

# CHANGES IN THE AGE STRUCTURE OF PRIMARY CARE PHYSICIANS IN THE CZECH REPUBLIC BETWEEN 2000 AND 2007

Luděk Šídlo

Department of Demography and Geodemography, Faculty of Science, Charles University in Prague, Czech Republic

ludek.sidlo@gmail.com

## PRIMARY CARE PHYSICIANS IN THE CZECH REPUBLIC

- there is approximately 16.3 thousands of primary care physicians – 41 % from this number are dentists, 32 % practical physicians for adults, 14 % gynecologists and obstetrics and the rest (13 %) are practical physicians for children and youth (Figure 1)
- there is the most usable indicator at the evaluation of the number of physicians "number of physicians per 100.000 inhabitants" (e.g. WHO, Eurostat); on the base of this indicator there is possible to say that the average number of physicians per inhabitants is quite constant in the several past years in all studied braches of activities (Figure 2)
- this indicator is the most usable on the one site, but other hand it is an indicator with quite a small testified value, which reflected just the current staff in a health care in the studied region, but not the age structure of physicians as well as the inhabitants of the region
- the most important head from the position of the future development is to study the structure of physicians and inhabitants, above all their age structure
- the current age structure of physicians is influenced by several factors:
  - historical consequences (there were accepted some proceedings in 70's which allowed during a short time to produce quite a big number of physicians; these physicians, who are now around 50–60 years old, make a focus in current age structures);
  - very low numbers of graduates from medical faculties from 90's (the study program "general medicine" graduate yearly around 1,000 students – there is just a small shape from them (just around 15 %), who have to consecutively specialized their profession to the primary care physician; the study program "stomatology" graduate yearly around 130 students);
  - the current situation is not positively influenced also by income of foreign physicians (the numbers of them are in a primary care insignificant due to necessity to know very well a Czech language for communicating with patients);
  - the current situation is conversely positively influenced by low numbers of Czech physicians who move away abroad (by information from Czech medical chamber and Czech stomatological chamber, there was registered just a decimal numbers of primary care physician during 2000–2007);
  - the better health status of population enable to practice a medical profession also in a higher age – the percentage of physicians in a pensionable age, who steadily active practice their profession is constantly escalated.
- also from these reasons there is possible to observe the growing of average age of primary care physicians; the current situation is not optimistic by the view of future development and carries many questions about accessibility of quality primary care

Figure 1: Structure of all physicians by branch of activity, Czech Republic, 31. 12. 2007

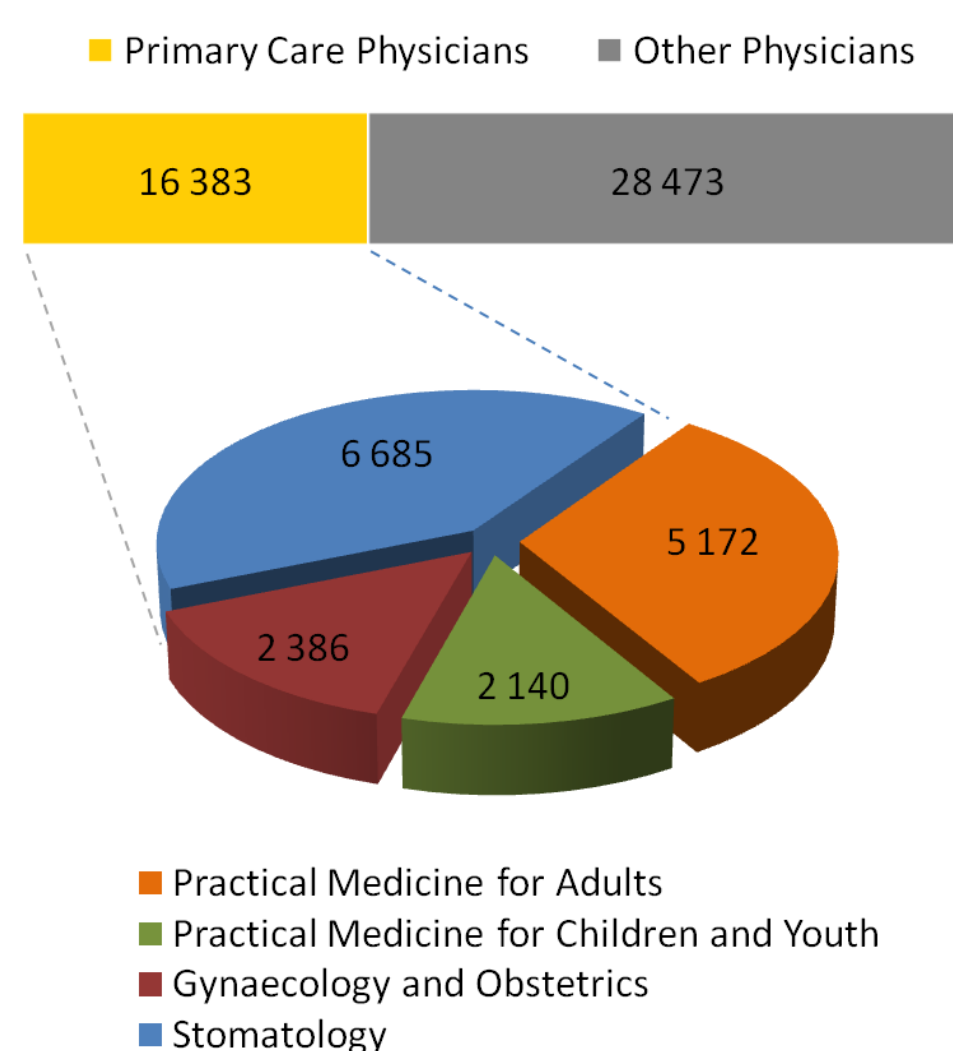
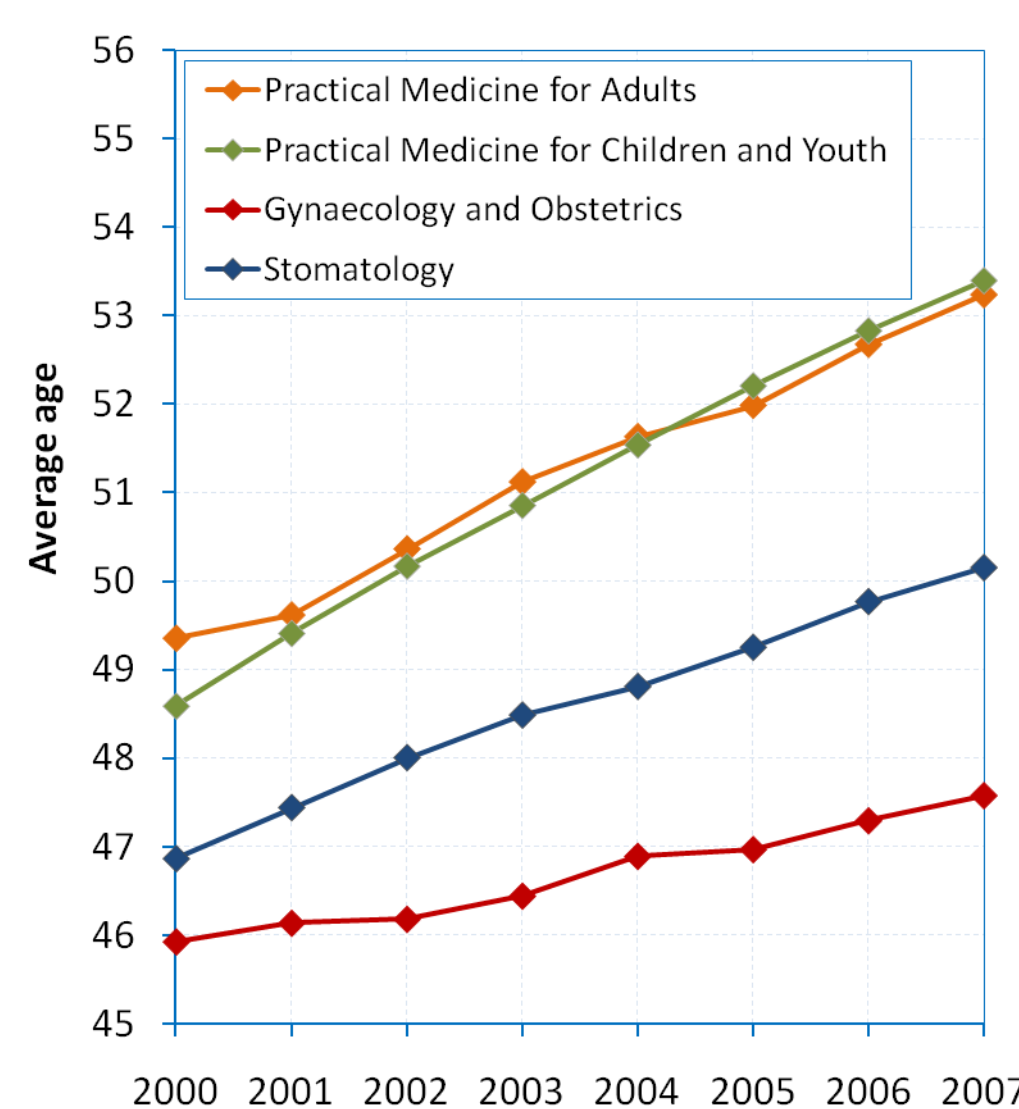


Figure 2: Average age of primary care physicians, Czech Republic, 31. 12. 2007



## SPECIFICS OF BRANCHES OF PRIMARY CARE ACTIVITY

### Practical Medicine for Adults

- one of the oldest age structures
- an average age reaches 53 years in the end of 2007 (49.4 in 2000)
- the prospects to the future indicate another ageing of physicians
- in the age group 50–54 years is a quarter of all physicians – it is more than 8 per cent points higher value than the proportion of physicians in an age 45 and younger

### Gynaecology and Obstetrics

- the youngest age structure from studied branches of activity – an average age was in the end of 2007 almost 48 years – it is just an increase by 1.7 years since 2000
- quite a big proportion of physicians in young age groups – until the age of 40 there is a third of all physicians in this branch – the same proportion like of physicians in age 55 and older
- it is possible to observe the higher proportion of physicians-males in older generations; in youngest age categories it turns back in bigger proportion of females

### Practical Medicine for Children and Youth

- the most older age structure between primary care physicians
- an average age reaches 53.5 years in the end of 2007

- feminization of this branch (87 % of physicians are females)
- very low number of graduates specialized in this branch of activity
- big number of physicians in age 50–60 years – quite a half of all physicians (47 %)

### Stomatology

- very refers branch of activity in media – the situation is grace, but not so dramatic like by physicians for adults or for children
- an average age increased between 2000 and 2007 by 3.3 years and in the end of 2007 first exceed the level of 50 years

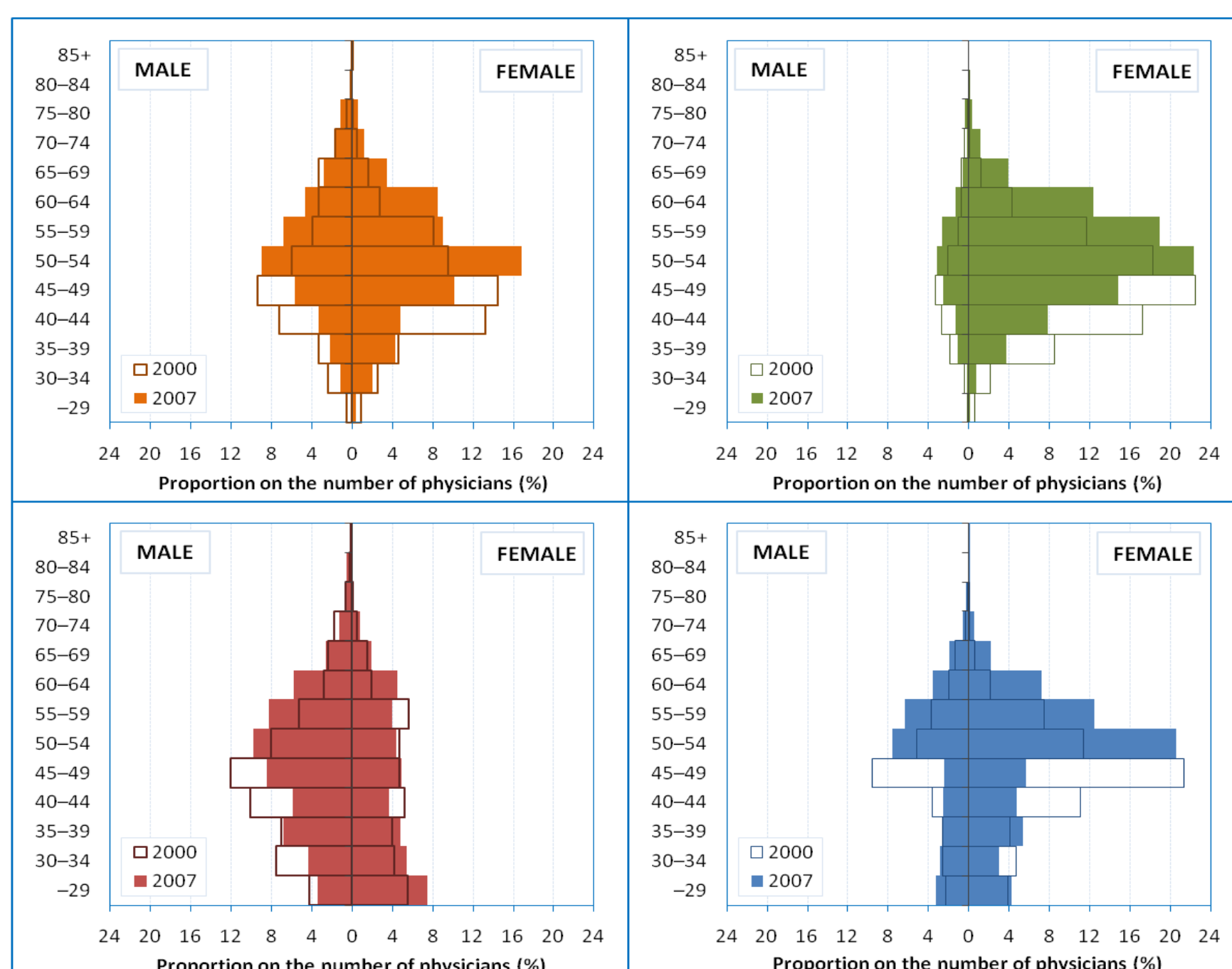


Figure 3: Age structure of primary care physicians by branch of activity, Czech Republic, 31. 12. 2000 and 31. 12. 2007

- there is a big disproportion of individual age categories in a proportion of age structure of stomatologists – there is 28 % of all dentists in an age group 50–54, the same proportion is for all dentist in a age 45 and younger; in an age 50–64 there is more than half (57 %) of all dentists.

## DEFINITION OF PRIMARY CARE

- "primary care is the provision of integrated, accessible health care services by clinicians who are accountable for addressing a large majority of personal health care needs, developing a sustained partnership with patients, and practicing in the context of family and community"

<http://books.nap.edu>

- guarantee the balance of two main goals of the heath-system – optimization of heath and equality in a distribution of sources between groups of population
- there are four branches of activity in a primary care in the Czech Republic in a harmony with general tradition:
  - Practical Medicine for Adults,
  - Practical Medicine for Children and Youth,
  - Practical Medicine for Females,
  - Stomatology

## USED DATA

- separated data from the "Registry of Physicians, Dentists and Pharmacists" (RPDP) offered by "ÚZIS ČR" (Institute of Health Information and Statistics of the Czech Republic) for the period 2000–2007:
  - used data of the "TYPE A" (by main branch of activity); here each worker is included only once, by the assigned main branch.
  - according to the RPDP there is no possibility to separate practical physicians for woman, but just from the branch "Gynaecology and Obstetrics"
- there were compiled following branches of activity (on the base of ÚZIS ČR)
  - Practical Medicine for Adults
  - Practical Medicine for Children and Youth
  - Gynaecology and Obstetrics
  - Stomatology

## MAIN RESULTS

- the main usable indicator – the average number of physicians per 100.000 inhabitants – is not convenient for evaluating the accessibility of health care due to untaken note of age structures
- the preponderance of primary care physicians is in an older productive age in the Czech Republic (a quarter of all physicians is in an age group 50–54 years; more than a half is in age 50–64)
- every 12th physician is in a senior age (older than 65 years)
- the proportion of younger age categories is very low (until the year of 40 there is just 17 % of primary care physicians)
- average age of physicians is still rapidly growing up – there was an increase by some branches of activity almost by five years between 2000 and 2007; the current average age is higher than 50 years
- the worse situation is in a branch "Practical Medicine for Children and Adults" and "Practical Medicine for Adults"
- quite relatively proportion of physicians is seen just in a branch "Gynaecology and Obstetrics"
- the question is, who will cater the primary care after the leaving of physicians from the "strong-generations" in next 20 years
- it is necessary to deal with this question and create suitable conditions for young physicians which will stimulate them to perform this profession