UK Health Security Agency

Health Needs Assessment: Immunisations in Prisons in North West England

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INTRODUCTION

Immunisations are of the most significant public health interventions for preventing infectious diseases. Outbreaks of infectious diseases occur globally in prisons, where the population and structures contribute to an increased risk[1]. Prison populations are over-represented by groups with poorer health outcomes in addition to experiencing an ageing population[1-3]. Many prisons are older buildings without purpose-built healthcare facilities. Prison residents can live in close proximity, with shared washing and dining facilities[4,5]. Immunisation in prison populations is an important measure for preventing outbreaks of infectious diseases among vulnerable individuals in these high-risk settings. Although prison settings can increase the risk of outbreaks, they can also present an opportunity to provide vaccines to a population who may not be as accessible to healthcare in the community[6].

There are 15 prisons in the North West of England, with a capacity of 12,439. In 2020/21, immunisations were a priority area for the North West Health & Social Care Prison Partnership Board.

This health needs assessment aimed to understand:

1. **The uptake of routine and additional immunisations in North West prisons during 2019-2020**
2. **The gaps and barriers in service provision as demonstrated by immunisation data and as understood by prison residents**

METHODS

Quantitative Methods

Health & Justice Indicators of Performance (HJIP) data from April 2019 – March 2020 was analysed to calculate percentage uptake based on numbers eligible and numbers immunised for each vaccine and prison. This data is released quarterly and is based on figures provided by prison healthcare teams. Data from 2019-2020 was chosen as this pre-dated the various impacts on healthcare delivery due to the Covid-19 pandemic.

Qualitative Methods

Due to Covid-19 restrictions, it was not possible to undertake qualitative data collection specifically for the purpose of this needs assessment. Reports from A Better Life prison health forums were utilised to obtain qualitative data on prison resident's views on immunisations. The health forums are well-established programmes which invite prison residents to share their views on particular health topics. Thematic analysis was used to gather qualitative data from the health forum reports. This data was then grouped by themes regarding immunisations; motivators for uptake, barriers to uptake and recommendations for improving uptake amongst prison residents.

Ethics

Public Health England (PHE) Research Governance (now UK Health Security Agency) confirmed a PHE ethical review was not required for this needs assessment.

RESULTS

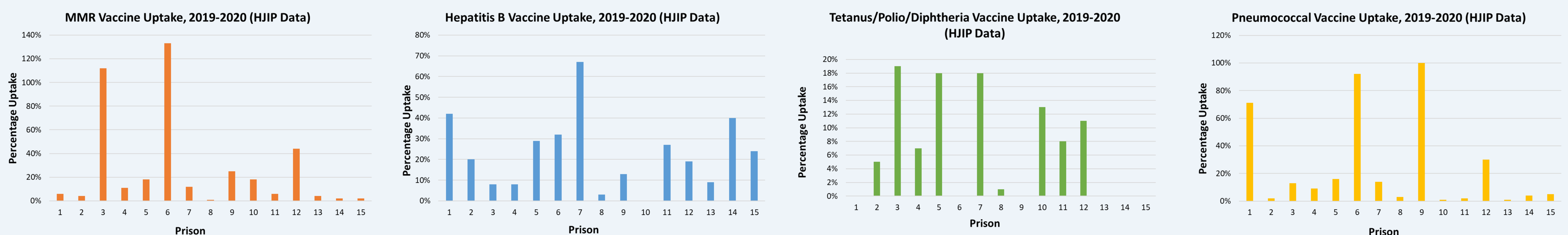

Figure 1. Uptake of routine immunisations across 15 prisons in 2020-2021 as recorded in HJIP

Data Analysis:

In reviewing this data, a number of issues were apparent resulting in limited data analysis. The eligibility number varied between prisons and appeared to be a mixture of either the entire prison population or the number of new residents that month. This resulted in quite dramatic variations in uptake coverage for vaccines across the fifteen prisons. The recorded vaccines given each month in HJIP are therefore unlikely to represent the actual coverage in the prison.

Determining Numbers Eligible:

An additional consideration was the number of new residents entering the prison per month. Those that remain in the prison for a day would appear as eligible for a vaccine, but it would not be reasonable to assume they would have undertaken a full healthcare assessment, had their GP records transferred to prison healthcare and have received outstanding vaccinations in that short period of time. It is also possible the same individual may be counted twice across two prisons if they have moved during the month the data is recorded. It is therefore worth considering if the eligible population should only include those prison residents who are remaining within the prison, as well as existing residents who are unvaccinated.

Data Collection and Records System:

The completeness of healthcare records is reliant on information being sent from the resident's community GP and the quality of this information can vary. Summary Care Records can be accessed but only provide information for the previous 12 months. In addition, residents may not have up to date GP records if they have not sought healthcare for some time or have had complex lifestyles. If GP health records are available and scanned, immunisations need to be entered onto the system under the correct read codes or the immunisation history will be absent. This then means prisons can appear to have missing immunisation coverage data. The method by which immunisations are entered on to the system can also vary by prison, and this can cause discrepancies when extracting data that may be under different read codes. In addition, prisons with high turnover can appear to be under-performing if prison residents are entered on to the system but not offered immunisations, likely because they only remained there a short period of time.

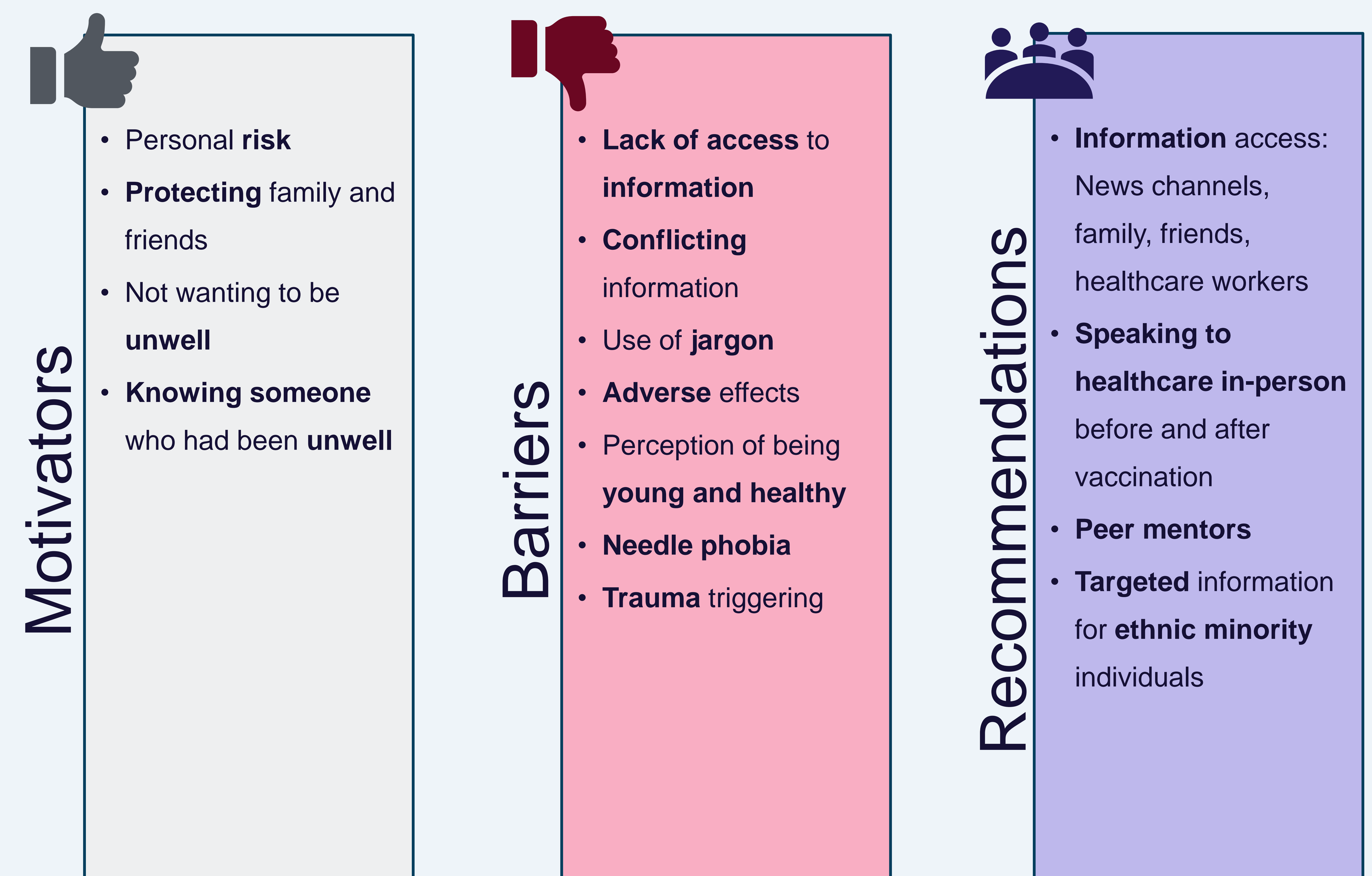

Figure 2. Views and recommendations on immunisations by prison residents

RECOMMENDATIONS

For prison healthcare policy makers and commissioners:

1. Communication to GP practices in the North West on the recommendation to share healthcare records, including immunisation history, with prison healthcare in a timely manner
2. Review of the definition of "eligible population" on HJIP data, with consideration to only include those in the prison who are both unvaccinated and eligible for the particular vaccine
3. Review of inclusion in HJIP data of new prison residents who remain in establishments for short periods (i.e. less than three days)
4. Review all available immunisation data sources and subsequent reports to provide a representative view of immunisation coverage and uptake in North West prisons

For Public Health:

1. Conduct further qualitative analysis on the understanding and barriers to uptake of vaccinations, focusing on routine immunisations
2. Consider further research into barriers to vaccine uptake in those recovering from intravenous drug use
3. To promote the importance of immunisations as a public health intervention, including its role in reducing inequalities, across the prison system

For prisons and prison healthcare:

1. The development of a health record template for immunisations for use across all North West prisons to ensure consistency and efficiency of data entry
2. A sustainable and consistent system across all prisons to upload immunisation history from GP records to prison healthcare record system
3. Provide information on vaccination to prison residents before and after vaccinations are offered and administered
4. Consider opportunistic discussions about vaccination during healthcare visits
5. Utilise existing prison media channels to share information on routine immunisations
6. Consider use of peer mentors and influential prison residents for promoting the uptake of vaccines, helping to answer queries and dispel myths. Consider the needs of residents from ethnic minority backgrounds in peer mentor programmes.
7. Make immunisations a whole-prison responsibility, through training, education, and prioritisation in the local delivery board

ACKNOWLEDGEMENTS

Elizabeth Farrington, Healthcare Public Health Programme Lead, NHS England
Tracy Wilson, Senior Commissioning Manager, Health & Justice North West, NHS England
Diane Fiefield, Senior Health Protection Specialist Nurse, UK Health Security Agency
Diana Cooper, Screening & Immunisations Co-ordinator, NHS England North West
Helen Dickinson, Public Health Commissioning Manager, NHS England North West
Kerry Holmes, Head of Service, Prison Health Councils, ABL Health LTD
Rebecca Fecitt, North of England Delivery Lead, Prison Health Councils, ABL Health LTD
Katrina Marsden, Assistant Screening & Immunisations Co-ordinator, NHS England North West
Kelly O'Connor, North West Heath & Justice Quality Manager, NHS England
Robert Knight, Governor for HMP Manchester

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