Financing for international collective action for health between 2020-2022. Background paper for CIH 3.0.

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1. Introduction

The first report of the *Lancet* Commission on Investing in Health (CIH), "Global health 2035: a world converging within a generation" (GH2035) made a case for reorienting development assistance for health (DAH) away from country-specific support to individual low- and middle-income countries (LMICs), towards international collective action for health (ICAH).[1] More specifically, GH2035 argued that DAH should be targeted at "global functions", which address health challenges that go beyond the boundaries of individual nation states. Funding for global functions reaps transnational health benefits, regionally or globally.

GH2035 categorized global functions into *three types*:

- Provision of global public goods (GPGs), such as product development for neglected diseases
- Management of cross-border externalities, such as pandemic preparedness and response (PPR)
- Fostering leadership and stewardship, such as convening for consensus building.

Funding for what the CIH calls country-specific functions refers to funding given to an individual country to support disease control activities, such as reducing maternal mortality, that will benefit that country alone. Jamison and colleagues (1998) defined country-specific functions as activities that tackle "time limited problems within individual countries that justify international collective action because of highly constrained national capacity."[2]

At the time GH2035 was released, available DAH data did not provide evidence on the extent to which resources were targeted at global functions, so in 2015 we introduced a new method to track aid by function.[3] The method allowed us to estimate the proportion of DAH directed to the three categories of global functions and to country-specific functions. We also introduced a broader concept of health aid, called "DAH Plus" (DAH+), to capture additional public spending on product development for neglected diseases from agencies, such as the National Institutes of Health (NIH), that are usually excluded in studies that track DAH.

Our 2015 study found that global functions accounted for 23% of DAH+ disbursements in 2013, while 77% was allocated towards country-specific activities. A follow-up study showed that donors are prone to "cycles of panic and neglect."[4] In response to the 2014-2016 Ebola epidemic in West Africa, during the "panic" phase the share of funding for global functions grew to 29% in 2015, driven by a reactive increase in outbreak response funding. This was followed by a "neglect" phase—donors did not sustain their preparedness funding after the outbreak, and the share of funding for global functions dropped to 24% in 2017.

In this study, we assess trends in DAH+ in the years 2020-2022. We classify the funding by function and subfunction, i.e., we assess the proportion of funding for global functions and respective subfunctions vs. funding for country-specific functions. We also disaggregate the country-specific funding into two types: funding for the CIH 3.0 priority conditions, which comprise eight infections and maternal health conditions (HIV/AIDS, tuberculosis, malaria, neonatal conditions, maternal conditions, lower respiratory infections, diarrheal diseases, and vaccine-preventable childhood diseases), and funding for other country-specific functions (non-communicable diseases and health system strengthening).

2. Methods

Development Assistance for Health Plus (DAH+)

The DAH+ framework allows us to conduct a more comprehensive assessment of funding by international funders to global functions. DAH+ includes:

- O*fficial development assistance* (ODA) for health as reported by funders to the Organisation for Economic Cooperation and Development's Development Assistance Committee (OECD DAC).
- *Private development finance* from philanthropic funders, such as the Gates Foundation, reporting to the OECD DAC.
- Funding for *neglected disease product development* from the Global Funding for Innovation for Neglected Diseases (G-FINDER) database.[5] In our view, all funding for R&D for neglected diseases is an important addition to traditional concepts of DAH, because LMICs are disproportionally affected by them. For example, funding for the development of an HIV vaccine channeled by the US government through the NIH does not count as DAH since the provision of development aid is not NIH's primary purpose. From our perspective, such organizations contribute significantly to global health, and including them improves the accuracy of our estimate of global health funding.

Data sources

As in our previous studies, we used two major data sources:

First, we obtained data on health ODA and private development finance for health from the Creditor Reporting System (CRS) database of the OECD DAC.[6,7] The CRS database, assembled and hosted by the OECD DAC, is a record of financial aid flows from official donor agencies to recipient countries. The database documents individual project and program level financial data reported by 30 DAC donor countries, 19 non-DAC donor countries, 63 multilateral institutions, and 41 private philanthropic foundations working in development. Each financial record in the CRS database includes a purpose code. The purpose code is a five-digit number representing the sector of destination for aid. The first three digits of the purpose code correspond to a general sector to which the aid is allocated while the last two digits define the specific sub-sector to which the aid is allocated. The three-digit codes are also known as DAC5 codes, while the five-digit codes are called CRS codes.

We assessed four DAC5 codes for "aid to health": "health, general (DAC5 code 121)," "basic health (DAC5 code 122)," "non-communicable diseases (NCDs) (DAC5 code 123)," and "population policies/programmes and reproductive health (DAC5 code 130)." For these four DAC5 codes, there are a total of 27 purpose codes, of which two are voluntary codes. In addition, we included purpose code 16064 ("social mitigation of HIV"). We assessed health ODA disbursements ("actual international transfer of financial resources, or of goods or services valued at the cost to the donor") for the years 2020, 2021, and 2022 (US Dollars, constant 2021 prices). We used the December 22, 2023 update of the CRS and downloaded the data on January 3, 2024. We downloaded all projects ("aid activities") from the CRS for the period 2020-2022, i.e., we downloaded the "microdata." In total, there were 139,066 health projects in these three years.

Second, we accessed data on funding for neglected disease product development from the G-FINDER database, which tracks disbursements on product development for 42 neglected diseases.[6] Our assessment includes all G-FINDER funding by all international funders (public and philanthropic). We did not include funding for R&D on neglected diseases by LMICs and the private sector. The G-FINDER data was accessed on February 19, 2024. Parts of the funding in the G-FINDER database are also reported by international funders to the OECD DAC. To avoid double-counting, we assessed the CRS purpose code for medical research and removed R&D projects that were in both databases.

Third, the CIH 3.0 report also includes a short overview on general ODA trends. For this analysis, we used the CRS and DAC2A databases.[8] Annex 3 provides further details on the approach and the results.

Approach for the analysis of DAH+ for global and country-specific functions

Our assessment entailed four major steps. First, we classified the 27 CRS purpose codes into global functions and country-specific functions (and their respective subfunctions):

- 7 CRS codes report on global functions according to our categorization:
    - *GPGs:* Health statistics and data; Medical research; Research for prevention and control of NCDs; Population statistics and data.
    - *Management of externalities:* COVID-19 control; Tobacco use control; Control of harmful use of alcohol and drugs.
    - *Leadership and stewardship:* None.
- 11 CRS codes focus on country-specific support for the CIH priority conditions: Malaria control; Tuberculosis control; STD control including HIV/AIDS; Social mitigation of HIV/AIDS; Infectious disease control; Reproductive health care; Family planning; Personnel development for population and reproductive health; Population policy and administrative management; Basic health care; Basic nutrition.
- 3 CRS codes report on country-specific funding for NCD control.
- The remaining 6 CRS codes report on broader health systems strengthening, including for the provision of tertiary services (see Annex 1 for more information).

Second, our classification of CRS codes provides an initial framework for our analysis. However, we also performed a keyword search to identify projects that support global functions and respective

subfunctions. For example, polio eradication is an important subfunction under the management of externalities. Another important subfunction are aid activities against antimicrobial resistance (AMR), so we searched for projects and programs that aim to tackle AMR. Global health leadership as well as the development and harmonization of international health regulations are important subfunctions under GPGs. We searched the title, short description, and long description of each project in the CRS database for our key terms. Any project containing one of our key terms was allocated to the sub-function associated with that key term (regardless of its purpose code). CRS keyword searches are a common strategy to analyze financing for specific health areas. For each of the 10 sub-functions of global functions (see Table 1), we established a list of keywords (Annex 1). Using these keywords, we searched the CRS database to identify those aid projects that potentially provided funding for global functions.

Third, we conducted a manual coding exercise to qualitatively analyze and confirm which projects supported global functions and identify the primary sub-function. As part of this coding, we assessed the project titles and descriptions to see if the key term search led to valid results. We also assessed other information deemed useful for determining if a project supports global functions or respective subfunctions.

Fourth, we made additional adjustments based on information from the microdata. For example, the "control of cross-border disease movement" is an important subfunction under the management of externalities. As such, if funding was allocated to a geographical region rather than a specific country, it was placed under this category.

Table 1. Categorization of DAH+ into global and country-specific functions

Function	Sub-function	Activities included
Global function: Provision of global public goods	Research and development for health tools	▪ Product development for poverty-related and neglected diseases (as defined by G-FINDER)
	Development and harmonization of international health regulations	▪ Global and regional technical guidelines, norms, standards, and framework conventions ▪ Development and harmonization of global/regional norms ▪ Guidelines and pre-qualification related to R&D
	Knowledge generation and sharing	▪ Global and regional research ▪ Global and regional statistics/data ▪ National studies that contribute to the global evidence base ▪ Distribution of knowledge incl. through South-to-South
	Intellectual property sharing	▪ Activities that help make products and knowledge available to the poor, such as patent pooling and free licensing
Global function: Management of negative regional and global cross-border externalities	Outbreak preparedness and response	▪ Response to the COVID-19 pandemic ▪ R&D for medical countermeasures for infections with pandemic potential (WHO's R&D Blueprint diseases;[9] pandemic influenza) ▪ Global, regional, and national outbreak surveillance systems and MCM stockpiles
	Responses to antimicrobial resistance (AMR)	▪ Activities targeting AMR, including research
	Responses to marketing of unhealthful products	▪ Global, regional, national activities in response unhealthful products (e.g., alcohol, tobacco)
	Control of cross-border disease movement	▪ Polio eradication ▪ Cross-border and regional disease programs ▪ Biosecurity/biosafety projects
Global function: Fostering of global health leadership and stewardship	Health advocacy and priority setting	▪ Convening policy makers for negotiation and consensus building ▪ Development of global and regional plans and strategies ▪ Leadership/stewardship for specific conditions or health overall ▪ Cross-sectoral advocacy and advocacy for the health of neglected, marginalized, and conflict-affected groups
	Promotion of aid effectiveness and accountability	▪ Global and regional accountability for results and financing
Country-specific functions		▪ Support to the eight infections and maternal health priority conditions ▪ Control of NCDs and injuries ▪ Health systems support: health infrastructure, information technology, health administration, improving system performance, transport, equipment, health worker training

Approach for the analysis of country-specific funding

We also disaggregated the country-specific funding for the eight infections and maternal health conditions prioritized by CIH 3.0. These are HIV/AIDS, tuberculosis, malaria, neonatal conditions, maternal conditions, lower respiratory infections, diarrheal diseases, and vaccine-preventable childhood diseases.

The CRS includes purpose codes for malaria control (12262), tuberculosis control (12263), and HIV/AIDS (13040; 16064).[10] Funding for these three priority conditions was calculated based on the CRS purpose codes. In addition, the CRS includes purpose codes for reproductive health, which cover essential services for maternal and newborn health (13010; 13020; 13030; 13081).[11] We included these purpose codes and conducted a key term search to identify additional projects that focus on maternal and newborn health. Often, maternal and newborn health services are delivered together so we estimated the overall funding for maternal and newborn funding.

We also provided an overall estimate for the remaining three priority conditions – lower respiratory infections, diarrheal diseases, and vaccine-preventable childhood diseases. Further disaggregating was not possible for two reasons: First, much of the support for these conditions is provided by Gavi in the form of vaccines. However, most vaccines protect against multiple diseases across the three conditions – estimating the amounts for each condition would therefore be an artificial exercise. Second, support from other funders for these conditions, such as UNICEF, is often delivered in an integrated manner and the CRS data does not allow a further break down of the budget by conditions. To identify projects for the three priority conditions, we performed key term searches. Table 2 summarizes how we approached the assessment of the priority conditions.

Table 2. Assessment of eight infections and maternal health priority conditions

Priority condition	**Approach**
Malaria control	CRS purpose code
Tuberculosis control	CRS purpose code
HIV/AIDS	CRS purpose codes
Maternal and newborn	CRS purpose codes and key terms search
Lower respiratory infections, diarrhea, vaccine preventable childhood diseases	Key term search

Analysis by income group We disaggregated all health aid in the CRS database by income classification and sub-function. We use income classifications consistent with the World Bank: low income, lower middle income, upper middle income, and high income. Aid allocated to a "regional" recipient, "bilateral, unspecified" recipient, or recipient with no income classification designated by the World Bank (Montserrat, Niue, Saint Helena, Tokelau, and Wallis and Fortuna) were categorized as "not allocable by income group." All funding in the G-FINDER database also includes a country recipient. We disaggregated product development aid from the G-FINDER database by income classification using the country recipient label. All funding in the G-FINDER database with the country recipient label "African

Union," "European Union," "not specified," or "cannot be allocated to a single country" was categorized as "not allocable by income group."

Limitations

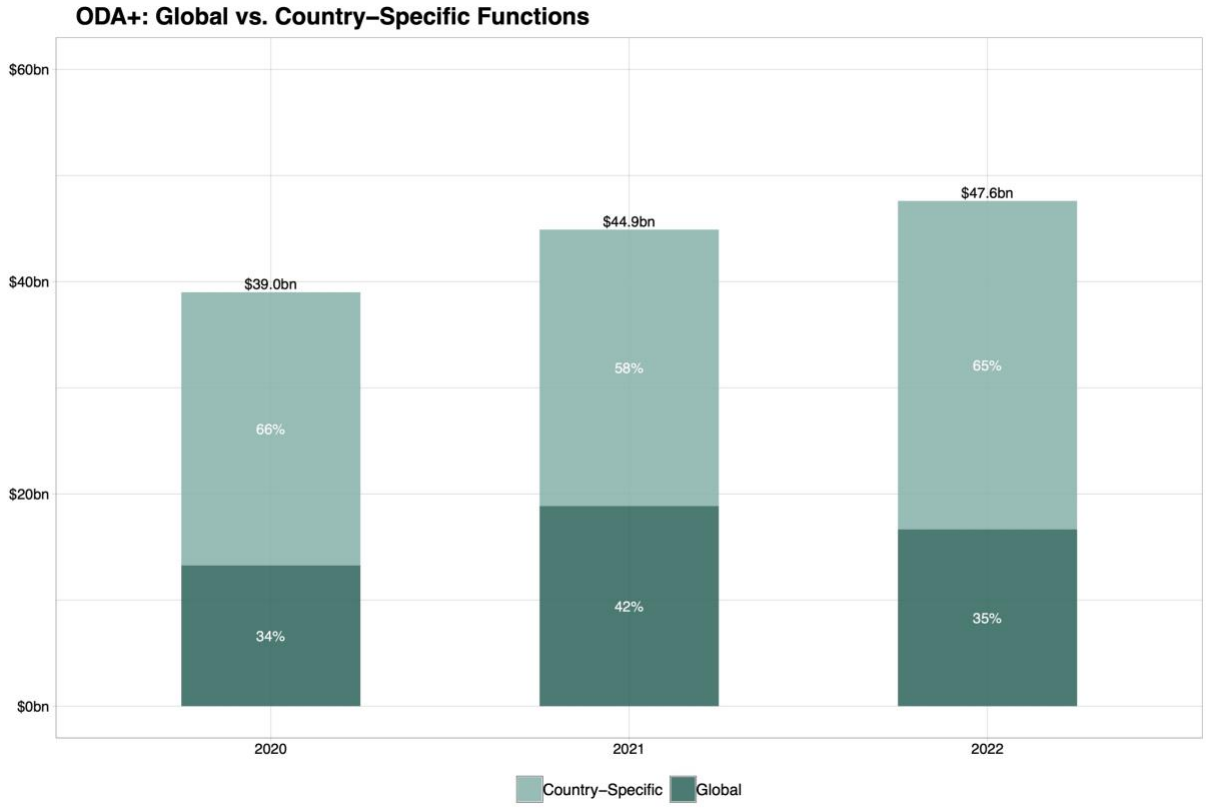
There are two main limitations. First, CRS project descriptions can be vague, which might have affected our key term search because of the limited project information. Second, aid activities were classified as targeting "global functions" if the CRS project information indicated that the project provided funding in support of global functions. If this was the case, the entire project amount counted towards global functions. We then coded the project to a single global function and the main sub-function. If the project information suggested that the project focused on multiple sub-functions, we only selected the sub-function that was the primary focus. Apportioning project funding across different sub-functions was not feasible due to data limitations in the CRS.

3. Results

3.1 Funding for global functions

DAH+ disbursements reached $44.9 billion in 2021 and $47.6 billion in 2022, its highest ever level (Figure 1; see also Annex 1). Despite the criticism of the behavior of high-income countries during the pandemic, especially their hoarding of COVID-19 vaccine doses,[12] the pandemic led to a substantial increase in DAH+. In addition, the share of DAH+ targeted at global functions grew from about a quarter before the pandemic to over a third during it.[13] The pandemic response clearly drove this increase, but funding for other global functions also contributed to this upward trend. Funding for the control of cross-border disease movement, which includes funding for regional programs and polio eradication, grew compared to previous years (Table 3).

Figure 1. ODA+: Evolution of DAH+ disbursements, 2020-2022 (constant 2021 US$)



However, there are also some concerning trends. First, the share of funding by donor governments channeled through multilateral agencies increased from 23% in 2020 to 30% in 2021, while the share of funding that was directly provided to recipient governments dropped from 38% to 33%. At the same time, DAH+ disbursements to low-income countries remained flat in 2021 compared to 2020 levels, which indicates that the additional funding made available by donors in 2021 did not reach low-income countries.[14] Second, funding for basic research and product development for neglected diseases fell from $3.8 billion in 2021 to $3.3 billion in 2022. This fall comes at a time when there is a pressing need to increase investment in such product development—to achieve the "30 by 2035" and "50 by 50" goals described in section 3—and to leverage new approaches to reduce development costs.

Table 3. Funding for global functions by function and sub-function, 2020-2022 (millions of US$)

Function and Sub-Function	2020	2021	2022
Global public goods	$4,700	$4,600	$4,000
Product development	$3,800	$3,800	$3,300
Development/harmonization of health regulations	$85	$110	$96
Knowledge generation	$750	$710	$620
Intellectual property	$0.00	$0.20	$0.10
Externalities	$8,200	$14,000	$12,000
Outbreak preparedness and response	$5,500	$11,000	$9,300
(COVID-19)	*($4,400)*	*($8,800)*	*($5,800)*
AMR	$230	$320	$160
Responses to marketing of unhealthful products	$110	$130	$100
Control of cross-border disease movement	$2,400	$2,400	$2,600
Leadership and stewardship	$420	$440	$360
Health advocacy	$390	$420	$350
Aid effectiveness and accountability	$30	$24	$14
Country-specific functions	$26,000	$26,000	$31,000
Priority infections and maternal health conditions	$21,000	$20,000	$24,000
NCDs and health systems strengthening	$4,600	$5,700	$7,400
(NCDs)	*($250)*	*($270)*	*($230)*
(Health system strengthening)	*($4,300)*	*($5,400)*	*($7,200)*
Total	**$39,000**	**$45,000**	**$48,000**

Notes: Gross disbursements. Constant 2021 prices (US$ millions). All data have been rounded to a maximum of two significant figures. Numbers in parentheses (i.e., for COVID-19, NCDs, and health system strengthening) are a fraction of the total value of the respective sub-functions.

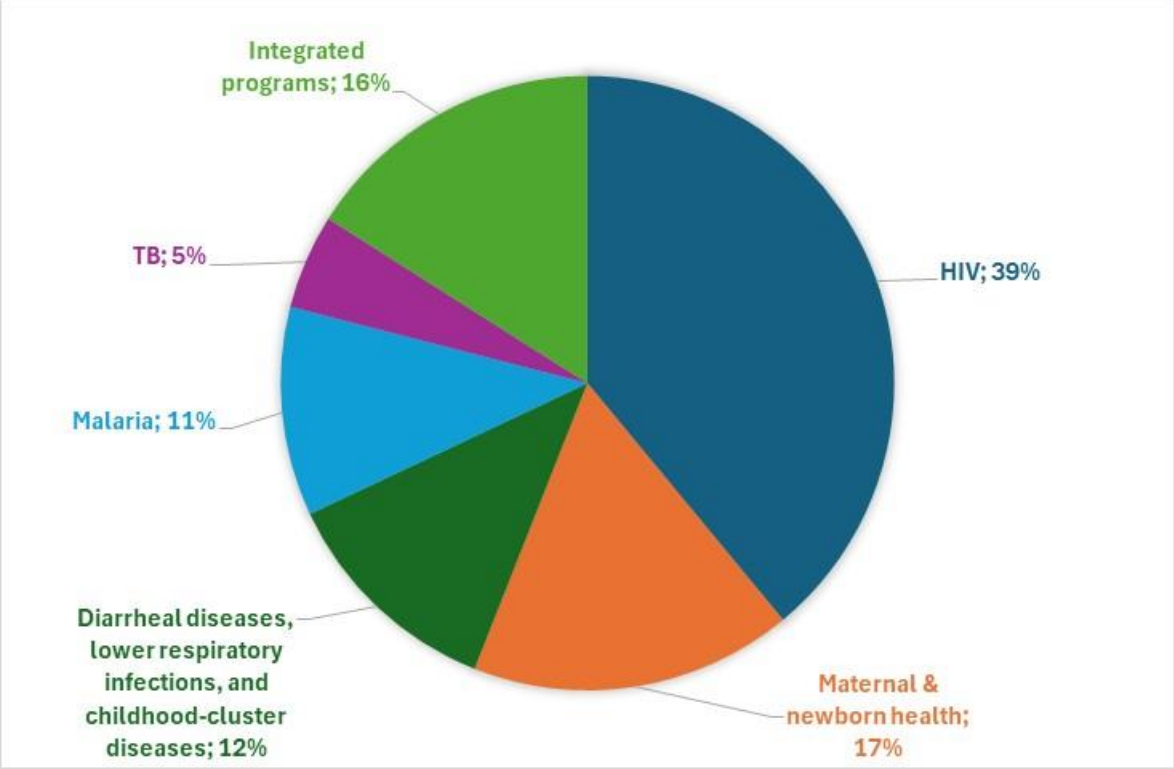
3.2 Funding for country-specific functions

CIH3.0 argues that funding for country-specific functions should be focused on the priority infections and maternal health conditions to reach "30 by 2035." Our analysis finds that in 2022, $31.0 billion was targeted at country-specific functions, of which about three-quarters (76% or $23.7 billion) addressed these priority conditions. The remaining share (24%) was mostly for broader health systems support ($7.2 billion), while only a small fraction was for NCDs ($0.2 billion).

Country-specific funding is distributed unevenly across the eight priority conditions (Figure 2). Between 2020 and 2022, 39% of the funding for the eight infections and maternal health priority conditions was for HIV, with more than half of the HIV funding (51%) targeting middle-income countries. Low-income countries only received 23% of the HIV funding (the remaining 26% was not allocable by income group). Funding for maternal and newborn health accounted for 17%, while malaria and tuberculosis received 11% and 5%, respectively. The remainder was directed to the remaining three priority conditions—

diarrhea, childhood-cluster diseases, and lower respiratory infections (12%)—and to integrated service delivery (16%).

Figure 2. Country-specific funding for the eight infections and maternal health priority conditions



Notes: Gross disbursements. Constant 2021 prices (US$).

Distribution of country-specific DAH+ by income group

CIH 3.0 makes the case that funding for country-specific disease control and HSS should focus on the least-developed countries. Between 2020–2022, 28% of country-specific funding was channeled to least-developed countries and other low-income countries, while lower-middle-income countries and upper-middle-income countries accounted for 41% and 9%, respectively (the remainder of 22% was not allocable by income group). In the same period (2020–2022), 29% of the funding for the eight priority conditions was directed to least-developed countries (LDCs) and other low-income countries, 38% to lower-middle-income countries and 8% to upper-middle-income countries (25% were not allocable by income group). These data indicate that funding for the priority infections and maternal health conditions is not well targeted, neglecting countries with the lowest resources, and suggests a potential to shift more of the available funding to resource constrained settings. About half of the funding for the eight priority conditions went to middle-income countries with adequate potential for domestic public finance of their health system.

Table 4. Country-specific DAH+ by income group, 2020-2022 (millions of US$)

Country-specific functions	Income group	2020	2021	2022
Priority infections and maternal health conditions	Low-income	$6,100 (29%)	$5,900 (29%)	$6,400 (27%)
	Lower-middle income	$8,900 (42%)	$8,000 (40%)	$7,900 (33%)
	Upper-middle income	$1,700 (8%)	$1,700 (8%)	$1,900 (8%)
	Unallocated by income group	$4,300 (20%)	$4,600 (23%)	$7,500 (32%)
	Total	**$21,000 (100%)**	**$20,000 (100%)**	**$24,000 (100%)**
NCDs and health systems strengthening	Low-income	$1,300 (28%)	$1,300 (23%)	$2,000 (27%)
	Lower-middle income	$2,200 (50%)	$2,800 (51%)	$4,100 (55%)
	Upper-middle income	$530 (12%)	$860 (15%)	$750 (10%)
	Unallocated by income group	$480 (11%)	$590 (11%)	$590 (8%)
	Total	**$4,500 (100%)**	**$5,600 (100%)**	**$7,400 (100%)**

Note : Constant 2021 prices (US$ millions). All data have been rounded to a maximum of two significant figures. 'Low-income' refers to LDCs and other low-income countries.

Annexes

Annex 1. Methodological approach

Table A.1. Categorization of DAH+ by function based on CRS codes

Purpose code	Purpose code name	Purpose code description	Function	Sub-function
12110	Health policy and administrative management	Health sector policy, planning and programmes; aid to health ministries, public health administration; institution capacity building and advice; medical insurance programmes; including health system strengthening and health governance; unspecified health activities.	Country specific	Health systems strengthening
12196	Health statistics and data	Collection, production, management and dissemination of statistics and data related to health. Includes health surveys, establishment of health databases, data collection on epidemics, etc.	Global public good	Knowledge generation
12181	Medical education/training	Medical education and training for tertiary level services.	Country specific	Health systems strengthening
12182	Medical research	General medical research (excluding basic health research and research for prevention and control of NCDs (12382)).	Global public good	Product development
12191	Medical services	Laboratories, specialised clinics and hospitals (including equipment and supplies); ambulances; dental services; medical rehabilitation. Excludes	Country specific	Health systems strengthening

		noncommunicable diseases (123xx).		
12220	Basic health care	Basic and primary health care programmes; paramedical and nursing care programmes; supply of drugs, medicines and vaccines related to basic health care; activities aimed at achieving universal health coverage.	Country specific	Priority infections and maternal health conditions
12230	Basic health infrastructure	District-level hospitals, clinics and dispensaries and related medical equipment; excluding specialised hospitals and clinics (12191).	Country specific	Health systems strengthening
12240	Basic nutrition	Micronutrient deficiency identification and supplementation; Infant and young child feeding promotion including exclusive breastfeeding; Non-emergency management of acute malnutrition and other targeted feeding programs (including complementary feeding); Staple food fortification including salt iodization; Nutritional status monitoring and national nutrition surveillance; Research, capacity building, policy development, monitoring and evaluation in support of these interventions. Use code 11250 for school feeding and 43072 for household food security.	Country specific	Priority infections and maternal health conditions
12250	Infectious disease control	Immunisation; prevention and control of infectious and	Country specific	Priority infections and maternal

		parasite diseases, except malaria (12262), tuberculosis (12263), COVID-19 (12264), HIV/AIDS and other STDs (13040). It includes diarrheal diseases, vector-borne diseases (e.g. river blindness and guinea worm), viral diseases, mycosis, helminthiasis, zoonosis, diseases by other bacteria and viruses, pediculosis, etc.		health conditions
12261	Health education	Information, education and training of the population for improving health knowledge and practices; public health and awareness campaigns; promotion of improved personal hygiene practices, including use of sanitation facilities and handwashing with soap.	Country specific	Health systems strengthening
12262	Malaria control	Prevention and control of malaria.	Country specific	Priority infections and maternal health conditions
12263	Tuberculosis control	Immunisation, prevention and control of tuberculosis.	Country specific	Priority infections and maternal health conditions
12264	COVID-19 control	All activities related to COVID-19 control e.g. information, education and communication; testing; prevention; immunisation, treatment, care.	Management of cross-border externalities	Outbreak preparedness & response
12281	Health personnel development	Training of health staff for basic health care services.	Country specific	Health systems strengthening

12310	NCDs control, general	Programmes for the prevention and control of NCDs which cannot be broken down into the codes below.	Country specific	NCDs
12320	Tobacco use control	Population/individual measures and interventions to reduce all forms of tobacco use in any form. Includes activities related to the implementation of the WHO Framework Convention on Tobacco Control, including specific high-impact demand reduction measures for effective tobacco control.	Management of cross-border externalities	Responses to marketing of unhealthful products
12330	Control of harmful use of alcohol and drugs	Prevention and reduction of harmful use of alcohol and psychoactive drugs; development, implementation, monitoring and evaluation of prevention and treatment strategies, programmes and interventions; early identification and management of health conditions caused by use of alcohol and drugs [excluding narcotics traffic control (16063)].	Management of cross-border externalities	Responses to marketing of unhealthful products
12340	Promotion of mental health and well-being	Promotion of programmes and interventions which support mental health and well-being resiliency; prevention, care and support to individuals vulnerable to suicide. Excluding treatment of addiction to tobacco, alcohol and	Country specific	NCDs

		drugs (included in codes 12320 and 12330).		
12350	Other prevention and treatment of NCDs	Population/individual measures to reduce exposure to unhealthy diets and physical inactivity and to strengthen capacity for prevention, early detection, treatment and sustained management of NCDs including: Cardiovascular disease control: Prevention, screening and treatment of cardiovascular diseases (including hypertension, hyperlipidaemia, ischaemic heart diseases, stroke, rheumatic heart disease, congenital heart disease, heart failure, etc.). Diabetes control: Prevention, screening, diagnosis, treatment and management of complications from all types of diabetes. Exposure to physical inactivity: Promotion of physical activity through supportive built environment (urban design, transport), sports, health care, schools and community programmes and mass media campaign. Exposure to unhealthy diet: Programmes and interventions that promote healthy diet through reduced consumption of salt, sugar and fats and	Country specific	NCDs

		increased consumption of fruits and vegetables e.g. food reformulation, nutrient labelling, food taxes, marketing restriction on unhealthy foods, nutrition education and counselling, and settings-based interventions (schools, workplaces, villages, communities). Cancer control: Prevention (including immunisation, HPV and HBV), early diagnosis (including pathology), screening, treatment (e.g. radiotherapy, chemotherapy, surgery) and palliative care for all types of cancers. Implementation, maintenance and improvement of cancer registries are also included. Chronic respiratory diseases: Prevention, early diagnosis and treatment of chronic respiratory diseases, including asthma. Excludes: Tobacco use control (12320), Control of harmful use of alcohol and drugs (12330), research for the prevention and control of NCDs (12382).		
12382	Research for prevention and control of NCDs	Research to enhance understanding of NCDs, their risk factors, epidemiology, social determinants and economic impact; translational and	Global public good	Knowledge generation

		implementation research to enhance operationalisation of cost-effective strategies to prevent and control NCDs; surveillance and monitoring of NCD mortality, morbidity, risk factor exposures, and national capacity to prevent and control NCDs.		
13010	Population policy and administrative management	Population/development policies; demographic research/analysis; reproductive health research; unspecified population activities. (Use purpose code 15190 for data on migration and refugees. Use code 13096 for census work, vital registration and migration data collection.)	Country specific	Priority infections and maternal health conditions
13096	Population statistics and data	Collection, production, management and dissemination of statistics and data related to Population and Reproductive Health. Includes census work, vital registration, migration data collection, demographic data, etc.	Global public good	Knowledge generation
13020	Reproductive health care	Promotion of reproductive health; prenatal and postnatal care including delivery; prevention and treatment of infertility; prevention and management of consequences of abortion; safe motherhood activities.	Country specific	Priority infections and maternal health conditions

13030	Family planning	Family planning services including counselling; information, education and communication (IEC) activities; delivery of contraceptives; capacity building and training.	Country specific	Priority infections and maternal health conditions
13040	STD control including HIV/AIDS	All activities related to sexually transmitted diseases and HIV/AIDS control e.g. information, education and communication; testing; prevention; treatment, care.	Country specific	Priority infections and maternal health conditions
13081	Personnel development for population and reproductive health	Education and training of health staff for population and reproductive health care services.	Country specific	Priority infections and maternal health conditions
16064	Social mitigation of HIV/AIDS	Special programmes to address the consequences of HIV/AIDS, e.g. social, legal and economic assistance to people living with HIV/AIDS including food security and employment; support to vulnerable groups and children orphaned by HIV/AIDS; human rights of HIV/AIDS affected people.	Country specific	Priority infections and maternal health conditions

Table A2. Key terms*

Sub-function	Key terms
Product development	IAVI, DNDi, r&d, research & development, product development, product development partnership, pdp, technology, technologies, clinical trial, PRND, poverty-related, poverty related, tropical disease, neglected disease, prequalification, pre-qualification, clinical, Koch, NIH, National Institutes of Health, EDCTP, Pasteur
Development/harmonization of health regulations	Regulatory, international health regulations, standards, IHR, harmoni, standardization, guideline
Knowledge generation	CRVS, research, science, knowledge dissemination, knowledge sharing, south-to-south, south to south, south network, global learning, cross-country learning, regional learning, learning network
Intellectual property	Intellectual, property right, (ip), patent, tech transfer, technology transfer, licens,
Outbreak preparedness and response	Covid-19, covid, ebola, marburg, crimean-congo, crimean, lassa, mers, middle east respiratory syndrome, coronavirus, sars, severe acute respiratory syndrome, nipah, henipaviral, rift valley fever, zika, disease X, pandemic preparedness, pandemic response, zoonoses, zoonotic, cepi, coalition for epidemic preparedness, covax, act-a, influenza, health security, medical countermeasure, mcm, surveillance, manufacturing, surge
AMR	AMR, antimicrobial, counterfeit, fake, sub-standard, antibiotic
Responses to marketing of unhealthful products	beverages, junk food, product marketing, healthy diets, food safety, sugar
Control of cross-border disease movement	Polio, cross-border, cross border, disease movement, biosecurity, eradication, biosafety
Health advocacy and priority setting	Advocacy, leadership, policymaking, leader, decision-making, priority setting, domestic health expenditure, domestic financing, global advocacy, health advocacy, prioritization
Aid effectiveness/accountability	Leadership, communication, aid effectiveness, accountability, transparency
Selected priority conditions	Diarrh, rotavirus, pentavalent, measles, DTP, pneumonia, PCV, pneumococcal, newb, neonat, maternal

*Key terms were also translated into French.

Table A3. DAH+ disbursements by type (constant 2021 US$ millions)

	2020	2021	2022
ODA	$31,000 (78.9%)	$36,000 (79.8%)	$40,000 (84.0%)
Private development finance (philanthropic)	$4,500 (11.5%)	$5,300 (11.8%)	$4,300 (9.0%)
G-FINDER	$3,800 (9.7%)	$3,800 (8.4%)	$3,300 (6.9%)
Total	**$39,000 (100.0%)**	**$45,000 (100.0%)**	**$48,000 (100.0%)**

Annex 3. General ODA trends

In the CIH 3.0 report, we included an analysis on trends in official development assistance (ODA). We used the CRS database to calculate ODA trends (in 2022 constant prices (US$)) from 2020 to 2022. More specifically, we calculated the share of total funding targeted at hosting refugees in donor countries using the CRS purpose code 93010 (refugees/asylum seekers in donor countries). In addition, we calculated funding to the Ukraine between 2020 and 2023 using data from the DAC2A database. Funding for 2023 is preliminary data provided by the OECD DAC.

Between 2021 and 2022 total ODA disbursements grew by 22% from US$228 billion in 2021 to US$277 billion in 2022. This growth is largely attributable to an increase in aid to Ukraine and an increase in aid for hosting refugees in donor countries. ODA for Ukraine increased from $2 billion in 2021 to $29 billion in 2022. Preliminary data suggests that aid to Ukraine grew even further to US$40 billion in 2023, which equates to more aid than was received by the whole of sub-Saharan Africa. The 29 member countries of the DAC OECD used US$9 billion of their bilateral ODA budget in 2020 for hosting refugees and US$31 billion in 2022. Excluding ODA to Ukraine and ODA for hosting refugees in donor countries, total ODA disbursements grew by only 3% from 2020 to 2022.

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