

Coventry and Warwickshire VTS, CRN West Midlands and Warwick Medical School  
**‘Primary Care Research and Audit in Coventry and Warwickshire’**  
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<b>PRESENTER’S DETAILS</b>		
<b>Title</b> Miss	<b>First Name</b> Bridget	<b>Surname</b> McManamon
<b>Place of work/study</b> Warwick Medical School (Phase 3)		
<b>PRESENTATION DETAILS</b> (total max 250 words - not including title)		
<b>Co-Authors</b> n/a	<b>Title of Study</b> Are patients at the Forrest Medical Centre receiving their infant immunisations appropriately: follow up and completion of the audit cycle	
<b>What’s the problem you are tackling? (Background)</b>  <p>In the UK, there is a set guideline for the schedule of infant vaccinations given in a child’s first year, given at 8, 12 and 16 weeks of age. This is outlined in the Public Health England (PHE) document ‘<i>Immunisation against infectious disease</i>’ (‘The Green Book’). The guidance states that the schedule should be ‘followed as closely as possible’, specifically with a “four week interval recommended between each of the three doses of DTaP containing vaccine” and that “if one of these doses is given up to a week early, [this can be counted as a valid] ... However, no more than one dose should be given early in the three dose schedule”.</p> <p>An initial audit at the practice completed in 2017 identified that there were a significant cohort of patients who were not receiving these immunisations within the correct timeframe. The aim of this audit therefore was to establish whether the success of the practice in responding to this and establishing better practice.</p>		

### How did/will you do it? (Method)

We performed three searches of the practice's database (System One) in order to identify all patients given first year infant vaccinations. The search terms identified the '5 in 1' vaccine, as this vaccine is given at each 8, 12 and 16 week immunisation. As all infant vaccinations due before 16wks have the same immunisation schedule, this served as a proxy for the patient having received the infant immunisation schedule.

The initial audit identified patients receiving any one of their 8, 12 or 16 week immunisations within a 2 week window in April 2017, identifying the other 2 vaccines retrospectively and prospectively. We expanded this to perform a more comprehensive analysis, performing a search of all patients who received their 8 week vaccination between 1st July 2017 and 1st January 2018 (6 month period). We then followed these patients to the completion of their 16 week vaccination.

A total of 50 patients received their 1st vaccine between 1st July 2017 and 1st Jan 2018 (participants n=50; vaccinations given =150). A vaccination was defined as given early if <1 days before the recommended interval. As there is no definitive time frame for what constitutes a 'late' vaccination, we made the decision to define in the same way as the previous audit (>7 days from recommended interval).

### What did you find? (Results)

This audit found the practice has made significant improvements in the areas identified in 2017. From having given 15% of the 5in1 vaccines early in the 2017 audit to only 2% (3 vaccines) in the 2018 audit (13% improvement). Additionally, they are now in line with guidance that 'no more than 1 dose should be given early in the 3 dose schedule', as the early doses given were received by 3 separate patients. The practice has also decreased the number of vaccinations given late by 12.7%. A summary of key data is given in the table below.

TOTALS (all 5 in 1 doses)	2017 (%)	2018 (%)
Vaccination too early (<0 days)	15.3	2
Vaccination within 1-7 days	42.7	68.7
Vaccination late (> 7 days)	42	29.3

### Why does this matter? (Conclusion)

This audit has identified that Forrest Medical Centre was highly successful in responding to recommended areas for improvement from a previous audit. It confirms the role and benefit of the audit process in identifying areas for improvement, and the importance of completing the audit cycle with re-audit to confirm these improvements. Given that the only information for the infant immunisation schedule in the Public Health England guidelines has a degree of vagueness, and there are no NICE guidelines on the administration of these vaccines, it is a beneficial area to have identified. It also suggests that other practices may have similar deficiencies in this area, which they may benefit from identifying. This is of particular relevance given that infant immunisations is highly topical at the moment, with increased scrutiny on health professionals working in this area.