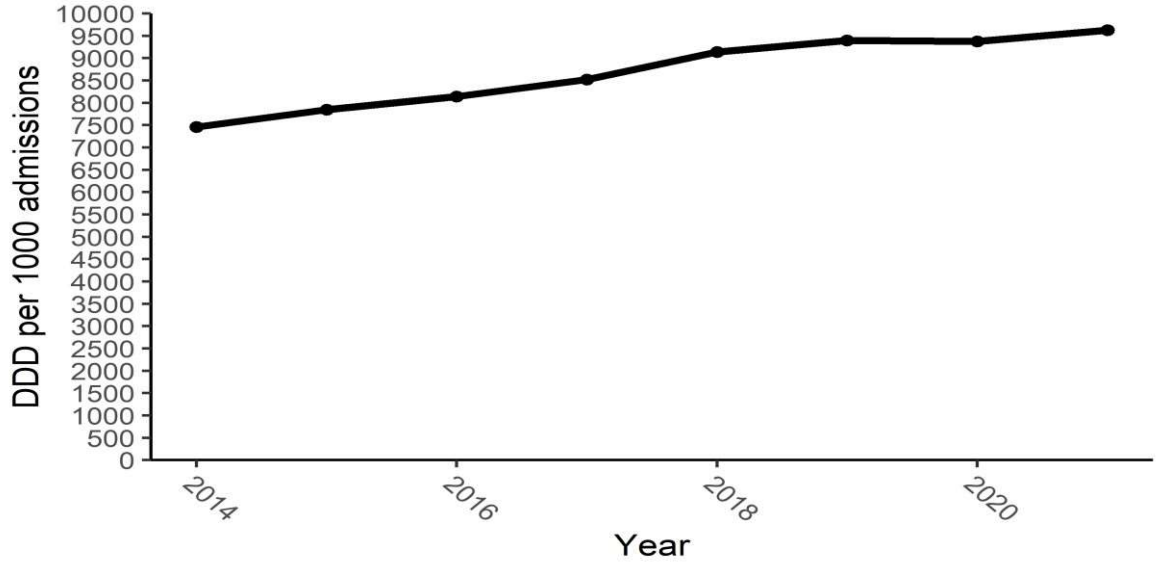


Figure 3.23: Total antibiotic consumption, expressed as DDD per 1000 admissions, NI, 2018 - 2021

The secondary care antibiotic consumption rate per 1000 occupied bed days decreased between 2018-2021 from 1502 to 1457 DDD per 1000 occupied bed days. The rate had increased slightly between 2018 and 2019 (1501 to 1542 DDD per 1000 occupied bed days), decreasing steadily between 2019 and 2021 (Figure 3.24).

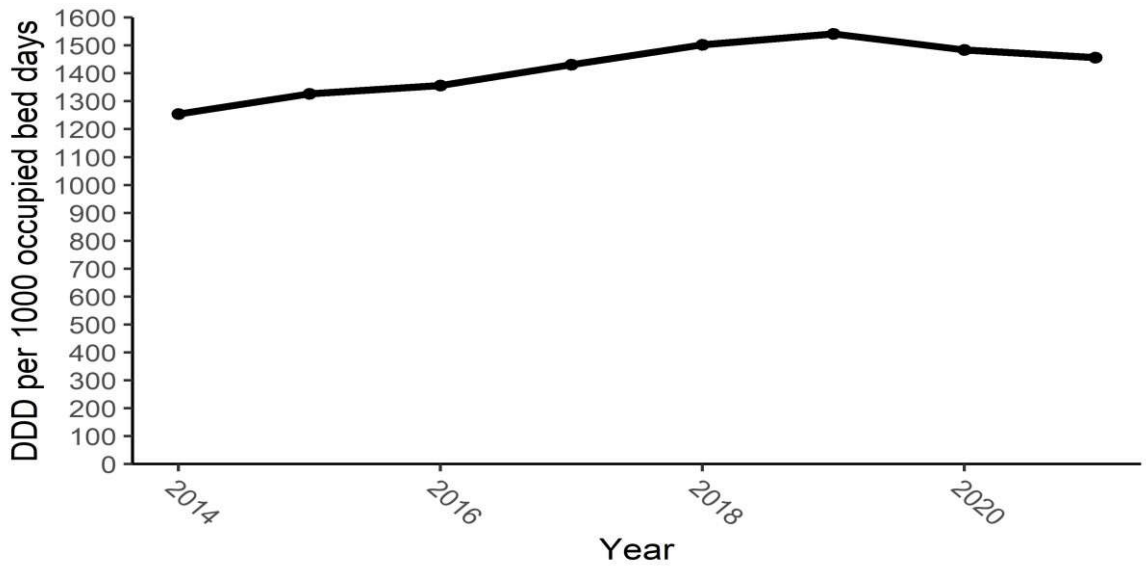


Figure 3.24: Total antibiotic consumption, expressed as DDD per 1000 occupied bed days, NI, 2014 - 2021

Figure 3.25 shows the top 6 antibiotics prescribed in secondary care. In 2021, the highest rates of antibiotic consumption were for penicillins, although penicillin usage has decreased from 2469 in 2018 to 2277 DDD per 1000 admissions in 2021. Penicillin/beta lactamase inhibitor combinations have increased from 1642 to 1858 DDD per 1000 admissions, while the use of tetracyclines and related drugs have also increased from 1223 in 2018 to 1415 DDD per 1000 admissions in 2021.

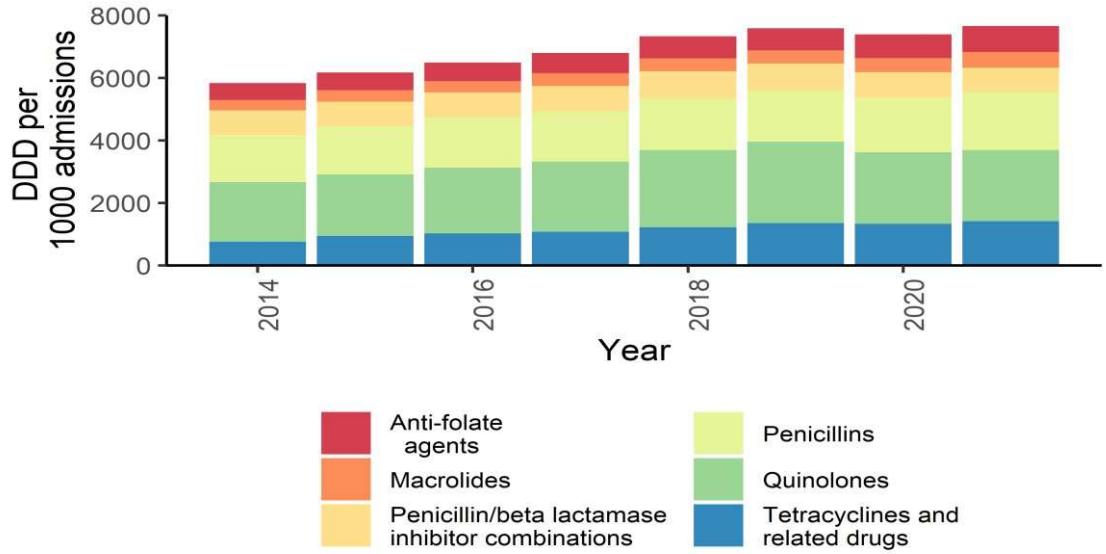


Figure 3.25: Total antibiotic consumption in secondary care, expressed as DDD per 1000 admissions, NI, 2014 - 2021

## 3.2.2 Antibiotic consumption by key agents

During 2021, the most frequently used antibiotics in both primary and secondary care in NI were penicillins (37.6% and 23.7% respectively), followed by tetracyclines and related drugs (29% and 14.7% respectively). This is similar to the trends observed in 2018 when penicillins were also the most frequently consumed antibiotic class in both primary and secondary care (38.7% and 27.0% respectively) (Figure 3.26).

*Note: Oral/rectal preparations for metronidazole (ATC P01AB01) and vancomycin (ATC A07AA09) are included in the anti-clostridium difficile agents and do not appear in the nitroimidazoles or glycopeptides categories respectively. Antituberculosis drugs include only streptomycin (ATC J01GA01).*

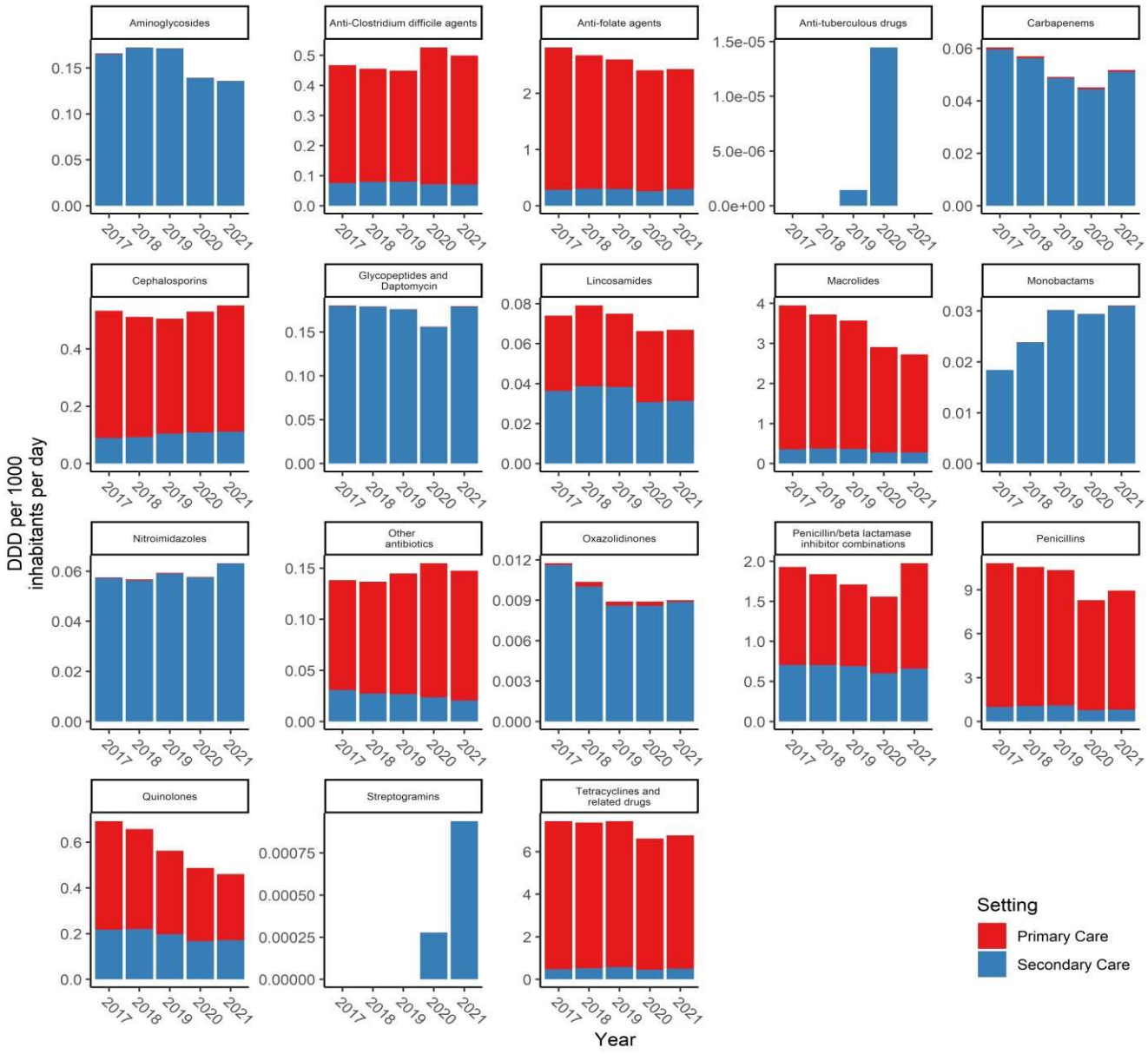


Figure 3.26: Total antibiotic consumption by key antibiotic groups, expressed as DDD per 1000 inhabitants per day, NI, 2014 - 2021 *Note: differing scales on y-axis.*

## 3.2.3 Antibiotic consumption by class and individual antibiotics

### Penicillins

Figure 3.27 shows the top six antimicrobial agents used in the penicillins class. Penicillins accounted for 35.7% of total antibiotic consumption in 2021. Penicillin consumption has decreased from 10.56 DDD per 1000 inhabitants per day in 2018 to 8.94 DDD per 1000 inhabitants per day in 2021, although a slight increase was observed between 2020 and 2021 (from 8.29 to 8.94 DDD per 1000 inhabitants per day). The highest rate among antibiotics in the penicillins class was for amoxicillin, which has steadily decreased between 2018-2021 (7.39 to 5.95 DDD per 1000 inhabitants per day), remaining relatively stable between 2020 and 2021.

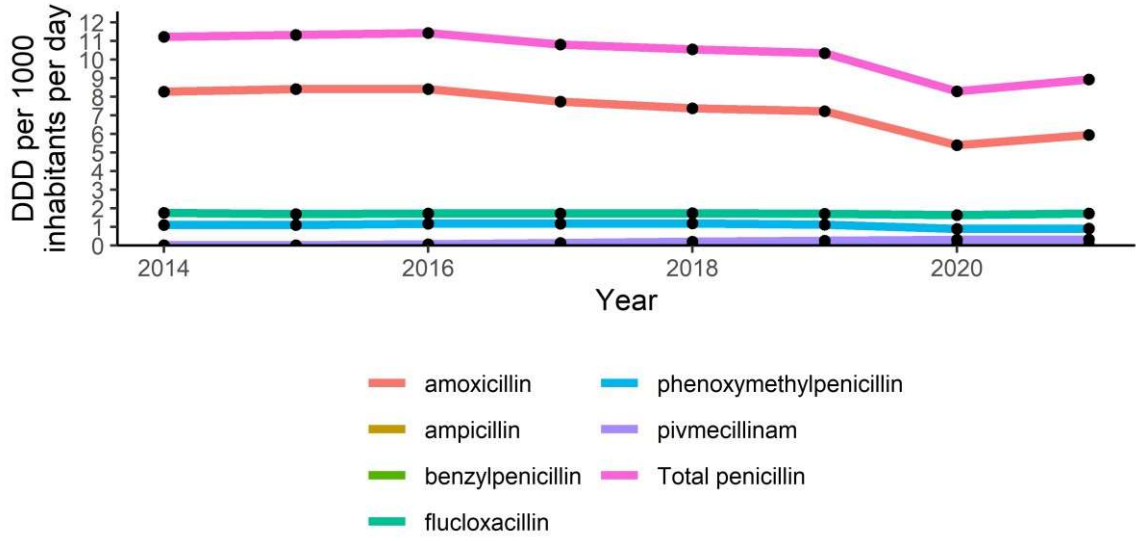


Figure 3.27: Consumption of most commonly used penicillins expressed per 1000 inhabitants per day, NI, 2014 - 2021

### Cephalosporins

Figure 3.28 displays the top six agents used in the cephalosporins class. The overall rate of cephalosporin consumption remained relatively stable between 2018 and 2021 (0.51 to 0.55 DDD per 1000 inhabitants per day). The highest rate among antibiotics in the cephalosporins class was for cefalexin, which also remained relatively stable between 2018 and 2021 (0.4 to 0.44 DDD per 1000 inhabitants per day).

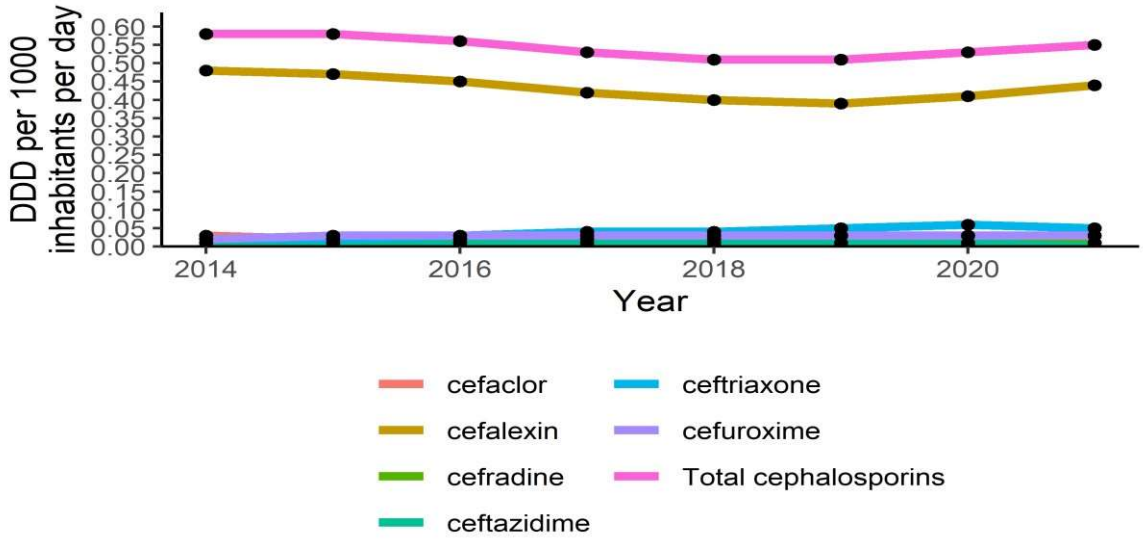


Figure 3.28: Consumption of most commonly used cephalosporins expressed per 1000 inhabitants per day, NI, 2014 - 2021

**Tetracyclines and related drugs**

Figure 3.29 shows the top six agents used in the tetracyclines and related drugs class. The proportion of total antibiotic consumption accounted for by tetracyclines and related drugs has remained relatively stable between 2020 and 2021 (27.6% in 2020 and 27% in 2021).

Consumption of tetracyclines and related drugs decreased between 2018 and 2021 (from 7.36 to 6.77 DDD per 1000 inhabitants per day) although a slight increase was observed from 2020 (6.62 DDD per 1000 inhabitants per day) to the rate observed in 2021.

Within the tetracyclines and related drugs class, the highest usage rate was for doxycycline, which has increased slightly between 2020 and 2021 (from 4.41 to 4.66 DDD per 1000 inhabitants per day). Despite this increase, doxycycline consumption remained lower in 2021 than during 2018 (4.78 DDD per 1000 inhabitants per day).

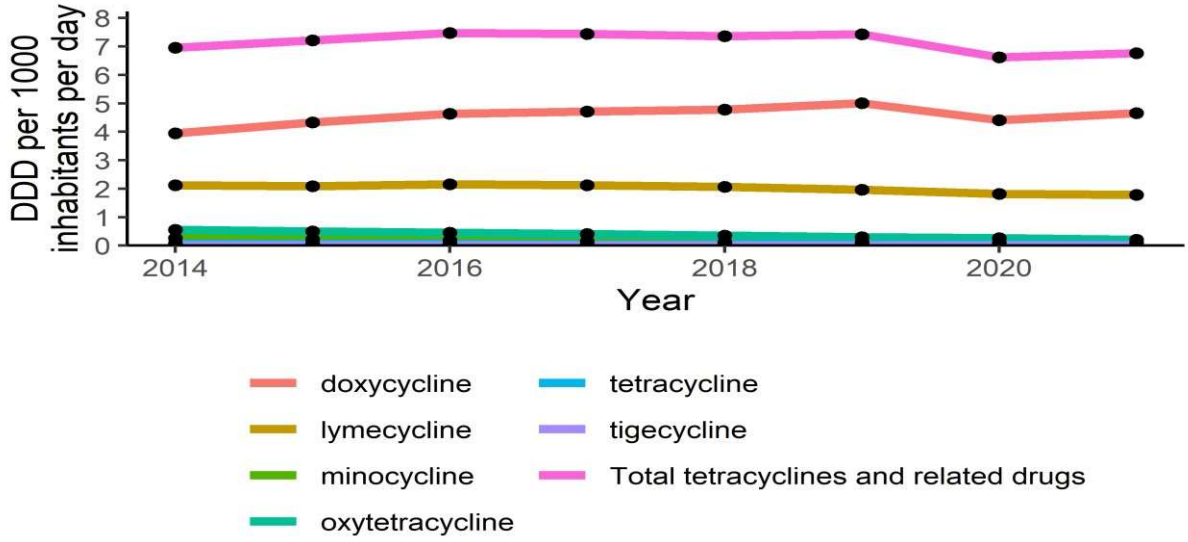


Figure 3.29: Consumption of most commonly used tetracyclines and related drugs expressed per 1000 inhabitants per day, NI, 2014 - 2021

*Note: While demeclocycline and lymecycline are not primarily used for their antimicrobial effects they have been included as they can still be considered drivers of resistance.*

### Quinolones

Consumption of quinolones steadily decreased from 0.66 DDD per 1000 inhabitants per day in 2018 to 0.46 DDD per 1000 inhabitants per day in 2021. Within the quinolones class, the highest consumption rate was for ciprofloxacin. Ciprofloxacin consumption also decreased from 2018 (0.54 DDD per 1000 inhabitants per day) to 0.36 DDD per 1000 inhabitants per day in 2021 (Figure 3.30).

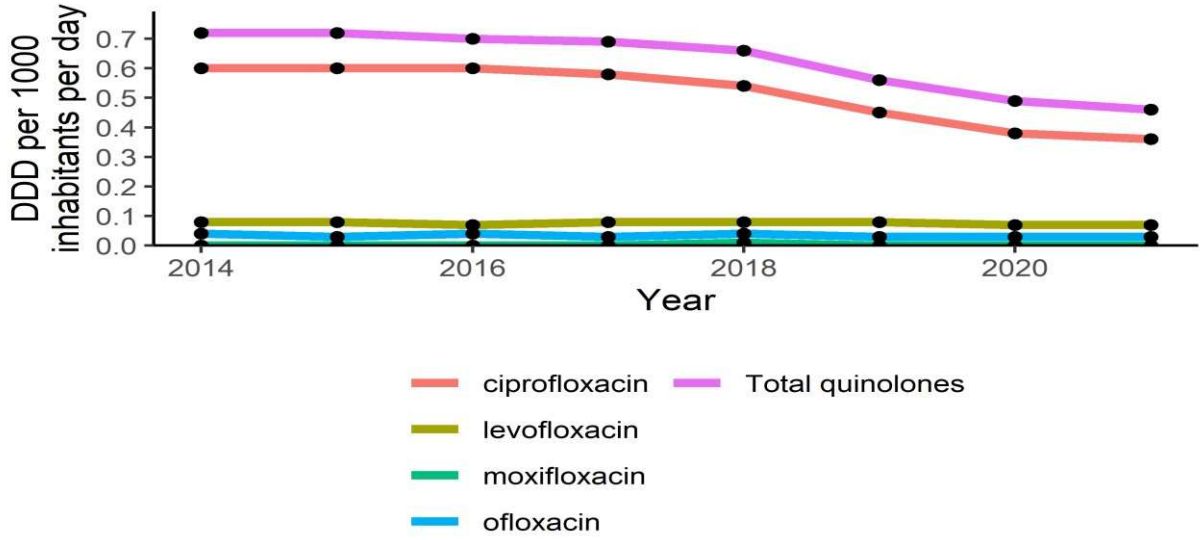


Figure 3.30: Consumption of most commonly used quinolones expressed per 1000 inhabitants per day, NI, 2014 - 2021

### Macrolides

Macrolides accounted for 10.9% of total antibiotic consumption in 2021. Consumption of macrolides decreased from 3.72 DDD per 1000 inhabitants per day in 2018 to 2.73 DDD per 1000 inhabitants per day in 2021.

Within the macrolide class the highest usage was for clarithromycin, for which consumption remained relatively stable during 2020 and 2021 (1.56 DDD per 1000 inhabitants per day in 2020 and 1.5 DDD per 1000 inhabitants per day in 2021). Clarithromycin consumption in 2020 and 2021 was lower than in both 2018 (2.35 DDD per 1000 inhabitants per day) and 2019 (2.19 DDD per 1000 inhabitants per day) (Figure 3.31).

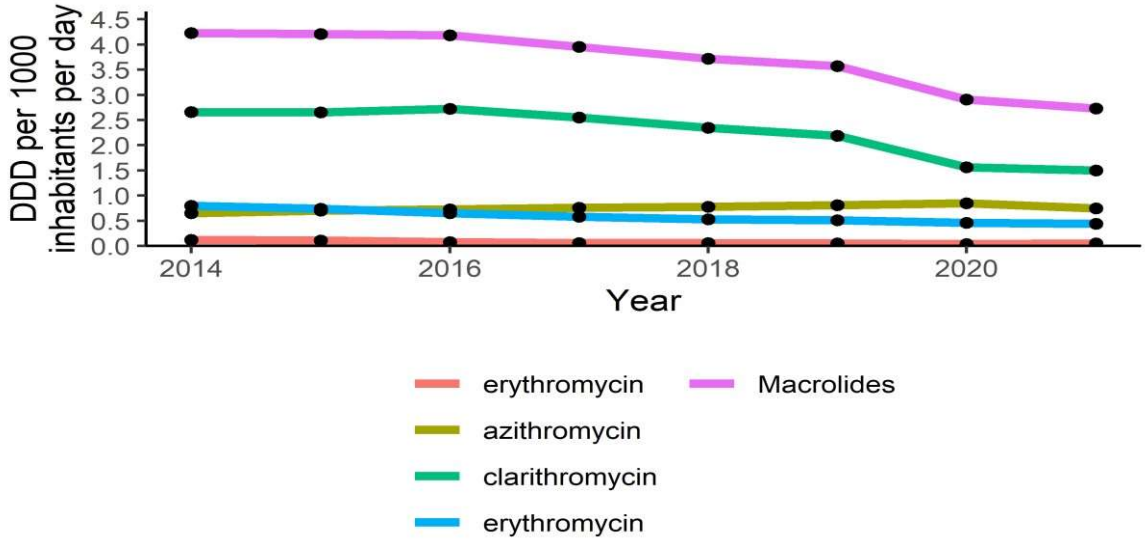


Figure 3.31: Consumption of most commonly used macrolides expressed per 1000 inhabitants per day, NI, 2014 - 2021

### Carbapenems

The rate of carbapenem consumption remained low and relatively stable from 2018 to 2021 at 0.06 and 0.05 DDD per 1000 inhabitants per day, respectively. The highest comsumption rate within the class was for meropenem, which has also remained stable between 2018 and 2021 (around 0.05 DDD per 1000 inhabitants per day) (Figure 3.32).

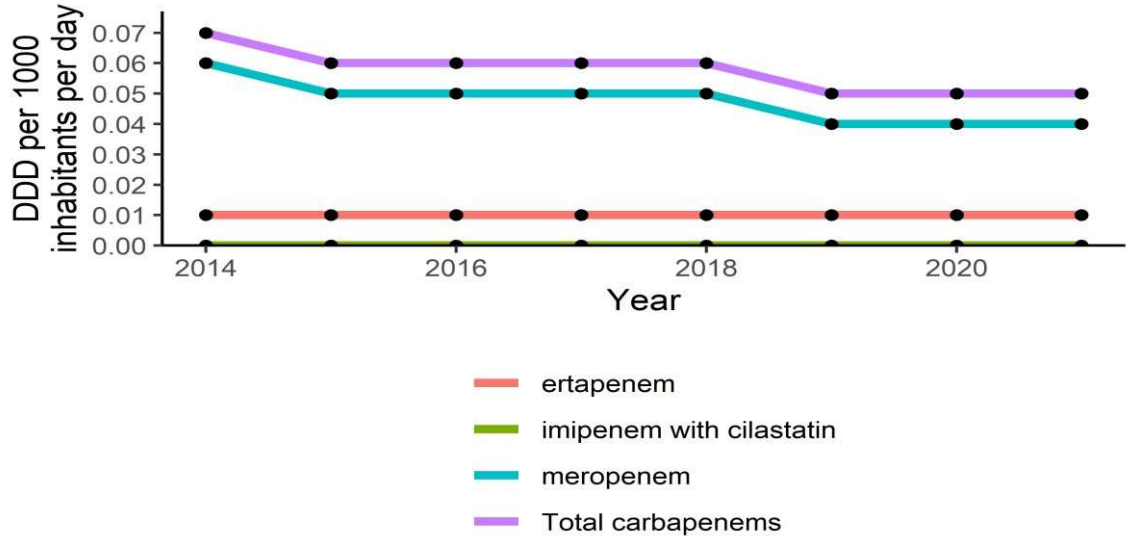


Figure 3.32: Consumption of most commonly used carbapenems expressed per 1000 inhabitants per day, NI, 2014 - 2021

**Penicillin/beta lactamase inhibitor combinations**

Consumption of penicillin/beta lactamase inhibitor combinations steadily decreased between 2014 and 2020. During the 2018-2020 period the consumption rate decreased from 1.84 to 1.56 DDD per 1000 inhabitants per day. A slight rise in consumption of penicillin/beta lactamase inhibitor combinations was however observed between 2020 and 2021 (to 1.98 DDD per 1000 inhabitants per day in 2021).

The highest consumption rate within the class was for co-amoxiclav which followed a similar trend to the penicillin/beta lactamase inhibitor combinations class overall, decreasing from 1.65 in 2018 to 1.40 DDD per 1000 inhabitants per day in 2020, before increasing to 1.8 DDD per 1000 inhabitants per day in 2021. The use of piperacillin/tazobactam has remained relatively stable during 2018-2021 with rates remaining below 0.19 DDD per 1000 inhabitants per day (Figure 3.33).

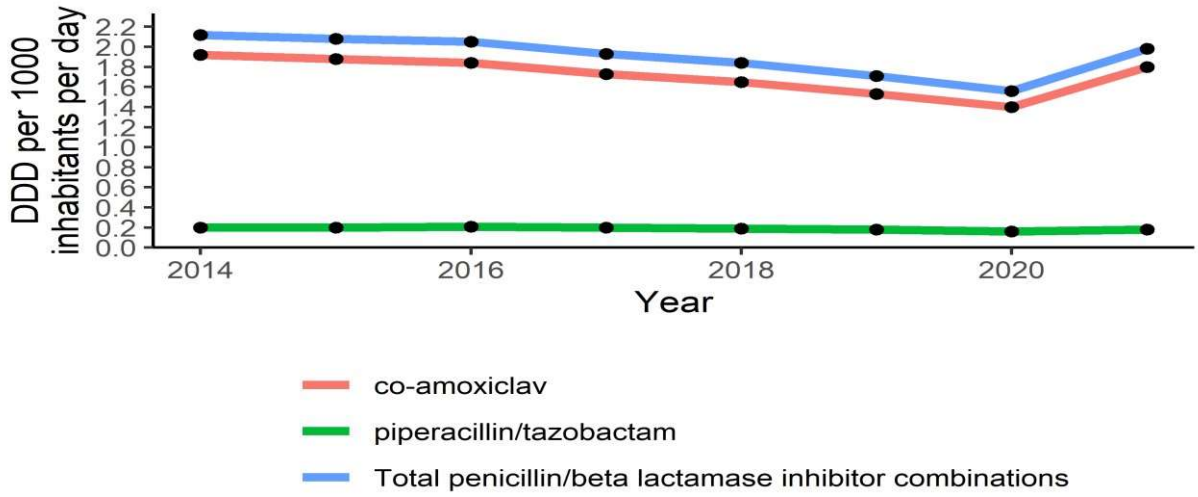


Figure 3.33: Consumption of most commonly used penicillin/beta lactamase inhibitor combinations expressed per 1000 inhabitants per day, NI, 2014 - 2021

### Glycopeptides and daptomycin

Glycopeptides and daptomycin consumption remained stable between 2018 and 2021 at 0.18 DDD per 1000 inhabitants per day. During 2020, the consumption rate slightly decreased to 0.16 DDD per 1000 inhabitants per day before increasing again in 2021. The highest consumption rate within the class was for teicoplanin, which followed a similar trend to overall glycopeptide and daptomycin consumption. Teicoplanin use remained stable between 2018-2019 at 0.14 DDD per 1000 inhabitants per day, decreasing slightly to 0.12 DDD per 1000 inhabitants per day in 2020 before increasing to 0.14 DDD per 1000 inhabitants per day in 2021 (Figure 3.34).

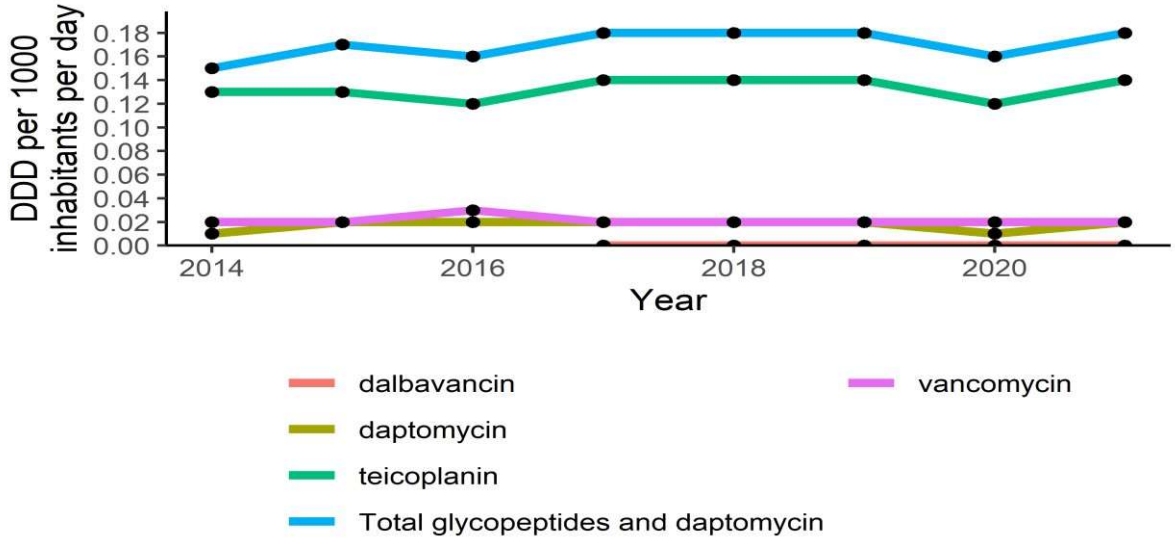


Figure 3.34: Consumption of most commonly used glycopeptides and daptomycin expressed per 1000 inhabitants per day, NI, 2014 - 2021

### Anti-folate agents

Anti-folate agents accounted for 9.7% of total antibiotic consumption in 2021. The consumption rate of anti-folate agents has steadily declined from 2.67 DDD per 1000 inhabitants per day in 2018 to 2.43 DDD per 1000 inhabitants per day in 2021. The highest consumption rate within the class during 2021 was for nitrofurantoin. Nitrofurantoin use slightly decreased from 1.13 DDD per 1000 inhabitants per day in 2018 to 1.1 DDD per 1000 inhabitants per day in 2021. Prior to 2021, the highest consumption rate within the anti-folate agent class was for trimethoprim (Figure 3.35).

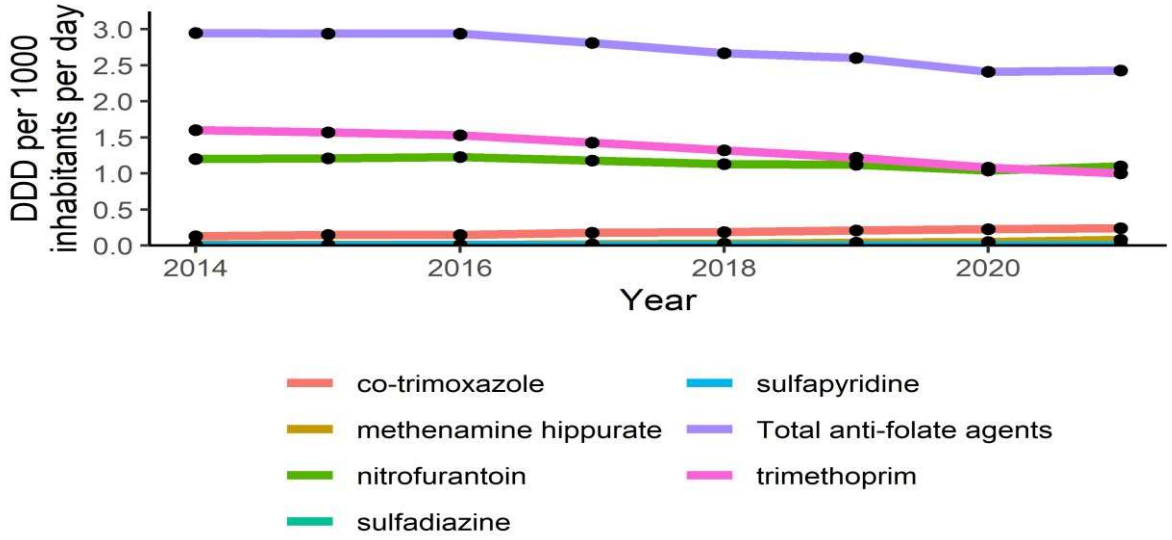


Figure 3.35: Consumption of most commonly used anti-folate agents expressed per 1000 inhabitants per day, NI, 2014 - 2021

## 3.2.4 Antibiotic consumption of key agents by healthcare setting

### Trimethoprim

Trimethoprim use in primary and secondary care combined continued to decrease from 1.32 DDD per 1000 inhabitants per day in 2018 to 1 DDD per 1000 inhabitants per day in 2021.

Consumption of trimethoprim was stable between 2018 to 2019 (1.2 DDD per 1000 inhabitants per day in primary care and 0.1 DDD per 1000 inhabitants per day in secondary care) prior to a slight decrease across both sectors in 2020 (1.01 DDD per 1000 inhabitants per day and 0.07 DDD per 1000 inhabitants per day respectively). In primary care, trimethoprim use decreased further in 2021 to 0.93 DDD per 1000 inhabitants per day, while secondary care use remained unchanged (0.07 DDD per 1000 inhabitants per day) (Figure 3.36).

### Nitrofurantoin

Consumption of nitrofurantoin in primary and secondary care combined decreased steadily from 2018 (1.13 DDD per 1000 inhabitants per day) to 2020 (1.04 DDD per 1000 inhabitants per day), before increasing slightly in 2021 (to 1.10 DDD per 1000 inhabitants per day).

Nitrofurantoin use displayed a similar pattern across the sectors, with a decrease noted from 2018 (1.04 DDD per 1000 inhabitants per day in primary care and 0.09 in secondary care) to 2020 (0.96 and 0.08 DDD per 1000 inhabitants per day respectively). In 2021, a slight increase in nitrofurantoin use was noted in both sectors, to 1.01 DDD per 1000 inhabitants per day in primary care and 0.10 DDD per 1000 inhabitants per day in secondary care (Figure 3.36).

### Aminoglycosides

Aminoglycosides were used predominantly in the secondary care sector. Consumption of aminoglycosides was stable between 2017-2019 at 0.17 DDD per 1000 inhabitants per day, before decreasing to 0.14 in 2020 and holding stable in 2021 (Figure 3.36).

### Glycopeptides and daptomycin

Consumption of glycopeptides and daptomycin in primary and secondary care combined has remained relatively stable from 2018 to 2021. Glycopeptides and daptomycin use in primary care remained at 0 DDD per 1000 inhabitants per day from 2018 onwards, with secondary care use also remaining stable during the same time period (0.18 DDD per 1000 inhabitants per day. A slight decrease was noted in the consumption of glycopeptides and daptomycin in secondary care during 2020 (0.16 DDD per 1000 inhabitants per day) before returning to 2018 levels in 2021 (0.18 DDD per 1000 inhabitants per day) (Figure 3.36).

### Colistin

Colistin use in primary and secondary care combined remained relatively stable from 2014 to 2019 (0.09 to 0.11 DDD per 1000 inhabitants per day) with a slight increase noted during 2020 to 0.13 DDD per 1000 inhabitants per day. In 2021, colistin slightly decreased again to 0.12 DDD per 1000 inhabitants per day but remained higher than during 2018 (0.10 DDD per 1000 inhabitants per day).

Rates of colistin consumption in primary care increased from 0.10 in 2018 to 0.13 DDD per 1000 inhabitants per day in 2020, followed by a slight decrease in 2021 (to 0.12 DDD per 1000 inhabitants per day). Colistin use within secondary care remained unchanged between 2018 and 2020 (0.02 DDD per 1000 inhabitants per day), followed by a slight decrease to 0.01 DDD per 1000 inhabitants per day in 2021 (Figure 3.36).

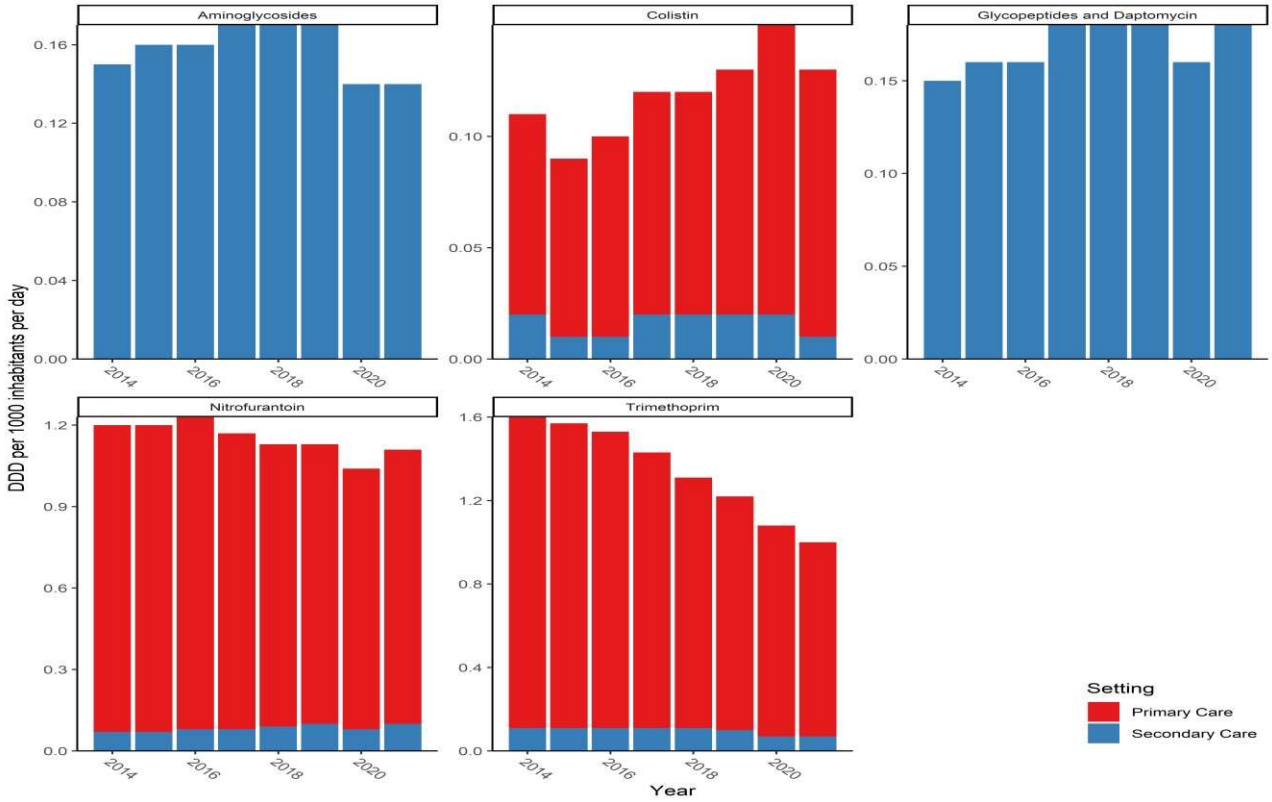


Figure 3.36: Total antibiotic consumption of key antibiotic groups by healthcare setting, expressed as DDD per 1000 inhabitants per day, NI, 2014 - 2021

*Note: differing scales on y-axis. DDDs in primary care for aminoglycosides and glycopeptides/daptomycin are not truly zero.*

## 3.2.5 Antibiotic consumption by WHO AWaRe Category

The World Health Organization (WHO) classifies antibiotics into three stewardship groups known as the AWaRe categories; Access, Watch and Reserve. Antibiotics in the Access group include antibiotics that can be utilised for a range of common susceptible pathogens and have a lower potential for resistance. The Watch group contains those with an increased potential for resistance and should be used in a restricted manner and includes most high priority agents. The Reserve group contains antibiotics which are to be treated as 'last resort' when other treatments have failed or there are no alternatives available. Adapted WHO AWaRe categories are used in NI with several national and trust level antibiotic consumption targets based on these which will stand for the remainder of the current target period (20192024).

The highest proportion of total antibiotic consumption during each year covered by this report was from antibiotics within the Access category, which increased across the period 2018-2021 (65.49% to 66.4%). The proportion of total consumption accounted for by antibiotics from the Watch group decreased slightly from 33.56% in 2018 to 32.22% in 2021. Consumption of antibiotics from the Reserve category slightly increased from 0.82% to 1% in 2021. Antibiotics not assigned to any of the AWaRe categories- denoted here as 'unknown'- accounted for less than 1% of total consumption in each year between 2018 and 2021 (Figure 3.37).

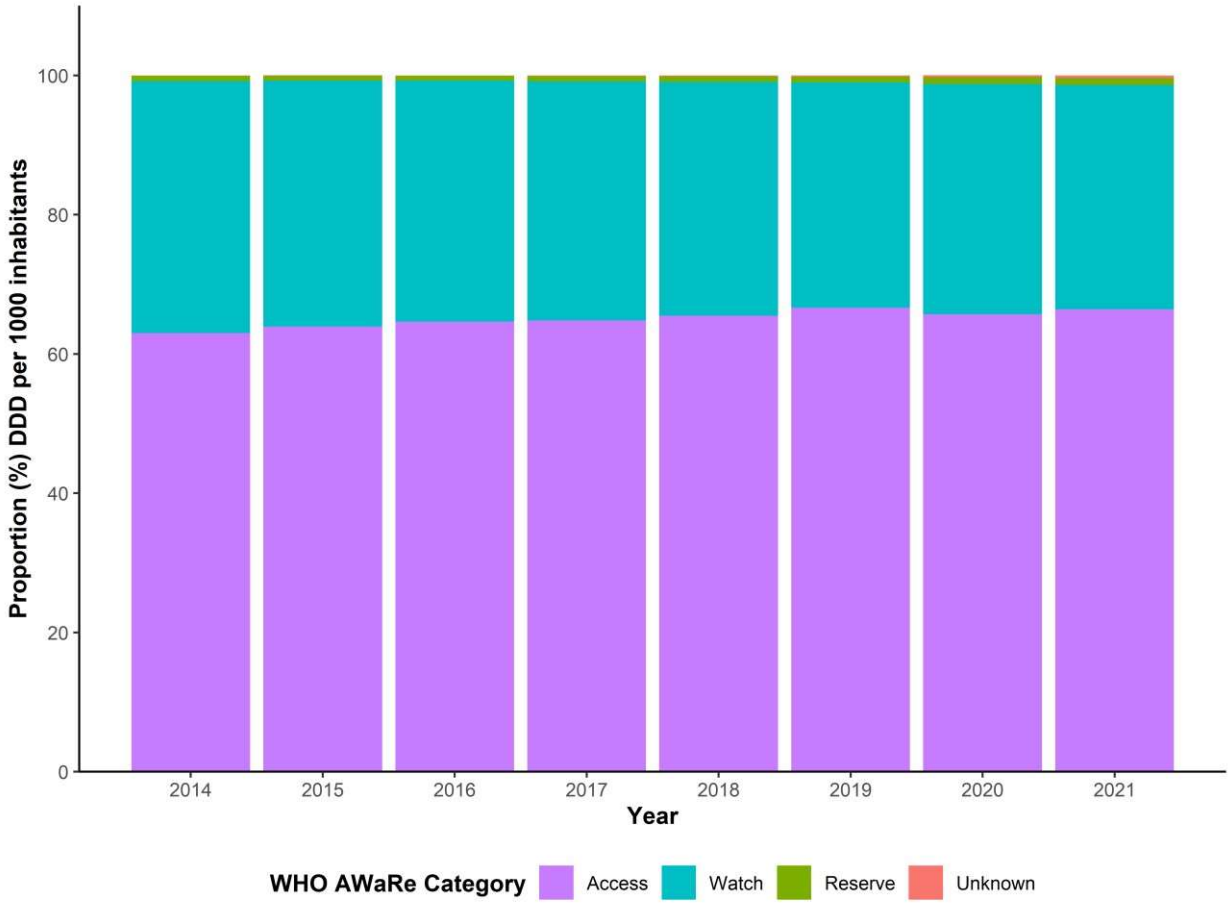


Figure 3.37: Proportion of DDDs per 1000 inhabitants by WHO AWaRe category, NI, 2014 - 2021

# 3.3 Engagement activities

## 3.3.1 Engagement with the public and health and social care colleagues

The PHA, in collaboration with the Strategic Planning and Performance Group (SPPG), formerly Health and Social Care Board (HSCB), engaged in several communications projects during 2021 with the aim of sharing key messages surrounding antibiotic resistance with the public. These included a campaign to 'keep antibiotics working' along with press and social media activity. The HSCB/SPPG engaged in several communications with primary care services during 2020-2021 specifically around World Antibiotic Awareness Week, with HSCB staff and Family Practitioner Services (FPS) namely, general practice, community pharmacy, dental and optometry. Key messages highlighted simple steps that individuals can take to keep antibiotics working, encouraging them to become 'Antibiotic Guardians' and highlighting the TARGET Toolkit (TARGET) resources. They also included messages around antibiotic resistance, encouraging safe disposal of antibiotics and raising awareness of appropriate penicillin allergy labelling.

## 3.3.2 Antibiotic guardians

There were 184 new antibiotic guardians registered in NI during 2021. To the end of 2021 there was a total of 1305 individuals registered as antibiotic guardians (69 individuals per 100,000 population) (Figure 3.38).

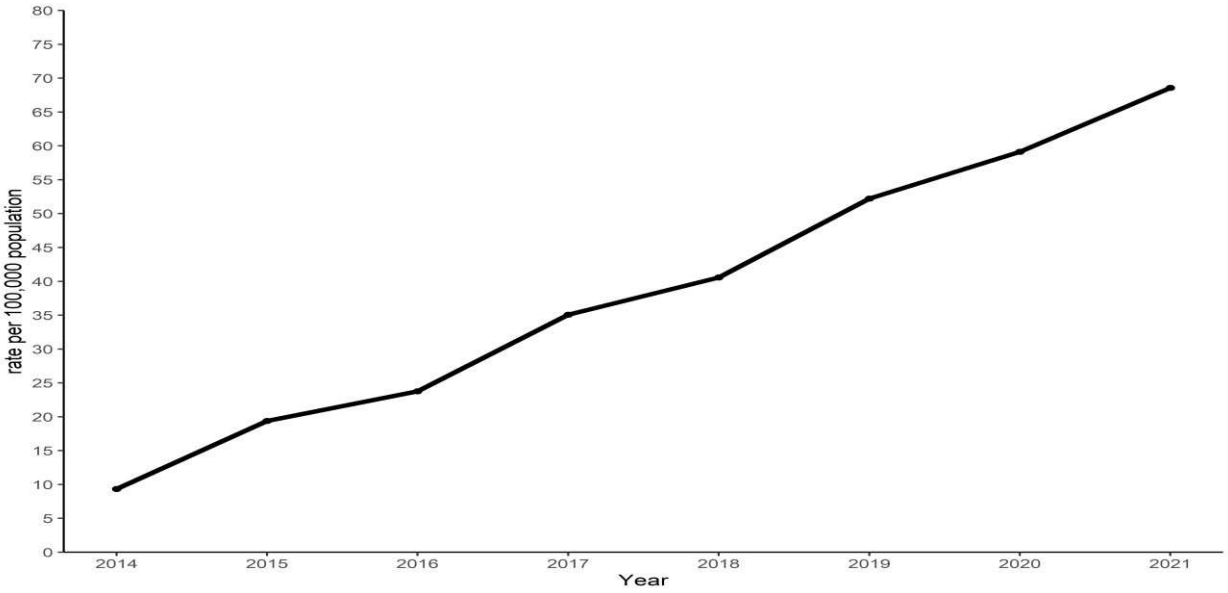


Figure 3.38: Cumulative rate of antibiotic guardians per 100,000 population, NI, 2014 - 2021

## 3.3.3 Changing prescribing behaviour

HSCB/SPPG engaged in a number of campaigns to help change prescribing behaviour during 2020-2021 including:

- Socially distanced workshops on antimicrobial stewardship delivered to primary care in May 2021. They included GPs, pharmacists and nurses. Recordings of the session were uploaded to the NICPLD and Medicines NI websites to increase accessibility.
- An ECHO session delivered in April 2021 to community pharmacists providing the Pharmacy First for Uncomplicated Lower Urinary Tract Infections (LUTIs) in women aged 16 to 64 years. A recording of which was made available to increase accessibility.
- Evaluation of a community pharmacy C-reactive protein (CRP) point-of-care testing pilot [9]
- Supporting GP out-of-hours services in reducing inappropriate antibiotic prescriptions.

## 3.3.4 Future work

Planned future work will include:

- Contributing to the development of the new UK National Action Plan for antimicrobial resistance and the development of a local implementation plan for NI.

- Continued provision of prescribing trend information to primary and secondary care prescribers.
- Further refinement of secondary care data capture and reporting processes to allow more timely and comprehensive information to help focus and reduce antibiotic use in secondary care services.
- Continued engagement in awareness activities during the European Antibiotic Awareness Day (EEAD) and World Antibiotic Awareness Week (WAAW).

# 4 Discussion

This is the fourth report of antibiotic resistance and antibiotic consumption in NI. As a result of the COVID-19 pandemic it was not feasible for the agency to undertake an annual report covering 2019-2020. Figures for this time period are included within the current report. As with previous reports, we have aimed to keep the content generally comparable with the ESPAUR report for England [4]. In future reports, we aim to be able to access, analyse and report more detailed information about antimicrobial use and resistance in specific healthcare settings.

## 4.1 Antibiotic resistance

The focus for the antibiotic resistance section was the antibiotic-pathogen combinations that were identified as part of the UK 5-year national action plan for antimicrobial resistance 2019 to 2024 (NAP) [3]. The data for this report has been extracted from the Northern Ireland Lab Information System (NILIS). *S. aureus* and Gram negative bloodstream infections including; *E. coli*, *K.pneumoniae* and *Pseudomonas* species are subject to mandatory surveillance.

*E. coli* and *K. pneumoniae* bloodstream infections have been targeted as part of the UK government's ambition to reduce healthcare-associated gram-negative bloodstream infections by 50% by 2024. In order to reduce the number of these infections, local teams will need timely information about the characteristics of the patients who are affected, the risk factors that contributed to the infection and which healthcare settings were responsible. In recognition of this, mandatory surveillance of gram-negative bloodstream infections was introduced in NI in April 2018. These new data are an important source of business intelligence for Health and Social Care Trusts as they aim to improve the quality and safety of the care that they provide. The success of this new programme will require Trusts to take steps to implement new data collection arrangements quickly for the benefit of their patients.

During the period since the last report (2018 to 2021) the number of bloodstream infections due to *E. coli*; *K. pneumoniae*, *S. pneumoniae* and *Acinetobacter* decreased while reports of *Enterococcus*, *K. oxytoca*, *Pseudomonas* sp. and *S. aureus* increased. The trends observed during the 2018-2021 period are broadly similar to those noted in England during the same time period with the exception of *Acinetobacter* which increased in England between 2018-2021 [4].

During the first year of the COVID-19 pandemic (2020), a decrease in the number of bacteraemias was observed for all of the key organisms with the exception of *Enterococcus* which continued to increase and *S. aureus* which remained stable. During 2021, the number of bacteraemias increased for five of the eight key organisms, with decreases continuing for only *Acinetobacter*, *K. pneumoniae* and *S.*

*pneumoniae* . The observed decreases during 2020 are similar to the trends reported in England [4] and are likely associated with changes in healthcare activity and interventions against COVID-19 including social distancing measures, enhanced infection control procedures within the healthcare setting and deferral of non-urgent surgery. The noted increase in bloodstream infections due to *Enterococcus* in 2020 was also observed in England [4].

Increases in antibiotic resistance were noted for a number of antibiotic-pathogen combinations between 2018-2021 including; *E. coli*, *K. oxytoca* and *pseudomonas* sp. resistance to piperacillin-tazobactam; *pseudomonas* sp. and *K. pneumoniae* resistance to third-generation cephalosporins; *E. coli* and *K. pneumoniae* resistance to carbapenems and *S. pneumoniae* resistance to penicillin. The proportion of nonsusceptible isolates decreased for *K. pneumoniae* against piperacillin-tazobactam; *E. coli* against third-generation cephalosporins; *K. pneumoniae* and *E. coli* against coamoxiclav with *K. oxytoca* resistance to co-amoxiclav remaining stable. Reductions in number of bloodstream infections during 202-2021 are likely to be at least partly attributable to changes in healthcare activity during the COVID-19 pandemic.

Reports to the PHA of CPE had been increasing year-on-year from 2016-2019 but decreased in 2020 and further in 2021. A similar trend was observed in England [4]. Some of the increase likely reflects the voluntary nature of reporting and local developments in the ability to test for CPE, while recent decreases may be at least partly attributable to changes in hospital activity and increased focus on infection prevention and control in healthcare settings during the pandemic

As antimicrobial resistance is a transmissible global problem, PHA will continue to liaise with UK Health Security Agency and the Scottish, Welsh and Irish public health organisations and the World Health Organization’s Global Antimicrobial Resistance Surveillance System (GLASS). This will ensure standardised information on antimicrobial resistance is available to inform comparisons and drive improvement.

## 4.2 Antibiotic consumption

Total antibiotic consumption in NI continued to decline between 2018 and 2021 with notable reductions particularly during 2020 and 2021. Primary care antibiotic usage has been steadily decreasing since 2016. Changes in access to primary care services during the pandemic are a likely driver of the recent reductions and we will continue to monitor antibiotic usage in primary care as we emerge from the pandemic. Antibiotic consumption in secondary care has also decreased between 2018-2021, with the most noticeable reductions observed during 2020 and 2021. Again, this may be partially attributable to changes in healthcare activity. When the change in admissions during 2020-2021 are accounted for, the prescribing trend in secondary care remained stable in 2020 and increased slightly in 2021. Consumption of antibiotics within the dental sector also increased during 2020 - 2021, the only setting to do so during the pandemic. A similar trend was observed in England [4].

In general, antibiotic consumption in NI remains higher than in England (25.04 compared with 15.95 DDD per 1000 inhabitants per day) during 2021. By this measure, NI’s total antibiotic consumption in 2021 is 57% higher than that of England. Penicillins, tetracyclines and macrolides remained the most commonly

prescribed antibiotics in both settings. There has been a decrease in the usage of a number of antibiotic classes in both settings including penicillins, tetracyclines, macrolides and anti-folate agents. The consumption of penicillin/beta-lactamase inhibitor combinations, cephalosporins and anti-C. difficile agents have increased. Co-amoxiclav use had been decreasing between 2014-2020 but increased in 2021. Piperacillin-tazobactam consumption while relatively stable was more than twice the rate in England during 2021 (0.08 DDD per 1,000 inhabitants per day). Similarly, third-generation cephalosporin use in NI (between 0.51 and 0.55 DDD per 1,000 inhabitants per day during 2018-21) is higher than in England (0.31 DDD per 1,000 inhabitants per day in 2021). Tetracycline use has generally decreased in NI from 2019 but was higher than in England during 2021 (6.77 compared with 4.33 DDD per 1,000 inhabitants per day). Macrolide and quinolone consumption steadily decreased between 2018-2021 in NI, similar to trends in England. Colistin is an antibiotic of last resort, used for multidrug-resistant infections and also as an inhaled therapy for people with cystic fibrosis. Colistin consumption in NI has been steady since 2014, but rates are higher than in England (0.12 DDD per 1,000 inhabitants per day in 2021 in NI and 0.038 DDD per 1,000 inhabitants per day in 2021 in England).

The general trend of consumption across the WHO AWaRe categories is encouraging, with antibiotics from the Access category consistently accounting for approximately two thirds of total consumption per year between 2014 and 2021. This may reflect consistent antimicrobial stewardship practices led by pharmacists in primary and secondary care.

The amount of antibiotic use in NI has reduced but still remains markedly higher than England. Understanding the reasons for the difference is complex. During 2018 the PHA collaborated with the HSCB, the Innovation Lab at the Department of Finance and other primary care stakeholders to fill this information gap, producing a report of their findings which included eight recommendations for how antibiotic prescribing could be addressed in the future [10].

Investigating the reasons for differences in secondary care is more difficult because antibiotic consumption is measured at ward rather than patient level. Future work will also investigate the effect of the COVID-19 pandemic on antibiotic consumption in both primary and secondary care and the appropriateness of prescribing during this time. Health and Social Care NI is adopting a new electronic healthcare record ("Encompass"), which will include electronic prescribing and provide a rich source of information about the factors influencing antimicrobial consumption.

To engage with professionals and the public, the PHA encourages readers to sign up here to become an Antibiotic Guardian.

# 5 Method

## 5.1 Antibiotic resistance

### 5.1.1 Data sources

Testing for bacteria in human specimens and their susceptibility to antibiotics is conducted in the laboratories of five Health and Social Care Trusts in NI. Infections that meet certain criteria, usually the most severe that occur in the blood

(bacteraemias), are reported voluntarily to the PHA's "NILIS" Information System directly from each Trust's laboratory. The resistance data included in this report includes selected bacteraemias that were reported to the PHA between 2009 - 2021 (presented by calendar year).

Detections of carbapenemase-producing organisms (CPOs) are reported to the PHA as part of a voluntary reporting service. In cases where a microbiology laboratory suspects a CPO, the specimen is submitted to UK Health Security Agency's (UKHSA) Antimicrobial Resistance and Healthcare Associated Infections (AMRHAI) reference unit for investigation. Most recently, some health and social care trusts have developed the capacity to perform this function locally. For the purposes of this report however, the focus will be on carbapenemase-producing Enterobacterales (CPE) only.

### 5.1.2 Definitions

The term "antimicrobial" refers to drugs used to treat infections caused by a range of microbes including; bacteria, viruses, fungi and parasites. While this term is used throughout the report, the data presented only reflects antibiotics which are utilised to treat bacterial infections.

Hospital microbiology laboratories report antimicrobial susceptibility test results as "susceptible", "intermediate" or "resistant". For the purpose of this report, antibiotic susceptibility test results reported as "intermediate" or "resistant" were combined and presented as "non-susceptible". The terms "non-susceptible" and "resistant" are used interchangeably throughout the report when referring to "intermediate" or "resistant" antibiotic susceptibility tests. For analysis of resistance to more than one antibiotic, multi-drug resistance (MDR) was defined as acquired non-susceptibility to at least one agent in three or more antimicrobial classes.

## 5.2 Antibiotic consumption

### 5.2.1 Data sources

Consumption data for primary and secondary care was obtained using the data submitted to the Central Asian and European of Antimicrobial Resistance Network (CAESAR). The primary care antibiotic consumption data were extracted from the Electronic Prescribing Database by the Health and Social Care Board. The data includes health and social care prescribing from: general practitioners within general practice and out-of-hours centres; nurse, pharmacy and allied health professionals; and, dentists. The secondary care antibiotic consumption data were extracted by each Trust's JAC Medicines Management System and aggregated for all five Trusts to give Northern Ireland totals. It was not possible to analyse at the level of inpatient or outpatient. The data for all settings are available from 2014-2021 and are presented by calendar year.

Different to in England, outpatient medications in NI are usually prescribed by general practitioners at the request of secondary care specialists. A significant proportion of outpatient prescribing is therefore counted under primary care in NI as opposed to secondary care in England. There is currently no way of separating these prescriptions from the rest of primary care prescribing in NI. In England, outpatient prescribing accounts for 6.5% of secondary care antimicrobial prescribing [11].

Data from out-of-hours settings was extracted from multiple sources. For pre-packed antibiotics the JAC Medicines Management System and a private pharmaceutical company are responsible for over-labelling of antibiotic packs. All other out-of-hours data is received from the BSO Pharmaceutical Payment System.

### 5.2.2 Definitions

The classification of antibiotic used is based on the anatomical therapeutic chemical (ATC) classification system, using the WHO defined daily doses (DDD) for each drug and where grouped, this has been done according to Kucer's "The Use of Antibiotics" (6th edition) [12]. The data for both settings in this report include ATC classification groups J01, A07 and P01, please refer to Appendix 2 for specific inclusions.

### 5.2.3 Denominator

Mid-year population estimates for 2018-2021 were obtained from the (NI Statistics and Research Agency) prior to the June 2023 rebased figures . The population of 2021 utilizes figures from the 2021 Census (NISRA) to express DDD's per 1,000 inhabitants per day. Hospital activity and occupancy statistics were obtained from data published by the Department of Health.

### 5.2.4 WHO Defined Daily Doses

Antibiotic consumption is measured here using the 2019 WHO Classification of Defined Daily Doses (DDDs). The World Health Organization updates the DDDs on a semi-regular basis and these changes are applied to data retrospectively [13].

## 6 Acknowledgements

The information produced in this report is based on information derived from data submitted by Health and Social Care Trust microbiology and pharmacy staff, and we thank them for the time and effort involved in producing these data.

We also thank Nizam Damani for his input into the content of this year's annual report.

### 6.0.1 Image credits

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# 7 Appendices

## 7.1 Appendix : AMR surveillance categories

Table 7.1: Antibiotic names (trade and generic) and assigned surveillance group for the antimicrobial resistance data

| Antibiotic surveillance group | Individual antibiotic name |
|---|---|
| 3rd Generation Cephalosporin | cefotaxime |
| 3rd Generation Cephalosporin | claforan |
| 3rd Generation Cephalosporin | ceftazidime |
| 3rd Generation Cephalosporin | fortum |
| 3rd Generation Cephalosporin | cefpodoxime |
| 3rd Generation Cephalosporin | ceftizoxime |
| 3rd Generation Cephalosporin | ceftriaxone |
| Carbapenem | meronem |
| Carbapenem | meropenem |
| Carbapenem | imipenem |
| Carbapenem | ertapenem |
| Ciprofloxacin | ciprofloxacin |
| Ciprofloxacin | low level ciprofloxacin |
| Ciprofloxacin | ciproxin |

Table 7.1: Antibiotic names (trade and generic) and assigned surveillance group for the antimicrobial resistance data

| Antibiotic surveillance group | Individual antibiotic name |
|---|---|
| Co-amoxiclav | co-amoxiclav |
| Co-amoxiclav | amoxicillin/clavulanate |
| Co-amoxiclav | augmentin |
| Colistin | colistin |
| Colistin | colomycin |
| Gentamicin | gentamicin |
| Gentamicin | lugacin |
| Gentamicin | cidomycin |
| Gentamicin | genticin |
| Gentamicin | garamycin |
| Gentamicin | high_level gentamicin |
| Glycopeptide | vancocin |
| Glycopeptide | vancomycin |
| Glycopeptide | teicoplanin |
| Macrolides | clarithromycin |
| Macrolides | erythromycin |
| Macrolides | azithromycin |
| Macrolides | erythrocin |
| Macrolides | erythromid |
| Meticillin | cefoxitin |
| Meticillin | flucloxacillin |
| Meticillin | floxapen |
| Meticillin | oxacillin |
| Meticillin | meticillin |
| Meticillin | celbenin |

Table 7.1: Antibiotic names (trade and generic) and assigned surveillance group for the antimicrobial resistance data

| Antibiotic surveillance group | Individual antibiotic name |
|---|---|
| Meticillin | cloxacillin |
| Meticillin | orbenin |
| Penicillin | apsin |
| Penicillin | benzylpenicillin |
| Penicillin | phenoxymethylpenicillin |
| Penicillin | penicillin |
| Penicillin | penidural |
| Piperacillin/Tazobactam | tazocin |
| Piperacillin/Tazobactam | piperacillin/tazobactam |

# 7.2 Appendix : AMC data categories

Table 7.2: Antibiotic names, ATC codes and assigned surveillance group for the antimicrobial consumption data

| Antibiotic surveillance group | Individual antibiotic name | ATC codes |
|---|---|---|
| Aminoglycosides | tobramycin | J01GB01 |
| Aminoglycosides | gentamicin | J01GB03 |
| Aminoglycosides | neomycin | J01GB05 |
| Aminoglycosides | amikacin | J01GB06 |
| Anti-Clostridium difficile agents | vancomycin | A07AA09 |
| Anti-Clostridium difficile agents | fidaxomicin | A07AA12 |
| Anti-Clostridium difficile agents | metronidazole | G01AF01 |
| Anti-Clostridium difficile agents | metronidazole | P01AB01 |
| Anti-folate agents | trimethoprim | J01EA01 |
| Anti-folate agents | sulfapyridine | J01EB04 |
| Anti-folate agents | sulfadiazine | J01EC02 |
| Anti-folate agents | sulphamethoxypyridazine | J01ED05 |

Table 7.2: Antibiotic names, ATC codes and assigned surveillance group for the antimicrobial consumption data

| Antibiotic surveillance group | Individual antibiotic name | ATC codes |
|---|---|---|
| Anti-folate agents | co-trimoxazole | J01EE01 |
| Anti-folate agents | nitrofurantoin | J01XE01 |
| Anti-folate agents | methenamine | J01XX05 |
| Anti-tuberculous drugs | streptomycin | J01GA01 |
| Carbapenems | meropenem | J01DH02 |
| Carbapenems | ertapenem | J01DH03 |
| Carbapenems | imipenem with cilastatin | J01DH51 |
| Carbapenems | meropenem | J01DH52 |
| Cephalosporins | cefalexin | J01DB01 |
| Cephalosporins | cefazolin | J01DB04 |
| Cephalosporins | cefadroxil | J01DB05 |
| Cephalosporins | cefradine | J01DB09 |
| Cephalosporins | cefoxitin | J01DC01 |
| Cephalosporins | cefuroxime | J01DC02 |
| Cephalosporins | cefaclor | J01DC04 |
| Cephalosporins | cefotaxime | J01DD01 |
| Cephalosporins | ceftazidime | J01DD02 |
| Cephalosporins | ceftriaxone | J01DD04 |
| Cephalosporins | cefixime | J01DD08 |
| Cephalosporins | cefpodoxime | J01DD13 |
| Cephalosporins | ceftazidime_with_avibactam | J01DD52 |
| Cephalosporins | ceftaroline | J01DI02 |
| Glycopeptides and Daptomycin | vancomycin | J01XA01 |
| Glycopeptides and Daptomycin | teicoplanin | J01XA02 |
| Glycopeptides and Daptomycin | dalbavancin | J01XA04 |

Table 7.2: Antibiotic names, ATC codes and assigned surveillance group for the antimicrobial consumption data

| Antibiotic surveillance group | Individual antibiotic name | ATC codes |
|---|---|---|
| Glycopeptides and Daptomycin | daptomycin | J01XX09 |
| Lincosamides | clindamycin | J01FF01 |
| Macrolides | erythromycin | J01FA01 |
| Macrolides | clarithromycin | J01FA09 |
| Macrolides | azithromycin | J01FA10 |
| Macrolides | telithromycin | J01FA15 |
| Monobactams | aztreonam | J01DF01 |
| Nitroimidazoles | metronidazole | J01XD01 |
| Nitroimidazoles | tinidazole | P01AB02 |
| Other antibiotics | chloramphenicol | J01BA01 |
| Other antibiotics | quinupristin | J01FG02 |
| Other antibiotics | colistin | J01XB01 |
| Other antibiotics | fucidic_acid | J01XC01 |
| Other antibiotics | fosfomycin | J01XX01 |
| Oxazolidinones | linezolid | J01XX08 |
| Oxazolidinones | tedizolid | J01XX11 |
| Penicillins | ampicillin | J01CA01 |
| Penicillins | amoxicillin | J01CA04 |
| Penicillins | pivmecillinam | J01CA08 |
| Penicillins | temocillin | J01CA17 |
| Penicillins | co-fluampicil | J01CA51 |
| Penicillins | benzylpenicillin | J01CE01 |
| Penicillins | phenoxymethylpenicillin | J01CE02 |
| Penicillins | benzathine-benzylpenicillin | J01CE08 |
| Penicillins | procaine | J01CE09 |

Table 7.2: Antibiotic names, ATC codes and assigned surveillance group for the antimicrobial consumption data

| Antibiotic surveillance group | Individual antibiotic name | ATC codes |
|---|---|---|
| Penicillins | flucloxacillin | J01CF05 |
| Penicillins | co-fluampicil | J01CR50 |
| Penicillins with beta lactamase inhibitors | co-amoxiclav | J01CR02 |
| Penicillins with beta lactamase inhibitors | ticarcillin with clavulanic_acid | J01CR03 |
| Penicillins with beta lactamase inhibitors | piperacillin/tazobactam | J01CR05 |
| Quinolones | ofloxacin | J01MA01 |
| Quinolones | ciprofloxacin | J01MA02 |
| Quinolones | norfloxacin | J01MA06 |
| Quinolones | levofloxacin | J01MA12 |
| Quinolones | moxifloxacin | J01MA14 |
| Tetracyclines and related drugs | doxycycline | J01AA02 |
| Tetracyclines and related drugs | lymecycline | J01AA04 |
| Tetracyclines and related drugs | oxytetracycline | J01AA06 |
| Tetracyclines and related drugs | tetracycline | J01AA07 |
| Tetracyclines and related drugs | minocycline | J01AA08 |
| Tetracyclines and related drugs | tigecycline | J01AA12 |
| Tetracyclines and related drugs | minocycline | A01AB23 |

# 7.3 Appendix : Testing data

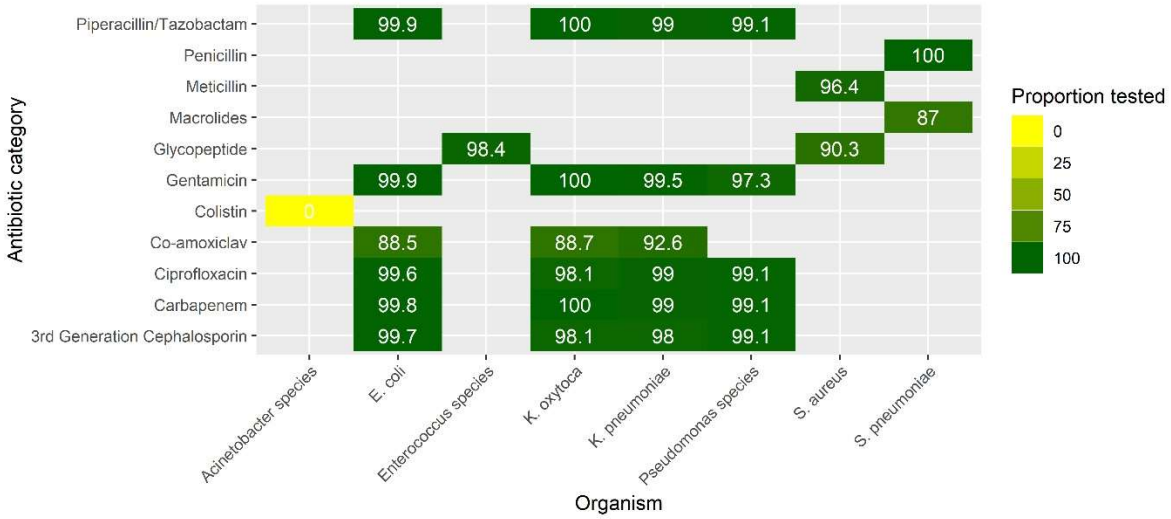


Figure 7.1: The proportion of key bacteraemias where selected antibiotic susceptibility results were reported to the PHA in 2021

# 7.4 Appendix : Antibiotic-pathogen combinations monitored

Table 7.3: Antibiotic-pathogen combinations monitored

| | |
|---|---|
| Escherichia coli | Third-generation cephalosporins, carbapenems, co-amoxiclav, ciprofloxacin, gentamicin, piperacillin/tazobactam |
| Klebsiella pneumoniae | Third-generation cephalosporins, carbapenems, co-amoxiclav, ciprofloxacin, gentamicin, piperacillin/tazobactam |
| Pseudomonas species | Third-generation cephalosporins, carbapenems, ciprofloxacin, gentamicin, piperacillin/tazobactam |
| Staphylococcus aureus | Glycopeptide, meticillin |
| Enterococcus species | Glycopeptide, linezolid, teicoplanin, vancomycin |
| Streptococcus pneumoniae | Macrolides, penicillin |
| Acinetobacter species | Colistin |

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HSC Public Health Agency

**item 12**

| | |
|---|---|
| **Title of Meeting** | PHA Board Meeting |
| **Date** | 16 November 2023 |
| **Title of paper** | PHA Position Statement on "Stopping the Start: Our New Plan to Create a Smokefree Generation" |
| **Reference** | PHA/04/11/23 |
| **Prepared by** | Colette Rogers |
| **Lead Director** | Dr Joanne McClean |
| **Recommendation** | For **Approval** ☐ For **Noting** ☒ |

## 1 Purpose

The purpose of this paper is for the Board to note PHA's position with regard to the UK Government Department of Health and Social Care's command paper, "Stopping the Start: Our New Plan to Create a Smokefree Generation"

## 2 Background Information

Smoking is the single most entirely preventable cause of ill-health, disability, and death in the UK. It is responsible for around 2,200 deaths per year in Northern Ireland. No other consumer product kills up to two-thirds of its users.

On 4 October 2023, the Department of Health and Social Care (DHSC) published a command paper 'Stopping the start: our new plan to create a smokefree generation' setting out proposed actions to help protect future generations from the harms of smoking by creating the first "smokefree generation", which the UK government and devolved administrations are now seeking to consult on.

'Smoking causes harm throughout people's lives, not only for the smoker but for those around them. It is a major risk factor for poor maternal and infant outcomes, significantly increasing the chance of stillbirth and can trigger asthma in children.

Smoking causes around 1 in 4 of all UK cancer deaths and is responsible for the great majority of lung cancer cases. Smoking is also a major cause of premature heart disease, stroke and heart failure, and increases the risk of dementia in the elderly. Smokers lose an average of 10 years of life expectancy, or around one year for every four smoking years.

In Northern Ireland, around 17% of the population are current smokers.

The command paper also set out measures to tackle youth vaping, and this is covered in the consultation.

Selling vapes to children is already illegal in Northern Ireland, but it is clear from recent surveys that children here have tried them. According to the Northern Ireland Young person's behaviour and attitudes survey 2022, 21.3% of 11 to 16 year olds in Northern Ireland reported having ever used an e-cigarette.

Due to nicotine content and the unknown long-term harms, vaping also carries risks to health and could lead to lifelong addiction for children. Nicotine vapes in particular can be highly addictive and withdrawal causes anxiety, trouble concentrating and headaches.

The health advice is clear: young people and people who have never smoked should not vape.

Disposable vapes also cause significant environmental harm and waste management challenges as over 5 million single-use vapes are thrown away every week across the UK.

By responding to this consultation, the people of Northern Ireland will therefore also have the opportunity to influence and shape future policy around vapes and proposals to limit their availability and appeal to children.

## 3 PHA Position as agreed at AMT on Wednesday 8 November 2023

The PHA has approved a position on the UK Government consultation on 'creating a smokefree generation and tackling youth vaping'

In summary the position statement includes the following references to PHA…

> ***The Public Health Agency welcomes this UK-wide public consultation – 'Creating a smokefree generation and tackling youth vaping: your views' – and is encouraging everyone in Northern Ireland, of all ages, to have their views heard through submitting responses to it. The consultation runs until 6 December 2023 at 11:59pm.***
>
> ***In response to the launch of the consultation, Dr Joanne McClean, Director of Public Health in Northern Ireland, said:***
>
> > ***"Ensuring people do not become addicted to smoking in the first place, and helping current smokers to quit, are two effective measures we can take to protect our population's health.***
> >
> > ***"Creating a 'smokefree generation' - through the introduction of a new law to stop children who turn 14 this year, and everyone***

***younger than that, from ever legally being sold cigarettes would be ground-breaking in terms of avoiding preventable deaths in Northern Ireland.***

***"It's really important the people have their say as this is a major public health issue affecting all of us, so I encourage everyone to respond to this consultation."***

***The Public Health Agency welcomes the inclusion of proposals in this consultation to restrict child-friendly flavours and brightly-coloured packaging for vapes, and to examine the cost of them, to reduce the appeal, affordability and availability to children.***

***The PHA is also encouraging a strong Northern Ireland response to this public health consultation.***

The Position Paper also directs people to the consultation online link…

***You can access and respond to the consultation at:***

Creating a smokefree generation and tackling youth vaping - GOV.UK (www.gov.uk)


**IMPORTANT**

**This consultation closes at 11.59pm on 6 December 2023.**

**REMEMBER to mark on your response that you are responding from Northern Ireland.**

## 4 Next Steps

The PHA's Tobacco Control Team are working with partner organisations across Northern Ireland and through the Tobacco Control Strategy Implementation Group to maximise responses to this UK-wide consultation. A number of actions are ongoing including:

- The Position Statement is now available on the PHA's website
- An external communications plan has been developed by the PHA Communications Team and Health Improvement Team and includes a series of media interviews, social media posts, a countdown to the closing date for the response, media briefings and proactive connections with media to promote this consultation and importance of responses for people of all ages.

- An internal partnership communications plan has been developed to support distribution of the PHA's position on this consultation and encourage responses across Pharmacy, Trusts, Schools, Councils, Youth and Sports Groups and many other partners
- Ongoing meetings with the Department of Health to support the Northern Ireland response rate.