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2030 AGENDA FOR SUSTAINABLE DEVELOPMENT

# Deliberate Next Steps toward a New Globalism for Universal Health Coverage (UHC)

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Submitted on March 15, 2019

Revised on March 31, 2019

## Abstract

Much effort has been expended on promoting universal health coverage (UHC). We focus on four areas that, on current trajectories, are unlikely to achieve sufficient progress to meet Sustainable Development Goal (SDG) 3.8. These are also issues for which G20 can provide significant traction. The principle of “leaving no one behind” is central to UHC. Migrants and migrant health workers are too often overlooked, as is genuine support for primary health care at the community level. Prioritizing reliable domestic financing requires enlightened leadership and deliberate dialogue between finance and health ministries. Harnessing, and regulating, innovation for a future where multi-omics, immuno-biology, artificial intelligence, social communications and health care converge against threats from climate change, humanitarian crises and emerging and antimicrobial resistant infections requires judicious planning. Finally, mutual learning and harmonized aid amongst countries remain unfulfilled priorities of good governance.

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<sup>1</sup> The member list of the working group is in the Acknowledgments.



## Challenge

### 1. Leaving no one behind

Substantial inequities in access to care continue to persist within as well as between countries. Vulnerable populations face a higher burden of morbidity and premature mortality due to easily preventable and treatable causes. Their limited access to affordable and quality essential services, as well as underinvestment in primary health care systems, is a major impediment to achieving UHC. Such inequities also threaten human security [1].

Access to health care is an important concern for all vulnerable groups, such as the poor, older people, women, children, minorities and migrants. Some of these have been the focus of ongoing national and global efforts for redress. However, global migration, especially related to migrant workers poses unique and so far neglected challenges to UHC progress. There is a significant increase in the global movement of people due to economic, political, conflict, and environmental reasons. Protecting the health of migrants is challenging for both high and low income countries. Information systems on migrants are weak. Migrant workers often work in difficult and dangerous environments and have limited entitlement to health care in the host country or when they return home. Further, the migration of health care workers often depletes the ability of resource poor countries to provide health services to all citizens.

### 2. Prioritizing reliable domestic financing and cost-effective best buys

Social, economic and institutional transformations require innovative financing to sustain the provision of adequate health care domestically in all countries. Additionally, health development assistance should be re-designed to support countries to transition toward reliable self-sufficiency. Implementing either or both remains a vexed challenge.

### 3. Harnessing innovation and access to technology and medicine judiciously

Technological innovations in health care (pharmaceuticals, diagnostics, devices etc.) and in information and communication technologies have the potential to substantially accelerate progress towards UHC. Markets, on their own, are unlikely to produce innovations that increase access at scale



and on a sustainable basis. There is also a risk of undesirable outcomes, such as the emergence of antimicrobial resistance, rapid increases in health care costs and the exclusion of some people from access to medical care.

#### **4. Supporting common monitoring mechanisms, mutual learning platforms, and coordinated international cooperation for UHC**

Common methods that would make cross-country data on UHC monitoring directly comparable are unevenly deployed, mostly due to variable technical competence and non-standardized approaches in data collection.

While countries take different paths towards UHC, there are common lessons. However, they have not been effectively shared.

Individual G20 members already provide technical and financial support to global partners and other countries, albeit in an uncoordinated, inefficient and non-transparent manner.

### **Proposal**

#### **1. Leaving no one behind**

##### **1-1: Strong primary health care for health equity**

Strong primary health care (PHC) systems are effective in reducing inequities of access, through the core principles of first-contact, continuous, comprehensive, and coordinated care [2–4]. Following the Alma Ata Declaration that was recently reaffirmed in Astana, PHC, with its reliance on community health workers, basic curative health interventions, and focus on preventive and promotive care and empowerment of individuals and communities, is a proven means of advancing UHC.

Strengthening PHC systems to reduce inequities requires action on many fronts but two issues are particularly important for governments. First, domestic financing and development aid should emphasize investments in essential services that can be provided locally at the community level and by basic health workers. Making essential medicines universally affordable and available is



critical. The emergence of HIV/AIDS and resurgence of tuberculosis and malaria have focused global funding towards the control of these emergencies. While major progress has been achieved, this was often accomplished by building parallel financing and delivery systems [5]. G20 and development partners should bring about a renewed focus on PHC systems by making comprehensive care central to activities, with particular attention to marginalized groups. This includes bringing a PHC systems strengthening focus to global disease control programs. In particular, G20 should promote better measurement of PHC systems performance and support and expand ongoing efforts such as the Primary Health Care Performance Initiative (PHCPI – <https://improvingphc.org>).

Second, population aging and the growing burden of non-communicable diseases (NCD) pose new challenges to country health systems. The global population aged 60 years or over was estimated at 962 million in 2017 and, is expected to double by 2050 [6]. Two-thirds of the world's older persons currently live in low- and middle-income regions [6]. The preoccupation with infectious diseases and reproductive conditions has shaped the organization of PHC systems in many countries. Older people, however, are more likely to suffer from NCDs that require sustained care. The development assistance policy of G20 members should encourage investments in re-orienting PHC systems to integrate packages of cost-effective promotive, preventive and curative NCD interventions, such as those identified in the Disease Control Priorities, which can be delivered through population-based, community, health center and hospital platforms [7].

### **1-2: Health of migrants and health care worker migration**

There were 258 million migrants in 2017, representing 3.4% of the world's population [8] (Figure 1 (a)). People leave their homes to relocate within or across national borders due to economic, political, and conflict-related reasons. While the health of all migrant groups is equally important, the right of migrant workers to health care in destination countries is much debated.

Crossing national borders to work is one of the key motivations behind global migration. According to International Labour Organization (ILO), there were 164 million (64% of all migrants) migrant workers globally in 2017 [9] (Figure 1 (b)). While the United Nations General Assembly recently endorsed the Global Compact for Safe, Orderly and Regular Migration supporting the



right of migrants to health care and encouraging countries to incorporate their health needs into policies, there remains too little attention given to the health implications associated with migration [10].

G20 members, many of which are important players in global migration [11], should spearhead inter-governmental action to establish reliable information systems on migrants. This includes having an agreed set of standardized, publicly available migration indicators that source and destination countries collect [12]. Further, it is important that routine national statistical systems also include and identify migrant populations. This can help governments understand the scale of migration, develop evidence-based policies, and to know the extent to which refugees and labor migrants are able to access health and other social services [8,12].

The productivity of migrant workers is tied to their health. Therefore it benefits the host country to invest in their health [13]. In addition, the documented migrant labor workforce contributes to the host economies through taxation. Many migrant workers often perform jobs that have poor work environments thus placing them at higher health risk while they may not have access to care due to government policy, lack of citizenship, or clarity on legal status [14]. Some destination countries extend health care coverage to migrant workers, their families in the home country, and offer portability of health benefits when migrant workers return home [15].

First, migrant workers should be offered similar access to health and social security benefits in the country where they work as local workers [10,16]. Second, health benefits of migrant workers should, to the extent possible, be coordinated by both source and destination countries through mechanisms such as bilateral social security agreements [14]. Third, G20 members should explore the potential of extending health benefits to the families of migrant workers and making health benefits portable such that such benefits will become available to migrant workers after they return to their home country.

The migration of health care workers from resource-poor to high-income countries can constrain the ability of source countries to benefit from their investments in health professional education (Figure 1 (c), 1(d)). At the same time, these workers are an important resource for both source and destination country health systems. In return, migration offers health care workers opportunities for better compensation and professional development. In 2010, World Health Organization (WHO) adopted the Global Code of Practice on the



International Recruitment of Health Personnel to encourage ethical and fair hiring [17].

G20 action is necessary for systematically measuring health workforce mobility [17]. Additionally, G20 is uniquely placed to facilitate a shared understanding of the complex web of inter-relationships, at the country and global levels, between workforce migration, health workforce needs, workforce planning and production. Such an understanding requires engagement with multiple sectors – education, health and labor ministries within national governments, international recruitment stakeholders, health professional groups, and UN agencies including WHO and ILO.

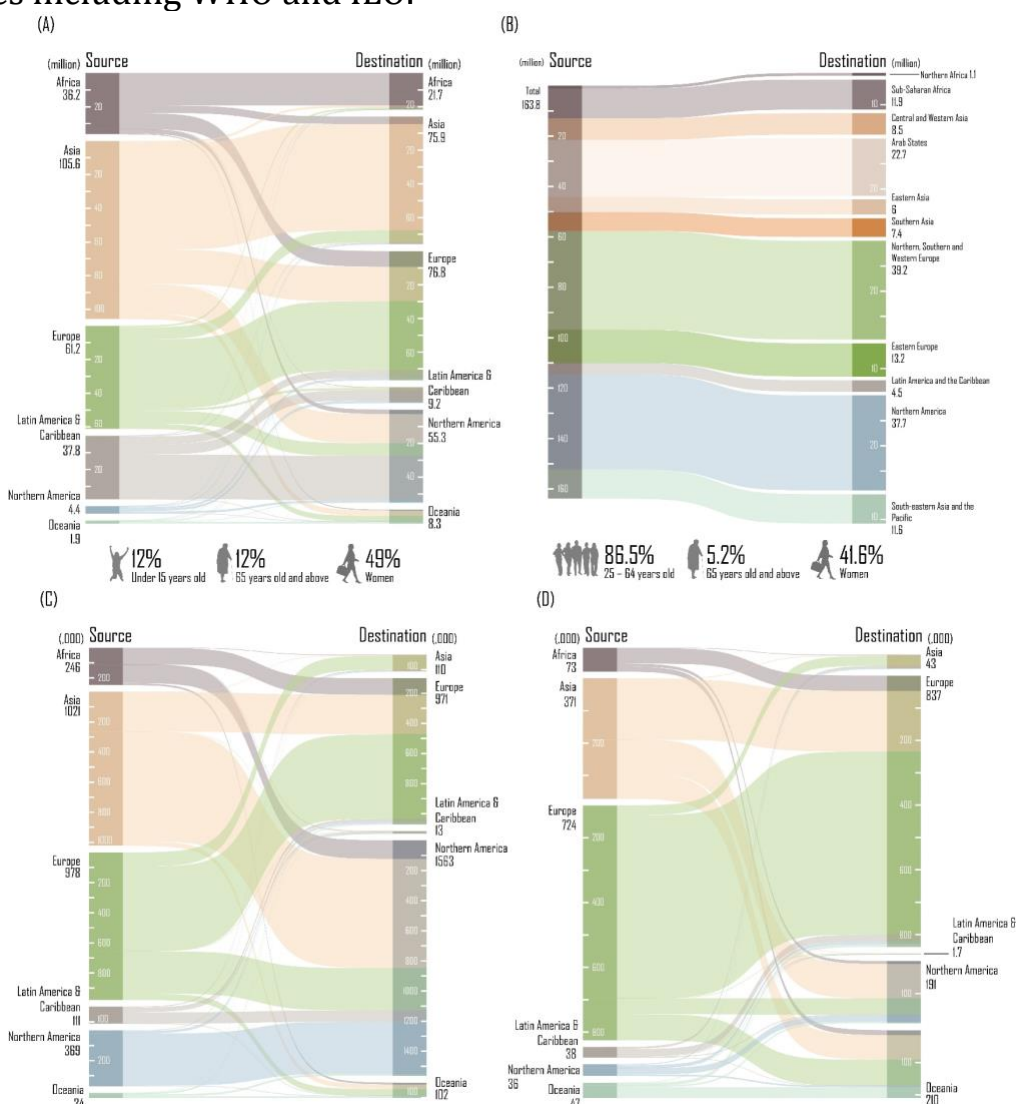


Figure 1 (a) Total migration by source and destination region as estimated by UNDESA (2017); (b) Total labor migration by destination region as estimated by ILO (2017); (c) Total foreign-trained doctors in destination region of the OECD (2012-2016); (d) Total foreign-trained nurses in destination region in the OECD (2012-2016)



## 2. Prioritizing reliable domestic financing and cost-effective best buys

Health systems will increasingly need to adapt to rapid and interconnected changes, with a major impact on the demand for health services and the capacity to pay for them. Population aging, the growing burden of complex, chronic non-communicable diseases, developments in medical technologies and the multiplicity of communication channels are driving increasing expectations for medical care. This is happening, in many countries, at a time of fiscal stagnation linked to population aging and changes in the labor market in favor of the informal economy. Countries are at risk of a variety of shocks related to climate change, economic transitions, pandemics, amongst other threats. These can affect both the demand for health services and the resources available to pay for them. The patterns of inequality and of population groups at risk of being left behind are also changing. Access to health services can make an important contribution to the ability of individuals and societies to adjust to change. Also, recent experiences with humanitarian crises such as the Ebola outbreaks have demonstrated how the lack of effective and trusted health services increases the risk of major shocks.

Many G20 countries are implementing innovative approaches for coping with rapidly increasing demand and/or challenges associated with fiscal stagnation [18–21]. Whereas mobilizing domestic resources to reliably finance needed health care is crucial, fiscal discipline in resource allocation and spending is equally critical to ensure long-term sustainability. One example is Japan, where close collaboration between the Ministries of Health and Finance, through periodic social insurance fee schedule review, have enabled it to control overall expenditure while meeting the health needs of a rapidly ageing population [22]. We recommend that the G20 support systematic studies of their own country experiences with health finance and establish mechanisms for mutual learning about what works, how and why, involving ministries of finance in addition to health.

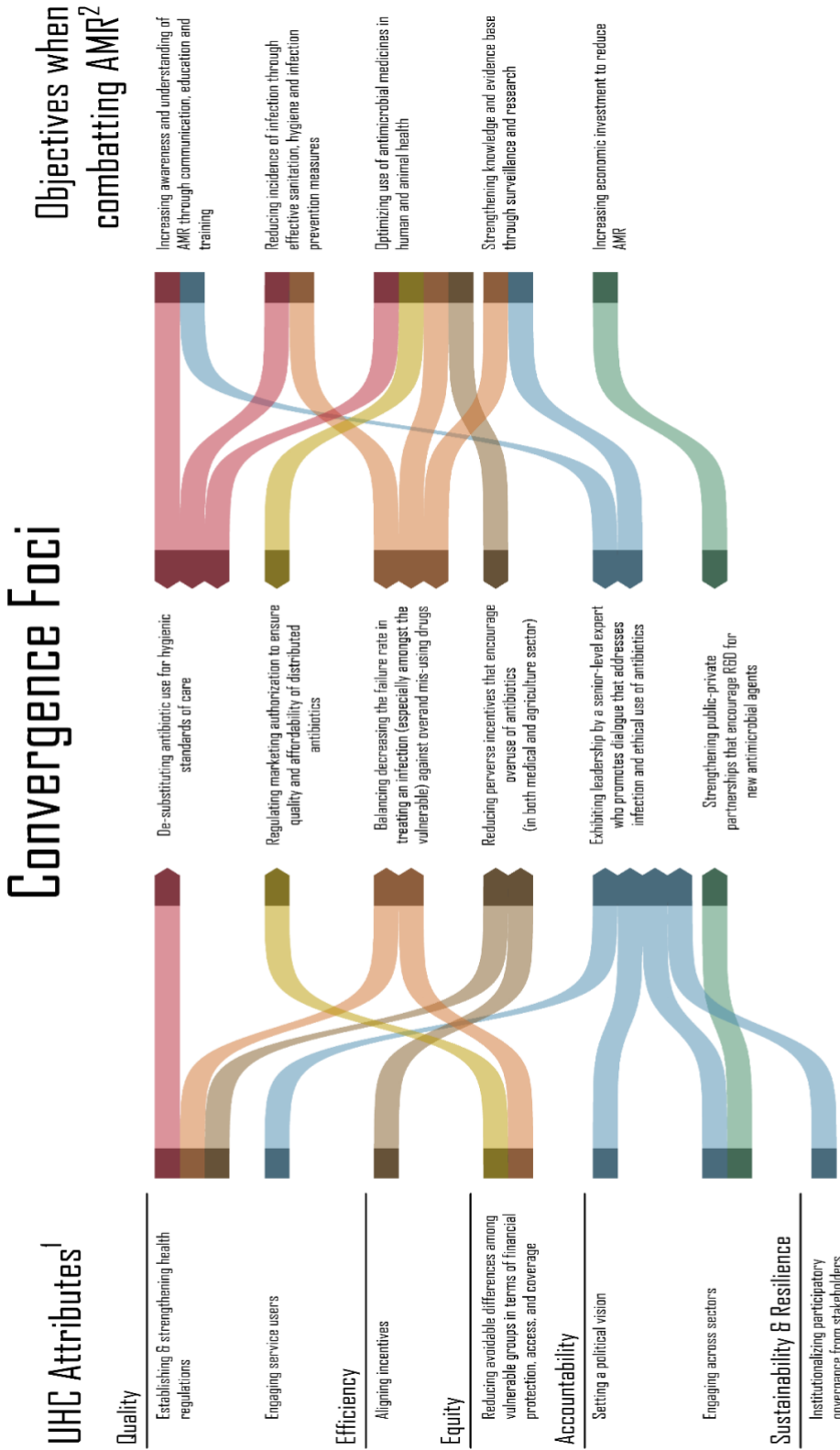
G20 members have mechanisms to ensure that their less-developed subnational regions receive appropriate financial support for health services. Some also provide health development assistance to low-income countries. We call on G20 to continue providing financial support for countries and regions with very limited capacity to sustainably finance effective health services. The form this support takes needs to take into account big changes in economic development. A number of countries and regions are experiencing increases in



average income, especially in rapidly growing urban areas and in resource-rich localities. Their governments face special challenges in establishing effective and reliable mechanisms for financing health services that meet the needs of all. We call on G20 to reallocate its health development assistance gradually to areas with the greatest need, while providing support to other areas to become self-sufficient. This will involve providing opportunities for mutual learning about effective strategies for health finance, support for strengthening health financing institutions and tapering of support to avoid sudden shocks. We also call on them to establish coordination mechanisms to ensure that assistance contributes to the establishment of long-term, sustainable health financing solutions.

Increased health finance needs to be complemented by measures to ensure that resources are used well. One important area for intervention is on access to effective and appropriate drugs. This requires measures to reduce their cost to patients and ensure that their quality is good and they are used well. This is especially important for antimicrobial drugs because of the health consequences of treatment failure and the risk of antimicrobial resistance. Commitments by G20 to invest in antimicrobial drug discovery must be complemented by measures to increase access to treatment and improve management and stewardship of such drugs [23–26]. Low-income communities require financial support to purchase and distribute these drugs, as is already the case with the treatment of tuberculosis, malaria and HIV/AIDS. Measures to reduce the cost of drugs should be complemented by actions to ensure appropriate use, such as the introduction of treatment guidelines, agreements by pharmaceutical companies to end incentives that encourage a high volume of sales and public information campaigns (Figure 2). Also, the development of affordable and good quality point-of-care diagnostics can encourage rational use. G20 should support the incorporation of these measures into national action plans as well as development cooperation plans for addressing the challenge of infectious diseases and making progress towards UHC.





1. WHO Western Pacific Region. Universal Health Coverage Moving Towards Better Health: Action Framework for the Western Pacific Region. <http://www.who.int/wpr/2015>.  
 2. World Health Organization. Global Action Plan on Antimicrobial Resistance. Geneva, 2015.

Figure 2 Examples of how the UHC agenda and AMR global action plan converge



### 3. Harnessing innovation and access to technology judiciously

Technological innovations hold enormous promise as contributors to rapid progress towards UHC, especially in low and middle-income countries. This will involve new forms of collaboration between public and private sectors. Governments can make important contributions by creating an environment that encourages research and development, supporting measures to ensure equitable access to technologies and medicines and creating regulations to protect the public against unintended harms. UHC2030 ([www.uhc2030.org](http://www.uhc2030.org)) has established a private sector constituency to support public-private partnerships for meeting health care needs at scale. G20 should encourage and support this.

One important area of innovation is in information and communications technologies, which have the potential to enable countries to leapfrog previous ways of increasing access to health information and care and accelerating progress towards UHC [27,28]. Bilateral development agencies and international philanthropies have invested in a number of successful pilots and some large companies are investing heavily in the development of digital health services, but the impact on access to health services has been limited [29–31]. The factors listed below suggest that this is likely to change [32]:

- rapid falls in the cost of smart phones and access to the internet and in the development of low-cost diagnostic technologies,
- the development of smartphone applications that link information on symptoms and diagnostic indicators to advice on treatment,
- the emergence of business models that enable information platforms to link to suppliers of goods, such as drugs, at scale and
- the creation of platforms that maintain secure personal health records and enable people to link to different types of health care provider.

Government action is needed to ensure that digital health and other information-based technologies contribute to UHC, rather than to meeting the needs of a privileged minority, to expanding markets for suppliers of drugs or diagnostic devices, or to generate data for commercial use. Governments can work with development agencies to accelerate progress by shifting investment



from pilots to routinized efforts supporting the provision of bundled services to meet needs, the development of new types of partnership between the health, technology and communications sectors and the creation of business models that combine markets and public finance. This will require investment in building the capacity of government agencies to provide effective stewardship for digital health (Figure 3) [33].

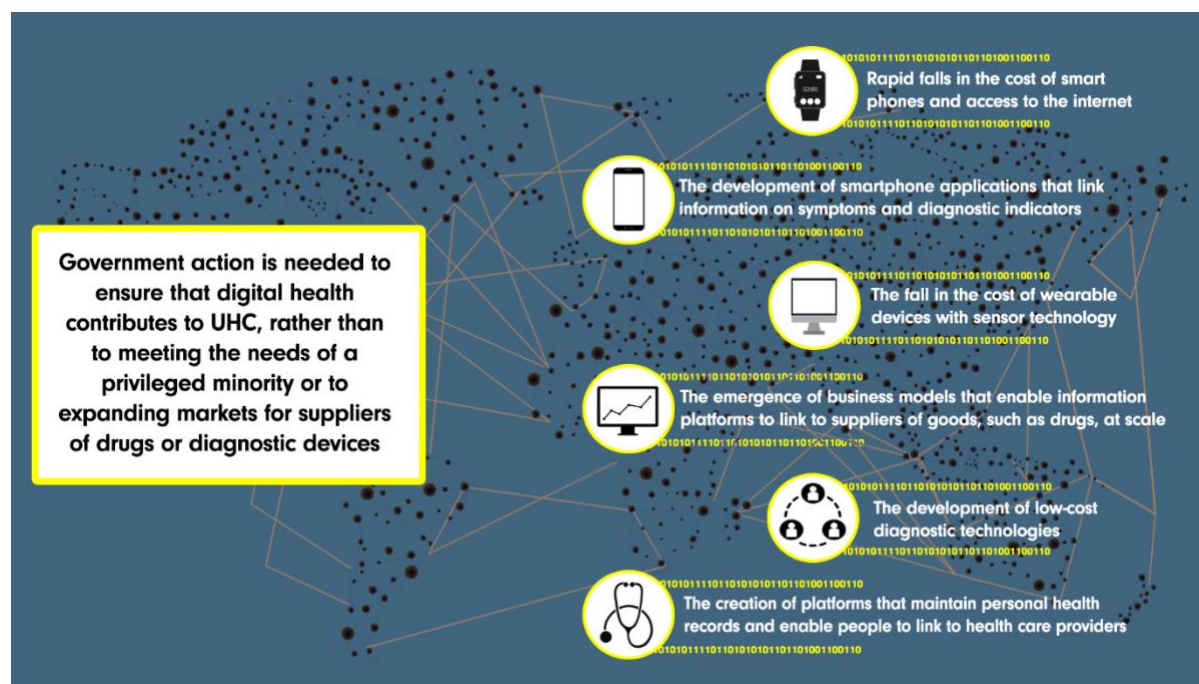


Figure 3 Harnessing technology in pursuit of UHC

The increasing importance of digital health is creating new regulatory challenges [28, 32]. How can new health platforms be influenced to prioritize the needs of the public, rather than commercial interests? To what extent should online medical advice be regulated and should algorithms be produced and made available as public goods? Who should own the data from users of digital health services and who should modify treatment algorithms on the basis of these data? How can issues of personal privacy be taken into account? What are the implications of the development of these platforms for the regulation of health care professionals?

Digital health technologies are potentially disruptive: leading to the creation of new kinds of partnership between organizations in the health, knowledge and telecommunications sectors; altering the relationships between individuals, their families and usual providers of health care and creating new kinds of



distance services within countries and across borders. Recent experience has shown that incremental changes can lead to a tipping point and subsequent transformation of an entire sector. In some cases it has led to the rapid growth of large and very powerful corporations. This is a possibility in the health sector, which could greatly influence future development. It is important that governments put a regulatory framework in place before that point is reached. We recommend that G20 establish a working group involving all relevant ministries to work with their supranational interlocutors, as well as private industry, to review opportunities and challenges associated with the rapid development of digital health services and the deployment of disruptive technologies. This group could identify areas for collaboration in accelerating progress towards UHC and for establishing regulatory standards for digital health services and systems. It could also identify the appropriate global agency to support ongoing work on this issue.

#### **4. Supporting common monitoring mechanisms, mutual learning platforms, and coordinated international cooperation for UHC**

G20 should support, amongst others, the Group of Friends of UHC and Global Health in strengthening global and regional governance mechanisms for UHC, working with UN member states at the upcoming UN High-level Meeting on UHC in September 2019.

##### **4-1. Common UHC monitoring mechanisms**

The 17 SDGs comprise 169 targets, and in turn for each target, one or more indicators are defined to monitor progress in the run up to 2030. The global indicator framework for the SDGs and their targets were adopted in July 2017 [34] and further refined in March 2018 [35].

Target 3.8 of SDG 3 directly concerns UHC for which two specific indicators monitor progress in coverage of essential health services and financial protection. The methodology and country data requirements of these indicators are already defined [36]. The annual UN High-level Political Forum on Sustainable Development has a central role in the follow-up and review of progress towards the SDGs, receiving voluntary national reviews from member states.

Current priority is for a common operational protocol that should be shared between countries, especially those in resource-limited settings so that all



member states could produce directly comparable statistics. A globally-shared mechanism of technical support, sufficiently contextualized to allow for between-country differences in data availability, including data disaggregation to capture equity perspectives, amongst other variabilities, should be established to provide assistance in monitoring and evaluation of progress towards UHC. In addition to formally tracking progress through the SDG indicators, on-the-ground practical experience sharing and monitoring would be important for operational improvement. G20, bilaterally or multilaterally through international organizations such as the WHO, should help other countries strengthen national capacities, introduce new facilitative technologies, improve health information systems, better analyze and use data for improving resource allocation and operational management, and enhance multistakeholder policy dialogue. Accordingly, G20 should provide direct and in-kind support to academic institutions in their own countries to further develop a global technical support network.

#### **4-2. Mutual learning platforms for UHC both at global and regional levels**

Actioning the UHC agenda at the country level is vexed with difficult decisions. Policymakers must decide which services to expand, whom to include as beneficiaries or service providers, and how to shift from out-of-pocket payment towards prepayment, and in what order, with a commitment to fairness and consideration of social needs and political realities. These policies and their implementation should be developed based on evidence and social values with public participation, being accountable to the people [36].

Mutual learning between policymakers as well as health and finance program managers and sharing of country experiences will promote progress. As there are multiple paths towards UHC, empirical lessons and good practices of G20 members in particular should be documented with robust research evidence and widely and effectively shared with those who are responsible for implementing UHC in their respective countries.

We already have a number of such platforms, such as UHC2030's UHC Knowledge Hub and the Joint Learning Network, which can be further strengthened to foster mutual learning at the global level in a coordinated manner. In addition, regional platforms, such as the Regional Observatories on Health Systems and Policies, Technical Advisory Groups on UHC or equivalent at WHO Regional Offices, or ASEAN+3 UHC Network etc., should be enhanced

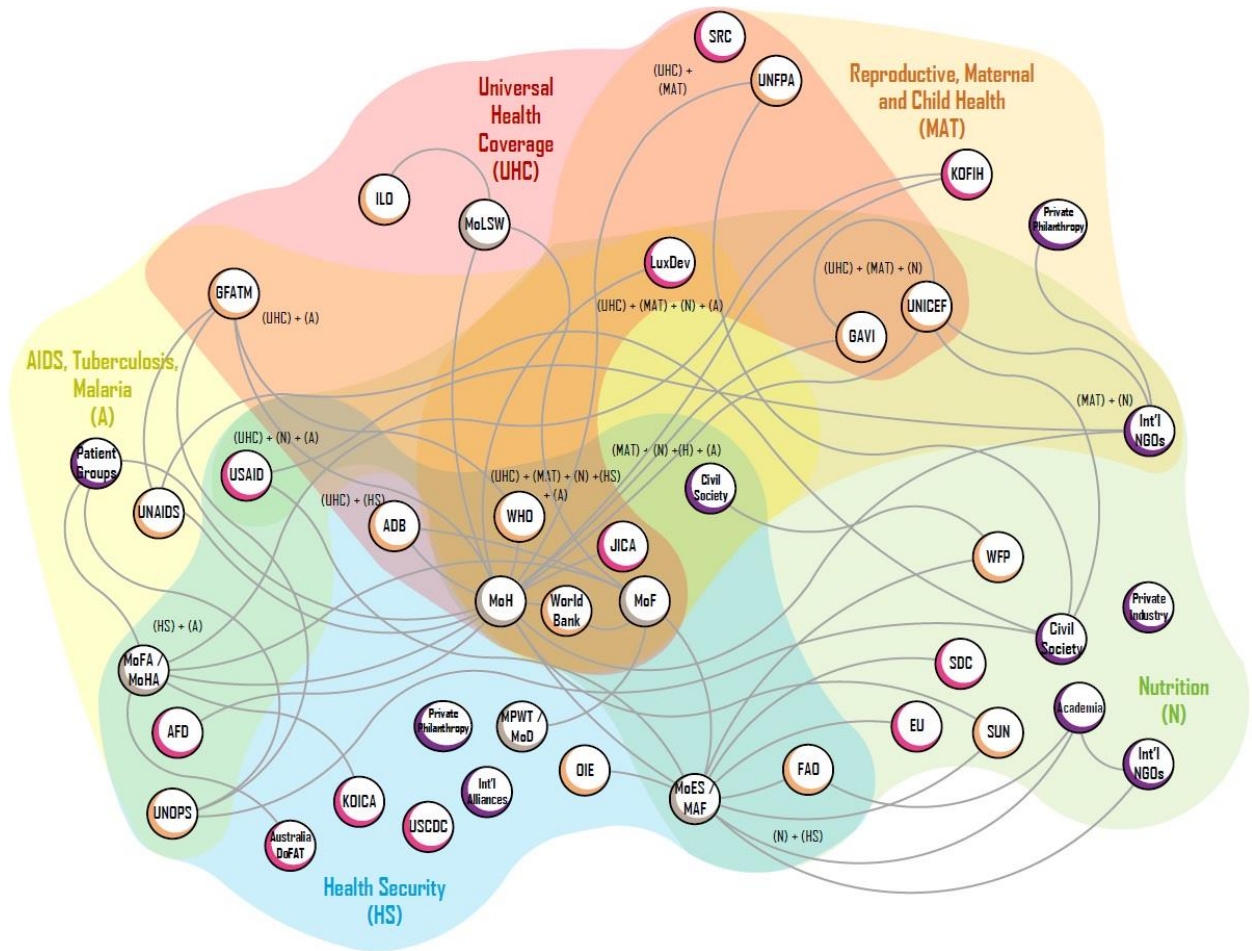


to provide more timely and contextualized advice. G20 members should proactively contribute to these mutual learning platforms for UHC both at global and regional levels, also encouraging their academic institutions, think tanks and civil society organizations to participate.

#### **4-3. Coordination of international cooperation for sustainable UHC**

While G20 members provide most of the available development assistance to low- and middle-income countries, increasingly greater emphasis is placed on mobilizing domestic resources within developing countries in achieving the SDGs. The UHC2030 statement on sustainability and transition from external funding sets out key principles of sustainability and transition and encourages all countries and health partners to invest in health in ways that will explicitly sustain equitable coverage of essential health services, beyond the duration of external financing [37]. G20 members should work together to help facilitate this financing transition in developing countries, while harmonizing their contributions in providing technical assistance at the country level, avoiding duplications and filling gaps.

Recent G20 meetings have agreed on a coordinated global preparedness and response to health risks and on making connections and encouraging partnerships between international stakeholders and national governments, including those from non-G20 countries, for the mutual benefit of all and in order to align activities and avoid duplication of efforts [38]. Similarly, development partners, including G20 members, should consider harmonizing aid for progress towards UHC within the existing health sector aid coordination mechanism at the country level (Figure 4). While acknowledging that there may well be a role for direct bilateral aid, G20 members should consider information sharing on and harmonizing development assistance for UHC. The annual G20 Health Working Group meeting could serve as an initial platform for such coordination [39].



(A) AIDS, Tuberculosis, Malaria (HS) Health Security (MAT) Reproductive, Maternal and Child Health (N) Nutrition (UHC) Universal Health Coverage

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| <p><b>○ Domestic Ministries / Agencies</b></p> <p>MAF: Ministry of Agriculture and Forestry<br/>         MoD: Ministry of Defense<br/>         MoES: Ministry of Education/Sports<br/>         MoF: Ministry of Finance<br/>         MoFA: Ministry of Foreign Affairs<br/>         MoH: Ministry of Health<br/>         MoHA: Ministry of Home Affairs<br/>         MoLSW: Ministry of Labor and Social Welfare<br/>         MPWT: Ministry of Public Works and Transport</p> | <p><b>○ Supranational Agencies and International Alliances</b></p> <p>ADB: Asian Development Bank<br/>         FAO: Food and Agriculture Organization of the UN<br/>         MoD: Ministry of Defense<br/>         GAVI: Gavi, the Vaccine Alliance<br/>         GFATM: The Global Fund to Fight AIDS, Tuberculosis, and Malaria<br/>         ILO: International Labor Organization<br/>         DIE: World Organization for Animal Health<br/>         SUN: Scaling Up Nutrition<br/>         UNAIDS: Joint United Nations Program on HIV/AIDS<br/>         UNFPA: United Nations Population Fund<br/>         UNICEF: United Nations Children's Fund<br/>         UNOPS: United Nations Office for Project Services<br/>         WHO: World Health Organization<br/>         World Bank<br/>         WFP: World Food Program</p> | <p><b>○ Donor Country Agencies</b></p> <p>AFD: French Development Agency<br/>         Australia DoFAT: Australia Department of Foreign Affairs and Trade<br/>         EU: European Union<br/>         JICA: Japanese International Cooperation Agency<br/>         KOICA: Korea International Cooperation Agency<br/>         LuxDev: Luxembourg Development Cooperation Agency<br/>         SDC: Swiss Agency for Development and Cooperation</p> | <p><b>○ Others</b></p> <p>Academia<br/>         Civil Society<br/>         International Alliances<br/>         International NGOs<br/>         Private Industry<br/>         Private Philanthropy<br/>         SRC: Swiss Red Cross</p> |
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Figure 4 Congestion and gaps in a complex web of global health development aid in a typical recipient country



## References

1. Government of Japan, The World Bank, World Health Organization, UNICEF, JICA, UHC 2030. Tokyo Declaration on Universal Health Coverage. In: *Universal Health Coverage Forum 2017*. Geneva; 2017.
2. Mosquera PA, Hernández J, Vega R, et al. The impact of primary healthcare in reducing inequalities in child health outcomes, Bogotá – Colombia: an ecological analysis. *Int J Equity Health*. 2012;11(1):66. doi:10.1186/1475-9276-11-66
3. Macinko J, Starfield B, Erinosh T. The Impact of Primary Healthcare on Population Health in Low- and Middle-Income Countries. *J Ambul Care Manage*. 2009;32(2):150-171. doi:10.1097/JAC.0b013e3181994221
4. Stigler FL, Macinko J, Pettigrew LM, Kumar R, van Weel C. No universal health coverage without primary health care. *Lancet*. 2016;387(10030):1811. doi:10.1016/S0140-6736(16)30315-4
5. WHO. From primary health care to universal coverage – the “affordable dream.” Ten years in public health, 2007-2017: report by Dr Margaret Chan, Director-General. <https://www.who.int/publications/10-year-review/universal-coverage/en/>. Published 2017. Accessed January 21, 2019.
6. Department of Economic and Social Affairs Population Division. *World Population Ageing 2017 (ST/ESA/SER.A/408)*. New York; 2017.
7. Watkins D, Jamison D, Mills A, et al. Universal Health Coverage and Essential Packages of Care. In: *Disease Control Priorities*. Third. Washington, D.C.: World Bank; 2017.
8. International Organization for Migration. *Global Migration Indicators 2018*. Geneva; 2017.
9. International Labor Organization. *ILO Global Estimates on International Migrant Workers: Results and Methodology*. Geneva; 2018.
10. Zimmerman C, Kiss L, Hossain M. Migration and Health: A Framework for 21st Century Policy-Making. *PLoS Med*. 2011;8(5). doi:10.1371/journal.pmed.1001034
11. OECD/ILO/IOM/UNHCR. *G20 International Migration and Displacement Trends Report 2018*; 2018.
12. Bilborrow RE. The global need for better data on international migration and the special potential of household surveys. *Migr Policy Pract*. 2017;7(1):9-17.
13. Saint-Martin A, Inanc H, Prinz C. *Job Quality, Health and Productivity: An Evidence-Based Framework for Analysis*. Paris; 2018.





14. Benach J, Muntaner C, Delclos C, Menéndez M, Ronquillo C. Migration and “Low-Skilled” Workers in Destination Countries. *PLoS Med.* 2011;8(6). doi:10.1371/journal.pmed.1001043
15. Holzmann R. *Do Bilateral Social Security Agreements Deliver on the Portability of Pensions and Health Care Benefits? A Summary Policy Paper on Four Migration Corridors Between EU and Non-EU Member States.* Bonn; 2016. <http://ftp.iza.org/pp111.pdf>.
16. Abubakar I, Aldridge RW, Devakumar D, et al. The UCL-Lancet Commission on Migration and Health: the health of a world on the move. *Lancet (London, England).* 2018;392(10164):2606-2654. doi:10.1016/S0140-6736(18)32114-7
17. World Health Organization. *Migration of Health Workers: The WHO Code of Practice and the Global Economic Crisis.* (Siyam A, Dal Poz MR, eds.). Geneva; 2014.
18. Cashin C, Sparkes S, Bloom D. *Earmarking for Health From Theory to Practice.* Geneva; 2017.
19. Götze R, Schmid A. *Healthcare Financing in OECD Countries beyond the Public-Private Split, TranState Working Papers, No. 160.* Bremen; 2012.
20. Kutzkin J, Witter S, Jowett M, Bayarsaikhan D. *Developing a National Health Financing Strategy: A Reference Guide.* Geneva; 2017.
21. Unami H. The policy challenges of financing longevity—A perspective from Japan. *J Econ Ageing.* November 2018. doi:10.1016/J.JEOA.2018.10.003
22. Hashimoto H, Ikegami N, Shibuya K, et al. Cost containment and quality of care in Japan: is there a trade-off? *Lancet.* 2011;378(9797):1174-1182. doi:10.1016/S0140-6736(11)60987-2
23. The Review on Antimicrobial Resistance (2016). *Tackling Drug-Resistant Infections Globally: Final Report and Recommendations.* London; 2016. [https://amr-review.org/sites/default/files/160525\\_Final\\_paper\\_with\\_cover.pdf](https://amr-review.org/sites/default/files/160525_Final_paper_with_cover.pdf).
24. Bloom G, Merrett GB, Wilkinson A, Lin V, Paulin S. Antimicrobial resistance and universal health coverage. *BMJ Glob Heal.* 2017;2(4):e000518. doi:10.1136/bmjgh-2017-000518
25. World Health Organization. *Technical Series on Primary Health Care Brief: Antimicrobial Resistance and Primary Health Care.* Geneva; 2018. [http://www.who.int/docs/default-source/primary-health-care-conference/amr.pdf?sfvrsn=8817d5ba\\_2](http://www.who.int/docs/default-source/primary-health-care-conference/amr.pdf?sfvrsn=8817d5ba_2).
26. Holloway KA, Kotwani A, Batmanabane G, Santoso B, Ratanawijitrasin S, Henry D. Promoting quality use of medicines in South-East Asia: reports



- from country situational analyses. *BMC Health Serv Res.* 2018;18(1):526. doi:10.1186/s12913-018-3333-1
27. OECD. *ICTs and the Health Sector: Towards Smarter Health and Wellness Models*; 2013. <http://dx.doi.org/10.1787/9789264202863-en>.
  28. National Academy of Sciences, Engineering, and Medicine. *Crossing the Global Quality Chasm: Improving Health Care Worldwide*. Washington, D.C.; 2018. <https://doi.org/10.17226/25152>.
  29. Agarwal S, Perry HB, Long L-A, Labrique AB. Evidence on feasibility and effective use of mHealth strategies by frontline health workers in developing countries: systematic review. *Trop Med Int Heal.* 2015;20(8):1003-1014. doi:10.1111/tmi.12525
  30. Free C, Phillips G, Watson L, et al. The Effectiveness of Mobile-Health Technologies to Improve Health Care Service Delivery Processes: A Systematic Review and Meta-Analysis. Cornford T, ed. *PLoS Med.* 2013;10(1):e1001363. doi:10.1371/journal.pmed.1001363
  31. Wilson K, Gertz B, Arenth B, Salisbury N. *The Journey to Scale: Moving Together Past Digital Health Pilots*. Seattle; 2014.
  32. Bloom G, Berdou E, Standing H, Guo Z, Labrique A. ICTs and the challenge of health system transition in low and middle-income countries. *Global Health.* 2017;13(1):56. doi:10.1186/s12992-017-0276-y
  33. Balasubramaniam P, Rao N, Sharma G, et al. *Innovations for Universal Health Coverage: A South-South Collaboration to Transform Health Systems in Africa and India*. New Delhi; 2018. <http://opendocs.ids.ac.uk/opendocs/handle/123456789/14180>.
  34. United Nations General Assembly. *Resolution Adopted by the General Assembly on Work of the Statistical Commission Pertaining to the 2030 Agenda for Sustainable Development (A/RES/71/313), Annex*. Geneva; 2017.
  35. United Nations. *Global Indicator Framework for the Sustainable Development Goals and Targets of the 2030 Agenda for Sustainable Development*. Geneva; 2018. [https://unstats.un.org/sdgs/indicators/Global Indicator Framework after refinement\\_Eng.pdf](https://unstats.un.org/sdgs/indicators/Global_Indicator_Framework_after_refinement_Eng.pdf).
  36. World Health Organization. *Tracking Universal Health Coverage: 2017 Global Monitoring Report*; 2017.
  37. UHC 2030. Statement on sustainability and transition from external funding. [https://www.uhc2030.org/fileadmin/uploads/uhc2030/Documents/About\\_UHC2030/UHC2030\\_Working\\_Groups/2017\\_Transition\\_working\\_gr](https://www.uhc2030.org/fileadmin/uploads/uhc2030/Documents/About_UHC2030/UHC2030_Working_Groups/2017_Transition_working_gr)



oup\_docs/UHC2030\_Statement\_on\_sustainability\_and\_transition\_Oct\_2018.pdf. Published 2018. Accessed February 16, 2019.

38. G20 Health Ministers. *Declaration: G20 Meeting of Health Ministers*. Buenos Aires; 2018.
39. World Health Organization. *Towards a Global Action Plan for Healthy Lives and Well-Being for All: Uniting to Accelerate Progress towards the Health-Related SDGs*. Geneva; 2108.

## Appendix

### Acknowledgments

We thank members of the Working Group for the generation and discussion of the content and review and comments by other expert contributors, as listed below.

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