

# **Matching the supply of doctors with Alberta's needs.**

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Sept 25<sup>th</sup>, 2017

# **The Edinburgh Declaration of Medical Education 1988**

**How many doctors does  
Alberta need?**

**Is there an unmet health  
need that arises because a  
suitable doctor is not  
available in Alberta?**

**What can we learn from  
looking at comprehensive  
surveys of unmet health  
need in EU countries?**

| Eurostat<br>2013 | Cost<br>barriers | Travel<br>barriers | Waiting<br>time<br>barriers | Non health<br>system<br>factors | Total<br>unmet<br>need (% of<br>total pop.) |
|------------------|------------------|--------------------|-----------------------------|---------------------------------|---|
| Sweden           | 0.5              | 0.2                | 1.2                         | 11.7                            | <b>13.6</b>                                 |
| France           | 2.1              | 0.1                | 0.5                         | 3.5                             | <b>6.2</b>                                  |
| Germany          | 0.6              | 0.1                | 0.8                         | 4.5                             | <b>6</b>                                    |
| UK               | 0.1              | 0.1                | 1.4                         | 1.5                             | <b>3.1</b>                                  |
| Switzerland      | 1                | 0                  | 0.1                         | 1.2                             | <b>2.3</b>                                  |
| Netherland       | 0.1              | 0.1                | 0.3                         | 1.1                             | <b>1.6</b>                                  |

| Eurostat<br>2013 | Non health<br>system<br>factors | Total unmet<br>need (% of<br>total pop.) |
|------------------|---------------------------------|--|
| Sweden           | 11.7                            | <b>13.6</b>                              |
| France           | 3.5                             | <b>6.2</b>                               |
| Germany          | 4.5                             | <b>6</b>                                 |
| UK               | 1.5                             | <b>3.1</b>                               |
| Switzerland      | 1.2                             | <b>2.3</b>                               |
| Netherlands      | 1.1                             | <b>1.6</b>                               |

**What conclusions can you draw about health care in comparison to other service industries in the context of these data?**

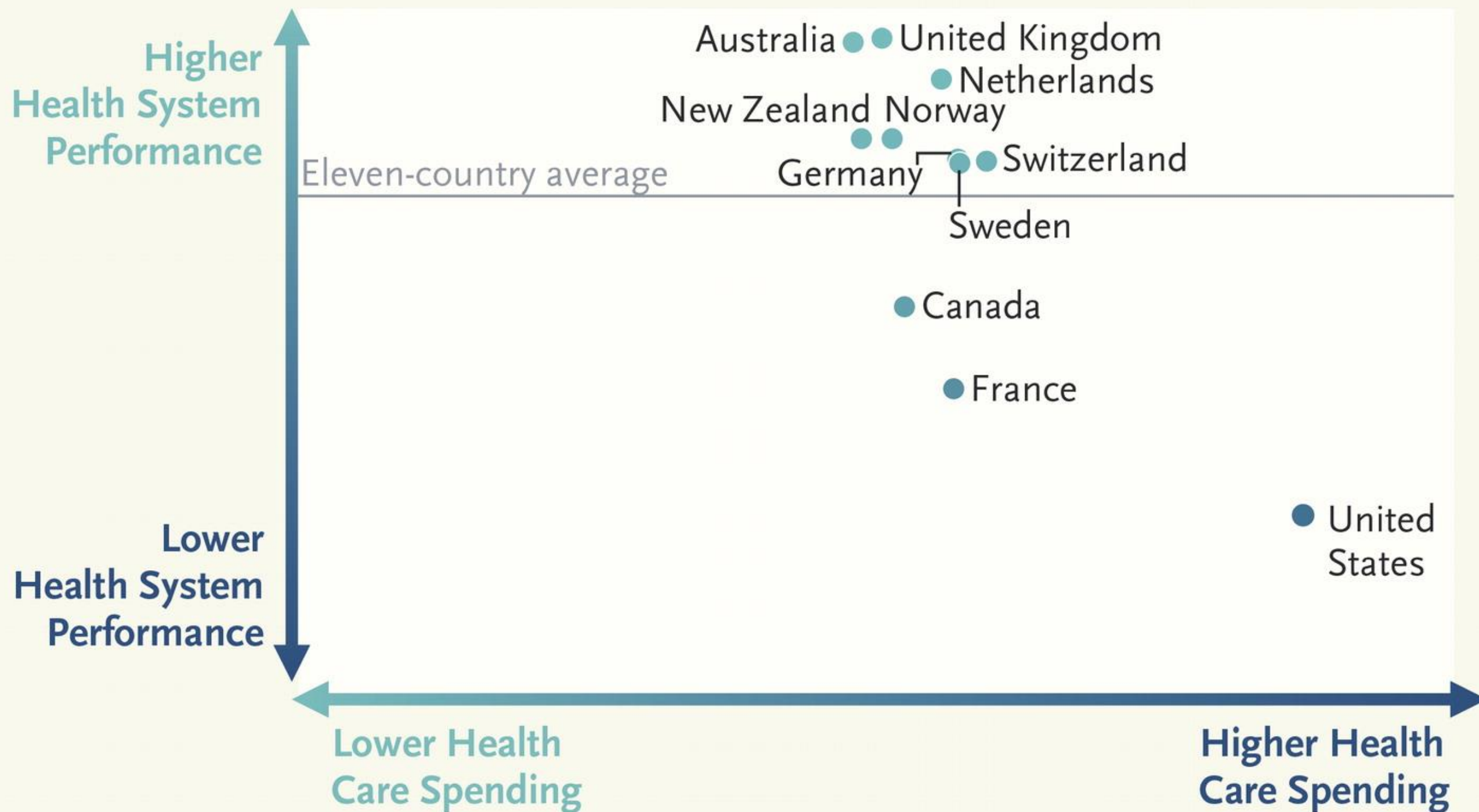


**Auntie's story and the  
comparison of virtual  
services in banking versus  
the uptake of virtual  
healthcare**

**What impact would a  
widespread take up of  
virtual healthcare, and  
particularly in community  
settings, have on the need  
for doctors?**

| Eurostat<br>2013 | Cost<br>barriers | <i>Annual<br/>health<br/>spend per<br/>capita in<br/>USD</i> | Total unmet<br>need (% of<br>total pop.) |
|------------------|------------------|--|--|
| Sweden           | 0.5              | 3,925  | <b>13.6</b>                              |
| France           | 2.1              | 4,118  | <b>6.2</b>                               |
| Germany          | 0.6              | 4,495  | <b>6</b>                                 |
| UK               | 0.1              | 3,905  | <b>3.1</b>                               |
| Switzerland      | 1                | 5,643  | <b>2.3</b>                               |
| Netherlands      | 0.1              | 5,099  | <b>1.6</b>                               |

|                    | <b>% GDP<br/>health spend</b> | <b>CF Ranking</b> |
|--------------------|-------------------------------|-------------------|
| <b>UK</b>          | <b>9.9</b>                    | <b>1</b>          |
| <b>Australia</b>   | <b>9.0</b>                    | <b>2</b>          |
| <b>Netherlands</b> | <b>10.9</b>                   | <b>3</b>          |
| <b>New Zealand</b> | <b>9.4</b>                    | <b>4</b>          |
| <b>Norway</b>      | <b>9.3</b>                    |                   |
| <b>Sweden</b>      | <b>11.2</b>                   | <b>6</b>          |
| <b>Switzerland</b> | <b>11.4</b>                   |                   |
| <b>Germany</b>     | <b>11.0</b>                   | <b>8</b>          |
| <b>Canada</b>      | <b>10.0</b>                   | <b>9</b>          |
| <b>France</b>      | <b>11.1</b>                   | <b>10</b>         |
| <b>USA</b>         | <b>16.6</b>                   | <b>11</b>         |



Schneider & Squires N Engl J Med 2017; 377 (10): 1-4

| Eurostat<br>2013 | Waiting time<br>barriers | Doctors per<br>1,000 pop.<br>(ratio of<br>OECD mean) | Total unmet<br>need (% of<br>total pop.) |
|------------------|--------------------------|--|--|
| Sweden           | 1.2                      | 1.1  | <b>13.6</b>                              |
| France           | 0.5                      | 1.1  | <b>6.2</b>                               |
| Germany          | 0.8                      | 1.1  | <b>6</b>                                 |
| UK               | 1.4                      | 0.7  | <b>3.1</b>                               |
| Switzerland      | 0.1                      | 1.2  | <b>2.3</b>                               |
| Netherlands      | 0.3                      | 1.2  | <b>1.6</b>                               |

**Based on these data,  
increasing the number of  
doctors or health funding, in  
isolation, would predictably  
have little impact on the  
level of unmet health need  
in these EU countries.**

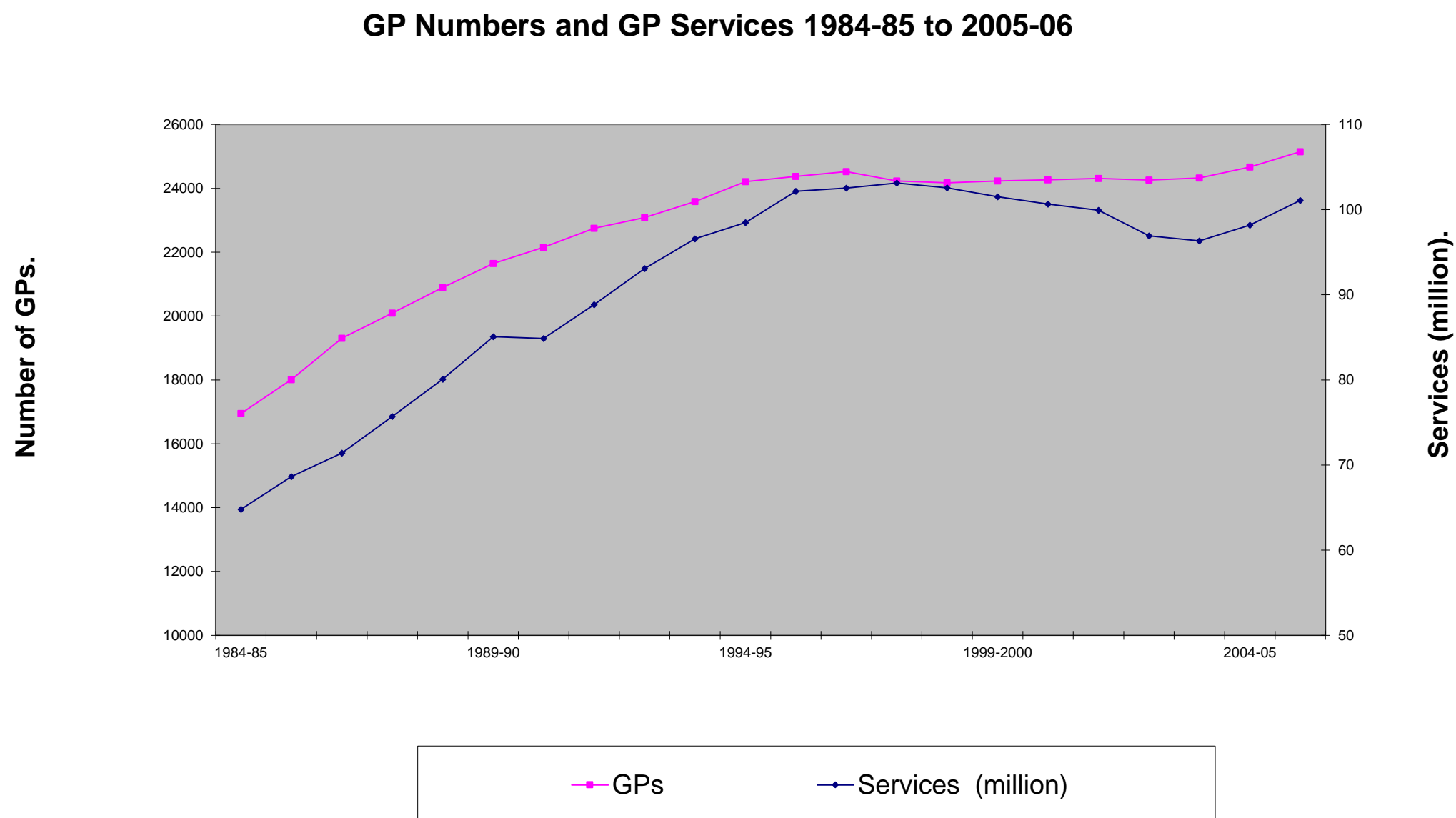
**The number of doctors  
that any jurisdiction needs  
depends upon what the  
doctors do.**



# **The Soweto Story**

**The number of doctors that  
are apparently needed to  
meet need will also depend  
upon how they are  
recognised, remunerated  
and rewarded.**

# ***Relationship between GP numbers and services in the Australian fee-for-service health system Dr Ian McRae (Australian National University)***



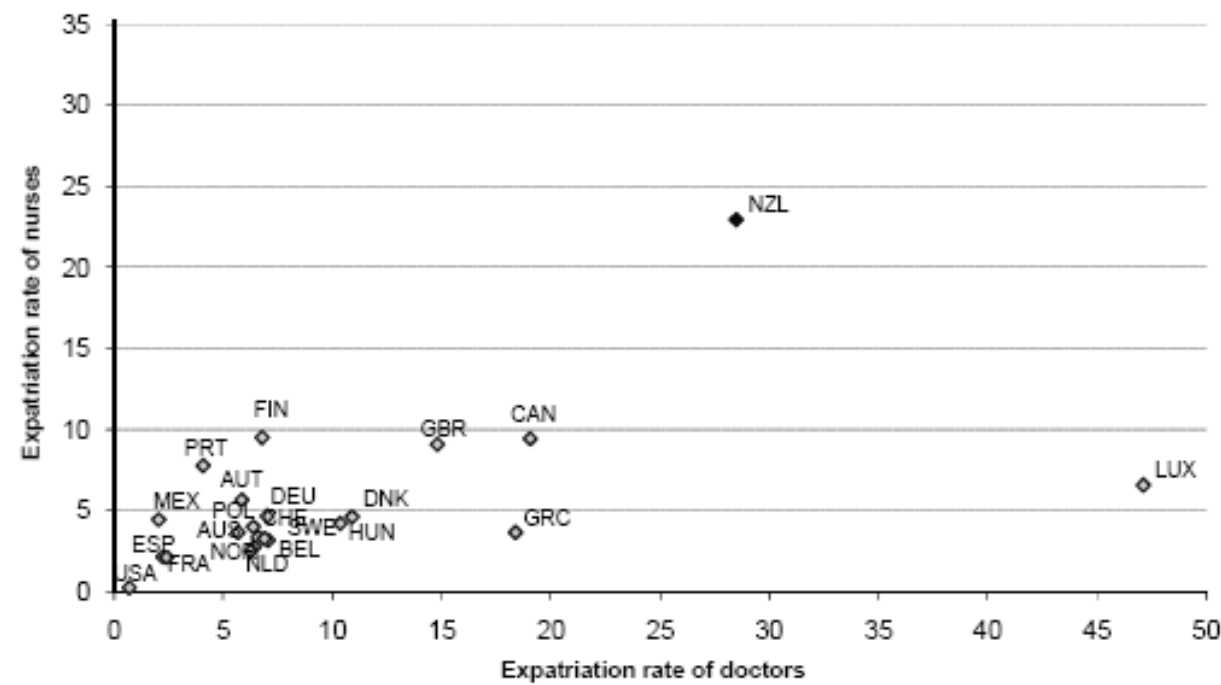
**TLT commissioning, informed  
consumer driven health  
spend and an evolutionary  
approach to workforce  
development**

# **The New Zealand approach**

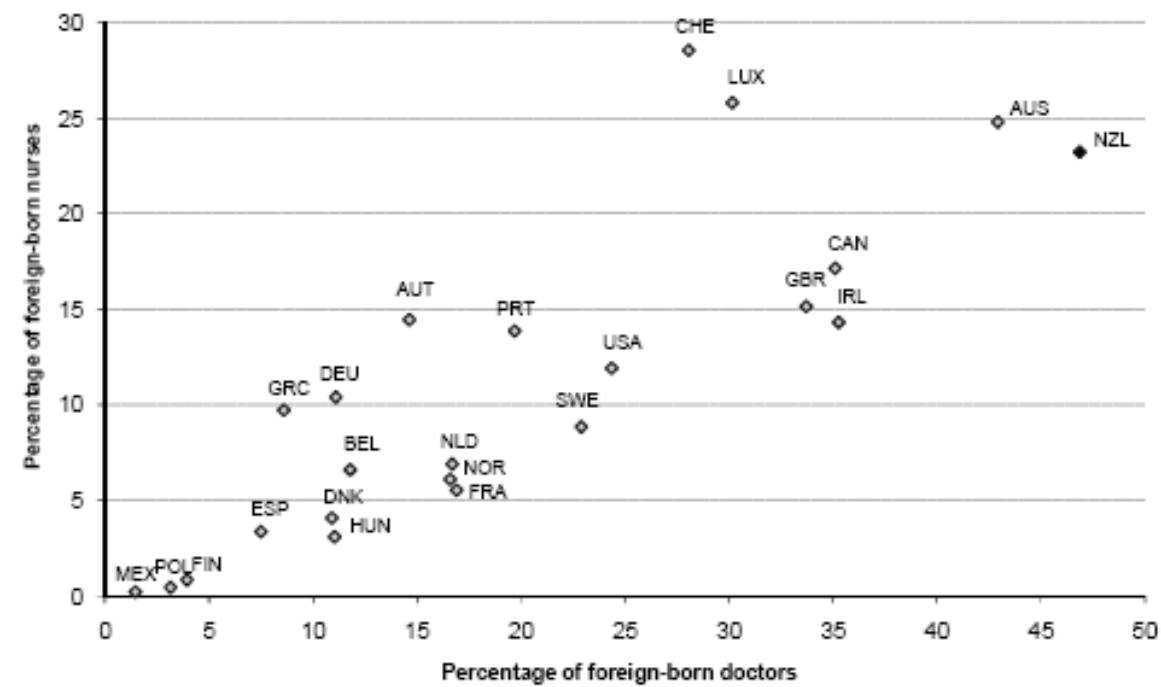
**Zurn P, Dumont J-C. Health  
workforce and international  
migration: can New Zealand  
compete? WHO  
DELSA/HEA/WD/HWP (2008)3**

| <b>Country or Region</b> | <b>Ratio of doctors per<br/>1,000 in 2004</b> |
|--------------------------|---|
| <b>All OECD nations</b>  | <b>3.1</b>                                    |
| <b>Australia</b>         | <b>2.5</b>                                    |
| <b>New Zealand</b>       | <b>2.2</b>                                    |
| <b>Canada</b>            | <b>2.05</b>                                   |

**Chart 7. Expatriation rates and percentages of foreign-born doctors and nurses, selected OECD countries, circa 2000**



Source: Dumont and Zurn (2007)



Source: Dumont and Zurn (2007)



**We need to test the basic  
premises of these WHO  
assumptions.**

**On what basis is a ratio of 3.1  
doctors/1,000 population a  
meaningful statement of  
anything?**

**Australia and Canada's workforce planning was driven by provider to population ratios as compared to critical analyses of unmet health.**

**Fréchette, D., et alia, Findings from the  
Royal College's employment study. Ottawa,  
Ontario: The Royal College of Physicians and  
Surgeons of Canada. © 2013 Royal College  
of Physicians and Surgeons of Canada**

**Australia is graduating 1,000  
more doctors than there are  
vocational training positions.**

# **Advantages of an over-supplied medical labour market:**

- (1) more competitive markets for procedures and interventions that will lower costs if managed properly;**
- (2) the displacement of doctors to under-served areas and disciplines;**
- (3) behaviourally sound recognition, reward and remuneration schema for doctors.**

## **Disadvantages of an over-supplied medical labour market:**

**(1) doctor unemployment and consequent poor returns on training investment;**

**(2) social disruption for displaced doctors;**

**(3) reversion of innovative models to previously disrupted practices to employ more doctors.**

**The Zealand Approach – the  
OECD nations on average have  
40% too many doctors!**

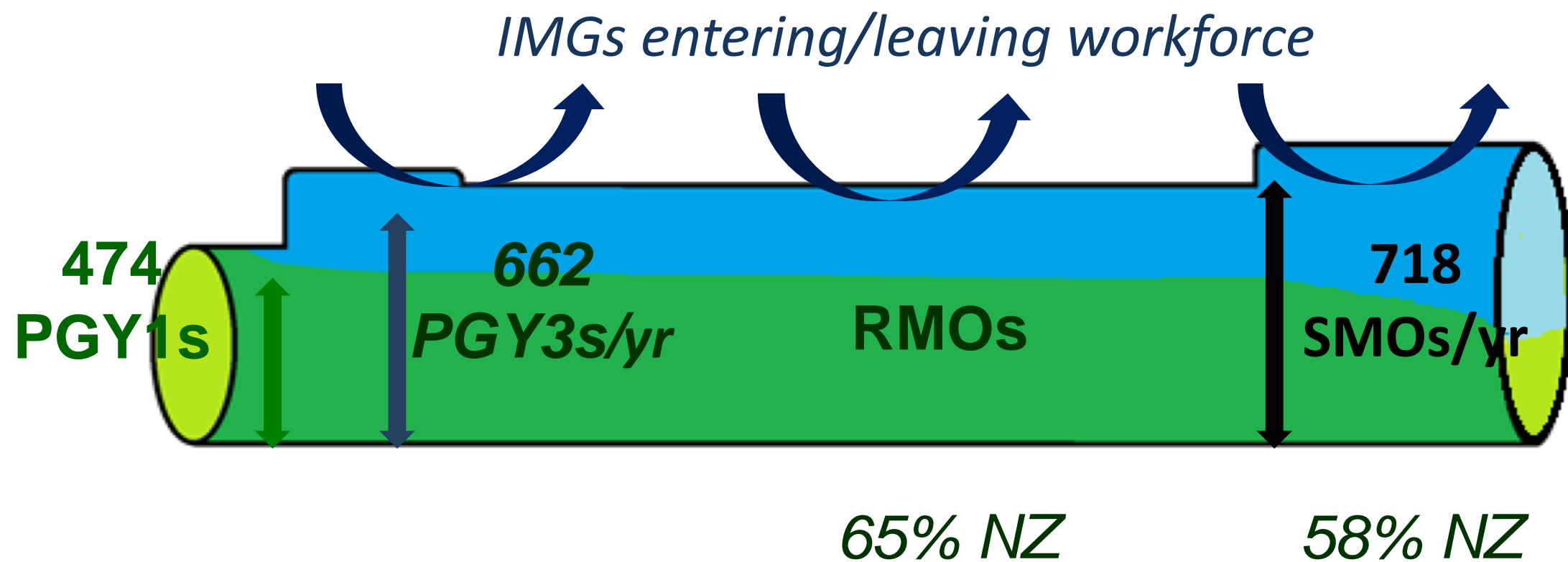


**Given the structural flaws in and  
perverse funding of the New Zealand  
health system, the usual high-quality  
clinical outcomes must be due to the  
quality of the health workforce.**

**It follows that whatever investments  
you make in workforce development,  
the quality of the clinical training  
experience should never be  
compromised.**

**200 additional medical students  
in 2008 based on system capacity  
to accommodate learners  
without compromise.**

# The second question is whether a reliance on IMGs is sustainable?



**Besides not considering them as a homogeneous group, the need is to consider IMGs as an asset to be managed carefully and not as a problem.**

# **Approaches to determining doctor supply:**

- (1) Traditional 'linear' modeling based on projected provider ratios;**
- (2) Qualitative forecasting based on health need;**
- (3) Combined quantitative and qualitative approaches;**
- (4) Agnostic evolutionary approaches.**

**OECD nations are probably over-supplied with doctors, but health data suggest those doctors are not well distributed to meet need.**

**What works in aligning the  
medical workforce to better  
meet health need?**



**Selection processes**  
**Undergraduate pedagogy**  
**Immediate PG exposure**  
**Sound behavioural economics**  
**Targeted vocational training**  
**Career factor attention**  
**Social engineering**

**The quality of healthcare in  
Alberta is probably largely  
dependent on the quality of the  
health workforce such that ...**