


An Audit...

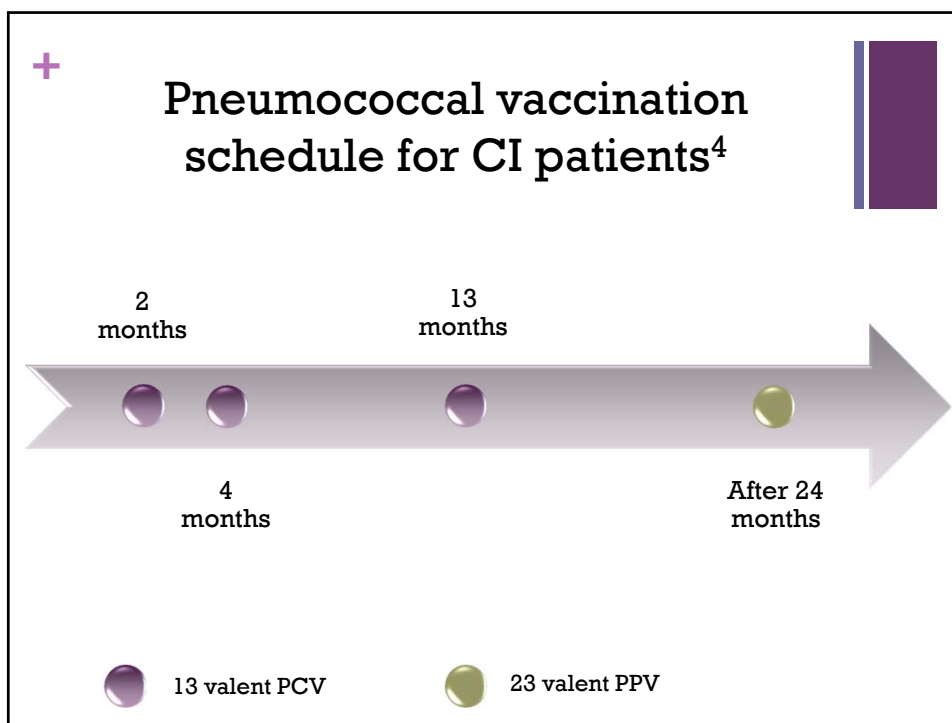
Pneumococcal Immunisation Status of Children Within the Cardiff and Vale Paediatric Cochlear Implant Programme

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Introduction

- Over 1,300 implants per year in the UK.¹
- Recipients have a **lifelong** increased risk of *Streptococcus pneumoniae* meningitis.²⁻⁵
- The pneumococcal vaccination schedule is different for CI patients.⁴
- Multiple changes to the vaccination schedule in recent years.
- Previous studies have shown that CI patients are **often not optimally immunised** against pneumococcal meningitis.^{3,6}



+ **Aim**

- To evaluate pneumococcal immunisation status of CI patients within the Cardiff and Vale CI programme.

Objectives

- To determine the proportion of children optimally immunised:
 - a) Prior to implantation
 - b) At the time of audit

Sample

- All 98 children who had received a CI since the Cardiff and Vale programme was established in June 1997.

+ Methods

■ Microsoft Excel database

- DOB
- Health board
- Date of implant surgery
- Date and type of any pneumococcal vaccinations received.

■ Data collection

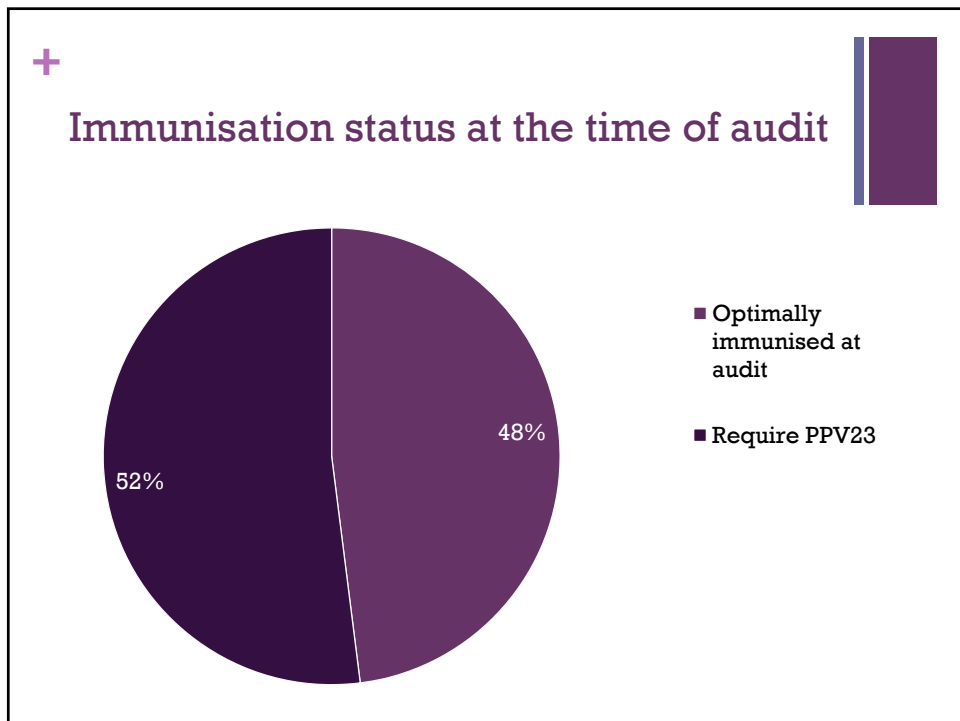
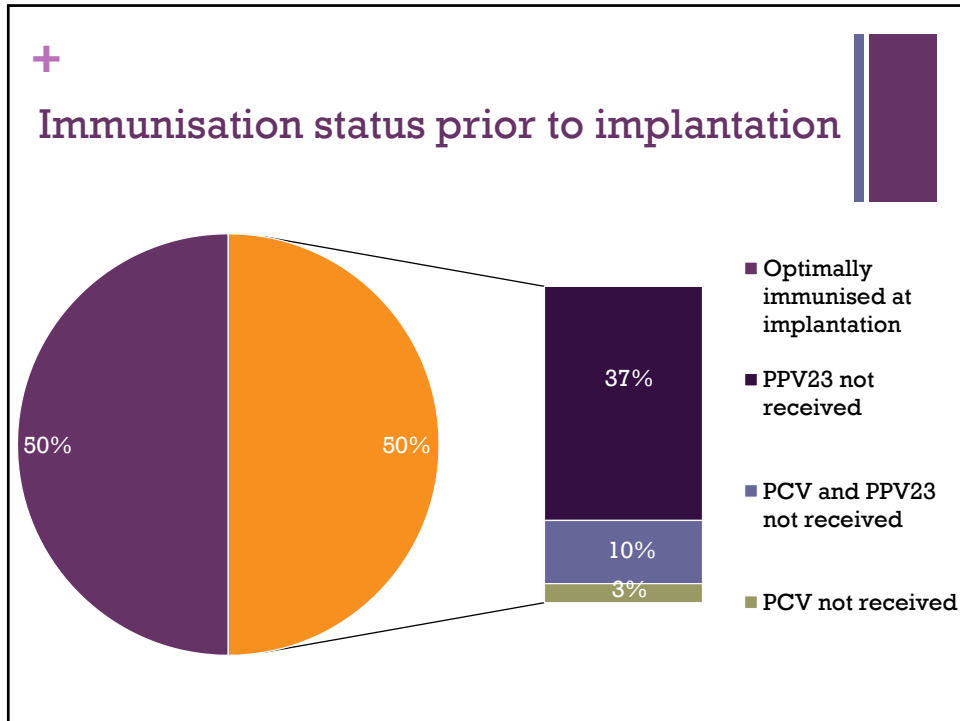
- GPs
- Community paediatricians
- Health protection nurses
- Parents
- Community Child Health 2000
- PARIS.

■ Determining immunisation status:

- Pneumococcal vaccination flowchart audit tool³
- Historical immunisation guidance (Green books)⁴

+ Results

- What proportion were optimally immunised **prior to implantation?**
- What proportion were optimally immunised at the **time of audit?**





Key Findings

- 14 (~14%) children had received **no** vaccinations.
- Half of all patients were not optimally immunised at implantation.
 - This was mostly a result of failure to administer the PPV23.
- The majority of children were not optimally immunised at the time of audit.
 - In **every** case, the patient required PPV23.

Failure to deliver PPV23 accounted for almost all cases of sub-optimal immunisation.



Recommendations

- Pneumococcal immunisation status is included on CI referral form.
- The flowchart is used to assess immunisation status as part of CI candidacy assessment.
- Include immunisation status on ChIP (Children's Implant Profile) template.
- Any child over the age of 2 years, pre or post-op, must have immunisation status checked to ensure they have received PPV23.
- The database is updated regularly.

Thank you for listening.

References

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2. Reefhuis J, Honein MA, Whitney CG, Chamany S, Mann EA, Biernath KR, et al. Risk of Bacterial Meningitis in Children with Cochlear Implants. *N. Engl. J. Med.* 2003;349(5):435-45
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4. Public Health England. *Pneumococcal Immunisation Against Infectious Disease - 'The Green Book'*. London; 2013. p. 295-313, [accessed: 01/06/2013]. Available from: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/147977/Green-Book-Chapter-25-v4_0.pdf.pdf.
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