A Situational Analysis and Assessment of the Overseas Patient Referral Systems in four Pacific Islands Countries

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Outline of Presentation

• Introduction
• Country Comparisons
• Conclusion / Recommendations
• Thoughts for discussion
Significance of this study

• Health expenditure is a significant component of government budgets across the Pacific
• It is important for us to see if there is value for money in health expenditure
• Therefore we need to evaluate equity within the elements of health expenditure
• Overseas referral is one such element
Introduction

• Most PICs lack capacity to provide specialized tertiary healthcare for their citizens
• Overseas patient referrals is common amongst Public health systems
• Increased demand for specialized healthcare services = increased healthcare costs; but limited resources
Results
### Health financing indicators

**Source:** Global health expenditure database

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Year</th>
<th>Country A</th>
<th>Country B</th>
<th>Country C</th>
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<tbody>
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<td><strong>Total health expenditure (THE) % Gross Domestic Product (GDP)</strong></td>
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<td>13.3</td>
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<td><strong>Average for MICs as per WBIG</strong></td>
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## Country Comparisons

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<th>Country B</th>
<th>Country C</th>
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<td>30.90</td>
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Total number of patients referred overseas

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<td>Number of Patients Referred</td>
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<td>32</td>
<td>120</td>
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<td></td>
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<td>India (82%)</td>
<td>India (50%)</td>
<td>Fiji (90%)</td>
<td>New Zealand (99%)</td>
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</tr>
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<td>Fiji (44%)</td>
<td>New Zealand (6%)</td>
<td>Other (1%)</td>
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<td>India (3%)</td>
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<td>8%</td>
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<tr>
<td>Orthopedic</td>
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<td>n/a</td>
<td>80%</td>
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<td>Medical</td>
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<td>n/a</td>
<td>n/a</td>
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<td>Cardiac</td>
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<td>n/a</td>
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<td>Pediatric</td>
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<td>n/a</td>
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<td>Other</td>
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<td>n/a</td>
<td>n/a</td>
<td>22%</td>
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</table>
Country A: By Gender and Age Group

![Gender and Age Group Graph](image)

- **Male** and **Female** distributions over **2008**, **2009**, and **2010**
- **Age Category** and **Percentage** variations from **0-5**, **6-12**, **13-19**, **20-30**, **31-40**, **41-50**, **51-60**, and **>=60**
Country D: By Gender and Age Group

- 2008: Females 51%, Males 49%
- 2009: Females 53%, Males 47%
- 2010: Females 57%, Males 43%
- 2011: Females 51%, Males 49%
- 2012: Females 48%, Males 52%
- 2013: Females 42%, Males 58%

Age Category:
- 0-5: Females 5%, Males 4%
- 6-12: Females 4%, Males 4%
- 13-19: Females 9%, Males 6%
- 20-30: Females 4%, Males 4%
- 31-40: Females 4%, Males 4%
- 41-50: Females 11%, Males 10%
- 51-60: Females 13%, Males 19%
- >60: Females 21%, Males 29%

Percentage:
- 2008: Females 5%, Males 4%
- 2009: Females 4%, Males 4%
- 2012: Females 4%, Males 4%
- 2013: Females 4%, Males 4%
## Actual referral expenditure per referred patient (USD)

<table>
<thead>
<tr>
<th>Year</th>
<th>Country A</th>
<th>Country B</th>
<th>Country C</th>
<th>Country D</th>
</tr>
</thead>
<tbody>
<tr>
<td>2009</td>
<td>5,924</td>
<td>9,609</td>
<td>13,104</td>
<td>1,605</td>
</tr>
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<td>2010</td>
<td>8,009</td>
<td>9,012</td>
<td>15,006</td>
<td>1,562</td>
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<tr>
<td>2011</td>
<td>5,033</td>
<td>6,076</td>
<td>12,623</td>
<td>1,157</td>
</tr>
<tr>
<td>2012</td>
<td>6,816</td>
<td>4,304</td>
<td>13,936</td>
<td>1,859</td>
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<td>2013</td>
<td>8,439</td>
<td>12,554</td>
<td>20,504</td>
<td>1,949</td>
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</table>

**GDP per capita (current US$)**

<table>
<thead>
<tr>
<th>Year</th>
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<th>Country B</th>
<th>Country C</th>
<th>Country D</th>
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<tbody>
<tr>
<td></td>
<td>4,375</td>
<td>1,650</td>
<td>3,880</td>
<td>16,001</td>
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</table>

**THE per capita (US$)**

<table>
<thead>
<tr>
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<th>Country A</th>
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<th>Country D</th>
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<tr>
<td></td>
<td>197</td>
<td>264</td>
<td>433</td>
<td>412</td>
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</table>
### Referral expenditure and population in %

<table>
<thead>
<tr>
<th>Year</th>
<th>Country A</th>
<th>Country B</th>
<th>Country C</th>
<th>Country D</th>
</tr>
</thead>
<tbody>
<tr>
<td>2009</td>
<td>0.6 (0.010)</td>
<td>2.3 (0.032)</td>
<td>30.9 (1.22)</td>
<td>2.0 (0.59)</td>
</tr>
<tr>
<td>2010</td>
<td>0.9 (0.010)</td>
<td>3.6 (0.052)</td>
<td>31.1 (1.31)</td>
<td>1.9 (0.78)</td>
</tr>
<tr>
<td>2011</td>
<td>0.7 (0.014)</td>
<td>2.7 (0.057)</td>
<td>23.1 (1.05)</td>
<td>2.8 (0.69)</td>
</tr>
<tr>
<td>2012</td>
<td>0.8 (0.012)</td>
<td>1.9 (0.054)</td>
<td>32.3 (1.01)</td>
<td>3.9 (0.85)</td>
</tr>
</tbody>
</table>

Red font = % of referral expenditure over TGHE  
Brackets = patients referred as a % of total pop.
Conclusion

• The issue is much bigger than what we have highlighted. Every country had a long waiting list for referrals.

• The patients overseas referral system is inequitable.

• The patients overseas referral system is poorly organized.
Thoughts for Discussion

• Should there be a Regional Initiative (body/forum) to facilitate Specialized Tertiary Health Care in PICs?
Thank You

Feedback Questions?
Conclusion

• To conclude, over the five years total number of patients referred overseas from 2009 to 2013 was 2015 and US $15 million was spent. This equates to 0.20% of total population in 4 PICs. This extremely raises the issue of Universal Health Coverage’s in terms of equity and access.

• In addition, of 2015 patients referred what was the outcome. There was very limited data on this. How many died on referral sites, what contribution they made to the economy as per their referral policy.
Recommendations

- Ensure that you have a well developed overseas referral policy
- Create a position of a patient referrals coordinator
- Maintain a complete patients referral database
- Maintain accurate and complete financial data on patient referrals linked to individual patient and treatment
- Insist that Development Partners provide complete information on donor financed patient referrals
Recommendations

• Establish a system of classifying diagnosis and treatment (e.g. ICD-10)
• Monitor and evaluate the outcomes of the treatment and patient
• Periodically assess the cost of referral sites
• Network and even collaborate with other PICs to discuss referral sites and treatment types and costs
• Establish some agreement with regular used Airlines would be most beneficial to reduce costs
Recommendations

• The 4 P’s of the referral process

- **Policy**
  - clear guidelines on processes to follow
  - eligibility criteria
  - widely disseminated

- **Person**
  - create a position to coordinate referrals
  - responsible for database
  - may also coordinate visiting specialist teams

- **Patient database**
  - complete patient information
  - financial costs
  - treatment outcomes

- **Plexus**
  - with other PICs
  - with health providers
  - with airlines
Country Comparisons

- Budget and Actual expenditure for overseas patient referrals (USD millions)

<table>
<thead>
<tr>
<th>Year</th>
<th>Country A</th>
<th>Country B</th>
<th>Country C</th>
<th>Country D</th>
</tr>
</thead>
<tbody>
<tr>
<td>2009</td>
<td>0.48 (0.49)</td>
<td>0.40 (0.31)</td>
<td>0.93 (1.52)</td>
<td>0.37 (0.25)</td>
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<td>2010</td>
<td>0.80 (0.70)</td>
<td>0.39 (0.49)</td>
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<td>0.43 (0.19)</td>
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<td>2011</td>
<td>0.59 (0.60)</td>
<td>0.36 (0.36)</td>
<td>1.12 (1.46)</td>
<td>0.48 (0.18)</td>
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<td>2012</td>
<td>0.70 (0.70)</td>
<td>0.37 (0.25)</td>
<td>1.12 (1.41)</td>
<td>0.43 (0.26)</td>
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<td>2013</td>
<td>0.70 (0.70)</td>
<td>0.79 (0.88)</td>
<td>1.30 (1.97)</td>
<td>0.43 (0.34)</td>
</tr>
</tbody>
</table>

Red font = actuals
Country Comparisons

- Budget verses Actuals

![Bar chart showing budget verses actual comparisons for various years and categories.](chart.png)

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Objectives

- Estimate and compare total government expenditure on overseas referral
- To compare and contrast the cost of overseas referrals versus Total Government Health Expenditure
- To compare and contrast the proportion of population served by overseas referrals versus proportion of GDP spent on the same