

Childhood Vaccination and Immunisation



Introduction

Within the national childhood immunisation programme, NHS Camden was responsible for the commissioning and implementation of the Childhood Vaccination and Immunisation programme.

In December 2010, NHS Camden commissioned Health Intelligence to improve their data flows for childhood vaccinations. This case study details the work between Health Intelligence and NHS Camden Childhood Vaccination & Immunisation Service, highlighting the issues, opportunities and achievements gained through their partnership. This partnership resulted in an increase of vaccination coverage, as well as an improvement in the operational processes within the call and recall service.

The Approach

Health Intelligence was approached to assist in increasing vaccination coverage within NHS Camden by the use of data analytics. Health Intelligence proposed:

- Introduce robust information governance to securely export childhood vaccination data (over N3). Health Intelligence would securely host and report on vaccination coverage and gaps in coverage.
- Highlight data quality issues and improve coding.
- Health Intelligence would create a structured .csv file to upload vaccination data direct from GP Practices, into BT Rio using the GPIUS tool to batch up child health records.

Initial Findings

After reviewing the existing procedures, Health Intelligence identified some key areas to be addressed:

- There was no consistent process for GP Practices to notify Child Health of completed vaccinations.
- Not all GP Practices submitted their vaccination information
- Many practices spent several days per month completing feedback forms for all relevant children.
- Child Health would spend over two weeks a month manually inserting data.

- Child Health would spend approximately two weeks per quarter chasing vaccination information.
- Inadequate processes for sharing patient data.

The Management of Change

Working with NHS Camden

In order for improvements to occur, it was vital to form a joint working agreement between Health Intelligence, NHS Camden Immunisation & Vaccination Services and GP Practices.

Health Intelligence worked closely with Patricia Stephens, Immunisations Nurse Specialist and her team; Ian Kirkwood, Camden Children's Service Data Analyst; and Central and North West London (CNWL) NHS Foundation Trust, to ensure that electronically transferring data was quick, accurate and safe.

In addition, the system could not function properly and effectively without robust information governance. The Local Medical Committee ratified the data sharing agreement to ensure the solution was secure and did not breach any data protection legislation.

Implementation of Change

Health Intelligence engaged with all GP practices within Camden to ensure all childhood vaccination data could be exported securely and directly from their GP Practice's clinical system. It was vital that this data was exported from all practices across Camden to remove the manual and inconsistent submission of data.

Health Intelligence designed and created a structured .csv file that pre-mapped the BT Rio vaccination code to the Primary Care read codes for each vaccination given. This ensured a standardisation of vaccination codes and led to a reduction in the inaccurate data supplied.

By uploading the .csv file via the GPIUS tool to batch update child health records in BT Rio, the services removed the labour intensive time spent manually inserting data.

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Outcome

In January 2012, Health Intelligence provided NHS Camden Vaccination & Immunisation Service with the first .csv file to batch update their IT system. 5,450 vaccinations were successfully uploaded into BT Rio.

“The process to upload these vaccinations took a matter of seconds, whereas before the electronic transfer, the process would have taken over 1 month for a member of staff to manually enter the information into BT Rio.”

Patricia Stephens, Lead Immunisations Nurse

Health Intelligence agreed to provide this .csv file on a monthly basis to eliminate the majority of the administrative burden from personnel in both GP Practice's and NHS Camden Childhood Vaccination & Immunisation Service. The electronic transfer of primary care vaccinations to BT Rio contained an average of 1,000 vaccinations, which previously would have taken a full time data entry officer 14½ days (every month) to manually insert into the Child Health IT System.

In December 2012, the frequency of the .csv file changed from monthly to weekly to facilitate a quicker transfer of data. In February 2013, NHS Camden Vaccination & Immunisation Service requested that all GP Practices not submit any further hard copies of vaccinations given, as the solution had proven to become effective and robust.

Benefits of Change

- All GP Practices within Camden agreed to the electronic transfer of vaccination data to CNWL's Camden Children's Services. Therefore, GPs no longer had to spend time sending this information and the information was consistent.
- Reduction of the labour intensive time Practices and Child Services spent manually inserting vaccination data. So Camden Children's Services now only spend a few minutes per week uploading the data.
- CNWL's Camden Children's Services had more time to spend inviting or reminding parents to vaccinate their children. So the focus is now on delivering uptake, not filling in paperwork.
- The vaccination coverage has increased an average of 1.8% up to 12 months, an average of 7.1% up to 24 months and an average of 13.2% up to 5 years.

Conclusion

The electronic transfer of vaccination data from GP Practices to NHS Trust Camden Childhood and Vaccination Services has proven to be a great success. The benefits to GP Practices, the NHS Trust Camden Childhood and Vaccination Services and most importantly, the health of the children within Camden have been substantial. Time from labour intensive processes has been saved, CNWL's Camden Children's Services has quicker access to more accurate data and vaccination coverage has significantly increased.

The results would not have been achieved without the dedication of the Immunisations Support Team and the co-operation of the Camden GP Practices.

“Our experience of working with Health Intelligence has been very positive. There have been clear workforce benefits within our Universal Children's support services in having immunisation data managed in a reliable and timely manner. This in turn allows our clinical teams to focus more fruitfully, with partners in Primary Care on genuine immunisation defaulters, which has contributed to improved performance for Immunisations across Camden.”

Jonathan Freedman, Service Line Manager - Universal Children's Services, CNWL NHS Foundation Trust

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