

Monitoring vaccine coverage of newly introduced MenB and MenACWY vaccines in England

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INTRODUCTION

In 2015 two vaccines against meningococcal disease were introduced into the UK immunisation schedule:

- **Meningococcal B (MenB) vaccine** (offered at two, four, and 12 months) was introduced from 1 September 2015 (for children born 1 July 2015 onwards) with catch-ups for children born in May/June 2015.
- **MenACWY vaccine** for 13-16 year olds, primarily delivered in schools, replaced MenC vaccine in Autumn 2015. Three General Practice (GP)-delivered MenACWY catch-up campaigns targeted older teenagers in their last school year between 2015/16 and 2017/18. All these cohorts remain eligible for MenACWY vaccination until the age of 25

We estimated vaccine coverage for these programmes since their inception to ensure their successful implementation and to monitor long-term trends.

METHODS

Vaccine coverage data for **MenB** were collected via two systems:

- Monthly at 26, 52 and 78 weeks of age via ImmForm, a web-based system based on data directly extracted from GP IT systems.
- Quarterly and annually at 12 and 24 months through the COVER (Cover of Vaccination Evaluated Rapidly) programme which evaluates coverage using data extracted from Child Health Information Systems (CHISs).

MenACWY coverage data were collected using ImmForm via two methods:

- Local Authority level data for the school-delivered programme, for Years 9, 10 and 11 (students aged 13-16) were manually entered on ImmForm in September 2016 for the 2015/16 academic year.
- Monthly data for the GP-based catch-up cohorts were automatically extracted from GP practices using ImmForm.

RESULTS

- **Infant MenB** – in May-July 2017, 88% of children had completed their primary course of MenB at 26 weeks, rising to 93% by 52 weeks of age (figure 1) [1].
- The COVER programme reported that 92.2% of children born April to June 2016 in England had received two doses of MenB by their first birthday [2], similar to the ImmForm estimate for the same period (92.6%) [1].
- Early ImmForm estimates of MenB booster coverage at 18 months indicate that coverage is consistently $\geq 87\%$ [1].

- Annual 2015/16 **school-delivered MenACWY** coverage estimates were 84.1% in Year 9, 77.2% in Year 10, and 71.8% in Year 11 (catch-up cohort) (Figure 2) [3].
- Vaccine coverage for the third **GP-delivered MenACWY** catch-up cohort in 17-18 year old school leavers (eligible from April 2017) was 29.4%, 12% higher than coverage reported for the second catch-up cohort (eligible from April 2016) in August 2016 (Figure 2) [3].
- Coverage for the first and second catch-up cohorts (born 01/09/1996–31/08/1997 and 01/09/1997-31/08/1998) was 39.7% and 35.5% respectively by August 2017.

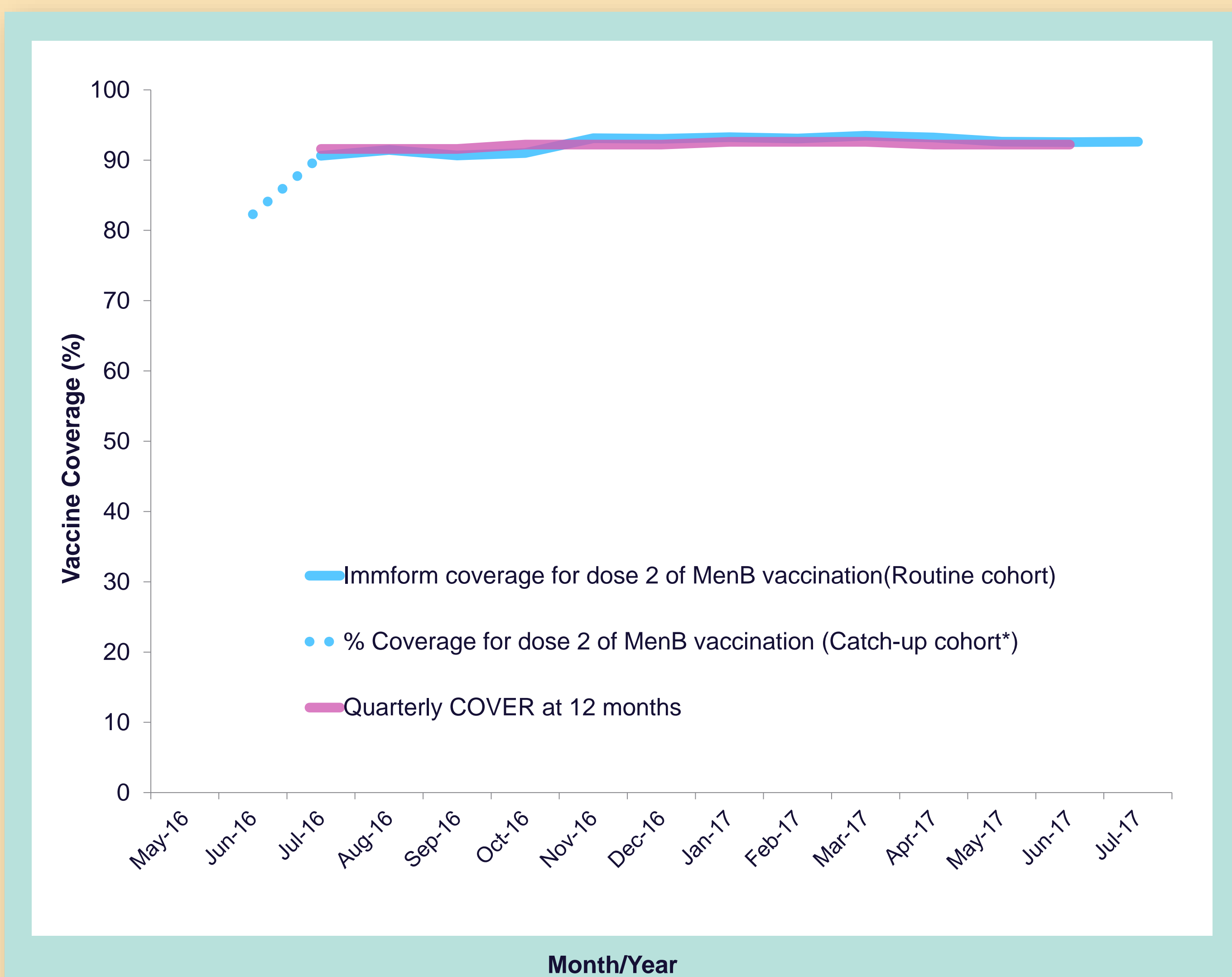


Figure 1. Coverage of two doses of MenB vaccine at 12 months using GP and CHIS data

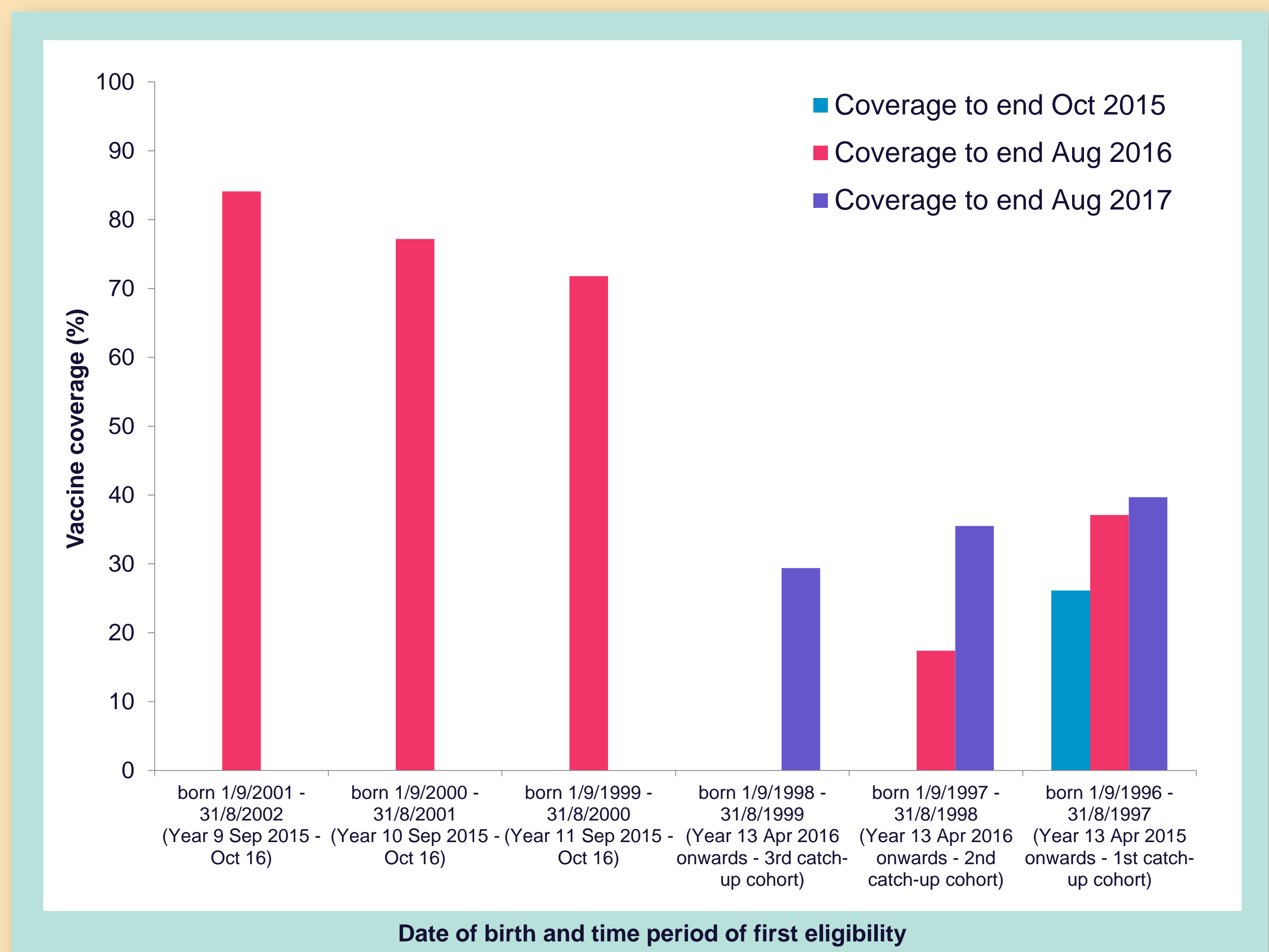


Figure 2. MenACWY vaccine coverage for the school and GP-delivered programmes

CONCLUSIONS

- The MenACWY and MenB programmes have been successfully implemented and coverage estimates in the routine cohorts are high.
- ImmForm enables more timely coverage estimates from the first cohorts offered the vaccine and validates routine COVER data.
- Vaccine coverage for the routine MenACWY cohorts is similar to other school-delivered adolescent programmes where decreasing coverage with increasing age is also seen.
- Lower coverage in the MenACWY catch-up cohorts highlights challenges in delivering vaccination via GP in this age group, but the year on year improvements have been encouraging.

REFERENCES

1. Public Health England. Preliminary vaccine coverage estimates for the meningococcal B (MenB) immunisation programme for England, update from May to July 2017. HPR 11(34). Available at: <https://www.gov.uk/government/publications/meningococcal-b-immunisation-programme-vaccine-coverage-estimates>
2. Public Health England. Quarterly vaccination coverage statistics for children aged up to five years in the UK (COVER programme) : April to June 2017. HPR 11(34). Available at: <https://www.gov.uk/government/statistics/cover-of-vaccination-evaluated-rapidly-cover-programme-2017-to-2018-quarterly-data>
3. Public Health England. Preliminary vaccine coverage for the school based meningococcal ACWY (MenACWY) adolescent vaccination programme in England, 1 September 2015 to 31 August 2016. HPR 10(44). Available at: <https://www.gov.uk/government/publications/meningococcal-acwy-immunisation-programme-vaccine-coverage-estimates>
4. Public Health England. Vaccine coverage for the GP based catch-up meningococcal ACWY (MenACWY) immunisation programme in England to the end of August 2017. HPR 11(34). Available at: <https://www.gov.uk/government/publications/meningococcal-acwy-immunisation-programme-vaccine-coverage-estimates>