

Establishing a 2nd year of life health child visits as a platform for vaccination and other health interventions (2YL)

Concept note

In 1974, the World Health Organization (WHO) launched the Expanded Programme on Immunization (EPI) with a goal to protect every child against six specific vaccine-preventable diseases: diphtheria, pertussis, tetanus, measles, poliomyelitis, and tuberculosis. Initially, immunization schedules focused on vaccines against these diseases given in the first year of life. Subsequently, WHO has substantially increased the number of recommended vaccines to be given by all immunization programmes to include vaccines against hepatitis B, *Haemophilus influenzae b*, pneumococcal disease, rotavirus, rubella, and Human Papillomavirus. However, many immunization programmes still perceive childhood immunization as a health intervention only for children <1 year old and do not offer vaccinations to children over 1 year of age even if the child was never vaccinated. Even when policies are in place to allow vaccination of children over 1 year of age, this often does not translate to a change in practices.

In line with this, there are multiple benefits to establishing a strong platform for immunization and other interventions in the 2nd year of life:

- 1) **Provides an additional routine contact for vaccination in 2YL: primary doses, booster doses and second doses.** Booster doses of routine immunizations such as for DTP are increasingly recognized of public health importance. In addition, a second dose of measles containing vaccine (MCV2) is recommended in some settings. Although some countries offer MCV2 at school entry ages, most offer MCV2 during the second year of life. For some newer vaccines such as pneumococcus vaccine, and meningitis A vaccine, one schedule option includes a routine dose in the second year of life. There are also multiple vaccines in development such as vaccines for malaria and dengue fever that will likely be recommended for children over 1 year of age. Having an established platform for immunization in the 2nd year of life will increase the potential uptake of these vaccines once introduced.
- 2) **Achieve higher coverage of vaccines offered in the first year of life through catch-up vaccination.** A strong platform in the 2nd year of life provides an important opportunity to provide missed vaccines to children and to improve overall coverage. By expanding vaccination services to the 2nd year of life, a child will no longer be limited to a 3-month window for receipt of MCV1; this change will positively impact the achievement of the measles elimination goals. Other missed doses in infancy should also be given at this time.
- 3) **Create opportunities to integrate with other health interventions.** Immunization systems are increasingly integrated with other health interventions with the intent of maximizing public health impact with limited resources. The 2nd year of life is an opportunity to further integrate immunizations with other health interventions such as Vitamin A supplementation, nutrition, growth monitoring, and deworming.

WHO is developing guidance to countries to establish a “healthy child visit” in the second year of life to achieve the benefits mentioned above. To inform this guidance, in-depth reviews of the introduction of a routine measles second dose in Zambia and Senegal are in the process to being completed. Further inputs to

the guidance will include a landscape analysis and literature review conducted by UNICEF, and a long term evaluation project of the measles second dose introduction by CDC in Ghana. Finally, grey literature and personal experience and anecdotes from national programmes on their experience to date will help inform the guidance document. The intent is to then implement this guidance in four further countries in 2017 to fine-tune it.

The following major issues emerging in this discussion include:

1. **Unexpected complexity:** While many national programmes assumed the introduction of a measles second dose (MCV2) and creating a visit in the second year of life as straightforward, the reality has shown that it brings with it a lot of complexity, in some cases complexity never encountered before by EPI programmes. Successful scheduling and implementation of a 2nd year of life healthy child visit requires better planning and implementation support than anticipated.
2. **Required definition, clarification and guidance:** Further work is required to better define and clarify key concepts, including
 - what constitutes a 2YL visit (given that many countries have a primary dose vaccination visit at 12 months);
 - how missed doses before 12 months impact understanding of the need for doses in the 2YL (eg. if a child missed their MCV1 in the first year of life, health workers may be confused on how the dose given in the second year of life should be given and called;
 - how to conceptualize the notion of a “Fully Immunized Child”, both within a country and when aggregating data for many countries;
 - at what age MCV1 doses should be measured, and if this should be standardized globally (given that countries schedule the first dose at 9 months or at 12 months, but currently are counted at 12 months and 24 months respectively);.
3. **Recording and reporting documents and practices:** Currently, monitoring systems often lack the capability to record, report, and monitor vaccinations in age groups beyond infancy and are therefore of limited use to measure the impact of a 2YL platform. Furthermore, tally sheets, summary sheets and monitoring tools may send “messages” that direct behaviour inappropriately. For example, observations from multiple settings suggest that a form disallowing the entry of MCV1 doses above 12 months may direct health workers not to give such a dose even when it is national policy. Likewise, excluding untimely doses from performance measures may provide perverse incentives to not administer those vaccinations, or record them in the wrong age range. Forms should be adapted to assure that they provide adequate resolution to provide programme direction without becoming too burdensome or drive behaviour against stated policy;
4. Definition of a **package of interventions** and the complexity it introduces in terms of programmatic coordination, revisions to policies and standards, and implications at health facility level for health worker workload, patient flow, and data management across health interventions;
5. **Implementation research:** The implementation of a new healthy child visit (as opposed to the introduction of a new vaccine) should be investigated through implementation research projects. Specific research questions should be included to differentiate between supply and demand factors and their relative role in the establishment of a 2YL and its successful implementation;

6. **Development of guidance for the establishment of a 2nd year of life healthy child visit:** Using the case studies, demonstration projects, landscape analyses and literature reviews to develop guidelines for national programmes for the establishment of a 2nd year of life healthy child visit.
7. **Support to implementation of a 2nd year of life healthy child visit:** In four countries, both those that intend introducing a routine measles second dose, and those not intending to introduce a measles second dose, provide technical and implementation support to the establishment of a 2nd year of life healthy child visit.
8. **Development of information, education, and communication (IEC) materials and processes to support their use.** Possibly in the context of the proposed demonstration projects or independent of these projects, IEC materials should be developed and refined to inform parents of the importance of vaccinating in the 2nd year of life and to guide health care workers on how to catch-up children behind in their immunization doses (catch-up schedules, minimum interval between doses, etc.). Opportunities to bring these tools into regular use should also be identified to ensure that they are brought into standard practice.

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