HPV Prevention and Control Board

www.hpvboard.org

HPV VACCINATION PROGRAM IN THE UK

‘WARTS & ALL’

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Overview of the UK HPV vaccination program

- **Decision for introduction who when why.**

1' objective at inception was to '***reduce the incidence of cervical cancer in women***' * JVCI recommendation – taken up by D.of.H

- **How was the HPV program prepared in the country**

JVCI was notified of a new HPV vaccines in development in 2005, this was considered on 7 occasions prior to the statement in 2008 recommending that HPV become a routine vaccine. (the working documentation is confidential until formulated).
The JCVI considered published, unpublished research and that provided by the manufacturers – it looked at safety, effectiveness, cross reactive protection, it studied the burden of HPV related diseases and the expected cost benefits from a vaccination regime, it undertook modelling of the natural history of HPV, sexual transmission and cost effectiveness.
These models where subsequently peer reviewed.

Boys of any age and Girls aged 18-25 were not included for cost effectiveness reasons (*aimed at cervical cancer prevention only!)

(JCVI is an independent expert advisory committee of the UK NHS set up in 1963 to advise government on communicable diseases preventable by immunisation and on vaccine safety) The initial vaccine choice was based on cost effectiveness, the JVCI stated that if the two vaccines had been priced equally it would have preferred the quadrivalent vaccine on clinical grounds.

- **Start date program**

2008

- **Target groups**

Girls aged 12-13 (pre-exposure) 3 dose regime with Cervarix + a time limited catch up programme for girls aged 14-18.
The vaccine changed to quadrivalent Gardasil in 2012,
The regime changed to 2 doses in 2014 –remaining a 3 dose regime if starting age >15
Predominantly a school based programme (catch up and late comers vaccinated by 1' care)

Overview of the UK HPV vaccination program

- **Implementation**
  A school based programme (main reason for good national uptake overcoming deprivation factors)
  Mop up achieved through 1' care based programme for late uptake and initial catch up programme
  A simple uncomplicated – one size fits all National Programme – free for all.

- Due to a forward thinking and a well organised Public Health and JVCI the vaccination data is to be entered onto the 3 systems (Child Health Information System, General Practice data base and the Open Exeter System controlling the national cervical screening data) – this will give the early, accurate and comprehensive outcome data on cervical cancer rates… the start of the journey!

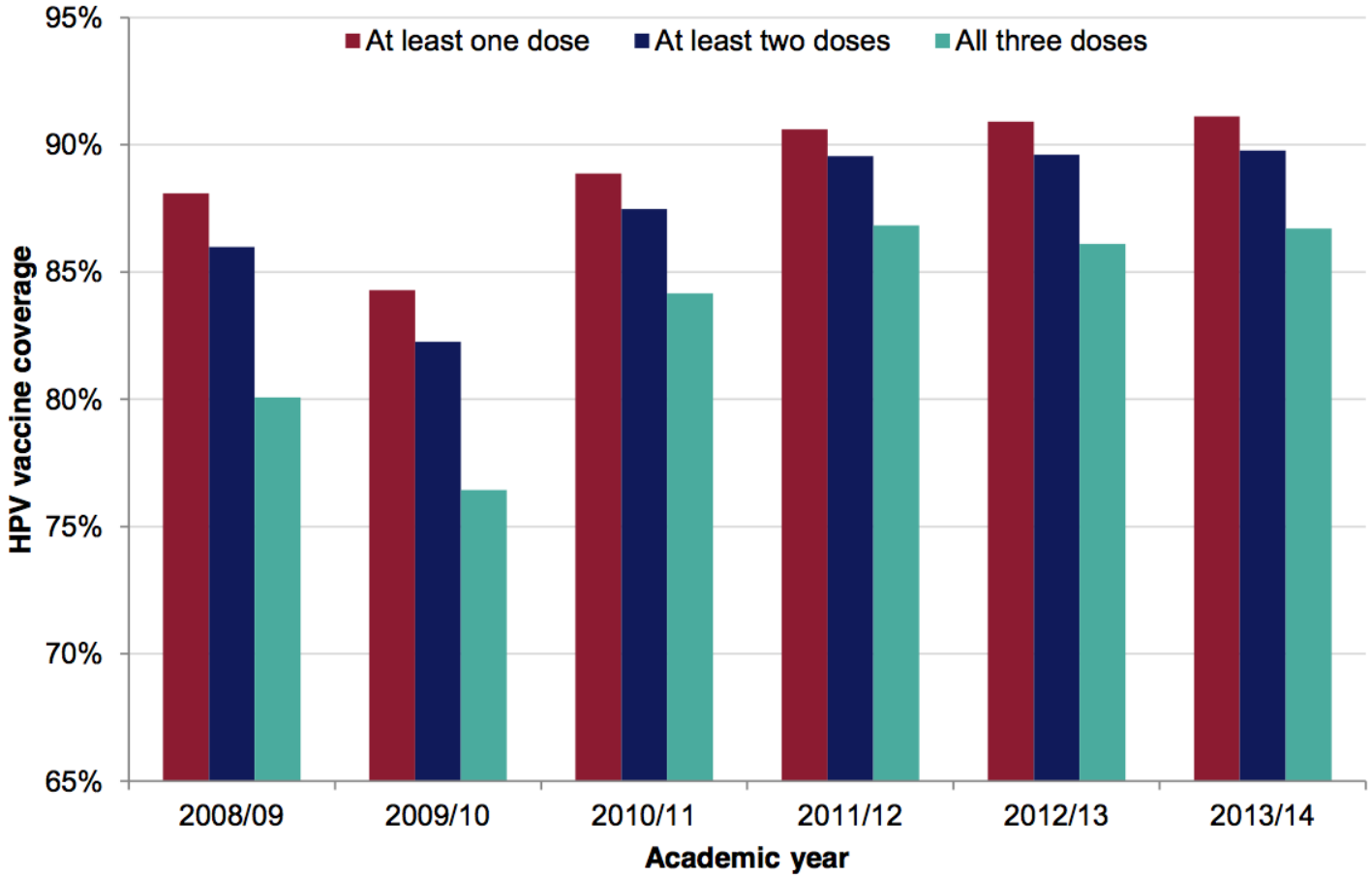
- **Training and information sources for general public and vaccinators**

  A National announcement.

  Information packs and guidance disseminated to School Health England and GP's

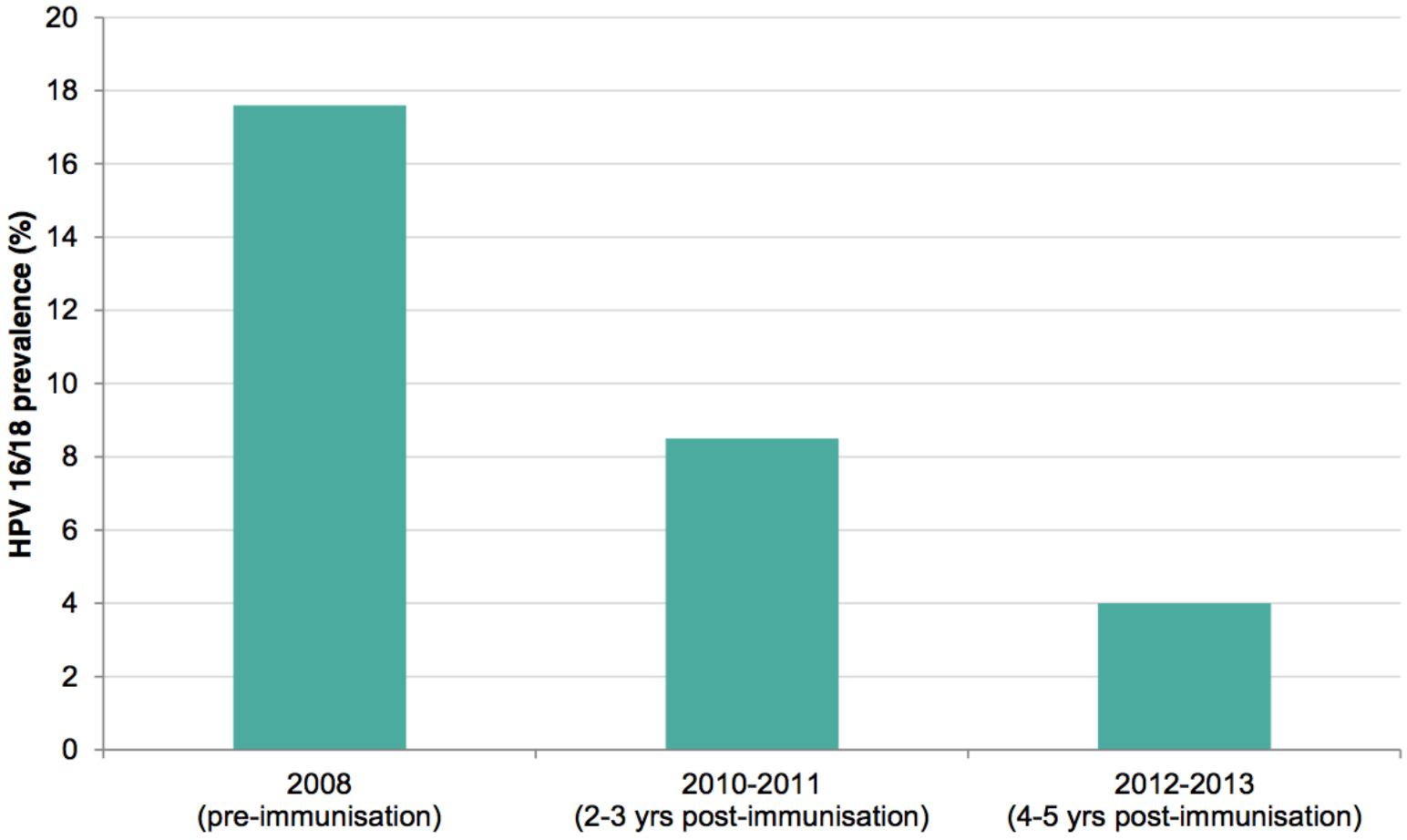
- **Vaccination coverage**
  see charts – next slide

Figure 7. Routine HPV vaccine coverage in girls aged 12-13 years (school year 8 in England and Wales, secondary school S2 in Scotland, school year 9 in Northern Ireland) in the UK, assessed at the end of academic years 2008/09 to 2013/14



Data from Public Health England. HPV Vaccine Coverage in England 2008/9 to 2013/14 'A review of the full six years of the three-dose schedule'.

Figure 9. Prevalence of HPV16/18 in a survey of 16-18 year old sexually active young females in England in 2008 (before the immunisation programme) and in 2010-11 and 2012-13 (after)



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Major stakeholders and influencing factors

A Government (NHS) funded vaccination programme thus subject to -

- **Cyclical Politics** (UK politics is not consensual rather adversarial),
- **Resource availability** (2008 Financial crises, Budgets),
- NICE **cost analysis**. (**N**ational **I**nstitute for Health and **C**are **E**xcellence)
- **Pharmaceutical influences** (UK hosts many of the Pharmaceutical head offices and the R&D, thus it needs to ensure a profitable environment)
- **Clinical representation and research from** - Joint Committee on Vaccination and Immunisation, Public Health England, Genito-Urinary Medicine, Oncology (collectively seen as free from non clinical influencing factors)
- **Public / Parental acceptance:** a vaccine for adolescent girls with a sexualised content, moral connotations and a fear of unintended promiscuity. (this has subsided with a change in narrative from wart virus vaccine to one of anti-cancer vaccine, thus more socially acceptable). Safety fears - the UK still bears the scars of the MMR vaccine scare (Dr Wakefield, encephalitis 1998) – the public mistrust of government advice persists but is diminishing with time.
- Global **anti vaccine and pharmaceutical company** alliances such as www.anhinternational.org argue that research is flawed and links Complex Regional Pain Syndrome, Postural Orthostatic Tachycardia Syndrome and Guillan Barre Syndrome with the vaccine, it also links the Danish outbreak of symptoms, the Irish TV3 documentary and the ex-Merck doctors revelations in France as signs of corporate greed and governmental / medical establishment blindness.

SWOT analysis of the program

- **Strengths** good national uptake >86%, equitable, free at the point of delivery, minimal social deprivation variation, evidence based – likely future cancer reduction figures will bolster the safety / effectiveness message
- **Weakness** - failure to incorporate boys thus also targeting genital warts and ano-genital cancers, reduced uptake in African and Asian communities.
- **Opportunities** – increase trust in Government vaccination programme (post MMR), sustainable cancer prevention outcome in a young population risk group (thus maximal impact of life years saved)*, stepping stone to expand group to next high risk group (gay men) and tackling immigrant populations.
- **Threats** – anti-vaccine campaigners, vexatious litigation, social media hype, religious conservatism, populism politics, possible economic hardship,

* UK Data – Cervical screening is estimated to save 4500 lives/year, we see approximately 2500 confirmed cervical cancer cases annually with a 1000 deaths annually. The vaccination programme is expected to prevent a further 600 cases.

Lessons Learnt and the way forward

Lessons Learnt

That scientific advances combined with a political will, funding and a comprehensive strategy can deliver improved health care outcomes.

There will always be people who shun modern science.
We should continue to provide impartial advice based on evidence, in a non-judgemental manner respecting their choices.

The Way Forward

We should now focus on the next cohort of people to benefit from the HPV vaccine.
Men who have **S**ex with **M**en (MSM) and extending the programme to include adolescent boys*

With good data we hope to modify the cervical screening programme to make it more efficient, acceptable and safer:
utilising HPV serology rather than cervical cytology as the first test**

Allowing evidence based analysis on the value of the new 9 valent Gardasil

*JCVI Interim Statement on Extending HPV Vaccination to Adolescent Boys July 2017

** Helping to prevent cervical cancer. Department of Health, Cancer Research and Treatment, 6th July 2017


"We're so busy watching out for what's just ahead of us that we don't take time to enjoy where we are."
- Calvin & Hobbes