Telemedicine and Health

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Introduction to Telemedicine

Wootton R. Telemedicine and developing countries - successful implementation will require a shared approach. *Journal of Telemedicine and Telecare* 2001;7:1-6

Telemedicine can be used for a wide range of health-care purposes:

1. Clinical (diagnostic and therapeutic)
2. Educational
3. Administrative

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Question:

Choose 2 examples from the article. Identify which category each example belongs to, the technology used, and the specific problem that it solved within its category.

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Various programs mentioned:

- SatelLife
- Post-graduate training provided from Canada to Kenya and Uganda
- Real-time Surgical Mentoring using low-quality video-pictures
- Tele-radiology in KwaZulu-Natal
- Store-and-forward Tele-neurology
- The Swinfen Charitable Trust
  - Tele-dermatology in sub-Saharan Africa

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Communications Methods

- Internet
- Satellite Link
- Telephone network

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Question:

What are some of the various problems in health-care delivery for developing countries?

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Infrastructure problems

- Unreliable electricity supplies
- Unclean water and poor sanitation
- Poor telephone services
- Lack of medical supplies, especially drugs
- Lack of transport

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Organizational problems

- Isolation and lack of continuing medical education for health-care staff
- Poor training and supervision of health-care workers
- Poor referral systems (and no feedback for the referrer)
- Not enough doctors and other health-care workers
- Too many patients

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Other Considerations

- Can health-care workers do anything on the basis of the advice they receive? That is, was the advice offered appropriate in the context of the health-care system in which the health-care workers were practicing?

- Is it an appropriate use of resources? That is, would the resources be better used in another way?

- How do you know that the advice offered was in fact correct?

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How can telemedicine advance in the developing world?

- Sharing of experience is important, so that mistakes are not repeated and successful application can be replicated.

- Arguably, such functions would be assisted by coordination by an international organization of some kind.

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Critical Thinking:

The article suggests that the success of telemedicine in developing countries relies on an increase in publication and coordination with an international organization. What other factors may also contribute to its success?