



Challenges using Telehealth in East Timor

East Timor

- History and Demographics
- Burden of Disease
- Medical Services and Telehealth Challenges



Dr Dan Manahan, Director of Medical Services
Darling Downs Hospital and Health Service Rural Division
Dan.Manahan@health.qld.gov.au



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History and Demographics

Conflict –

Portuguese 16th century – 1975
Indonesia 1975 - 2001,
Democratic Republic of Timor Lest







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History and Demographics

Conflict – now Democratic Republic of Timor Lest

Presidents – Xanana Gusmao, Hose Ramos Horta, Taur Matan Ruak

Predominantly Catholic > 95%

Population 1,167,240

Rural subsistence farming

80% population employed in agriculture – Coffee, Cinnamon, Cocoa

Petroleum dependent Timor-Leste Petroleum Fund = Government annual budget

Variety of Languages and dialects

Official Languages Tetum (multiple dialects) and Portuguese

Indonesian spoken widely also

English limited / Dili



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History and Demographics

Significant issues

Infrastructure – roads, transport, air

Weather events – tropical climate, monsoons

Employment

Government

- workforce
- establishing structure

Proximity to Australia

Dili – Darwin : 722 km or < 1hr 15min flight

Australia's nearest Capital City



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Burden of Disease

Developing Country

Neonatal Mortality 24/1000 (Australia 3)

Infant Mortality 48 (4)

Life Expectancy 66 (82)

Maternal Mortality Ratio 300 (7)

Access to Skilled birth attendants 26.9%

Public Health Issues

Water

Sanitation

Electricity

Roads and road safety

TB, Dengue, Malaria, other tropical infections

Malnutrition and Growth stunting

Trauma





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Burden of Disease



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Medical Services & Telehealth Challenges

Medical Services

Telehealth Models

- Store and Forward Models
- Diploma Program admin
- Mental Health Support

Telehealth Issues

- Internet Speed & Bandwidth
- Communication
- Engagement



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Medical Services & Telehealth Challenges

Post Independence clinical services limited – few doctors
Community Health Clinics managed by nurses/midwives

Cuban Medical Brigade

Cuban East Timor Training Program 2003+

- Up to 300 Cuban doctors deployed to Timor Leste
- 1000 Timor Leste Medical Student scholarships ~ 400
- 400 Cuban trained Timor Leste doctors -2010-2013
- Over 2/3 to rural community clinics/services outside Dili
- Cuban Medical Brigade numbers reduced as locals trained 2013+
- Limited supervision



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Medical Services & Telehealth Challenges

Complex issues of medical retention

- Larger number medical practitioners = increased overall costs
- Clinician goals
 - Work near family
 - Specialty skills
 - Access to Professional Development
 - Access to supervision
 - Access to specialists / specialist advice
 - Improved remuneration
- Supply chain issues – pharmacy
- Infrastructure issues – pathology, imaging



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Medical Services & Telehealth Challenges

Telehealth Models

- Store and Forward Models
 - Dermatology
 - Medical Imaging USS
 - Complex cases
- Diploma Program
 - Administration coord
 - Tutorial material
 - Case workshopping
- Mental Health Support
 - Limited MH services in Timor
 - Distance supervision and case management
 - Optimizing limited pharmacy supply



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Medical Services & Telehealth Challenges

Telehealth Issues

- Internet Speed & Bandwidth
- Hardware – smart phone only
- Difficulty with Video Downloads
- Use of Whatapp
- Communication - language
- Engagement –
 - Staff changes, turnover
 - Champion fatigue
 - Value



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Opportunity a plenty
Complex challenges

Thank You

Dan Manahan DDHHS

Dan.Manahan@health.qld.gov.au





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Fin



Atarro



Dili

Mambara

Liquica

Aileu Maria

Clino
Fajaria

Manatato
Valdeaur

Bancu
Elevao
Alfonsinho
EDUARDO

Lospalos
Abia
MEXICO

Batugode

Manbisse

Yiqueque
Otonio

Universid
- CUSA
- Tuna Lid
Estroo
Moria
Gorjaria

Oxese
ODECIA

Maliana

Aivos
MARTA

EGIO
- BETANNO

Snai

DAN
STANTHARE













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