

Supplementary methods annex: Tracking development assistance for HIV/AIDS: the international response to a global epidemic

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0. Outline

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1. Introduction

Development assistance for health (DAH) estimates were extracted from the Institute for Health Metric and Evaluation's (IHME) 2015 Development Assistance for Health database. For a detailed explanation of how DAH is tracked and measured to create this database, see the methods appendix associated with the publications of the 2015 database.[1,2] In short, IHME tracks all funds channeled through established global health channels—such as United Nations Agencies, non-governmental organizations, and bilateral agencies—to recipient country or region, and backward to the source. In this process, double counting is removed, DAH is estimated for recent years for which data is not available due to reporting-time lags, and all values are converted to real 2015 US dollars.

The IHME DAH database divides DAH disbursements into health focus areas, which are primary areas that DAH targets. These health focus areas include HIV/AIDS, malaria, non-communicable disease, and health system strengthening. Some of these health focus areas are further divided into program areas. DAH for HIV is divided into nine program areas: treatment, prevention (excluding prevention of mother-to-child-transmission), prevention of mother-to-child-transmission (PMTCT), orphans and vulnerable children, care and support, counseling and testing, health system strengthening, HIV/TB, and unidentified. For ease of understanding, the program area of prevention is defined as all HIV prevention activities excluding those specifically for PMTCT. HIV care and support entails activities such as pain and palliative care for those living with HIV/AIDS and the provision of necessary nutritional support and treatment of opportunistic infections prior to being healthy enough to be placed on antiretroviral treatment. Treatment includes activities providing and purchasing antiretroviral therapy (ART) for people with HIV/AIDS.

The granularity captured in these nine program areas has not been done before, and changes in methodology were needed to better track DAH for HIV. When possible, budget documents were used to assign DAH to these program areas. When budget documents were unavailable, a keyword search was run on project titles and on project descriptions.

2. Keyword search

IHME uses a keyword search applied to project titles and project descriptions to assign DAH disbursements to health focus areas. The keywords associated with each health focus area are mutually exclusive, and have been peer reviewed and published elsewhere.[1–4] The keyword search is run on each project, the number of words associated with each health focus area is recorded, and DAH is divided into health focus areas according to the relative number of words found in a given project. If eight words associated with HIV are hit, and two words associated with malaria are hit, 4/5 of the DAH is assigned to HIV, and 1/5 is assigned to malaria. The keyword search was adapted to take into account the nine program areas, and these words can be found in Table 1.

Table 1: Terms for keyword searches

Health focus area level I	Program Area	Keywords
HIV/AIDS	HIV envelope/unidentified	hiv, aids, human immunodeficiency virus, reverse transcriptase inhibitor, acquired immune deficiency syndrome, acquired immunodeficiency syndrome, retroviral, condom, vct, male circumcision, art, arv, cd4 count, haart, pmtct, mother-to-child transmission, mother-to-child aids transmission, parent-to-child transmission, mother to child transmission, mother to child aids transmission, parent to child transmission
	Care and Support	care activities, pain relief, symptom relief, social support, chronically ill, clinical monitoring, care and support, psychological service, psychological support, psychosocial support, psychosocial service, material support
	Counseling and Testing	vct, counseling and testing, diagnosis, counselling and testing, testing and counselling, testing and counseling
	Orphans and Vulnerable Children	ovc, orphans, vulnerable children, infected children, vulnerable group, most at risk
	Prevention of mother-to-child transmission (PMTCT)	mother to child aids transmission, mother to child hiv aids transmission, mother to child transmission, parent to child transmission, mother to child transmission, pmtct
	Prevention	condom, prevent, hiv education, aids education, reducing the transmission of hiv, reduce the transmission of hiv, male circumcision, safe blood supply, safe injection, abstinence, awareness, blood safety
	Treatment	retroviral, treat, art, arv, cd4 count, haart, viral load, viral burden, viral titer, viral titre, essential service, drug regimens
Tuberculosis		tuberculos, TB, tubercular, DOTS, directly observed treatment, XDR TB, MDR TB, rifampicin, isoniazid
SWAps/ Health sector support		SWAP, sector wide approach, sector-wide approach, sector program, budget support, sector support, budgetary support, hss, health system strengthening, health systems strengthening, tracking progress, skilled health workers, skilled staff, adequate facilities, training program, staff training, essential medicines, health information system, policy development, early warning alert and response system, health system support, health systems support, capacity-building, capacity building, medical equipment, surgical equipment

The number of words under the HIV envelope/unidentified category is used to determine how much DAH is given to HIV (Table 1). Once this amount is calculated, this DAH is further subdivided to program areas, if any of the words associated with HIV/AIDS program areas were tagged. If no HIV program areas were tagged, all DAH goes to HIV unidentified. To determine the DAH disbursed to HIV health system strengthening and to HIV/TB, another methodology was needed, because these categories are not mutually exclusive with the health system strengthening and TB health focus areas. If both the

Tuberculosis and HIV/AIDS health focus areas were tagged, the DAH assigned to tuberculosis was split between TB and HIV/TB. If the only two health focus areas tagged were SWAps/Health sector support and HIV/AIDS, the funds initially assigned to SWAps/Health sector support from the keyword search were reassigned to HIV health system strengthening. If multiple health focus areas were tagged, such as child health, HIV/AIDS, and SWAps/Health sector support, the funds assigned to SWAps/Health sector support were not reassigned.

3. The Global Fund to Fight AIDS, Tuberculosis, and Malaria (the Global Fund)

In order to estimate DAH allocations to program areas for the Global Fund, budgets by program activity area were extracted from Program Grant Agreement documents.[5] Aggregate budget estimates by “Service Delivery Areas” and “Objectives” for each HIV/AIDS project were extracted and distributed evenly among the years in the grant period based on the number of months the grant was active for each year of the grant period. We matched these Service Delivery areas to the nine program HIV/AIDS areas focused upon in this study. If Service Delivery Area was not present, but Objectives were available, we distributed funds allocated to the Objectives based on the Service Delivery Areas listed within the Objectives in the Grant Performance Report documents. After matching to our nine program areas, these budgets allowed us to calculate the fraction of aid budgeted by each HIV/AIDS program area. We then applied these budget fractions to the funds actually disbursed by year. When budget information was not available or illegible, we distributed project funds to program areas based upon fractions provided by personal correspondence.[6] 60.2% of Global Fund projects did not have budget information available online. An example of using “Service Delivery Areas” is shown in Table 2.

Table 2. Examples of Global Fund Service Delivery Areas

Service Delivery Area	HFA Allocation
HSS: Monitoring & Evaluation	Health Systems Strengthening/ SWAps: 100%
Treatment: Antiretroviral treatment (ARV) and monitoring	Treatment: 100%
Prevention: Blood safety and universal precaution	Prevention: 100%

4. The United States President’s Emergency Plan for AIDS Relief (PEPFAR)

All funds channeled through the United States bilateral agency were extracted from the CRS database.[7] A keyword search was conducted on the CRS data to identify HIV-relevant projects sourced from the United States. We assumed that all of these HIV-specific projects were associated with PEPFAR. Yearly planned funding estimates were then extracted from the PEPFAR Dashboard.[8] Budget codes were mapped to program areas, and the fraction of funds going to each HIV/AIDS program area for each country and year was calculated. These year-specific fractions were multiplied into the DAH in order to disaggregate the DAH into program areas. If a PEPFAR project did not match with the country-year-specific budget fractions, a keyword search was conducted on the project titles and descriptions to distribute DAH into program areas. The budget codes and their corresponding program areas can be found in Table 2.

Table 2. PEPFAR Budget Codes

PEPFAR Budget Code	PEPFAR Budget Code Long	HFA Allocation	PEPFAR Budget Code description
HBHC	Adult Care and Support	Care and Support: 100%	All facility-based and home/community-based activities for HIV-infected adults and their families aimed at extending and optimizing quality of life for HIV-infected clients and their families throughout the continuum of illness through provision of clinical, psychological, spiritual, social, and prevention services. Clinical care should include prevention and treatment of OIs (excluding TB) and other HIV/AIDS-related complications including malaria and diarrhea (providing access to commodities such as pharmaceuticals, insecticide-treated nets, safe water interventions and related laboratory services), pain and symptom relief, and nutritional assessment and support including food. Psychological and spiritual support may include group and individual counseling and culturally-appropriate end-of-life care and bereavement services. Social support may include vocational training, income-generating activities, social and legal protection, and training and support of caregivers. Prevention services may include “prevention for positives” behavioral counseling and counseling and testing of family members. The purchase of OI drugs (excluding TB drugs) should be included under Adult Care and Treatment. ARV treatment should be coded under Adult Treatment and ARV Drugs.
HKID	Orphans and Vulnerable Children	Orphans and Vulnerable Children: 100%	Activities are aimed at improving the lives of orphans and other vulnerable children (OVC) affected by HIV/AIDS, and doing so in a measurable way. Services to children (0-17 years) should be based on the actual needs of the child and could include ensuring access to basic education (from early

			<p>childhood development through secondary level), broader health care services, targeted food and nutrition support, including support for safe infant feeding and weaning practices, protection and legal aid, economic strengthening, training of caregivers in HIV prevention and home-based care, etc. Household-centered approaches that link OVC services with HIV-affected families (linkages with PMTCT, palliative care, treatment, etc.) and strengthen the capacity of the family unit (caregiver) are included along with strengthening community structures which protect and promote healthy child development (schools, churches, clinics, child protection committees, etc.) and investments in local and national government capacity to identify, monitor and track children's well-being. Programs may be included which strengthen the transition from residential OVC care to more family-centered models. (See the OVC Technical Considerations and OVC Guidance for further details.) It is important that funding for OVC is not double-counted in pediatric care activities.</p>
HVTB	TB/HIV	TB: 50% HIV_TB: 50%	<p>Includes exams, clinical monitoring, related laboratory services, treatment and prevention of tuberculosis (including medications), as well as screening and referral of TB clinic clients for HIV testing and clinical care. The location of HIV/TB activities can include general medical settings, HIV/AIDS clinics, home-based care and traditional TB clinics and hospitals. Pediatric TB/HIV services should be included in this budget code.</p>
PDCS	Pediatric Care and Support	Care and Support: 100%	<p>All health facility-based care for HIV-exposed children aimed at extending and optimizing quality of life for HIV-infected clients and their families throughout the continuum of illness through provision of clinical, psychological, spiritual, social, and prevention services. Clinical care should include early infant diagnosis, prevention and treatment of OIs (excluding TB) and other HIV/AIDS-related complications including malaria and diarrhea (providing access to commodities such as pharmaceuticals, insecticide treated nets, safe water interventions and related laboratory services), pain and symptom relief, and nutritional assessment and support including food. Other services – psychological, social, spiritual and prevention services – should be provided as appropriate. Pediatric care and support services should be counted if they are provided at a facility; community services should be included within programs for orphans and vulnerable children (OVC). It is important that funding for pediatric care activities is not double-counted in OVC.</p>
HLAB	Laboratory Infrastructure	Health Systems Strengthening/ SWAPs: 100%	<p>Development and strengthening of laboratory systems and facilities to support HIV/AIDS-related activities including purchase of equipment and commodities and provision of quality assurance, staff training and</p>

			other technical assistance. Specific laboratory services supporting TB testing goes under TB/HIV. Laboratory services supporting counseling should go under Counseling and Testing or PMTCT. Laboratory services supporting care should go under Adult or Pediatric care and support. Laboratory services supporting treatment should be included under Pediatric or Adult Treatment Services.
HVSI	Strategic Information	Health Systems Strengthening/ SWAPs: 100%	HIV/AIDS behavioral and biological surveillance, facility surveys, monitoring partner results, reporting results, supporting health information systems, assisting countries to establish and/or strengthen such systems, and related analyses and data dissemination activities fall under strategic information. Program area-specific monitoring and routine evaluation should be incorporated under the specific program area.
OHPS	Other/Policy Analysis and System Strengthening (this became OHSS in 2009)	Health Systems Strengthening/ SWAPs: 100%	Include activities that contribute to national, regional or district level systems by supporting finance, leadership and governance (including broad policy reform efforts including stigma, gender etc.), institutional capacity-building, supply chain or procurement systems, Global Fund programs and donor coordination. (Please note, as stated in the introduction, other activities will also contribute ultimately to reporting budget attributions to HSS. These calculations will be handled at HQ.)
OHSS	Health Systems Strengthening (this code was OHPS prior to 2009)	Health Systems Strengthening/ SWAPs: 100%	Include activities that contribute to national, regional or district level systems by supporting finance, leadership and governance (including broad policy reform efforts including stigma, gender etc.), institutional capacity-building, supply chain or procurement systems, Global Fund programs and donor coordination. (Please note, as stated in the introduction, other activities will also contribute ultimately to reporting budget attributions to HSS. These calculations will be handled at HQ.)
HVMS	Management and Operations	Distribute evenly among the all other program areas	Includes costs of supporting USG mission staff to manage, support, and administer HIV/AIDS programs including related training, salaries, travel, housing and other personnel-related expenses.
CIRC	Voluntary Medical Male Circumcision	Prevention: 100%	Policy, training, outreach, message development, service delivery, quality assurance, and equipment and commodities lies related to male circumcision. All MC services should include the minimum package; HIV testing and counseling provided on site; age-appropriate pre- and post-operative sexual risk reduction counseling; active exclusion of symptomatic STIs and syndromic treatment when indicated; provision and promotion of correct and consistent use of condoms; circumcision surgery in accordance with national standards and international guidance; counseling on the need for abstinence from sexual activity during wound healing; wound care instructions; and post-operative clinical assessments and care. HIV counseling and testing associated with

			male circumcision can be included in either counseling and testing or male circumcision.
HMBL	Blood Safety	Prevention: 100%	Activities supporting a nationally-coordinated blood program to ensure a safe and adequate blood supply including: infrastructure and policies; donor-recruitment activities; blood collection, testing for transfusion-transmissible infections, component preparation, storage and distribution; appropriate clinical use of blood, transfusion procedures and hemovigilance; training and human resource development; monitoring and evaluation; and development of sustainable systems.
HMIN	Injection Safety	Prevention: 100%	Policies, training, waste-management systems, advocacy and other activities to promote medical injection safety, including distribution/supply chain, cost and appropriate disposal of injection equipment and other related equipment and supplies.
HVAB	Sexual Prevention: Abstinence/Be Faithful	Prevention: 100%	Activities (including training) to promote abstinence, including delay of sexual activity or secondary abstinence, fidelity, reducing multiple and concurrent partners, and related social and community norms that impact these behaviors. Activities should address programming for both adolescents and adults. For sexually active individuals, it is anticipated that programs will include funding from both HVAB and HVOP.
HVCT	HIV Testing and Counseling	Counseling and Testing: 100%	Includes activities in which both HIV counseling and testing are provided for those who seek to know their HIV status (as in traditional VCT) or provider initiated counseling and testing. Funding for counseling and testing in the context of preventing mother-to-child transmission can be included under PMTCT or Counseling and Testing; targets should be included in PMTCT.
HVOP	Sexual Prevention: Other Sexual Prevention	Prevention: 100%	Other activities (including training) aimed at preventing HIV transmission including purchase and promotion of condoms, STI management (if not in palliative care settings/context), messages/programs to reduce other risks of persons engaged in high-risk behaviors. Prevention services should be focused on target populations such as alcohol users; at risk youth; men who have sex with men (MSM); mobile populations, including migrant workers, truck drivers, and members of military and other uniformed services (e.g. police); and persons who exchange sex for money and/or other goods with multiple or concurrent sex partners, including persons engaged in prostitution and/or transactional sexual partnerships.

IDUP	Injecting and Non-Injecting Drug Use	Prevention: 100%	Activities including policy reform, training, message development, community mobilization and comprehensive approaches including medication assistance therapy to reduce injecting drug use. Procurement of methadone and other medical-assisted therapy drugs should be included under this program area budget code. Programs for prevention of sexual transmission within IDUs should be included in this category.
MTCT	Prevention of Mother to Child Transmission	PMTCT: 100%	Activities (including training) aimed at preventing mother-to-child HIV transmission, including ARV prophylaxis for HIV-infected pregnant women and newborns and counseling and support for maternal nutrition. PMTCT-plus ART activities should be described under ARV Drugs and Adult Treatment. Funding for HIV counseling and testing in the context of preventing mother-to-child transmission can be coded under PMTCT or Counseling and Testing; targets should be included in PMTCT. Early infant diagnosis should be included under Pediatric Care.
HTXD	Antiretroviral Drugs	Treatment: 100%	Including procurement, delivery, and in-freight of ARV drugs. All antiretroviral Post-Exposure Prophylaxis procurement for rape victims should be included within this program area. Distribution/supply chain/logistics, pharmaceutical management and related systems strengthening inputs are to be included in the Health Systems Strengthening section.
HTXS	Adult Treatment	Treatment: 100%	Including infrastructure, training clinicians and other providers, exams, clinical monitoring, related laboratory services, and community-adherence activities. Clinical monitoring and management of opportunistic infections is classified under Adult Care and Support.
PDTX	Pediatric Treatment	Treatment: 100%	Including infrastructure, training clinicians and other providers, exams, clinical monitoring, related laboratory services, and community-adherence activities. Clinical monitoring and management of opportunistic infections is classified under Pediatric Care and Support.

5. The Joint United Nations Programme on HIV/AIDS (UNAIDS)

UNAIDS does not provide project-level data. In lieu of project-level data, budget data were extracted from UNAIDS.[9] UNAIDS budgets contain information on program areas targeted, so year-specific budget fractions were calculated and were multiplied into DAH estimates to disaggregate disbursements into program areas.

The methodology of assigning UNAIDS DAH to program area differed for three time periods. For 2008 through 2015, biennial Unified Budget and Workplan documents structure UNAIDS' budget into "Key Outputs." Key Outputs change across time and do not have a one-to-one relationship with program areas. A keyword search was used on these Key outputs to disaggregate these budgets to the program

areas. Budget fractions were calculated and were multiplied into UNAIDS DAH estimates for these years. The Key Outputs can be found in Table 4.

Table 4: Key Outputs from 2008 to 2015

Key Output

Accelerated support to governments and civil society to scale up effective HIV prevention, treatment, care and support services for those engaging in injecting drug use, sex between men, sex work, including in prison settings
Access to ART and IPT to prevent TB for all PLHIV who are eligible, and for all TB patients irrespective of CD4 count
Access to ART to prevent TB for all PLHIV who are eligible, and for all TB patients irrespective of CD4 count.
Access to HIV-related legal services and legal literacy increased for people living with HIV, for key populations and for women
Access to legal services and legal literacy increased, especially for key populations, especially on laws and practices which impede universal access to HIV and health services for key populations including women.
Advocacy and communications strategy addressing investments in HIV sensitive social protection is developed.
Advocacy strategy for progressive and sustainable HIV financing is developed.
Advocacy to secure commitment, effective partnerships and investment of national resources to advance gender equality and rights-based AIDS responses
Strengthened national care and support systems (both government and non-government).
Biomedical, socio-behavioral and operational research agendas developed and promoted to foster scaling up of the response through improved programmes, practices and policies in prevention, treatment and care and support
Biomedical, socio-economic, behavioural, operational research and evaluation agendas developed and promoted to scale up of the response.
Capacities to work with key populations are strengthened
Capacities to work with key populations are strengthened.
Capacity of national AIDS authorities to lead and coordinate an inclusive and broad based multisectoral response on AIDS is strengthened
Capacity of people living with HIV, civil society and community-based organizations is strengthened to meaningfully engage in HIV responses at all levels
Community data and approaches have influenced the design, implementation and decision making of HIV policies and plans
Community systems strengthened through capacity building and inclusion of people living with HIV, most-at-risk, affected and vulnerable groups in national responses
Comprehensive HIV-related treatment and care services scaled up.
Comprehensive programmes for the prevention of mother-to-child transmission scaled up

Coordinated and harmonized leadership by the UN system on AIDS, with strengthened capacity and AIDS competence at global, regional and country levels
Coordinated promotion of human rights-based, gender-responsive and equitable AIDS policies and programmes, and improved government adherence to human rights treaties and other related international obligations.
Coordinated technical and financial support involving governments, multilaterals, bilaterals, the private sector and civil society
Countries are using "Know Your Epidemic - Know Your Response" analysis to re-prioritize the national response and reallocate resources
Countries integrate GBV in their multisectoral HIV strategies and plans
Countries use "Know Your Epidemic - Know Your Response" analysis to re-prioritize the national response and allocate resources
Country systems strengthened & HIV/TB collaborative activities implemented to reduce the burden of TB & HIV for people living with HIV (including the three I's for HIV/TB and earlier treatment to prevent TB transmission, morbidity and mortality).
Country systems strengthened and HIV/TB collaborative activities implemented to reduce the burden of TB and HIV for people living with HIV
Country-specific strategic information generated to monitor access for key populations by documenting barriers to be addressed
Country-specific strategic information generated to monitor access for key populations, documenting barriers to be addressed
Crisis/post-crisis countries significantly affected by HIV integrate GBV and HIV into conflict prevention, resolution and recovery efforts
Demand for treatment increased by mobilising communities (Pillar 5 of Treatment 2.0), promoting policies & engaging them in strategies, service design & delivery, adherence & provision of care & support including nutritional support and ensuring human rights of all affected communities (esp. key populations)
Demand for treatment increased by mobilising communities, promoting policies and engaging them in service design, delivery, adherence and providing care and support (incl. nutritional) ensuring human rights of affected communities (Pillar 5).
Drug regimens optimized (Pillar 1), with minimal toxicities, high barriers to resistance, limited drug interactions & fixed dose combinations or easy-to-use paediatric formulations
Drug regimens optimized, with minimal toxicities, high barriers to resistance, limited drug interactions and fixed dose combinations or easy-to-use paediatric formulations (Pillar 1)
Enhanced capacities at country level to implement effective policies and programs to prevent infections among young people, including young people most at risk of HIV in line with treatment, care and support.
Enhanced capacities at country level to provide equitable access, through the workplace, to comprehensive HIV prevention, treatment and care services.
Enhanced capacities at country level to scale up comprehensive programmes for the prevention of mother-to-child transmission.
Enhanced capacities at country level to scale up provision of AIDS treatment and care services, including antiretroviral therapy, prevention and management of opportunistic infections and other HIV-related conditions, prevention for HIV positive people, nutrition, and palliative and end-of-life care and related education services.
Equitable access and uptake of HIV testing and counselling ensuring confidentiality, informed consent, counselling and appropriate referrals
Equitable access to comprehensive HIV prevention, treatment and care services through the workplace and for mobile populations

Evidence base developed which supports public health approaches for HIV prevention, treatment & care services including drug dependence treatment for people who use drugs, and those living in prisons and other closed settings

Evidence base developed which supports public health approaches for HIV prevention, treatment and care services including opioid substitution therapy for people who inject drugs, and those living in prisons and other closed settings

Evidence based guidance developed in relation to HIV sensitive social transfers.

Evidence on GBV and HIV linkages is collected, shared and used to address GBV within national HIV strategies and/or to review or develop new strategies, and range of actors linking GBV and HIV is increased

Evidence on GBV/HIV linkages is collected and shared with all countries reviewing or developing national HIV strategies or GBV strategies

Evidence on stigma and discrimination and its impact is developed, updated and used to inform programmes and policies in countries

Evidence on stigma and discrimination and its impact is developed, updated and used to inform programmes and policies in countries, with key populations acting as change agents in all countries (and in relevant global forums and processes)

Evidence-based guidance on HIV sensitive social transfers and investments in social protection generated and communications strategies developed

Evidence-informed policies and practices, and improved coordination and harmonization of approaches for HIV prevention, treatment and care for injecting drug users, sex workers, men who have sex with men and transgender people

Expanded dissemination and support for the use of evidence-informed policies and practices as well as improved coordination and harmonization of approaches among all partners to address the vulnerabilities and needs of most-at-risk populations

Financial resources mobilized and leveraged in a timely, predictable and effective manner to match projected resource needs for a scaled up response.

Financial resources mobilized in a more timely and effective manner to match projected resource needs for a scaled up response

For men who have sex with men, sex workers and transgender people, major municipalities have: organizations for prevention, treatment, care and support, non-stigmatizing programmes, rights-based program to ensure positive responses by local authorities

Gender inequality, gender-based violence and discrimination against women and girls are more effectively addressed, including through the engagement of men and boys

Global agenda for an effective, comprehensive AIDS response clearly defined and supported by global policies, standards and guideline

Global agenda for an effective, comprehensive HIV response clearly defined and supported by global policies, standards and guidelines.

Global guidance adapted and implemented to achieve the five pillars of Treatment 2.0, including support for strategic information that measures effectiveness and impact, with particular focus on countries with high prevalence and low ART coverage

Global guidance adapted and implemented to achieve the five pillars of Treatment 2.0, including support for strategic information that measures effectiveness and impact, with particular focus on countries with high prevalence and low ART coverage.

Global plan and monitoring framework, for eliminating new HIV infections among children and for keeping their mothers alive, developed and implemented.

HIV and AIDS corporate results frameworks, both across UNAIDS and among other stakeholders in the response to AIDS, are increasingly synchronized and aligned

HIV and AIDS corporate results frameworks, both across UNAIDS and other stakeholders in the response to AIDS, are increasingly synchronized and aligned

HIV monitoring and evaluation approaches and systems are better coordinated and harmonized.

HIV policies and programmes implemented for populations affected by humanitarian crisis

HIV prevention, treatment, care and support provided, with opioid substitution therapy for people who inject drugs, and HIV prevention, treatment, care and support provided for people living in prisons and other closed settings.

HIV prevention, treatment, care and support services scaled up with, by and for those engaging in injecting drug use, sex between men, sex work, and including those in prisons and other at risk settings

HIV responses integrated into broader development and sectoral plans in line with National AIDS Strategies and Annual Action Plans.

HIV sensitive social transfers are incorporated into national social protection policies and programmes (cash, food, in-kind)

HIV sensitive social transfers are incorporated into national social protection policies and programmes (cash, food, in-kind).

HIV testing and counselling for TB patients expanded; HIV prevention, treatment and care provided by TB programmes

HIV testing and counselling for TB patients expanded; HIV prevention, treatment and care services provided by TB programmes; more HIV-positive TB patients on antiretroviral therapy and co-trimoxazole preventive therapy; and HIV care and support, including nutrition, for TB patients living with HIV improved

HIV transmission and impact on women and girls are reduced through gender responsive service delivery and access to commodities.

Human rights based policies and programmes are coordinated and promoted in all settings, and vulnerability to HIV reduced through an enabling legal environment and access to justice for those affected

Human rights of most-at-risk populations are promoted and protected, including equitable access to services

Implementation of PMTCT improved, including rural and urban areas

Implementation of PMTCT in marginalized populations improved, including rural and urban areas, areas of low HIV prevalence and concentrated epidemic settings.

Improved capacities at country level for human resource planning, training, compensation, and retention measures in all sectors relevant to the response to HIV/AIDS.

Improved capacity of countries to scale up joint HIV/TB planning, training, procurement and delivery of harmonized HIV/TB services, including provision of a package of prevention, care and support for HIV-related tuberculosis.

Improved coordination and harmonization of AIDS monitoring and evaluation approaches and systems

Inclusion of the needs of the most-at-risk, affected and vulnerable groups in National AIDS Strategies and Action Plans with appropriate resources allocated

Increased, harmonized and aligned technical and financial support to scale-up funding and implementation of national AIDS programmes

Informed vocal and capable organizations of men who have sex with men, sex workers and transgender people engaged as partners to advance universal access to HIV prevention, treatment, care and support, including in municipalities, and at least one comprehensive HIV programme in place providing non-judgemental, non-stigmatizing and relevant services.

Innovative ways to finance HIV related health care developed including advocacy strategy for progressive and sustainable HIV financing

Innovative ways to finance HIV related health care promoted.

Inter-governmental and inter-agency organizations, multilateral institutions and funding mechanisms, and civil society are active and committed in the implementation of the UNAIDS 2011-2015 Strategy
Interventions for the prevention of HIV transmission within health care and occupational settings (including blood safety, safe injection practices, universal precautions; occupational health standards, PEP) scaled up.
Key populations act as change agents in all countries and in relevant global forums and processes.
Links between HIV responses and the broader MDG agenda are visible
Links between HIV responses and the broader MDG agenda are visible and show cost-effectiveness.
Maternal and child health systems and services strengthened, including antenatal care and deliveries by skilled attendants, and PMTCT integrated with sexual and reproductive health
Maternal and child health systems and services strengthened, including antenatal care and deliveries by skilled attendants, and PMTCT integrated with sexual and reproductive health.
Movements for HIV related law reform are catalyzed and/or supported
Mutual accountability frameworks, including the UBRAF and systems for delivery of UNAIDS Vision, Mission and Strategy developed
Mutual accountability frameworks, including UBRAF, and systems for delivery of UNAIDS Vision, Mission and Strategy developed
National AIDS Strategies and Action Plans are costed, inclusive, multisectoral, sustainable, prioritized and informed by scientific evidence, reflecting social and epidemiological data
National AIDS Strategies, Annual Action Plans and priorities integrated into broader planning and budgetary processes, such as Poverty Reduction Strategy Papers (PRSPs), national development plans, national budgets, Medium-Term Expenditure Frameworks, and sectoral plans
National capacity, systems and institutions are strengthened to address prevention, treatment, care and support programmes
National coalitions for relevant law and regulation reform are actively advocating for removal of discriminatory HIV-related travel restrictions created including attention to HIV related services for migrants
National coalitions for relevant law and regulation reform are actively advocating for removal of legal barriers to HIV prevention, treatment, care and support including attention to specific needs of women, young people, refugee, MSM, sex workers, IDPs and migrants
National coalitions for relevant law and regulation reform are created including attention to HIV related services for migrants
National HIV strategies and programmes are aligned and integrated into broader health and development planning and programmes
National HIV/AIDS strategies are reviewed and incorporate comprehensive responses to care, protection and support including for key populations
National human resource planning, training, compensation, and retention measures in all sectors relevant to the response are improved
National legislative, procurement and other systems strengthened to make use of TRIPS flexibilities, pooled procurement and local production and cost-reduction and financial sustainability plans for drugs, diagnostics and non-commodity costs developed (Pillar 3 of Treatment 2.0)
National social protection, social health insurance or other health financing strategies reviewed and revised
National strategic information and accountability systems, including one agreed monitoring and evaluation framework for HIV, are developed and implemented
National Strategic planning and programme tools implemented with inclusion of civil society
National systems for procurement and supply management, and legislation to facilitate access to quality affordable HIV medicines, diagnostics, condoms, and other essential HIV commodities are strengthened

National systems strengthened to make use of TRIPS flexibilities, pooled procurement and local production, cost-reduction and financial sustainability for drugs, diagnostics and noncommodity costs (Pillar 3)

New and emerging HIV prevention technologies and approaches (including male circumcision, microbicides, PREP, HIV vaccines) supported and included in the scale up of combination prevention if they continue to show effectiveness in trials

Paediatric HIV treatment and care integrated into existing child health services and treatment programmes to address the needs of exposed and infected children

Paediatric HIV treatment and care integrated into existing child health services and treatment programmes to address the needs of exposed and infected children.

PMTCT policy and programmes expanded, including antiretrovirals (prophylaxis and treatment for eligible women), family planning and primary prevention, including nutritional support.

PMTCT policy and programmes expanded, including antiretrovirals (prophylaxis and treatment for eligible women), sexual and reproductive health (including MHCH, family planning, STIs and GBV), primary prevention and nutritional support.

PMTCT service delivery decentralized and integrated into routine antenatal, delivery and postnatal care settings and other sexual and reproductive health services (e.g. family planning, management of sexually transmitted disease)

PMTCT service delivery decentralized and integrated into routine antenatal, delivery and postnatal care settings and other sexual and reproductive health services (e.g. family planning, management of sexually transmitted disease).

Policies and programmes address equitable access to treatment, care and support for children, women and men, with a particular focus on key populations.

Policies, programmes and services for young people, particularly those most at risk, are implemented

Political commitment and leadership among government, civil society, nonstate partners, private sector, labour and other stakeholders at all levels galvanized to ensure inclusive, multisectoral and sustainable AIDS responses.

Political commitment and leadership among government, civil society, private sector, and other stakeholders at all levels galvanized to ensure inclusive, multisectoral and sustainable HIV responses.

Presence of transformative leadership and commitment for a sustainable AIDS response including at national and local levels and among key populations.

Prevention of sexual transmission of HIV and STI strengthened including through sexual and reproductive health policy, programmes and service linkage

Programmes/resources/strategies to work with PLHIV in terms of positive health, dignity and prevention are expanded

Programmes/resources/strategies to work with PLHIV in terms of positive health, dignity and prevention are expanded.

Promotion and Expansion in the use of point-of-care and other simplified platforms for diagnosis and treatment monitoring (Pillar 2 of Treatment 2.0) (e.g. rapid diagnosis, point-of-care CD4 and viral load testing, and tests for related conditions)

Proposals for law reform or removal of legal/regulatory barriers are approved

Protection, care and support for children affected by AIDS are provided.

Provision of HIV prevention, treatment, care and support services including drug dependence treatment, as per UN guidance, for people who use drugs including those living in prisons and other closed settings.

Range of actors linking GBV and HIV is increased; Evidence on GBV/HIV linkages is collected and shared to all countries reviewing or developing national HIV strategies or GBV strategies

Reliable and timely data, information and analyses on global, regional and national trends are available and used, and the estimation of global and country HIV resource needs and tracking of financial flows are improved.

Reliable data, information and analyses made available on global, regional and national trends of the AIDS epidemic, its impact, and national responses, as well as improved estimation of global and country AIDS resource needs and tracking of financial flows

Reliable information and monitoring systems established, and external donor support and technical assistance mobilized

Reliable information and monitoring systems established, and external donor support and technical assistance mobilized.

Review and adaptation of national legislation and policies concerning narcotic drugs, criminal justice, prison management and HIV have been facilitated

Review and adaptation of national legislation and policies concerning narcotic drugs, criminal justice, prison management and HIV have been facilitated.

Scaled up and harmonised joint HIV/TB planning, training, procurement and delivery of HIV/TB services

Service delivery decentralized and integrated with prevention and other health programmes to increase access to and quality and sustainability of treatment (Pillar 4 of Treatment 2.0).

Skills built to address gender, GIPA and human rights aspects of HIV epidemic.

Skills built to address gender, GIPA and human rights aspects of the HIV epidemic

Social movements that address HIV-specific needs of women and girls catalyzed and strengthened, including through the engagement of men and boys

Social movements that address HIV-specific needs of women and girls catalyzed and strengthened.

Stigma, discrimination and other key social determinants of vulnerability addressed in HIV policies and programmes

Strategic action on HIV incorporated into national gender plans, and women's human rights action frameworks, with appropriate budgets for implementation, monitoring and evaluation

Strategic actions for women and girls are incorporated into national AIDS strategic plans, with appropriate budgets for implementation, monitoring and evaluation

Strategic actions on HIV are incorporated into national gender plans, sexual and reproductive & maternal & child health plans, and women's human rights action frameworks, with appropriate budgets for implementation, monitoring and evaluation

Strategic alliances and partnerships are established and well defined for quality diagnostics and treatment, and elimination of new child infections

Strategic alliances and partnerships are established and well defined for quality diagnostics and treatment, and elimination of new child infections.

Strategic information tools and processes further refined, shared and utilized for decision making.

Strategic information tools and processes refined, shared and utilized for decision making

Strategies for national social protection and health care financing systems aligned with best practice and implemented

Strategies, policies, services, and resource allocation programming within hyper-endemic countries account for HIV prevention, treatment, care and support, gender equality and gender-based violence

Strengthened capacity of inclusive national AIDS authorities to lead and coordinate a broad based multisectoral and multipartner response on AIDS, to convene participatory processes to develop National AIDS Strategies and Annual Action Plans that are costed, inclusive, sustainable, credible, and informed by scientific evidence and social and epidemiological data; and to oversee the development and implementation of one agreed national monitoring and evaluation framework for AIDS

Strengthened capacities and coordinated approaches of government and humanitarian actors to implement internationally accepted policies and standards, and effective and sustainable multisectoral HIV and AIDS programmes for populations of humanitarian concern, including for food insecure households, migrants and mobile populations, and uniformed groups

Strengthened capacities at country level for the provision of essential HIV prevention services, including prevention of sexual transmission and development of new HIV prevention technologies

Strengthened capacities at country level to prevent HIV among women and girls, reduce vulnerability of women and girls and reduce the impact of AIDS on women and girls, including reducing and eliminating gender-based violence and trafficking

Strengthened capacities at country level to provide protection, care and support for children affected by HIV/AIDS.

Strengthened capacity of countries to ensure equitable access to HIV testing and counselling that ensures confidentiality, informed consent and counselling

Strengthened capacity of country partners to assess and develop programmes to mitigate the socio-economic impact of AIDS

Strengthened capacity of government and civil society to address AIDS-related stigma and discrimination and other human rights issues especially in relation to most-at-risk populations.

Strengthened capacity of government and civil society to address gender inequality, gender-based violence, and discrimination against women and girls in responding to AIDS and to engage men and boys in this response

Strengthened capacity of government and civil society to overcome legal and policy barriers impeding equitable access to HIV prevention, treatment, care and support services and commodities, including those designed specifically for vulnerable and most-at-risk populations

Strengthened capacity of national and regional authorities in developing countries to utilize the flexibilities in the global trade rules in promoting wider access to affordable HIV-related pharmaceuticals and prevention commodities

Strengthened capacity of young people, youth-led organizations, key service providers and partners to develop, implement, monitor and evaluate HIV prevention programmes

Strengthened capacity of young people, youth-led organizations, key service providers and partners to develop, implement, monitor and evaluate HIV prevention programmes targeting young people in school and in community settings including through HIV testing and risk reduction counselling, and comprehensive condom programming.comprehensive sexuality education,

Strengthened capacity to plan, implement and evaluate combination prevention programmes that meet the needs of individuals and communities

Strengthened capacity to plan, implement and evaluate combination prevention programmes that meet the needs of individuals and communities.

Strengthened human rights and gender competencies among parliamentarians, judges, law enforcement officials, community and traditional leaders and other relevant actors

Strengthened leadership and capacity of people living with HIV and groups of people living with HIV, civil society and community-based organizations to meaningfully engage in AIDS responses at all levels

Strengthened national social protection, care and support systems (both government and non-governments)

Strengthened national systems for procurement and supply management for high quality HIV medicines, diagnostics, condoms, and other essential HIV commodities

Support provided to civil society to further enable leadership and advocacy efforts

Sustainable programmes to mitigate the socio-economic impact of AIDS are developed and implemented through strengthened capacity of country partners

Technical support provided, including through civil society technical support providers, to strengthen community systems and provide HIV-related services

The UBRAF is managed, monitored and reported in a transparent way to meet the needs of different stakeholders

Transformative leadership and commitment for a sustainable AIDS response, at national and local levels and in key populations

UN system support coordinated and harmonised to strengthen the HIV response at global, regional and country levels

UNAIDS Division of Labour is systematically operationalized and monitored at global, regional and country levels

UNAIDS Division of Labour is systematically operationalized and monitored at global, regional and country levels.

UNAIDS support and resources developed, deployed and implemented for maximum efficiency and impact

UNAIDS support services and resources are developed, deployed and implemented for maximum efficiency and impact

For 1998 to 2007, annual Unified Budget and Workplan documents disaggregate UNAIDS budget using “Programme Components,” rather than Key Outputs. These Programme Components are shorter and more exact than the Key Outputs used from 2008 to 2015, so each component was manually matched to a program area. When a Programme Component corresponded to multiple program areas, we disaggregate the budgeted funds among these program areas according to their proportions from 2008 to 2010. Once all budgeted money was matched with a program area, budget fractions were calculated, and these were multiplied into UNAIDS DAH estimates, to disaggregate disbursements. The Programme Components and their corresponding program areas can be found in Table 5.

Table 5: Programme Components and corresponding program areas

Years	Programme Component	Program area
1998-1999	Administration and support	Split proportionally among all
1998-1999	Advocacy and public information	Unidentified
1998-1999	Advocacy and public information	Unidentified
1998-1999	Alleviation of the impact of HIV/AIDS on children, young people, and their families	Orphans and vulnerable children
1998-1999	Care and counselling for HIV/AIDS/STD	Care and support
1998-1999	Communications programming	Unidentified
1998-1999	Community responses, including strengthening of networks of people living with HIV/AIDS and NGOs	Care and support, and treatment
1998-1999	Condom programming	Prevention
1998-1999	Development and HIV/AIDS	Unidentified
1998-1999	Difficult-to-reach and vulnerable populations	Prevention

1998-1999	Gender and HIV/AIDS	Unidentified
1998-1999	Governance, coordination, management, and performance monitoring and evaluation	Health system strengthening
1998-1999	Human rights, ethics, and law	Unidentified
1998-1999	Information systems, development, and services	Health system strengthening
1998-1999	Information systems, development, and services	Health system strengthening
1998-1999	Institutional settings	Health system strengthening
1998-1999	Intercountry technical network development	Health system strengthening
1998-1999	Office of the Director, country planning, and program development	Split proportionally among all
1998-1999	Office of the Director, external relations and advocacy	Split proportionally among all
1998-1999	Office of the Director, policy, strategy, and research	Split proportionally among all
1998-1999	Resource mobilization	Health system strengthening
1998-1999	School-based interventions and services	Prevention
1998-1999	Strengthening of health systems	Health system strengthening
1998-1999	Support to national responses	Health system strengthening
1998-1999	Technology for prevention of HIV/AIDS/STD	Prevention
1998-1999	The Initiative Fund	Unidentified
2000-2001	Advocacy, public information, and resource mobilization	Unidentified
2000-2001	Alleviation of the impact of HIV/AIDS	Unidentified
2000-2001	Capacity building and support at the national level	Health system strengthening
2000-2001	Capacity building and support at the regional/intercountry level	Health system strengthening
2000-2001	Care and counselling for HIV/AIDS/STD	Care and support
2000-2001	Communications programming	Unidentified
2000-2001	Community responses, especially of people living with HIV/AIDS and NGOs	Care and support, and treatment
2000-2001	Dynamics, determinants, surveillance, and monitoring of the epidemic	Prevention
2000-2001	Evaluation and monitoring	Health system strengthening
2000-2001	Governance, management, and administration	Health system strengthening
2000-2001	Over-arching socio-economic concerns and enabling environments	Unidentified
2000-2001	Programming on HIV/AIDS/STD prevention methods and tools	Prevention

2000-2001	Protection and support to vulnerable populations, including young people	Orphans and vulnerable children
2000-2001	The Initiative Fund	Unidentified
2002-2003	Addressing those most vulnerable to, and at greatest risk of, HIV infection	Prevention
2002-2003	Care and support to individuals and communities affected by HIV/AIDS	Care and support
2002-2003	Cross-cutting issues required for an expanded response	Health system strengthening
2002-2003	Epidemiological and strategic information	Health system strengthening
2002-2003	Governance, management, and administration	Health system strengthening
2002-2003	Human resources and insitutional capacities in key sectors	Health system strengthening
2002-2003	Mobilizing financial resoruces	Unidentified
2002-2003	Mobilizing political and public support	Health system strengthening
2002-2003	Operations and biomedical research	Unidentified
2002-2003	Policies, legislation, and programs	Health system strengthening
2002-2003	Protecting children and young people	Orphans and vulnerable children
2002-2003	Regional strategy and technical support	Health system strengthening
2002-2003	Strengthening national strategic planning and coordination	Health system strengthening
2002-2003	UN system mobilization, planning, performance monitoring and evaluation	Unidentified
2004-2005	Alleviating socioencomic impact and addressing special situations	Unidentified
2004-2005	Building capacity and leadership, including human rights	Health system strengthening
2004-2005	Care, support, and treatment	Care and support, and treatment
2004-2005	Prevention and vulnerability reduction	Prevention
2004-2005	Research and development	Unidentified
2004-2005	Resources, follow-up, monitoring and evaluation	Health system strengthening
2006-2007	AIDS in conflict- and disaster-affected regions	Unidentified
2006-2007	Children affected by HIV and AIDS	Orphans and vulnerable children
2006-2007	Country capacity - Three Ones	Health system strengthening
2006-2007	Family and community-based care	Care and support, and treatment
2006-2007	Health care systems for treatment of HIV and AIDS	Health system strengthening
2006-2007	HIV prevention	Prevention

2006-2007	Human and technical resources	Health system strengthening
2006-2007	Human rights	Unidentified
2006-2007	Leadership and advocacy	Health system strengthening
2006-2007	National action to alleviate impact	Unidentified
2006-2007	Partnerships	Unidentified
2006-2007	Programs addressing vulnerability to HIV	Prevention
2006-2007	Resource mobilization, tracking, and needs estimation	Health system strengthening
2006-2007	Strategic information, research, and reporting	Health system strengthening
2006-2007	UN system coordination	Split proportionally among all

Finally, no budget information was available further disaggregate UNAIDS DAH for 1996 and 1997. Consequently, the average budget fractions from 1998 to 2000 were taken, and these were multiplied into UNAIDS DAH estimates for the years 1996 and 1997.

Citations:

- 1 Dieleman JL, Graves C, Johnson E, Templin T, Birger M, Hamavid H, *et al.* Sources and Focus of Health Development Assistance, 1990-2014. *JAMA* 2015; **313**:2359–2368.
- 2 Financing Global Health 2014: Shifts in Funding As The MDG Era Closes. Seattle, WA: Institute for Health Metrics and Evaluation; 2015.
- 3 Ravishankar N, Gubbins P, Cooley RJ, Leach-Kemon K, Michaud CM, Jamison DT, *et al.* Financing of global health: tracking development assistance for health from 1990 to 2007. *The Lancet* 2009; **373**:2113–2124.
- 4 Financing Global Health 2013: Transition in the Age of Austerity. Seattle, WA: Institute for Health Metrics and Evaluation; 2014.
- 5 The Global Fund. Grant Portfolio. <http://www.theglobalfund.org/en/portfolio/find/> (accessed 30 Nov2015).
- 6 D’Souza C. RE: Global Fund spending on HIV/AIDS. 2016.
- 7 Organisation for Economic Co-Operation and Development. Creditor Reporting System (OECD-CRS). <http://stats.oecd.org/index.aspx?r=484118> (accessed 30 Nov2015).
- 8 The United States President’s Emergency Plan for AIDS Relief. PEPFAR Dashboards. <https://data.pepfar.net/> (accessed 1 Nov2015).
- 9 Joint United National Programme on HIV/AIDS. Unified Budget and Workplan. <http://search.unaids.org/search.asp?lg=en&search=unified%20budget> (accessed 30 Nov2015).