

NAVIGATING TELEHEALTH IN THE PACIFIC

Laurent Deans, BSN, MPH, RN
University of Guam
HLATTE Director

PACIFIC ISLANDS

- **American Samoa (American residents)**
- **Commonwealth of the Northern Marianas Islands (Rota, Saipan, Tinian)**
- **Federated States of Micronesia (Chuuk, Kosrae, Pohnpei, Yap) Consist of 607 islands**
- **Guam (US Territory)**
- **Republic of the Marshall Islands (consist of 34 islands including Kawajalein and the island capitol of Majuro), has direct relationship as US Commonwealth**
- **Republic of Palau**
- **All of the islands, except American Samoa, are identified as Micronesia**

Secondary/Tertiary Health Care in the Pacific

Secondary Health Care is a Financial Management Challenge in the Pacific

Tertiary Health Care

- 1. Disease care beyond the local capacity.**
- 2. Some places it equates Death.**
- 3. For Pacific, it means “off-island medical referral”**
- 4. Mobile criteria for assignment- “intra-island vs off-island” medical referral.**
- 5. Tertiary Health Care is also a horizontal process of dealing with disease care beyond the local capacity and therefore, have to be referred.**

Values of the Pacific Island Primary Care Association

We believe that our isolation and diversities in culture, tradition, and language present both challenges and opportunities in health. This rich and unique environment demands capacities that are polyvalent, collaborations that are Pacific-centered, and health strategies that capitalize on our common heritage

- By **ISOLATION**, we mean remote geographic location and limited resources.
- By **HEALTH**, we mean fulfilling individual and societal obligations and responsibilities.
- By **POLYVALENT CAPACITIES**, we mean multi-skilled personnel, sharing resources, and building community networks.
- By **COMMON HERITAGE**, we mean having strong traditions common within the Pacific Island cultures, including but not limited to extended families, strong family ties, enhanced women's roles, and traditional authority.

What happened?

Emerging and re-emerging infectious diseases

- Mixing of people
 - population growth
 - urban crowding
 - changes in social behaviors
 - international air travel and mobile populations
- Environmental degradation
- Antibiotic misuse
- Public health infrastructure decline
- Microbes adapted

Health System

>600 tiny islands, spread over approximately 2000 miles archipelago

FSM DHESA,
Division of Health

(1) Technical/Training Assistance

(2) Coordinate Outside Funding

(3) Establish Standards of Services

(4) Monitor Compact Compliances

Tertiary HC

Yap

1 Hospital (50 beds)

Pop: 11,000

Chuuk

1 Hospital (125 Beds)

Pop: 53,000

Pohnpei

1 Hospital (116 beds)

2 P. Clinics (36 beds)

Kosrae

1 Hospital (35 beds)

4 D/O/P

Pop: 7,000

Secondary HC

Primary HC

16 D/O/P

81 D/O/P

9 D/O/P

4 D/O/P

Disease Trends

- **The major causes of morbidity and mortality were non-communicable diseases such as heart disease, diabetes, hypertension, obesity, chronic lung disease, cancer, prematurity, complications of pregnancy and labor, and malnutrition. However, respiratory diseases, skin diseases, gastrointestinal diseases, otitis media and other infectious diseases—combined-- are the leading causes of the hospital admissions.**
- **NCDs have replaced infectious and immunize able diseases as leading causes of morbidity and mortality among adults and even children in FSM.**
- **Preventable cancer morbidity and mortality likewise continue to grow. Cervical cancer is now the leading cancer in FSM.**
- **Head and neck cancer, once only common on Yap, has increased in the other states due to the spread of betel nut chewing to the other island states of FSM. Liver cancer, associated with Hepatitis B infection, is gradually falling, due to widespread Hepatitis B vaccination in newborns, children and health workers but is still common over age 40. All of these cancers may be considered diseases of lifestyle; all could be prevented.**

Education Situation

- **Average of 4 Grades behind U.S. Standards;**
- **About 30% of Teachers are not certified to teach;**
- **High School Graduates experience “crash landing” in
four year colleges or universities;**
- **Most students admitted to COM-FSM take remedial courses;**
- **Most High School Graduates (about 1,500 in SY04-05) could not enroll in college;**
- **Most schools have outdated or no textbooks at all;**
- **School Facilities not conducive to learning (no science lab or aging buildings, etc.)**

Marshall Islands
worldatlas.com

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Taongi

Pacific Ocean



29 Atolls
5 single islands

181.3 sq km land
11,673 sq km water

Population
62,500

Infant Mortality
28.43 p/1000

Birth Rate
33 p/1000

Majuro 90-bed hospital

Ebeye 50-bed hospital

Kwajalein – Military Hospital

29 outer island dispensaries

RMI HEALTH DATA

- **Population—Projected 2005 63,579**
- **Ten Leading Causes of Death**
 1. **Sepsis/Septicemia 46**
 2. **Cancer (All types) 23**
 3. **Myocardial Infarction 15**
 4. **Pneumonia 14**
 5. **Suicide 13**
 6. **End Stage Renal Disease and Cerebrovascular Disease 12**
 7. **Drowning 10**
 8. **Prematurity 8**
 9. **Trauma 6**
 10. **Congestive Heart Failure & Hepatitis B 5**

MORBIDITY DATA FOR MARSHALLS

1999-2004

Diseases	1999	2000	2001	2002	2003	2004
Influenza	1326	1792	2539	3703	4016	5170
Gastroenteritis	388	1526	2219	1029	1854	2041
Scabies	195	548	1374	534	772	778
Diarrhea, Adult	309	69	3294	1954	69	0
Diarrhea, Infantile	155	49	0	0	1986	1640
Chicken Pox	64	98	446	313	313	426
Fish poisoning	49	156	311	481	185	251
Conjunctivitis	806	611	1672	1450	1596	2632
Syphilis	46	12	74	77	273	172
Tuberculosis						60
HIV/AIDS positive						103
Amoebias	16	80	58	213	401	312

2001 Pacific Island Health Officers Association Data

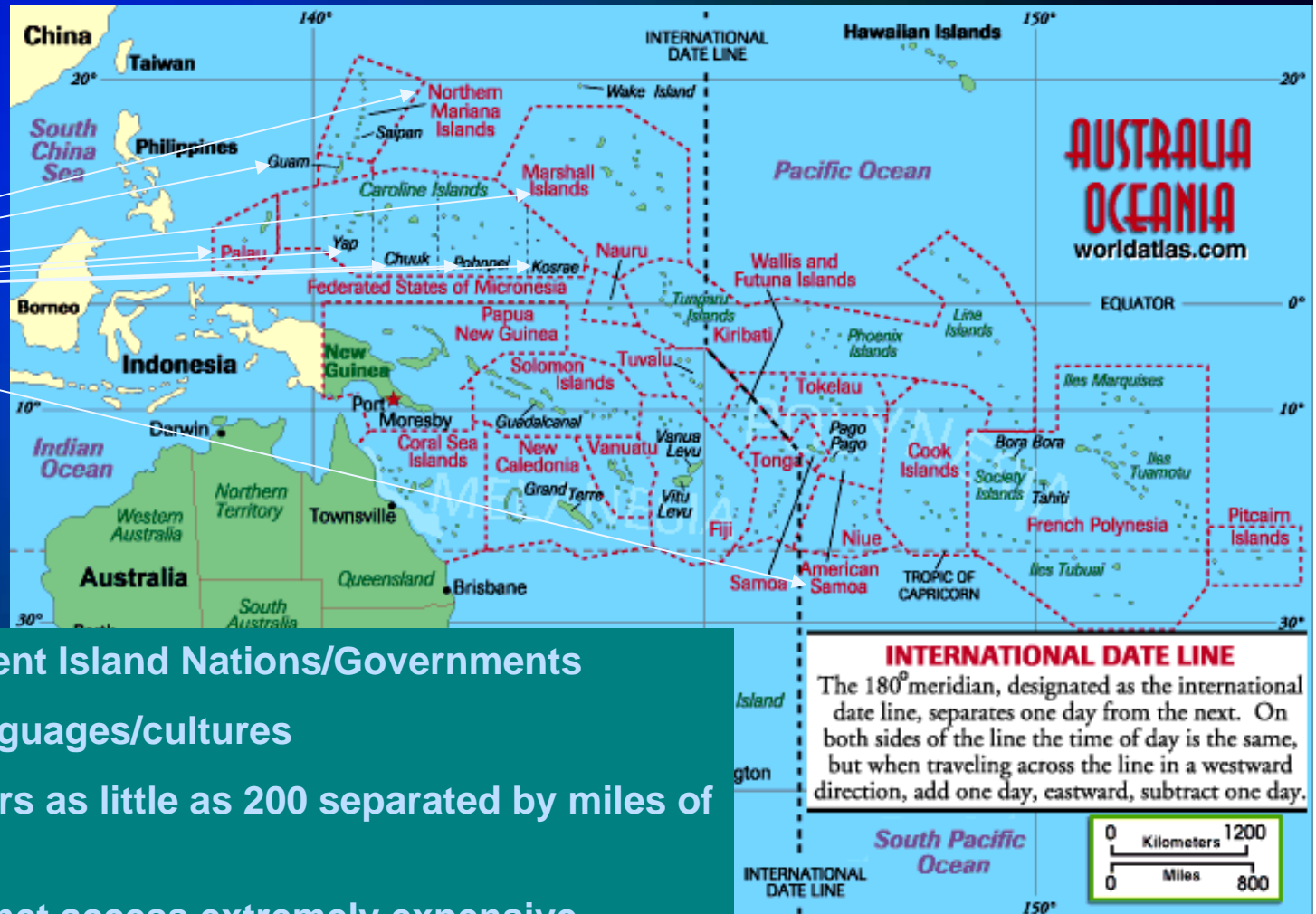
	Population	Dentist	Nurse	Physicians	
American Samoa	59,400	1:4000	1:1600	1:1200	1 Health Center 4 dispensaries 2 Private Clinic 1 Public Hospital (128 beds)
CNMI	69,221	1:34,610	1:6922	1:2307	3 PH Clinics 1 Public Hospital (101 beds) 5 Private
Guam	157,554	1:2218	1:440	1:484	3 PH Centers 1 Public Hospital (209 beds) 20 Private Clinics 1 Military Hospital
Marshall Islands	50,840	1:12,710	1:358	1:1,640	56 Health Clinics 1 Health Center 2 Public Hospitals (140 beds)
Palau	19,626	1:4,782	1:189	1:755	1 Private Clinic 12 Dispensaries 1 Hospital (80 beds)

2001 Pacific Island Health Officers Association Data for Federated States of Micronesia

	Population	Dentist	Nurse	Physicians	
Chuuk	53,595	1:10,719	1:492	1:2680	81 Health Clinics 1 Hospital (125)
Kosrae	7,686	1:3843	1:214	1:854	5 Health Clinics 1 Hospital (45)
Pohnpei	35,459	1:11,820	1:753	1:1866	2 Health Clinics 1 Dental 1 Hospital (91)
Yap	11,241	1/11,000	1:416	1:1000	19 Dispensaries 1 Hospital (43)

TeleHealth Challenges

Nine Island Jurisdictions



Distinct Independent Island Nations/Governments

Many different languages/cultures

Populations centers as little as 200 separated by miles of oceans

Telephone & internet access extremely expensive

Many health professionals have two year degrees or were trained on the job

THE CHALLENGE

- **Training of health professionals with specialized skills that are flexible and multi-tasked**
- **Health resources that meet the educational level of the individuals**
- **Developing alternative strategies to meet training needs of the community served**
- **Developing & implementing a recruitment & retention plan**
- **Creative & innovative ways in addressing the shortage and maintaining the competency needs of the individuals**
- **Improving working conditions and relationships**
- **Lack of current evidence-based data**
- **Lack of health training resources and a centralized resource center for the Pacific**

Navigating TeleHealth Care in the Pacific

Kalahngan, Kinisou Chapur, Komol Tata, Si Yu'os ma'ase'



Thank you!
Questions and feedback welcome!



Acknowledgements

Contributions to these slides from:

- Slidebay (Internet)
- WHO (Hitoshi Oshitani)
- CDC (Brendan Flannery)
- Ian Barr (Melbourne)
- SPC (Dr Steve Angus)