An Roinn Sláinte Department of Health Office of the Chief Medical Officer



04 October 2022

Dr Colm Henry Chief Clinical Officer Health Service Executive Dr Steevens' Hospital Dublin 8

By email only

Re: Recommendations regarding HPV vaccine dosage

Dear Colm,

I have recently received advices from the National Immunisation Advisory Committee (NIAC) in relation to the dosing schedule for the HPV vaccine (attached and summarised below).

The NIAC has recommended the following dosing schedules for the HPV vaccine:

- 1. A single dose of human papillomavirus (HPV) vaccine is recommended for unvaccinated females and males aged 9-24 years of age.
- 2. Those aged 25 years and older for whom the vaccine is recommended, or who choose to receive it, require a two-dose schedule at 0- and 6-12-month intervals.
- 3. Those with immunocompromise require a three-dose schedule at of 0, 2 and 6 months regardless of age.

In coming to its recommendation on moving to a one dose regimen, the NIAC reviewed international studies which examined immunogenicity, modelling, and vaccine effectiveness and efficacy against HPV infection, anogenital warts, and cervical intraepithelial neoplasia (CIN).

Internationally, the World Health Organisation (WHO) recommends the option of one dose for those aged up to 21 years, and in the UK the Joint Committee on Vaccination and Immunisation recommends one dose for those aged up to 25 years as evidence suggests vaccine efficacy will not differ in those aged 22-24 years.

In addition, modelling suggests that improving single dose HPV vaccine uptake to 90% can offset any potential long-term reduction in vaccine effectiveness. Therefore, the NIAC has recommended that "priority should be given to achieving vaccine uptake of 90% to maximise the effectiveness of a single dose HPV vaccination programme."

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As with any change of policy, it is crucial that effective monitoring and evaluation is undertaken to ensure that a reduction in the number of vaccine doses is not associated with a risk of a decline in antibodies to a level associated with reduced effectiveness. Longer term follow up studies of single dose HPV vaccination strategy, currently underway, will detect if there is a significant decline in protection which may require an additional vaccine dose at a later date. Further risk mitigation can be achieved by HPV infection surveillance to monitor for the emergence of any replacement serotypes. Such surveillance would also serve as an early warning system if protection against HPV9 vaccine effectiveness were to decline. Consequently, the NIAC have advised that enhanced surveillance is required to monitor for the emergence of any replacement serotypes and to detect any decline in HPV9 vaccine effectiveness.

Following my recommendation, the Minister for Health has now accepted these advices for commencement. It will be necessary to ensure the necessary safeguards of improved uptake of the HPV vaccine and enhanced surveillance of HPV disease, including whole genome sequencing, are in place to monitor the effectiveness and safety of this new HPV regimen.

I would now ask that the HSE put plans in place to give effect to this advice immediately.

Yours sincerely,

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Prof Breda Smyth Chief Medical Officer