

## The Human Resources Software: Overview of Module 1 – HRPlanner

The Human Resources (HR) Software has been developed by Health Partners Southern Africa (HPSA) as a tool to improve management and planning of human resources within health systems and facilities. The software currently consists of two main modules which can be used either together or separately:

Module 1: Health Resources Planner (HRPlanner)

Module 2: Human Resources Administration (HR Admin)

This document provides an overview of Module 1, HRPlanner.

### What is HRPlanner?

HRPlanner is a unique human resource planning tool that has been specifically developed to facilitate the rationalisation of human resources in the public sector in developing countries. To achieve this it was envisaged that HRPlanner would:

- Assist health departments and ministries to generate comprehensive staff establishments for any type of institution service in a consistent manner in a relatively short time;
- Assist health departments and ministries with effective HR management and planning;
- Provide a database of approved, filled and recommended staff establishments of all health institutions and services to inform strategic planning of human resources.

HRPlanner has not been designed as a theoretical planning tool. Its primary purpose is to generate staff establishments in the format currently required in the public sector. It therefore incorporates all the details essential for the establishment of public sector health staffing, including but not limited to:

- Facility type and organisational structures;
- Geographical allocation of health services;
- Authorities rendering health services;
- Post categories;
- Salary grading systems and levels.

HRPlanner is not a prescriptive planning tool: the developed staffing models accommodate the individual circumstances of the country in which HRPlanner is being deployed whilst being guided by national affordability regulations.

The data captured in HRPlanner allows users to create different scenarios for the revision staffing arrangements as a result, for example, of staffing or financial constraints. It also supports the achievement of rapid restructuring or

rationalisation of health services and can generate lists to inform strategies for the redeployment of surplus staff or the filling of vacant posts. Furthermore, HRPlanner may be used to formulate projections for future human resource requirements and training needs.

### How is HRPlanner used?

HRPlanner has been successfully implemented in five South African provinces – Eastern Cape, Gauteng, Free State, Northern and North West Provinces – as well as in Botswana, Malawi, Georgia and four states in Northern Nigeria.

It has been used to develop staff establishments of hospitals and health districts. The software has proven to be a very useful repository of information on hospital and district staffing and has simplified the task of performing comprehensive analyses of staffing trends.

To generate reports on human resource utilisation and develop staff establishments the following information may be entered into HRPlanner:

- Posts utilised in healthcare services, including details of occupation codes, post categories and salary scales/grades;
- Workload variables which may be used to generate staff allocations;
- Purpose and function of each component within any facility type or service for the creation of templates from which organisational structures may be developed;
- Types of health facilities, management and administrative offices or services that require specialised staff establishments.

Staffing models may be created for institutions using inputs from the collected data listed above. Additional information can be entered to enhance the basic analysis of staff planning and management provided by HRPlanner:

- Geographical details for location of facilities in local areas, sub-districts, districts, regions, provinces and country;
- Health authority by name and type;
- Individual facilities, linked with any relevant identification codes;
- Staff data from any personnel database from other health authorities can be incorporated into HRPlanner. Core information from these systems – such as date of birth, gender, date of appointment and salary grade – can be stored for each individual and updated intermittently;

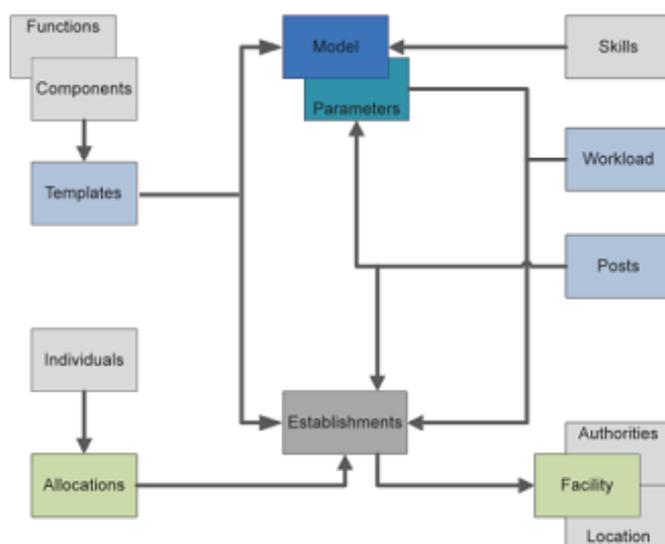


Figure 1: HRPlanner process diagram

- Individual personnel on personnel databases allocated to specific posts in a recommended establishment.

HRPlanner gives users the ability to link individual employees to the posts in a specific component of a specific establishment of a health facility

### Some specific uses of HRPlanner

HRPlanner may be used to generate:

- Multiple staff establishments for specific institutions based on different staffing models and multiple scenarios and that will feed into scenario planning and costing;
- Detailed staff establishments or post category summaries (by class or category of post);
- Analysis of the trends in staffing of approved, filled, intermediate and final recommended staff establishments for a given institution by category of post;
- Projections of vacant posts and surplus staff that would occur as a result of a changes in institutions;
- Projections of vacant posts and surplus staff by facility, district, region or province based on the service delivery framework scenarios approved by the Ministry of Health;
- Lists of health facilities by type, district, region, province or health authority to establish duplication of services by different health authorities and to identify gaps in health service delivery;
- A detailed organisation chart (organogram) in block format for the recommended establishment of a specific facility by exporting to Visio (a diagramming software programme);
- Lists of staff positions recommended for a specific facility type;
- Lists of staff to be allocated for a specific facility, using data imported from HR/personnel systems and other health authority databases;
- District, regional or provincial staffing summaries by post category for approved, filled, intermediate or final establishment of staffing;

- District, regional or provincial summaries of vacancies and/or redundancies by post class and category;
- Costs for any of the above reports (except the facility listing).

All the above reports may be exported into Excel to facilitate the tabulation and manipulation of the data as well as the creation of graphs and perform statistical analyses.

HRPlanner may also be used in the comparative analyses of staffing trends of different countries for which data has been entered.

### Development of detailed staff lists

As part of the rationalisation of human resources, HRPlanner facilitates the creation of staff lists for each facility and/or service. These lists provide the specific details of the health service personnel and their placement once the recommended staffing establishments have been approved. The facility staff lists are created by extracting individuals from current personnel administration system establishments – as well as those provided by other authority establishments where appropriate – and aligning them to the new posts from the recommended establishments. This exercise enables the reconciliation of recommended and current staff establishments and facilitates a comprehensive audit of personnel utilisation. It also allows for the:

- Identification of critical shortages in personnel;
- Identification of the numbers and categories of surplus personnel to current requirements;
- Rapid implementation of any new establishments, following a decision on their final composition by the Ministry of Health. All the necessary data being available on one electronic platform, it can very easily be fed into the personnel administration component of the HR Software (HRAdmin) or any other system being used ensuring a smooth and nimble transition;
- Identification of 'ghosts' individuals: these are individuals that continue to be present on the payroll whilst no longer actively working or individuals that have been entered more than once on the system.

## Strategic planning of human resources

In addition, HRPlanner has been extended to enable:

- **Identification of policy issues** to facilitate the finalisation of staffing health facilities such as:
  - the need to identify the appropriate mix of health facilities,
  - the provision of level 1 hospital care in urban sub-urban and rural areas,
  - the cross-subsidisation of PHC services by hospitals and of training delivered by health facilities,
  - the role of unions in the staff rationalisation process,
  - the allocation of private wards in hospitals and which services to privatise,
  - the separation of levels of care, and
  - the type of level 3 hospital services to be provided.
- **Clarification of the appropriate staffing** of provincial, district or local area offices: The revision of the structure and staffing of district offices may be required in view of decisions relating to devolution of health services to local authorities, the management of hospitals and/or the cross-subsidisation of PHC services by hospitals.
- **Clarification of the appropriate hierarchy of service provision:** The role and functions of each type of PHC facility, hospital and service may need to be clarified in relation to its position in the referral chain and the role of district and regional offices.
- **Clarification of the structure and functions of facility-based and community-based services** to facilitate the staffing of sub-districts and community health centres as well as identifying appropriate workload variables. Such clarifications also ensure the development of appropriate workload variables for clinics based on the type of community-based services rendered by clinical staff.
- **Development of appropriate staffing norms and guidelines for hospitals** based on the structure and function of each type of hospital. By identifying appropriate cost centres and workload indicators for staffing each cost centre, HRPlanner can help develop model staff establishment for each type of hospital and generate individual staff establishment for each individual institution. Models and policy on service provision may be reviewed in light of feedback from hospitals on recommended staff establishments, cost projections and available budget.
- **Creation of uniform staff establishments for all health facilities and services** through the incorporation of personnel databases from other health authorities: If required personnel from non-governmental organisations or private, local and provincial authorities may be integrated into individual public health facilities. This integration through the use of HRPlanner simplifies the creation of a uniform comprehensive health service and facilitates the devolution of district health services to local authorities.

## Possible additions to HRPlanner

Additional modules can be incorporated into HRPlanner to address further strategic planning issues. Examples of additional modules that are in development include:

### *Skills Planning (SP) Module*

This enables provision of more detailed information on skills mix requirements and the capacity to monitor specific trends in the staffing of health facilities.

### *Recurrent Expenditure (RE) Modelling Module*

The RE Module can be utilised to:

- Ascertain current recurrent expenditure and optimal recurrent expenditure by cost centre, facility, facility type, local area (sub-district), district, region and/or province;
- Determine surplus or deficit in recurrent funding by a comparison of current and optimal funding;
- Assist the financial modelling of scenarios that may involve changes in projected activity levels and/or benchmarked costs.

### *GIS Mapping Module*

GIS (geographical information system) mapping involves using datasets from HRPlanner and converting them into maps for specified geographical areas. Among other things, the GIS Module can be utilised to:

- Illustrate key performance indicators (KPI) for facilities grouped in a geographical area and run comparative analysis with similar facilities in other geographical groupings;
- Create maps and statistical analyses to highlight, for example:
  - current distribution of health professionals;
  - optimal distribution of health professionals;
  - surplus or deficit in distribution of health professionals;
  - distribution of facilities by facility type in districts, province and country;
  - primary health care or hospital catchment areas/population;
  - strategic overview of facility utilisation and resource distribution for a specific geographical area.