

CHAPTER 11

ICT Priorities

Having completed an assessment of the strategic requirements, e-health potential and affordability, your focus can shift to choices and decisions about the ICT that should be part of the e-health investment plan. Two main types of ICT priorities support capacity building:

- ICT infrastructure – the technology
- ICT skills – the people.

Projects to improve these will help you to achieve high-benefit, high-impact and affordable e-health. An example is from an AKI presentation to use medical and information technology to:

- Minimise operational and personnel expenses
- Enhance customer service
- Trace and measure outcomes for reporting and strategic decisions
- Integrate patient medical data (Kamunyo, undated).

Reaching this type of position depends on bringing together several factors for decisions around the leadership and collaboration themes in chapter 6. It should reflect the affordable projects that will improve and advance interoperability, ICT and data standards, and health and healthcare applications and activities. It is extremely unlikely that governments will be able to meet all ICT priorities, so choices are inevitable. By bringing together several themes, you can compile a realistic schedule of affordable ICT projects. Core features in terms of being realistic are affordability, interoperability, timing and technical feasibility within the skills available.

The Rockefeller Foundation (2008) produced an example of e-health application priorities from a survey. Some of these may match your ICT priorities. In addition, ICT priorities for general communications networks and infrastructures could be ICT priorities. Chart 4 shows a summary.

Chart 4. E-health challenges identified by Rockefeller Foundation survey

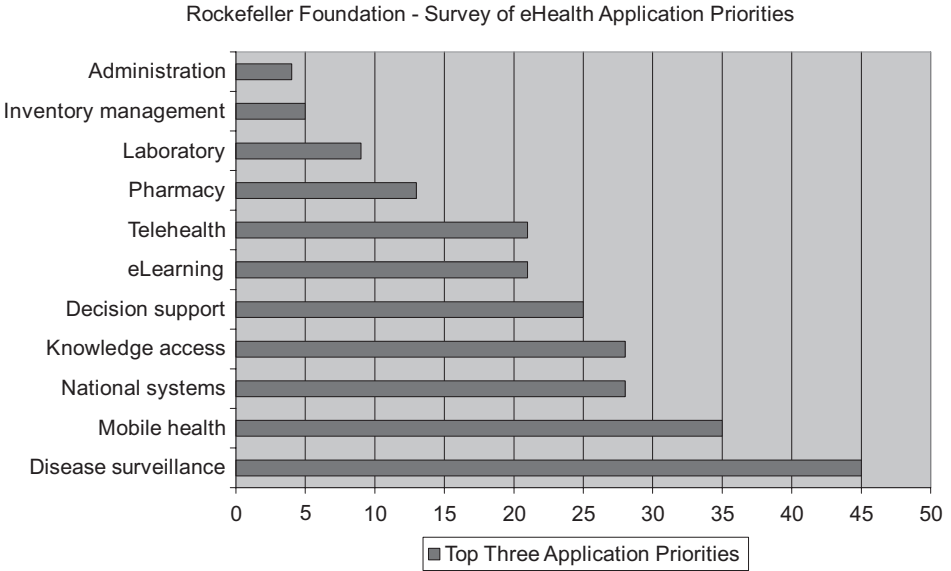


Table 15 shows an approach to compiling a schedule of your ICT priorities. The column ‘ICT classification’ comprises e-health categories. The column ‘ICT requirements’ is for general ICT needed to support the applications. You can change all these to fit your needs.

Table 15. Illustrative selection of ICT priorities, requirements, costs and timing for e-health

<i>ICT classification</i>	<i>ICT application</i>	<i>Healthcare area</i>	<i>ICT requirements</i>	<i>Estimated capital and revenue costs US\$</i>	<i>Type and year</i>
Clinical	Diagnostic results	Laboratories			
	Picture archiving	Imaging			
	Prescribing	Decision support			
	Health records	Transmission			
	Clinical management	Summary Detailed			
Tele-	Telemedicine	Beds			
		Theatre			
		Outpatients			
	Telehealth	Emergency care			
		Specific conditions			
M-health	Home monitoring				
Networks	District	Hospital discharge			
		Patients in communities			
		Hospitals			
	National and regional	Primary care			
		Both			
Public health					
Secondary	Public health				
	Health promotion				
	Health education				
	Research				
E-learning	Undergraduate				
	Postgraduate				
	Continuous				
Logistics	Supply chains	Drugs			
		Medical supplies			
	Theatre	Availability			
Management	Beds	Sterile supplies			
	Billing	Availability			
	Activity				
	Cost and utilisation				

The relative priorities assigned to each selected ICT investment should reflect the strategic timing need for e-health. Just because ICT is available early in the future, this is not a reflection of its relative strategic priority. Indeed, if you use availability as a criterion, it can distort relative strategic priorities. An example is where many local solutions are available that need to be linked to a national communications network. Is the priority to install the network, then the solutions, or install the solutions first, then the network, or a mix of both? These decisions must reflect the health, healthcare and ICT context, and look for the optimal medium-term outcome over say five years. Your goal is to avoid attractive short-term fixes, but to aim for effective, sustainable longer-term investment with increasing benefits. This is demanding and needs the guidance of your colleagues in the workshops.