

# TRENDS IN SUPPLY OF DOCTORS AND NURSES IN EU AND OECD COUNTRIES

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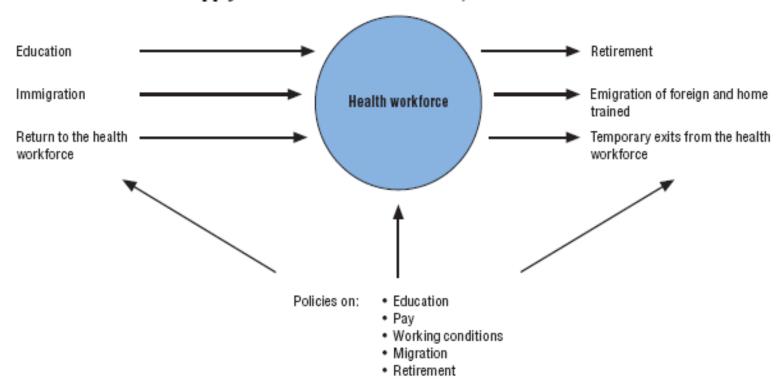
Expert Group Meeting on European Health Workforce





### Analytical framework (Stock/Flow model)

#### Supply of health workers: inflows, stocks and outflows



Source: OECD



### OECD/EUROSTAT/WHO-EUROPE JOINT QUESTIONNAIRE

(NON-MONETARY HEALTH CARE STATISTICS)



### Background on OECD/Eurostat/WHO-Europe Joint Questionnaire

- Started in 2010 with data collection on health human resources and physical resources:
  - Extended in 2013 (health care activities)
  - Extended in 2015 (<u>health workforce migration</u>)
- Aim is to collect internationally comparable data to monitor key aspects and trends in health workforce development (and other resources and activities of health systems)
- Aim of joint data collection is to:
  - Reduce data collection burden on national authorities
  - Improve consistency of data in international databases

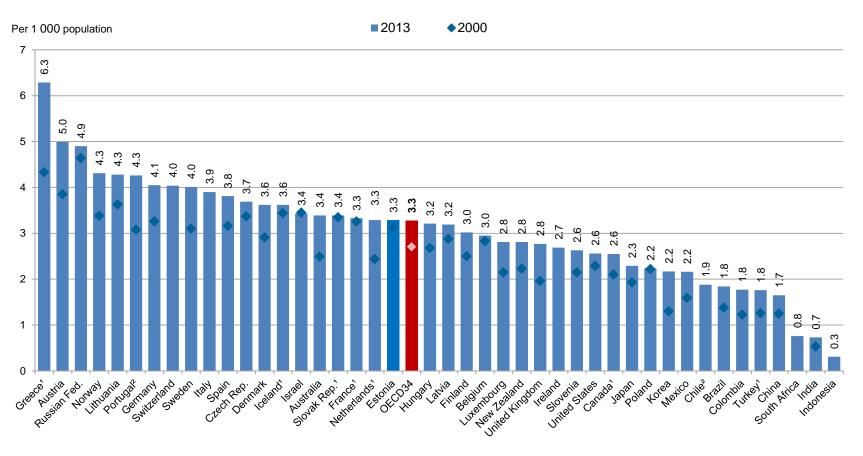


### Scope of OECD/Eurostat/WHO-Europe Joint Questionnaire

- Number of health workers
  - Physicians (Doctors)
    - by age and gender
    - by categories (generalists and specialists)
  - Nurses
    - by categories (higher level and lower level)
    - distinguished from health care assistants (nursing aides)
  - Midwives
  - Dentists
  - Pharmacists
  - Physiotherapists
- New graduates (doctors, nurses, midwives, dentists, pharmacists)
- Health workforce migration, focussing on doctors and nurses (new in 2015)



# Number of doctors has increased in nearly all EU and OECD countries



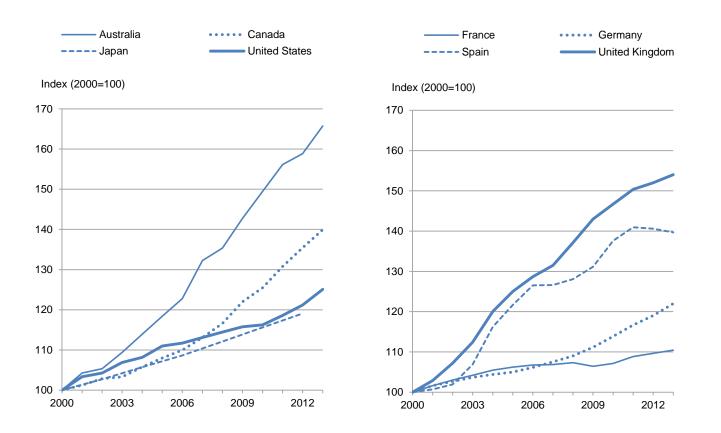
1. Data include not only doctors providing direct care to patients, but also those working in the health sector as managers, educators, researchers, etc. (adding another 5-10% of doctors). 2. Data refer to all doctors licensed to practice (resulting in a large over-estimation of the number of practising doctors in Portugal, of around 30%).

Source: OECD Health at a Glance 2015 (based on OECD/Eurostat/WHO-Europe Joint Questionnaire)



# And in some countries, the number of doctors has increased strongly

Evolution in the number of doctors, selected OECD countries, 2000 – 2013 (or nearest year)

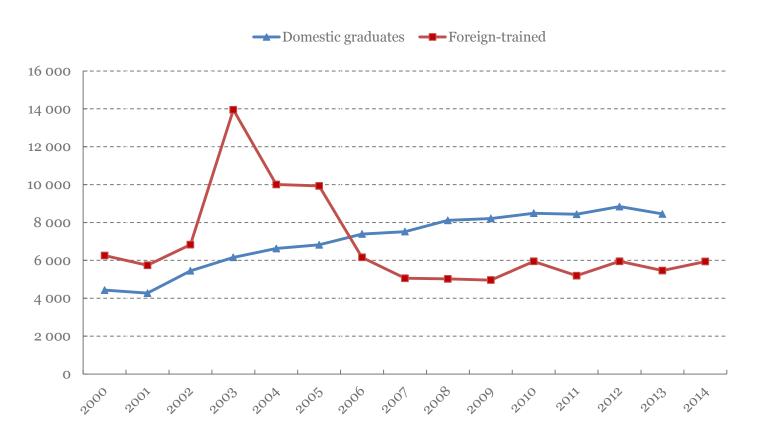


Source: OECD Health Statistics 2015



# Driven by inflows of new medical graduates and foreign-trained doctors

Annual inflows of foreign-trained doctors and domestic medical graduates, UK, 2000 – 2014



Source: OECD Health Statistics 2015 (based on OECD/Eurostat/WHO-Europe Joint Questionnaire)



# But still, apparently, the rise has not been sufficient in some countries...



How the UK is the unhealthy man of Europe: NHS needs 50,000 more nurses and 26,500 doctors costing £5bn to bring it up to standard of Western neighbours



Britain's healthcare lagging behind the rest of the WORLD, major report warns

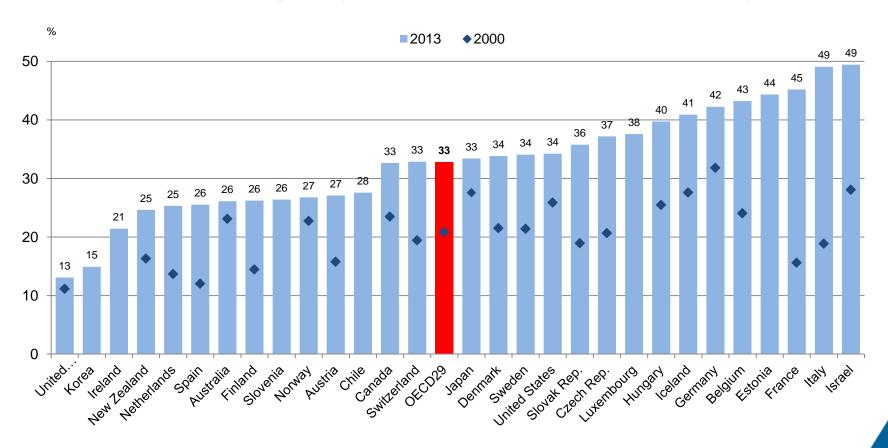
The UK needs 50,000 more nurses and 25,000 more doctors to match standards in other Western countries, leading experts say

Few facts: Between 2007 and 2014, the number of doctors in UK has increased by 29 000. Since 2010, there are more than 8 400 new medical graduates each year in the UK. If only the last three waves of medical graduates end up working as doctors, this would be enough to completely eliminate the remaining « gap » with the OECD average. (Note: the OECD average is not a « gold standard »; it's just an average!)



### A large proportion of doctors is getting closer to retirement age (though the retirement age is also moving up)

Share of doctors aged 55 years and over, 2000 and 2013 (or nearest year)

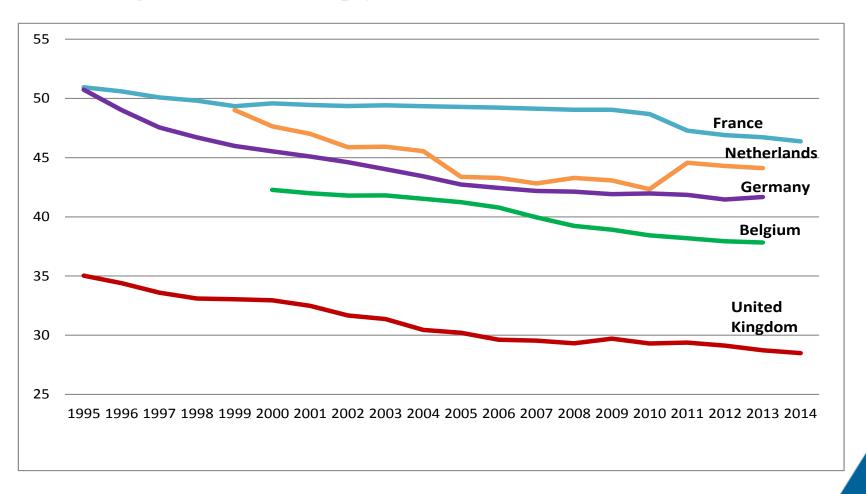


Source: OECD Health at a Glance 2015 (based on OECD/Eurostat/WHO-Europe Joint Questionnaire)



# Steady decline in the share of generalists in many countries

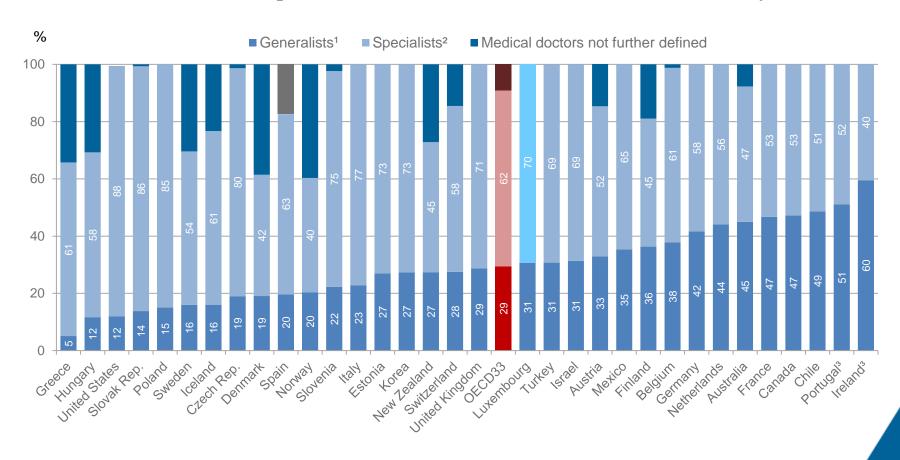
Share of generalists as % of all physicians, selected OECD countries, 1995 – 2014





# Ratio of specialists to generalists is now 2:1 on average in EU and OECD countries

Generalists and specialists as a share of all doctors, 2013 (or nearest year)

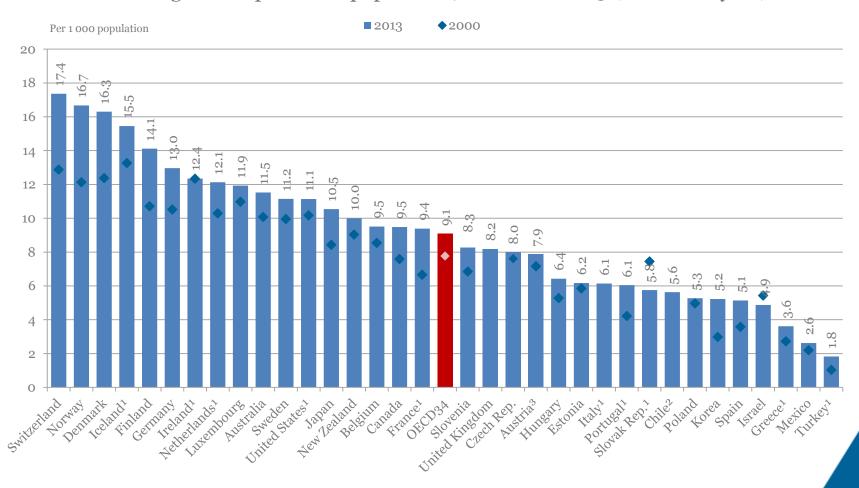


Source: Health at a Glance 2015 (based on OECD/Eurostat/WHO-Europe Joint Questionnaire)



# The number of nurses has also increased in nearly all EU and OECD countries

Practising nurses per 1 000 population, 2000 and 2013 (or nearest year)

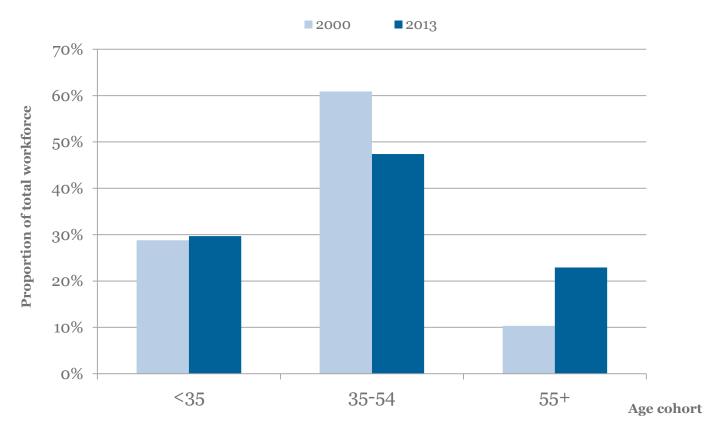


Source: OECD Health at a Glance 2015 (based on OECD/Eurostat/WHO-Europe Joint Questionnaire)



# A growing proportion of nurses are also approaching retirement age: Example of France

Share of nurses by age group (% of all nurses), France, 2000 and 2013 (or nearest year)

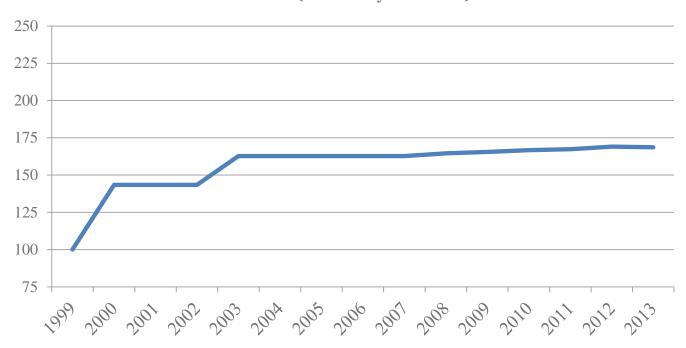




### But there will be steady inflows of new nurses to replace them

Admissions to nursing education, France, 1999 - 2013

Index (Baseline year = 100)



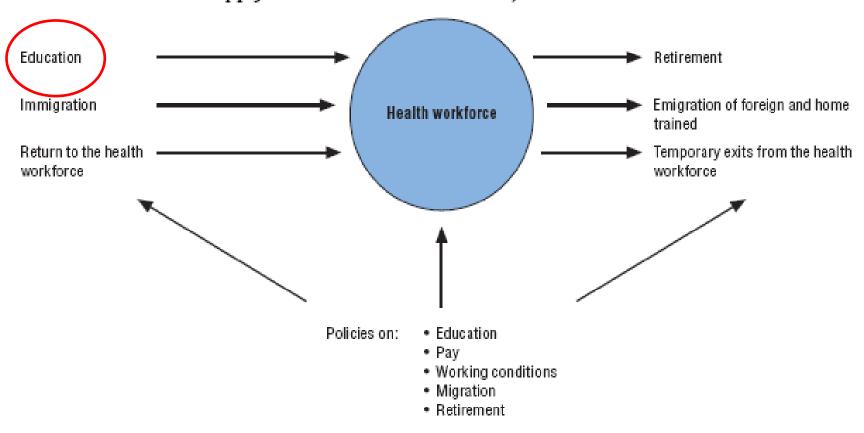


### OECD PROJECT ON CHANGES IN EDUCATION AND TRAINING CAPACITY (TRENDS AND POLICIES)



### Education policy is the most important policy lever

#### Supply of health workers: inflows, stocks and outflows



Source: OECD



#### Objectives of the study

- Review recent changes in *numerus clausus* policies for admissions in medical and nursing education programmes in EU and OECD countries
- Recent changes also in composition of post-graduate training places in medicine (general medicine versus specialisation) and introduction/expansion of advanced training programmes for advanced nursing roles (e.g., nurse practitioners)



### Numerus clausus policies in the past have tended to go through cycles (ups and downs)

Evolution of the numerus clausus for medical education, France, 1971-2013



Source: ONDPS 2015



#### Trends in admissions to medical education

Number of OECD countries for which admissions to medical education	Increased	Remained Constant	Decreased
	21	10	O

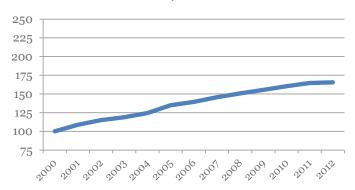
Note: Refers to the period 2007 to 2012. Covers OECD countries in Europe and outside Europe.

Source: 2012 OECD Health Characteristics Survey

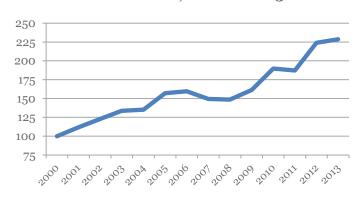
### In some countries, admissions to medical education have grown rapidly; in others, the growth has been more modest

Index (Baseline year = 100)

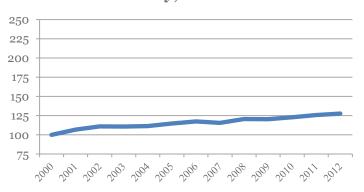
Canada, 2000 - 2012



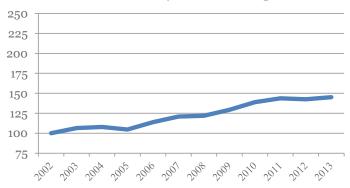
Sweden, 2000 - 2013



Germany, 2000 - 2012



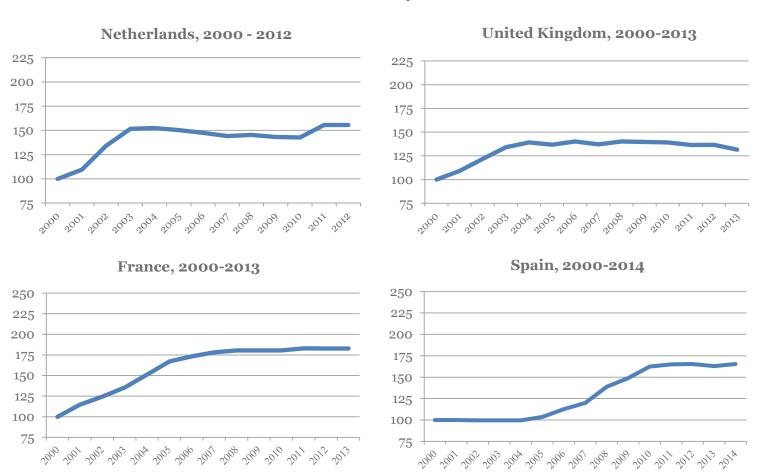
Poland, 2002 - 2013





### Admissions to medical education have stabilised in recent years in some countries, but at a much higher level

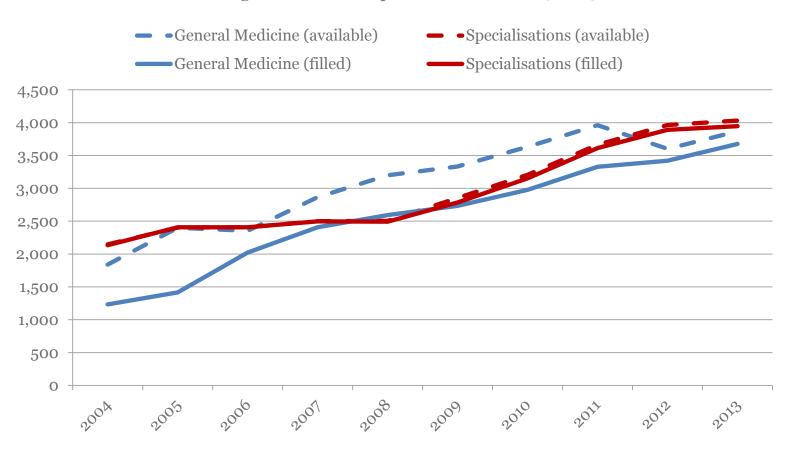
Index (Baseline year = 100)





# Post-graduate training: Some countries making deliberate efforts to increase training places in general medicine

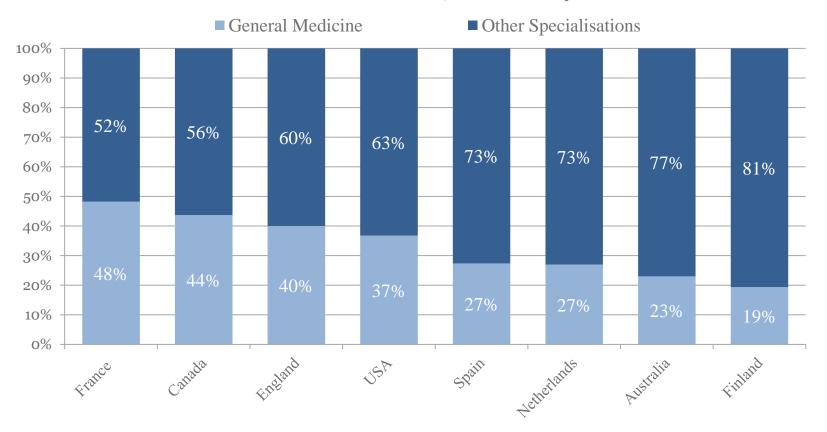






### Large variations across countries in post-graduate training places in general medicine *versus* different specialties

Share of students admitted to general medicine and other specialisations, selected OECD countries, 2013 (or nearest year)





#### Trends in admissions to nursing education

• Results from 2012 OECD Health Characteristics Survey.

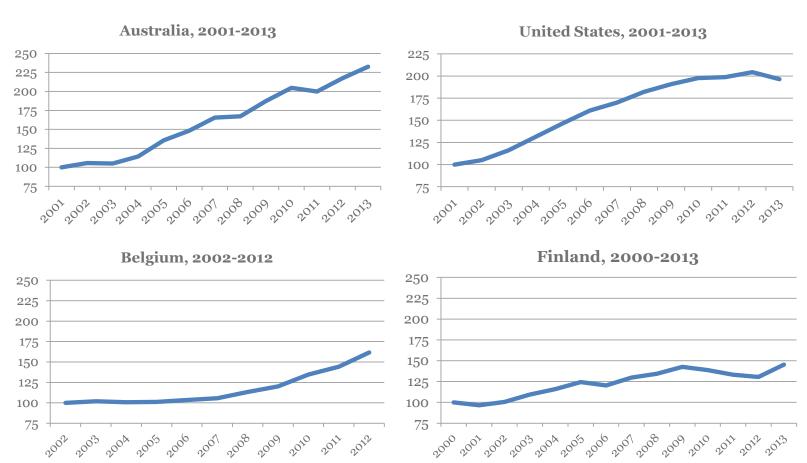
Number of OECD countries for which admissions to nursing education	Increased	Remained Constant	Decreased
	20	9	2

Note: Refers to the period 2007 to 2012. Covers OECD countries in Europe and outside Europe.



# In some countries, admissions to nursing education have expanded greatly since 2000

Index (Baseline year = 100)





# <u>United States</u>: From projected shortages of nurses to projected surpluses

In 2004: US Department of Health and Human Services **projected a shortage** of almost one million registered nurses by 2020.

In 2014: US Department of Health and Human Services **projected a surplus** of 340 000 registered nurses by 2025 (mainly because annual training rates have doubled and retention rates have also increased).

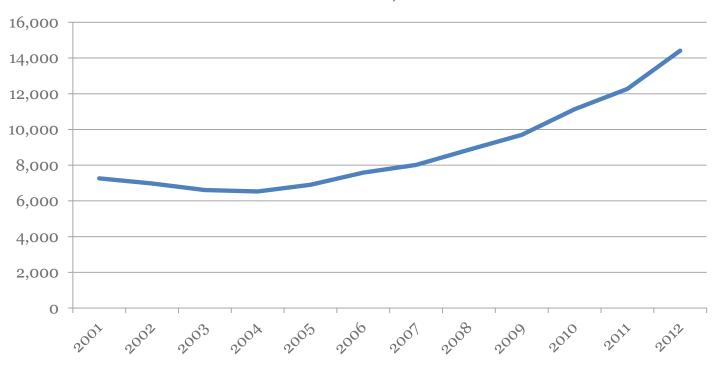
[Note: 100 000 more nurse graduates per year x 10 years = 1 000 000 nurses]

Source: US Department of Health and Human Services (2014), The Future of the Nursing Workforce, National and State Level Projections 2012 -2025



# Training more advanced nurses also increasing in the United States and some European countries

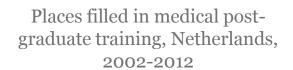
Number of students graduating from NP programmes, United States, 2001 - 2012

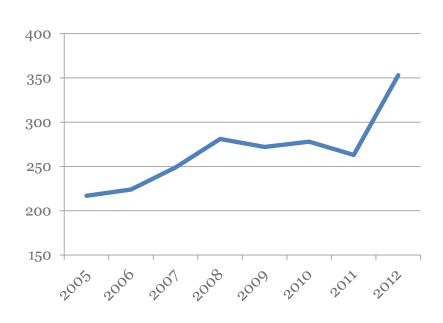




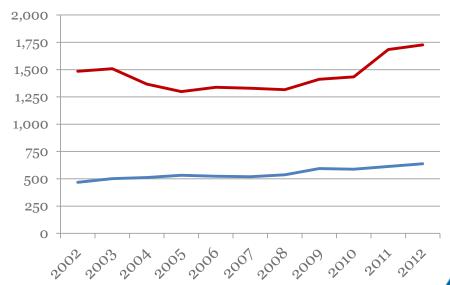
### Training more Nurse Practitioners to play a bigger role in primary care: The Netherlands

Number of students admitted to NP programmes, Netherlands, 2005-2012





General Medicine (realization)
Other Specialisations (realization)





### Conclusions on Numerus Clausus Policies

- Numerus clausus policies need to be based on better health workforce data and planning models.
- Health workforce planning is not an exact science and needs regular updating.
- Health workforce planning should **help avoid a "yo-yo" approach** to student intakes and entry into medical and nursing occupations.
- Supply-side projections need to focus more attention on changing **retention and retirement patterns**.



#### Coming out soon

### Synthesis report on changes in *Numerus Clausus* Policies:

As part of broader publication on health workforce.

#### **Country notes**

• 3-5 page individual country notes describing in more detail changes in medical and nursing education and post-graduate training programmes (for all countries with sufficient information).



### Thank you

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