

A note from the Chair:

Dear colleagues,

Welcome to the 9th IPAC bulletin – the first for 2017. I was very pleased to present the work of IPAC at the SAGE meeting in WHO headquarters at the end of April. I mentioned the variety of work we did in virtual mode via TechNet21, email and teleconference in 2016, and highlights from our February meeting, which is also summarised elsewhere in this bulletin. You can find my presentation at the SAGE meeting page at: <http://www.who.int/immunization/sage/meetings/2017/april/en/>

This link also hosts a web-summary of SAGE proceedings, focused on vaccine specific topics, with several conclusions highly relevant to immunization practice. On **polio eradication**, this summary outlines the continuing need in the short-term for Inactivated Polio Vaccine (IPV) to be given as fractional dosing, where this is practical, to ameliorate vaccine supply shortages. The summary also notes the need to prioritise IPV use in routine immunization especially in Tier 1 and 2 countries, and recommen-

dations for the future incorporation of IPV into routine schedules after global OPV withdrawal. Regarding **cholera vaccine**, mass vaccination campaigns were discussed as likely to be the most practical option for service delivery, in addition to the synergies between vaccination and water, sanitation and hygiene interventions. Service delivery options for **ebola vaccines**, in this period when no vaccine is yet licensed, and **diphtheria** were also discussed along with other programmatic implications such as enhanced surveillance.

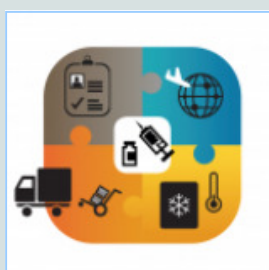
Cross-cutting programmatic topics were also discussed at SAGE, including new evidence on the role of the **private sector** in immunization, strengthening **national immunization advisory groups**, and a session on **national immunization programme managers**. This session included country case studies from Pakistan and Armenia and the work of USA CDC and partners in applying a competency framework to mapping and defining the functions needed at the national level. IPAC members will recall discussing this topic in February,

with several members offering inputs. Proposed global guidance to strengthen immunization programme management is under development, including a guidance document on key functions and competencies, and tools for workforce mapping.

Lastly, I'm pleased to see IPAC's new Terms of Reference that realigns us with other advisory committee processes, commits to annual IPAC meetings, and balances two aspects of our mandate: applying a programmatic lens to innovations, and the need to strengthen existing systems. This also updates IPAC's forward agenda, of which more in future bulletins. This bulletin is reaching you a week or so late, my apologies, due to my rapid transit from SAGE to evaluation work in Lhasa, from where I send you my greetings,

Chris Morgan

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Inside this issue:

From the Working Group frontlines	2
IPAC Meeting and TOR updates	3
CCEOP Workshop: Example of Burkina Faso	4-5
Home-based record revitalization workshop	5
Special Issue of Vaccine on Supply Chains	6
Upcoming meetings and events	6
A final word from the IPAC Secretariat	6

From the Working Group frontlines

CTC Working Group update

by Anna-Lea Kahn (CTC focal point at WHO and part of the CTC-WG Secretariat)

The IPAC Working Group on the Controlled Temperature Chain (CTC-WG) met in person in Geneva on 13 February 2017, in order to make important headway on the critical task of defining a clear and precise strategic direction for the CTC agenda. Central to this task was the stock-taking exercise of examining progress to date and understanding where the main barriers lie to capitalizing on the thermostability of vaccines. Having a full day, face-to-face meeting of experts and stakeholders on this subject, in contrast to the usual 90 minute teleconferences that are scheduled every two months, allowed for a more thorough discussion during which the concepts and reasoning underpinning the CTC approach to vaccine delivery could be further considered and the varied perspectives and insights on priorities with respect to the program of work in support of CTC were shared. This valuable meeting concluded with consensus on a forward path for the CTC work-stream, including the selection of four vaccines which should benefit from focused attention and support in order to ensure the appropriate momentum both in upstream efforts to bolster supply of CTC-compatible vaccines and downstream, country-level efforts to facilitate uptake, measure benefits, and boost demand for such vaccines. As detailed in the meeting report that is available on request from

the CTC-WG Secretariat, the four vaccines identified as priority for the CTC program consist of 1) *Human papillomavirus vaccine (HPV)*, (2) *Oral Cholera Vaccine (OCV)*, (3) *Tetanus Toxoid (TT)-containing vaccine*, and (4) *Hepatitis B birth dose vaccine*.

As this is a newly established working group, meeting in person also provided an opportunity for members to be introduced to one another and develop a more cohesive dynamic hereafter. Having a full day to interact offered the group a unique opportunity to



WHO/EPI—transporting vaccines outside the cold chain

exchange views and achieve a shared vision for CTC, which was indeed among the principal objectives of the meeting, as detailed in the December issue of the *IPAC Quarterly Bulletin*. The meeting outcomes were presented to IPAC for information and approval during its 14-16 February meeting, leading to confirmation of the proposed priorities and interest in the detailed roadmap under development for

each of the four priority vaccines. The latter document was the main subject of discussion of the WG's teleconference in late April and an initial draft is expected to be completed by the end of June 2017, with an aim of seeking further approval from IPAC shortly thereafter.

It should be noted that carrying out the proposed activities under the CTC work plan will be contingent on the WHO-PATH implementation partnership securing required funding. At present, funding limitations are responsible for some disruption in WHO's ability to fully implement the CTC program, as well as provide adequate human resource capacity to this area of work. A direct consequence has been the inability to further renew the consulting contract of Dörte Petit who had been actively involved in implementing Meningitis A vaccination through CTCs, as well as assisting with the facilitation of this working group. The CTC-WG Secretariat would like to take this opportunity to thank Dörte for her varied and invaluable support to CTC over the past two and a half years and we wish her much success in her future projects. In the interim, Carmen Au from WHO has joined the working group's secretariat, she will help ensure its continued smooth running.

The next teleconference of the CTC-WG is scheduled for Wednesday, June 28th at 3pm CET. Anyone interested is welcome to join these calls. Please contact Carmen Au (auc@who.int) for further details.

IPAC 14-16 February 2017 Meeting: a brief summary

The meeting report emerging from IPAC's meeting in Geneva from 14-16 February 2017 is now available online on the website for the WHO Department for Immunization, Vaccines, and Biologicals (IVB) at the following link: http://www.who.int/immunization/programmes_systems/policies_strategies/ipac/en/



WHO / Grevendonk, J.

It provides a summary of each of the six sessions held during the

first two days of the meeting, which focused on key technical issues the IVB Department is currently dealing with. These sessions consisted of:

- I. Immunization supply chain and logistics
- II. Global supply, shortages and implementation solutions
- III. Immunization in the second year of life
- IV. Controlled temperature chain working group – update
- V. Delivery Technology working group – update
- VI. Immunization advisory committees – updates

The third day of the meeting was dedicated to internal operations and governance issues, including discussion of the new Terms of Reference under development for

the Committee.

IPAC provided advice on: (1) WHO's Data Reference Manual and guidance to address the increasing demands on data and monitoring imposed by more complex programmes. (2) WHO's operational guidance on vaccination in the Second Year of Life. (3) The Controlled Temperature Chain (CTC) roadmap for the next wave of vaccines to prioritize for on-label single excursions beyond the cold chain. (4) The Delivery Technology working group mapping of innovations in vaccine delivery and product presentation; including the final target product profile for measles and rubella containing micro-array patches.

IPAC Terms of Reference: update on the ongoing revisions

As highlighted by IPAC Chair, Chris Morgan, during his opening note of the December issue of this Bulletin, the Committee's Secretariat sought the assistance of an external consultant (former IVB staff member, Dr Carsten Mantel) to examine and revise the Committee's terms of reference (TORs) so as to ensure the Committee is supporting WHO as effectively as possible in its work to strengthen and improve the delivery of immunization programmes, as per the goals of the Global Vaccine Action Plan (GVAP). The TOR revision exercise was conducted through a consultation process that allowed for input from a broad range of stakeholders, including most importantly, senior technical staff within the Immunization, Vaccines and Biologicals (IVB) department at WHO. Among

the objectives was also the alignment of IPAC's mandate and operations with those of the other advisory committees serving IVB in parallel- notably, the *Immunization and Vaccines related Implementation Research Advisory Committee (IVIR-AC)* and the *Product Development for Vaccines Advisory Committee (PDVAC)*. Some of the governance practices of IPAC were modified to echo those applied to the Strategic Advisory Group of Experts on Immunization (SAGE), and other WHO Committees.

After further feedback provided by IPAC during its February 2017 meeting and several rounds of revision following input from the IVB leadership, the latest internally approved version of the IPAC TORs were shared with the SAGE in advance of its 25-27 April 2017

meeting, appearing in the background literature- or "yellow book"- provided to SAGE and meeting participants. SAGE members have been offered the opportunity to comment on the new TORs prior to their finalization by the end of May 2017.

Among the important changes featured in the new IPAC TORs are annual meetings during the first quarter of each year, a reduction in Committee members from 15 to 11, and the complete removal of dedicated observer seats on the Committee. While IPAC's general mandate remains unchanged, the new core technical areas benefiting its focus are now defined as:

- Innovations for equitable immunization coverage
- Immunization Service Delivery and Programme Management.

CCEOP Country Support : example of Burkina Faso

by Souleymane Kone

The Cold Chain Equipment Optimization Platform (CCEOP) is a salutary initiative of GAVI Alliance that supports eligible countries to strengthen their supply chains by acquiring new, high-quality, high-performance refrigeration equipment that meets standards. The support from the CCEOP requires the submission of a robust proposal, including several mandatory documents.

Many countries in the region were facing some challenges to prepare for the required documents to support their proposals. Particularly, Burkina Faso is in a critical situation as its 2012 Effective Vaccine Management (EVM) will exceed the five years limit for EVM assessment after June 2017. As part of the subsequent EVM assessment, the country will be required to update its inventory of cold chain equipment. Taking into account the critical situation of the cold chain and the urgent need to replace non-functional and obsolete equipment, Burkina Faso requested technical assistance of the GAVI Alliance partners through AFRO/IST-WA and UNICEF/WCARO.



UNICEF/ Ganivet, S.

In response to the request from the Ministry of Health Burkina, a workshop was organized to sup-

port country readiness to GAVI CCEOP. In order to maximize the opportunity of technical support being mobilized, the workshop was further extended to four other countries that face similar challenges, including Benin, Central African Republic (CAR), Cote d'Ivoire and Senegal.

The mission consisted of a three to five day country workshop to support Burkina Faso, following a week of inter-country workshop for the four other countries.

A. Country workshop to support Burkina Faso:

Specific support provided to Burkina Faso includes the review of the following mandatory documents:

- Cold chain equipment inventory data cleaning;
- Cold chain equipment inventory report review;
- Cold chain essential estimation methods and scenarios;
- Cold chain rehabilitation and expansion plan;
- National Health strategic documents (plan, service delivery mapping, etc.).

The result of the workshop strengthened the capacity of the new logistics team. An update was provided on tools for monitoring vaccine stock availability and utilization in the national immunization programme.

B. Inter-country workshop to support other countries:

For the CCEOP proposal, the participating countries demonstrated different stages of readiness. With the exception of CAR, all



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countries recently updated their cold chain equipment inventory. Data cleaning and validation, as well as drafting reports were all necessary to complete for all countries. During the workshop, the countries were facilitated through the finalization of mandatory documents:

- Development of facility segmentation and rational for cold chain equipment selection;
- Development of 5-year cold chain equipment deployment plan to cover two phases (i) initial phase of urgent needs (ii) extended phase for replacement and expansion needs;
- Review of the maintenance plan for cold chain equipment and ensure that its funding is adequately covered by government funding or a development partner;
- Ensure that the CCEOP country joint-investment is taken into account and, if necessary, check consistency with the Gavi Health System Strengthening funding;
- Check consistency in the various documents to be submitted.

Further, alignment on the CCEOP application guideline and form

CCEOP Country Support (Cont'd from page 4)

was the next focus:

- Review Gavi CCEOP application guidelines;
- Familiarize and answer key questions on the CCEOP application form;

- Check narrative and coherence of the EPI logistics support activities planned.

After the workshop, countries are required to finalize their proposals with all mandatory documents and make necessary en-

dorsement before submitting to Gavi Secretariat for further WHO pre-review. For the May round of WHO pre-review, the deadline for submission is 3rd May 2017. Countries will have another opportunity to submit their final proposal in September 2017.

Home-based record revitalization workshop in Africa: Summary report - by David Brown

In the December 2016 (Volume 2, Issue 4) of the IPAC Bulletin, the importance of well-designed, durable and legibly completed home-based records was highlighted. During 21-24 February 2017, representatives from Cameroon, Ethiopia, Liberia, Nigeria, Rwanda and Uganda gathered in Kampala, Uganda to rethink and improve their country's current home-based record design and functionality as well as the broader system that supports the home-based record to address issues such as stock-outs described in this link <https://goo.gl/aSqEF2>

Participants not only walked away from the workshop with a physical prototype of their improved home-based records (e.g., vaccination card, child health book) but perhaps more importantly an implementation plan to move forward as well as a conviction that addressing the needs of primary users ensures that the home-based record is valued by, and meaningful to, the intended users.

Following a user-centered approach, participants of the

Africa workshop conducted pre-workshop activities that included health facility visits to talk with and observe caregivers and health workers, as well as to collect information to map out how their home-based records are prepared, produced, distributed and used. Participants brought this information, which was shared across country teams, as input to the cross-country workshop to help the teams think beyond usual assumptions and ground their decisions on actual observations rather than perception.

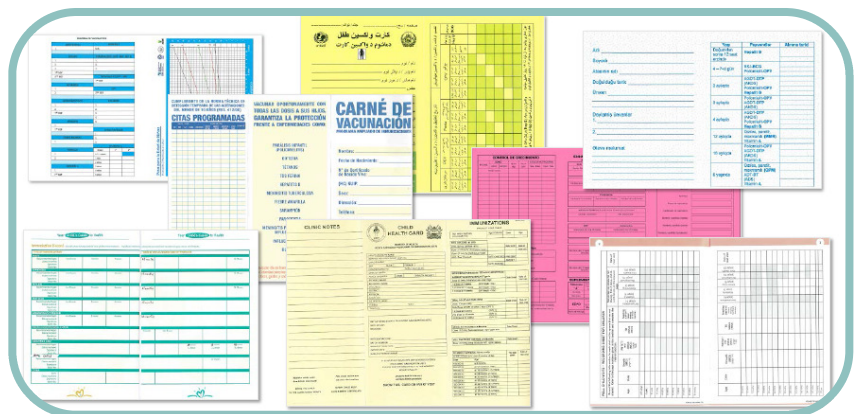
Participants were also provided with the initial framework of a business case for investment in home-based record systems, a document which is available in



Home-based record vaccination section

the following link: <https://goo.gl/rP1mA7>

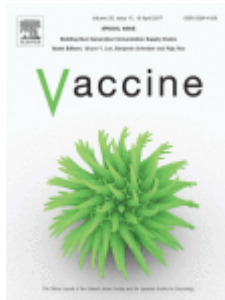
We encourage readers to take a quick read through the final workshop report available here : <http://www.technet-21.org/en/forums/discussions/home-based-record-revitalization-workshop-in-africa-report-summary> on TechNet. Comments are welcome.



WHO / Digital Home-based record collection from Member States

Announcing a special issue of *Vaccine* on supply chains

A special issue on **Immunization Supply Chains** has just been released in *Vaccine*, follow the link below!



Vaccine: Volume 35, Issue 17, Pages 2101–2278 (19 April 2017): **Building Next Generation Immunization Supply Chains**

<http://www.sciencedirect.com/science/journal/0264410X/35/17>

Upcoming Meetings & Events:



- ⇒ 05 May 2017 — Geneva, Switzerland: **WHO maternal influenza epidemiology working group dissemination meeting**
- ⇒ 22–31 May 2017 — Geneva, Switzerland: **Seventieth World Health Assembly**
- ⇒ 29–31 May 2017 — Geneva, Switzerland: **SAGE WG on Typhoid Vaccines**
- ⇒ 12–15 June 2017 — Geneva, Switzerland: **PCV Technical Expert Consultation and SAGE WG on PCVs**
- ⇒ 20–22 June 2017 — Geneva, Switzerland: **SAGE WG on Measles and Rubella**
- ⇒ 26–29 June 2017 — Geneva, Switzerland: **15th Global Measles and Rubella Laboratory Network (GMRLN) meeting**

A final word from the IPAC Secretariat

This Spring issue of the IPAC Bulletin was prepared thanks to the skilled efforts of the latest addition to the Supply, Technologies, and Financing (STF) team within the Expanded Programme on Immunization (EPI), Ms Carmen Au. Though Carmen has joined EPI as a consultant to mainly assist the preparations for the 2017 TechNet Conference taking place next October in Cascais, Portugal, she will also be offering support to the IPAC Secretariat. As you will have noted from the CTC Working Group update, she has already been active with that group too and so will probably continue to become a familiar name to you. Carmen has a background in Biochemistry and has a proven track record as an excellent project manager.

The next main opportunity for discussion and dialogue for our Committee will be during a web-based teleconference we are hoping to schedule in early July. Members should stand by for a doodle poll which will allow us to identify the most appropriate timing.

In the meantime, IPAC members are invited to keep an eye on the IPAC online discussion group for any additional relevant announcements and discussions as a number of items are in the pipeline for submission to IPAC in the coming months, such as the draft CTC Priority Vaccine Roadmap.

The IPAC Secretariat Team