A case study of the Swaziland Essential Health Care Package

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In association with Ifakara Health Institute and Training and Research Support Centre
In the Regional Network for Equity in Health in east and southern Africa (EQUINET)

EQUINET DISCUSSION PAPER 112

The role of Essential Health Benefits in the delivery of integrated services: Learning from practice in East and Southern Africa

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Executive summary

The Essential Health Benefit (EHB) is known as Essential Health Care Package (EHCP) in Swaziland. This desk review provides evidence on the experience of EHCPs in Swaziland and includes available policy documents and research reports. It was implemented in an EQUINET research programme through ifakara Health Institute (IHI) and Training and Research Support Centre (TARSC), in association with the ECSA Health Community, supported by IDRC (Canada).

The desk review presents the motivations for and methods used to develop, define and cost EHCP. It includes key informant input from a multi-disciplinary national task team through a workshop of key stakeholders shown in Appendix 1, with technical support from the World Health Organisation (WHO). It outlines how the EHCP has been disseminated and used in the budgeting and purchasing of health services and in monitoring health system performance for accountability. The paper also reports on the facilitators and barriers to development, uptake and use of the EHCP.

Swaziland is a small landlocked country in southern Africa, with a million people. It is a lower middle-income country with an estimated gross domestic product per capita in 2014 of approximately US$3,390 [all references to $ will be US$]. The country has faced various challenges: an incidence of HIV that in 2011 was 2.38% of over 15 year olds and 63% of the population living below the poverty line. AIDS and TB are the leading causes of mortality in inpatients, accounting for a third of deaths.

Swaziland’s health system is based on a primary health care (PHC) approach, organised at four levels:

a. Community-based care, where rural health motivators, faith-based healthcare providers, volunteers and traditional practitioners provide care, support and treatment;
b. PHC facilities, including health centres, public health units, rural clinics and a network of outreach sites;
c. Five regional hospitals; and
d. Three national (referral) hospitals.

The 2005 Constitution of the Kingdom of Swaziland, in its clauses on social objectives, provides that the state shall take all practical measures to ensure the provision of basic healthcare services to the population. National health policy in Swaziland requires the Ministry of Health (MoH) to define and support the delivery of an essential health benefit at all health service delivery levels to address the common health conditions that have contributed to the burgeoning burden of diseases.

The Essential Health Care Package (EHCP) was initially articulated in the ‘Ouagadougou Declaration on primary healthcare’ and ‘Health systems in Africa: Achieving better health for Africa in the new millennium’. All member states of the WHO African Region endorsed this declaration in 2008. The EHCP was developed as a policy document to guide the provision of health services for the population. It sets the standards to be followed by all healthcare providers and forms the basis for investments in the health sector. It demands that health workers across all categories of cadres meet acceptable staffing norms to deliver it.

Swaziland’s EHCP is designed to achieve these objectives to improve life expectancy, reduce maternal mortality and improve equity in health. The national health policy, human resource for health projections, service availability mapping, survey reports and specific guidelines in individual programme documents informed development of EHCP. A wide range of stakeholders and health sector professionals were consulted during the design stage, including those in MoH programmes, non-government organisations (NGOs), the private sector and development partners, including WHO and health training institutions. Health sector professionals and health academia were consulted for information and desk review of policy documents.
In costing EHCP at service delivery levels, estimates were done of the costs of medicines, test kits, diagnostic tests, labour, overheads and equipment. There was a major challenge in accessing price data, undermining the accuracy of the estimates. The many EHCP interventions (2,400 in total) also made the costing challenging. In an Excel-based model, each intervention was estimated and multiplied by the volume required.

Implementation costs, to be spread over 10 years, were estimated in excess of $528 million. The EHCP was launched, followed by dissemination of information to its stakeholders. Multiple communication strategies have assisted in raising awareness of EHCP, including billboards and brochures distributed to the public. Monitoring and evaluation of the implementation of the EHCP would be undertaken through the existing monitoring and evaluation structures in the MoH, namely in the quality assurance unit in conjunction with the strategic information department.

The initial implementation of the EHCP proved ad hoc in nature, resulting in MoH reducing the package to a minimum set of services (HIV, TB, diabetes and hypertension, mother and child health and cancer) to be offered at health facilities.

A pilot assessment of ten clinics was undertaken in four regions in collaboration with Clinton Health Access Initiative (CHAI) and the President’s Emergency Plan for AIDS Relief (PEPFAR) to identify gaps relative to service delivery for these services. The gaps identified were: shortage of equipment, need for training on cancer screening and provision of non-communicable disease medicines.

Cost-effective analysis, technical, political and social considerations have played a significant role in the development of EHCP in Swaziland. EHCP services were prioritised on the basis of those that achieved best value for money. It was intended that the resource envelope be increased to cater for future service needs, including through other ways of mobilising resources such as social health insurance to augment the resource base. It is understood that a comprehensive mix of essential health services should be funded by tax revenue, health insurance and external funds.

In guiding the provision of services for all, the EHCP was envisaged to contribute towards the alleviation of poverty and as a tool for universal health coverage. Its implementation calls for a health service Infrastructure that is in good condition, competent health personnel, readiness to undergo training in new medical technology, supporting laws and capacity in the health financing unit.

The EHCP in Swaziland was intended to guide the provision of health services. However, its costs were beyond the national resources to fund it. The adoption of a more restricted health service package currently being assessed in ten clinics in all four regions of the country suggests that a phased approach to delivery of an EHB may be more affordable financially for the country.
1. Introduction

An Essential Health Benefit (EHB) is a policy intervention designed to direct resources to priority areas of health service delivery to reduce disease burdens and ensure equity in health. Many east and southern African (ESA) countries have introduced or updated EHBs in the 2000s. Recognising this, the Regional Network for Equity in Health in East and Southern Africa (EQUINET), through Ifakara Health Institute (IHI) and Training and Research Support Centre (TARSC), in association with the ECSA Health Community and national partners in the region, is implementing research to understand the role of facilitators and the barriers to nationwide application of the EHB in resourcing, organising and in accountability on integrated health services. The work is supported by International Development Research Centre (Canada).

This case study report compiles evidence on the experience of the EHB at national level under the auspices of the Swaziland Ministry of Health. In Swaziland it is referred to as the Essential Health Care Package (EHCP). This desk review contributes to national and regional policy dialogue on the role of the EHB. It includes information on the motivations for developing the EHBs; the methods used to develop, define and cost it; how it is being disseminated and communicated; how it is being used in budgeting, resourcing and purchasing health services and in monitoring health system performance for accountability; and the facilitators and barriers to its development, uptake or use.

1.1 Country context

Swaziland is a small landlocked country in southern Africa, neighbouring South Africa and Mozambique. The country is divided into four administrative regions, namely: Hhohho, Manzini, Lubombo and Shiselweni; and further divided into 55 local authorities (Tinkhundla) and 365 chiefdoms. It has a population of 1,018,448, of whom 53% are women (MOEPD, 2007c). The King is head of state and appoints the Prime Minister as chairperson of the Cabinet and heads of government (AfDB, 2013). Swaziland is classified as a lower middle-income country (LMIC) with an estimated per capita gross domestic product of $3,390 in 2014 (MOEPD, 2016). The country is experiencing challenges from its classification as a LMIC, as this deprives it of the concessional resources or access to funds at discounted or preferential interest rates without stringent collateral and repayment terms and conditions to address its socioeconomic challenges. Notwithstanding its high poverty and HIV prevalence rates, Swaziland is not eligible, for example, for Global Alliance for Vaccines and Immunisation funding (WHO, 2016).

An estimated 63% of Swazis live below the poverty line. This level of poverty is associated with a high burden of communicable and non-communicable diseases (UNICEF, 2015). Poverty is exacerbated by the impact of HIV/AIDS, the global economic financial crisis and the decline of revenue from the Southern African Customs Union (SACU), of which Swaziland is a member. SACU receipts contribute 58% of tax revenue so any decline in revenue significantly reduces the available budget and increases Swaziland’s vulnerability to external shocks (MOEPD, 2016).

Swaziland has an unequal income distribution with a GINI index of 51% (MOEPD, 2007b), and 54.6% of the wealth held by the richest 20%, while the poorest 20% hold only 4.3% of the wealth (MOEPD, 2007a). Nearly half (41.7%) of the population are unemployed, with unemployment particularly affecting youth and women (MOLSS, 2013).

The economic growth rate of 1.6% per annum in 2016 falls short of the level of economic growth needed to fight poverty and provide essential social services (Central Bank of Swaziland, 2016b). The decline in economic performance compromises the country’s capacity to pursue policies that increase expenditure on social services such as education, basic health, safe water and safety nets that benefit the poorest and most vulnerable groups. It is projected that the country requires a minimum growth rate of at least 5% per annum, or 2.3% per annum in real GDP per capita, to sustain the economy (AfDB, 2016). The current growth rate thus makes it difficult for the country to meet national commitments, including implementation of the EHCP.
1.2 Health profile
Inpatient mortality statistics from 2013 indicate that the acquired immune deficiency syndrome (AIDS) and tuberculosis (TB) jointly account for about one-third of all deaths in Swaziland (WHO, 2016). HIV prevalence in 2011 was 31% in the general population, with many people living with HIV now surviving due to increased ARV uptake. The overall HIV incidence stands at 1.36% (Justman et al., 2016). However, Swaziland’s incidence rate remains amongst the highest globally. High co-infection with TB (above 70%) has been the single highest contributor to human immunodeficiency virus (HIV)-related morbidity and mortality (WHO, 2016). People living with HIV are 21-34 times more likely to develop TB than those who are HIV negative, while those who are infected with TB are more likely to progress faster to AIDS.

The infant mortality rate is 55 deaths per 1,000 live births, and the under-5 mortality rate is 67 deaths per 1,000 live births (MOEPD, 2013). Maternal mortality is projected at 593 deaths per 100,000 (MoH, 2014c). Non-communicable diseases, including cardiovascular diseases, cancers, diabetes mellitus, psychiatric illnesses, trauma and injuries contribute significantly to the country’s burden of disease. In 2014 NCD’s accounted for 33% of all inpatient admissions (MoH 2014b). The most common NCD’s include: cardiovascular diseases, type 2 diabetes, cancer and chronic respiratory diseases (MoH, 2014b).

1.3 Organisation of the health system
Swaziland’s health system is based on a primary health care (PHC) approach, organised at four levels:

a. Community-based care, where rural health motivators, faith-based healthcare providers, volunteers and traditional practitioners provide care, support and treatment.

b. PHC facilities, including health centres, public health units, rural clinics and a network of outreach sites.

c. Five regional hospitals.

d. Three national (referral) hospitals.

According to 2013 services available mapping data, there are 287 facilities across four regions of the country. Six categories of health facility ownership were identified: government, mission, industry, privately owned by nurses, privately owned by doctors and those owned by non-government organisations (NGO’s).

Government is the main provider of health services as the majority owner of health facilities in the country. Clinics can be further divided into two levels: Type A and B facilities, with type B facilities offering maternity services while type A do not. Public health units provide primary healthcare services and are the base for outreach services. Health centres provide curative and inpatient care as well as primary healthcare services.

*Figure 1* overleaf illustrates these health service delivery levels as an adopted structure within the essential healthcare package. It highlights the resulting five levels of national health services: level 2 (PHC facilities) comprises clinic types A and B and public health units.

2. Methods
A desk review of available relevant policy documents and research reports was conducted for this report. We carried out a content analysis of available policy documents, surveys and research reports, identified from various stakeholders comprising: officials of the Ministry of Health, World Health Organisation local office, technical professionals of MoH, professionals from private health sector and health academia. The content analysis included information on the development, usage, costing and contribution of EHCPs across the Swazi health system.

A technical working group comprising representatives of MoH, EHCP, regions, development partners (CHAI, PEPFAR, University Research Council, Management Sciences for Health, WHO), ministerial stakeholders and regional health management teams was set up to lead the
process of understanding what it would take to fully expand the health services with a view to implement the pilot minimum package. During the development process of EHCP, discussions were held over two days to ascertain the barriers to service delivery; the investment required to deliver high priority services in line with EHCPs; resource mobilisation approaches; technical and co-ordinated assistance for service delivery; and capacity and tools for planning, implementing and monitoring services nationwide.

**Figure 1: National health service delivery levels**

3. **Historical Development of the EHCP**

3.1 **Timeline for the development of the EHCP**

The concept of the essential health benefit was initially articulated in the ‘Ouagadougou Declaration on primary healthcare’, and ‘Health systems in Africa: Achieving better health for Africa in the new millennium’, which were endorsed by all member states of the WHO African Region in 2008 (Resolution AFR/RC58/R3), (WHO, 2008). The declaration recommended that member states review and/or develop essential healthcare packages, taking into consideration high priority conditions and high impact interventions to achieve universal coverage (WHO, 2008).

Swaziland’s Essential Health Care Package (EHCP) was developed in 2010 and publicly launched in 2012. The EHCP outlines as a policy and guides the health services to be delivered at each level of the health system (MoH, 2010b). The 2007 National Health Policy explicitly articulated the need to enhance public health and clinical services, thus leading to the development of EHCP in Swaziland (MoH, 2007). It is a guide for all stakeholders engaged in supporting the health sector, irrespective of whether they are in the public or private sector. The EHCP sets the standards to be followed by all healthcare providers and forms the basis for investments in the overall health sector. Deliberate effort was made to sensitise and orient the health sector on the EHCP, and its contents, following its national launch in 2012. A number of
initiatives were conducted, including the service availability mapping in 2013 to provide baseline data on the provision of essential health services in the country.

Following the 2013 mapping exercise, an assessment was carried out on health infrastructures. This survey revealed that the number of facilities increased by 8.3% between 2010 and 2013, as did general equipment, utilities -- water sanitation, piped water and electricity. Human resources remained a major challenge with all types of cadres below acceptable staffing norms, a doctor-to-patient ratio of 10:100,000 and a midwife-to-patient ratio of 64:100,000 (MoH, 2012e). The implementation of EHCP implies enhanced decentralisation of health services. However, this can only be achieved if human resources, infrastructure and equipment are strengthened and if supervision of the MoH is strengthened while new services are introduced.

Consequent to the assessments undertaken and the changing patterns of the burden of disease in the health sector, a review of the EHCP was conducted during the first quarter of 2017. This led to a streamlined EHCP for priority health services in line with:

- The burden of diseases/ill health of the population of Swaziland;
- Cost-effectiveness of the interventions addressing the conditions, diseases and associated factors responsible for the greater part of the disease burden;
- Affordability relative to the available and projected resources; and
- Service delivery models that maximise synergies and linkages.

3.2 Motivations for developing the EHCP

The Constitution of the Kingdom of Swaziland (2005:48) explicitly states its objectives that “Without compromising quality, the State shall promote free and compulsory basic education for all and shall take all practical measures to ensure the provision of basic healthcare services to the population” (MoJCA, 2005: p48).

The provision of basic healthcare to the population is thus a national interest supported by the Constitution. The national health policy further reinforces this, stating that the Ministry of Health shall define and support the delivery of essential healthcare packages, to be delivered at all service delivery levels, to address the common health conditions that have contributed to the burgeoning burden of disease. For instance, these diseases include: communicable diseases such as HIV, TB and others and non-communicable diseases such as cardiovascular diseases (CVDs), cancers, diabetes mellitus, mental illnesses and other chronic diseases (MoH, 2007). The policy acknowledges the magnitude of the burden of disease, with high levels of TB due to the high incidence of HIV and of conditions such as diabetes. It recognises government’s commitment to reduce this burden in line with the Sustainable Development Goal 3 aiming at improving health and wellbeing for all age groups (UN, 2016).

The development of the EHCP was motivated by criticisms of the functioning of the health sector. The health sector remains vulnerable to uncoordinated and poorly harmonised health services, inequitable access to services and overburdened tertiary facilities. This is linked to poor alignment of funding relative to need in the health sector (MoH, 2010b). For instance, the 2010 public expenditure review revealed that over 50% of the recurrent budget for health was directed towards urban hospital services, with only 20% allocated to clinics. This reflects the direction of more resources towards hospitalisation to treat disease rather than preventing them at lower levels of services.

The absence of a standard set of services by level of delivery has made quality assurance a huge challenge. An assessment carried out by the Council for Health Services Accreditation for Southern Africa indicated that 40% of health facilities in Swaziland were substandard (CHOSASA 2010). There is no single reference to benchmark health services in the country. Patients are also not aware of what to expect from service providers and the role they are expected to play, which reduces the accountability of health providers to the patients.
4 Design of the EHCP

4.1 Content and policy purpose

The intended objectives of the EHCP, as stated earlier, include improving health, reducing mortality, improving equity and distribution of health, improving responsiveness to clients health needs, preventing communicable and non-communicable diseases and managing medical and related conditions. The Ministry of Health, co-ordinated by the EHCP committee, defined the EHCP on the basis of existing resources and ongoing work.

A review process for the EHCP was initiated in 2017, facilitated by a multidisciplinary national task team during the first quarter of 2017, comprising nominees from both the preventative and essential clinical services as led by the MoH head office. The consultations and interactions are ongoing. In this process, consultations were held to sensitishe the different stakeholders through workshops held in various locations in the country. Expert groups from different disciplines were consulted on standard intervention practices, types of health personnel, specialised equipment used in delivering these interventions and medicines and other supplies. The stakeholders consulted included the Ministry of Health programmes, hospitals at national and regional levels and lower level health facilities. Additional consultations involved private sector healthcare providers, faith-based organisations and non-governmental organisations, NGOs, health training institutions, other government sectors and development partners. WHO provided the technical support (WHO, country office and the Africa regional office (WHO AFRO), Inter-country support team for eastern and southern Africa).

In the 2017 review, the MoH proposed 2,347 potential interventions grouped into four healthcare packages, namely: essential public health services; essential clinical care services; allied health services and support services. These interventions may not have covered all the essential healthcare needs of the country. The EHCP is seen as a dynamic document that evolves with the needs of population health. In line with this, a restructured version of the EHCP was proposed based on the burden of disease. It prioritised reproductive health (RH), family planning (FP), TB, HIV and AIDS, malaria, URTI, pneumonia, diarrheal diseases, intestinal worms, immunisation, ENT, STI, diabetes, digestive disorders and injuries.

The EHCP did not seek to merely list the services to be provided at different levels. It also aimed to adopt a client-oriented delivery model. This implies that when a client presents at a health facility with a problem, an opportunity is seized to attend to any other issues of interest. Such considerations have cost implications, however, and for the identified interventions at each healthcare service delivery level, the inputs and components were also outlined.

Tables 1a and 1b summarise the services provided, in line with the delivery models and mechanisms, at the five levels of care shown earlier in Figure 1. Level 1 shows the services offered at community level, largely promotive and preventative in nature, with curative services provided through mobile outreach for refills of medication, such as TB, HIV and mental health/epilepsy. Level 2 comprises public health units and clinics -- types A and B -- and maternity services. Level 3 constitutes first level hospitals offering inpatient and outpatient services, with limited diagnostic services, and with emergency and theatre services. Level 4 comprises regional hospitals providing: preventive, promotive, curative and rehabilitative services for in- and outpatient care. This includes a basic level of specialist services such as internal services, obstetrics and gynaecology, paediatrics, general surgery, oral health services. Level 5 facilities provide super specialities such as ENT, maxillo-facial surgery and psychiatry, not provided at lower levels and referred from Level 4. The mechanisms covered include: strengthening the referral system, standardisation of treatment and essential services, sufficient human resources with capacity to deliver the services, defining supervision and mentoring approaches, a well-managed infrastructure and equipment and strengthening of health systems (MoH, 2010b). The MoH quality assurance and monitoring and evaluation unit tracks progress through reporting and feedback from community to national referral level, to see that the services provided are appropriate and people centred.
Table 1a: Healthcare services for Level 1 (Community), April 2017

<table>
<thead>
<tr>
<th>Categories of Health Services</th>
<th>Home-based Care</th>
<th>Mobile Health</th>
<th>Community Outreach</th>
<th>Health Post</th>
</tr>
</thead>
</table>
| a. Communicable diseases → HIV, TB, malaria | Health education and promotion  
HIV home testing  
Pre-packed refills of medicines  
Active case finding  
TB screening  
Follow-up of communicable disease cases  
Linkages and referral | Health education  
HIV diagnosis, management  
initiation and refills  
Follow-up, Prophylaxis: CTX, INH, fluconazole  
Lab work and other diagnostics e.g. X-ray  
Linkages and referrals | Health education  
HIV diagnosis, management  
initiation and refills  
Follow-up  
Prophylaxis: CTX, INH, fluconazole  
Point of care lab work, and other diagnostics e.g. mobile X-ray  
Linkages and referrals | Health education  
HIV screening, diagnosis, management and follow-up  
Prophylaxis refills  
Treatment refills  
Point of care lab tests  
Linkages and referral |
| b. Non-communicable diseases → HT, DM, CVD, COPD, epilepsy, mental illnesses | Health education and promotion  
Screening  
Pre-packed medicines refills  
Follow-up of NCD cases  
Linkages and referral | Health education  
Diagnosis, management, follow-up  
Pre-packed refills of medicines  
NCD screening  
Linkages and referral | Health education  
Diagnosis, management, follow-up  
Pre-packed refills of medicines  
NCD screening  
Linkages and referral | Health education  
Management and follow-up  
NCD screening  
Rehabilitation  
Linkages and referral |
| c. Cancers → cervical, breast, prostate | Health education and promotion  
Palliative care | Health education and promotion  
Screening  
Pain management and palliative care | Health education and promotion  
Screening  
Pain management and palliative care | Health education and promotion  
Screening  
Adverse events monitoring and counselling  
Palliative care |
| d. RMNCAH (immunisation, FP, ANC, PNC, adolescent reproductive health) | Health education and promotion  
Community mobilisations  
Condom distribution  
Infant feeding counselling | Health education  
Childhood immunisations  
FP commodities  
ANC, PNC and ARH  
Intrapartum care (for only emergency deliveries), Immediate postpartum care  
Postabortion care | Health education  
Childhood immunisations  
All FP commodities  
Full ANC, PNC and ARH  
Intrapartum care for emergency deliveries  
Immediate postpartum care  
Postabortion care | Health education, Childhood immunisations  
All FP commodities  
Full ANC, PNC and ARH  
Intrapartum care for emergency deliveries  
Immediate postpartum care  
Postabortion care  
Neonatal screening and infant care |
<table>
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<th>Community Outreach</th>
<th>Health Post</th>
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<tbody>
<tr>
<td>e. NTDs - (bilharzia, worm infestation)</td>
<td>Health education Community mobilisations and referrals Urine &amp; stool sample collection Deworming services</td>
<td>Health education Community mobilisations and referrals Urine &amp; stool sample collection Deworming services</td>
<td>Health education Community mobilisations and referrals Urine &amp; stool sample collection Deworming services</td>
<td>Health education Community mobilisations and referrals Urine &amp; stool sample collection Deworming services</td>
</tr>
<tr>
<td>f. Common medical Conditions (RTI, skin problems, Gastrointestinal, arthritis, LRTI, eye diseases, ear problems, STIs)</td>
<td>Health education and promotion Provision of ORS Provision of eye and skin ointments Condom promotion</td>
<td>Health education and promotion Provision of ORS Provision of eye and skin ointments, Eye/ear treatments Condom promotion</td>
<td>Health education and promotion Provision of ORS Provision of skin ointments, Diagnosis and treatment of eye/ear conditions Pain management STI management &amp; treatment</td>
<td>Health education and promotion Provision of ORS Provision of skin ointments Diagnosis and treatment of eye/ear conditions Pain management STI management &amp; treatment</td>
</tr>
<tr>
<td>g. Medical specialties (dermatology, cardiology, renal, psychiatry)</td>
<td>Health education and promotion Referrals and linkages</td>
<td>Health education Treatment of minor ailments Refill of treatment Referrals and linkages</td>
<td>Health education Treatment of minor ailments Refill of treatment Referrals and linkages</td>
<td>Health education Treatment of minor ailments Follow-up of treatment Referrals and linkages</td>
</tr>
<tr>
<td>h. Surgical conditions (trauma/injuries, skin growths, GI disorders, bone conditions, male circumcision)</td>
<td>Health education Referral and linkages to care</td>
<td>Diagnosis Management (first aid, minor suturing and wound care) Basic resuscitation Male circumcision Referrals</td>
<td>Diagnosis Management (first aid, minor suturing and wound care) Basic resuscitation Male circumcision Referrals</td>
<td>First aid Minor suturing and wound care Referrals</td>
</tr>
<tr>
<td>i. Surgical specialties (orthopaedics, neurology, ENT, ophthalmology, urology, maxillofacial)</td>
<td>Health education and promotion Basic first aid Referrals</td>
<td>Health education Basic first aid Referrals</td>
<td>Health education Basic first aid Referrals</td>
<td>Screening for impairments and disabilities Referral and follow-up</td>
</tr>
<tr>
<td>Categories of Health Services</td>
<td>Home-based Care</td>
<td>Mobile Health</td>
<td>Community Outreach</td>
<td>Health Post</td>
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<tr>
<td>j. Paediatrics</td>
<td>Health education and promotion ORS management Referral and linkages to care Child welfare services Immunisation HTS for exposed infants</td>
<td>Diagnosis and management (IMCI package) Management of malnutrition and minor ailments HTS for exposed infants Referrals and linkages</td>
<td>Diagnosis and management (IMCI package) Management of malnutrition and minor ailments HTS for exposed infants Referrals and linkages</td>
<td>Screening and follow-up (IMCI package) Management of malnutrition Outpatient care Referrals and linkages,</td>
</tr>
<tr>
<td>k. Dentistry</td>
<td>Health education and promotion Referrals Oral examination</td>
<td>Health education and promotion Oral/ dental screening Tooth extractions Management of simple oral conditions Referrals and linkages</td>
<td>Health education and promotion Oral/ dental screening Tooth extractions Management of simple oral conditions Referrals and linkages</td>
<td>Heath education Assessment Diagnosis Referral and follow-up care</td>
</tr>
<tr>
<td>l. Occupational therapy, physiotherapy</td>
<td>Referrals and linkages Screening for impairments</td>
<td>Referrals and linkages</td>
<td>Referrals and linkages</td>
<td>Assessment Referral and follow-up</td>
</tr>
<tr>
<td>m. Speech and hearing (audiology)</td>
<td>Screening for impairments and disabilities Referrals and linkages</td>
<td>Referrals and linkages Screening for impairments and disabilities Corrective devices</td>
<td>Referrals and linkages Screening for impairments and disabilities Corrective devices</td>
<td>Referrals and linkages Screening for impairments and disabilities Supportive management</td>
</tr>
</tbody>
</table>

Source: MoH, 2016c
Table 1b: Healthcare services for Levels 2 to 5, April 2017

<table>
<thead>
<tr>
<th>Categories of Health Services</th>
<th>Level 2 (Secondary) Clinics</th>
<th>Level 3 (Tertiary) Health Centres</th>
<th>Level 4 (Quaternary) Regional Hospitals</th>
<th>Level 5 National Referral Hospitals and Specialised Hospitals</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Communicable diseases →d HIV, TB, malaria</td>
<td>Health education Screening Diagnosis Management (initiation and refills) Follow-up Prophylaxis: (CTX, INH, FLC, PEP)</td>
<td>Health education Screening Diagnosis Management (initiation and refills) Follow-up care Prophylaxis (CTX, INH, FLC, PEP) Outpatient and inpatient care Outreach to clinics</td>
<td>Health education Screening Diagnosis Management (initiation and refills) Management of complications of HIV and ARVs Follow-up care Prophylaxis (CTX, INH, FLC, PEP) Outpatient and inpatient care Outreach to clinics</td>
<td>Health education Screening Diagnosis Management (initiation and refills) Management of complications of HIV and ARVs Follow-up care Prophylaxis (CTX, INH, FLC, PEP) Outpatient and inpatient care Outreach to clinics</td>
</tr>
<tr>
<td>b. Non-communicable diseases → HT, DM, CVD, strokes, asthma, epilepsy</td>
<td>Health education Screening Clinical diagnosis Treatment for non-complicated conditions Follow-up (refilling of medicines)</td>
<td>Health education Screening Clinical and laboratory diagnosis Treatment of minor and complicated conditions (initiation, refilling) Follow-up Outpatient and inpatient care Outreach to clinics</td>
<td>Health education Screening Clinical and laboratory diagnosis Treatment of minor and complicated conditions Follow-up Outpatient and inpatient care Specialised services Rehabilitation</td>
<td>Health education Screening Clinical and laboratory diagnosis Treatment of complicated conditions Follow-up Outpatient and inpatient care Highly specialised services Rehabilitation Referral to super specialities</td>
</tr>
<tr>
<td>c. Mental conditions, alcohol use disorder and substance abuse</td>
<td>Health education Screening Diagnosis Management Follow-up (refilling of medicines)</td>
<td>Health education Screening Diagnosis Management Follow-up (refilling of medicines) Inpatient and outpatient care</td>
<td>Health education Screening Diagnosis Management Follow-up (refilling of medicines) Inpatient and outpatient care Rehabilitation (drugs, alcohol, occupational)</td>
<td>Health education Screening Diagnosis Management Follow-up (refilling of medicines) In-patient and out-patient care Rehabilitation services (for drugs, alcohol, occupational)</td>
</tr>
<tr>
<td>Categories of Health Services</td>
<td>Level 2 (Secondary) Clinics</td>
<td>Level 3 (Tertiary) Health Centres</td>
<td>Level 4 (Quaternary) Regional Hospitals</td>
<td>Level 5 National Referral Hospitals and Specialised Hospitals</td>
</tr>
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<td>-------------------------------</td>
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</tr>
<tr>
<td>d. Oncology (cancers of breast, cervix and prostrate)</td>
<td>Health education and promotion Screening clinics (breast palpation, VIA, cryotherapy) Morphine refills (pain management-hospice care)</td>
<td>Health education and promotion Screening clinics (breast palpation, VIA, cryotherapy, LEEP, DRE) Diagnosis through biopsy taking Symptomatic management Palliative care</td>
<td>Health education and promotion Screening clinics (breast palpation and mammography, VIA, cryotherapy, LEEP, DRE) Diagnosis through biopsy taking Management of complications Surgical intervention Chemotherapy</td>
<td>Health education and promotion Screening clinics (breast palpation and mammography, VIA, cryotherapy, LEEP) Management of complications Surgical intervention Specialised oncology Chemotherapy and radiotherapy Palliative care</td>
</tr>
<tr>
<td>e. RMNCAH (immunisation, FP, ANC, PNC, ARH)</td>
<td>Health education All childhood immunisations All FP commodities Full ANC Intrapartum care (spontaneous vaginal deliveries) PNC ARH</td>
<td>Health education All childhood immunisations FP commodities Full ANC &amp; PNC ARH Intrapartum care including caesarean sections Neonatal care Postabortion complications</td>
<td>Health education Maternity waiting rooms Intrapartum and immediate postpartum care Caesarean sections Birth immunisations Neonatal high care Postabortion complications</td>
<td>Health education Intrapartum and immediate postpartum care Caesarean sections Birth immunisations Neonatal intensive care Postabortion complications Maternity high care Postabortion complications</td>
</tr>
<tr>
<td>f. NTDs (bilharzia, intestinal worms)</td>
<td>Health promotion Screening Deworming services Treatment Follow-up Referrals and linkages</td>
<td>Health education and promotion Screening Diagnosis and treatment Management of complications (e.g. pneumonia) Referral and linkages</td>
<td>Diagnosis and treatment Management of complications (e.g. intestinal obstruction, pneumonia) Follow-up</td>
<td>Diagnosis and treatment Management of complications (e.g. intestinal obstruction, pneumonia, bladder cancer, brain abnormalities) Follow-up</td>
</tr>
</tbody>
</table>

**Note:** The services listed are examples and may vary depending on the specific healthcare system and location.
<table>
<thead>
<tr>
<th>g. Common medical conditions (RTI, skin problems, Gastrointestinal diseases, arthritis, LRTI, Ear, Nose and Throat conditions, ear problems, STIs)</th>
<th>Health education Screening Diagnosis Management of minor conditions Follow-up</th>
<th>Health education Screening Diagnosis Management of minor and complicated conditions Follow-up</th>
<th>Diagnosis Management Inpatient care Management of severe complications Specialised medical and surgical services Follow-up</th>
<th>Diagnosis Management Inpatient care Management of severe complications Specialised medical and surgical services Follow-up</th>
</tr>
</thead>
<tbody>
<tr>
<td>h. Medical specialties (Dermatology, cardiology, renal, psychiatry)</td>
<td>Health education Treatment of minor ailments Refill of treatment</td>
<td>Health education Advanced diagnosis and management of uncomplicated conditions Follow-up of treatment Outreach to level 2 of healthcare</td>
<td>Health education Advanced diagnosis and management of complicated conditions Follow-up of treatment Outreach to facilities at level 3 of healthcare</td>
<td>Health education Advanced diagnosis and management of complicated and uncomplicated conditions Follow-up of treatment Outreach to facilities at level 4 of healthcare (regional)</td>
</tr>
<tr>
<td>i. Surgical conditions (trauma/injuries, skin tumours, GI disorders, bone conditions, male circumcision)</td>
<td>Diagnosis Management (first aid, minor suturing and wound care) Basic resuscitation Male circumcision Referrals</td>
<td>Diagnosis Management (first aid, minor suturing and wound care) Basic resuscitation Emergency and minor operations Referrals</td>
<td>Diagnosis Management (first aid, minor suturing and wound care) Resuscitation Minor and major operations Referrals</td>
<td>Advanced diagnosis Resuscitation Specialised operations Referrals</td>
</tr>
<tr>
<td>j. Surgical specialties: (orthopaedics, neurology, ENT, ophthalmology, urology)</td>
<td>Health education Basic first aid</td>
<td>Diagnosis Patient stabilisation Basic management Referrals</td>
<td>Diagnosis Patient stabilisation Advanced management and follow-up Referral to level 5 of healthcare</td>
<td>Diagnosis Patient stabilisation Advanced management and follow-up Outreach to level 4 of healthcare</td>
</tr>
<tr>
<td>k. Paediatrics</td>
<td>Diagnosis and management (IMCI package) Management of malnutrition and minor ailments</td>
<td>Diagnosis and management (IMCI package) Management of malnutrition Outpatient and inpatient care</td>
<td>Diagnosis and management (IMCI package) Management of malnutrition Out patient/inpatient care including neonatology</td>
<td>Advanced diagnosis and management (surgical and medical) Neonatology Intensive care</td>
</tr>
<tr>
<td>l. Oral Health</td>
<td>Health education and promotion Oral/ dental screening</td>
<td>Health education and promotion Management of oral conditions</td>
<td>Assessment Diagnosis Management (includes surgical care)</td>
<td>Assessment Diagnosis Management (includes surgical care)</td>
</tr>
<tr>
<td></td>
<td>Tooth extractions</td>
<td>Restorative procedures</td>
<td>care and fractures</td>
<td>Restorative and follow-up care</td>
</tr>
<tr>
<td>---</td>
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<td>------------------------</td>
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<td>-------------------------------</td>
</tr>
<tr>
<td></td>
<td>Management of simple oral conditions</td>
<td>Minor oral surgical procedures</td>
<td>care and fractures)</td>
<td>Restorative and follow-up care</td>
</tr>
<tr>
<td>n.</td>
<td>Occupational therapy, physiotherapy</td>
<td>Referrals and linkages</td>
<td>Assessment Management and follow-up</td>
<td>Assessment Management and follow-up</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Assessment and management</td>
<td>Screening and supportive management</td>
<td>Adult screening, Paediatric/ neonate screening, Supportive management and referral</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Assessment Counselling Pain management Management of distressing symptoms Psychological care Spiritual care End-of-life care Outreach services (palliative surgery)</td>
</tr>
</tbody>
</table>

Source: MoH, 2016c
4.2 Methods and processes used and issues raised

In line with the call for renewal of primary healthcare globally, the Swaziland government views EHCP as a crucial part of public health reform, as it is a critical step to outlining the services that should be universally accessible.

As noted earlier, a multidisciplinary national task team co-ordinated the review in 2017 of the EHCP. The process for this, and the earlier EHCP in 2010 involved various sources of evidence:

- Official and technical documents, including: the national health policy (MoH, 2007); national health sector strategic plans I, 2009-13 (MoH, 2009a) and II, 2014-18 (MoH, 2015a) respectively; service availability mapping (MoH, 2013a); various reports on the implementation of EHBs (Meirovich, 2014; Waddington, 2013); and the Ouagadougou declaration on PHC primary and health systems in Africa (WHO, 2008).
- Consultations with various stakeholders, expert groups, technical professionals from the MoH and private sector, development partners and health academica.
- Consultation of stakeholders involved in the MoH programmes, hospitals at national and regional levels, health facilities at lower levels of service delivery and private sector healthcare providers, faith-based organisations, non-governmental organisations, health training institutions and development partners (MoH, 2010b).

The development of EHCP was also benchmarked against standards set within the Southern African Development Community (SADC) and other African countries, including Botswana and Lesotho. This was done to ensure that the interventions developed for Swaziland were regionally comparable, cost effective, equitable and addressed national health priorities.

As a principle it was intended that the EHCP services provided at each level, as shown in Table 1, should cover every Swazi citizen regardless of place of abode or ability to pay, and that all should be within a distance of 5 kilometres from a health facility. The EHCP thus took into account:

- The burden of disease in Swaziland.
- Cost-effectiveness of interventions to address the conditions and factors responsible for the greater part of the disease burden.
- Affordability in terms of the available and projected resources
- Service delivery models that maximise synergies and linkages, with pathways for clinical referrals (MoH, 2010b).
- Technical, political and social considerations (Waddington, 2013).

Whatever was included should be monitored through the existing monitoring and evaluation system with appropriate and specific indicators. This provides feedback to aid in decision-making and supports the improvement of health service delivery.

The EHCP does not merely list the services to be provided at different levels; it also aims to reflect a client-oriented delivery model so that when a client presents at a health facility with a problem, an opportunity is seized to attend to any other issues of interest. This has cost implications and the next section discusses the costing of the approach.

4.3 Costings: methods, findings and challenges

After the 2010 EHCP was defined, an assessment of the resources necessary to deliver it for the fiscal years between 2010/11 and 2012/13 was carried out. Future resource requirements were also projected for the next 3 years. The costing was based on data obtained from MoH national accounts, with estimated costs of medicines, test kits, diagnostic tests, labour, overheads and equipment.

A number of assumptions were made during the costing exercise. The main assumptions related to the cost of labour in terms of man-months worked; net inflation; drug distribution and losses;
average contact time; outpatient and inpatient utilisation rates of services; distribution of outpatient and inpatient services by level of service delivery (MoH, 2010b).

There were also a number of limitations with regards to the costing, including:

- Inadequate data on unit costs of laboratory tests meant that they were not included in the costing results.
- The prices of some medicines were not on the Swaziland essential medicines list provided by MoH.
- The EHCP interventions were too many to cost. There were 2,400 interventions, making it too cumbersome to cost them individually. Costing was thus based on the cost-effectiveness of the burden of diseases and what was generally considered as essential within the SADC region, as noted earlier. These benchmarked interventions that were then costed included: reproductive health, family planning, tuberculosis, HIV and AIDS, integrated management of childhood illness, malaria, upper respiratory tract infections, pneumonia, diarrhoea, immunisation, sexually transmitted infections and injuries.

Table 2, below, shows the estimated $ cost per capita for EHCP. The costs of the interventions were estimated on the basis of an Excel-based model developed by the MoH in which each intervention was estimated and multiplied by the volume of services required by the unit cost (MoH, 2010b). The methodology applied involved estimation of the cost of providing each of the services based on required inputs of drugs, test kits, diagnostic tests, labour overheads and equipment.

**Table 2: Estimated annual cost per capita for EHCPs in US$, 2010-2013**

<table>
<thead>
<tr>
<th>Period in years</th>
<th>Service Levels</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Clinics and public health</td>
</tr>
<tr>
<td>2009/10</td>
<td>18</td>
</tr>
<tr>
<td>2010/11</td>
<td>20</td>
</tr>
<tr>
<td>2011/12</td>
<td>22</td>
</tr>
<tr>
<td>2012/13</td>
<td>24</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>84</strong></td>
</tr>
<tr>
<td><strong>Percent</strong></td>
<td><strong>20</strong></td>
</tr>
</tbody>
</table>

*Source: MoH, 2010b; exchange rate US$1=10.9 SZL*

As shown in Table 2, delivery of EHCP at national referral hospital levels accounts for the largest portion of the total estimated cost per capita in the period under consideration. National referral hospitals accounted for $188/capita (43% of the total per capita cost), while regional hospitals were $96/capita (22%), clinics and public health $84/capita (20%) and health centres $66/capita (15%).

The total estimated cost of implementing the full EHCP infrastructure and equipment (rebuilding/construction or refurbishing and purchasing required medical equipment) is $442,876,137 or $434.85 per capita. As shown in Table 3 overleaf, regional hospitals account for a larger share of the total cost of infrastructure and equipment due to the number hospitals in the regions. These EHCP costs in public health units are less than 1% (0.45%) but rise to 36% of total costs in regional hospitals.

The estimated total cost of implementing EHCP is projected at $528.6 million ($519 per capita), covering the costs of human resources (recruitment, training, administration and human resources management) and the direct costs of infrastructure and equipment, maintenance and general administration.

This total cost is beyond a level that government can afford. The budget for the MoH for 2016/2017 is estimated at $163.9 million (US$1:12.5 SZL), which represents about 9.9% of the national budget and includes both capital and recurrent expenditure (MoF, 2017). The country
faces challenges in a reducing share of revenue from the Southern African Customs Union (SACU), with receipts falling from 2014/15 levels of $600 million to $420 million in 2016/17. With SACU receipts 37% of total government revenue and a limitation in government’s capacity to attract financial resources from development partners, the government is challenged in meeting the substantial cost of the EHCP, which represents more than four times the maximum budget in the public health sector, with a MoH budget of $163 / capita against $400 / capita for EHCP implementation in 2016/17 (CBS, 2016a).

Table 3: Total estimated cost of infrastructure and equipment in US$, 2014

<table>
<thead>
<tr>
<th>Total Cost of Infrastructure and Equipment by Type of Facility</th>
<th>National referral hospitals</th>
<th>Regional hospitals</th>
<th>Health centres</th>
<th>Clinics</th>
<th>Public health</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cost</td>
<td>$100,975,759</td>
<td>$159,435,409</td>
<td>$71,303,058</td>
<td>$109,390,406</td>
<td>$1,771,505</td>
</tr>
<tr>
<td>Total cost per capita</td>
<td>$99</td>
<td>$157</td>
<td>$70</td>
<td>$107</td>
<td>$1.7</td>
</tr>
<tr>
<td>Percent</td>
<td>22.8</td>
<td>36</td>
<td>16.1</td>
<td>24.7</td>
<td>0.4</td>
</tr>
</tbody>
</table>

Source: Meirovich, 2014

According to Meirovich (2014), there is an opinion that Swaziland should consider the experiences of other African countries that have defined, designed and implemented EHCPs. It should also consider options to streamline the current EHCP by identifying priority interventions, as a minimum package of the most urgent interventions, where the level of investment matches the fiscal possibilities of the country. A study conducted in Swaziland on the implementation of EHCP on 17 healthcare facilities revealed that financial commitment to fall to an estimated $120 million if such a minimum package was adopted (Meirovich, 2014).

Given the resource constraints, a minimum package was costed as a subset of the EHCP, to include the most essential interventions for the health sector. Cost estimates were produced for service delivery for those more limited interventions that contribute significantly to the burden of disease that should be accessible to the population at no cost. The cost of this package was significantly less than that of the EHCP. Table 4 compares the cost of service delivery of the minimum package and EHCP respectively for 2010 – 2012. The cost of the minimum package is about half the cost of service delivery in respect to EHCP in the fiscal period.

Table 4: Cost of minimum package and EHCP in US$, 2010-2012

<table>
<thead>
<tr>
<th>Type of Package</th>
<th>2010/11</th>
<th>2011/12</th>
</tr>
</thead>
<tbody>
<tr>
<td>Minimum package</td>
<td>54.2 m</td>
<td>58.8 m</td>
</tr>
<tr>
<td>EHCP</td>
<td>94.5 m</td>
<td>106 m</td>
</tr>
</tbody>
</table>

Source: MoH, 2010b

Table 4 provides the estimated cost of the minimum package as a total and per capita in US dollars from 2009 to 2013.

Table 5: Minimum package cost in US$, 2009/13

<table>
<thead>
<tr>
<th></th>
<th>2009/10</th>
<th>2010/11</th>
<th>2011/12</th>
<th>2012/13</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cost</td>
<td>72 m</td>
<td>78.4 m</td>
<td>85 m</td>
<td>93 m</td>
</tr>
<tr>
<td>Per capita</td>
<td>71</td>
<td>77</td>
<td>83</td>
<td>90</td>
</tr>
</tbody>
</table>

Source: MoH, 2010b
5. Current use of the EHCP

5.1 Dissemination of EHCP
The Government of Swaziland through the Ministry of Health embraced the concept of EHCP during the official launching at a stakeholders’ forum in 2012. Representatives of development partners, senior government officials, members of Parliament’s two health portfolio committees, regional health management committees and other health sector stakeholders graced the occasion. The Minister of Health tasked all health workers to ensure smooth implementation of EHCP for optimum health outcomes in Swaziland.

There has been wide national dissemination of information about EHCP. For instance, in most forums where the senior leadership of the MoH is invited, there is a slot to present information about the objectives and benefits of the EHCP. The official launching of EHCP by the Honorable Minister of Health in 2012 involved diverse stakeholders.

Multiple communication strategies have assisted in raising awareness of the EHCP. Road shows have been conducted in all the regions of the country communicating information on health sector programmes. Billboards and brochures are also mass produced and distributed in all health delivery centres (clinics, health centres, public health units, regional and national referral hospitals). However, no study has yet been conducted to ascertain provider and public views and awareness of EHCP.

The MoH regularly organises regional and national campaigns at which information is communicated to participants on the concept of EHCP. Scheduled workshops are also held countrywide to educate the general public about EHCP. A dedicated promotions unit is responsible for designing programmes and materials to educate/inform the public about health sector activities, some of which are transmitted in the local media (press, television and radio). Research paper presentations also share information with stakeholders on health-related issues at national health research conferences organised by the MoH.

5.2 Implementation of the EHCP
A quality assurance unit was established to ensure that patients/clients receive high quality and effective healthcare at health service delivery facilities. Since the establishment of the unit, quality assurance programmes have been set up to ensure improvement of service delivery in the healthcare system. A total of 10 health facilities, comprising two hospitals, two health centres and six clinics were identified for rolling out the programme. Outreach health services into communities have been strengthened to increase the population’s access to health interventions. Regional health management structures have also been established to bolster supervision and monitoring of EHCP.

Since it was launched in 2012, implementation of EHCP has faced challenges, including:
   a. Poor fiscal environment marked by under-performing economy.
   b. Declining revenue from the SACU.
   c. Limited resources against the relatively high cost of the full EHCP, noted earlier.
   d. The high burden of disease.
   e. The poor condition of the health infrastructure and inadequate logistic systems for delivery of the EHCP.
   f. Inadequate human resources for health to deliver healthcare services, insufficiently motivated, with productivity and retention challenges.

The health sector faces severe human resource shortages across all cadres at all levels of the health system. The current doctor-to-patient ratio is 10:10,000, far below WHO standards (MoH, 2012e). Furthermore, a poor skills mix and poorly motivated employees exacerbate the gravity of human resource shortfalls in the health sector.
A significant proportion of the infrastructure and equipment of the health sector in the country is in a poor state of repair. An estimated $145 million would be required to repair the infrastructure to implement the EHCP (Meirovich, 2014). Government has made positive strides towards rehabilitating some of the health facilities, including some health centres, clinics and the national referral hospital in Mbabane (MoH, 2017). However, unless the challenges are addressed, they act as a barrier to implementation of EHCP.

5.3 Use of the EHB in strategic purchasing and resource allocation
Despite prioritising the health and education sectors, it would take a major government commitment to fully finance the EHCP under the prevailing fiscal space, given the costs also of the ongoing programme to rehabilitate the health system. Currently, there is no inclusion of budget bidding and grants being made against the cost estimates of the EHCP. The EHCP concept has not been implemented as a working tool for application in the budget processes as was expected.

Although the Government of Swaziland remains committed to mobilise resources to fund the EHCP, its efforts have been thwarted by the extent of the estimated cost of implementation of over $400 million. A minimum package at a much-reduced cost was introduced to accommodate the limited available resources. Moreover, an estimated period of up to 15 years was envisaged for implementation of the wider EHCP.

In light of this extended period, EHCP implementation became ad hoc. Government appointed a technical working group (TWG) mandated to assess the EHCP situation with a view to identifying the existing gaps towards implementation of EHCP in phases. A total of ten clinic facilities were identified as pilot centres in the four regions of the country, based on the extent of activity levels in each facility. A total of six disease conditions were considered, namely: HIV, TB, hypertension, diabetes, maternal and child health and cervical cancer. These six conditions were used for the package that formed the basis of the assessment. The following gaps were identified:

- a. Shortage of basic equipment and some medicines in the clinics.
- b. Skills shortage in screening cervical cancer.
- c. An absence of clinic management of non-communicable diseases such as diabetes and hypertension.

Having identified the existing gaps at the clinics, the MoH in collaboration with development partners (CHAI and PEPFAR) designed a programme of action in which equipment was procured and distributed to the ten clinics. Further, nurses were trained on cervical cancer screening and medicines for managing diabetes and hypertension were made available.

The Government of Swaziland also requested WHO to conduct a financial feasibility study to assess and project financial evidence to inform introduction of social health insurance in the country (WHO, 2008). This was anticipated to allow the MoH the autonomy to manage and enhance procurement of services. When the EHCP was launched in 2012, the feasibility study had been conducted and the planned social health insurance, not yet implemented, could have contributed to the financing of the services. However, government has mobilised funding to facilitate refurbishment of health infrastructure and equipment to improve value for money in service performance and to pave the way for the provision of EHCP. The World Bank and European Union HIV and TB projects continue to fund rehabilitation of the infrastructure, in particular clinics, health centres and regional hospitals (World Bank and European Union 2014).

5.4 Monitoring performance and accountability
Monitoring and evaluation are essential components of management. They provide the means to ensure that ‘what is planned’ by an organisation becomes ‘what is achieved’. It is widely known that without employing the correct tools for tracking performance, results can be elusive (Ille et al., 2012). Adequate monitoring systems must thus be established to ensure that those with highest need are actually utilising the services. This monitoring would also support a revision of EHCP every 5-10 years.
Monitoring and evaluation of the EHCP could be accommodated in the existing monitoring and evaluation systems/structures in the Ministry of Health using the feedback mechanisms for periodic reporting. Reliable data would be sourced from all regions and national health facilities (perhaps the current systems may need to be enhanced to feature the new EHCP). Features that have been adopted and identified for monitoring the EHCP include: access to EHCP, quality of care, health outputs and health outcomes. The quality assurance unit, in collaboration with the strategic information department, is positioned to take a leadership role in ensuring that the monitoring and evaluation processes for the EHCP are implemented, depending on the quality of information gathered.

A feedback mechanism is in place for at least periodic reporting -- quarterly and annually. The MoH holds regular meetings with stakeholders to discuss pertinent issues within the health sector. A quarterly performance report for the MoH is presented to both the Parliament and Senate. Figure 2 is a presentation of stakeholders involved in a joint evaluation for implementing the EHCP. It is intended that this evaluation tool be used to ascertain the impact of the EHCP, consolidated with regional reports to show information on the interventions, outputs and outcomes and the financial aspects.

Figure 2: Joint evaluation of implementation of EHCP

While noting that the EHCP is still to be implemented, it is intended that performance of the EHCP be measured in terms of the outputs and outcomes, in contrast to inputs (funds and other resources). For this to occur, the collection of data/information on health expenditure, health inputs and periodic national health accounts and reports from financial management systems are vital.

6. Discussion

6.1 Issues in design and costing: strengths and gaps

Generally, the development of EHCP content is influenced by international and national knowledge. It is benchmarked against acceptable and relevant international standards; while the national agenda provides cost–effectiveness analysis, technical, political and socioeconomic considerations that also play a key role in defining the services covered. The purpose is to focus scarce resources on the services that provide the best value for money in terms of improved health.
While the methods for defining the contents of the package and planning for its implementation are described in this paper, the issue of its funding is a critical limitation. Even the initial estimated cost of implementing EHCP, as a one-off cost covering infrastructure and equipment, was in excess of $400 million ($393 per capita), covering 2,400 health interventions initially designed and developed by the MoH.

An analysis of key activities and interventions indicates that the resource envelope for Swaziland will need to be increased to adequately address its future needs, a question that is affected by wider macroeconomic conditions. For example, about 50% of government revenue is received from SACU on the basis of business trade between the member countries included in SACU. The sharing of revenue from SACU is determined by an agreed revenue sharing formula by member states. This dependence on fiscal support poses concerns for sustainability of government programmes, as sudden shortfalls within the SACU could have detrimental effects on overall and sustained health financing, such as that needed for the EHCP (MoH, 2015a).

Over the past 10 years, resources allocated to the health sector have shown a marked increase. For example, health expenditure over total government expenditure increased from 11.4% in 2013 to 13% in 2016 (MoF, 2017). However, the prevailing high burden of HIV and AIDS and TB continues to demand a significant portion of health resources (MoH, 2014c). This calls for alternative resource mobilisation strategies to collect or generate additional revenues for health. Funding for the health sector is sourced from the government, representing about 57% of total health expenditures as of 2012/13 financial year. Table 6 shows health expenditure over total government expenditure and total health per capita.

| Table 6: Health expenditure over total expenditure and health per capita |
|-----------------|---|---|---|---|
|                  | 2013 | 2014 | 2015 | 2016 |
| % of health expenditure over total government expenditure | 11.4% | 12% | 12.5% | 13% |
| Total health expenditure per capita                    | $260 | $270 | $280 | $290 |
| Source: MoH, 2015a                                     |     |     |     |     |

One WHO report advised that an EHCP should contain a comprehensive mix of essential services paid for by national tax revenue, health insurance, external funding and/or out-of-pocket costs, with public or private providers at various levels (World Bank, 1993). Potential opportunities for new resources are being considered in Swaziland, such as social health insurance to broaden the funding base. However, this has been deferred indefinitely following a feasibility study conducted by development partners (WHO, 2008).

In the meantime, services within the EHCP have been selected as a minimum package addressing the priority disease burdens. For example, the increasing adult prevalence of HIV, currently at 26% (AEO, 2016), calls for measures that require substantial amounts of money. This must be raised domestically and through external funding from development partners. The priority setting this calls for brings into consideration cost-effectiveness and cost-containment strategies as a motivation for developing an EHCP. The decisions on which services are included have wider impact. With ill health and costs of healthcare leading causes of poverty, the EHCP can contribute to poverty reduction, and, it has been noted, as a tool for achieving universal health coverage.

6.2  Issues in the implementation and use

Since the development of EHCP, an assessment of the extent of use of EHCP in service delivery levels has shown positive results, even though the pace of use has been negatively impacted by factors described in this paper. The MoH has, however, expressed satisfaction with the uptake of EHCP services (HMIS, 2015).
Further, development of EHCP in 2010 has been followed by a number of key documents and guidelines as a result of the input by stakeholders, listed below:

a. Standard Treatment Guideline and Essential Medicines List (MoH, 2012a)
b. Quality Assurance Policy (MoH, 2012b)
c. Task Shifting Framework (MoH, 2012c)
d. Referral and Linkages Framework (MoH, 2013b)
e. Service Availability Mapping (MoH, 2013a)
f. National Equipment and Infrastructure Standards for Clinics (MoH, 2014a)
g. Staffing Norms (MoH, 2016b)
h. Quality Assurance Strategic Plan (MoH, 2012d)
i. Supportive Supervision and Mentoring Framework (MoH, 2009b)

These documents were identified as necessary for the process of EHCP implementation.

Implementation of EHCP calls for improvements in the quality of health infrastructure. New structures, technologies and equipment may be required. Human resources for health must be improved in terms of competency, skills, recruitment, incentives and retention. Any gaps in these inputs limit delivery and raise user frustration with the provider and the MoH. As new medicines, technologies and approaches are introduced, the EHCP needs to be updated and health workers trained to implement it. These gaps and challenges demand a shift in resources or mobilisation of new resources, which implies integrating the EHCP in budget and allocation decisions, which also means that the EHCP has had a limited role in strategic purchasing.

The monitoring and evaluation system that already exists within the MoH can provide support to EHCP implementation, providing feedback on the progress based on laid down strategies. The system can inform on its contribution to improved equity in service provision and access, improved health outcomes and reduced disease burdens. For this to be achieved, the limitations and gaps identified above need to be addressed.

While the paper has raised these implementation challenges, the critical barriers are that of resources. The present financing landscape indicates that government will not have adequate financial resources to support the country’s future health needs and desired health outcomes, particularly as the demand for services continue to outpace their availability. The MoH is allocated a budget of $160 million per year (2016/ fiscal year) sourced from taxes, domestic and external funding and development partners (CBS, 2016a).

Recognising the importance of financing services, the MoH is committed to establishing a national financing strategy, policy, and implementation framework (MoH, 2007), and to support and build the capacity of the health financing subunit within the planning unit. It seeks to be empowered to advocate for sustainable health financing priorities, including for the effective and efficient use of available resources to ensure access to health services. In view of the guiding principles in the national health policy, rising demand against the real financial constraints suggest that future finance strategies within the health sector give attention to public health (non-personal health) and essential clinical services as a matter of priority. This would ensure that the health system is able to meet demand with limited resources, to provide a sustainable path to ensure universal and accessible healthcare for all based on need and not ability to pay. Just as important is to reduce the disease burden through investment in public health, prevention and essential clinical services. This calls for the renewal of primary healthcare in the country.

7. Conclusions

In view of the adoption and implementation of the EHCP by the Government of Swaziland, and the report findings, certain implications need to be considered. The review of the initial EHCP interventions led to the scaling down of health priorities to a minimum package, due to the resource constraints faced in implementing the full EHCP.
Implementation of EHCP is clearly incapacitated by the resource constraints (human, financial and health systems). The government may thus need to identify priority areas for public financing and areas where private sector investment would be appropriate to share the responsibilities. Additionally, the development of a national health finance policy that sets longer term strategies and alternative approaches for resourcing the health sector appears to be a necessary policy complement to the EHCP. Such policy will ensure sufficient public sector investment while also promoting private sector investments in the health sector, avoiding cost escalation and focusing resources where most needed. For example, the referral of clients for treatment outside the country is costly, while encouraging investment in facilities in the country would need to be supported by appropriate policy/legislation.

The EHCP is itself dynamic, needing to be updated and costed as population health demands change and service responses develop. For example, for the current EHCP implementation stakeholders’ responses have not yet been solicited. An EHCP calls for research, technical and other relevant reports and prompt availability of information for decision-making – and this is not always available. With the demands, possibilities and challenges faced, research and development on healthcare delivery to inform decision-making must be strengthened, including in areas such as implementation research.

While finances are a key constraint, and appropriate logistics and adequate commodities need to be assured, these services need to be delivered by various cadres of health personnel. The shortage of health workers impacts heavily on the provision of the EHCP. This too needs to be planned for -- to recruit and place health personnel, to explore the organisation and shifting of tasks, all of which require dialogue, training and an appropriate policy and regulatory framework.

It is significant that the EHCP in Swaziland contributed to and is based on a model of ‘client-orientated’ service delivery. However, this also requires a reorganisation of the health system to incorporate new service delivery models focused on patients. For this to occur, there is need to orient and train health workers and sensitise clients on new approaches. Implementing the EHCP in a client-orientated service delivery model approach means not taking a singular disease focus but basing the response on each case as it presents, focused around the various health needs they present. This calls for retraining health workers, with negotiations with professional associations to accommodate the changes needed to achieve the EHCP objectives. It also calls for a review of current laws, policies and guidelines to provide a legal mandate, with increased health literacy in the community and mechanisms for government to monitor and enforce adherence to EHCP by all stakeholders through the national quality assurance unit. It also calls for enhanced co-ordination of activities within the MoH.
8. References


Acronyms

AIDS Acquired Immunodeficiency Syndrome
ART Antiretroviral Therapy
CBS Central Bank of Swaziland
EHCP Essential Health Care Package
HIMS Health Information Management System
HIV Human Immunodeficiency Virus
MDR-TB Multidrug-resistant Tuberculosis
MOEPD Ministry of Economic Planning and Development
MOF Ministry of Finance
MOH Ministry of Health
NCD Non-communicable Disease
PEPFAR U.S. President’s Emergency Plan for AIDS Relief
PHC Public Health Centres
PMTCT Prevention of Mother-to-Child Transmission (of HIV)
SACU Southern African Customs Union
SADC Southern African Development Community
SHI Social Health Insurance
TB Tuberculosis
UN United Nations
UNAIDS Joint United Nations Programme on HIV/AIDS
WHO World Health Organisation
MOJCA Ministry of Justice and Constitutional Affairs
## Appendix 1 Stakeholder lists

### Table A1: List of National Validating Team (Technical Working Group)

<table>
<thead>
<tr>
<th>Designation</th>
<th>Organisation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Deputy Director of Health (Clinical/Curative Services)</td>
<td>MoH</td>
</tr>
<tr>
<td>EHCP Co-ordinator (Secretary)</td>
<td>MoH</td>
</tr>
<tr>
<td>Chief Nursing Officer</td>
<td>MoH</td>
</tr>
<tr>
<td>Health Systems Focal Person</td>
<td>WHO</td>
</tr>
<tr>
<td>Country Representative</td>
<td>Medicine Sciences for Health</td>
</tr>
<tr>
<td>SMO – TB Hospital</td>
<td>MoH</td>
</tr>
<tr>
<td>TB Officer</td>
<td>University Research Council</td>
</tr>
<tr>
<td>Deputy Chief Nursing Officer Public Health</td>
<td>MoH</td>
</tr>
<tr>
<td>Co-ordinator COAG</td>
<td>PEPFAR</td>
</tr>
<tr>
<td>Health Systems</td>
<td>PEPFAR</td>
</tr>
<tr>
<td>Senior Health Administrator</td>
<td>MoH</td>
</tr>
</tbody>
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### Table A2: List of Stakeholders involved in developing and reviewing the EHCP

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<thead>
<tr>
<th>Designation</th>
<th>Organisation</th>
<th>Designation</th>
<th>Organisation</th>
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<tr>
<td>Medical Officer (SMO)</td>
<td>MGH</td>
<td>Programme Manager</td>
<td>MoH</td>
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<tr>
<td>Nursing Officer</td>
<td>MoH</td>
<td>Midwife</td>
<td>RFMH</td>
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<tr>
<td>ICU and Renal</td>
<td>MGH</td>
<td>Advanced Midwifery</td>
<td>MGH</td>
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<tr>
<td>ENT Specialist</td>
<td>MGH</td>
<td>Operating Theatre</td>
<td>MGH</td>
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<tr>
<td>Paediatricist</td>
<td>MGH</td>
<td>Anaesthetic Technician</td>
<td>MGH</td>
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<tr>
<td>Surgeon</td>
<td>MGH</td>
<td>Audiology</td>
<td>MGH</td>
</tr>
<tr>
<td>Orthopaedic Surgeon</td>
<td>MGH</td>
<td>ICU/ Renal Unit</td>
<td>MGH</td>
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<tr>
<td>SMO</td>
<td>Mbabane Clinic</td>
<td>MED-SURG</td>
<td>NHC</td>
</tr>
<tr>
<td>Medical Officer</td>
<td>ICAP</td>
<td>EPI</td>
<td>Mbabane P H U</td>
</tr>
<tr>
<td>Medical Officer</td>
<td>MGH</td>
<td>EPI</td>
<td>WHO</td>
</tr>
<tr>
<td>Dentist</td>
<td>MGH</td>
<td>IMCI</td>
<td>Mbabane P H U</td>
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<tr>
<td>Peadiatrician</td>
<td>Baylor Clinic</td>
<td>Speech &amp; Hearing</td>
<td>MGH</td>
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<tr>
<td>Neuro-Surgeon</td>
<td>MGH</td>
<td>Lecturer</td>
<td>NCoN</td>
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<tr>
<td>Internal Medicine</td>
<td>MGH</td>
<td>Paediatric Nurse</td>
<td>MGH</td>
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<tr>
<td>Ophthalmologist</td>
<td>MGH</td>
<td>ICU / Renal</td>
<td>MGH</td>
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<tr>
<td>Psychiatrist</td>
<td>Psychiatric Centre</td>
<td>Orthopaedic Nurse</td>
<td>MGH</td>
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<tr>
<td>Laboratory</td>
<td>Laboratory Manzini</td>
<td>Nutritionist</td>
<td>Nutritional Council</td>
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<tr>
<td>Lecturer</td>
<td>UNISWA (Health)</td>
<td>Nursing Sister</td>
<td>MGH</td>
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<tr>
<td>Medical Officer</td>
<td>MGH</td>
<td>Pharmacist Mbabane</td>
<td>MGH</td>
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<tr>
<td>Medical Officer</td>
<td>MGH</td>
<td>Laboratory Technologist</td>
<td>Malaria Programme</td>
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<tr>
<td>SNAP</td>
<td>MoH</td>
<td>Chief Surveillance Officer</td>
<td>Malaria Programme</td>
</tr>
<tr>
<td>HIV Officer</td>
<td>WHO</td>
<td>Grant Manager</td>
<td>Malaria Programme</td>
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<tr>
<td>TB</td>
<td>TB Hospital</td>
<td>Programme Manager</td>
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<tr>
<td>Medical Officer</td>
<td>HGH</td>
<td></td>
<td></td>
</tr>
<tr>
<td>EPR</td>
<td>MoH</td>
<td>Nursing Sister</td>
<td>TB Programme</td>
</tr>
<tr>
<td>M&amp; E Officer</td>
<td>MoH</td>
<td>Optometrist Mbabane</td>
<td>MGH</td>
</tr>
<tr>
<td>Epidemiologist</td>
<td>MoH</td>
<td>Environmental Health</td>
<td>MoH</td>
</tr>
<tr>
<td>Senior Statistician</td>
<td>MoH</td>
<td>Laboratory</td>
<td>Manzini</td>
</tr>
<tr>
<td>NCD Programme Manager</td>
<td>MoH</td>
<td>Ophthalmic Nurse</td>
<td>MGH</td>
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<tr>
<td>NCD</td>
<td>MoH</td>
<td>Optometrist</td>
<td>Vision 2020</td>
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<tr>
<td>Physiotherapist</td>
<td>MGH</td>
<td>Programme Officer</td>
<td>PSI</td>
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<tr>
<td>Occupational Health Therapist</td>
<td>MGH</td>
<td>School Health Nurse</td>
<td>School Health</td>
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<tr>
<td>Health Promotion Officer</td>
<td>MoH</td>
<td>Consultant</td>
<td>Crown Agency</td>
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<tr>
<td>FHP</td>
<td>WHO</td>
<td>Programme Manager</td>
<td>Bilharzia</td>
</tr>
<tr>
<td>SRH</td>
<td>MoH</td>
<td>Nurse Capacity Initiative Advisor</td>
<td>ICAP</td>
</tr>
<tr>
<td>Programme Manager</td>
<td>MoH</td>
<td>Biomedical</td>
<td>MGH</td>
</tr>
</tbody>
</table>
Equity in health implies addressing differences in health status that are unnecessary, avoidable and unfair. In southern Africa, these typically relate to disparities across racial groups, rural/urban status, socio-economic status, gender, age and geographical region. EQUINET is primarily concerned with equity motivated interventions that seek to allocate resources preferentially to those with the worst health status (vertical equity). EQUINET seeks to understand and influence the redistribution of social and economic resources for equity oriented interventions, EQUINET also seeks to understand and inform the power and ability people (and social groups) have to make choices over health inputs and their capacity to use these choices towards health.

EQUINET implements work in a number of areas identified as central to health equity in east and southern Africa

- Protecting health in economic and trade policy
- Building universal, primary health care oriented health systems
- Equitable, health systems strengthening responses to HIV and AIDS
- Fair Financing of health systems
- Valuing and retaining health workers
- Organising participatory, people centred health systems
- Promoting public health law and health rights
- Social empowerment and action for health
- Monitoring progress through country and regional equity watches

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