REPORT OF THE WHO GLOBAL PARTNERS’ MEETING ON
HEPATITIS ELIMINATION

CHÂTEAU DE PENTHES, PRENY-CHAMBÉSY
(GENEVA, SWITZERLAND) 27–28 FEBRUARY 2019
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EXECUTIVE SUMMARY

The Global Hepatitis Programme convened a partners’ meeting to take stock of the progress towards elimination of hepatitis and to identify new opportunities for collaboration. While global goods such as guidelines have been made available to facilitate implementation, testing and treatment have not reached a high level of coverage at country level. On the first day, partners reviewed the opportunity that universal health coverage (UHC) provides for elimination, explored options for procurement of treatment and diagnostic commodities at better prices, examined the implications of using domestic funding for elimination and outlined the concept of a global collaborative for strategic information. On the second day, countries expressed their needs, while partners presented what they can offer. Group discussions identified enablers for elimination. The meeting closed with pledges of closer collaboration in order to accelerate country, regional and global responses towards elimination.
## ACRONYMS AND ABBREVIATIONS

<table>
<thead>
<tr>
<th>Acronym</th>
<th>Description</th>
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<tbody>
<tr>
<td>AASLD</td>
<td>American Association for the Study of Liver Diseases</td>
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<tr>
<td>ANRS</td>
<td>Agence Nationale de Recherches sur le Sida et les Hépatites Virales</td>
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<td>APASL</td>
<td>Asian Pacific Association for the Study of the Liver</td>
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<td>CDA Foundation</td>
<td>Center for Disease Analysis</td>
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<td>CGHE</td>
<td>Coalition for Global Hepatitis Elimination</td>
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<td>CHAI</td>
<td>Clinton Health Access Initiative</td>
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<tr>
<td>DAA</td>
<td>direct-acting antiviral (drug)</td>
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<tr>
<td>DNDi</td>
<td>Drugs for Neglected Diseases initiative</td>
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<tr>
<td>EASL</td>
<td>European Association for the Study of the Liver</td>
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<tr>
<td>ECDC</td>
<td>European Centre for Disease Prevention and Control</td>
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<td>ECHO</td>
<td>Extension for Community Healthcare Outcomes</td>
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<tr>
<td>FIND</td>
<td>Foundation for Innovative New Diagnostics</td>
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<tr>
<td>GBD</td>
<td>Global Burden of Disease (study)</td>
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<td>GHP</td>
<td>(WHO) Global Hepatitis Programme</td>
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<td>GHSS</td>
<td>Global Health Sector Strategy</td>
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<td>Global Fund</td>
<td>Global Fund to Fight AIDS, Tuberculosis and Malaria</td>
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<td>GRSH</td>
<td>Global Reporting System for Hepatitis</td>
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<tr>
<td>HBV</td>
<td>hepatitis B virus</td>
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<td>HCV</td>
<td>hepatitis C virus</td>
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<td>HDV</td>
<td>hepatitis D virus</td>
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<td>HIC</td>
<td>high-income country</td>
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<td>IARC</td>
<td>International Agency for Research on Cancer</td>
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<td>IAS</td>
<td>International AIDS Society</td>
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<td>ICE</td>
<td>International Coalition to Eliminate HBV</td>
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<td>IHME</td>
<td>Institute for Health Metrics and Evaluation</td>
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<td>INPUD</td>
<td>International Network of People who Use Drugs</td>
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<td>MoH</td>
<td>Ministry of Health</td>
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<td>MSF</td>
<td>Médecins Sans Frontières</td>
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<tr>
<td>NAT</td>
<td>nucleic acid test/testing</td>
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<td>PIH</td>
<td>Partners In Health</td>
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<tr>
<td>PMTCT</td>
<td>prevention of mother-to-child transmission</td>
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<tr>
<td>POC</td>
<td>point-of-care (test)</td>
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<tr>
<td>PWID</td>
<td>people who inject drugs</td>
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<tr>
<td>TB</td>
<td>tuberculosis</td>
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<tr>
<td>UHC</td>
<td>universal health coverage</td>
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<tr>
<td>UMIC</td>
<td>upper-middle-income country</td>
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<tr>
<td>UNDP</td>
<td>United Nations Development Programme</td>
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<td>US CDC</td>
<td>United States Centers for Disease Control and Prevention</td>
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<td>WHA</td>
<td>World Hepatitis Alliance</td>
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1. DAY ONE: PARTNERSHIPS FOR GLOBAL GOODS

1.1. The status of the elimination initiative in 2019

WHO’s Global Hepatitis Programme (GHP) and a representative of the authors of the Lancet Commission on Hepatitis Elimination presented an overview of the progress since the World Health Assembly resolution of 2016. While WHO and its partners have provided many global goods to facilitate work at the country level (e.g. guidelines), progress towards elimination remains limited. Progress has been made in terms of prevention, although timely birth dose coverage with the hepatitis B vaccine in Africa and the global coverage of harm reduction interventions remain low. In contrast, progress in testing and treatment has been limited and has not reached high coverage levels apart from a number of high-burden champion countries that launched ambitious programmes.

1.2. Universal health coverage (UHC): service delivery

Hepatitis programme managers seeking to achieve elimination through UHC must think of what they want to achieve as if they were health system planners. This means that the UHC menu of interventions should include public health interventions as long as they are effective, affordable, cost effective and possible to integrate in existing service delivery systems. For hepatitis, UHC considers (a) treatment of persons diagnosed with hepatitis B virus (HBV) or hepatitis C virus (HCV) infection, (b) focused testing for HBV and HCV, (c) population testing for HBV and HCV, and (d) prevention of mother-to-child transmission (PMTCT) of HBV. Hepatitis can be a positive case study for UHC because it is a high-impact intervention. The WHO hepatitis price tag exercise suggests that elimination would add an additional $59 billion between 2016 and 2030 (1.5%) to the cost of the total UHC package. Even though the upfront investment is substantial, the impact is high as this investment would reduce mortality by 5% and result in a 9.6% increase in healthy life-years gained. Community representatives, including from specific vulnerable populations, need to be engaged in national working groups to ensure that these interventions are included and adapted to the most vulnerable populations. Elimination will require champions in ministries of health (MoHs), health services and communities.
1.3. Universal health coverage (UHC): procuring commodities

The price of treatment is rapidly decreasing (more rapidly than for HIV medicines 15 years ago), and the concept of all-inclusive pricing is emerging (i.e. price of treatment that includes the price of diagnostics). In the meantime, price reduction strategies need to address nucleic acid testing (NAT) for HBV and HCV, particularly HBV DNA, which is required for annual monitoring of persons on treatment. Simplified testing algorithms that reduce the number of tests used for diagnosis and linkages with HIV or other services are additional ways of reducing costs.

The procurement capacity of the United Nations Development Programme (UNDP) is strengthened by its role as a principal recipient of the Global Fund to Fight AIDS, Tuberculosis and Malaria (Global Fund). This provides opportunities for UNDP to assist countries by procuring and supplying drugs and diagnostics. UNDP has negotiated the cost of a course of curative HCV treatment regimen for as little as US$ 89. In addition, the Drugs for Neglected Diseases initiative (DNDi) is studying a new promising direct-acting antiviral (DAA) regimen (sofosbuvir/ralidasvir) targeting middle-income countries.

It is important to build on the capacity/lessons learnt from multi-disease platforms used for tuberculosis (TB) and HIV and ensure that viral load testing for viral hepatitis makes use of these platforms. In most countries, machines capable of multi-disease testing are underutilized, creating opportunities for HBV and HCV viral load testing without the need for capital investment in additional instruments initially. An essential list of diagnostics would help procure commodities free of duty.

1.4. Financing hepatitis elimination

General considerations in funding a new initiative such as hepatitis elimination. An integrated approach to funding is required, but with the capacity to provide international support for implementation. Economic growth in a country should lead to increased domestic spending on health. As an illustration, most of the global increase in spending on TB in recent years has been funded through domestic sources. Revenue collection needs to be strengthened to increase the fiscal space and, of the national budget, more needs to be spent on health. When health-care expenditure increases, MoHs need technical support to take on new initiatives such as hepatitis elimination. When that happens, UHC is the way to funnel resources towards hepatitis since fragmented financing sources are counterproductive.

The importance of domestic financing. The funding gap for hepatitis will not be addressed by external funding sources. In the world, one third of US$ 1 trillion a year is spent in out-of-pocket payments on health. If this is captured through risk pooling pre-payment strategies, large amounts of funding could be mobilized in many countries. In India, concerted central support to the HIV response led to a successful programme in the public sector. In contrast, for TB, poor public-sector performance drove patients to seek care in the private sector, which led to high rates of multidrug resistance.
New funders? What could be the role of the Global Fund in the hepatitis response? Options are limited as the current mandate for hepatitis is limited to HIV/viral hepatitis coinfection. However, existing Global Fund support in harm reduction and HIV services can facilitate access to HCV testing and treatment in these settings. Similarly, existing investments in point-of-care (POC) viral load assays for TB and HIV can be used for HBV and HCV viral load testing. There are currently few funders in the hepatitis landscape. A strong economic case would help, along with strong action from civil society. The case can be made that the cost of inaction is higher than the cost of action. The World Bank loaned approximately $400 million to Egypt for its hepatitis elimination initiative. This is a model that can be replicated in other high-burden countries if there is a request from the government. However, in most countries, it would make more sense to fund elimination in the context of UHC, although some countries may benefit from a combined approach. The success of the hepatitis programme in India is a case study of integration within UHC that led to domestic financing. The national programme managed to gain support on the basis of an economic analyses done in-country, which had a major effect on advocacy with local opinion leaders. Optimized procurement with national generic medicine production and integrated implementation led to low prices, such as US$ 39 per cure to treat 1 million HCV-infected patients.

1.5. Strategic information: towards a global data collaborative

Strategic information. Strategic information includes data collected at all service delivery and administrative levels to inform policy and programme decisions. The global effort to eliminate hepatitis requires information at subnational, national and global levels. WHO has a key convening role in the development and implementation of strategic information and is at the hub of various stakeholders in the field of hepatitis. However, WHO cannot implement all the required functions alone. Therefore, a global data collaborative would help to set up a system that addresses all strategic information needs.

From empirical data collection to global estimates. At country level, data are collected, managed, and used for decision-making, leading to programmatic activities. New data are generated to monitor and evaluate these programmes, and the cycle continues. WHO’s country presence and mandate to work with Member States facilitates work at the country level through (a) guidance, (b) convening with country offices, (c) technical assistance and (d) collection of data to monitor progress. Some of the data collected are used as input parameters for models to generate output estimates. These outputs can be compared/validated using other sources of empirical data. In addition, models point to determinants of uncertainty, which call for better data collection to inform those critical points. The Reference Group on Hepatitis Strategic Information and Modelling advises WHO on the role of modelling.

Towards a data collaborative. A master model such as SPECTRUM for HIV might be difficult to replicate for hepatitis in view of the resource implications. But much could be achieved through better collaboration. WHO’s involvement is key (a) to agree on the input indicators, (b) to facilitate validation of the output with empirically collected data, (c) to guide the use of disease-specific assumptions (e.g. progression rate from infection to sequelae) and (d) to convene a process by which the various models can be documented, shared and understood in a transparent manner by all stakeholders. Current partners have a lot to offer:
• The International Institute for Health Metrics and Evaluation (IHME) has coordinated the Global Burden of Disease (GBD) study that generates consistent global estimates of incidence, prevalence and mortality.

• The Center for Disease Analysis (CDA Foundation) has been active in collecting information in many countries to build bottom–up country models that add up to regional and national epidemiological estimates of incidence and prevalence for HBV and HCV infection.

• The International Agency for Research on Cancer (IARC) has systematically reviewed empirically collected data on the fraction of hepatocellular carcinoma attributable to HBV and HCV, which can be used to generate/validate the current mortality due to past infection.

• The Coalition for Global Hepatitis Elimination proposes to offer technical assistance to countries through assessment, planning, implementation and evaluation, which includes a component on data collection, analysis and use.

• Universities and institutes have published in the literature on models for HBV and HCV, focusing on incidence, prevalence or economic analyses.

• Professional associations of hepatologists can lead the process of collecting data on the fraction of cirrhosis and hepatocellular carcinoma attributable to HBV and HCV.
2. DAY TWO: IMPLEMENTATION AT THE COUNTRY LEVEL

2.1. Selected examples of country progress

China. China is focused on improving the affordability of chronic HBV treatment and ensuring access to chemotherapy and other treatment for hepatocellular carcinoma and cirrhosis. Through infant vaccination, progress has been achieved in reducing HBV infection in populations under 20 years of age. The prevalence of HBV is now <0.5% in children under 5 years. An estimated 20% of persons (4 million) who need treatment for HBV infection have been treated; however, loss to follow up is high and the long-term adherence rate to treatment is low. There is minimal programming for HCV except in pilot provinces.

Pakistan. Approximately 1.1 million persons with HCV infection are to be treated by the end of 2019 under the current national plan. Punjab and Sindh provinces account for 96% of the burden and will be the focus of attention. To date, 91 500 persons have tested HCV antibody-positive in 214 dedicated clinics in Punjab, 70 000 received NAT confirmation and 24 700 have been treated. Political will has been a significant contributor to progress. Interventions that advance infection control, harm reduction and advocacy for most affected groups are not yet widespread. Testing and treatment are yet to be fully decentralized.

Russian Federation. Russia has a robust strategic information system for hepatitis. This allows for an accurate description of the burden of disease in all districts. For HCV, there are an estimated 5 million HCV-antibody-positive persons, and 3.5 million in need of treatment. About 3 million persons are infected with HBV. Testing is widely available for health-care workers, certain birth cohorts and pregnant women. Insurance is also available for patients with complications of liver disease due to hepatitis. Lack of public awareness and stigma persist. In addition, most affected groups (e.g. people who inject drugs [PWID]) and supportive civil society organizations are often marginalized. The partners’ group can be leveraged to develop a comprehensive awareness and communication strategy for Russia. There is little access to generics and DAAs are still prohibitively expensive.

Uganda. Uganda has taken the lead in providing services for HBV vaccination, testing and treatment. High-level political commitment is demonstrated through the presidential and parliamentary mobilization of internal funding – $3 million annually. As of 2018, over 2.3 million adults have been tested (representing nearly 50% of the target population); about 4000 people are on tenofovir (TDF) treatment. The WHO criteria for care are duly followed. There is minimal programming for HCV interventions, which do not cover certain populations (e.g. internally displaced persons). For PMTCT of HBV, no birth dose vaccine is available in the public sector. Support from WHO to develop and finalize policies would be helpful.
2.2. Partners’ panel

Unitaid. Unitaid’s investments in hepatitis recognize in particular the importance of HIV/HCV coinfection. Unitaid’s work does not support service delivery at scale, but accelerates access to critical health products, with a catalytic effect, triggering broader change to impact the hepatitis disease burden. Unitaid projects have contributed to a reduction in the price of HCV medicines in many low- and middle-income countries. For example, the Unitaid-funded Medicines Patent Pool has negotiated a voluntary license to enable generic companies to supply affordable daclatasvir. Other Unitaid projects support advocacy and evidence for simpler models of care: Coalition Plus works to increase hepatitis awareness, and Médecins Sans Frontières (MSF) demonstrated that it is feasible to cure people with HCV in low-resource settings through a simplified algorithm. Unitaid funds the Foundation for Innovative New Diagnostics (FIND) to develop simple, easy-to-use tests to confirm HCV infection, and supports WHO to prequalify medicines and diagnostics. Unitaid welcomes new partnerships and works through calls for proposals – the most recent being for long-acting formulations.

1 Partner: (African Region) Burkina Faso, Tanzania, Namibia, Liberia, Sierra Leone, Niger, Chad, Mozambique, Kenya, Senegal, (Region of the Americas) Colombia, Uruguay, Argentina, Canada, (European Region) Kazakhstan, (Eastern Mediterranean Region) Egypt, Morocco

2 Partners: (African Region) Nigeria, Cameroon, Côte d’Ivoire, (Region of the Americas) Brazil, (European Region) France, Portugal, (Eastern Mediterranean Region) Iran, (Western Pacific Region) China

> 2 Partners: (Region of the Americas) USA, (Eastern Mediterranean Region) Pakistan, (South-East Asia Region) Thailand, (Western Pacific Region) Australia, Cambodia

> 5 Partners: (European Region) Georgia, Ukraine (South-East Asia Region) India, Indonesia, Myanmar, Malaysia, Viet Nam
**ANRS.** Agence Nationale de Recherches sur le Sida et les Hépatites Virales (ANRS) maximizes the limited but stable funding from the French government to support implementation science research in eight focus countries (Brazil, Burkina Faso, Cambodia, Cameroon, Cote D’Ivoire, Egypt, Senegal and Viet Nam). ANRS research covers modelling and impact studies, evaluation of the long-term impact of DAA treatment, microelimination (Burkina Faso), and new HBV and hepatitis D virus (HDV) treatments (i.e. the International Coalition to Eliminate HBV [ICE]). ANRS has stopped research effort on the HCV vaccine. The organization is open to research partnerships with other academic institutions and nongovernmental organizations (NGOs), joint publications on normative public health and basic sciences for hepatitis, and can act as a sponsor for studies.

**MSF.** MSF worked through Unitaid funding on HCV prevalence surveys in HIV cohorts (Kibera in Kenya, Mbarara in Uganda, Maputo in Mozambique) and on access to HCV screening, diagnosis and DAA treatment in patients with HIV in India, Myanmar and South Africa. Beside these Unitaid projects, MSF provides access to screening, diagnosis and DAA treatment in at-risk populations in Iran (south Teheran and Mashad), Myanmar, Pakistan and Ukraine, in patients with MDR-TB in Armenia and access to simplified and decentralized HCV care in primary health centres in rural areas of Cambodia. MSF is working with the Access Campaign to decrease the price of DAAs. MSF is looking for an alternative to existing viral load machines to have a one-step diagnosis closer to the patient. For HBV, MSF implements birth-dose vaccination in maternity units in countries where MSF works in collaboration with the MoH.

**United States Centers for Disease Control and Prevention (US CDC).** The Division of Viral Hepatitis (located in the National Center for HIV, Hepatitis, STD and TB) has a mandate to support US domestic programming for hepatitis (annual budget $39 million). However, the Division has supported several WHO Member States (e.g. Georgia, India, Pakistan, Uganda, Ukraine) and the WHO Western Pacific Region in activities such as data collection and analysis, development of serosurveys, strengthening of country laboratory capacity and outbreak response. In addition, US CDC has provided long-term (20+ years) financial and human resource support to the WHO/GHP and to the WHO immunization department. CDC has country offices in 44 WHO Member States, managed by the Center for Global Health; however, most do not focus on hepatitis.

**The Clinton Health Access Initiative (CHAI).** CHAI is present in 36 countries but works principally in seven (Cambodia, Indonesia, India, Myanmar, Nigeria, Rwanda and Viet Nam) to support hepatitis elimination. This also lends itself to country support for budgeting from the programming, human resources and commodities perspectives and day-to-day concerns of the MoH. CHAI is increasingly focusing on case-finding. In certain instances, CHAI has responded to the requests of countries outside these seven for activities such as the development of national plans and guidelines.

**World Hepatitis Alliance (WHA).** In addition to its role as a platform for global- and country-level advocacy, WHA acts as a global and regional convener. This year, it will support regional summits in Africa and Asia.
2.3. Group work

Group work along six themes led to the identification of gaps and areas for priority action if elimination is to be achieved.

A. **Service delivery.** Services are too centralized. The use of rapid POC tests will be key to elimination. Partners can help in task-shifting. They can pilot models and communicate what works well.

B. **Research.** POC RNA and HCV core antigen tests have not been fully tested yet in field programmes. There is a need to reduce the time gap between testing and treatment. Multidisease diagnostic platforms will help. Self-/home-based testing will help to find the missing millions. There is a need to measure the reduction in incidence secondary to treatment as prevention, explore the use of the HBV birth dose out of the cold chain, and evaluate the long-term impact of microelimination.

C. **Access.** Registration of viral hepatitis medicines remains an issue. Upper-middle-income countries (UMICs) and high-income countries (HICs) do not have access to generics. Access to RDTs is not useful in the absence of quality assurance. There would be benefit in having dynamic website with reference pricing of medicines.

D. **Workforce.** There is a need to quantify the workforce that can implement testing (the “testers”) and the workforce that can implement treatment (the “treaters”). Curriculum and tools are missing, and a minimum package should be defined. For example, this may include understanding cirrhosis, hepatocellular carcinoma, when to refer and care for specific populations. The mechanism of training that can be used is unclear. Should it be conducted face to face or online? As an Extension for Community Healthcare Outcomes (ECHO)-type model? Policy obstacles need to be addressed. There is a need to decentralize care and encourage task-shifting.

E. **Harm reduction.** Policy barriers to harm reduction must be better understood and overcome. Partners could be more vocal and WHO could be more proactive. Change agents must be identified. All partners can work on overcoming barriers. Client-focused services are key for implementation.
F. **Advocacy.** Advocacy efforts need to place communities at the centre. The three foundations are (1) awareness, with testing as an entry point and mobilization of those cured, (2) funding and (3) an enabling environment. Key activities include reinforcing capacities in the community, empowering communities and conducting community-led research and monitoring.

**FIG. 3** Recent examples of collaboration between WHO headquarters and partner organizations

- **Project**
  - Good practices and lessons learnt in viral hepatitis response global project

- **Research**
  - Operational research on decentralized viral load testing at harm reduction sites and primary care

- **Country support**
  - Joint country missions/site visits (Mongolia, Egypt, Myanmar, Viet Nam, Cameroon)

- **Strategic information**
  - Generating global estimates for WHO Global Hepatitis Report
  - Generating mortality estimates

- **Advocacy and communications**
  - World Hepatitis Summit joint conference sessions

- **Joint activities**
  - Joint activities in Georgia (decentralized testing and treatment), Pakistan (strategic information), treatment cohort (Myanmar)
3. CONCLUSIONS OF THE MEETING

3.1. Commitments from WHO

1. Include hepatitis in UHC and reach out to countries that implement UHC.
2. Continue monitoring the progress of the Global Health Sector Strategy (GHSS) through the Global Reporting System for Hepatitis (GRSH).
3. Keep the partners’ group alive, without a formal structure, but with regular (at least quarterly) communication.
4. Set up regional platforms to coordinate country support to high-burden countries.
5. Move forward towards a data collaborative.
6. Reach out to the Global Fund for reprogramming opportunities.
7. Finalize the partners’ landscape for the coalition to promote as a live platform.
8. Convert the lessons learnt into a policy brief and peer-reviewed journal article.
10. Accelerate development of the HBV PMTCT guidelines, including the use of antiviral medicines in pregnancy.

3.2. Commitments from partners

- CDC will continue its country-level work and its support to WHO/GHP.
- The Coalition for Global Hepatitis Elimination is reaching out to coordinate information-sharing by all country programmes, preferably on a quarterly basis, as requested by WHO. It is also assisting countries in strategic information analysis for local planning and participation in the WHO GRSH.
- CDA Foundation will work towards its contribution to the Global Data Collaborative.
- EndHep2030 is launching its first call for proposals.
- Unitaid will accelerate access to critical health products, investing in projects to impact the burden of hepatitis. Unitaid will continue to invest, within its mandate, with its most recent call for proposals (long-acting formulations) potentially relevant for hepatitis.
- Coalition + hopes for more connections and will help civil society to “shout louder”.
- The Asian Liver Centre will include more countries in the HBV calculator and provide technical expertise.
- The International AIDS Society (IAS) appreciates the entry point of HIV coinfection and will try to broaden its scope.
- The European Association for the Study of the Liver (EASL) will contribute to education, training, convening the “treaters”, and help with surveillance of sequelae.
- The American Association for the Study of Liver Diseases (AASLD) will contribute to providing high-quality evidence and to the education, training and mentoring of treaters, and will assist in the development of long-term follow-up registries.
- CHAI will coordinate elimination in the six countries where it works in the area of hepatitis and add hepatitis to the priorities of other countries that are not yet involved.
• ANRS will conduct more impact studies and join the Data Collaborative, provide funding for optimal strategies for HBV PMTCT, and focus on the HBV cure initiative.
• The European Centre for Disease Prevention and Control (ECDC) will communicate the cascade data of European Union (EU) Member States to the GRSH.
• Kanazawa University will continue its support for training in Asia.
• UNDP will further develop pooled procurement of hepatitis medicines and diagnostics.
• The Rotarian Action Group for Hepatitis Eradication will lead efforts to increase testing and linkage to hepatitis care around World Hepatitis Day.
• FIND will reach out to partners and continue its vital work on diagnostic innovations.
• The International Network of People who Use Drugs (INPUD) will make sure that civil society is vocal.
• WHA will continue its support to civil society and focus on its 3-year “Finding the missing millions” campaign.
• TreatAsia will continue its work on access, including in UMICs without access to generic medicines.
• MSF will continue to evaluate models of care and especially task-shifting to nurses for DAA initiation. It will advocate for simpler HCV diagnosis closer to the patient and for the Global Fund to support HCV diagnosis in LMICs.
• DND/i will increase its dialogue with countries.
• Partners In Health (PIH) will expand its hepatitis work beyond Rwanda to Liberia, Sierra Leone, and Malawi, with a particular focus on HBV care and treatment.
• IARC will work on evidence of the link with viral hepatitis and cancer to advocate for elimination.
• The Burnet Institute will continue to develop models around the optimization of diagnosis and treatment of hepatitis C and hepatitis B to inform countries about their elimination responses. Burnet’s public health registrars could provide support to the WHO viral hepatitis team on specific projects and help organize meetings.
• The Asian Pacific Association for the Study of the Liver (APASL) will continue to hold the public health forums that it regularly holds at every annual meeting of the society, with an emphasis on task-shifting, which is the need of the region.

Dr Ren Minghui, Assistant Director-General for Communicable Diseases, closed the meeting. He called for speeding up country action and for more partners and “champions” to move towards the goal of hepatitis elimination by 2030.
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AGENDA

TABLE 1  Meeting chairs: Margaret Hellard and Gottfried Hirnschall – Day 1

DAY 1: Partnerships for global goods of the Global Health Sector Strategy (GHSS) on viral hepatitis

08:00–8:30  Registration

Session 1: Global context and objectives

- Welcome: Ren Minghui, WHO
- Hepatitis flagship initiative in the context of WHO transformation: Soumya Swaminathan, WHO
- Mid-way progress update in implementation of the GHSS: Marc Bulterys, WHO
- Introductions: partners introduce themselves and the focus of their work in hepatitis (3 min per partner)

08:30–10:30

10:30–11:00  Break – Group picture

Session 2: Hepatitis elimination in the era of universal health coverage (UHC)  
Moderators: Michael Ninburg and Amna Khan

Scene-setter: UHC agenda and practical implications for hepatitis elimination: Karin Stenberg, WHO

Panel discussion: Obstacles and opportunities for increased efficiencies and integration

- David Subeliani, INPUD: People who inject drugs
- Suna Balkan, MSF: Simplifications
- Saeed Hamid, APASL: Task-sharing
- Maria Donatelli, Coalition Plus: Advocacy

11:00–12:30

Scene-setter: Pricing and procurement: David Ripin, CHAI

Panel discussion: Procuring commodities at the best possible price

- Giten Khwairakpam, TREAT Asia: Medicines
- Cécile Macé, UNDP: Procurement
- Zachary Katz, FIND: Diagnostics
- François Bompart, DNDi: New medicines

12:30–13:30  Lunch

Session 3: Financing for sustainability
Moderators: Craig McClure and Maria Donatelli

Scene-setter: Increasing efficiencies and raising revenue: David Wilson, The World Bank

Panel discussion: Financing elimination in the SDG era

13:30–15:00

- Mehlika Toy, Stanford School of Medicine, Asian Liver Center: Economics
- Janet Ginnard, Unitaid: Innovations
- Sandhya Kabra, Ministry of Health, India: Domestic financing (connected remotely)
- Margaret Hellard, Burnet Institute: The WISH investment case
- Wangsheng Li, ZeShan Foundation: Funders

15:00–15:30  Break
### Session 4: Strategic information

**Moderators:** Maya Malarski* and Jonathan Mermin

- **Scene-setter:** Towards a global collaboration on strategic information: Yvan Hutin, WHO
- **Panel discussion:** Partners’ contributions towards a global hepatitis data collaborative

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<th>Time</th>
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| 15:30–17:00 | - Homie Razavi, CDA Foundation: Modelling  
                  - Catherine de Martel, IARC: Impact assessment  
                  - Theo Vos, IHME: Global estimates (connected remotely)       |
|          | - Andrew Amato, ECDC: Sequelae surveillance  
                  - Amit Prasad, WHO: Impact framework  
                  - Tom Karlsen, EASL: Sequelae surveillance                   |

### Session 5: Wrap up

**Moderator:** Marc Bulterys

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<td>17:00–17:30</td>
<td>Collective way forward for global goods: what has been delivered and what is still needed? How to strengthen coordination at global level?</td>
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<td>17:30–19:00</td>
<td>Reception – Room Pavilion Albert Gallatin</td>
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### Table 2

**Meeting chairs:** Margaret Hellard and Gottfried Hirnschall – Day 2

**DAY 2: Partnerships for country impact**

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<td>08:30–09:00</td>
<td><strong>Summary of day 1, outline for day 2</strong> From advocacy to action: addressing implementation gaps: Philippa Easterbrook, WHO. Presentation of the working document on lessons learnt/best practices and partnership landscape</td>
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**Session 6:** Country panel: progress, challenges and needs in the quest for elimination

**Examples from four countries: China, Pakistan, Russia, Uganda**

**Moderators:** Funmi Lesi and Charles Gore

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<td>09:00–10:30</td>
<td>Representatives from China (Zhang Guomin, Chinese Center for Disease Control and Wang Yu, Tsinghua University), Pakistan (Amna Khan, Directorate General Health Services), Russia (Vladimir Chulanov) and Uganda (Rachel Beyagira) present the status of national scale-up plans towards elimination, outlining needs in terms of partnerships, technical assistance and support for policy dialogue. <strong>Summary:</strong> Identification of key themes and recurrent issues</td>
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<td>10:30–11:00</td>
<td><strong>Break</strong></td>
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**Session 7:** Partners’ panel: Opportunities and solutions offered by major partners

**Moderators:** Cécile Macé and Massimo Ghidinelli

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<td>11:00–12:30</td>
<td>Partners share their roles, specific actions and contributions to support national programmes, particularly in response to the needs expressed by countries in the preceding session. <strong>Statements from:</strong> Janet Ginnard (Unitaid); François Dabis (ANRS); Carolyn Wester (CDC); David Ripin (CHAI); Philippe de Botton (Médecins du Monde); Suna Balkan (MSF) and Michael Ninburg (WHA) <strong>Summary:</strong> Focus of implementation partners, critical gaps and opportunities for partnerships for country impact</td>
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* unable to attend
### Session 8: Group discussion on key enablers for elimination

**Moderators:** François Dabis and Mukta Sharma

Discussion groups on key themes (45 min): (1) community engagement and advocacy; (2) integration of services; (3) harm reduction; (4) public health research; (5) medicines and diagnostics access; (6) workforce development and capacity-building (including professional associations)

Panel (45 min): A panel of six rapporteurs will report on their findings to identify common solutions for opportunities for action.

### Session 9: Wrap up on partnerships for country impact

Collective way forward for coordinated action for country impact

- Being most responsive to real needs
- Strengthening coordination in countries and regions

### Session 10: Conclusions and the way forward

**Chair:** Ren Minghui and Lelio Marmora

Practical action points