

Childhood Vaccination and Immunisation



Introduction

As part of the national childhood immunisation programme, NHS Westminster was responsible for the commissioning and implementation of a Childhood Vaccination and Immunisation programme for their population.

In June 2010, NHS in London released their latest immunisation performance report on Vital Signs, covering all 31 PCTs within London. The report showed that NHS Westminster was ranked top in all six immunisation categories; the first time any PCT had achieved number one ranking in all six Vital Sign categories. This was in addition to NHS Westminster meeting all six targets set within 'Vital Signs', demonstrating a complete reversal of previous reports.

This case study shows how this turnaround was achieved.

The Approach

Prior to May 2010, reports from NHS in London indicated that NHS Westminster's Childhood Vaccination programme failed to achieve a high uptake of immunisation within their population of more than 6,000 pre-school children aged 1, 2 and 5 years old.

NHS Westminster approached Health Intelligence to help the PCT identify why this was the case and to recommend ways to improve its low immunisation uptake. A three stranded approach was agreed. Health Intelligence would:-

- Analyse the data held on NHS Westminster's Childhood Vaccination and Immunisation programme and at individual healthcare practices.
- Implement a review of the PCT's data management processes including time management.
- Recommend and support the implementation of new procedures to ensure that NHS Westminster met their targets.

Initial Findings

After extracting, reviewing and analysing the relevant data from each healthcare practice, Health Intelligence identified that the prime cause of below par performance could be attributed to the inaccuracy of patient data found at practice level. Incorrect data was being passed onto NHS in London, who in turn had concluded that NHS Westminster had a low uptake of immunisation.

Reasons for inaccuracy of patient data included:

Failure to properly record or notify patients' medical history and records

- Practices were using inappropriate codes to update patient data regarding their vaccinations
- Some templates were found to be out of date
- Some Practice users would only enter partial data
- Personal Child Health Record Books, (kept by the patient) included a child's Immunisation Record, which the practice would manually complete. This information was then entered onto the practices system, leading to data entry errors by staff.

Time Consuming Procedures

- There was a heavy reliance on completing paperwork and forms.
- Each healthcare practice was spending an average of two days per quarter on paperwork.

Inadequate Processes for Sharing Patient Data

- There was no facility for healthcare practices and the PCT to benchmark their performance.
- There were no checks to ensure that accurate immunisation statistics were being passed to NHS.

The Management of Change

Working with NHS Westminster

In order for effective improvements to take place, it was vital for Health Intelligence to work with experienced Project leaders at NHS Westminster. Prior to taking over as lead of Childhood Immunisation in October 2009, Tyrone Schiefner, (NHS Westminster's Primary Care Commissioning Manager of Childhood Immunisations) had worked within the IT department, specifically on data quality and clinical systems. Part of his work had included read coding and templates for immunisations, giving him a baseline knowledge and understanding of the immunisation issues facing NHS Westminster.

Working with NHS Westminster

In order to ensure the successful implementation and consistent application of the changes, it was vital that GP practices were included and engaged with the process of change as well as other key stakeholders including immunisation co-ordinators, patient groups etc.

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Implementation Time Line

The Department of Health monitors progress against all elements of 'Vital Signs' at least once a year. As NHS in London had requested childhood immunisation and vaccination data from all 31 London PCTs to be presented by May 2010 for the 2009/10 programme, this gave Health Intelligence and NHS Westminster four months to implement the findings and recommendations.

Implementation of Change

Health Intelligence research had shown that the key to improving immunisation performance was the introduction of a new approach to the management of data, rather than the need to commission new services. Three key areas were identified for change;-

- Secure Automated Export of Data was needed to identify immunisation trends across all practices in Westminster.
- Introduction of Data Quality Reports to highlight healthcare practices that were using inappropriate codes.
- Provision of user friendly templates to improve the data quality and accuracy of data coding.

From February to May 2010, NHS Westminster undertook a data cleaning programme on their 2009/10 data, with co-operation from the healthcare practices. As part of this process, the data management service was implemented (with new templates and up to date read codes) enabling all the GP practices to input correct information into their systems. This upgraded information was then sent over a secure network provided by Health Intelligence and extrapolated into a report for NHS Westminster, who in turn was now able to raise queries quickly with GPs on specific data they had supplied.

The Benefits of Change

- NHS Westminster is now able to feed back findings to all their GPs and healthcare practices, ensuring that all data stored at practice level is accurate and the information which is sent to the PCT is correct and up to date.

- The data quality report enables the PCT to identify and flag up any issues which may be affecting one or more practices and their data entry procedures. eg: the use of an incorrect read code for an immunisation. This enables queries to be sent back quickly to the GP to verify and correct where applicable.
- Health Intelligence has introduced standardised read codes for all GP practices. This enables input issues eg codes for new vaccinations, to be flagged up every two weeks rather than up to two years, with the previous system.
- NHS Westminster now has day to day control over their data and can access regular updates, reducing their administration time.
- New templates mean that all healthcare practices are now inputting information accurately using the correct read codes. This information is now used by the PCTs Child Health Department to identify children who have not yet been vaccinated and to help run targeted immunisation campaigns.
- The service provided by Health Intelligence gives NHS Westminster up to date information on childhood vaccination and immunisation coverage by practice. This enables resources to be better targeted, minimises paperwork and makes practices proactive rather than reactive.

Conclusion

A large part of this project's success was down to an exceptional working relationship with NHS Westminster and their stakeholders. Implementation of Health Intelligence research and recommendations was swift, professional and thorough, enabling NHS Westminster to not only meet their targets within all six categories but also to be ranked 1st in all six categories, within 31 London PCTs on the NHS in London Childhood vaccination table (equating to over 6,000 children - 2,000 one year olds, 2,200 two year olds and 1,800 five years olds).

"Before working with Health Intelligence, we knew we were good at providing data but no-one was managing it and checking it was accurate. Once we started managing the data in real time and accurately, the figures for our immunisation programme went up and now we are delivering top results."

Tyrone Schiefner - NHS Westminster's Primary Care Commissioning Manager

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