

**Ministry of Health**  
Health Economics Division  
Planning, Surveys and Evaluation Department

**PHYSICIANS IN THE COMMUNITY**  
SOCIODEMOGRAPHIC AND PROFESSIONAL  
CHARACTERISTICS

**Research Team:**

Annarosa Anat Shemesh MA MPH - Ministry of Health  
Emma Smetannikov MA - Ministry of Health  
Dr. Michael Dor MD MPA - Ministry of Health  
Dr. Michael Sherf MD MPH - Clalit Health Care Services  
Dr. Varda Shalev MD MPA - Maccabi Health Care Services  
Dr. Yossi Rosenblum MD - Meukhedet HMO  
Dr. Eran Matz MD MHA - Leumit HMO

**Jerusalem, August, 2007**

Planning Surveys and Evaluation Department  
Health Economics Division  
Ministry of Health  
2, Ben Tabai st., Jerusalem 93591  
Tel 972 (0)2 6705963  
[anat.shemesh@moh.health.gov.il](mailto:anat.shemesh@moh.health.gov.il)

## TABLE OF CONTENTS

List of Tables.....	9
List of Diagrams .....	9
List of Appendices .....	10
Abstract.....	11
1. Introduction.....	15
1.1 Physicians in Israel: a heterogeneous professional community in a multicultural society.....	16
1.2 Primary-care and non-primary-care physicians in the community: job description and trends .....	17
1.3 Changes in community medical personnel caused by the immigration of physicians .....	18
1.4 The paradox of the supply of physicians: simultaneous surplus and shortage .....	18
1.5 The need for a re-evaluation of the supply of physicians .....	21
2. Research Aims .....	23
3. Research Methods.....	24
4. Findings.....	29
4.1 Demographic characteristics .....	30
4.2 Employment characteristics .....	32
4.3 Distribution of physicians by region.....	34
4.4 Specialist physicians in the community .....	37
4.5 Primary-care physicians in the community.....	43
4.5.1 Specialist primary care physicians: 2003 v. 1998 .....	45
4.6 The time needed to complete licensing and a specialist certification .....	45
4.6.1 The time-lapse from completing one's degree to being licensed to practise .....	45
4.6.2 The time-lapse from a license to practise to specialist certification.....	47
5. Discussion .....	48
5.1 Workforce planning in a heterogeneous society .....	49
6. Conclusions.....	51
Bibliography .....	52
Appendices.....	55



## **ABSTRACT**

For all the many research studies into the medical professions in Israel there is still a noticeable lack of data on the national medical workforce. The study reported here helps to fill that gap by presenting data on all the physicians working in Health Maintenance Organization (HMO) clinics, that is the research population consists of all physicians, those in primary care and other fields, currently working in the four HMOs' community clinics. This is not a sample survey: it studied the entire research population, as defined above.

This study builds on and broadens an earlier joint study between the Ministry of Health and Ben-Gurion University, entitled *The Primary Care Physician in Israel: Demographic and Occupational Characteristics- a Comparison Between HMOs* (Shemesh et al. 2000)

The current study's research aims cover five areas of interest:

1. It builds a socio-demographic profile of the training and employment of the physicians employed by Israel's HMOs, both those in primary care and in other community-based professions.
2. It measures the physician-population ratio and breaks this ratio down by geographical region and population group.
3. It maps the geographical distribution of HMO physicians in the community.
4. It maps shortages of physicians in particular fields of community medicine.
5. It estimates the time-lapse from completing a medical degree to being licensed to practise and from being licensed to practise to being certified for a medical specialty.

## **Research Methods**

The data were collected from two sources:

- (a) The HMOs' lists of physicians employed by them in their community clinics, in late 2003/early 2004. These lists of physicians include both the salaried and the self-employed, primary care physicians and specialist consultants, physicians with and without specialist certification.
- (b) The Ministry of Health's database of physicians at the end of 2003. This source covers all the physicians living then in Israel and possessing a license to practise in Israel.

Matching the two sources yielded a complete file of all the physicians working in the four HMOs' community clinics. Each physician appeared once and once only in the file, together with the code of the HMO or HMOs he worked for.

## **Main Findings**

### General

In 2003 there were 9,176 physicians working in the community in Israel, 4,717 of them in primary care and 4,826 in other (non-primary care) fields of medicine. 367 physicians worked both in primary care and in another field of medicine. These community-based physicians constituted less than a third of all the physicians with a license to practise in Israel at that time.

### Demographic and Employment Characteristics

Of all physicians working in the community:

- 35% were women (of primary-care physicians - 44%, of other physicians, 25%);
- 29% had immigrated to Israel in 1989 or later (of primary-care physicians - 34%, of other physicians, 23%);
- 12% were Arabs (of primary-care physicians - 16%, of other physicians, 8%);
- 6% were aged 65+ (of primary-care physicians - 4%, of other physicians, 8%);
- 35% had completed their medical training in Israel (of primary-care physicians - 28%, of other physicians, 46%);
- The great majority worked for one HMO only (of primary-care physicians - 88%, of other physicians, 72%);

### Geographical Distribution

The community physician-per 10,000 population ratio ranges from a high of 16.0 in the Haifa region to a low of 10.7 in the Northern region. The low ratio in the North applies both to primary-care physicians (6.5 per 10,000) and to non-primary-care physicians (4.2). The Tel Aviv region stands out as having the lowest ratio of primary-care physicians to population (5.9) but the highest ratio of non-primary-care physicians (9.0).

## Specialists

Of all physicians working in the community, 69% had specialist certification (of primary-care physicians - 51%, of other physicians, 88%). The figure of 51% among primary-care physicians represents a rise of 7 percentage points since 1998 (44%), even though the absolute number of primary-care physicians in the community fell in the same period from 4,998 to 4,717. Overall, the specialists working in the community constitute 70% of all Israeli physicians with specialist certification. In selected individual specialties the corresponding percentage ranges widely, from 84% in dermatology and 82% in family medicine to 51% in neurology and 45% in internal medicine. Overall, the large majority of specialists working in the community are men (70%). In select specialties the corresponding percentage ranges widely, from 97% in orthopedics and 94% in general surgery to 62% in pediatrics, 60% in dermatology and 50% in family medicine. Overall, Arabs make up 8% of specialists working in the community, but 10% in family medicine and 12% in internal medicine. Overall, 24% of specialists working in the community had immigrated to Israel in 1989 or later and 54% had completed their medical training overseas. Family medicine was the specialty with the largest percentage of young (under 44) physicians while surgery, neurology, ear, nose and throat, and dermatology were the specialties with the lowest percentage of young physicians (16%, 17%, 19% and 22% respectively).

### **The Time Required to Get a License for General and Specialist Practise**

In general, it takes women medical graduates born in Israel less time (two years) to get a license to practise than their male counterparts (three years). It takes Israeli-trained graduates less time to get a license to practise than overseas-trained graduates. The same differences apply with regard to the time-lapse between getting a license for general and specialist practise. It takes men longer than women, overseas-trained Israelis longer than Israeli-trained Israelis, and immigrants longer than the native-born.

## **Discussion and Conclusions**

This study makes a number of useful contributions to knowledge about the medical profession in Israel: it quantifies and describes the physicians currently working in the community; it expands the database on Israel's medical workforce and it adds to what is known about the process of entering and retiring from the profession, all key aspects of workforce planning. This workforce planning has to take account of the heterogeneity of the client population and to make allowances for a multitude of cultures, with all the differences of language, custom and tradition among both clients and providers. The study reveals regional disparities of service provision and also disparities in the access of different population groups to community-sited medical care. It also shows that in certain specializations there are more physicians close to or over retirement age than there are young physicians to replace them. There are even physicians working in a specialist field with no formal specialist certification. These two last data point to an existing or potential shortage of community physicians in certain branches of medicine.