BUILDING SUSTAINABLE RESEARCH CAPACITIES FOR HEALTH AND ITS SOCIAL DETERMINANTS

SDH-NET

MAPPING RESEARCH FOR SOCIAL DETERMINANTS OF HEALTH AND HEALTH INEQUITY: A FOCUS ON KNOWLEDGE PRODUCTION AND NATIONAL RESEARCH SYSTEMS AND NETWORKS: SOUTH AFRICA COUNTRY MAPPING REPORT

JOHANNESBURG, NOVEMBER, 2012
SOCIAL DETERMINANTS OF HEALTH NETWORK (SDH-NET)
CONSORTIUM PARTNER INFORMATION

<table>
<thead>
<tr>
<th>Country</th>
<th>South Africa</th>
</tr>
</thead>
<tbody>
<tr>
<td>Partner Institution</td>
<td>University of the Witwatersrand</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Contact Name</th>
<th>E-mail</th>
</tr>
</thead>
<tbody>
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</tr>
</tbody>
</table>
EXECUTIVE SUMMARY

1. SDH Policy and Knowledge Production
   - Brief State of SDH Policy
   - SDH research activity - perceptions, trends and national priorities
   - Scope of research on SDH & health inequity - type of research, methods employed, skills in use & capacity gaps

2. Research Systems
   - Research implementation - insight into key research institutions researching on SDH and health inequity (HR, financing)
   - National Research Systems - policies, etc; governing/coordinating bodies, participation mechanisms

3. Research System Performance
   - M&E
   - Ethics

4. Recommendations on Research Capacity on Social Determinants *(suggestions from Caroline)*
   - research capacities in social determinants of health identified on national level and the main obstacles to developing and building capacities. This topic is a specific guide for next phase.

5. Conclusion Way forwards
   - Research capacities in social determinants of health identified on national level and the main obstacles to developing and building capacities
   - Indications for SDH-Net
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GLOSSARY OF TERMS

The determinants of health: Many factors combine together to affect the health of individuals and communities. Whether people are healthy or not, is determined by their circumstances and environment. To a large extent, factors such as where we live, the state of our environment, genetics, our income and education level, and our relationships with friends and family all have considerable impacts on health, whereas the more commonly considered factors such as access and use of health care services often have less of an impact. The determinants of health include: (a) the social and economic environment, (b) the physical environment, and (c) the person’s individual characteristics and behaviours.

Social determinants of health are the economic and social conditions – and their distribution among the population – that influence individual and group differences in health status. They are risk factors found in one’s living and working conditions (such as the distribution of income, wealth, influence, and power), rather than individual factors (such as behavioural risk factors or genetics) that influence the risk for a disease, injury, or vulnerability to disease or injury. According to some viewpoints, these distributions of social determinants are shaped by public policies that reflect the influence of prevailing political ideologies of those governing a jurisdiction. The World Health Organisation says that “This unequal distribution of health-damaging experiences is not in any sense a ‘natural’ phenomenon but is the result of a toxic combination of poor social policies, unfair economic arrangements [where the already well-off and healthy become even richer and the poor who are already more likely to be ill become even poorer], and bad politics.
### LIST OF ABBREVIATIONS

<table>
<thead>
<tr>
<th>Acronym</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>AIDS</td>
<td>Acquired Immune Deficiency Syndrome</td>
</tr>
<tr>
<td>AMC</td>
<td>Adult Male Circumcision</td>
</tr>
<tr>
<td>DHS</td>
<td>Demographic and Health Survey</td>
</tr>
<tr>
<td>DP</td>
<td>Development Partner</td>
</tr>
<tr>
<td>ECD</td>
<td>Early Childhood Development</td>
</tr>
<tr>
<td>EPI</td>
<td>Expanded Programme of Immunization</td>
</tr>
<tr>
<td>ESDP</td>
<td>Education Sector Development Programme</td>
</tr>
<tr>
<td>ETP</td>
<td>Education and Training Policy</td>
</tr>
<tr>
<td>FGM</td>
<td>Female Genital Mutilation</td>
</tr>
<tr>
<td>GEAR</td>
<td>Growth, Employment and Redistribution Plan</td>
</tr>
<tr>
<td>GBS</td>
<td>General Budget Support</td>
</tr>
<tr>
<td>GDP</td>
<td>Gross Domestic Product</td>
</tr>
<tr>
<td>GHI</td>
<td>Global Health Initiative</td>
</tr>
<tr>
<td>HSR</td>
<td>Health Sector Reform</td>
</tr>
<tr>
<td>HSSP</td>
<td>Health Sector Strategic Plan</td>
</tr>
<tr>
<td>HIV</td>
<td>Human Immuno deficiency Virus</td>
</tr>
<tr>
<td>ITN</td>
<td>Insecticide Treated Nets</td>
</tr>
<tr>
<td>HMIS</td>
<td>Health Management Information System</td>
</tr>
<tr>
<td>MCH</td>
<td>Maternal and Child Health</td>
</tr>
<tr>
<td>MDG</td>
<td>Millennium Development Goal</td>
</tr>
<tr>
<td>NACP</td>
<td>National AIDS Control Programme</td>
</tr>
<tr>
<td>NCD</td>
<td>Non-Communicable Diseases</td>
</tr>
<tr>
<td>NGO</td>
<td>Non Governmental Organization</td>
</tr>
<tr>
<td>NMCP</td>
<td>National Malaria Control Programme</td>
</tr>
<tr>
<td>NMSF</td>
<td>National Multi-sectoral Strategic Framework</td>
</tr>
<tr>
<td>PLHAs</td>
<td>People Living with HIV/AIDS</td>
</tr>
<tr>
<td>PMTCT</td>
<td>Prevention of Mother to Child Transmission of HIV</td>
</tr>
<tr>
<td>PPP</td>
<td>Public Private Partnership</td>
</tr>
<tr>
<td>Acronym</td>
<td>Description</td>
</tr>
<tr>
<td>--------</td>
<td>-------------</td>
</tr>
<tr>
<td>RDP</td>
<td>Reconstruction and Development Programme</td>
</tr>
<tr>
<td>SDH</td>
<td>Social Determinants of Health</td>
</tr>
<tr>
<td>SDH-Net</td>
<td>Social Determinants of Health Network</td>
</tr>
<tr>
<td>UNDP</td>
<td>United Nations Development Programme</td>
</tr>
<tr>
<td>UNICEF</td>
<td>United Nations Children’s Fund</td>
</tr>
<tr>
<td>WB</td>
<td>World Bank</td>
</tr>
<tr>
<td>WHO</td>
<td>World Health Organization</td>
</tr>
</tbody>
</table>
SECTION 1: INTRODUCTION

1.1 BACKGROUND

The year 2008 marks the 30th anniversary of the call for ‘Health for All’ made at the Alma Ata conference on Primary Health Care (PHC). The Alma Ata declaration reaffirmed that health, which is a state of complete physical, mental and social wellbeing, and not merely the absence of disease or infirmity, is a fundamental human right. Building on a model of comprehensive PHC that was developed in South Africa by Dr Sidney Kark and colleagues during the 1940s, the Alma Ata conference declared, “the promotion and protection of the health of the people is essential to sustained economic and social development and contributes to a better quality of life and to world peace”. Inequities in health across different populations are a global phenomena that exist within and different countries. Differentials in health status have been observed between population groups, wealth groups, urban-rural and education levels. Recognizing the important role of both clinical and social determinants of health, the conference called for the inter-sectoral collaboration involving “all related sectors and aspects of national and community development, in particular agriculture, animal husbandry, food, industry, education, housing, public works, communications and other sectors”\(^1\).

Globally, there has been a renewed interest in the determinants of health, including social determinants. The theoretical understanding of health and its determinants is not completely formed. Nonetheless, the World Health Organization Commission on Social Determinants of Health argues that there is enough evidence for governments to take action following three principles namely (a) improving the daily living conditions of people; (b) reducing health inequalities; and (c) strengthening the ability to monitor population.

The SDH-Net is a four-year (2011-2015) collaborative project among 11 partner institutions that aims to strengthen and to link research capacities for health and its social determinants in African and Latin American low and middle-income countries (LMIC) in close collaboration with European partners. The focus of the Project is on strengthening capacities to produce research of high quality, as well as on reinforcing the research to policy continuum towards addressing existing health inequities. Based on a conceptual framework for building sustainable social determinants of health (SDH), research capacity, guidelines for mapping research for SDH and health inequity was designed to capture aspects of SDH knowledge production and relevant national research processes and systems\(^2\),\(^3\).

### 1.2 SOUTH AFRICA: A BRIEF OVERVIEW

South Africa is an upper middle-income country with a population of over 48 million and a land area of 1,219,090 sq km (40 people/ square kilometer). It has 9 provinces and 52 districts (Figure 1.1).

*Figure 1.1 Provinces and districts in South Africa*

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\(^2\) SDH-Net. 2012a

\(^3\) SDH-Net. 2012b.
Country profile of South Africa is described in Table 1.1 In comparison to two other focus SDH-net countries, South African economy has a larger economy but it did not translate to a relative better health outcome. For example, maternal mortality rate (300/100,000 live births) and Infant Mortality rate (42.67/1000 live births) is comparable to Kenya. Other concern is significantly high Gini coefficient (65) in comparison to two other countries. There is also gross variation within South Africa among the Provinces in terms of Infant Mortality Rate (Figure 1.2), Under 5 Mortality Rate (Figure 1.3),

Figure 1.2 Infant mortality rate in 9 provinces in South Africa

It shows wide variation within South Africa. For example in compare to Western Cape, Eastern Cape and Kwa-Zulu Natal Provinces have significantly high IMR.
Figure 1.3 showed the same picture. However all the nine provinces managed to significantly reduce the Under-5 mortality rate since 2002.

Table 1.1 Country profile

<table>
<thead>
<tr>
<th>DEMOGRAPHY</th>
<th>Kenya</th>
<th>South Africa</th>
<th>Tanzania</th>
</tr>
</thead>
<tbody>
<tr>
<td>AREA</td>
<td>580,367 sq km</td>
<td>1,219,090 sq km</td>
<td>947,300 sq km</td>
</tr>
<tr>
<td>POPULATION</td>
<td>43,013,341</td>
<td>48,810,427</td>
<td>46,912,768</td>
</tr>
<tr>
<td>0-14 years</td>
<td>total: 42.2%</td>
<td>total: 28.5%</td>
<td>total: 42%</td>
</tr>
<tr>
<td></td>
<td>male 8,730,845</td>
<td>male 6,998,726</td>
<td>male 9,003,152</td>
</tr>
<tr>
<td></td>
<td>female 8,603,270</td>
<td>female 6,959,542</td>
<td>female 8,949,061</td>
</tr>
<tr>
<td>15-64 years</td>
<td>total: 55.1%</td>
<td>total: 65.8%</td>
<td>total: 55.1%</td>
</tr>
<tr>
<td></td>
<td>male 11,373,997</td>
<td>male 16,287,314</td>
<td>male 11,633,721</td>
</tr>
<tr>
<td></td>
<td>female 1,260,402</td>
<td>female 15,972,046</td>
<td>female 11,913,951</td>
</tr>
<tr>
<td>65 years and over</td>
<td>total: 2.7%</td>
<td>total: 5.7%</td>
<td>total: 2.9%</td>
</tr>
<tr>
<td></td>
<td>male 497,389/ female 605,031</td>
<td>(male 1,125,709/ female 1,660,694)</td>
<td>(male 538,290/ female 708,445)</td>
</tr>
<tr>
<td>MEDIAN AGE</td>
<td>total: 18.8 years</td>
<td>total: 25.3 years</td>
<td>total: 18.7 years</td>
</tr>
<tr>
<td></td>
<td>male: 18.7 years</td>
<td>Male: 25 years</td>
<td>male: 18.5 years</td>
</tr>
<tr>
<td></td>
<td>female: 18.9 years</td>
<td>female: 25.6 years</td>
<td>female: 19 years</td>
</tr>
<tr>
<td>POPULATION GROWTH RATE</td>
<td>2.444%</td>
<td>-0.412%</td>
<td>1.96%</td>
</tr>
<tr>
<td>BIRTH RATE (births/1,000 population)</td>
<td>31.93</td>
<td>19.32</td>
<td>31.81</td>
</tr>
<tr>
<td>DEATH RATE (deaths/1,000 population)</td>
<td>7.26</td>
<td>17.23</td>
<td>11.92</td>
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<tr>
<td>URBANIZATION</td>
<td>22%</td>
<td>62%</td>
<td>26%</td>
</tr>
<tr>
<td>LITERACY</td>
<td>87.4%</td>
<td>86.4%</td>
<td>69.4%</td>
</tr>
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### HEALTH

<table>
<thead>
<tr>
<th>Metric</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maternal mortality rate (deaths/100,000 live births)</td>
<td>360</td>
<td>300</td>
<td>460</td>
</tr>
<tr>
<td>Infant mortality rate (deaths/1,000 live births)</td>
<td>43.61</td>
<td>42.67</td>
<td>65.74</td>
</tr>
<tr>
<td>Life expectancy at birth</td>
<td>63.07 years</td>
<td>49.41 years</td>
<td>53.14 years</td>
</tr>
<tr>
<td>Total fertility rate (children born/woman)</td>
<td>3.98</td>
<td>2.28</td>
<td>5.08</td>
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</table>

### ECONOMY

<table>
<thead>
<tr>
<th>Metric</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
</tr>
</thead>
<tbody>
<tr>
<td>Health expenditures (% of GDP)</td>
<td>12.2%</td>
<td>8.5%</td>
<td>5.1%</td>
</tr>
<tr>
<td>GDP (purchasing power parity PPP)</td>
<td>US$72.34 billion</td>
<td>US$562.2 billion</td>
<td>US$64.71 billion</td>
</tr>
<tr>
<td>GDP (real growth rate)</td>
<td>5%</td>
<td>3.1%</td>
<td>6.7%</td>
</tr>
<tr>
<td>GDP (per capita PPP)</td>
<td>$1,800</td>
<td>$11,100</td>
<td>$1,500</td>
</tr>
<tr>
<td>Unemployment rate</td>
<td>40%</td>
<td>24.9%</td>
<td>?</td>
</tr>
<tr>
<td>Population below poverty line</td>
<td>50%</td>
<td>50%</td>
<td>36%</td>
</tr>
<tr>
<td>Distribution of family income (Gini index)</td>
<td>42.5</td>
<td>65</td>
<td>37.6</td>
</tr>
<tr>
<td>Inflation rate (consumer prices)</td>
<td>14%</td>
<td>5% (2011 est.)</td>
<td>12.7%</td>
</tr>
</tbody>
</table>

### COMMUNICATION

<table>
<thead>
<tr>
<th>Metric</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
</tr>
</thead>
<tbody>
<tr>
<td>Telephones - mobile cellular:</td>
<td>24.969 million</td>
<td>50.372 million</td>
<td>20.984 million</td>
</tr>
<tr>
<td>Telephones - main lines in use</td>
<td>460,100</td>
<td>4.225 million</td>
<td>174,500</td>
</tr>
</tbody>
</table>
Figure 1.4 Government spending on health

Figure 1.4 portrays the government spending on health. Again compare to other Provinces, Western Cape spends more on health, which is possible due to quasi-federal structure of South African government.

1.3 METHODOLOGY

This mapping report is a part of the SDH activity that presents an overview of the SDH landscape in three African (Kenya, South Africa and Tanzania) and three Latin American countries (Brazil, Colombia and Mexico). This report concentrates on South Africa. It looked into the role of SDH in health inequities; trends in recent research and priorities and capacity needs of some of the national and sub-national research /advocacy/policy groups working in the broader area of SDH and health inequities; It also describes existing national systems, processes and mechanisms in place to advocate, to initiate, to coordinate, to guide and to monitor research and policies and/or programmes, as well as to facilitate an exchange of information between research and advocacy bodies and with policy makers towards strengthening the research to policy continuum; and the way forward towards promoting a national SDH research and policy agenda.

The mapping exercise was carried out over a period of six months (March to August 2012). The methodologies used for mapping includes:

(a) Analysis of existing documents: The detailed desktop review of the up to date documents to identify key researches conducted in South Africa based on a desktop review of some national policies, strategies, and programmes and published SDH-related research outputs from 2005 onwards. (Annexure A).

(b) Stakeholder analysis: Key informants identification across a range of
stakeholders is critical in achieving the basis for consultative platforms and forums. We approached individuals from a cross-section of institutions, national research, policy or advocacy institutions; national coordinating institutions; national, provincial and district government departments and non-governmental organizations (Annexure B).

This mapping report is not comprehensive or exhaustive. It does not reflect all SDH related activities in the country.
SECTION 2: CONCEPTUALIZATION OF SDH AND HEALTH INEQUALITIES: STAKEHOLDERS PERCEPTION

A review of South African trends shows that economic and social policies have resulted in economic growth and some improvements in access to basic services such as water, sanitation and electricity. Despite that, it is clear that the health of the South African population has worsened in the last decade, which is believed to be linked to social determinants of health. Some of these determinants highlighted by the respondents are listed in Table 2.1.

Table 2.1 Social determinants of Health

<table>
<thead>
<tr>
<th>General socio-economic cultural and environmental conditions</th>
<th>Culture</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Environment</td>
</tr>
<tr>
<td></td>
<td>Poverty and insufficient Resources</td>
</tr>
<tr>
<td></td>
<td>Poor leadership and management</td>
</tr>
<tr>
<td></td>
<td>Poor communication</td>
</tr>
<tr>
<td>Living and working conditions</td>
<td>Food security and hunger</td>
</tr>
<tr>
<td></td>
<td>Employment status</td>
</tr>
<tr>
<td></td>
<td>Working conditions</td>
</tr>
<tr>
<td>Social and community influences</td>
<td>Education</td>
</tr>
<tr>
<td></td>
<td>Early childhood development</td>
</tr>
<tr>
<td></td>
<td>Social cohesion</td>
</tr>
<tr>
<td></td>
<td>Urbanization and migration</td>
</tr>
<tr>
<td>Individual lifestyle factors</td>
<td>Trends in health status</td>
</tr>
</tbody>
</table>

Most of the respondents believed that South Africa have had developed excellent policies and legal frameworks for addressing health inequalities and inequities [such as Reconstruction and Development Programme (RDP), Growth and Growth, Employment and Redistribution (GEAR)] since 1994 but a lot could still be done.

To address existing inequalities and inequities, responded recommended the following:

- Effective implementation of various government policies and strategies to eradicate social inequalities and inequities
- Transparency in allocation of resources based on need
- Building capacity and capabilities among staff to manage allocated resources
- Integration of various spheres of government (national, provincial and local) as well as among different governments
- Coordination among government, non-governmental organisations and private sectors.
- Improve governance through various structures (Clinic committee, hospital board) to improve social accountability
- Implement human resource plan for health (Vision 2030) and allocate sufficient resources to improve production of health care workers and explore various task-shifting policies
- Implement the accreditation system for improvement of quality of care in health facilities
- Implementation of National Health Insurance for reducing cost of health care in private sector.
SECTION 3: KNOWLEDGE PRODUCTION: GENERAL TRENDS IN RECENT RESEARCH AROUND SDH AND HEALTH INEQUITY

Despite uncertainty about the exact levels of mortality, it is clear that the health of the South African population has worsened in the last decade. South Africa can be considered to have a quadruple burden of disease, including diseases and conditions related to poverty and under-development, chronic diseases, injuries and HIV and AIDS (Bradshaw, et al, 2002). A major proportion of these deaths could be linked to SDH. However, unlike Brazil, nationally there is no SDH specific research institution or commission in South Africa. THE SDH related researches are scattered and often form part of researches conducted in health and social development related fields (such as maternal and child health, HIV/AIDS, poverty, environment). Differentials in health status have been observed between population groups, wealth groups, urban-rural and education levels. A review of South African trends shows that economic and social policies have resulted in economic growth and some improvements in access to basic services such as housing, water, sanitation and electricity. Extreme inequalities and high unemployment rate likely play an important role in poor health outcomes. Cultural trends are difficult to capture, but of obvious concern to health are the high level of violence and the lower social status afforded to women and children. One of the major challenges is lack of clear understanding of health and its determinants. Therefore, it is difficult to estimate the effects of different government initiatives such as (increase in social grant, job creation of a separate ministry for women, children and people with disabilities)

The rainbow diagram by Dahlgren and Whitehead shown in Figure 3.1 provides a simple model in terms of layers of influence, starting with the individual and moving to wider society. It is by no means an explanatory model, but is used here as a simple framework to organise the review of the trends in the broader determinants of health. The determinants include: general socioeconomic factors, cultural and environmental factors; living and working conditions; social
and community factors; and individual lifestyle factors.

**Figure 3.1 Schematic diagram showing spheres of influence on health**

Some of the main causes of inequities in South Africa according to the responses are listed in Table 2.1.

**General socio-economic cultural and environmental conditions**

The determinants identified under this category are: poverty and insufficient resources (Figure 3.2), Income inequalities, Unemployment among economically active population. The Figure 3.3 shows the gap between poorest 10% and richest 10%.

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This is highlighted by very high Gini’s Coefficient for South Africa (Figure 3.3).

Some of the effect is lack of medical aid coverage among a large proportion of people, which varies from province to province (Figure 3.4). However, in all the nine provinces a large proportion of population have no medical aid and dependent on public health system.

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5 DOH
Poor infrastructure is another important factor pointed out by participants, which includes access to piped water and access to toilet (Figure 3.5), which is worst in Eastern Cape and better of in Gauteng and Western Cape Provinces.

Leadership and governance: The challenges identified by the participants under this category include poor management in the field of finance, human resources and supply chain management.
Poor communication: Lack of community awareness/ consciousness about ‘basic rights entrenched in South African constitutions’ (Box 3.1) highlighted by the participants as one of the major challenges.

Box 3.1 South African constitution

<table>
<thead>
<tr>
<th>27. Health care, food, water and social security</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1) Everyone has the right to have access to -</td>
</tr>
<tr>
<td>(a) health care services, including reproductive health care;</td>
</tr>
<tr>
<td>(b) sufficient food and water; and</td>
</tr>
<tr>
<td>(c) social security, including, if they are unable to support themselves and their dependants, appropriate social assistance</td>
</tr>
<tr>
<td>(2) The state must take reasonable legislative and other measures, within it’s available resources, to achieve the progressive realisation of each of these rights.</td>
</tr>
<tr>
<td>(3) No one may be refused emergency medical treatment.</td>
</tr>
</tbody>
</table>

Living and working conditions

Food security and hunger: Food security has a profound impact on health. It incorporates several aspects: food availability; individual access to food; utilization of food; and stability of food availability. Under-nourishment is a key impact indicator of food security and is defined as having an energy consumption that is continuously below a minimum dietary energy requirement for maintaining a healthy life and carrying out light physical activity. The Food and Agriculture Organization (FAO), assessed that <5% of the South African population were under-nourished. 6 General Household Survey found between 2002 and 2011, the percentage of households that experienced hunger decreased from 23,8% to 11,5% while the percentage of individuals who experienced hunger decreased from 29,9% to 13%.

The height and weight of children are clearly important indicators of longer-term food security. The 2010 SADHS reported 12% of children (under 5 years) were underweight, 27% were stunted and 5% were wasted. However, there are no indications that the nutritional status of children has changed substantially over the past 10 years. The survey also showed that stunting correlates strongly with mother’s level of education, ranging from 38% in the cases when the mother has no education to 13%, when the mother has post-matric level education. A recent report suggested an increase in under-nourishment among children in Johannesburg Metro Health District raising concerns.

Employment status: Unemployment levels in South Africa rose until about 2003, reaching levels of about 30% using the definition (i.e. able and wanting to work and taking active job seeking steps in the four weeks prior to survey). Unemployment is particularly high among the young, the unskilled and Africans. An economic review of human resources in South Africa describes that there is a current skills shortage in the economy and that concurrently, unemployment among the unskilled is high. Informal work provides little respite. Aside from income, unemployment has health consequences resulting from psycho-social factors, and high risk behaviours related to unemployment such as binge drinking and substance abuse.

Working conditions: South Africa has legislation to protect workers from gross health hazards (Occupational Health and Safety Act, Mine Health and Safety Act), but enforcement of occupational health and safety standards is poor. The number of inspectors is inadequate for the working population, making a system of proactive enforcement almost impossible. According to Adams et al., there has been little progress towards harmonization of legislation to date. In contrast to the improvements in mining fatalities and injuries, working conditions have

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deteriorated. For example, the toll of ‘miner’s phthisis’ (i.e. silicosis and tuberculosis) continues to exist or is even worsening.

Social and community influences

**Education:** Education plays a fundamental role in health. About one-third of women and men have completed Grade 12 or higher, men having a slightly higher proportion than women7. In 2007, 10% of the population aged 20 years and above had no education compared with 19% in 1996. Two reasons predominate among women 15-24 for leaving schools were financial reasons and falling pregnant. Whereas the proportion of all young women who left school due to pregnancy declined from 10% in 1998 to 7% in 2003, but the proportion who left school due to financial reasons, increased from 13% to 19%. The adult population of South Africa is mostly able to read with about 90% being able to read a sentence presented during the interview.

**Early childhood development:** Both nutritional deficiencies and psycho-social deprivation affect brain development10,11. In terms of nutritional deficiencies, poor development has been associated with stunting, iodine deficiency and iron deficiency anaemia. In South Africa, about 20% children are stunted, and iron deficiency anaemia is a recognized health problem that needs attention.12 The DoH planned for an Integrated Nutrition Programme (INP) that was comprehensive and community-based, nevertheless, the programme was never

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fully implemented\textsuperscript{13}. The school feeding programme, however, has been more successful and by 2006/07 the programme reached about six million learners in 18,039 schools with a midday meal.\textsuperscript{14}

\textbf{Social cohesion:} Using data from the World Values Surveys, the mid-term report indicates that South Africa compares favourably with other comparable countries in terms of belonging to volunteer organizations, with about 50\% the population belonging to Faith Based Organizations\textsuperscript{15}. Often disease itself can result in exclusion, and illustrated it with cases of people with HIV/AIDS, who have been excluded by their own family\textsuperscript{16}. The mid-term report noted that according to survey data, Africans seem the least networked, when compared to other population groups\textsuperscript{14}. The report highlights the fact that although it is often assumed that Africans have a better sense of community, they belong to networks of meagre resources.

\textbf{Urbanization and migration:} During apartheid era, the Group Areas Act controlled the movement of people and restricted Africans to selected rural areas. By 1994, 50\% of the population was urbanised. Continued growth of the urban population has placed extensive pressure on the need for housing and services and has created enormous challenges for local and provincial government. Migration has been bound up with urbanisation and the splitting of families has been a part of the South African way of life\textsuperscript{17}. For example, miners stayed in a single sex hostel living their families in the rural areas. This must have contributed to the rapid spread of HIV in South Africa. Children have been left in the care of rural


grandparents while the parents seek employment in urban areas. This is not conducive to building the social supports needed for raising children in a secure environment.

Although many researches have been done on SDH in South Africa they were fragmented and diseases specific. There is an urgent need to integrate the findings of these researches to create circumstantial evidences on the link between SDH and health and diseases. The impact of changes in SDH on health and diseases takes a long time. Nonetheless, the World Health Organization Commission on Social Determinants of Health argues that there is enough evidence for governments to take action following three principles: improving the daily living conditions of people; reducing health inequalities; and strengthening the ability to monitor population health. A revitalised Alma Ata provides an aspirational charter to build primary curative and preventive care accompanied by intersectoral action linking health and action.
SECTION 4: NATIONAL SYSTEMS: RESEARCH AND ADVOCACY ON SDH AND HEALTH INEQUITIES: CAPACITY NEEDS AND GAP

A number of organizations in South Africa are working on issues pertaining to health and inequities and inequalities. These include research institutions, Advocacy Group as well as Government Institutions who are looking into disease and system research priorities. There are a number of research project undertaken on issues related to strengthening health systems and addressing the determinants of infectious diseases (such as malaria, tuberculosis, HIV/AIDS) non-communicable diseases (such as diabetes and hypertension), mother and child health. In addition a number of research projects were undertaken on environmental and occupational health. There are also some researches on health policy but very few on implementation or translational research. More importantly, very few of the research findings were used by the DoH to change practices and delivery of services. As a result it is difficult to understand the impact of these researches on the poor and vulnerable population. In addition some researches are focused on gender issues.

In terms of the National Health Act (ACT 61 of 2003), each Clinic and hospital will have a clinic committee and hospital board, in addition to a health council at district, provincial and national levels. However, the effect of these governance structures is not widely researched.

Most of the research undertaken nationally employs a range of quantitative and qualitative research skills including policy analysis. Some focuses on scientific rigour whereas other concentrates on richness of data through participatory methods. Many research disciplines are involved in SDH related research such as medical doctors, nurses, medical and allied health professionals, epidemiologists and biostatisticians, social scientists, economists, demographers,
geographers, public health practitioners, urban planners, activists, advocacy groups. However, interdisciplinary are very few particularly there is a big disjoint between clinical and social science researches. Following are specific gaps in research as noted by some of the respondents:

- Integrated biomedical and social science research
- Health system management research
- Use of business principles in health care sector
- Implementation research
- Use of routinely collected data in health system research
- Service delivery based on the need of the community through community empowerment (such as clinic and ward committees)
- Impact of Municipal Ward Based Primary health care agents on improving health outcomes
- Impact of National Health Insurance.

There is an urgent need for an integrated research focusing on improving health of the community. There is a now a recognition to conduct more researches linked to health of the community rather than health systems research. In addition, translational research is gaining ground over purely academic research. The Province and District structure are becoming more concerns about research undertaken in their facilities and started engaging the researchers and research institutions to understand the findings of their research in relevance to their strategic objectives. Recently, health research committees have been established at national, provincial, district as well as facility levels in terms of the National Health Act and National and Provincial health research policies.

Nationally and locally, a number of programmes exist to build research capacity. Some of them are formal programme at the University level whereas others are informal programme for the staff working for government, non-governmental as well as private organisations.
Although there is no shortage of individual research skills, there are not enough staff to carry out research. This often results in outside institutions employ staff with donor funding without involving local staff resulting in missed opportunities to build local research capacity.

Annexure B provides list of South African institutions who are involved in SDH related research and dissemination strategies as well training of researchers in research methodology and research management.
SECTION 5: NATIONAL SYSTEMS: GUIDING RESEARCH AND POLICY ON SDH AND HEALTH INEQUITY

5.1 NATIONAL POLICIES, STRATEGIES AND PROGRAMMES ADDRESSING SDH AND HEALTH RELATED INEQUITIES

There are a number of legislative framework in place that provide strategic directions in health research in South Africa most important being the National Health Act (Act 61 of 2003). In addition to the National Health Act, following documents also focuses on researches in this area:

- Ten-point plan of the National Department of Health

Researches on Social determinants of health are highlighted as one of the key priorities of the National DoH.

**Box 5.1 Ten point plan**

<table>
<thead>
<tr>
<th>Strengthen Research and Development</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.10.1 Research to accurately quantify Infant Mortality Rate</td>
</tr>
<tr>
<td>2.10.2 Research into the impact of social determinants of health and nutrition (Research commissioned DoH, Presidency)</td>
</tr>
<tr>
<td>2.10.3 Support research studies to promote indigenous knowledge systems and the use of appropriate traditional medicines</td>
</tr>
<tr>
<td>2.10.4 To support health research that promotes partnerships that protect health from climate change</td>
</tr>
<tr>
<td>2.10.5 Improve the research output, especially from formerly disadvantaged health training institutions</td>
</tr>
<tr>
<td>2.10.6 Review the research capacity of academic health complexes</td>
</tr>
</tbody>
</table>

- Strategic plan of the DoH

The strategic plans for both national and nine provincial governments highlights research as one of the priority areas

- District health Plans

Each of the 52 districts are expected to produce annual district health plan
• Human resources plan for health

The documents presents HR plan for South Africa till 2030 and highlighted the need for research in this area.

• National Development Plan: Vision for 2030

This document highlighted the comprehensive and integrated development need for South Africa including the plan to address inequities and inequalities.

• National and Provincial Health Research Policies

The National and nine Provincial health research policies also focuses on priority research areas

5.2 COORDINATION AND GOVERNANCE MECHANISM

The National Health Research Committee established under National Health Act are expected to coordinate health in South Africa. However, in reality, various bodies (listed in Annexure C) conduct research independently with very little coordination among them, resulting in duplication and wastage of scarce resources. Besides the organizations listed in Annexure C, a number of donor funded institutions conducted contract research on behalf of the donors. The majority of these organizations are affiliated to one of the Universities. There is a general consensus among the interviewee about the need to coordinate the activities of these organizations and make their activities aligned to the national, provincial and district strategic objectives and needs. Hopefully, National, Provincial and District Research committees will address these gaps. Some of the major challenges identified by the respondents are:

• Duplication of researches in the same fields
• Implementation research
• Failure to conduct research where the needs are
• Link between priority of the DoH and interest of the research institutions and researchers
• Dissemination of research findings
• Failure to implement recommendations of the researches conducted in their area
• Use of existing data
• Weak research network
• Failure to understand and conceptualization of the importance of research on SDH and health inequities and inequalities.

Currently, donor funding dominates the government and non-governmental organisation particularly in the field of HIV/ AIDS research. However, the government through Department of Science and Technology spends a significant amount of resources on health research. In addition, the DOH at Province and District level are expected to spend 2% of its budget on research.
5.3 MECHANISM THAT ARE IN PLACE TO PROMOTE NETWORKS AND FACILITATE A TWO-WAY FLOW OF INFORMATION BETWEEN GOVERNING BODIES AND RESEARCH AND ADVOCACY INSTITUTIONS/ GROUPS AND DECISION MAKERS (POLICY MAKING BODIES)

There are no national structure that will promote networks and facilitate a two-way flow of information between governing bodies and research and advocacy institutions/ groups and decision makers (policy making bodies). The National, Provincial and District Research Committees are expected to play that role in future. In addition, a number of research conferences are held in South Africa, which provides exchange of ideas among the researchers.
SECTION 6: SYSTEM PERFORMANCE: MECHANISMS IN PLACE TO MONITOR THE ETHICS AND RESEARCH AND/OR POLICY PERFORMANCE

6.1 ETHICS REVIEW COMMITTEES

Ethics review committees are well-established in South African setting. All the Universities have Ethics Review Committees. In addition, the DOH also have their own Ethics Review Committees. Lastly National Health Act (Act 61c of 2003), provided the legal framework for establishment of a National Health Research Ethics Council.

The researchers are asked to fill in a prescribed form and submit it with relevant documents (such as protocol, information sheet, consent form) which are reviewed by the Ethics Committees and who then inform the researchers about their decisions.

One of the major weaknesses of the current system is to monitor the use of ethical principles after permission is granted.

6.2 INSTITUTIONAL MECHANISMS

Institutions have a range of processes for periodic reviews of researches conducted in their institutions. These are done through annual reporting and internal and external reviews. Often the donor organisations conduct their own reviews. The format of review varies between institutions but often done through peer review. Institutions are often judged on number of papers published in peer reviewed journals, number of papers presented in scientific conferences. However, this culture only exists in academic institutions. There are no incentives to conduct these type reviews in the DOH facilities.
6.3 NATIONAL MECHANISMS

There are a number of national data sets exists in South Africa. These data are collected through active or passive surveillance.

**District Health Information System:** The National DoH monitors a number of indicators through the routinely collected data (District Health Information System) since 1994. Each facility reports at the beginning of the month, which are collated at sub-district, district, province and national level. These data are reviewed every quarter at district and provincial level. The principles of DHIS are

(a) Data to be collected at its generation
(b) Data collection is to enable service assessment as well self-assessment
(c) Service delivery personnel would have responsibility for data collection
(d) Basic analysis at the point of collection
(e) Collection, aggregation and analysis will follow organizational structure of health services. It includes very few SDH related indicators.

**Minimum data set:** The health facilities collect data for a number of indicators (over 600) which includes Hospital Minimum dataset, Hospital Strategy Project, Hospital Revitalization data and National Tertiary services data. It includes very few SDH related indicators.

**Vital registration data:** It is mainly used for Demographic events. Examples are Birth and death notification data; Marriage; Immigration and Emigration. It does not include any SDH related indicators.

**Surveillance of notifiable medical conditions in South Africa:** National DoH identified a number of conditions as notifiable conditions for which regular, frequent & timely info on individual cases is necessary for prevention & control of disease. It does not include any SDH related indicators.
Electronic TB Register ((ETR.Net)): Department of Health manages this database for all TB patients. It only report new cases, which are reported/diagnosed. It does not include any SDH related indicators.

Extended programme on Immunization: AFP, Measles, Neo-Natal Tetanus: This database was designed by WHO and linked to laboratory results with suspected cases. It does not include any SDH related indicators.

National Mortality Surveillance System: It is maintained by the MRC and captures unnatural Deaths from only few mortuaries (mainly in urban). It does not include any SDH related indicators.

Reproductive Health : Termination Of Pregnancy: It is maintained by the DoH based on TOP’s performed in Public Health Facilities.

Reproductive Health : Maternal mortality (MAMAS): It is maintained by the DoH based on any maternal death. It captures causes of maternal deaths. It also captures a number of SDH related indicators.

Perinatal Problem Identification Programme (PPIP): It is maintained by the DoH based on any perinatal death. It captures causes of perinatal deaths. It also captures a number of SDH related indicators.

National Injury Mortality Surveillance: It is maintained by MRC-SA/ UNISA. It captures deaths due to non-natural causes that in terms of the Inquest Act (Act 58 of 1953) are subject to medico-legal investigations. It produces and disseminates descriptive and epidemiological information on those deaths.

National Cancer Registry: It is maintained by National Health Laboratory Services. It relies on private pathologist for providing info apart from NHLS
Malaria surveillance: It is maintained by the DoH. There are collecting information only three malaria prone provinces.

STI sentinel surveillance: It is maintained by the DoH. It is linked to DHIS and looked at some SDH indicators.

Antenatal Survey: It is maintained by DoH since 1990, based on very sound methodology (Internationally acknowledged) representative of all areas.

Population based Surveys: Population based Survey is conducted to collect specific information from a defined population. Examples are Census, Household surveys, South African Demographic Health Surveys, Burden of diseases Survey. They collect a number of SDH related indicators.

As shown by the above examples, South Africa do collect information on a number of SDH indicators they are not really integrated and used in conjunction with clinical determinants.
SECTION 7: STRENGTHENING SYSTEMS TOWARDS A NATIONAL SDH AND HEALTH INEQUITY AGENDA

South Africa has recently established National Health Research Committee and similar structures are being re-established at Provincial and District level.

Research and advocacy institutions and development partners are also being conscious about the need to communicate research evidences to policy makers and managers to influence policy making and service delivery. The research to service delivery interface is influenced by policy context, characteristics of research institutions and researchers, and nature of the research evidence.

Strategic alliances, coalitions and networking and active engagement between researchers and managers and policy makers are important for effective and efficient utilization of relevant researches into practice. Research evidence is often complex. Some effect of some research evidence may only be visible over time. In addition, substantial resources (human, finance and material) are often required to change and implement new policies. Thus a number of other factors influence implementation of research evidence into practice such as: Priorities of the government and ruling parties; Interest of researchers and research institutions; Interest of donors

There is a general consensus among the respondents about effective dissemination of research findings and evidence based policy formulation and service delivery. Following are some of the ideas for putting SDH research at the forefront.

- Set up a SDH commission like Brazil to integrate SDH research and mainstream the evidence generated from multi-disciplinary research
- Work at different levels (national, provincial, district and facility) to develop an understanding about SDH among health professionals, managers and policy makers
An increased awareness and advocacy of SDH as an attractive research field
Integration of SDH and clinical determinants of health for conducting research
Strengthening communication network to disseminate findings
REFERENCES AND BIBLIOGRAPHY


ANNEXURE A: TOOLS USED FOR THE SURVEY: KNOWLEDGE PRODUCTION: SDH RESEARCH ACTIVITY, BASIC RESEARCH SKILLS, RESEARCH DISSEMINATION

| Most important SDHs | Knowledge/ perception |
| Most important SDH sectors* | Knowledge/ perception |
| Most vulnerable populations* | Knowledge/ perception/ opinions |
| Priority areas for research on SDH and health inequity | Knowledge/ perception/ opinions |
| Priority given to SDH research and relevant capacity needs* | Knowledge/ perception/ opinions |
| Effective dissemination of available findings* | Knowledge/perception/opinions |

<p>| SDH Research Title (and if published, full) | SDHs &amp; SDH sectors &amp; target population | Key researcher(s), institutions, financiers* | Research methods used (quantitative/qualitative; mixed; epidemiological, | Type of research (operational, implementation, health systems, biomedical, | Research skills involved (conventional, | Time span and Status of research (completed, ongoing)*/** | Details dissemination research findings (national or international | Source of information, provide complete reference |
|-------------------------------------------------|----------------------------------------|------------------------------------------|----------------------------------------------------------|-----------------------------------------------|---------------------------------------------|----------------------------------------------------------|----------------------------------------------------------|----------------------------------------------------------|----------------------------------------------------------|</p>
<table>
<thead>
<tr>
<th>reference)*</th>
<th>addressee</th>
<th>anthropological, economics, etc)*</th>
<th>participatory action, ethnographic, synthesis review, poverty analysis, etc)*</th>
<th>interdisciplinary</th>
</tr>
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<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>conferences, publications in reputed journals, policy briefs, via media, etc)**</td>
</tr>
</tbody>
</table>

*Source of information: web search and review of available reports/documents, national stakeholder meeting, semi-structured interviews with NHS governing bodies, policy bodies (national level and CSOs) and sample of research institutions/groups

** Source of information: most probably will be limited to information available from research systems (governing bodies and sample of research institutions/groups interviewee
ANNEXURE B: RESEARCH ENTITIES IN SOUTH AFRICA

MEDICAL RESEARCH COUNCIL OF SOUTH AFRICA

The MRC Research Units, Groups and Lead Programmes have been listed according to the health priorities of South Africa.

National collaborative research programmes (NCRPs) and collaborative research groups (CRGs) are under development, selected from topics within these areas:

- HIV and AIDS (including SAAVI)
- Tuberculosis
- Malaria
- Cancer
- African Traditional Medicine and Drug Discovery
- Genomics, proteomics and computational biology
- Nutrition
- Crime, violence and injury
- Women, maternal and child health
- Cardiovascular and metabolic diseases
- Mental health and functional disorders
- Policy and implementation

The list below represents the 41 MRC Research Units, Groups and Lead Programmes, which are listed according to the health priorities of SA. For more information on each, please click on the relevant Unit or Lead Programme.

<table>
<thead>
<tr>
<th>Health Priorities</th>
<th>Research units and lead programmes</th>
</tr>
</thead>
<tbody>
<tr>
<td>HIV and AIDS</td>
<td>HIV Prevention Research Unit&lt;br&gt;South African AIDS Vaccine Initiative</td>
</tr>
<tr>
<td>Tuberculosis</td>
<td>Tuberculosis Epidemiology and Intervention Research Unit&lt;br&gt;Clinical and Biomedical Tuberculosis Research Unit&lt;br&gt;Molecular Mycobacteriology Research Unit&lt;br&gt;Centre for Molecular and Cellular Biology</td>
</tr>
<tr>
<td>Cardiovascular Disease and Diabetes</td>
<td>Chronic Diseases of Lifestyle Research Unit&lt;br&gt;Inter-university Cape Heart Research Unit&lt;br&gt;Exercise and Sports Medicine Research Unit</td>
</tr>
<tr>
<td>Infectious Disease</td>
<td>Immunology of Infectious Disease Research Unit&lt;br&gt;Diarrhoeal Pathogens Research Unit&lt;br&gt;Infiammation and Immunity Research Unit&lt;br&gt;Respiratory and Meningeal Pathogens Research Unit&lt;br&gt;Malaria Research Unit</td>
</tr>
<tr>
<td>Crime, Violence and Injury</td>
<td>Safety and Peace Promotion Research Unit</td>
</tr>
<tr>
<td>Cancer</td>
<td>Cancer Epidemiology Research Group&lt;br&gt;PROMEC&lt;br&gt;Oesophageal Cancer Research Group&lt;br&gt;Oncology Research Unit</td>
</tr>
<tr>
<td>Public Health</td>
<td>Burden of Disease Research Unit&lt;br&gt;Biostatistics Unit&lt;br&gt;South African Cochrane Centre&lt;br&gt;Health Policy Research Unit&lt;br&gt;Health Systems Research Unit&lt;br&gt;Rural Public Health and Health Transition Research Unit</td>
</tr>
<tr>
<td>Health Promotion</td>
<td>Alcohol and Drug Abuse Research Unit&lt;br&gt;Health Promotion Research and Development Unit</td>
</tr>
<tr>
<td>Category</td>
<td>Research Units</td>
</tr>
<tr>
<td>--------------------------------</td>
<td>--------------------------------------------------------------------------------</td>
</tr>
</tbody>
</table>
| **Women, Maternal and Child Health** | Gender and Health Research Unit  
Mineral Metabolism Research Unit  
Maternal and Infant Health Care Strategies |
| **Nutrition**                  | Nutrition Intervention Research Unit                                          |
| **Brain and Behaviour**        | Anxiety and Stress Disorders Research Unit  
Medical Imaging Research Unit                                                  |
| **Genomics and Proteomics**    | Bioinformatics Capacity Development Research Unit  
Bone Research Unit  
Human Genetics Research Unit  
Human Genomic Diversity Research Unit  
Receptor Biology Research Unit                                                |
| **Environment and Health**     | Environment and Health Research Unit                                         |
| **South African Traditional Medicine** | Drug Discovery and Development Research Unit  
Indigenous Knowledge Systems Research Unit                                    |

**NATIONAL RESEARCH FOUNDATION**

**SOUTH AFRICAN UNIVERSITIES**

- **University of Cape Town**  
Cape Town
- **University of Fort Hare**  
Alice, East London
- **University of the Free State**  
Bloemfontein
- **University of KwaZulu-Natal**  
Durban, Pietermaritzburg, Pinetown, Westville
- **University of Limpopo**  
Polokwane, Ga-Rankuwa
- **North-West University**  
Mafikeng, Mankwe, Potchefstroom, Vanderbijlpark
- **University of Pretoria**  
Pretoria, Johannesburg\(^2\)[15]
- **Rhodes University**  
Grahamstown
- **University of Stellenbosch**  
Stellenbosch, Saldanha Bay, Bellville
- **University of the Western Cape**  
Bellville (Cape Town)
- **University of the Witwatersrand**  
Johannesburg
- **University of Johannesburg**  
Johannesburg
- **Nelson Mandela Metropolitan University**  
Port Elizabeth, George
- **University of South Africa**  
Distance education, headquartered in Pretoria,
campuses and regional offices nationwide

University of Venda  Thohoyandou
Walter Sisulu University  Umtata, East London
Cape Peninsula University of Technology  Bellville, Cape Town
Central University of Technology  Bloemfontein, Welkom
Durban University of Technology  Durban, Pietermaritzburg
Mangosuthu University of Technology  Umlazi
Tshwane University of Technology  Pretoria
Vaal University of Technology  Vanderbijlpark

OTHER ORGANISATIONS

- Development Bank of South Africa
- South African Social Security Agency
ANNEXURE C: NATIONAL HEALTH ACT: CHAPTER 9: NATIONAL HEALTH RESEARCH AND INFORMATION

National Health Research Committee

69. (1) The Minister must establish a committee to be known as the National Health Research Committee.

(2) (a) The National Health Research Committee consists of not more than 15 persons, appointed by the Minister after consultation with the National Health Council.
(b) A person appointed in terms of paragraph (a)—
(i) serves for a term of not more than three years and may be reappointed for one or more terms; and
(ii) ceases to be a member on resignation or if requested by the Minister for good cause to resign.
(c) A vacancy in the National Health Research Committee must be filled by the appointment of a person for the unexpired portion of the term of office of the member in whose place the person is appointed, and in the same manner in which the member was appointed in terms of paragraph (a).

(3) The National Health Research Committee must—
(a) determine the health research to be carried out by public health authorities;
(b) ensure that health research agendas and research resources focus on priority health problems;
(c) develop and advise the Minister on the application and implementation of an integrated national strategy for health research; and
(d) coordinate the research activities of public health authorities.

(4) The Minister must prescribe the manner in which the National Health Research Committee must conduct its affairs and the procedure to be followed at meetings of the Committee, including the manner in which decisions must be taken.

(5) A member of the National Health Research Committee who is not in the full-time employment of the State must in respect of his or her service as a member be paid such remuneration as the Minister may determine with the concurrence of the Minister of Finance.

Identification of health research priorities

70. (1) The National Health Research Committee must identify and advise the Minister on health research priorities.

(2) In identifying health research priorities, the National Health Research Committee must have regard to—
(a) the burden of disease;
(b) the cost-effectiveness of interventions aimed at reducing the burden of disease;
(c) the availability of human and institutional resources for the implementation of an intervention at the level closest to the affected communities;
(d) the health needs of vulnerable groups such as women, older persons, children and people with disabilities; and
(e) the health needs of communities.
Research on or experimentation with human subjects

71. (1) Notwithstanding anything to the contrary in any other law, research or experimentation on a living person may only be conducted—
   (a) in the prescribed manner; and
   (b) with the written consent of the person after he or she has been informed of the objects of the research or experimentation and any possible positive or negative consequences on his or her health.

(2) Where research or experimentation is to be conducted on a minor for a therapeutic purpose, the research or experimentation may only be conducted—
   (a) if it is in the best interests of the minor;
   (b) in such manner and on such conditions as may be prescribed;
   (c) with the consent of the parent or guardian of the child; and
   (d) if the minor is capable of understanding, with the consent of the minor.

(3) (a) Where research or experimentation is to be conducted on a minor for a non-therapeutic purpose, the research or experimentation may only be conducted—
   (i) in such manner and on such conditions as may be prescribed;
   (ii) with the consent of the Minister;
   (iii) with the consent of the parent or guardian of the minor; and
   (iv) if the minor is capable of understanding, the consent of the minor.

(b) The Minister may not give consent in circumstances where—
   (i) the objects of the research or experimentation can also be achieved if it is conducted on an adult;
   (ii) the research or experimentation is not likely to significantly improve scientific understanding of the minor’s condition, disease or disorder to such an extent that it will result in significant benefit to the minor or other minors;
   (iii) the reasons for the consent to the research or experimentation by the parent or guardian and, if applicable, the minor are contrary to public policy;
   (iv) the research or experimentation poses a significant risk to the health of the minor; or
   (v) there is some risk to the health or wellbeing of the minor and the potential benefit of the research or experimentation does not significantly outweigh that risk.
National Health Research Ethics Council

72. (1) A council to be known as the National Health Research Ethics Council is hereby established.

(2) The Minister must—

(a) after consultation with the National Health Council, appoint as members of the National Health Research Ethics Council not more than 15 persons nominated by interested parties at the invitation of the Minister by notice in the Gazette; and

(b) publish the list of appointees in the Gazette.

(3) A member of the National Health Research Ethics Council is appointed for three years but may be reappointed for one or more further terms.

(4) A member of the National Health Research Ethics Council must vacate his or her office if he or she resigns or if requested by the Minister for good cause to resign.

(5) If a member of the National Health Research Ethics Council vacates office or dies, the Minister may fill the vacancy by appointing a person in accordance with subsection (2) for the unexpired portion of the term of office of his or her predecessor.

(6) The National Health Research Ethics Council must—

(a) determine guidelines for the functioning of health research ethics committees;

(b) register and audit health research ethics committees;

(c) set norms and standards for conducting research on humans and animals, including norms and standards for conducting clinical trials;

(d) adjudicate complaints about the functioning of health research ethics committees and hear any complaint by a researcher who believes that he or she has been discriminated against by a health research ethics committee;

(e) refer to the relevant statutory health professional council matters involving the violation or potential violation of an ethical or professional rule by a health care provider;

(f) institute such disciplinary action as may be prescribed against any person found to be in violation of any norms and standards, or guidelines, set for the conducting of research in terms of this Act; and

(g) advise the national department and provincial departments on any ethical issues concerning research.

(7) For the purposes of subsection (6)(c), “clinical trials” means a systematic study, involving human subjects that aims to answer specific questions about the safety or efficacy of a medicine or method of treatment.
Health research ethics committees

73. (1) Every institution, health agency and health establishment at which health research is conducted, must establish or have access to a health research ethics committee, which is registered with the National Health Research Ethics Council.

(2) A health research ethics committee must—

(a) review research proposals and protocols in order to ensure that research conducted by the relevant institution, agency or establishment will promote health, contribute to the prevention of communicable or non-communicable diseases or disability or result in cures for communicable or non-communicable diseases; and

(b) grant approval for research by the relevant institution, agency or establishment in instances where research proposals and protocol meet the ethical standards of that health research ethics committee.

Co-ordination of national health information system

74. (1) The national department must facilitate and co-ordinate the establishment, implementation and maintenance by provincial departments, district health councils, municipalities and the private health sector of health information systems at national, provincial and local levels in order to create a comprehensive national health information system.

(2) The Minister may, for the purpose of creating, maintaining or adapting databases within the national health information system contemplated in subsection (1), prescribe categories or kinds of data for submission and collection and the manner and format in which and by whom the data must be compiled or collated and must be submitted to the national department.

Provincial duties in relation to health information

75. The relevant member of the Executive Council must establish a committee for his or her province to establish, maintain, facilitate and implement the health information systems contemplated in section 74 at provincial and local level.

Duties of district health councils and municipalities

76. Every district health council and every municipality which provides a health service must establish and maintain a health information system as part of the national health information system contemplated in section 74.