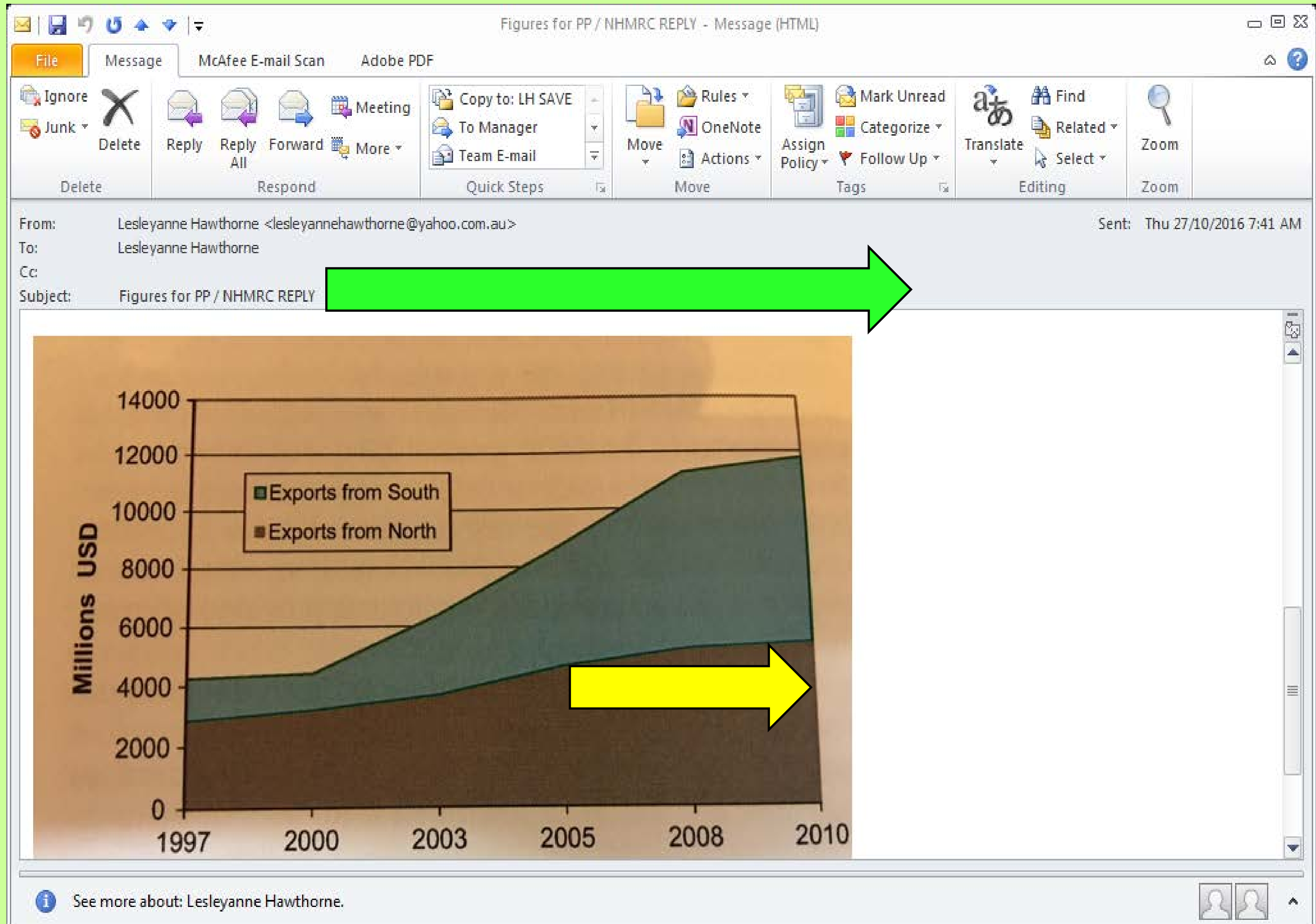
Disruptive Innovation:
The Future Impacts of Medical Tourism?

Lesleyanne Hawthorne PhD
Professor – International Health Workforce
International Health Workforce Collaborative Conference

24-28 October 2016
Washington DC

2000: The Health Benefits of Safari? (Lautier: Health Policy 118, 105-113 [2014])



Growing Paradigm Shift:
Who Will Move in the Future – Practitioner or Patient?

Development of medical tourism industry: Rapidly expanding

Estimated annual value (Deloitte 2009):

$US460 billion a year, with 20% annual growth

Bypasses:

- **Skilled migration challenges, including access to registration**
- **Patient bears risks**

Industry scale – reported number of medical tourists treated per year?

India (2004):	**1.18 million**
Thailand (2004):	**1.1 million**
Malaysia (2007):	**341,288**
Dubai (2015):	**320,000**

USA (2007): 750,000 patients went abroad for cheap medical care in multiple destinations

Data Challenges – Globalisation of the Health Care Market (OECD)

1. Extraordinary growth in global mobility:
   - Cheap transport systems
   - People smuggling
   - Tourism
   - Patient mobility

2. Negligible accurate medical tourism data:
   - Scale + type of services
   - Regulation (especially in private sector)
   - Health professional qualifications
   - Patient health outcomes
   - Impacts on OECD countries + provider countries

OECD – International Patient Mobility Modes At a Time of ‘Dynamic + Volatile Flows’

---

1. **Temporary visitors abroad**
2. **Long-term residents**
3. **Countries with common borders providing cross-national public funding for health care services in neighbouring countries (eg German aged care in Poland)**
4. **Out-sourced patients sent abroad by health agencies using cross-national purchasing agreements**
5. **Medical tourism – ‘patients who are mobile through their own volition’**

There are (increasingly) flows of patients from OECD countries to Lower and Middle Income Countries, in particular to India, Thailand and Malaysia which will necessarily have potential repercussions for health systems of OECD countries (p 9).

OECD – Main Service Types

Derived from marketing material scan:

1. **Cosmetic surgery** (breast, face, liposuction)
2. **Dental care** (cosmetic + reconstruction)
3. **Cardiology/ cardiac surgery** (by-pass, valves)
4. Orthopaedic surgery (hip + knee replacement, resurfacing, joint surgery)
5. **Bariatric surgery** (gastric bypass, banding)
6. **Fertility/ reproductive** system (IVF, gender re-assignment)
7. **Organ, cell + tissue** transplantation (including stem cell treatment)
8. **Eye surgery**
9. **Diagnostics + check-ups** (etc)

1. Patient Drivers:
Personal Agency in a Globalised Age

Patient desire to:

1. **Exercise choice**
2. **‘Research’ (google) + access health care**
3. **Reduce costs**
4. **(In select countries) Secure superior services**
5. **Minimise waitlists (‘just-in-time’ care)**
6. **Access discretionary services (eg cosmetic surgery)**

7. **Secure new +/or high-risk treatments | avoid ethical barriers**

OECD: Cost Relativities (Medical Tourism)

Hip replacement surgery ($US):

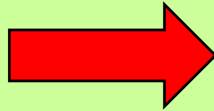
US:	$47,000
Mexico:	$17,300
Thailand:	$12,000
UK:	$12,000
Singapore:	$11,000
Malaysia:	$10,000
India:	$9,000
Hungary:	$7,500
Poland:	$6,120

Medical Tourism ($US 11.8 Billion by 2014): Past Versus Current (and Future) Procedures?

Until recently:

Global:

Cosmetic



South to North:

Eg advanced surgery

Now:

54% of services:

Provided by South (developing countries)

All types:

<u>Including</u>:

- **Illegal**
- **Experimental**
- **Ethically questionable**

Case Study 1 – Assisted Reproduction

Kate Bourne

Donor Registration Services Manager (Victoria)

Surrogacy services: Very limited in Australia

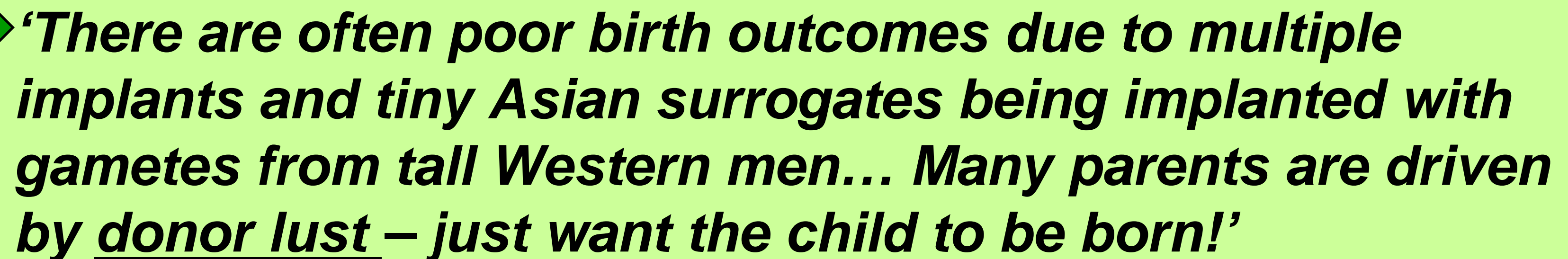
Global implants: Typically Asia

Risk: Multiple births, prematurity, extensive ICU needs

Mothers: Anonymous + poor – no scope for future contact

Screening + regulation: Minimal ('cowboy practice')

Errors: Mix-ups in poorly managed labs (etc)



'There are often poor birth outcomes due to multiple implants and tiny Asian surrogates being implanted with gametes from tall Western men… Many parents are driven by <u>donor lust</u> – just want the child to be born!'

Case Study 2 – Organ Transplantation

Francis Delmonico

Professor of Surgery (Harvard Medical School) + Advisor to WHO on Transplantation

Organ trafficking: Global phenomenon (eg kidneys)

2008 Istanbul Summit: Condemns practice (but little effect)

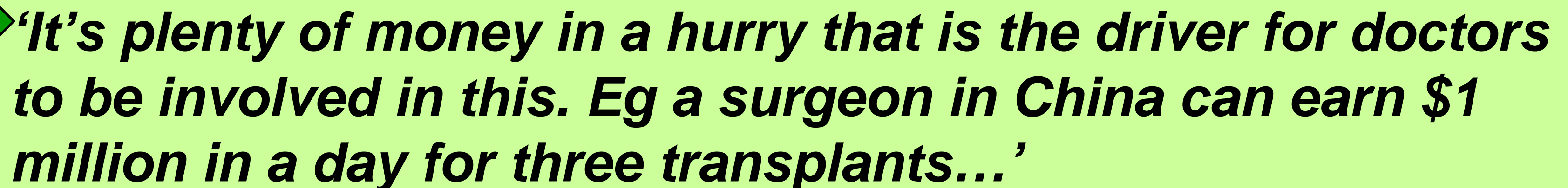
Donors: Typically young poor males

Patients: Largely OECD citizens

Cost: Around $US 50,000 (little to the donor)

Surgeons: Key beneficiaries

Location: Often India or China (and proliferating)



'It's plenty of money in a hurry that is the driver for doctors to be involved in this. Eg a surgeon in China can earn $1 million in a day for three transplants…'

Case Study 3 – Stem Cell Intervention

Megan Munsie

Head of Education, Ethics, Law + Community Awareness (Stem Cells Australia)

Global trials: Most at very preliminary stage

Doctors: Often no specialisation

Sample size: Minute numbers of human patients

Regulatory oversight: Negligible, for highly risky procedures

Simplistic marketing: 'Magic bullet' treatments at high cost clinics

'Proof': Often patient testimonials

Locations: India, China, Central + South America

'Media propels the idea that miraculous cures are just around the corner – though there are currently very few medically proven and effective treatments… Patients feel they are very pro-active and have done the research (with) little awareness of the risk this poses to the health that they have.'

2. Host Government Drivers:
Earn Revenue | Use ‘Excess’ Health Workers

Seeking global markets + revenue for:

Case study 1 - Malaysian medical graduates
Case study 2 - Filipino nursing graduates
Case study 3 – Fiji’s desire to retain health professionals @ home

Malaysia –
Growth in Private Sector Medical Schools to 2015

Entry levels –

- **Significantly lower?**

QA –

- **Mandatory or not?**

Residency/ internship access –

- **Assured?**

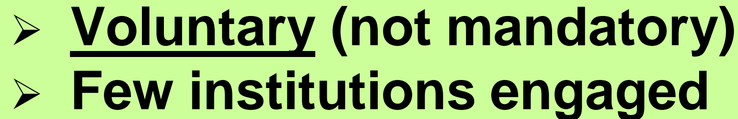
Malaysia –

- **9 QA-assured public medical schools**
- **By 2015: 14 private medical schools approved + 20 in the pipeline**
- **2016: Moratorium on new school approvals**
- **Medical tourism prioritised as a national industry**

Philippines: Competition for Global Markets Affected by the Calibre of Nurse Education

---

Tertiary sector quality assurance:



- **Voluntary (not mandatory)**
- **Few institutions engaged**

Nursing schools (1970s): 40 nationally

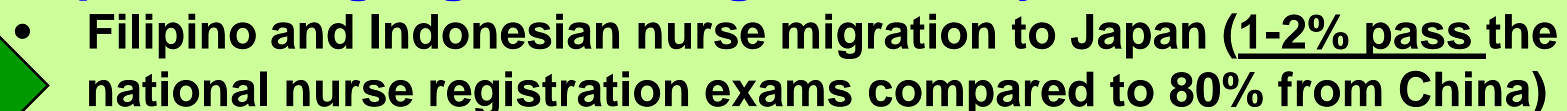
Nursing schools (2005): 441 nationally!

- **332,206 nurses trained (as export commodity)**
- **29,467 employed nationally compared to 163,756 overseas**
- **Vast numbers unemployed (seeking migration)**

Nursing school issues:

- **Most = private colleges**
- **Many with lax entry standards, minimal QA, 'invisible' Faculty, linked to migration agents, infiltration of regulatory bodies….**

Impact of language + training case study:



- **Filipino and Indonesian nurse migration to Japan (1-2% pass the national nurse registration exams compared to 80% from China)**

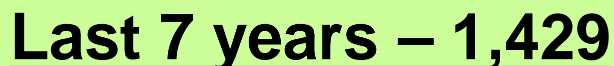
Fijian Health Professional Flows to Australia and NZ – Skilled Migration Temporary + Permanent Category

To New Zealand

Overall:

6th top source of temporary health professionals (skilled migrants)

Temporary numbers:



Last 7 years – 1,429

2014-15 – 233

Permanent numbers:

Last 7 years – 221

To Australia

Overall:

27th top source of permanent health professionals

Temporary numbers:

Last 7 years – 103

Permanent numbers:

Last 7 years – 44

3. Bypass the Barriers When Migrant Health Professionals Move: Growth in Arrivals to Australia by Major Field (2006-11 Compared to 2001-05)

Field	2001-2005 Arrivals	2006-2011 Arrivals
Engineering	18,790	41,407
Accounting	26,145	35,423
IT	22,630	31,968
Education	15,400	29,464
Registered Nursing	14,233	26,328
Medicine	7,241	12,696
Pharmacy	1,798	3,005
Dentistry	1,063	2,343
Physiotherapy	755	1,556
Total (All Degrees)	192,940	347,611

Latest Scale of Health Worker Migration Data:
Skilled Category Only 8 Years to 30 June 2015

Dominance of Temporary Entry to Pre-Arranged Work:

Australia:

Temporary skilled migrants – 41,335

Permanent skilled migrants – 17,808

Total - 58,143

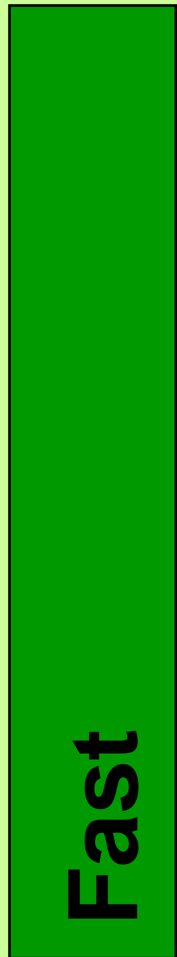
NZ:

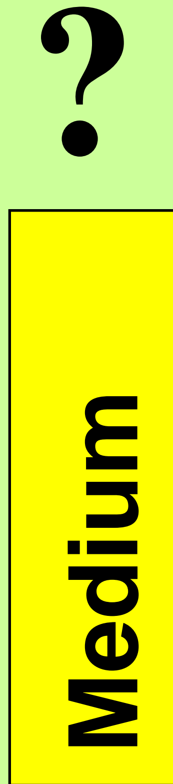
Temporary skilled migrants – 28,895

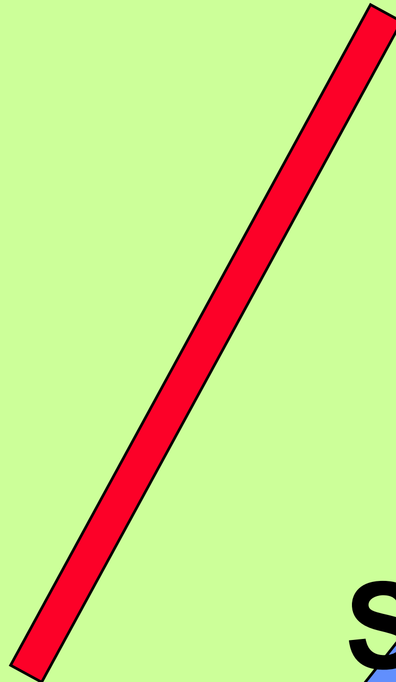
Permanent skilled migrants – 10,053

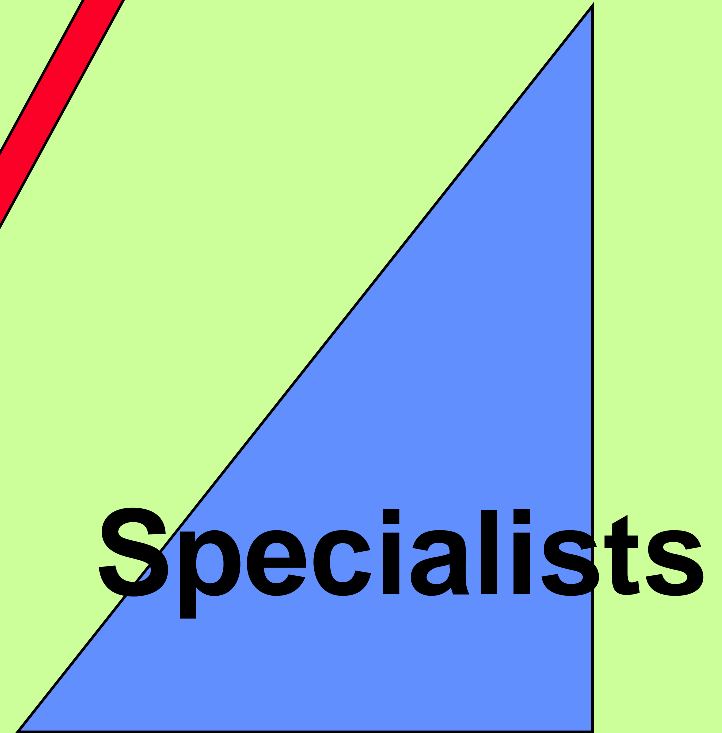
Total - 38,948

The Challenge of Registering Migrant Physicians:
Australian Registration Pathways 2008+









<u>BUT</u> Highly Variable Australian Medical Council Pass Rates - Select Candidate Countries of Training (2015 AMC)

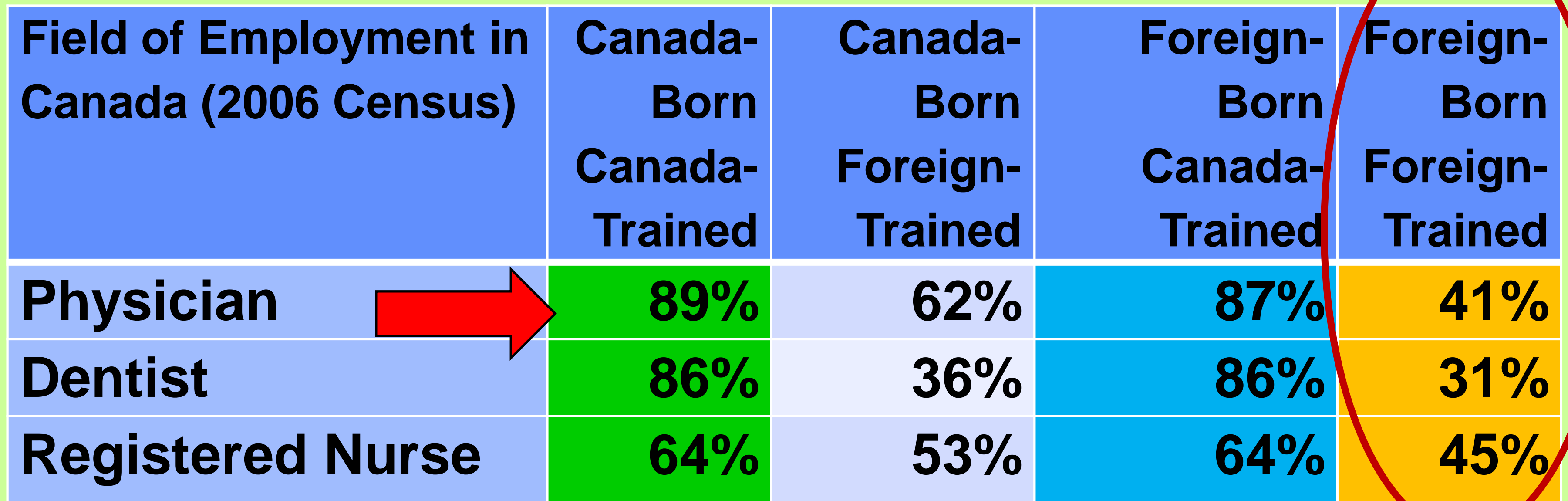
MCQ Exam (N=2,060, 62% pass)

Singapore: 100%
Germany: 91%
Malaysia: 87%
Sri Lanka: 80%
Iran: 75%
South Africa: 74%
Egypt: 66%
<u>India: 62%</u>
South Korea: 67%
Vietnam: 40%
Pakistan: 61%
Poland: 60%
China: 49%
Philippines: 46%
Romania: 33%

Clinical Exam (N=1,657, 35% pass)

Singapore 100%
Germany: 60%
South Africa: 45%
Vietnam: 45%
Malaysia: 44%
Pakistan: 41%
China: 35%
South Korea: 33%
Iran: 31%
Egypt: 30%
<u>India: 34%</u>
Philippines: 23%
Poland: 20%
Romania: 0%
Papua New Guinea: 0%

Impact of Health Worker Diversity on Registration + Work Access in Canada (Owusu & Sweetman 2015)



Field of Employment in Canada (2006 Census)	Canada-Born Canada-Trained	Canada-Born Foreign-Trained	Foreign-Born Canada-Trained	Foreign-Born Foreign-Trained
Physician	89%	62%	87%	41%
Dentist	86%	36%	86%	31%
Registered Nurse	64%	53%	64%	45%

4. Source Government Drivers: Future Potential to ‘Offshore’ Health Services | Reduce Costs?

Highly secretive TiSA ‘goods + services’ negotiations:

50 countries (GATS already liberalising health care ‘trade’)

Negotiations include:

Discussion of wide-ranging reforms to national public health systems to promote ‘offshoring’ of healthcare services

Concerns:

Risk of massive growth of ‘medical tourism’ to the detriment of investment in public hospitals and local healthcare

Leaked concept paper on healthcare services:

Argues there is ‘*huge untapped potential for the globalisation of healthcare services, creating massive business opportunities… The proposed regime would involve health professionals authorising patients to be treated in other TiSA countries (driven by cost saving*)’.

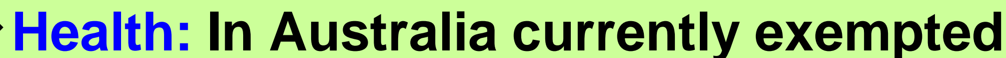
TISA and Health Sector? 'The Global Trade Agreement You've Never Heard Of' (September 2016 ABC Radio National)

Australian Senate Report 2015: 'Blind Agreement'

Scope: All services are included which are not excluded

Includes: Future services which not yet known or developed

Legal right: Providers able to sue governments if options are later modified ('ratchet' and 'lock-in' clauses)



Health: In Australia currently exempted

BUT precedent: If a market-oriented government admits private competitors to a select market, access cannot in the future be exempted (eg hospital providers)

RISK? For countries with a strong tradition of robust regulation of public services (compared to future developing country signatories)

http://www.abc.net.au/radionational/programs/themoney/tisa:-the-global-trade-agreement-you've-never-heard-of/7865742

Growth of Migration Agents – Future Expansion to 'Patient Agents'? (Established Networks)

By 2003 growth in agents to facilitate flows (ILO):

- **1,327 in Philippines**
- **1,250 in India**
- **524 in Sri Lanka**
- **Scale now?**

Role in facilitating IMG entry –

- **Saskatchewan (mineral sands)**
- **Global multinational – FiFo model (eg Afghanistan)**
- **Australia ('Recruit a doc')**

Future –

- **Facilitate aged care export | 'off-shoring'?**
- **Importation of low-skilled health workers?**

Future Challenges for IHWC Countries:
Game and Changers Medical Tourism

Medical care in an age of hyper-mobility:

1. **Growth - future scale?**
2. **Ethics – bypassed?**
3. **Impact - on domestic workforce planning + training**
4. **Regulation – quality of offshore providers**
5. **Insurance – coverage**
6. **Remediation – returning injured patients**
7. **Etc!**

Select Data Sources

Bourne, K, Delmonico, F & Munsie, M (2015), Presentations given at *Bodies, Borders and Biologicals: Ethical Consoderations of Medical Tourism*, Research Symposium, Melbourne School of Population and Global Health and Melbourne Law School , 27 August, Melbourne.

Burns, LR (2015), 'Medical Tourism Opportunities and Challenges: Illustration From US-India Trade', *International Journal of Health Policy and Management,* 8(1): 15-26.

Lautier, M (2014), 'International Trade of Health Services: Global Trends and Local Impact', Health Policy 111: 105-113.

Loh, C-P A (2015), 'Trends and Structura; Shifts in Health Tourism', *Social Science and Medicine* 132: 173-180.

Lunt, N & Mannion, R (2014), 'Patient Mobility in the Global Marketplace: A Multidisciplinary Perspective', *International Journal of Health Policy and Management,* 2(4): 155-157.

Lunt, N, Smith, R, Exworthy, M, Green, ST, Horsfall, D & Mannion, R (2015), *Medical Tourism: Treatments, Markets and Health System Implications: A Scoping Review*, OECD, Paris.

'Owusu, Y & Sweetman, A (2015),' Regulated Health Professions: Outcomes by Place of Birth and Training', adapted from Table 2 based on 2006 Canada Census data, in Hawthorne, L, McDonald, T & Sweetman, A (Eds) (2015), *Occupational Regulation and Foreign Qualification Recognition*, *Canadian Public Policy*, Special Issue, XLI Supplement 1, Ottawa, August, http://www.utpjournals.press/toc/cpp/41/Supplement+1

Hawthorne (et al):

Hawthorne, L (2012), *Health Workforce Migration to Australia – Policy Trends and Outcomes 2004-2010*, Australian government (Health Workforce Australia), Adelaide.

Hawthorne, L (2013), *Recognizing Foreign Qualifications – Emerging Global Trends*, Migration Policy Institute, Washington DC, http://www.migrationpolicy.org/research/recognizing-foreign-qualifications-emerging-global-trends.

Hawthorne, L (2014), 'WHO Four Country Study – Health Workforce Migration in Australia', Chapter 9 in *Migration of Health Workers – WHO Code of Practice and the Global Economic Crisis*, Eds A Siyam & M Dal Poz, World Health Organization, Geneva, pp 109-132.

Hawthorne, L (2014), 'Circular Migration of Health Professions – Overview and Critical Issues', *Policy Brief 1*, International Labour Organization, Geneva, pp 1-4, http://www.ilo.org/wcmsp5/groups/public/---asia/---ro-bangkok/---ilo-manila/documents/publication/wcms_320606.pdf.

Hawthorne, L, McDonald, T & Sweetman, A (Eds) (2015), *Occupational Regulation and Foreign Qualification Recognition*, Canadian Public Policy, Special Issue, XLI Supplement 1, Ottawa, August, http://www.utpjournals.press/toc/cpp/41/Supplement+1.

Hawthorne, L (2015), 'The Impact of Skilled Migration on Foreign Qualification Recognition Reform in Australia', *Canadian Public Policy Journal,* August, http://www.utpjournals.press/toc/cpp/41/Supplement+1.

Hawthorne L (2016 in press), *International Health Workforce Mobility and Its Implications in the Asia-Pacific Region*, World Health Organization, West Pacific Regional Office, Manila.