

## **B.3. Information Systems and Information Technology Planning Phases**

- *Phase 0* – Establish context and scope for healthcare institution information systems plan
- *Phase 1* – Determine healthcare institution information and support needs
- *Phase 2* – Establish information architectures and options for solutions
- *Phase 3* – Determine strategic solutions
- *Phase 4* – Prepare and deliver the implementation plan

### **Phase 0 - Establish context and scope for healthcare institution information systems plan**

#### *Initiate the study*

- Study context, scope, and terms of reference
- Prerequisites identified
- Essential parallel activities scoped and initiated
- Steering group set up and briefed
- Other key management members involved and briefed
- Initial interview schedule established

### **Phase 1 - Determine healthcare institution information and support needs**

#### *[a] Preparatory information collection*

- Outputs being produced
- Inventory and assessment of all available information about:
  - Healthcare institution goals, directions, and plans
  - Current and planned application systems
  - IT assets and inventory, current and on order
  - Human resource/skills

#### *[b] Determine healthcare institution information, support needs, and priorities*

- Outputs desired
- Agreed statement of healthcare institution information, support needs, and priorities based on consensus
- Document showing supporting detail of needs

## Phase 2 - Establish information architectures and options for solutions

### *[a] Assess current applications and IT technical status as well as match IT to needs*

- Outputs being produced
- Full inventory of current application portfolio and IT assets
- Assessment of strengths and weaknesses
- Outline of action plan for each high-priority weak area
- Preliminary view of rapid development opportunities where appropriate

### *[b] Developing information architectures*

- Draft architecture for healthcare institution structure
- Draft information architecture – application systems, databases, and technology requirements
- Identify key gaps/weaknesses in current status which will constrain the development of the architectures

### *[c] Establish initial options for strategic solutions*

- Identify key gaps/weaknesses in current coverage which require applications solutions
- Provide overall IS strategic vision of the preferred means for meeting the healthcare institution needs
- In the case of high-priority needs, a preliminary set of options for application solutions
- Modifications to emerging information architectures

### *[d] Develop cost/benefit justification for meeting needs*

- List of committed partners/stakeholders
- Present cases for meeting all key needs
- Action plan so that cases are carried forward through selection of solutions and implementation planning

## Phase 3 - Determine strategic solutions

### *[a] Identify and initiate urgent actions*

- Scope definition of a project to meet each appropriate need
- Completed developments
- Required healthcare institution outcome achieved

### *[b] Determine application and database solutions*

- Selection of the most appropriate application solutions
- Definition of the most appropriate application and database structures to support the solutions
- Log of options considered and reasons for selection or rejection
- Updates to the emerging information architectures as appropriate

- Specification of workload volumes and other technology requirements to support the solutions
- Basis for development of migration strategy to the proposed solution

*[c] Evaluate IT status and opportunities and set key IT directions*

- Assessment of current IT status, especially the gaps and soft spots
- Assessment of key developments and vendors in so far as they are relevant to the healthcare institution needs
- Identification of options and opportunities for meeting healthcare institution and application needs
- Preliminary identification of technology support options

**Phase 4 - Prepare and deliver the implementation plan**

*[a] Prepare applications and database projects plan*

- Statement of preferred strategic application solutions
- Complete development and implementation plan for applications and databases, linked to the IT and HR plans

*[b] Prepare IT technical projects plan*

- Statement of preferred strategic technology solution
- Complete development plan for computer hardware, software, communications, workstations, and development environments which supports the applications and databases development plan

*[c] Prepare organization and skills/resources development plan*

- Statement of organization and skills/resources solutions
- Complete development plan for IS organization and human resource skills and resources which support the applications and IT development plans

*[d] Integrate costs and case justification*

- Provide justification for the application, IT, and human resource plans
- Results of negotiations with stakeholders to ensure that final recommended delivery rate and sequence are acceptable
- Integrate financial analysis to support the recommended strategic solutions

*[e] Present plan and negotiate implementation*

- Agreed plans
- Application
- Technology
- Skills/resources
- Budgetary commitments
- Implementation program
- Agreed basis for maintaining and re-assessing the plans when healthcare institution circumstances change