PRIMARY HEALTH CARE SYSTEMS (PRIMASYS)

Case study from Uganda

Abridged Version
Uganda is a low-income country situated in East Africa with a population of 39.03 million people, 79.5% of whom reside in rural areas.¹ The country's population is generally young, with more than half aged below 18 years.² In addition, at a growth rate of 3.4% – the fifth highest in the world – the population is growing rapidly, having doubled between 1980 and 2002, and tripled by 2015 (Figure 1).

The population is increasingly affected by a double burden of disease. The burden is still heavily made up of infectious diseases, with the five leading causes of mortality being HIV/AIDS (17%), malaria (12%), lower respiratory infections (7%), tuberculosis (5%) and meningitis (4%).³ However, there is a growing prevalence of noncommunicable diseases (NCDs) – the sixth and seventh leading causes of mortality are cardiovascular diseases and cancers respectively, and NCDs are estimated to account for over a quarter (27%) of all deaths in the country. Although primary health care (PHC) in the country has mostly been tailored to communicable diseases, it is evolving to ensure that the noncommunicable burden is addressed.

Table 1 shows data related to basic population and health indicators in Uganda.

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3. Centers for Disease Control and Prevention, Uganda (https://www.cdc.gov/globalhealth/countries/uganda/).
Table 1. Basic population and health indicators in Uganda

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Value</th>
<th>Year</th>
<th>Source of information</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total population of country</td>
<td>39 032 383</td>
<td>2015</td>
<td>United Nations Population Division, 2015$^a$</td>
</tr>
<tr>
<td>Distribution of population (rural/urban)</td>
<td>0.79/0.21</td>
<td>2014</td>
<td>Uganda National Population and Housing Census, 2014$^b$</td>
</tr>
<tr>
<td>Life expectancy at birth (years)</td>
<td>63.3</td>
<td>2014</td>
<td>Uganda National Population and Housing Census, 2014$^b$</td>
</tr>
<tr>
<td>Infant mortality rate</td>
<td>43.8 per 1000 live births</td>
<td>2013</td>
<td>World Health Organization, 2014$^c$</td>
</tr>
<tr>
<td>Under-5 mortality rate</td>
<td>66.1 per 1000 live births</td>
<td>2013</td>
<td>World Health Organization, 2014$^c$</td>
</tr>
<tr>
<td>Maternal mortality rate</td>
<td>360 per 100 000</td>
<td>2013</td>
<td>World Health Organization, 2014$^c$</td>
</tr>
<tr>
<td>Immunization coverage under 1 year – DPT3</td>
<td>78%</td>
<td>2012</td>
<td>WHO/UNICEF estimate, 2014$^c$</td>
</tr>
<tr>
<td>Income or wealth inequality (Gini coefficient)</td>
<td>44.3</td>
<td>2013</td>
<td>World Bank, 2013$^d$</td>
</tr>
<tr>
<td>Total health expenditure as proportion of GDP</td>
<td>7.2%</td>
<td>2014</td>
<td>National Health Accounts, 2014$^e$</td>
</tr>
<tr>
<td>PHC expenditure as % of total health expenditure</td>
<td>66%</td>
<td>2012</td>
<td>National Health Accounts, 2014$^e$</td>
</tr>
<tr>
<td>Out-of-pocket payments as proportion of total expenditure on health</td>
<td>41%</td>
<td>2014</td>
<td>National Health Accounts, 2014$^e$</td>
</tr>
</tbody>
</table>


PHC is provided through both public and private institutions. The government dominates PHC provision, accounting for about 66% of health service delivery outputs.$^4$ The public PHC system is based on a referral system that is led by doctors and heavily supported by nurses and other cadres, including clinical officers and community health workers.$^5$ The latter two categories are especially significant in the rural areas, where doctors and nurses are present in fewer numbers. The private primary care system is also provided by doctor-led (urban) and clinical officer- or nurse-led (rural) facilities. However, its referral system is not as well defined as that in the public system.

PHC is provided through a National Minimum Health Care Package (NMHCP). The cost of funding this package is estimated at US$ 28 per capita. Although there have been increases in public spending on health, the actual public funding of the NMHCP is at US$ 8.2 per capita, which is below the necessary estimate of US$ 28 per capita, and much lower than the US$ 34 target estimated by the Commission on Macroeconomics and Health for minimum health care packages.$^6$

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## Timeline

Policies and programmes to support PHC in Uganda have evolved over the years in an effort to respond to domestic needs and to align with the global health agenda. Table 2 gives an overview of relevant policies and programmes concerning PHC in Uganda since the Alma Ata Declaration on PHC in 1978, when the concept was introduced to the country.

### Table 2. Historical overview of relevant policies and programmes concerning PHC in Uganda

<table>
<thead>
<tr>
<th>Year</th>
<th>Reform or programme</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>1978</td>
<td>Alma Ata Declaration</td>
<td>PHC concept introduced and adopted in Uganda.7</td>
</tr>
<tr>
<td>1983</td>
<td>Two programmes important to PHC introduced: (a) Control of Diarrheal Diseases; (b) UNICEF GOBI-FFF</td>
<td>GOBI-FFF (growth monitoring, oral rehydration, breast-feeding, immunization; female education, family spacing, food supplementation). This was part of the selective PHC vertical programmes that were introduced with the aim of preventing most health and nutrition problems.8</td>
</tr>
<tr>
<td>1986</td>
<td>Fundamental change in regime</td>
<td>This was marked by the end of the guerrilla war that had begun in the late 1970s, ushering in the government administration that has remained to date.</td>
</tr>
<tr>
<td>1987</td>
<td>Major restructuring of the health system in Uganda</td>
<td>This followed the release of the findings and recommendations of the Health Policy Review Commission. Many of the PHC structures and protocols in place today were recommended at that time.9</td>
</tr>
<tr>
<td>1987</td>
<td>Harare Declaration on Strengthening District Health Systems Based on Primary Health Care</td>
<td>This introduced the concept of the health subdistrict, which Uganda adopted as part of its current governance and service delivery structure.10</td>
</tr>
<tr>
<td>1992</td>
<td>Health Management Information System (HMIS) introduced</td>
<td>The current HMIS was introduced in Uganda to provide information for planning, decision-making and evaluation.11</td>
</tr>
<tr>
<td>1992</td>
<td>Medium-Term Expenditure Framework (MTEF) introduced</td>
<td>This was a major guide for policy and planning for the sector at that time.12</td>
</tr>
<tr>
<td>1993</td>
<td>Uganda National Drug Policy</td>
<td>In line with the policy, the National Medical Stores (NMS) and the National Drug Authority (NDA) were introduced to maintain good standards of health for Ugandans, through ensuring availability, accessibility and affordability at all times of essential drugs that are of appropriate quality, safety and efficacy, and by promoting their rational use.</td>
</tr>
<tr>
<td>1993</td>
<td>User fees introduced</td>
<td>The introduction of user fees was triggered by the economic decline that occurred globally. This led to the preventive aspects of health being financed by the government while curative services were financed individually, thus introduction of user fees.13 In the same year the World Bank report on Investing in health was released, calling for the introduction of essential health packages.14</td>
</tr>
</tbody>
</table>

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7 Tashobya CK, Ogwang OP. Primary health care and health sector reforms in Uganda. Health Policy and Development. 2004;2(1).
8 Tashobya CK, Sengooba F, Oliveria VC. Health systems reforms in Uganda: processes and outputs. Health Systems Development Programme, London School of Hygiene and Tropical Medicine, United Kingdom; 2006.
14 Sengooba F. Uganda’s Minimum Health Care Package: rationing within the minimum? Health Policy and Development. 2004;2(1S).
## Case study from Uganda

<table>
<thead>
<tr>
<th>Year</th>
<th>Reform or programme</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>1995</td>
<td>Decentralization</td>
<td>At this time, the current Constitution of the Republic of Uganda was promulgated. One of the resulting reforms was that of decentralization, which puts districts at the core of service provision.¹⁵</td>
</tr>
<tr>
<td>1996</td>
<td>Public-Private Partnership for Health (PPPH)</td>
<td>The concept led to integration of the private sector within the health system, and there were resumed subsidies for the private not-for-profit sector to be able to provide services, including PHC services.</td>
</tr>
<tr>
<td>1997</td>
<td>Poverty Eradication Action Plan (PEAP)</td>
<td>This built on the MTEF and acted as a guide for policy formulation and planning in the sector. It was introduced in response to the high poverty levels and poor health indicators in the 1990s.¹⁶</td>
</tr>
<tr>
<td>1997</td>
<td>Local Governments Act</td>
<td>The introduction of this Act of Parliament gave more administrative authority to the local/district governments, directly affecting PHC administration, finance and service delivery.¹⁷</td>
</tr>
<tr>
<td>1998</td>
<td>Poverty Action Fund (PAF)</td>
<td>The PAF was introduced by the Government of Uganda in response to the need to draw more attention to finance services that directly benefit the poor. The intention was direct reallocation of funds to benefit the poorer parts of the population.</td>
</tr>
<tr>
<td>2000</td>
<td>Sectorwide approach (SWAp)</td>
<td>This was introduced in response to widespread dissatisfaction with fragmented donor-sponsored projects and prescriptive adjustment lending. The SWAp was intended to provide a more coherent way to articulate and manage government-led sectoral policies and expenditure frameworks and build local institutional capacity, and to enable more effective relationships between governments and donor agencies.</td>
</tr>
<tr>
<td>1999</td>
<td>National Health Policy I (NHP I)</td>
<td>The policy highlighted PHC as the centre of provision of health services in the country. At about this time a concept paper on the health subdistricts of Uganda was released, giving guidance for governance and provision of services in the districts.</td>
</tr>
<tr>
<td>2000</td>
<td>Health Sector Strategic Plan I (HSSP I)</td>
<td>This was drawn out of the NHP I, and gave guidance on the activation and implementation of health policy.</td>
</tr>
<tr>
<td>March 2001</td>
<td>User fees policy abolished</td>
<td>This was an unexpected turn of events during the presidential campaigns and was passed as a presidential directive while the debate on these was still ongoing.</td>
</tr>
<tr>
<td>2000–2005</td>
<td>Global Health Initiatives</td>
<td>There was a significant increase in GHIs in the sector, resulting in an increase in funding for vertical programmes, especially malaria, tuberculosis and HIV/AIDS. At that time there was an increase in poor accountability and corruption, which significantly affected some of these initiatives, compromising their operations and objectives.</td>
</tr>
<tr>
<td>2010</td>
<td>National Development Plan (NDP) I</td>
<td>The NDP I emphasized investment in the promotion of people’s health and nutrition, which constitute a fundamental human right for all citizens. It laid a foundation for the development of the NHP II, the theme of which was promotion of people’s health to enhance socioeconomic development.¹⁸</td>
</tr>
<tr>
<td>2012</td>
<td>Universal health coverage concept introduced</td>
<td>The relationship between the concept of universal health coverage and PHC initially caused debate; the concept has more recently been viewed as a mechanism to strengthen PHC.</td>
</tr>
</tbody>
</table>

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¹⁵ Anders J. Decentralization and National Health Policy in Uganda: a problematic process. Department of Community Medicine, Malmo University Hospital; 2004.

¹⁶ Public Private Partnership Act, 2015, Uganda.

¹⁷ Local Governments Act, 2015, Uganda.

Governance

The administrative head of the health system in Uganda is the Ministry of Health, governing both the public and private sectors. The main administrative levels for the health system are at the national (central government) level and at the district (and city) level (local governments). The district systems are under the leadership of the District Directorate of Health Services (DDHS) and are present in each of Uganda’s current 112 districts and one city.21 Figure 2 is a representation of these administrative levels aligned with the service delivery and regulatory arrangements within the health system. The ministry manages and supervises activities at the national, regional and district headquarters, while the district directorate manages the health subdistrict (HSD), which is made up of all health centres and village health teams.

Although health service delivery is aligned with administrative levels, the regional-level facilities have no direct administrative level to match them and therefore report directly to the Ministry of Health. The HSD is the primary provider of PHC in Uganda. Tables 3 and 4 show the services provided from the different levels of the HSD to the regional and national levels.

PHC is delivered through a National Minimum Health Care Package (NMHCP) with the help of a hierarchy of health facilities in the HSD. The creation of the HSD in 1999 aimed at enhancing the effectiveness and efficiency in planning, provision and monitoring of health services at the regional and national levels. It is based on several principles, including integrated and better coordination and linkages between various types and levels of health care, and improving community involvement. At its creation, the HSD was meant to be based on constituencies, which comprise the subcounty as the basic unit. However, because of limited resources at the subcounty level, it was deemed only administratively viable to create these HSDs at the county level until such a time as the country’s economic circumstances changed. This has however compromised efficiency of service delivery due to the fact that most counties are very large, with populations of up to 400,000, whereas the HSD was meant to serve populations of up to 100,000 people.

At the national level are the national referral hospitals and regional referral hospitals. In addition to these are semi-autonomous institutions that operate at the national level but support PHC service delivery, including the Uganda Blood Transfusion Services, the National Medical Stores, and the Uganda Public Health Laboratories.

Regulation of services in the health system in Uganda is carried out by several bodies, including the professional councils, which monitor and exercise general supervision over the several different professional cadres; the National Drug Authority, which controls the manufacture, importation, distribution and use of drugs in the country; and the Medicines and Health Service Delivery Monitoring Unit, established by a presidential directive in 2009 in order to improve health services delivery in the country through monitoring the management of essential medicines and other health service delivery accountabilities.22, 23

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22 Medical and Dental Practitioners Act, 1997, Uganda.
23 Lukwago M, Achiro H. Strengthening the monitoring and evaluation system of the medicines and health services delivery monitoring unit. Kampala, Uganda: Makerere University; 2013.
Figure 2. Representation of the health care system of Uganda showing the administrative, service delivery and regulatory arrangements.

**Administrative hierarchy**
- Ministry of Health Headquarters
- District Health Services Headquarters

**Service provision hierarchy**
- National referral hospital
- Regional referral hospitals
- Referral facility (public or private) health centre (HC) or hospital
- HC III
- HC II
- Village health teams (villages/communities/households)

**Regulation**
- Uganda Blood Transfusion Service, National Medical Stores, Uganda Public Health Laboratories
- Professional councils; National Drug Authority; Medicines and Health Service Delivery Monitoring Unit, Ministry of Health; Quality Assurance Department
### Table 3. Hierarchy of health service provision within the district in Uganda

<table>
<thead>
<tr>
<th>Level</th>
<th>Health centre</th>
<th>Description</th>
<th>Approximate population served</th>
<th>Services provided                                                                iveau</th>
</tr>
</thead>
<tbody>
<tr>
<td>District Health subdistrict</td>
<td>Village health team</td>
<td>A satellite health facility with no definite physical structure; it is where health facility outreach teams meet the community for immunization, health education and designated activities.</td>
<td>Village: 1 000</td>
<td>Community-based preventive and promotive health services</td>
</tr>
<tr>
<td>II</td>
<td></td>
<td>The closest structural health facility to the community; it delivers the Minimum Activity Package of the NMHCP. It is at parish level of the politico-administrative system.</td>
<td>Parish: 5 000</td>
<td>Preventive, promotive and outpatient curative health services, and outreach care</td>
</tr>
<tr>
<td>III</td>
<td></td>
<td>The facility that delivers the Intermediate Referral Activity Package of the NMHCP. It handles referrals from HC (health centre) II level, as well as referring to HC IV level. It equates to the subcounty level of local government administration.</td>
<td>Subcounty: 20 000</td>
<td>Preventive, promotive, outpatient curative, maternity and inpatient health services and laboratory services</td>
</tr>
<tr>
<td>IV</td>
<td></td>
<td>The facility is a mini-hospital and delivers the Complimentary Activity Package. It heads the health subdistrict, which equates to the county, equivalent to a parliamentary constituency.</td>
<td>County: 100 000</td>
<td>Preventive, promotive and outpatient curative, maternity, inpatient health services, emergency surgery, blood transfusion and laboratory services</td>
</tr>
</tbody>
</table>

### Table 4. Hierarchy of health service provision at national and regional and levels in Uganda

<table>
<thead>
<tr>
<th>Level</th>
<th>Health centre</th>
<th>Description</th>
<th>Approximate population served</th>
<th>Services provided</th>
</tr>
</thead>
<tbody>
<tr>
<td>National</td>
<td>General hospital</td>
<td>These hospitals are run by either the central government or by city councils. They serve an area of two or more districts with a population equivalent to 5 times that served by the HC IV. They are fully equipped with cadres up to the subspecialist level. They handle referrals from the health subdistrict.</td>
<td>General hospital: 500 000</td>
<td>In addition to services offered at HC IV level, other general services are provided, including in-service training, consultation and research for community-based health care programmes</td>
</tr>
<tr>
<td>Regional referral hospital</td>
<td></td>
<td>These are run by the central government and serve an area equivalent to a geographical region. They however report directly to the Ministry of Health, as there is no regional administrative structure. They handle referrals from the health subdistrict and the general hospitals.</td>
<td>Regional referral hospital: 2 000 000</td>
<td>In addition to services offered at the general hospital, specialist services such as psychiatry, ear, nose and throat (ENT), ophthalmology, dentistry, intensive care, radiology, pathology, specialized surgical and medical services</td>
</tr>
<tr>
<td>National referral hospital</td>
<td></td>
<td>This is the highest level of health facility in the country. These hospitals are run by the central government and are equipped for up to superspecialist services. They serve the whole country, receiving referrals from all levels but most immediately from the regional referral hospitals. They are also equipped for teaching.</td>
<td>National referral hospital: 39 032 383*</td>
<td>Comprehensive specialist services, teaching and research</td>
</tr>
</tbody>
</table>

* Current population estimate.
Financing

Financing for PHC in Uganda is either from government/public or private sources. The proportions that each of these sources contributes to total expenditure on health are shown in figure 3. Private sources have consistently contributed a larger proportion of the funding for PHC. The private sources include households (out-of-pocket funds), private firms and not-for-profit organizations. Out-of-pocket funds contribute about 55% of all private health expenditure and 41% of total expenditure on health, a trend that has not changed much despite the abolition of user fees in public facilities since 2001. Private health expenditure as a proportion of total expenditure on health is 76%.

Figure 4 shows trends in selected health financing indicators in Uganda over the period 2009–2014. After a spurt of improvement for the indicators between 2009 and 2010, they took a downward trend and have not recovered.

**Figure 3.** Proportions of public and private funding of total health expenditure in Uganda

**Figure 4.** Trends in selected National Health Account indicators, Uganda, 2009–2014
Funds for PHC in the public sector come from two sources. The first is the government’s contribution, which is about 23.9% of total expenditure on health and includes central government funds mainly drawn from taxation, funds collected from decentralized local governments and funds from development partners channelled through general budget support. The government’s contribution to the health sector as a whole is 9.6%, which falls short of the 15% that the government committed to as part of the Abuja Declaration. The second source is donor or development partner funding that does not go to general budget support but is channelled through project support (e.g. to districts and nongovernmental organizations), direct district support and several Global Health Initiatives (GHIs). Development partner funding contributes about 28.6% of total expenditure on health.24

The health care resources in the PHC system are managed by several actors and institutions, including public managers from the Ministry of Health, other line ministries, district health services and parastatals, managing about 30%; and private managers from private health insurance agencies, facility-based NGOs, private firms and households, handling 70% of the funding in the sector. Although public resources in Uganda do have some degree of cross-subsidy, there is inadequate pooling of risk and funds due to the large proportion of out-of-pocket expenditure and the absence of efforts to integrate the different financing mechanisms. Small highly fragmented risk pools exist in the form of community-based health insurance, voluntary private prepayment schemes and health maintenance organizations.

Figure 5 shows transfers of monies for PHC from different sources through all financing agents.

Figure 5. Summary of flow of funds from sources to providers in Uganda


Households finance and handle the biggest proportion of monies, followed by nongovernmental agencies and organizations. Smaller transfers go through government agencies, for example the Uganda Prison Services, the Ministry of Education and Sports and the Uganda Police Services, which are also involved in different PHC activities.

Health care providers in public facilities are provided with a budget from the central government within which to operate. Budgets are mostly historical although there is an increasing effort to base these on information from the HMIS.

In the private sector, providers of PHC on behalf of the government are reimbursed mainly on a fee-for-service basis. This reimbursement mechanism has the potential for problems associated with incentives to over-service (and supplier-induced demand), leading to rapidly spiralling health care costs.

Human resources

PHC in Uganda is provided by health workers who can be categorized as follows: medical doctors and dental surgeons, nurses and midwives, pharmacists, and allied health professionals. Within these categories are finer delineations according to level of education and years of experience. There are about 8300 health workers registered by the different health professional councils for the categories of doctors and dentists, nurses and midwives, and pharmacists. The number of registered allied health workers including clinical officers and laboratory technicians is estimated at 26,685. The number of physicians per 1000 population is 0.03, while that of nurses is 0.46.

In addition to these formally trained medical health workers are teams of community health workers, also referred to as village health teams, who lend significant support to PHC, especially in rural areas where the proportion of skilled health workers is lower. There are currently 179,175 known members of village health teams in Uganda, making a density of 5.17 village health team members per 1000 population.

The government is the largest employer of health workers for PHC, at 42%. Of the rest employed in the private sector, 7% of total health workers are in private not-for-profit organizations, while an estimated 51% work for private for-profit organizations. However, these estimates are blurred for several reasons, including duality of employment, with several health workers employed in both the public and private sectors, and the very loose organization of those in the private sector, presenting difficulty in ascertaining their numbers and distribution.

The distribution of health care workers is affected by the cadre and level of training, and the level of health care unit they serve in. Figure 6 shows the distribution of different cadres in the urban and rural areas of the country. Doctors, dentists and pharmacists are greatly biased towards urban areas, while the allied health workers and the informal categories, such as traditional healers, are found more in the rural settings.

Pre-service training for health workers in the country is carried out in any one of the 110 health worker training institutions, including 10 universities, 51 nursing and midwifery training institutions and 49 allied health training institutions. Since 2008, by an Act of Parliament, accreditation and supervision of pre-service training for all health workers has been primarily under the Ministry of Education and Sports through the National Council of Higher Education (initially under the Ministry of Health). The Ministry of Health now only contributes to the regulation of health worker training through the professional councils. It also contributes to curriculum development and supervising, training and accreditation of new institutions to ensure that the training is adequate and the resulting trained health workers are competent.

28 Continuing Professional Development Accreditation System for Uganda. Uganda Health Professionals Councils; 2009.
Planning and implementation

Planning in the health sector involves multiple stakeholders over several levels of administration. While much of the planning happens at higher levels of administration, at district and national levels, input is ensured from lower levels of the system through consultation. For example, all facilities under a given district may be asked to submit plans and budgets in contribution to the consolidated district plan. Through the hierarchies, village health teams will submit their plans to the HC level II units, which will incorporate those into their own plans before submitting them upwards to HC level III, and so on up to the district level. The district will submit its plan to the Ministry of Health, which will develop a consolidated sector plan and budget. This planning is guided by several policy documents, including the NDP, NHP, and HSSIP. These documents have evolved through several editions over the years, changing to align with the PHC and other needs of the growing population. In addition, the HMIS, which maintains a comprehensive source of health and management information, provides input to the planning process.29

The PHC system attempts to involve users in planning and providing feedback through the health unit management committees that are present at all facilities. Users may also engage with village health teams that are readily accessible, especially in the rural areas.30

For PHC implementation, Uganda has a clear referral system for the public sector, although this is very poorly implemented. The lower health centres are required to act as “gatekeepers” to the system, with clear mandates regarding which conditions they handle and when to refer patients to the next level that offers the required service. This procedure however is not routinely followed, and patients with conditions that could be handled at lower levels self-refer to hospitals at the district, regional and even national level.

Where referral is done according to the sector protocol, challenges arise. There is a very loosely organized ambulance system in the public sector. Ambulances are attached to hospitals and many of these are provided by development partners. Several ambulances are also

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present with clear markings but with no ambulance equipment or services in them. There are also no trained human resources in the country to carry out ambulance services. Only recently, in 2016, has a department to address this issue been formed in the Ministry of Health, but there is no policy or guidelines under which it is operating. In addition, because there is no established service, there are no lines of communication, with the result that when ambulances have attempted to transfer a patient to the nearest hospital in the case of an emergency, the hospitals are often caught unawares and may not be ready for them. Furthermore, there are no established procedures to track those referred once they leave a given point of contact within the system. It is common for many referred patients not to make it to the centre for referral in the designated time or at all, but there is no system to track this or their outcome. Referral in the private sector is even more informal and ad hoc, with no particular protocol or guidelines.

Regulatory processes

There are processes and entities in place to regulate activities and structures geared towards PHC, as passed into law by Acts of Parliament.

The Uganda Medical and Dental Practitioners Council regulates the practice of doctors and dentists in the country. It is mandated with monitoring, general supervision and control, maintenance of professional medical and dental education standards, and enforcing ethics and supervising practice at all levels. In addition, it licenses and gives accreditation to facilities to provide health care services in both the public and private sectors. The Nurses and Midwives Council and the Allied Health Professionals Council perform the same functions for their respective cadres. The Allied Health Professionals Council also regulates laboratory standards in facilities.

There is a gap in regulating non-formal medicine practitioners, who include complementary medicine practitioners, traditional healers, traditional birth attendants, bonesetters and the like. They have loose associations that bring them together but not all members subscribe to them and they do not have any regulatory obligations. The work of the councils, although spelled out clearly, is compromised by their lack of capacity in comparison to the workload, and they have limited financial and human resources. Furthermore, they are expected to execute their work through the local or district governments, which presents a conflict of interest. The local governments execute PHC activities, including recruiting health workers, and should therefore not be part of the regulatory structures.

The National Drug Authority (NDA) is mandated with “ensuring the availability, at all times, of essential, efficacious and cost-effective drugs to the entire population of Uganda as a means of providing satisfactory healthcare and safeguarding the appropriate use of drugs”.\(^{31}\) Over the past two decades, the capacity of the NDA has been improved and it has engaged in several partnerships, especially with development partners. However, complementary medicine products, such as herbal medicines and food or mineral supplements, are still poorly regulated. The Natural Chemotherapeutics Research Institute is mandated with undertaking research into natural products used by traditional medicine practitioners in the country with a view to assessing the therapeutic claims of efficacy and the safety of complementary medicine products in the management of human diseases. Actual regulation of these products falls under the mandate of the NDA, though it is inadequately enforced. The Uganda National Bureau of Standards also regulates products coming into or produced in the country, and may be involved in regulation of some of the aforementioned products, especially those sold openly in grocery stores, for example food and mineral supplements.

The Quality Assurance Department of the Ministry of Health is tasked with ensuring that guidelines and standards are developed, disseminated and used; supervision is undertaken and strengthened at all levels of the health sector; and internal quality assurance capacity is built at all levels, including hospitals.\(^{32}\) However, this department is generally understaffed, which presents a challenge in carrying out its mandate. Due to these challenges, the Medicines and Health Services Delivery Monitoring Unit was formed by a presidential directive to improve health services delivery in the country, through monitoring the management of essential medicines and health service delivery accountabilities. This is a well resourced unit and has been able to carry out its

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\(^{32}\) Patient’s charter. Kampala, Uganda: Ministry of Health, Department of Quality Assurance; 2009. Patient’s charter. Kampala, Uganda: Ministry of Health, Department of Quality Assurance; 2009.
activities successfully, though it has been noted that some of its activities duplicate those carried out by other government departments. It has also grown increasingly unpopular with health workers because of what is seen as overzealousness in the execution of its work, and a lack of attention to health system issues that may occasionally lead to compromised practice.

There are other entities that regulate specific areas in the sector. For example, the Atomic Energy Council regulates use of radiation facilities in hospitals.

The Ministry of Education and Sports regulates the quality and standards of health professional education for the different cadres of PHC in Uganda. It specifically does this through the National Council of Higher Education in consultation with the professional councils. Stakeholders in the health sector feel that their involvement is inadequate and have repeatedly called for review of the Act that moved this responsibility from the health sector to the education sector.

The interests of health consumers in Uganda are very poorly protected. The Ministry of Health has put in place health unit management committees at each health facility. In addition, political leaders at all levels, from the village to Parliament, have been elected to represent the views of citizens and seek accountability on their behalf. While these structures are in place, they are inadequately implemented or enforced, with the result that consumer feedback is not heard and accountability is lacking. Civil society and nongovernmental organizations have often stepped in to fill this gap. The Uganda National Health Consumers’ Organization, for example, aims to act as a formal voice for consumers of health-related products and services in Uganda. It has become very active and involved in policy and decision-making since its establishment in 1999, though it is still not in a regulatory position. It is also plagued with limited resources and is unable to follow up every case concerning health consumers.

Anecdotal evidence from sector stakeholders reveals a general feeling that regulatory procedures in the health sector and the government as a whole are inadequately and inconsistently enforced, due in part to constraints in capacity to follow up and monitor activities in the sector.

Monitoring and information systems

Uganda has developed a health management information system (HMIS), an integrated reporting system used to collect relevant and functional information on a routine basis to monitor the Health Sector Strategic Plan (HSSP) indicators. This in turn supports planning, decision-making, and monitoring and evaluation of the health care delivery system. The HMIS has been gradually improved to HMIS 2 and is now generally trusted to provide reliable information. The system also has internal checks at the different administrative levels and an internal audit, which ensures that the quality of the data it provides is acceptable. However, a number of challenges are still faced: for example, while the system is based on the International Classification of Diseases, the information is gathered from facilities where practitioners and administrators are not well versed with the classification. Further challenges include the lack of motivation for personnel to collect data, lack of full training for data collectors, and the use of outdated tools. The system is also biased towards collection of data from the public sector rather than the private sector. In addition, data are collected on persons that visit health facilities, and there is no mechanism to systematically collect data on the large proportion of persons who use informal rather than formal services.

The data collected are used to inform planning and budgeting. Local leaders are required to analyse and interpret the data and make use of the findings before submitting the data to the central registry where they are aggregated. However, the analysis and use are not optimal, due to a number of reasons – for example, some districts do not have sufficient capacity to analyse and interpret their findings.

Ways forward and policy considerations

Building on the achievements of past decades, Uganda will need to improve significantly in some areas in order to realize its PHC objectives. Some key priority areas are as follows:

• Implementation and policy implementation monitoring need to be strengthened. It is clear the health sector has appropriate policies and programmes but has major gaps in implementation and monitoring. In addition, institutions and persons responsible for PHC are weak in power and capacity. There needs to be a concerted effort in improving what the sector has committed to doing and how, and monitoring implementation of policies and programmes to improved their effectiveness.

• Poor regulation of practice and products leads to outputs with compromised quality. There needs to be strengthened regulation within the system to encourage capacity-building and to stimulate strategies for self-accreditation.

• Financing PHC is still heavily dependent on private monies, including out-of-pocket funds. There needs to be a deliberate effort to reduce payment at the point of service and generally improve pooling of finances and risk to ensure affordable basic care for all and avoid catastrophic expenditure.

• Poor accountability, due to corruption, weakened institutions, poor distribution of resources, and weak efforts to incorporate users’ input and feedback in the system, significantly weaken PHC. The government has to strengthen accountability, effectively distribute the available meagre resources (including human resources), and forge more ways to engage users so as to create a more responsive and efficient system.

• There are still significant weaknesses in research and in the collection and use of data and information to strengthen the PHC system. The system needs to make use of advances in technology and knowledge translation to harvest available information and evidence to inform its operations.

• There is a need to review the basic tenets of PHC as embedded within the current health system structures as a means to revive and strengthen PHC strategy in Uganda. The Ministry of Health has prioritized the Community Health Extension Workers Programme as one strategy to strengthen PHC within the current system.

This case study was developed by the Alliance for Health Policy and Systems Research in collaboration with the Bill & Melinda Gates Foundation, as part of the Primary Health Care Systems (PRIMASYS) initiative. PRIMASYS supports the development of case studies of primary health care (PHC) systems in low- and middle-income countries in order to bridge the knowledge gap on PHC systems at national and subnational levels. Using findings from a combination of key informant interviews and focus group discussions with key stakeholders, as well as quantitative data available nationally, PRIMASYS provides insights to support PHC system strengthening and improve implementation, effectiveness and efficiency of health programmes in low- and middle-income countries.
Case study from Uganda

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This case study was developed by the Alliance for Health Policy and Systems Research, an international partnership hosted by the World Health Organization, as part of the Primary Health Care Systems (PRIMASYS) initiative. PRIMASYS is funded by the Bill & Melinda Gates Foundation, and aims to advance the science of primary health care in low- and middle-income countries in order to support efforts to strengthen primary health care systems and improve the implementation, effectiveness and efficiency of primary health care interventions worldwide. The PRIMASYS case studies cover key aspects of primary health care systems, including policy development and implementation, financing, integration of primary health care into comprehensive health systems, scope, quality and coverage of care, governance and organization, and monitoring and evaluation of system performance. The Alliance has developed full and abridged versions of the 20 PRIMASYS case studies. The abridged version provides an overview of the primary health care system, tailored to a primary audience of policy-makers and global health stakeholders interested in understanding the key entry points to strengthen primary health care systems. The comprehensive case study provides an in-depth assessment of the system for an audience of researchers and stakeholders who wish to gain deeper insight into the determinants and performance of primary health care systems in selected low- and middle-income countries.