Medical Tourism

Edward Kelley,
WHO Patient Safety Programme

02 October 2013
What is medical tourism?

- Medical tourists elect to travel across international borders to receive some form of medical treatment
  - Treatments may span the full range of medical services
  - Most common: dental care, cosmetic surgery, elective surgery, and fertility treatment – OECD, 2010

- No agreed definition of medical tourism exist; as a result methods applied by countries vary substantially
  - Some countries count foreign patients’ visits to hospitals whereas others count the entry of individual patients into the country
  - Other countries record nationality but not place of residence of patients, can be problematic when migrants return to home country for treatment – WHO, 2011
What is *medical tourism*?

All international inpatients receiving care

- Subtract expatriates seeking care in their country of current residence: -25% to -30%
- Subtract emergency cases: -30% to -35%

Medical travelers: 35-45%

What is medical tourism?

Figure 3 Conceptual framework of globalization and medical tourism

Health outcome:
- Health disparities
- Access to care
- Infrastructure development
- Cost containment in health
- Safety and quality of care

Medical tourism:
- Global health market
- Restructuring health system
- Private sector investment
- Efficiency and quality standards
- Consumer choice

Health system:
- Health resource allocation
- Cost of health care
- Insurance coverage
- Individual risk factors

Institutional:
- Governance structure
- Trade liberalization
- De-regulation and policy change

Economic and social:
- Privatization
- Global competition
- Off-shoring / outsourcing
- Resource availability/ allocation
- Food and social security

Technological:
- Global communication
- Capital and technology
- Information technology
- Mobility and interaction

Globalization process:
- Global concerns
- Structural adjustment policies
- Global politics
- Technology
Main drivers of medical tourism

Relative size of medical-traveler segments
(100% = 49,980 patients)

- Most advanced technology
- Better-quality care for medically necessary procedures
- Quicker access for medically necessary procedures
- Lower-cost care for medically necessary procedures
- Lower-cost care for discretionary procedures

# Prices & cost savings

<table>
<thead>
<tr>
<th>Procedure</th>
<th>US</th>
<th>India</th>
<th>Thailand</th>
<th>Countries</th>
<th>Cost saved per operation</th>
<th>Waiting list</th>
<th>Total saved</th>
</tr>
</thead>
<tbody>
<tr>
<td>Coronary artery bypass graft</td>
<td>8.631</td>
<td>3.413</td>
<td>500</td>
<td>3.913</td>
<td>4.718</td>
<td>97</td>
<td>457.646</td>
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<tr>
<td>Total hip replacement</td>
<td>8.811</td>
<td>3.413</td>
<td>500</td>
<td>3.913</td>
<td>4.898</td>
<td>28.800</td>
<td>141.062.400</td>
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</table>

OECD, 2011
OECD countries – Imports

Imports of health care services as share of total health expenditure, 2009 and annual growth rate in real terms, 2004-09 (or nearest year)

- Luxembourg: -6.8%
- Iceland: 12.2%
- Portugal: 5.5%
- Netherlands: 1.7%
- Belgium: -3.9%
- Germany: 7.3%
- Turkey: 23.5%
- Hungary: 40.0%
- Canada: 48.6%
- Czech Republic: 6.2%
- Slovak Republic: 13.2%
- Austria: 4.6%
- Korea: 19.7%
- Sweden: -6.4%
- Norway: 2.0%
- Estonia: 23.6%
- France: 20.0%
- Italy: 58.1%
- Slovenia: 4.0%
- Mexico: -4.4%
- Denmark: -5.4%
- Ireland: 3.0%
- Poland: -14.0%
- Greece: 8.4%
- United Kingdom: 13.0%
- United States: 0.04%
OECD countries – Exports

Exports of health-related travel as share of total health expenditure, 2009 and annual growth rate in real terms, 2004-09 (or nearest year)

<table>
<thead>
<tr>
<th>Country</th>
<th>2009 %</th>
<th>Change 2004-09</th>
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<tbody>
<tr>
<td>Czech Republic</td>
<td>3.58</td>
<td>27.8</td>
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<tr>
<td>Hungary</td>
<td>2.08</td>
<td>41.9</td>
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<tr>
<td>Poland</td>
<td>1.62</td>
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<tr>
<td>Luxembourg</td>
<td>1.15</td>
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<td>Turkey</td>
<td>0.98</td>
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<td>Belgium</td>
<td>0.84</td>
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<td>Estonia</td>
<td>0.67</td>
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<td>Mexico</td>
<td>0.48</td>
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<td>Slovenia</td>
<td>0.20</td>
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<td>Greece</td>
<td>0.19</td>
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<td>France</td>
<td>0.18</td>
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<tr>
<td>Korea</td>
<td>0.15</td>
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<tr>
<td>Israel</td>
<td>0.15</td>
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<tr>
<td>United States</td>
<td>-13.5</td>
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<td>Italy</td>
<td>-7.7</td>
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<td>Canada</td>
<td>-5.2</td>
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<td>United Kingdom</td>
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<td>New Zealand</td>
<td>-1.7</td>
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<td>Austria</td>
<td>-6.0</td>
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<td>Iceland</td>
<td>0.3</td>
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Medical travelers by point of origin
### US: Patient Demand

**Outbound Patient Flow, 10-Year Projection (millions)**

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<td><strong>Base Case</strong></td>
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<tr>
<td>Patients (millions)</td>
<td>0.75</td>
<td>1.50</td>
<td>3.00</td>
<td>6.00</td>
<td>7.50</td>
<td>9.38</td>
<td>10.78</td>
<td>12.39</td>
<td>13.64</td>
<td>15.00</td>
<td>15.75</td>
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<td>Growth Rate %</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>25</td>
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<td>15</td>
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<td><strong>Lower Bound</strong></td>
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<tr>
<td>Patients (millions)</td>
<td>0.75</td>
<td>1.50</td>
<td>3.00</td>
<td>5.25</td>
<td>6.56</td>
<td>7.55</td>
<td>8.68</td>
<td>9.55</td>
<td>10.02</td>
<td>10.32</td>
<td>10.43</td>
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<tr>
<td>Growth Rate %</td>
<td>100</td>
<td>100</td>
<td>75</td>
<td>25</td>
<td>15</td>
<td>15</td>
<td>10</td>
<td>5</td>
<td>3</td>
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<td><strong>Upper Bound</strong></td>
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<td>Patients (millions)</td>
<td>0.75</td>
<td>1.69</td>
<td>3.38</td>
<td>6.75</td>
<td>10.13</td>
<td>12.66</td>
<td>15.19</td>
<td>17.47</td>
<td>20.09</td>
<td>22.09</td>
<td>23.20</td>
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<tr>
<td>Growth Rate %</td>
<td>125</td>
<td>100</td>
<td>100</td>
<td>50</td>
<td>25</td>
<td>20</td>
<td>15</td>
<td>15</td>
<td>10</td>
<td>5</td>
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**Deloitte, 2008**
US: Cost Estimation

US Spending Abroad, 10 Years

Cost Estimation for Spending by Outbound US Medical Tourists

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<td>4.4</td>
<td>9.0</td>
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<td>34.1</td>
<td>40.4</td>
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<td>Lower Bound</td>
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<td>7.9</td>
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<td>15.6</td>
<td>19.3</td>
<td>22.9</td>
<td>25.9</td>
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<td>30.3</td>
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<tr>
<td>Upper Bound</td>
<td>2.4</td>
<td>4.9</td>
<td>10.1</td>
<td>15.6</td>
<td>24.1</td>
<td>37.2</td>
<td>47.9</td>
<td>59.2</td>
<td>70.2</td>
<td>79.5</td>
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Deloitte, 2008
US: Lost Domestic Spending

Lost Domestic Spending, 10 Year Projection (billion US$)

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<tbody>
<tr>
<td>Base Case Lost Spending (billions U.S.$)</td>
<td>15.9</td>
<td>32.8</td>
<td>67.7</td>
<td>104.5</td>
<td>161.5</td>
<td>207.9</td>
<td>257.0</td>
<td>304.4</td>
<td>344.9</td>
<td>373.0</td>
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<tr>
<td>Lower Bound Lost Spending (billions U.S.$)</td>
<td>15.9</td>
<td>32.8</td>
<td>59.2</td>
<td>91.5</td>
<td>117.8</td>
<td>145.5</td>
<td>172.4</td>
<td>195.3</td>
<td>211.2</td>
<td>228.5</td>
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<tr>
<td>Upper Bound Lost Spending (billions U.S.$)</td>
<td>17.9</td>
<td>36.9</td>
<td>76.1</td>
<td>117.6</td>
<td>181.7</td>
<td>280.7</td>
<td>361.4</td>
<td>446.7</td>
<td>529.1</td>
<td>599.5</td>
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</table>

Deloitte, 2008
## US: Insurance Pilot Programs

### Medical Tourism Pilot Programs within Health Benefits Plans

<table>
<thead>
<tr>
<th>Insurer</th>
<th>State</th>
<th>Foreign Medical Site</th>
<th>Program Summary</th>
</tr>
</thead>
</table>
| Anthem Blue Cross and Blue Shield (WellPoint) | Wisconsin | Apollo Hospitals, India     | • Will send the employees of Serigraph, Inc., a corporate client of Anthem WellPoint, to Apollo Hospitals for certain elective procedures; the program will start with Delhi and Bangalore facilities and later expand to all JCI-accredited Apollo Hospitals  
• Pilot project will cover about 700 group members  
• All financial details, including travel and medical arrangements, will be managed by Anthem WellPoint |
| United Group Program         | Florida   | Bummigrad, Thailand Apollo Hospitals, India | • Actively promoting medical tourism to more than 200,000 individuals covered through self-funded health plans and fully-insured, mini-med plans |
| Blue Shield and Health Net   | California | Mexico                      | • Covers about 20,000 patients  
• Focused on employers that hire a large number of Mexican immigrants |
| Blue Cross Blue Shield       | South Carolina | Bummigrad, Thailand         | • Will cover patients’ procedures organized through Companion Global if their plans cover travel  
• Will also cover two follow-up visits with physicians at Doctors Care |
Europe: New regulations

Cross-border healthcare 2013

- Accordance with principle of free movement of services
- Patients (insurers) have to pay same price of intervention as in their own Member State to avoid competitive disadvantages
- Although large differences in prices of healthcare services exist between individual Member States
WHO Resolution WHA59.26 (2006): International trade and health

• **Urges Member States to:**
  - Promote multi-stakeholder dialogue at national level
  - Adopt policies, laws and regulations that deal with issues identified in dialogue
  - Apply/establish coordination mechanism to address public-health related aspects
  - Create constructive and interactive relationships across public and private sectors
  - Continue to develop capacity at national level for potential opportunities/challenges

• **Requests the Director-General to:**
  - Provide support to Member States in their effort to frame coherent policies
  - Respond to Member States’ request for support of their effort to build capacity and to address relevant policies, opportunities and challenges
  - Continue collaborating with competent organizations to support policy coherence
  - Report to the Sixty-first WHA on progress made in implementing this resolution
Transplant Tourism & Organ trafficking
Transplant Tourism & Organ trafficking

“Organ trafficking”

✓ financial gain on the organ as such (commercialism)

✓ and/or lack of consent of the donor

✓ and/or transplantation outside of the established system

“Transplant tourism”

involves the donor, the recipient or both crossing national boundaries for the recipient to access a trafficked organ.
Transplant Tourism
Major destinations: “host” countries (2005/6)

Countries
A: type of organ
B: Estimated no. of transplant tourists
C: Estimated no. of transplantation

- **China**
  - A: kidney, liver, lung, heart
  - B: <2,000
  - C: 12,000 (all)

- **Pakistan**
  - A: kidney
  - B: 1,000 – 1,500
  - C: 2,000 (kidney)

- **Philippines**
  - A: kidney
  - B: 100 – 200
  - C: 630 (kidney, 2005)

- **Egypt**
  - A: kidney
  - B: 100 - 400
  - C: 500 (kidney)

- **India**
  - A: kidney
  - B: <50
  - C: 3,000-4,000 (kidney)

- **Colombia**
  - A: kidney, liver, lung, heart (from deceased donor)
  - B: 69
  - C: 879 (2005)

- **Philippines**
  - A: kidney
  - B: 100 – 200
  - C: 630 (kidney, 2005)
The Declaration of Istanbul

on Organ Trafficking and Transplant Tourism

Participants in the International Summit on Transplant Tourism and Organ Trafficking convened by The Transplantation Society and International Society of Nephrology in Istanbul, Turkey, April 30–May 2, 2008

Preamble

Organ transplantation, one of the medical miracles of the twentieth century, has prolonged and improved the lives of hundreds of thousands of patients worldwide. The many great scientific and clinical advances of dedicated health professionals, as well as countless acts of generosity by organ donors and their families, have made transplantation not only a life-saving therapy but a shining symbol of human solidarity. Yet these accomplishments have been tarnished by numerous reports of trafficking in human beings who are used as sources of organs and of patient-tourists from rich countries who travel abroad to purchase organs from poor people. In 2004, the World Health Organization, called on member states “to take measures to protect the poorest and vulnerable groups from transplant tourism and the sale of tissues and organs, including attention to the wider problem of international trafficking in human tissues and organs” (1).

To address the urgent and growing problems of organ sales, transplant tourism and trafficking in organ donors in the context of the global shortage of organs, a Summit Meeting of more than 150 representatives of scientific and medical bodies from around the world, government officials, social scientists, and ethicists, was held in Istanbul from April 30 to May 2, 2008. Preparatory work for the meeting was undertaken by a Steering Committee convened by The Transplantation Society (TTS) and the International Society of Nephrology (ISN) in Dubai in December 2007. That committee’s draft declaration was widely circulated and then revised in light of the comments received. At the Summit, the revised draft was reviewed by working groups and finalized in plenary deliberations.
WHO: Strengthening Safety and Service Delivery
WHO: Strengthening Safety and Service Delivery

### Legal/Ethical
- Impact on fair distribution of medical resources
- Is a proper contract of services made? Who is accountable in case of complications?
- Historically, what has been hospital's track record in dealing with malpractice claims?
- What are the local laws and regulations to deal with malpractice issues, particularly with IVF?
- Is there any government/non-profit organization to help them with legal assistance and advice in case of malpractice?

### Safety
- Quality of information provided to patients traveling abroad to get health care
- Are the accreditations regularly renewed?
- Is the hospital following the standard safety norms? Are the disposables being taken care of properly?
- Are the food and inpatient facilities hygienic?
- Is staff fluent in English or is interpreter competent to prevent any miscommunication?
- How safe and secure is the environment at the provider site?
- What are the precautions to be taken for the post-procedural care?
Patient Story: Lin Yu Shan

- **Story of Lin Yu Shan** from Taiwan-China
  - Lin was completely blind after complications from a life-threatening skin condition
  - Three surgeries were unsuccessfully and Lin almost lost her right eye completely
  - In her desperation Lin travelled to Singapore to see Dr. Leonard Ang, an award-winning ophthalmologist at the Novena Medical Center in Singapore
  - After a complicated four-hour surgery, Lin was able to see after a week
  - Two and a half months later, her vision was completely restored on the eye and she was able to return to a life of light and sign

- **Singapore** is one of the top medical destinations in the world
  - Around 850,000 foreign patients in 2012 generating revenue worth $3.5 billion

Asia Weekly, 2013