**Supplementary File 2**

**Method:** Methods for policy analysis

**Results:** HTA Questionnaire

**Table 2a.** Number and Percentage of respondent working in different health sectors

**Table 2b.** Respondents’ work setting

**Table 2c.** Decision-making process instances at different levels

**Table 2d.** Response on role of HTA at different levels of healthcare system

**Table 2e.** Response on decision to fund a HTA program

**Table 2f.** Additional responses to HTA in general and its implementation

**References**

**Method**

**Methods for policy analysis**

Policy analysis can be conducted both retrospectively and prospectively to understand and learn from past policy failures and successes. The aim is to explain the interactions between interests, ideas and institutions responsible for shaping policy processes (1). Different types of models provide diverse analytical frameworks for policy. Walt and Gilson (1) noted that health policy research concentrated mostly on policy content and minimally on stakeholders, processes and context. Their policy triangle framework takes a political and economic perspective and considers the interaction of four elements to shape policy-making:

1. actors involved in formulation and implementation.
2. contextual factors – social, economic, political and international factors – that influence the policy,
3. the content of the policy and
4. the process by which the policy was initiated and developed and most likely implemented and evaluated.

I used this framework for thematic analysis of policy documents to consider factors affecting the policy.

In addition, Kingdon’s multiple streams theory was used to examine how a particular policy can work at a particular time. The argument is that a “window of opportunity” only opens when three independent streams – problem, policy and politics – interact and thereby force governments to act. The problem stream contains broad societal problems. The policy stream includes outputs from experts and researchers who address the problems and propose solutions. The political stream comprises of factors, which influence politics such as political transitions, pressure from interest groups, elections or the national mood (2).

**Results**

**HTA Questionnaire**

1. What is your current job function (e.g. researcher, clinician, hospital-manager, health economist, etc)?
2. In what kind of setting do you work?
3. How are new health services approved currently in your setting?
4. Do you see a role for health technology assessment in your setting?
5. HTA can determine the clinical effectiveness, cost effectiveness and safety – would you decide to fund a project or program involving HTA and how would you decide whether to fund it or not?
6. Should HTA be centralized or devolved?

**Result**

1. What is your current job function (e.g. researcher, clinician, hospital-manager, health economist, etc)?

|  |  |  |
| --- | --- | --- |
| **Job description** | **Number** | **%** |
| Health care administrators | 32 | 58.2 |
| Providers | 17 | 30.9 |
| Researcher | 3 | 5.5 |
| Others | 3 | 5.5 |

Supplementary Table 2a. Number and Percentage of respondents working in different health sectors. Note: Percentages were rounded

2. In what kind of setting do you work?

|  |  |  |
| --- | --- | --- |
| **Level of healthcare** | **Number** | **%** |
| National | 24 | 43.6 |
| Provincial | 13 | 23.6 |
| Hospital | 11 | 20 |
| Others | 7 | 12.7 |

Supplementary Table 2b. Respondents’ work setting.

Note: Percentages were rounded

3. How are new health services approved currently in your setting?

Broken down according to health care levels – national and provincial government and hospitals (local) and others (e.g. medical device industry, academia, medical scheme etc). The frequency of each response is added in brackets

|  |  |
| --- | --- |
| **Level of healthcare** | **Information used for decision making** |
| National | * Feasibility studies (3) * Cost benefit analysis (1) * Efficiency studies (2) * Price (1) * Impact on clinical outcome (3) * Standard treatment guidelines (6) * Essential medicine list (2) * HTA (1) * Pharmacoeconomic evaluation (3) * Policy analysis (3) * Maintenance contract (1) * Quality control (3) * Evidence-informed and evidence-based (5) |
| Provincial | * Clinician decision within budget limitation (2) * Strategic fit (2) * Evaluation guidelines (1) * Health technology policies (1) |
| Hospital | * Decision at provincial level (4) * Decision at national level (5) * Multi-disciplinary team (3) * Strategic planning bounded by a framework (the 10 point plan (3)) * Provincial or district – depending on cost and the kind of service (2) * Local solutions through analysing local data (2) |
| Others | * Value-based (4) * Health economics (5) * Evidence-based (7) |

Supplementary Table 2c. Decision-making process instances at different levels

4. Do you see a role for health technology assessment (HTA) in your setting?

Note: The frequency of each response is added in brackets

|  |  |
| --- | --- |
| **Level of healthcare** | **Role of HTA** |
| National | * Cost-benefit & sensitivity analysis (1) * Pharmacoeconomic evaluation (2) * To increase access to cost-effective technologies (2) * Improve clinical outcomes (4) * Medicine reviews (2) * Cost-containment (1) |
| Provincial/National | Capacity building - Need of better understanding (25) |
| Local | * involvement of decision makers at all levels (1) * use of mini-HTA tool (1) * procurement of equipment (3) * To determine clinical and cost-effectiveness (1) * To inform on safety profile (1) * Improving and strengthening current services and interventions (1) * For decision on diagnostic technologies (1) * Based on provincial/national strategies and values (1) * To manage public expectation under constraints of available budget available (1) * To inform access (1) * To overcome clinical and patient demand (1) * To improve clinical outcome (1) * For impact on quality indicators and efficiency indicators (1) * For clinical effectiveness (1) * to introduce new innovation (1) * to improve on existing technologies (1) * to improve patient outcomes in an affordable manner (1) |
| Others | * help with better decision-making (1) * Will lead to efficient procurement of technology (1) * Help to rationalize service (1) * Lead to informed decision by using clinical evidence and economic evaluation (1) * Review of current benefit packages (1) |

Supplementary Table 2d. Responses on role of HTA at different levels of healthcare system.

5. Would you decide to fund a project or program involving HTA and how would you decide whether to fund it or not?

|  |  |
| --- | --- |
| National or  Provincial | * Applied to prove clinical value of new intervention (1) * Depends upon the technology under assessment (2) * Price of the service (1) * National or provincial Department of Health (33) |
| Local | * Anticipated benefit or value to healthcare services (2) * Based upon cost implications (2) * Only when technologies prove to be cost-effective (2) * Depend on size and service complexity (1) * Funding need to be budgeted (1) * Relevancy to improve health status of individuals (1) |
| Others | * Yes for all decisions on safety, clinical effectiveness and economic evaluation (4) |

Supplementary Table 2e. Responses on decision to fund a HTA program

6. Should HTA be centralized or devolved?

Responses varied accordingly depending upon the respondents’ work setting – national (29/52.7%), provincial (17/30.9%) or local level (9/16.3%). Note: Percentages were rounded

Comments from respondents

|  |
| --- |
| * Lack of knowledge in HTA at all levels and how to implement (1) * Lack of information, funding and champion (1) * Acceptable standard (1) * Lack of national strategy on HTA (1) * Reluctance to adopt change or new methods (1) * Need for various levels of staff (1) * Limited holistic view of true challenges facing healthcare (1) * Lack of meaningful systemic approach (1) * Lack of IT resources (2) * Lack of system capacity (1) * Promulgation of the HTA concept is vital (1) * Should involve end-users (1) |

Supplementary Table 2f. Additional responses to HTA in general and its implementation

**References:**

1. Walt et al. (2008) Doing Health Policy Analysis. Health Policy and Planning 23:308–317. doi:10.1093/heapol/czn024
2. Kingdon J (1984) Agenda, Alternatives and Public Policies. Boston, MA: Little Brown
3. National Department of Health Republic of South Africa. (2010) National Strategic Plan 2010/11-2012/13. Pretoria: National Department of Health, South Africa