

Using ICT's to provide viable
e-Health systems
for
enhanced health care in
Zimbabwe
BY

COLLENCE TAKAINGENHAMO CHISITA

collencechisita@yahoo.com

Background of e-Health programmes

- Developing countries are exploring alternatives ways of health delivery through integrating ICT's.
- ICT's are viewed universally as tools to improve the way work is executed.
- Sustainable health systems are dependant upon the integration of science and technology.
- Developing countries are investing in ICT connectivity and opportunities it provides

Use of ICT's in enhancing Health delivery

ICT's can be used to improve health delivery e.g.

- Improving home care delivery
- Predictions of outbreaks of pandemics and endemics.
- Efficient health information management.
- Education for health professionals
- Transparent management of health resources
- Use of assistive and adaptive technologies to promote e-inclusivity.

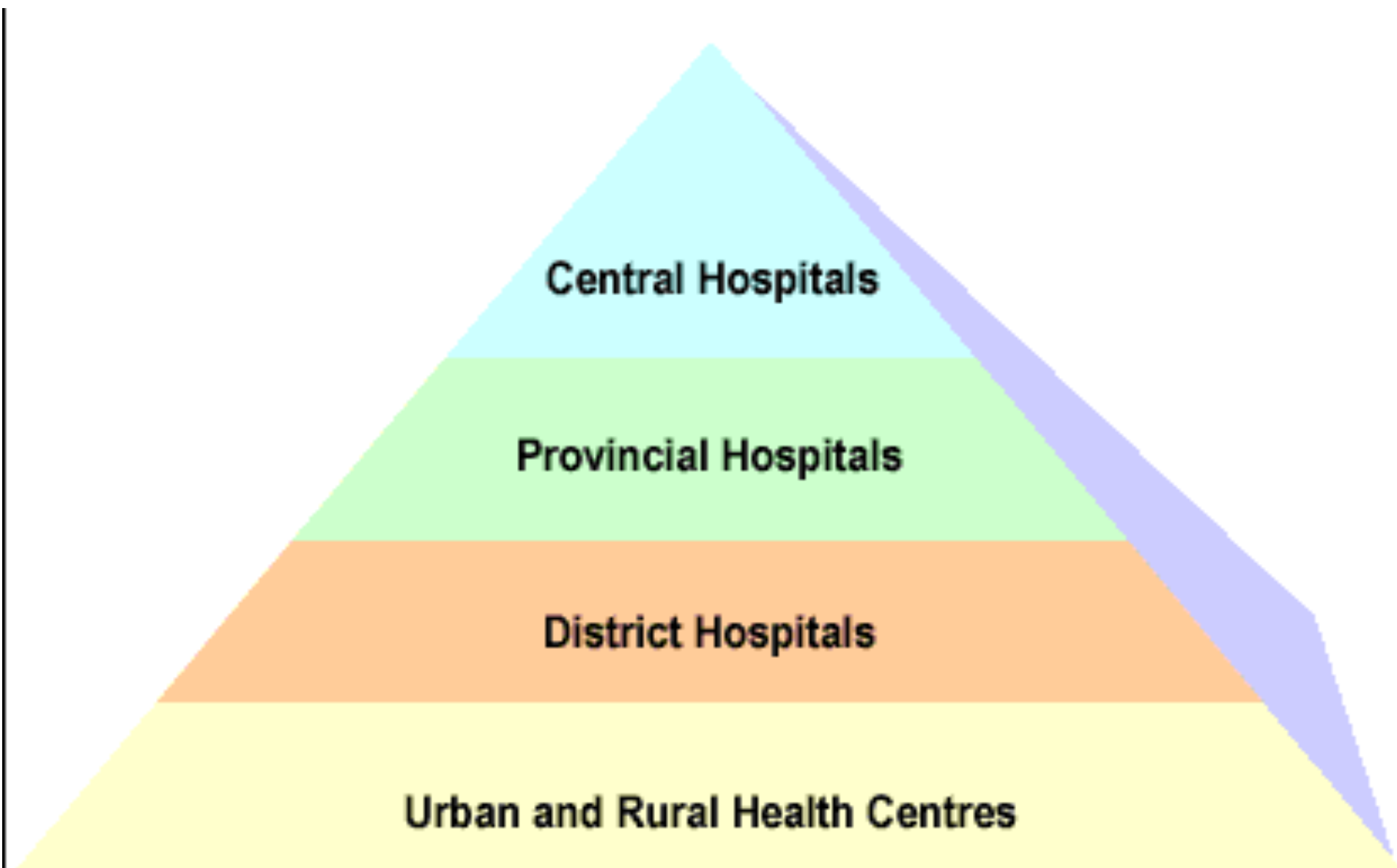


Figure 2: Progression of Health Care Delivery Referral System

Forms of e-Health

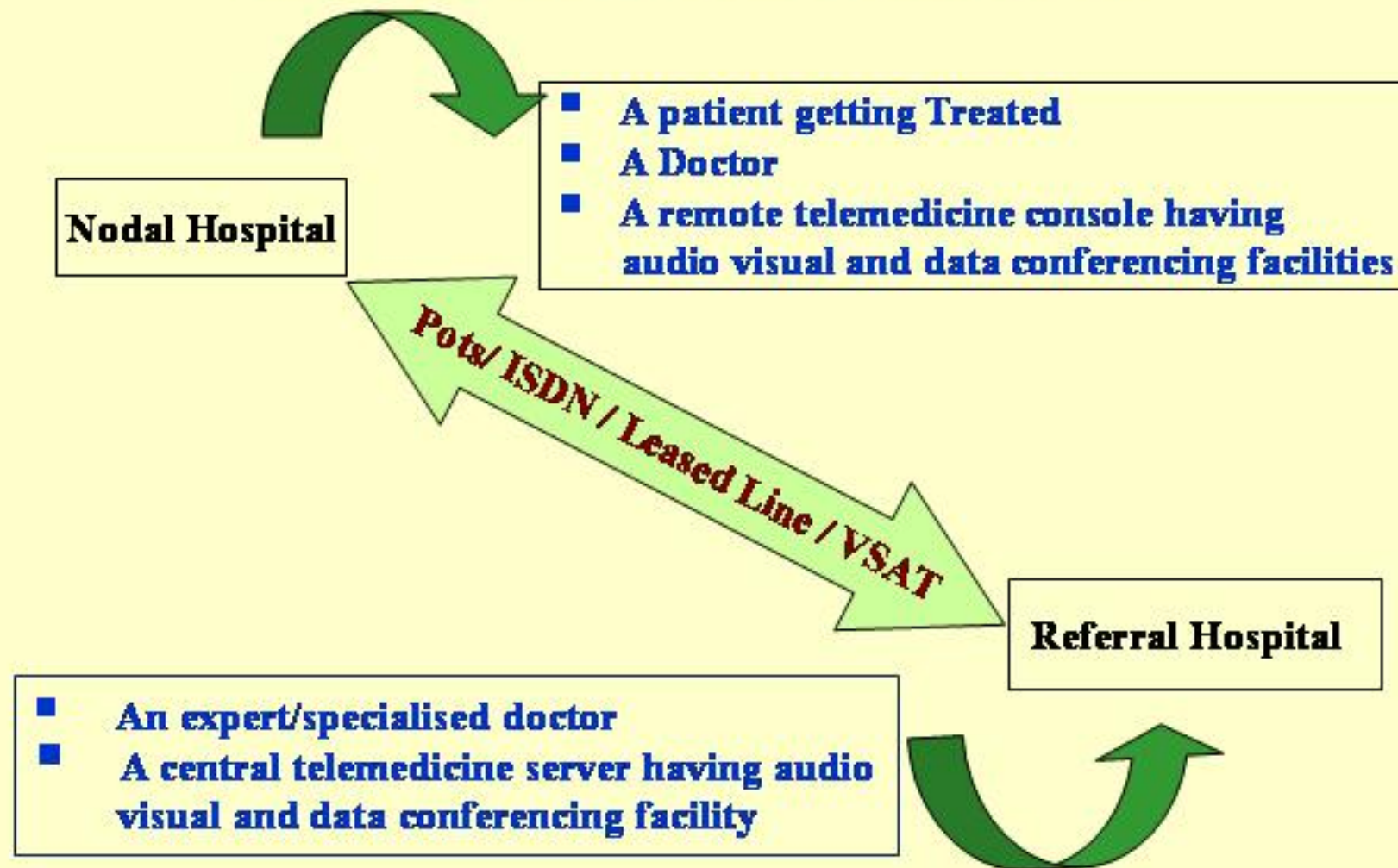
E-Health encompasses a variety of services and systems that are at the edge of medicine, health care and ICT's:

- Telemedicine .
- Consumer Health informatics.
- Electronic Health records.
- Health Knowledge management.
- Virtual health care teams
- mHealth.
- Health care Information Systems. *e.t.c*

M-Health alternative



Telemedicine : The Model



Source: K.K. Ghosh, Telemedicine, DIT Initiative

University of Zimbabwe's Medical School and e-Health

- It is the hub of health information catering for five thousand users at a time. (www.uz.ac.zw/-librarian)
- Systems caters for both staff, approved borrowers and users in Health Science Field
- Users can borrow and access e-resources from personal laptops from following;
- AJOL, Cambridge University, Oxford University, Agora, HINARI, Gale

Other e-health technologies for Africa

- Disease management tools.
- e-prescription
- Electronic patient physician communication
- Remote ICU-allowing virtual ICU teams.
- Ambulatory Computerised Physician Order Order Entry (ACPOE)
- Inpatient Computerised Provider Order Entry applications replaces traditional methods of placing medication orders, e.g. Paper , word of mouth

Benefits of e-Health technologies

- Removes problems of distance and time .
- Facilitates shared costs through consortium.
- Facilitates easier access to e-Health information
- Reduces government expenditure.
- Creation of institutional repositories of e-health to avoid institutional amnesia.
- Savings on storage facilities.
- Overcomes health data deluge or “health information tsunami” or ‘health information explosion”

continued

- “...the **seamless connectivity** to all components of a health delivery system... (and to).... Providers, employers, payors, pharmacies and regulatory agencies is a technological challenge, but **the potential of cost reduction and improvement in the quality of care is significant....”**

Ginter, P.M; Sawne, L.E. and Duncan, J.W
(1998:128) Strategic of Health Care
organisations

Challenges facing e-health programmes in Developing countries

- Lack of ICT infrastructure
- Variation in connectivity densities
- Information/Digital literacy to deal with the demand of a digital age.
- Need for a clear cut policy on e-health information
- Digital divide
- High costs of ICT hardware and software

Role of government in promoting e-health

- Prioritise Science and Technology in national plans
- Provide funding for e-health.
- Promulgate clear cut policies on e-health
- Promote research on e-health
- Develop regulatory framework for e-health programmes
- Promote Public and Private sector Partnership to develop e-health.

Role of Regional organisations in e-health services development

- Harmonisation of SADC/AU and ECOWAS e-Health systems and services.
- Prevent duplication of effort through creating a clearing house for research.
- Promote mutually beneficial partnerships at national and regional and global level.
- Promote resource sharing through consortia
- Provide funding *e.t.c*

Way Forward in promoting e-health in Africa

- Public and Private Sector Partnership as a special vehicle.
- Utilise ICT 's to promote Inter-institutional collaborations to overcome institutional insularity.
- Leverage free availability of health related services.
- Liberalise ICT industry to ensure competitive prices for products and services.
- Increase investment in ICT infrastructure

Continued

- Create an enabling legal environment for the development of a vibrant e-health systems and services.
- Make access to e-health information a vision for all African countries
- Forge South- South and North South Partnerships to leverage public health information , expertise and e-based courses.
- Internet connectivity in the entire health system to promote e-inclusivity.