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Hourly wages of health care personnel

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Summary

The average hourly and monthly wages of health care personnel decreased with the past year.

In March 2010, the average basic hourly wage of physicians was 126 kroons, which is 7 kroons, i.e. 5% lower than in 2009. The hourly wage together with regular additional remunerations decreased by 13 kroons, i.e. 9%, amounting to 140 kroons in 2010. The basic hourly wage was the highest at other health care providers (diagnostics and nursing care providers, prison out-patient medical departments, 145 EEK/h) and at specialist health care providers (144 EEK/h), and the lowest at rehabilitation care providers (98 EEK/h).

The average monthly wage of full-time physicians together with all additional remunerations was 25,343 kroons, which is 4% less than in 2009. In 2010, the average wage of physicians decreased more than the national average wage, but still remained more than twice as high. The average monthly basic wage shrank less than the total average wage – by 1%. However, the average monthly basic wage of physicians working in hospitals rose by 2%.

The average basic hourly wage of nurses and midwives amounted to 65 kroons, which is 6% less than in 2009. The hourly wage with regular additional remunerations was 70 kroons, i.e. 9% less than last year. The highest basic hourly wages were paid to nurses working for dental care providers (75 EEK/h) and wages were the lowest at rehabilitation care providers (53 EEK/h). The average monthly wage of full-time nurses together with additional remunerations was 13,325 EEK, shrinking by 2% compared to last year. The total wage of nurses and midwives exceeded the national average wage by 12% and thus this indicator remained unchanged. The wages of nurses comprised 53% of the physicians' wages.

In March 2010, the average basic wage of caring personnel and assistant nurses amounted to 37 kroons, which is 2 kroons, i.e. 5% lower than in 2009. The hourly wage together with non-regular additional remunerations was 40 kroons, diminishing by 7% within a year. The average hourly wage of hospital-based caring personnel was 35 kroons, which is 8% lower than last year. The average monthly wage of full-time caring personnel and assistant nurses was 7,408 kroons, which is 1% less than last year. The wages of caring personnel and assistant nurses comprised 62% of the national average wage. The wages of caring personnel

and assistant nurses were 44% smaller than the wages of nurses, as a result of which the aim that the wages of caring personnel and assistant nurses should reach 60% of the nurses' wages was not reached this year either.

The hourly wage analysis requires considering the number of working hours in March in a given year. On average, there are 168 working hours in March; in 2009, however, there were 176 and in 2010 even more working hours – 184. The increased number of working hours this year also affected the average basic hourly wage, because the hourly wages of workers with fixed monthly wages decreased as a result. Meanwhile, an increase in the number of working hours boosts the average monthly wage of workers who are paid by the hour.

The total hourly wage of health care personnel dropped more than the basic hourly wage. The monthly wage primarily shrank on the account of additional remunerations, because although the overall monthly wage decreased, the monthly basic wage of nurses and emergency care technicians increased by 2%, while that of caring personnel and assistant nurses grew by 3%. The monthly basic wage of specialists related to the provision of health care services remained the same. Although the monthly basic wage of physicians diminished by 1%, their total monthly wage dropped even more – by 4%.

The decrease in additional remunerations is largely related to the pressure of the economic decline. Regulation No 12 of the Government of the Republic of Estonia of 10 January 2008, „List of the health care services of the Estonian Health Insurance Fund”, introduced the coefficient 0.94 [4] upon payment for health care services during the period 15.11.2009-31.12.2010. The contract volumes of the Estonian Health Insurance Fund have decreased, people visit physicians less often due to high unemployment and smaller incomes. Compared to the first quarter of 2009, the number of outpatient family doctor visits dropped by 19%, visits to occupational health doctor decreased by 16%. The number of visits to the dentist shrank by 7%.

Table of contents

Summary	3
List of Tables.....	6
List of Figures	7
Definitions and notes.....	8
Introduction	11
1. Description of the survey data set	12
2. Trends in the wages of health care personnel	18
3. Wages of physicians.....	21
3.1 Hourly wage	21
3.2 Monthly wage.....	28
3.3 Dividends and income earned as self-employed persons.....	32
4. Wages of nurses and midwives	34
4.1 Hourly wage	34
4.2 Monthly wage.....	38
5. Wages of caring personnel and assistant nurses.....	42
5.1 Hourly wage	42
5.2 Monthly wage.....	44
6 The wages of specialists related to the provision of health care services and ambulance technicians	48
6.1 Hourly wage	48
6.2 Monthly wage.....	50
Conclusions	52
Appendix	54

List of Tables

Table 1. Basic hourly wage of physicians by type of health care provider, March 2010 (in kroons and %)	22
Table 2. Basic hourly wage, total hourly wage of physicians and the share of employees who were remunerated below the minimum wage rate, by type of health care provider, March 2010 (kroons and %)	23
Table 3. Basic hourly wage of nurses and midwives by type of health care provider, March 2010 (in kroons and %)	34
Table 4. Basic hourly wage and total hourly wage of nurses and midwives and share of employees who were remunerated below the minimum wage rate, by the type of health care provider, March 2010 (in kroons and %)	36
Table 5. Basic hourly wage of caring personnel and assistant nurses by type of health care provider, March 2010 (in kroons and %)	43
Table 6. The basic hourly wage and total hourly wage of caring personnel and assistant nurses and share of employees who were remunerated below the minimum rate, by the type of health care provider, March 2010 (in kroons and %)	44
Table 7. Basic hourly wage of specialists related to the provision of health care services, by type of health care provider, March 2010 (in kroons and %)	48
Table 8. Basic hourly wage and total hourly wage of specialists related to the provision of health care services and share of specialists who were remunerated below the minimum rate, by type of health care provider, March 2010 (in kroons and in %)	50
Table 9. Number of independent health care providers who presented the report, by county and type of provider, March 2010	54
Table 10. Posts occupied by health care personnel, according to type of health care provider, occupation and by type of employment contract, March 2010	55
Table 11. Division of occupied posts, according to the type of health care provider, March 2010 (%)	56
Table 12. Posts occupied by hospital health care personnel, according to the type of hospital, occupation and employment contract, March 2010	57
Table 13. Posts occupied by hospital health care personnel, according to the type of hospital, March 2010 (%)	58
Table 14. Posts occupied by health care personnel, according to the type of health care provider, occupation and sex, March 2010	59
Table 15. Division of posts occupied by health care personnel, according to the type of health care provider, occupation and sex, March 2010 (%)	60
Table 16. Posts occupied by physicians, according to their profession and sex, March 2010	61
Table 17. Posts occupied by nurses and midwives, according to profession and sex, March 2010	62
Table 18. Posts occupied by specialists related to the provision of health care services, according to profession and sex, March 2010	63
Table 19. Average age of health care personnel, according to occupation and the type of health care provider, March 2010	64
Table 20. Managers and residents-physicians, according to their occupation and the type of health care provider, March 2010	65
Table 21. Wages of health care personnel, according to their occupation group and the type of health care provider, March 2010 (in kroons)	66
Table 22. Average amount of dividends paid to the owners working for their own establishments and the average income of self-employed persons per month in 2009 (in kroons)	68

List of Figures

Figure 1. Distribution of occupied posts of health care personnel by type of health care provider, March 2010	13
Figure 2. Full-time equivalent employment of health care personnel by type of hospital, March 2010	14
Figure 3. Gender-based distribution of physicians by type of health care provider, March 2010	15
Figure 4. Age-based distribution of health care personnel by type of occupation, March 2010	16
Figure 5. Changes in national average wage and average gross monthly wage of health care and social sector, 2005–2010 (kroons).....	19
Figure 6. Growth in average wage of health care personnel and national average wage,.....	20
Figure 7. Physicians remunerated below the minimum wage rate by type of health care provider (total hourly wage), March 2010*	25
Figure 8. Hourly wages of physicians based on their managerial status and by type of health care provider, March 2010 (kroons).....	26
Figure 9. Hourly wages of physicians by gender and type of health care provider, March 2010 (kroons)	27
Figure 10. Hourly wages of physicians by resident status and type of health care provider, March 2010 (kroons).....	28
Figure 11. Average wage of full-time physicians by type of health care provider, March 2010 (kroons)	29
Figure 12. Average monthly wage of full-time physicians by hospital type, March 2010 (kroons)	30
Figure 13. Changes in the average monthly wage of physicians, 2006-2010 (kroons)	31
Figure 14. Average monthly dividend payments to owners who work in their own company, 2008–2009 (kroons)	32
Figure 15. Average monthly income of self-employed persons, 2008-2009 (kroons)*.....	33
Figure 16. Nurses and midwives remunerated below the minimum wage rate by type of health care provider (total hourly wage), March 2010*	37
Figure 17. Hourly wage of nurses and midwives, by manager status and by type of health care provider, March 2010 (in kroons).....	38
Figure 18. Average monthly wage of nurses and midwives working full-time, by type of health care provider, March 2010 (in kroons).....	39
Figure 19. Average monthly wage of nurses and midwives working full-time by type of hospital, March 2010 (in kroons)	40
Figure 20. Changes in the average monthly wage of nurses in 2006-2010 (in kroons).....	41
Figure 21. Average monthly wage of full-time working caring personnel and assistant nurses, by type of health care provider, March 2010 (in kroons).....	45
Figure 22. Average monthly wage of full-time working caring personnel and assistant nurses, by type of hospital, March 2010 (in kroons).....	46
Figure 23. Changes in the average monthly wage of caring personnel and assistant nurses in 2006-2010 (in kroons).....	47
Figure 24. Average monthly wage of full-time working specialists related to the provision of health care services, by type of health care provider, March 2010 (in kroons)	51

Definitions and notes

Physicians – physicians also include dentists and resident physicians.

Nurses and midwives – the terms nurses and nurses and midwives are used synonymously in this analysis.

Caring personnel – caring personnel, assistant nurses, assistants to physicians.

Specialists related to the provision of health care services – bioanalysts, laboratory technicians, radiographers, dental technicians and other specialists who work for dental care providers, motion therapists and physiotherapists.

Full-time employee – a person whose working week amounts to 40 hours or less according to internal work regulations.

Part-time employee – a person whose schedule is based on partial working days or partial working weeks/months.

Type of health care provider „Emergency care” – this type of **health care provider** only includes independent emergency care **providers**. Emergency medical care units operating by hospitals are included under hospitals.

Type of health care provider „Other providers” – diagnostics providers, nursing care providers, outpatient medical departments of prisons and providers of general medical care who are not family doctors (e.g. school physicians).

Average – arithmetic average.

Median – the median is the central member of a variation sequence, which divides workers into two equal groups, i.e. half of the employees receive wages that are equal to or lower than the median and the other half receive wages equal to or higher than the median. The difference between the median and the average indicates the asymmetry in the distribution of remunerations. A great difference (if the average is much higher than the median) refers to the existence of a few employees with very high remunerations.

Standard deviation – indicates the variability of wage levels, the average deviation from the average. The greater the standard deviation, the greater the dispersion of wage levels.

Percentile 25 – is the value of a variable, compared to which the amount of smaller or equal variables is about 25%.

Percentile 75 – is the value of a variable, compared to which the amount of greater or equal variables is about 75%.

The analysis uses the following types of gross wages:

- **Basic hourly wage** – basic wage, i.e. gross wage paid in March pursuant to the piece, hourly, daily, weekly or monthly wage rate determined in an employment contract or legal act. Hourly wages are calculated based on monthly basic wages divided by the number of hours worked in a month (except overtime). The basic hourly wage is the so-called pure wage without the regular additional remunerations, additional remunerations for work in the evenings, in the night, on weekends and national holidays and for overtime.
- **Total hourly wage** – includes the basic wage (see previous definition and regular additional remunerations, additional remunerations for evening work, night work, working on days off and national holidays and for overtime). The total monthly wage is divided by the number of all working hours (including overtime).
- **Average monthly basic wage** – gross wage paid in March based on the piece, hourly, daily, weekly or monthly wage rate determined by an employment contract or legal act. Does not include additional remunerations.
- **Total monthly wage with all additional remunerations** – includes the basic wage (see previous definition) and regular additional remunerations, additional remunerations for work in the evenings, in the night, on weekends and national holidays, for overtime, and other regular additional remunerations. This also includes non-regular additional remunerations (quarterly and annual bonuses as well as other non-regular achievement and value based remunerations).

All the data of the survey have been calculated regarding March 2010. All the presented wages are **gross wages**. The wages of personnel employed based on contracts for services have not been included in the analysis.

The data regarding **hourly wages** include the data of part-time and full-time employees and employees who were partially absent from work in March (on vacation, sick leave or care leave).

The data of **monthly wages** only include the data of full-time employees who worked throughout March, were not sick or on vacation.

- the phenomenon did not occur

0 the value of the indicator is smaller than half of the used measurement unit

The aggregate data of the values may differ from the sum of the added values due to rounding.

Introduction

The aim of this analysis is to provide an overview of the average hourly and monthly wages of health care personnel across different occupation groups¹ and types of the providers of health care services.

The wages of health care personnel have been analysed annually since 2002. Until 2007 the survey was organised by the Ministry of Social Affairs. In 2008, the collection, analysis and publication of health statistics was transferred from the ministry to the National Institute for Health Development. The wage data of health care personnel are collected by the means of the report „Hourly wages of health care personnel” regarding every March. The form and presentation procedure of the report is established by a regulation of the Ministry of Social Affairs. In the initial years of the survey, data were only collected from hospitals, but since 2006 the survey includes all providers of health care services.

More detailed tables with survey data are available in the Health Statistics and Health Research database (www.tai.ee/tstua).

¹ Employees are classified based on the International Standard Classification of Occupations, ISCO, and its expanded version prepared for the health care sector, which is available on the webpage of the Ministry of Social Affairs at: http://www.sm.ee/fileadmin/meedia/Dokumendid/Tervisevaldkond/E-tervis/Koopia_failist_THSametid_11.11.04.xls

1. Description of the survey data set

The analysis includes the wages of health care personnel across seven types of health care providers: hospitals, family doctor's offices, outpatient specialist health care, dental care, emergency medical care, rehabilitation and other providers. Other providers include diagnostics and nursing care providers, outpatient medical departments in prisons and general physicians who are not family doctors (e.g. school physicians). Emergency care providers only include independent emergency care providers.

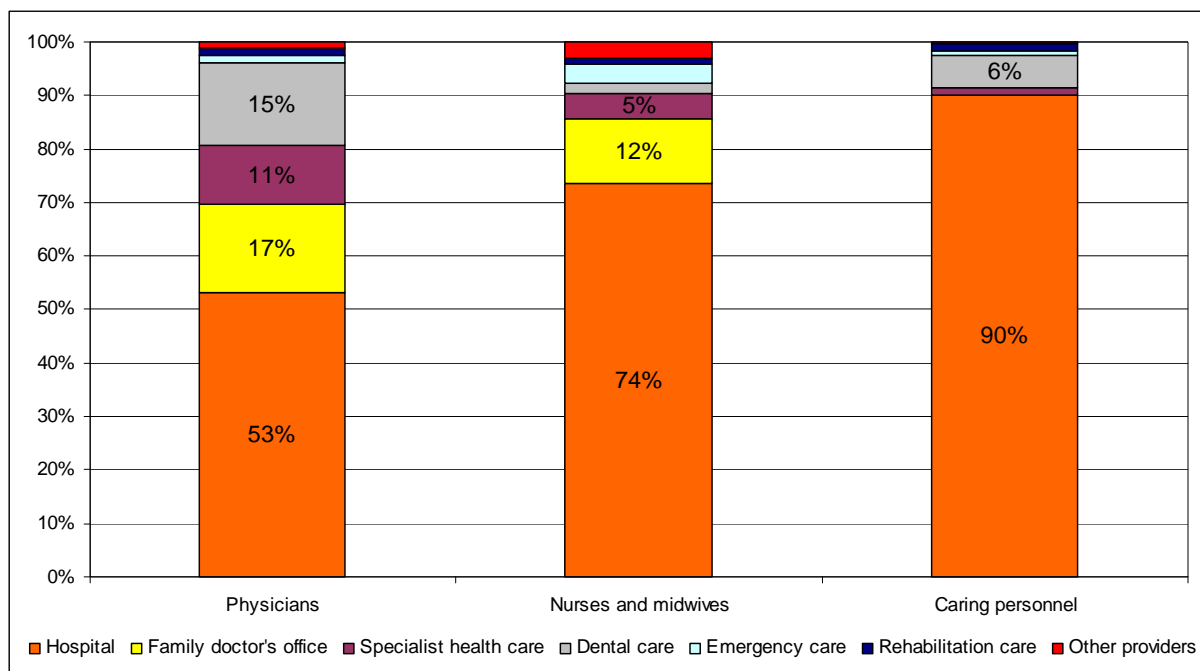
Based on positions and specialties, health care personnel have been divided into the following groups: physicians (including dentists and residents), nurses and midwives (nurses and midwives), caring personnel (caring personnel, assistant nurses, assistants), specialists related to the provision of health care services (bioanalysts and laboratory technicians, radiographers, dental technicians and other specialists that work for dental care providers, motion therapists and physical therapists) and emergency care technicians.

In 2010, health care providers declared a total of 19,075 occupied posts (full-time equivalent of occupied posts/occupied posts): 5,389 physicians, 7,914 nurses, 3,825 caring personnel and assistant nurses, 1,540 specialists engaged in the provision of health care services and 407 emergency care technicians (see Appendix Table 10). Compared to 2009, the proportions of the represented occupation groups are the same, but the number of occupied posts at health care providers has decreased by 4%. Although the reply rate remained lower than last year (97,8% in 2009; 96,1% in 2010), it can be concluded that the number of positions has diminished with the year, taking into consideration the profile of the non-represented providers.

When using the statistics of occupied posts, it is essential to keep in mind that the data concerning workload, i.e. occupied posts, have been submitted only as regards employees with employment contracts. No data was requested pertaining to persons who work based on a contract for services or as self-employed persons, because their monthly workload is difficult to assess. Due to the lack of more accurate data, for the calculation of occupied posts persons who work based on a contract for services or as self-employed persons have been included as full-time employees. Therefore, the number of occupied posts may be slightly overestimated.

Based on the number of occupied posts, over two-thirds (69%) of health care providers worked in hospitals. By occupation groups, the importance of hospitals was the most prominent among caring personnel and assistant nurses (Figure 1 and Appendix Table 11). Nine out of ten caring personnel and assistant nurses worked in hospital. About three quarters of nurses and over half of the physicians and specialists related to the provision of health care services worked in hospitals. The respective amount of emergency care technicians was 48%.

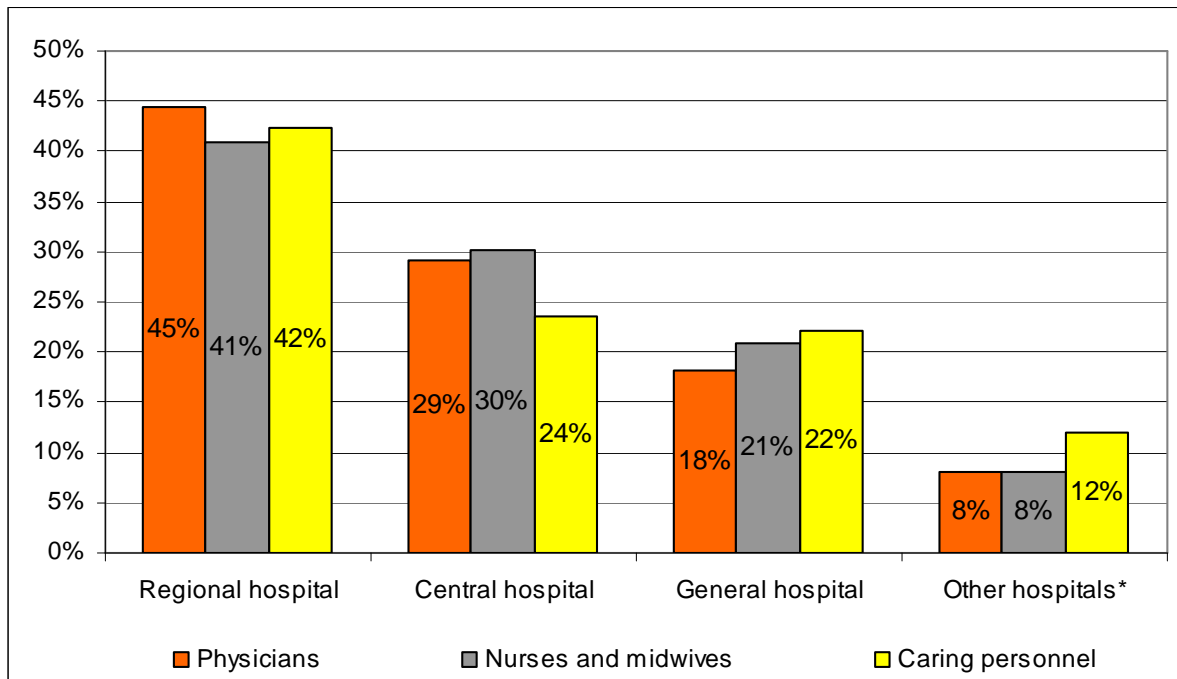
Figure 1. Distribution of occupied posts of health care personnel by type of health care provider, March 2010



Source: NIHD

From among hospitals, the number of positions is the greatest in regional hospitals, as 42% of physicians, nurses and caring personnel employed in hospitals worked in three regional hospitals (Figure 2, Appendix Tables 13 and 14). The total share of four central hospitals was 28% and in general hospitals one fifth of the total number of occupied posts.

Figure 2. Full-time equivalent employment of health care personnel by type of hospital, March 2010



Source: NIHD

* Rehabilitation, nursing care, special and local hospital

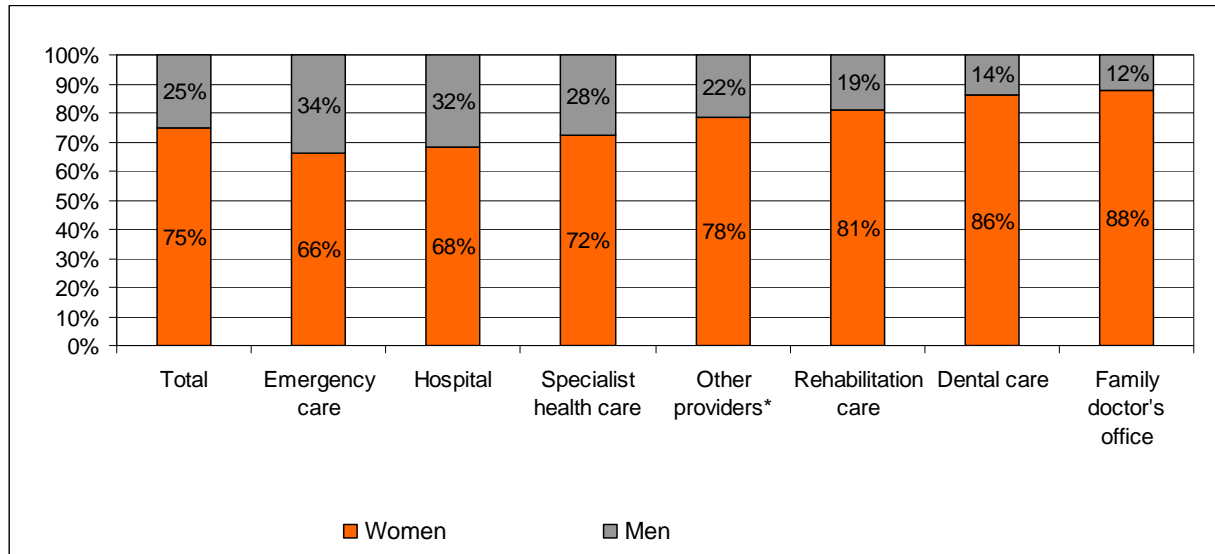
Hourly wage reports were submitted by altogether 279 physicians who work as self-employed persons, which comprises 5% of the total positions of physicians (see Appendix Table 10). Nearly half (46%) of the self-employed persons ran family doctor offices.

According to the submitted reports, in March 479 physicians and 218 nurses worked on the basis of contracts for services, which comprised 9% and 3% of all the positions filled by physicians and nurses (see Appendix Table 10). In both cases, employment relations were most often based on a contract for services at outpatient specialist health providers and hospitals.

Health care is a predominantly female occupation. Only 11% of the posts were occupied by men (Appendix Table 15). The number of men was the greatest among emergency care technicians (96%) and physicians (25%). However, men comprised a very small share of nurses (2%), caring personnel (5%) and specialists related to the provision of health care services (5%).

The share of male physicians was the greatest at emergency care providers (34%) (Figure 3, Appendix Tables 14 and 15), followed by hospitals (32%) and specialist health care providers (28%). The share of men was the smallest among physicians employed in family doctor offices – 12%.

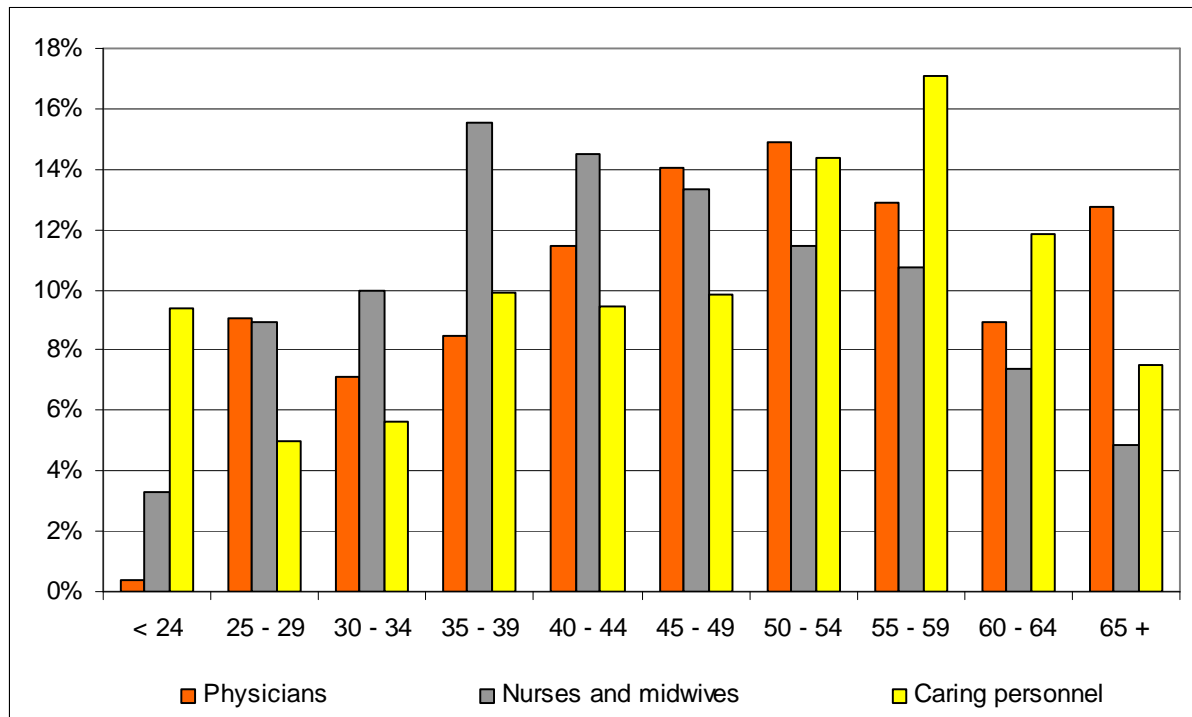
Figure 3. Gender-based distribution of physicians by type of health care provider, March 2010



Source: NIHD

* Rehabilitation, nursing care, special and local hospital

Across specialties, the greatest number of male physicians worked in surgical specialties, for instance, in urology, cardio-vascular surgery, general surgery, neurosurgery, orthopaedic surgery, plastic and reconstructive surgery (Appendix Table 16).

Figure 4. Age-based distribution of health care personnel by type of occupation, March 2010

Source: NIHD

Slightly over half of the physicians (53%) were aged 40-59 (Figure 4). Physicians aged 65 and over comprise 13% of the total number of physicians. The number of nurses was the greatest in the age group 35-39. The share of caring personnel and assistant nurses was the greatest in the age group 50-59. Their share was also great in the youngest age group, which probably stems from the fact that students work in hospitals as caring personnel during medical or nursing studies.

The average age of physicians was 49 years (Appendix Table 19). The average age of men was a year less (48 years) than that of women (49 years). The average age was the highest at rehabilitation care providers (56 years) and the lowest among physicians working for emergency care providers (42 years).

The average age of nurses, specialists related to the provision of health care services and emergency care technicians is 4 years lower than that of physicians. Their average age reached 44 years. Similarly to physicians, the average age was the youngest among nurses who worked for emergency medical care providers (39 years). The average age of caring personnel and assistant nurses was 47 years. In these positions, men were approximately 10 years younger than women.

19% of all physicians and 4% of nurses also fulfilled managerial tasks besides their ordinary work (Appendix Table 20). A manager in this analysis is a person who has subordinates, who deals with the management of processes and is responsible for the work of a unit/department/provider. Therefore, this term also includes the managers of small undertakings, including self-employed persons who have at least one employee.

In March 2010, resident-physicians filled about 342,2 positions of physicians, which is 6% of the total positions of physicians (Appendix Table 20).

2. Trends in the wages of health care personnel

The most recent collective agreement pertaining to the minimum wage rate of health care services was concluded on 16 March 2007 between the Government of the Republic of Estonia, the Estonian Hospitals Association, Estonian Nurses Union and the Federation of Estonian Healthcare Professionals Union. It laid down the minimum hourly wage rates of health care personnel (excluding physicians) for the years 2007 and 2008. The agreement established the following minimum hourly wages for health care personnel as of 1 April 2007:

- 52 kroons and 50 cents per hour for nurses (except nurses working for emergency medical care provider) and midwives;
- 52 kroons and 50 cents per hours for specialists related to the provision of medical services (pursuant to the terms of the collective agreement, this includes bioanalysts, physiotherapists, activity therapists, radiographers);
- 29 kroons per hour for caring personnel (caregiver, caring personnel) [4].

The parties set the aim of increasing the minimum hourly wage of nurses in emergency medical care to 52 kroons and 50 cents and that of emergency care technicians to 42 kroons per hour.

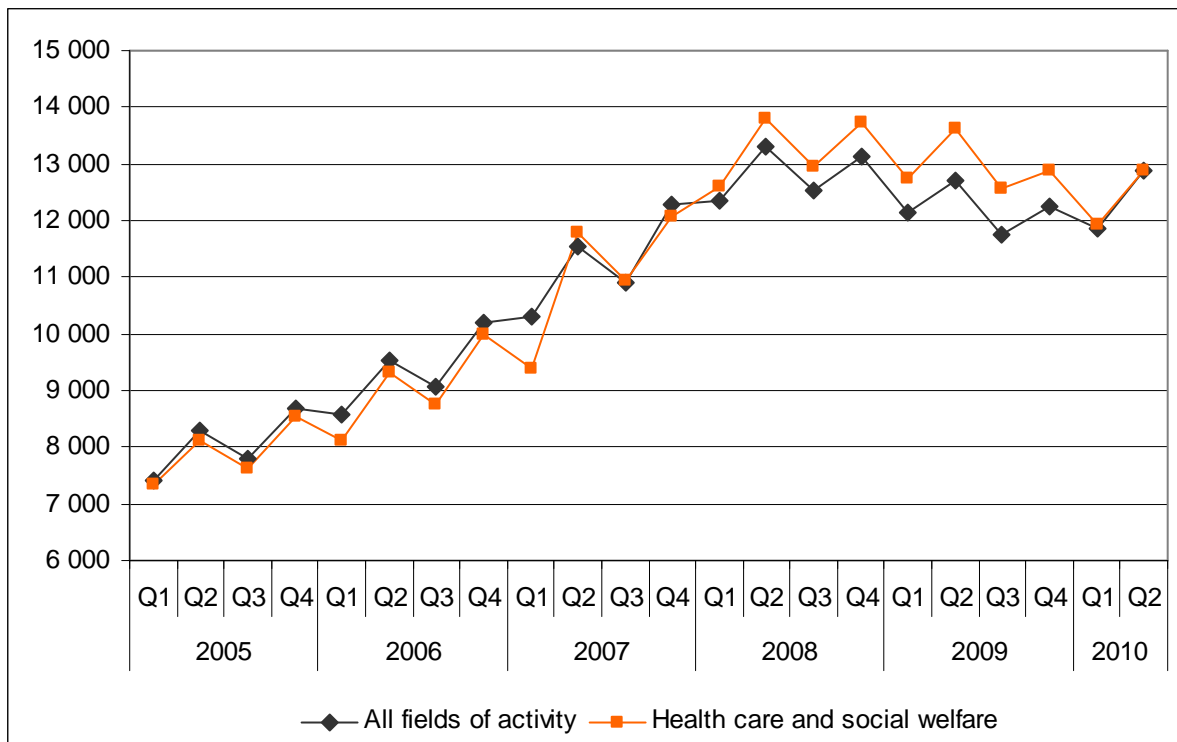
The same agreement set the following minimum hourly wages of health care personnel as of 1 January 2008:

- 60 kroons per hour for nurses and midwives;
- 60 kroons per hour for specialists related to the provision of health care services;
- 33 kroons per hour for caring personnel [4].

The minimum hourly wage of physicians proceeds from Decision No 9 of 19 January 2007 of the Supervisory Board of the Estonian Health Insurance Fund, „Financial opportunities of the Estonian Health Insurance Fund to increase the wage component”. As of 1 January 2008, based on the prices of health care services and the state budget the minimum hourly wage of physicians was scheduled to reach 112 kroons per hour [2]. An amendment to Regulation No 12 of the Government of the Republic, „List of health care services of the Estonian Health Insurance Fund” introduced the coefficient 0.94 [4] upon payment for health care services during the period 15.11.2009–31.12.2010.

The effect of the concluded wage agreement can be seen from Figure 5. For the first time in several years, in the second quarter of 2007 the wages in health care and social welfare exceeded the national average wage. Owing to the economic decline, the increase in the national average wage halted in the last quarter of 2008 and turned negative since 2009. Due to rising unemployment and dropping wages, less social tax was collected into the state budget, which entailed a decrease in the revenues of the health care system and the wages of health care personnel.

Figure 5. Changes in national average wage and average gross monthly wage of health care and social sector, 2005–2010 (kroons)

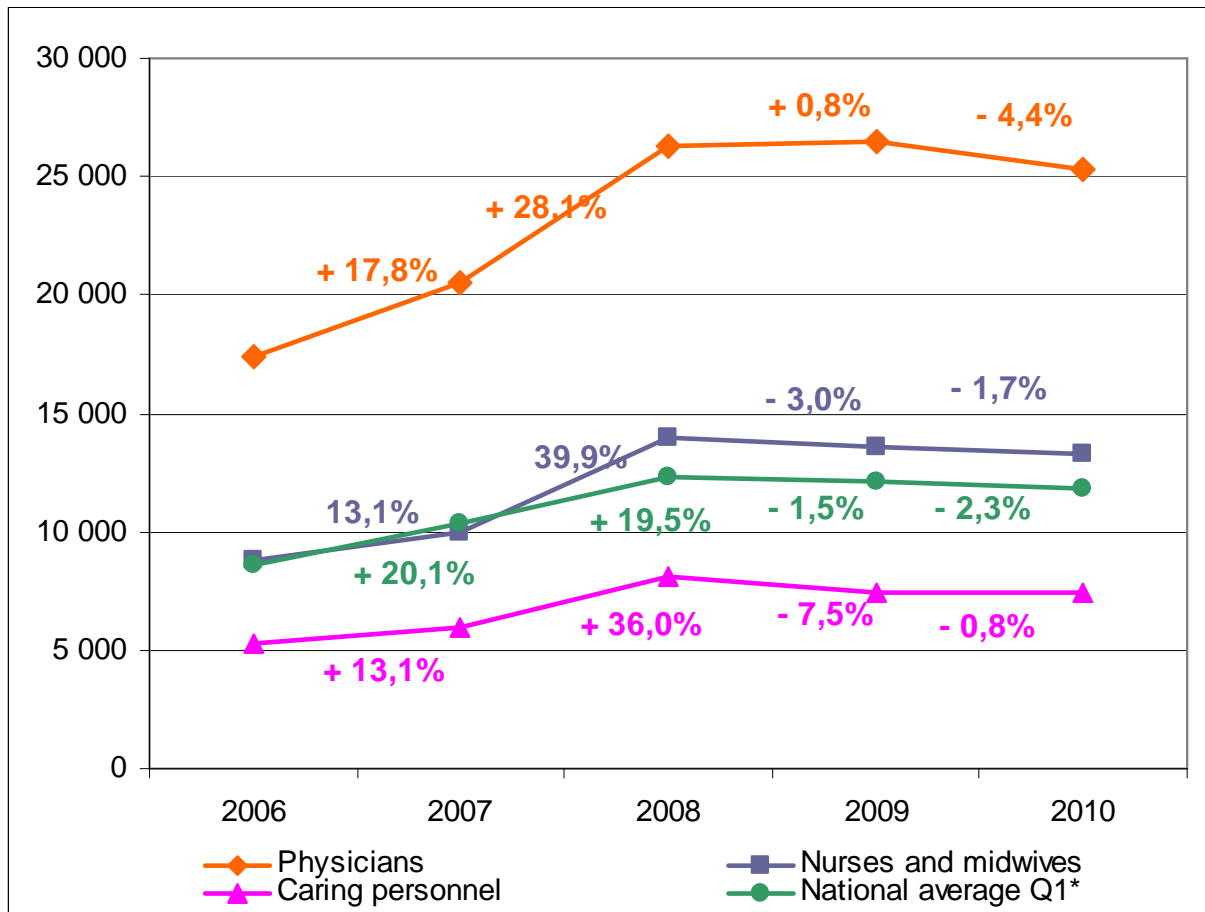


Source: Statistics Estonia

Wages in the health care and social welfare sector started decreasing in the second quarter of 2009. Until the third quarter of 2009, the national average wage diminished faster than wages in the health care and social welfare sector. In the first quarter of 2010 the situation was reversed, due to which the average wage in the health care and social welfare sector became equal to the national average wage. In the second quarter of 2010 the national average wage started increasing again, while the average wage in the health care sector is still shrinking.

Based on the data of the wage survey of health care personnel, in March 2010 the wages of physicians decreased by 4,4% compared to last year (Figure 6). The wages of nurses diminished less – by 1,7%. The wages of caring personnel and assistant nurses dropped minimally.

Figure 6. Growth in average wage of health care personnel and national average wage, 2006–2010 (kroons)



Source: NIHD

*Data source: Statistics Estonia

The wages of health care personnel diminished mainly owing to a decrease in additional remunerations, because contrary to total wages, the basic wage of nurses and caring personnel increased. While the basic wage of physicians dropped slightly, their total wages shrank considerably more.

The following section of the analysis views the wage changes of occupation groups in detail across different components.

3. Wages of physicians

3.1 Hourly wage

In this analysis, physicians include physicians, dentists, resident-physicians and physicians in managerial positions who are involved in medical treatment. The average hourly wage has been calculated based on the wages of both full-time and part-time workers. The calculation of the average monthly wage only includes full-time workers – those who worked full-time and were present throughout March.

Wages can be paid to workers based on the number of worked hours or as fixed monthly wages. The hourly wage has been calculated by dividing the monthly wage by the number of hours worked per month. Therefore, it must be kept in mind that for workers with fixed monthly wages the size of their hourly wage depends on the number of working days and hours worked in that month. At the same time, for workers who receive remuneration by the hour, the number of worked hours determines their monthly wage. In March 2010, there were more working hours than in March 2009. While last year the number of working hours was 176, in 2010 it reached 184. A greater number of working hours reduces the basic hourly wage through a decrease in the hourly wages of workers who receive fixed monthly wages. On the other hand, a greater number of working hours boosts the monthly wages of workers remunerated by the hour.

The wages of staff employed based on contracts for services are not reflected in this survey, as their remuneration and working hours per month are difficult to estimate. In addition, no data about the income of self-employed persons are collected with this survey, as they are analysed based on the data obtained from the Tax and Customs Board. The same source enables to observe the dividends paid to the owners of the undertakings that provide health care services.

The average basic hourly wage of physicians (i.e. wage without additional remunerations) was 126 kroons in March 2010, which is 5% less than last year (Table 1). The hourly wage median was 112 kroons, which indicates that half of the physicians earned 112 kroons or less per hour and half of them earned 112 kroons or more. The basic hourly wage of physicians was the highest at other health care providers (diagnostics and nursing care providers, outpatient medical departments of prisons and general medical care providers that are not

family doctor offices) (145 kroons) and at specialist health care providers (144 kroons). The basic hourly wage was the lowest at rehabilitation care providers (98 kroons). The average basic hourly wage of hospital physicians was 124 kroons, which is 5% lower than in 2009.

The basic hourly wage dropped the most at other health care providers where it was the highest result – by 7%. It also suffered an above-average setback at dental care and rehabilitation care provider. At emergency medical care provider, on the other hand, it rose by 2%. By hospital types, physicians employed in special hospitals received 16% smaller basic hourly wages and physicians in rehabilitation hospitals were paid 11% less. The average basic hourly wage rose in nursing care and central hospitals, while the median wage remained the same, which means that the number of people who received above-average wages increased.

Table 1. Basic hourly wage of physicians by type of health care provider, March 2010 (in kroons and %)

	Average	Change compared to 2009	Change compared to 2009 (%)	Median	Percentile 25	Percentile 75	Standard deviation
PHYSICIANS TOTAL	126	-7	-5%	112	103	130	58
Family doctor's office	118	-4	-3%	114	102	130	29
Specialist health care	144	-4	-3%	112	97	158	94
Dental care	130	-8	-6%	108	76	148	92
Emergency care	128	3	2%	121	113	134	28
Rehabilitation care	98	-6	-6%	100	78	113	41
Other providers	145	-12	-8%	112	102	175	76
Hospitals total	124	-7	-5%	112	103	125	40
<i>Regional hospital</i>	117	-12	-9%	109	103	120	33
<i>Central hospital</i>	138	5	4%	125	112	147	43
<i>General hospital</i>	118	-7	-6%	112	112	118	27
<i>Rehabilitation hospital</i>	110	-13	-11%	108	91	119	29
<i>Nursing care hospital</i>	152	9	6%	112	112	155	98
<i>Special hospital</i>	139	-27	-16%	137	85	163	65
<i>Local hospital</i>	123	-1	-1%	112	102	122	51

Data source: NIHD

The basic hourly wage of physicians deviated from the average wage by about 58 kroons (Table 1 column „standard deviation”). The difference in the wage level of physicians has remained in the range of 60 kroons over several years. The wage differences are still the greatest among dentists and physicians employed at outpatient specialist health care providers. Wage differences remain the smallest among physicians who work for emergency medical care providers and family doctor offices.

Besides the basic wage, achievement-based remuneration is paid for labour productivity and good results and additional remuneration is paid for overtime, work in the evenings/during night-time and on weekends. Together with regular additional remunerations, the hourly wage of physicians reached 140 kroons, which was 14 kroons, i.e. 11% higher than the basic hourly wage (Table 2).

The share of additional remunerations was the greatest in the hourly wages of physicians who were employed in hospitals (19 kroons, i.e. 13%), which is understandable due to the peculiarities of work for inpatient health care providers (work in the evenings, during the night, on weekends and holidays). The importance of additional remunerations in hospitals has decreased, forming the greatest share of the total hourly wage of physicians who work in regional hospitals, where the hourly wage together with additional remunerations was about 17% higher than the basic hourly wage. Regional hospitals were followed by general and central hospitals. No additional remunerations were paid in nursing care hospitals.

Table 2. Basic hourly wage, total hourly wage of physicians and the share of employees who were remunerated below the minimum wage rate, by type of health care provider, March 2010 (kroons and %)²

	Average basic hourly wage	Average total hourly wage	Difference, kroons	Difference, %	Physicians remunerated below the minimum rate (%), basic hourly wage*	Physicians remunerated below the minimum rate (%), total hourly wage*
PHYSICIANS TOTAL	126	140	14	11%	18%	14%
Family doctor's office	118	121	3	3%	24%	21%
Specialist health care	144	148	4	3%	37%	35%
Dental care	130	145	15	12%	51%	40%
Emergency care	128	137	9	7%	6%	6%
Rehabilitation care	98	102	4	4%	57%	53%
Other providers	145	151	6	4%	10%	9%
Hospitals total	124	143	19	15%	5%	2%
<i>Regional hospital</i>	117	137	20	17%	0%	0%
<i>Central hospital</i>	138	156	18	13%	2%	1%
<i>General hospital</i>	118	136	18	15%	11%	5%
<i>Rehabilitation hospital</i>	110	122	12	11%	25%	25%
<i>Nursing care hospital</i>	152	152	0	0%	18%	18%
<i>Special hospital</i>	139	155	16	12%	35%	22%
<i>Local hospital</i>	123	131	8	7%	28%	11%

Data source: NIHD

*The proportions have been calculated based on occupied posts within a type of provider.

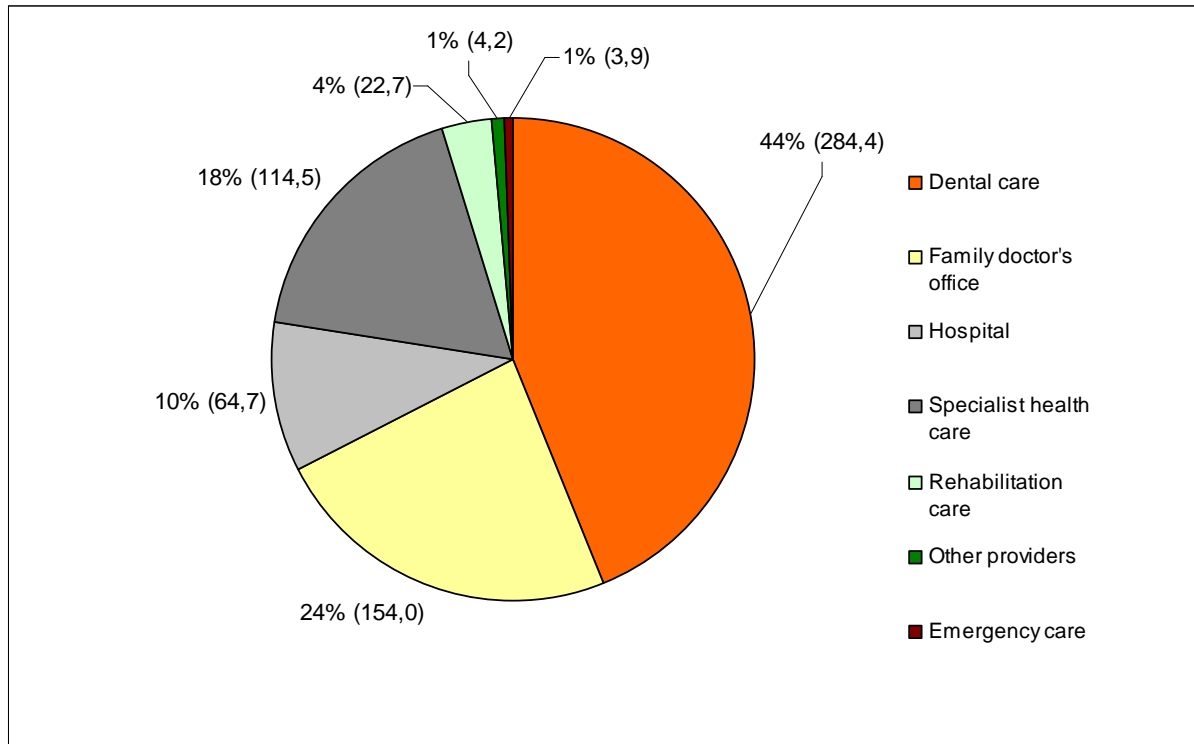
² In March 2010, there were more working hours (184) than in an average month (168). Therefore, the hourly remuneration of workers with fixed monthly wages pursuant to the minimum rate terms had to be 102 kroons.

By specialties, orthodontists earned the highest wages, as their average total hourly wage amounted to 301 kroons. Orthodontists were followed by oral and maxillofacial surgeons, radiologists and cardiovascular surgeons, but their total average hourly wage remained below 200 kroons. The total average hourly wage of occupational health, rehabilitation care and family doctors was the lowest, amounting to 122 kroons. The wages of cardiovascular surgeons, radiologists, anaesthesiologists, oral and maxillofacial surgeons remain above average despite the fact that the decrease in their total hourly wages was among the greatest. During the last year, also the total hourly wage of occupational health doctor underwent a significant drop.

Generally, the total hourly wage decreased more than the basic hourly wage. Compared to 2009, the average total hourly wage diminished by 9%, while the basic hourly wage dropped by 5%.

As of 1 January 2008, the minimum basic hourly wage rate established in the prices of health care services and the state budget is 112 kroons. In March 2010, 18% of physicians received less than that (Table 2). Considering their wages with all additional remunerations, their share was 14%. Wages remained below the minimum rate for 2% of all hospital-based physicians and 6% of physicians employed at emergency medical care providers. Thus, wages were paid below the minimum mainly at outpatient health care providers. Many physicians who work for outpatient health care providers are also owners of these undertakings. As owners they can pay themselves smaller wages and withdraw some of the revenues as dividends. Income received as dividends has been analysed below in this chapter.

Figure 7. Physicians remunerated below the minimum wage rate by type of health care provider (total hourly wage), March 2010*



Data source: NIHD

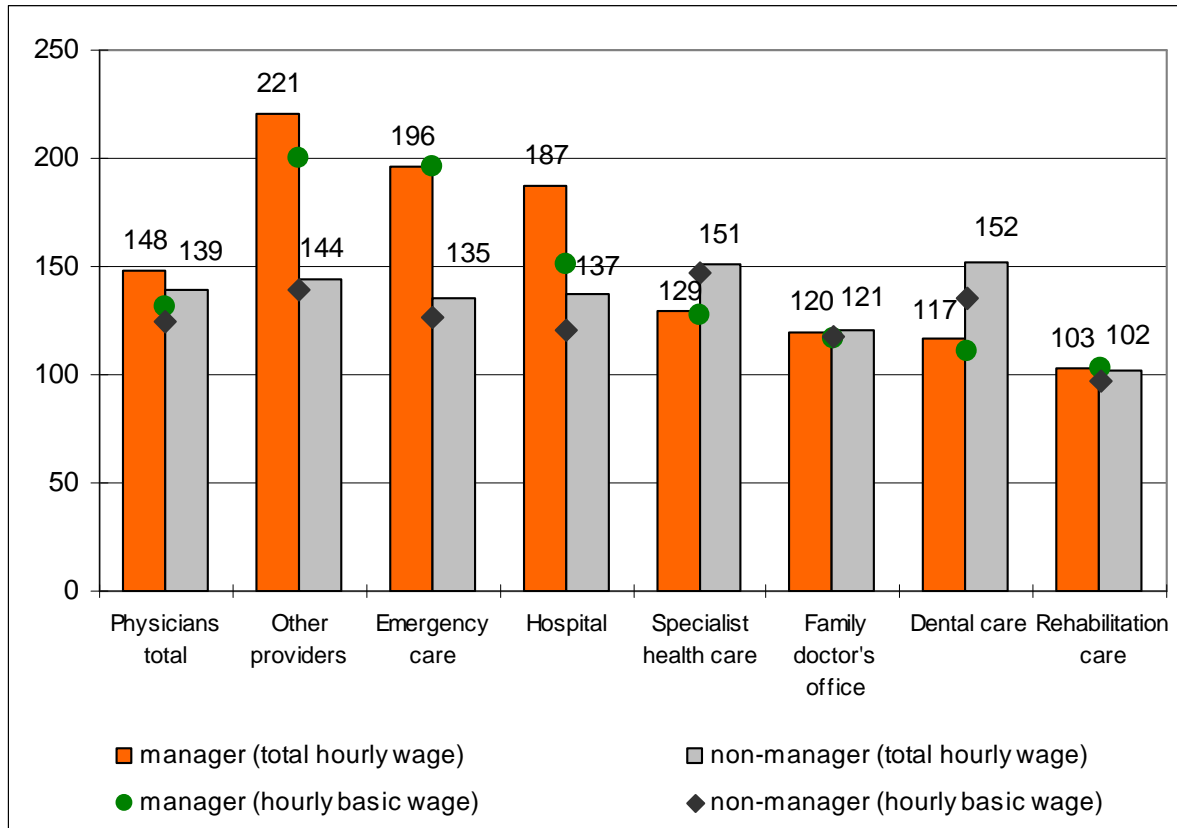
* The proportions have been calculated on the basis of occupied posts. The number of occupied posts is included in brackets.

Altogether, in March the total hourly wage of physicians in 648 occupied posts remained below the minimum rate. Most of them (44%) were physicians employed at dental care providers (Figure 7), of whom a third were managers. The total share of managers among the physicians who were paid below the minimum rate comprised 25%.

The total hourly wage of physicians who also hold managerial positions was approximately 9 kroons higher than that of other physicians (Figure 8). The difference was the greatest at emergency medical care providers and other health care providers, where the gap reached 70 and 61 kroons per hour, respectively. The wages of hospital physicians in managerial positions were also significantly higher. On the other hand, at outpatient specialist health care providers and dental care providers the wages of managers were lower than those of non-managers. In family doctor offices and at rehabilitation care providers, the wages of managers were nearly equal to those of other physicians. These differences in the wage levels of managers and other physicians indicate that in small establishments where physicians also own the companies, the managers curb costs on the account of their own wages. At major

providers, however, the wage system is more transparent and physicians in managerial positions also receive additional remuneration for their additional tasks.

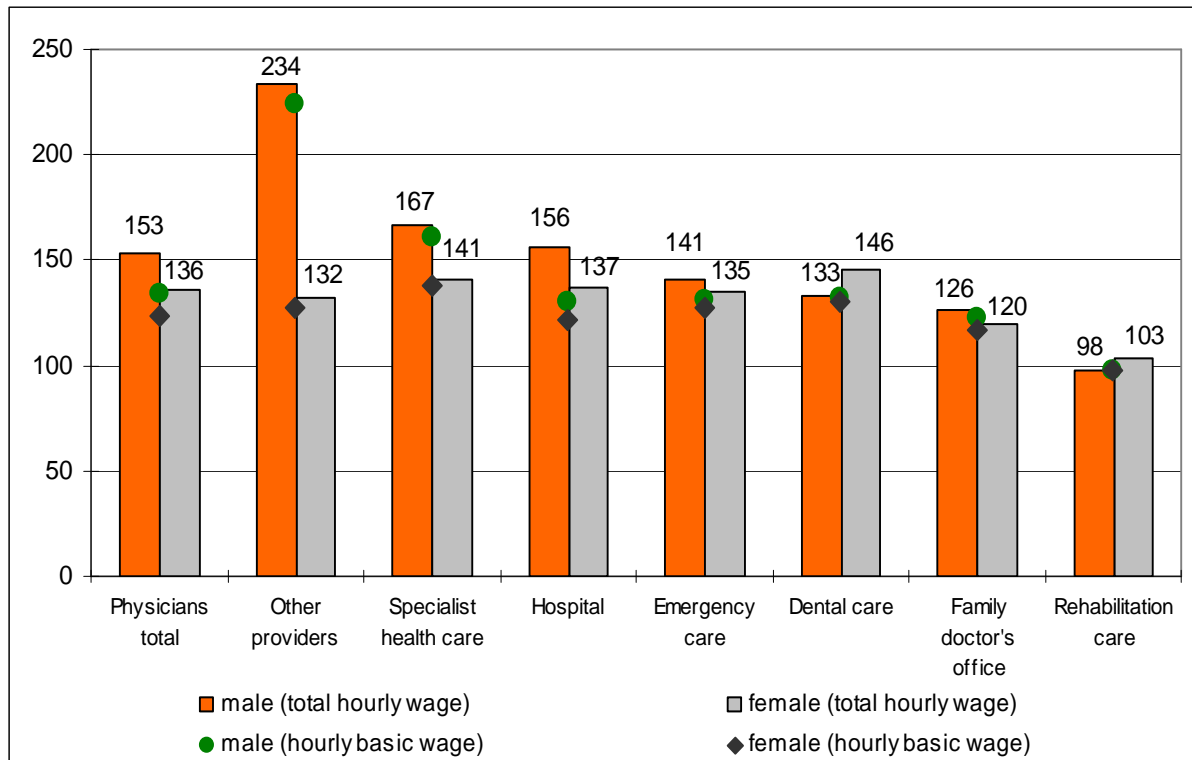
Figure 8. Hourly wages of physicians based on their managerial status and by type of health care provider, March 2010 (kroons)



Data source: NIHD

Differences also appeared in the wages of male and female physicians. The hourly wage of male physicians was approximately 17 kroons higher than that of female physicians. In March, the total average hourly wage of male physicians was 153 kroons and that of women 136 kroons (Figure 9), which means that the total hourly wage of women comprised 89% of the wage of men. The gender gap was the greatest among other health care providers, where the wages of female physicians were 44% smaller than those of men. This great difference mainly stemmed from the fact that compared to other groups, this group of health care providers included few physicians and even fewer male physicians. Thus, the effect of high wages on the average wage of the group is great. In addition, at other providers a greater share of men were radiologists and cardiologists, whose hourly wages are higher. Women predominantly work in positions with lower wages, such as family doctors and paediatricians.

Figure 9. Hourly wages of physicians by gender and type of health care provider, March 2010 (kroons)



Source: NIHD

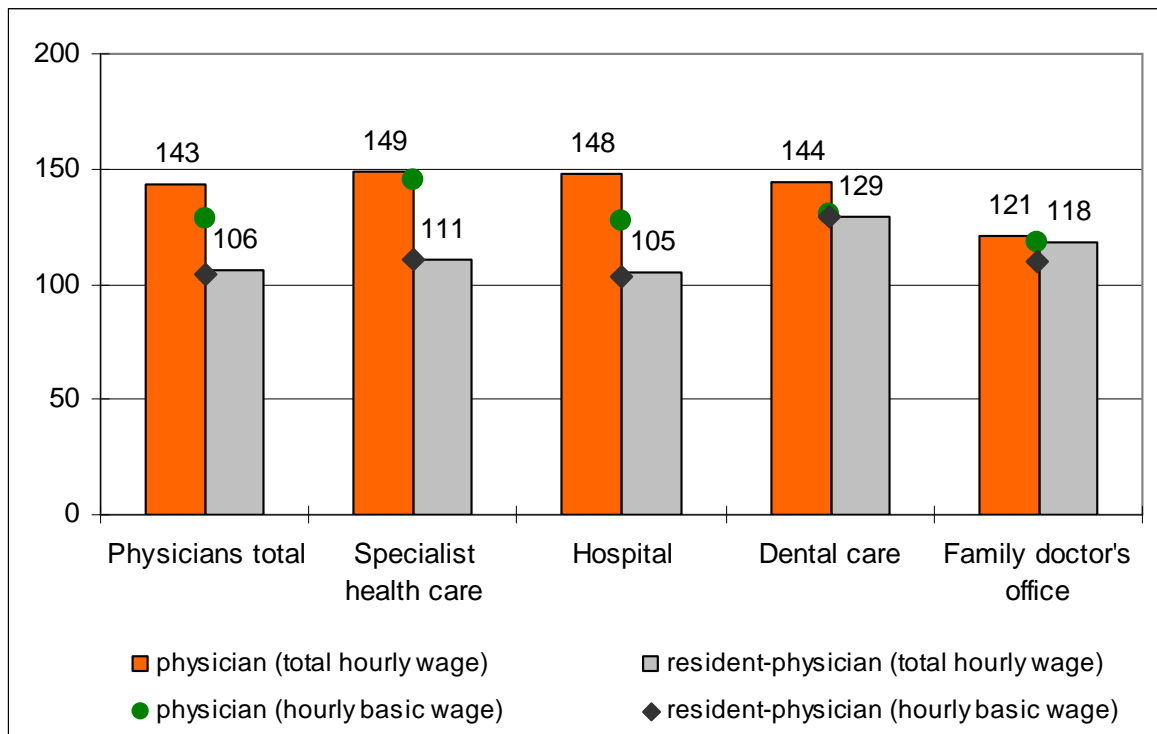
The hourly wages of men and women were also quite different at outpatient specialist health care providers and hospitals, where men were paid approximately 26 and 19 kroons more.

The wage gap of men and women may stem from various factors. Wages are influenced by specialties as well as holding a managerial position. The share of physicians in managerial positions was more or less equal among men and women, 16% and 17%, respectively. The wage difference among non-managing male and female physicians was considerably smaller than among managers. Without fulfilling managerial tasks, female physicians received 8% smaller wages than men; however, this difference was thrice greater among physicians who also worked as managers – 25%. Wage differences also appeared in within the same specialties. In several specialties, the average wage of men is higher than that of women in the same specialty. In some specialties, however, the situation was reversed.

There were also differences in the hourly wages of resident-physicians and physicians. The hourly wage of residents was considerably lower than that of physicians who had already completed their studies. The total average hourly wage of residents comprised 74% of the average wage of physicians (Figure 10). Comparing basic wages and wages with additional

remunerations, it turns out that residents are paid only minimal or no regular additional remunerations at all. Only the residents employed in family doctor offices received more additional remunerations than physicians.

Figure 10. Hourly wages of physicians by resident status and type of health care provider, March 2010 (kroons)

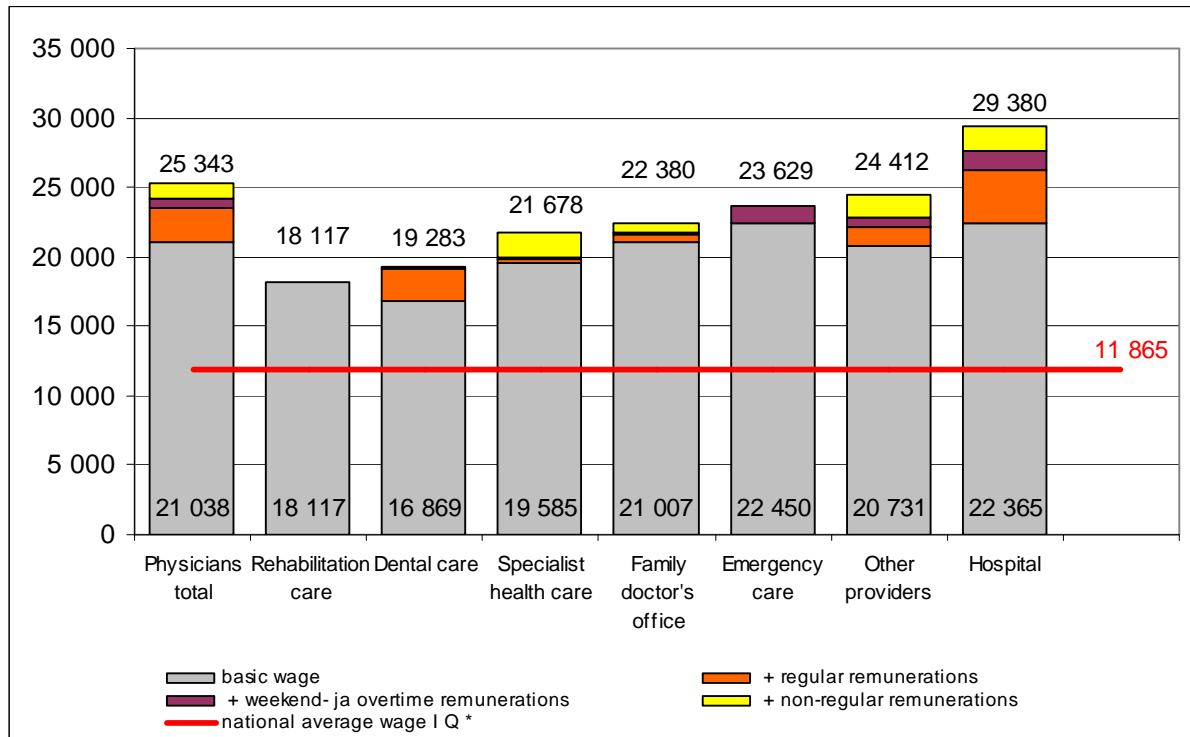


Data source: NIHD

3.2 Monthly wage

The calculation of monthly wages only includes the physicians who worked full-time in March and were present during the entire month (were not on vacation or sick leave, etc). In March 2010, the average monthly wage of physicians with all additional remunerations was 25,343 kroons (Figure 11). This is 2.1 times higher than the national average wage, which was 11,865 kroons in the first quarter of 2010 according to Statistics Estonia.

Figure 11. Average wage of full-time physicians by type of health care provider, March 2010 (kroons)



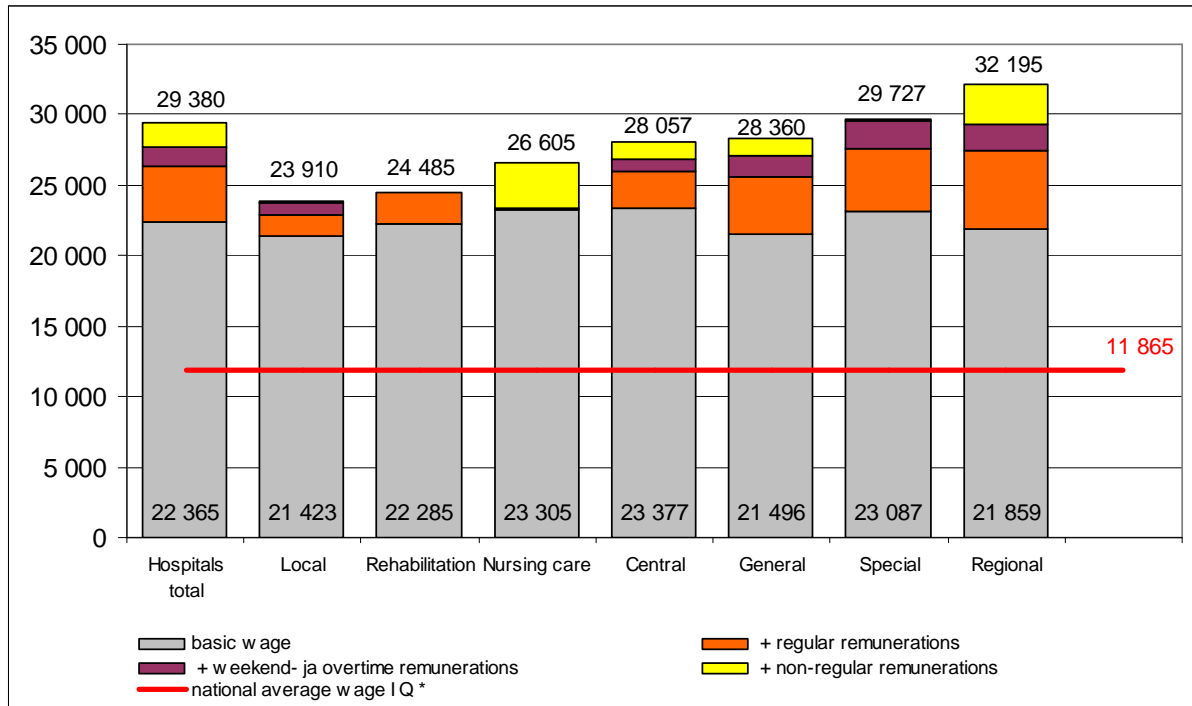
Data source: NIHD

*Data source: Statistics Estonia

The average monthly wage was the lowest for physicians employed at rehabilitation care providers – 18,117 kroons – and the highest for hospital-based physicians – 29,380 kroons. On Figure 11 the monthly wage of physicians is broken down into different wage components. This indicates that a significant share of the average monthly wage in hospitals consisted of additional remunerations.

By types of hospitals (Figure 12), similarly to last year the average monthly wage of physicians was the greatest in regional hospitals – 32,195 kroons. They were followed by physicians employed in special hospitals. The monthly wages of full-time physicians were the lowest in local hospitals – 23,910 kroons.

Figure 12. Average monthly wage of full-time physicians by hospital type, March 2010 (kroons)



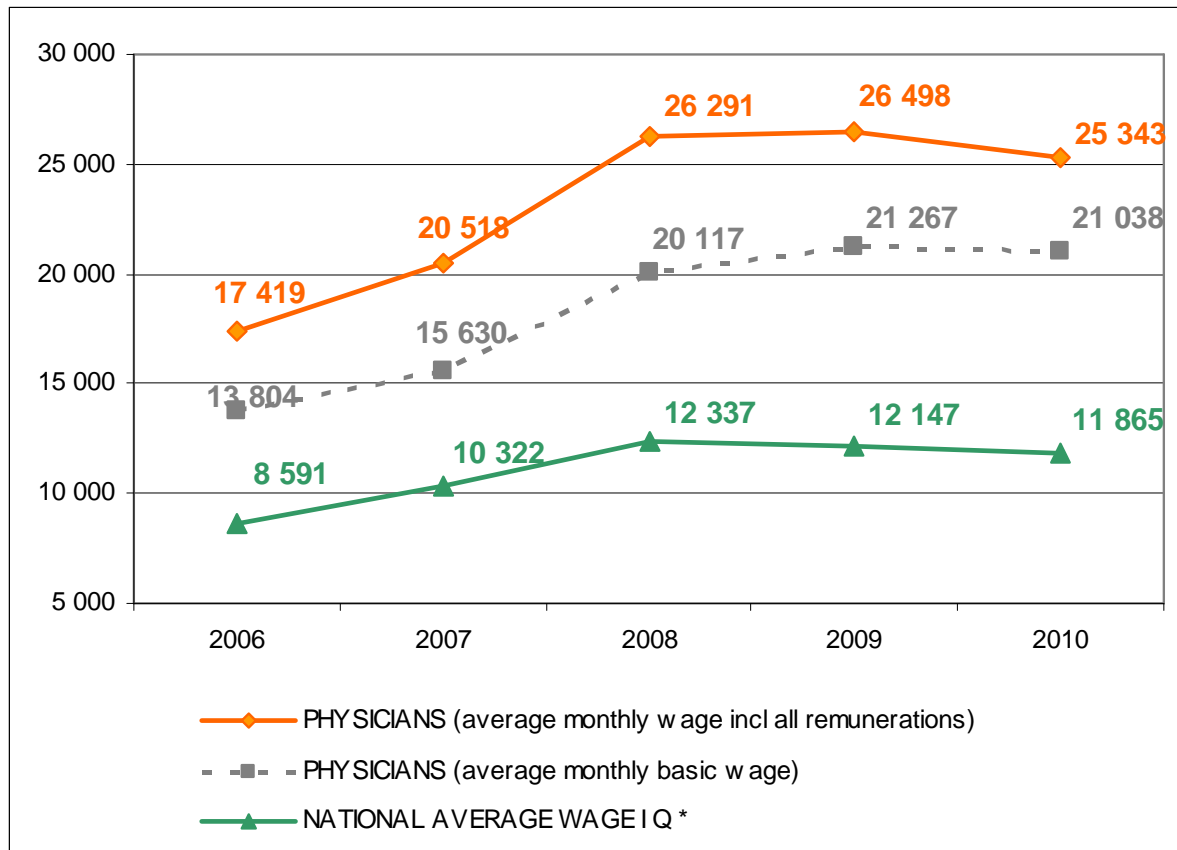
Data source: NIHD

*Data source: Statistics Estonia

The average wage of physicians rose continually from 2006 to 2009 (Figure 13), posting the highest increase in 2007-2008. Although in 2009, the wage growth virtually stopped (it rose only by 1%), the basic wage continued increasing (6%). Meanwhile, the national average wage already shrank by 2%.

By March 2010 the wages of physicians were also diminishing and dropped below the wage level of 2008. Compared to the same period last year, the decrease in the total average hourly wage of the month reached 4.4%. The basic wage shrank less – 1%. Additional remunerations dropped considerably more, decreasing at a similar pace to last year. While in 2009, the amount of paid additional remunerations was 15% smaller, by 2010 they dropped by 18%.

In 2010 the monthly wage shrank the most, i.e. 9% compared to 2009 at specialist health care providers. Specialist health care providers were followed by dental care providers with 8% and other health care providers with a 7% drop. By hospital type, the greatest changes occurred in rehabilitative and nursing care hospitals, but the number of physicians there was very small, due to which every employee exerts great influence on the formation of the average wage. In special hospitals with more physicians the total average monthly wage increased (by 7%), in other hospitals it decreased or remained unchanged.

Figure 13. Changes in the average monthly wage of physicians, 2006-2010 (kroons)

Data source: NIHD

*Data source: Statistics Estonia

The average monthly basic wage dropped at all providers, except in hospitals where the basic wage rose by 2%. The increase in the average monthly basic wage in hospitals may stem from the greater number of working hours in this year's March. This means that the monthly wage of employees who are remunerated by the hour was higher in March 2010. However, the total hourly wage also diminished in hospitals by 2%.

The drop in the hourly wage of physicians was greater than the monthly wage decrease, 9% and 4%, respectively. The number of working hours in the analysed month again plays an important role, as the size of the hourly wage of employees with fixed monthly wages is influenced by the number of working hours in that month. Thus, in March 2010 the average hourly wage of employees whose monthly wage did not change with the year and who received a fixed monthly wage remained smaller than in 2009.

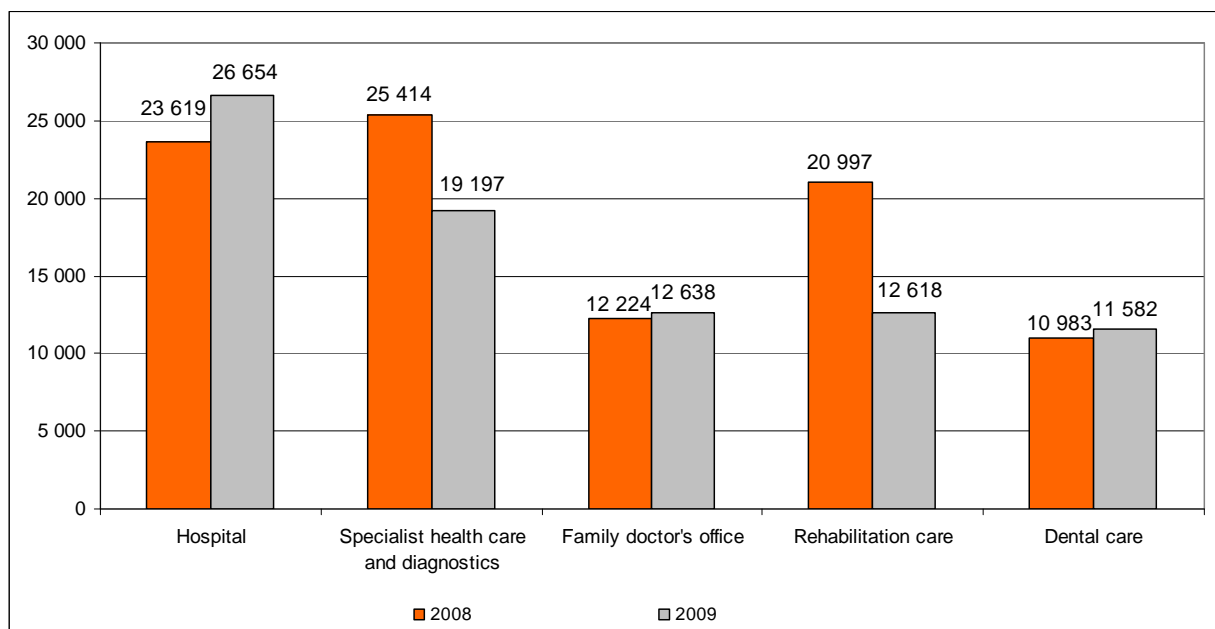
In addition, pursuant to the new Employment Contracts Act that entered into force as of 1 July 2009, shortened working time norms became void. Based on this, the Estonian Health Insurance Fund established 40 hours per week as the working time for all health care personnel. Therefore, the hourly wages of anaesthesiologists and radiologists decreased.

In 2006–2010, the average wage of physicians has been approximately twice as high as the national average. Although the gap increased until 2009, in 2010 the difference reached the level of 2008 again. (2.0 times higher in 2007; 2.1 in 2008; 2.2 in 2009, 2.1 in 2010).

3.3 Dividends and income earned as self-employed persons

Physicians who are owners of a health care provider may withdraw income as dividends. The dividends paid to the owners of health care providers have been analysed based on the data of the Tax and Customs Board. The data includes dividends paid in the year 2009.

Figure 14. Average monthly dividend payments to owners who work in their own company, 2008–2009 (kroons)



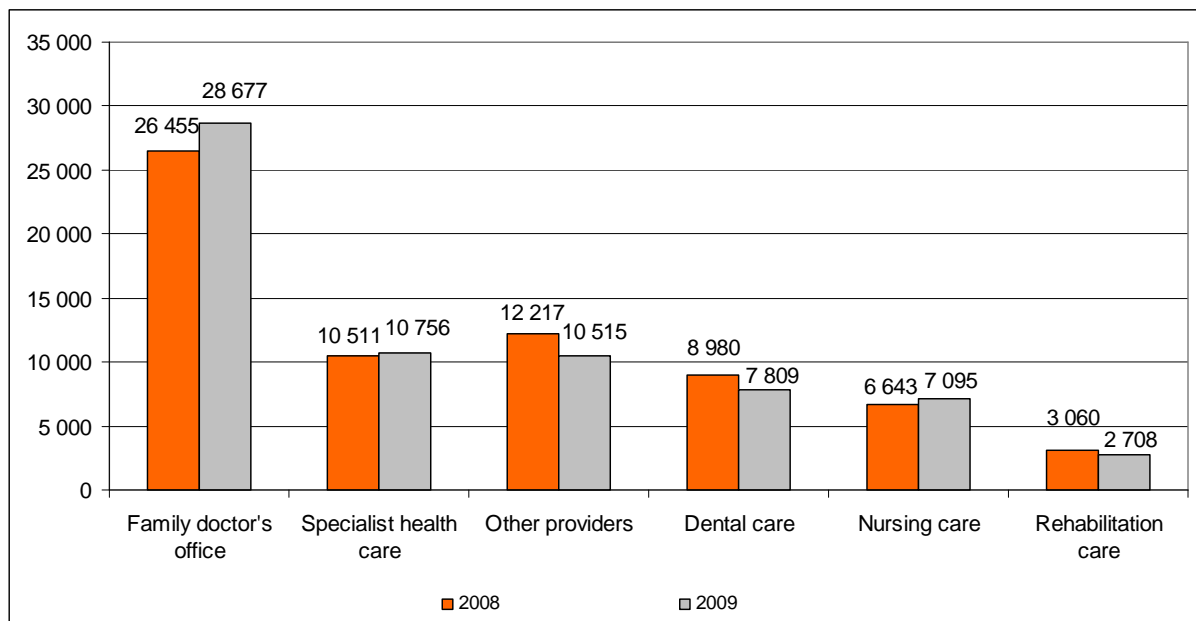
Source: Tax and Customs Board

In 2009, dividends were withdrawn by 857 owners of health care providers who also worked there. The number of those who withdrew dividends decreased by 132 persons, i.e. 13%

compared to 2008. Figure 14 presents the average monthly dividends per one owner who received dividends; to this end, the annually paid sum is divided by 12.

In 2009, the average dividend income of a health care provider owner per month was 14,342 kroons, which is 12% less than in the previous year (Appendix Table 23). Dividend income was the highest in hospitals (26,654 kroons) and the smallest in dental care establishments (11,582 kroons) (Figure 14). It diminished the most at rehabilitation care providers – by 40%. It is important to keep in mind that the paid dividends are declared to the Tax and Customs Board in the year of payment, if they are paid on the profit earned during previous years. 278 out of 330, i.e. 84% of self-employed persons who were active in 2009, declared profits regarding the fiscal year of 2009. In 2008, this indicator was 88%.

Figure 15. Average monthly income of self-employed persons, 2008-2009 (kroons)*



Data source: Tax and Customs Board

* Social tax adjusted taxable income

According to the data of the Tax and Customs Board, the average monthly income of a self-employed person amounted to 17,635 kroons (Appendix Table 23), which is 3% more than the previous year. Similarly to earlier years, family doctors earned significantly higher incomes with 28,677 kroons per month (Figure 15). For family doctors, working as a self-employed person is their primary occupation, while many specialised physicians or dentists only earn additional income as self-employed persons. Thus, the greater income of family doctors is also understandable, because their income comes from full-time work.

4. Wages of nurses and midwives

4.1 Hourly wage

In March 2010 the average basic hourly wage (i.e. wage without additional remunerations) for nurses working full-time or part-time was 65 Estonian kroons, or, in other words, it was 6% lower than in 2009 (Table 3). Also the median hourly rate fell from 63 Estonian kroons in 2009 to 61 Estonian kroons in 2010. Nurses working for dental care providers received the highest basic hourly wage (76 kroons) and nurses working for medical providers providing outpatient medical rehabilitation received the lowest basic hourly wage (53 kroons) – as well as physicians working in the same field. The average hourly wage of hospital nurses fell by one Estonian kroon more than the average, i.e. more than 7%.

Table 3. Basic hourly wage of nurses and midwives by type of health care provider, March 2010 (in kroons and %)

	Average	Change compared to 2009	Change compared to 2009 (%)	Median rate	Percentile 25	Percentile 75	Standard deviation	Percentage of physicians' wage
NURSES AND MIDWIVES TOTAL	65	-4	-6%	61	60	69	15	52%
Family doctor's office	64	-1	-2%	61	55	71	14	54%
Specialist health care	69	-2	-3%	60	55	70	29	48%
Dental care	76	-7	-8%	63	54	83	44	58%
Emergency care	74	1	1%	70	63	80	16	58%
Rehabilitation care	53	-3	-5%	50	45	60	16	54%
Other providers	64	1	2%	55	55	65	21	44%
Hospitals total	64	-5	-7%	61	60	68	10	52%
Regional hospital	65	-6	-8%	63	61	70	8	56%
Central hospital	66	-2	-3%	63	60	68	9	48%
General hospital	62	-4	-6%	60	60	60	10	53%
Rehabilitation hospital	55	-2	-4%	55	45	55	14	50%
Nursing hospital	60	0	0%	60	55	60	12	39%
Special hospital	77	-3	-4%	72	60	83	29	55%
Local hospital	60	-5	-8%	60	53	65	12	49%

Data source: National Institute for Health Development (TAI)

The basic hourly wage of nurses and midwives fell the most dramatically at dental care providers and in hospitals. At rehabilitation care providers the average basic hourly wage decreased by 5%, however, the median rate of the basic hourly wage decreased by 14%,

which means that the number of employees who earned less than average increased. There is a similar change to be recognised also in special hospitals where the average basic hourly wage decreased by 4% and the median rate of basic hourly wage decreased by 10%. By hospital types, nurses working in regional and local hospitals experienced the heaviest loss in their basic hourly wages during the previous year.

Healthcare professionals have had the objective of reaching a situation where the wage of nurses comprises 60% of physicians' wage. In March 2010 the average basic hourly wage of nurses was 52% of physicians' wage remaining the same as last year. Compared to physicians' wage, the highest average wage for nurses was that of dental care providers and emergency medical care providers comprising 58% of physicians' wage. At other health care providers such as diagnostics providers and nursing care providers, outpatient medical facilities of prisons and general health care providers which did not provide family doctor care and where the nurses and midwives wage was almost at an average level, the wage of nurses reached only 44% of physicians' wage due to the very high rate of physicians' wage at those medical providers. Comparing different hospital types, the level of nurses' wage compared with that of physicians' was the lowest in nursing care hospitals (39%).

The basic hourly wage of nurses varied, on average, by 15 kroons from the average. Similarly to physicians, nurses wage levels varied most at dental care providers and at outpatient specialist health care providers.

Table 4. Basic hourly wage and total hourly wage of nurses and midwives and share of employees who were remunerated below the minimum wage rate, by the type of health care provider, March 2010 (in kroons and %) ³

	Average basic hourly wage	Average total hourly wage	Difference in kroons	Difference in %	Nurses paid below minimum rate (%), basic hourly wage*	Nurses paid below minimum rate (%), total hourly wage*
NURSES TOTAL	65	70	5	8%	8%	6%
Family doctor's office	64	66	2	3%	17%	14%
Specialist health care	69	71	2	3%	26%	25%
Dental care	76	77	1	1%	26%	26%
Emergency care	74	78	4	5%	3%	2%
Rehabilitation care	53	54	1	2%	60%	58%
Other providers	64	68	4	6%	13%	8%
Hospitals total	64	70	6	9%	5%	2%
<i>Regional hospital</i>	65	72	7	11%	1%	1%
<i>Central hospital</i>	66	70	4	6%	0%	0%
<i>General hospital</i>	62	68	6	10%	10%	3%
<i>Rehabilitation hospital</i>	55	61	6	11%	42%	23%
<i>Nursing hospital</i>	60	64	4	7%	18%	15%
<i>Special hospital</i>	77	84	7	9%	18%	8%
<i>Local hospital</i>	60	65	5	8%	43%	16%

Data source: National Institute for Health Development (TAI)

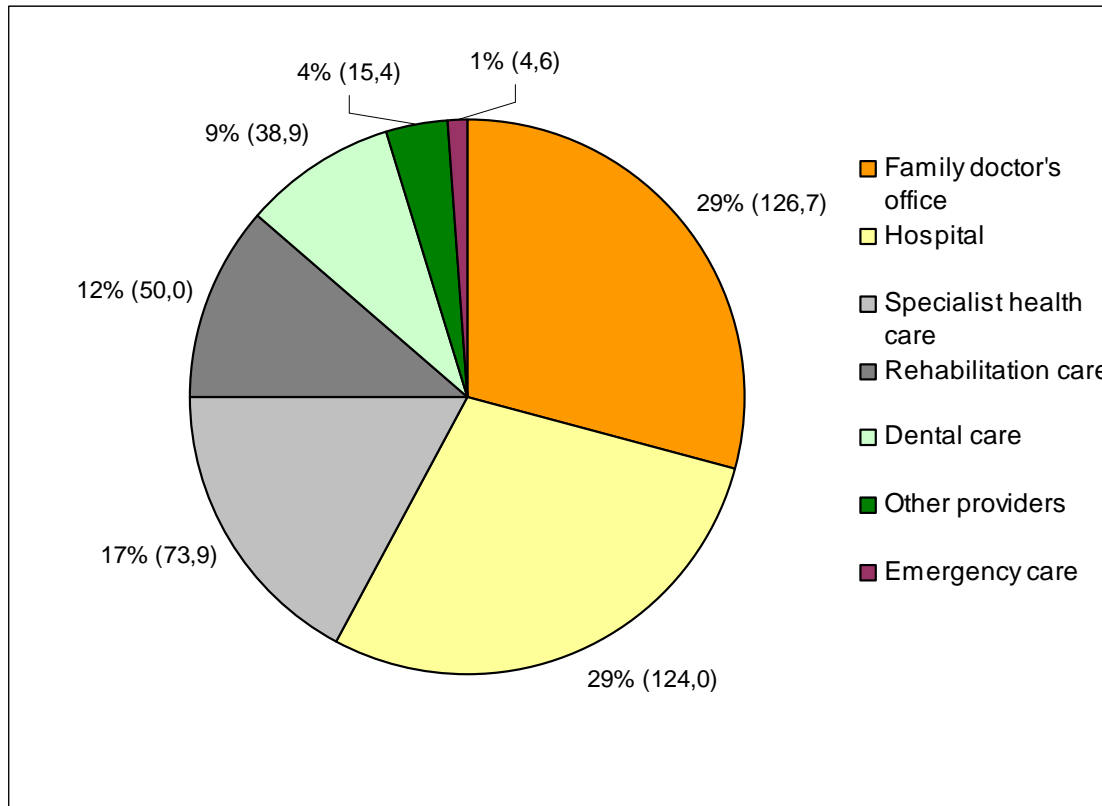
* The percentages have been calculated out of the occupied posts within a given type of health care provider.

With all regular additional remunerations, the hourly wage of nurses was 70 kroons which is 5 kroons or 8% higher than the basic hourly wage (Table 4). Similarly to physicians, additional remunerations increased the wage of nurses most in hospitals (6 kroons or 9%) due to the specific nature of an inpatient medical care provider (i.e. working in the evenings, at nights, on days off). In comparison by hospital types, regular additional remunerations were paid most in regional and rehabilitation hospitals where the hourly wage with all extras was, on average, 11% higher than the basic hourly wage.

In comparison by the fields of specialization, radiology nurses, intensive care nurses, nurse anaesthetists and surgical nurses were the best paid nurses whose average total hourly wage was 78 kroons and more. Occupational health nurses, rehabilitation nurses and school nurses received the lowest wage which was 60 kroons on average.

³ In March 2010 there were more working hours (184 hours) than in an average month (168 hours). Thus, in case of employees receiving a fixed wage the wage for one hour should have been 55 kroons according to the conditions of the minimum wage rate agreement.

Figure 16. Nurses and midwives remunerated below the minimum wage rate by type of health care provider (total hourly wage), March 2010*



Data source: National Institute for Health Development (TAI)

* The percentages have been calculated out of the occupied posts within a given type of health care provider.

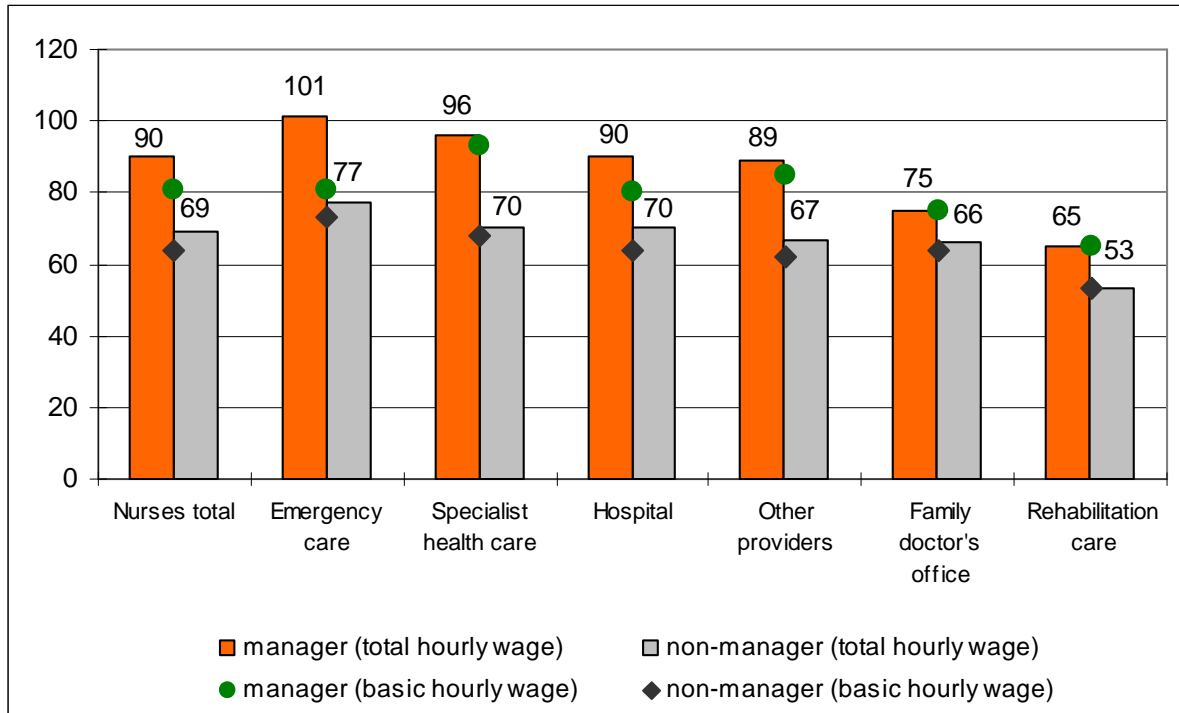
According to the collective agreement of health care personnel the minimum hourly wage rate of 60 kroons applies to nurses and midwives since 1 January 2008. In March this year the basic hourly wage of nurses and midwives remained 8% lower and the total hourly wage was 6% lower than the agreed minimum (Table 4). In hospitals, respectively 5% and 2% of the nurses were paid below the minimum wage rate.

In all, in March the total hourly wage of nurses remained below 60 kroons in 433,4 occupied posts. The majority of the nurses was working in family doctor offices and in hospitals (Figure 16). Nearly half of the nurses receiving the minimum rate were general nurses (48%). The percentage of nurses receiving a wage below the minimum rate is higher among occupational health nurses.

The wages of the nurses who worked as managers beside their medical work for any service provider were higher than those of other nurses. On average, with all regular additional

remunerations, the hourly wage of a nurse working as manager was nearly one-quarter (23%) higher (Figure 17).

Figure 17. Hourly wage of nurses and midwives, by manager status and by type of health care provider, March 2010 (in kroons)

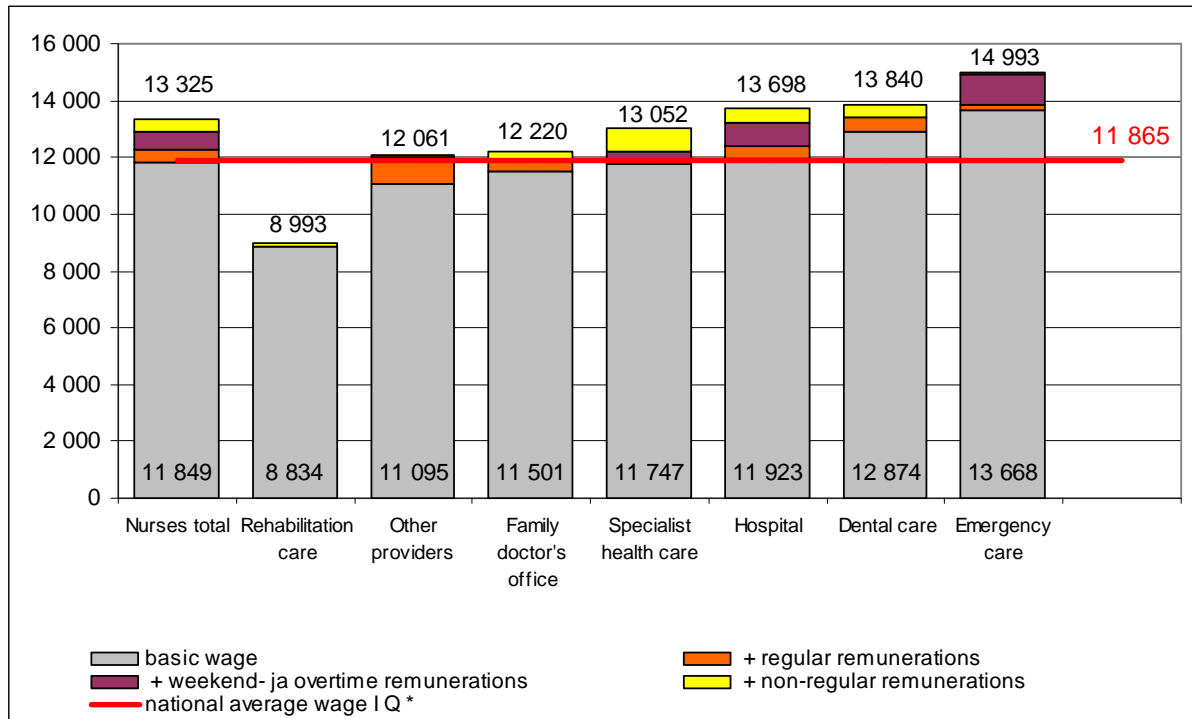


Data source: National Institute for Health Development (TAI)

4.2 Monthly wage

Only the nurses who worked full-time and throughout the month (i.e. they were not on holiday, ill etc.) in March had been involved in the monthly wage calculation. The average monthly wage of nurses and midwives with all extras in March 2010 was 13,325 kroons (Figure 18), which is nearly 2% lower than the wage of the last year. Nurses' wage with all extras exceeded the state's average wage by 12%. Like physicians, also nurses received the lowest average monthly wage (8,993 kroons) at rehabilitation care providers where the wage remained below the state's average level. Nurses who were paid the highest wage were those working for emergency medical care with average monthly wage of 14,993 kroons.

Figure 18. Average monthly wage of nurses and midwives working full-time, by type of health care provider, March 2010 (in kroons)

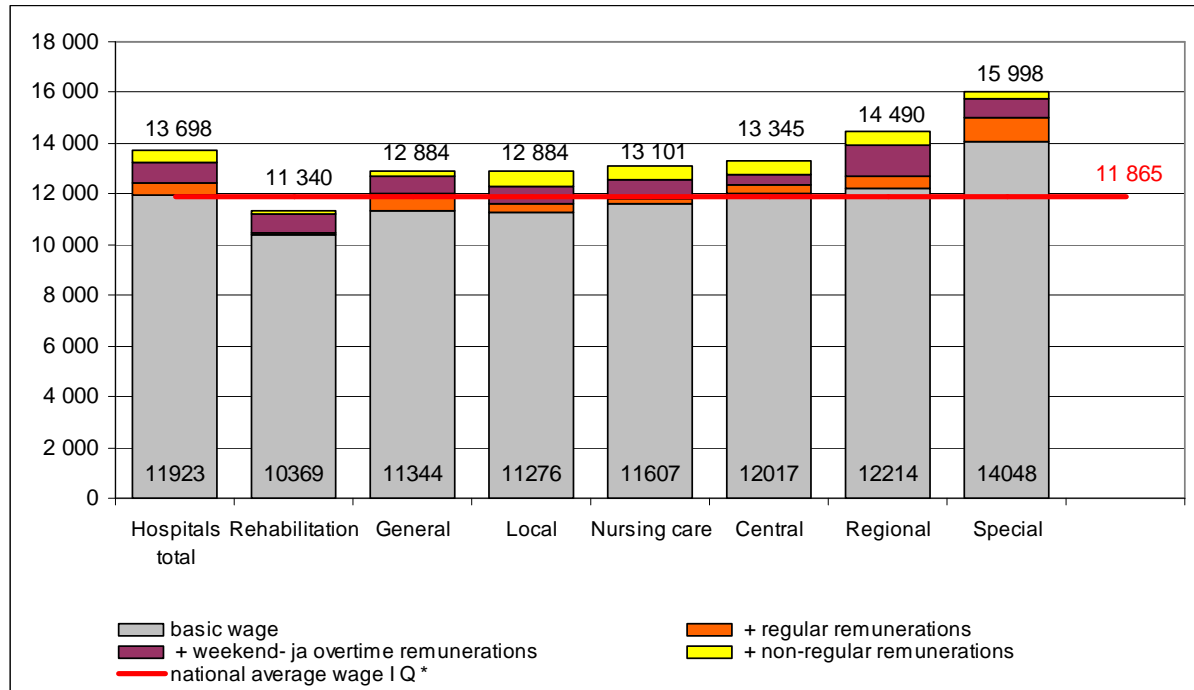


Data source: National Institute for Health Development (TAI)

*Data source: Statistics Estonia

In comparison by the hospital types, nurses had the highest average monthly wage in special hospitals – 15,998 kroons (Figure 19). They were followed by the nurses working in regional hospitals. The lowest monthly wage of a full-time working nurse was that paid in rehabilitation hospitals (11,340 kroons). Compared with the previous year, there has been a rise, on average, in the share of basic wages in the total wage. While last year the basic wages comprised 85% of the total wage, in 2010 the respective rate was 89%. Nurses working in rehabilitation hospitals had the highest share of basic wages, but at the same time, in some hospital types such as regional hospitals, extras made up 16% of the total wages.

Figure 19. Average monthly wage of nurses and midwives working full-time by type of hospital, March 2010 (in kroons)



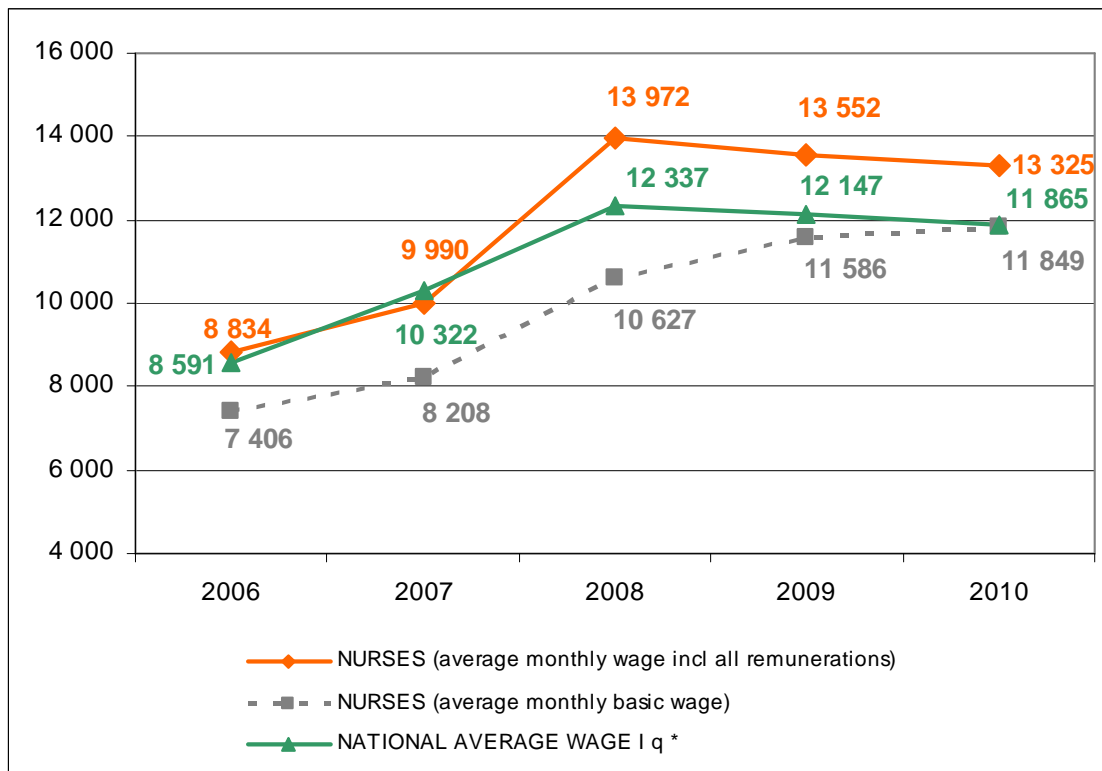
Data source: National Institute for Health Development (TAI)

*Data source: Statistics Estonia

The average monthly wage of nurses rose (58%) in 2006-2008 (Figure 20) noticeably. The most dramatic rise took place during the period of 2007–2008, when there were two pay rises laid out in the collective agreement. Since 2008, the average wage of nurses has overtopped the average wage of the state. In 2008, nurses’ wage was 13% higher than the state’s average; in 2009 and 2010 it was 12% higher.

In contrast to physicians, the wage of nurses decreased already in 2009 compared with the previous year. In 2010 the decrease continued. Similarly to 2009, the basic monthly wage of nurses rose (2%) in 2010, at the same time the total monthly wage dropped (2%). This means that the slight rise in monthly wage was enacted on account of additional remuneration. It is very likely that the decrease in additional remuneration has been caused by the economic recession. The base and total hourly wages of nurses and midwives decreased in 2010 by 3% and 6% respectively. Thus, the rise in basic monthly wage is related to a larger number of working hours in 2010.

Figure 20. Changes in the average monthly wage of nurses in 2006-2010 (in kroons)



Data source: National Institute for Health Development (TAI)

*Data source: Statistics Estonia

5. Wages of caring personnel and assistant nurses

5.1 Hourly wage

In 2010, the average basic hourly wage (i.e. wage without additional remunerations) of full-time or part-time working caring personnel and assistant nurses was 37 kroons which was two kroons or 5% lower than in the previous year (Table 5). The median rate of basic hourly wage dropped by one kroon. The highest base average hourly wage was that of the assistant nurses (assistants of physicians) working for dental care providers. Caring personnel working in hospitals earned, on average, 35 kroons an hour which was three kroons less than in the previous year. In comparison by the types of hospitals, the highest basic hourly wage of caring personnel was to be noted in special hospitals (41 kroons) and the lowest one in medical rehabilitation hospitals (33 kroons). The average variation from the caring personnel' average wage was 9 kroons.

Healthcare professionals have wished the wage of caring personnel to be 60% of the wage of nurses and midwives. Similarly to the previous year, the average basic hourly wage of caring personnel comprised 57% of the average wage of nurses. In hospitals, the wage of caring personnel comprises 55% of the wage of nurses and this parameter has been constant during last three years.

Table 5. Basic hourly wage of caring personnel and assistant nurses by type of health care provider, March 2010 (in kroons and %)

	Average	Change compared to 2009	Change compared to 2009 (%)	Median rate	Percentile 25	Percentile 75	Standard deviation	Percentage of nurses' wage
CARING PERSONNEL AND ASSISTANT NURSES TOTAL	37	-2	-5%	35	33	38	9	57%
Family doctor's office	39	2	5%	35	29	50	12	61%
Specialist health care	47	1	2%	41	29	58	19	68%
Dental care	53	1	2%	50	38	61	24	70%
Emergency care	46	0	0%	47	42	47	6	62%
Rehabilitation care	39	-1	-3%	35	29	45	16	74%
Other providers	48	8	20%	50	39	52	11	75%
Hospitals total	35	-3	-8%	35	33	37	5	55%
<i>Regional hospital</i>	35	-4	-10%	35	34	38	5	54%
<i>Central hospital</i>	36	-2	-5%	36	33	38	4	55%
<i>General hospital</i>	34	-2	-6%	33	33	36	4	55%
<i>Rehabilitation hospital</i>	33	0	0%	34	30	35	4	60%
<i>Nursing hospital</i>	36	0	0%	35	33	37	8	60%
<i>Special hospital</i>	41	-2	-5%	39	33	47	8	53%
<i>Local hospital</i>	34	-2	-6%	33	30	37	7	57%

Data source: National Institute for Health Development (TAI)

With all regular additional remunerations, the average hourly wage of caring personnel and assistant nurses was 40 kroons or, in other words, it was 3 kroons higher than the basic wages (Table 6). Additional remunerations comprise the largest part of caring personnel' wage in hospitals and at emergency care providers. In comparison between the types of hospitals, regular additional remunerations were paid most to the caring personnel working for rehabilitation hospitals. The wage with all additional remunerations was 15% higher than the basic wages there.

Table 6. The basic hourly wage and total hourly wage of caring personnel and assistant nurses and share of employees who were remunerated below the minimum rate, by the type of health care provider, March 2010 (in kroons and %)⁴

	Average basic hourly wage	Average total hourly wage	Difference in kroons	Difference in %	Caring personnel paid less than minimum rate(%), basic hourly wage*	Caring personnel paid less than minimum rate(%), total hourly wage*
CARING PERSONNEL AND ASSISTANT NURSES TOTAL	37	40	3	8%	7%	5%
Family doctor's office	39	39	0	0%	53%	37%
Specialist health care	47	48	1	2%	32%	28%
Dental care	53	56	3	6%	7%	7%
Emergency medical care	46	50	4	9%	3%	0%
Rehabilitation care	39	41	2	5%	32%	30%
Other providers	48	50	2	4%	0%	0%
Hospitals total	35	38	3	9%	6%	4%
<i>Regional hospital</i>	35	38	3	9%	8%	8%
<i>Central hospital</i>	36	39	3	8%	0%	0%
<i>General hospital</i>	34	38	4	12%	5%	2%
<i>Rehabilitation hospital</i>	33	38	5	15%	20%	0%
<i>Nursing hospital</i>	36	39	3	8%	4%	1%
<i>Special hospital</i>	41	42	1	2%	0%	0%
<i>Local hospital</i>	34	38	4	12%	2%	1%

Data source: National Institute for Health Development (TAI)

* The percentages have been calculated out of the occupied posts within a given type of health care provider.

Since 1 January 2008, according to the collective agreement, the minimum wage rate of 33 kroons has been in force with the respect of caring personnel. In March this year the total hourly wage of approximately 5% of all caring personnel and assistant nurses remained below 33 kroons (Table 6). In hospitals 4% of caring personnel were paid less than the minimum rate.

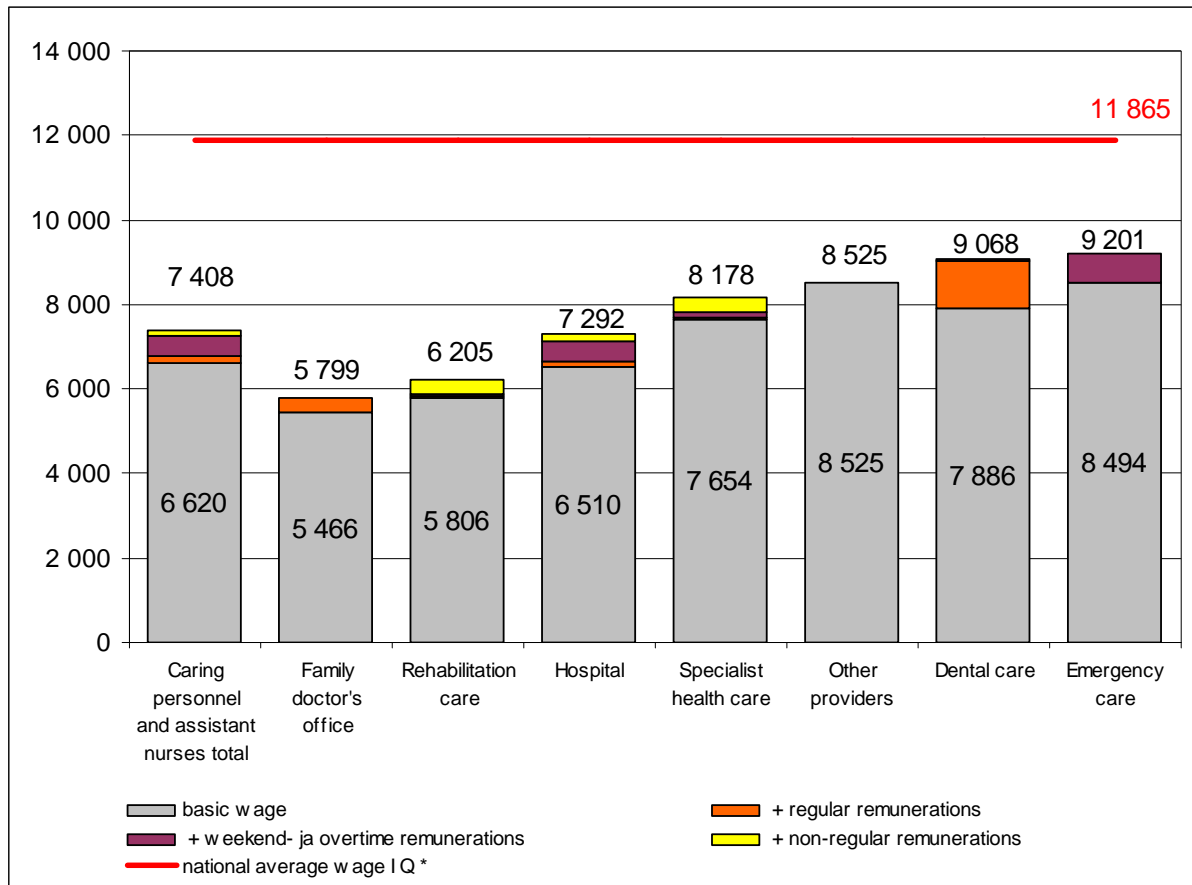
5.2 Monthly wage

Caring personnel and assistant nurses who were working full-time and throughout the month in March (i.e. they were not on holiday, ill etc.) have been involved in the average monthly wage calculation. The average monthly wage of the caring personnel, with all additional

⁴ In March 2010 there were more working hours (184 hours) than in an average month (168 hours). Thus, in case of workers receiving a fixed monthly wage the wage for one hour should have been 30 kroons according to the conditions of the minimum wage rate agreement.

remunerations was 7,408 kroons (Figure 21) which comprised 62% of the state's average wage. The wage of assistant nurses was the highest in emergency medical care and at rehabilitation care providers it was the lowest.

Figure 21. Average monthly wage of full-time working caring personnel and assistant nurses, by type of health care provider, March 2010 (in kroons)

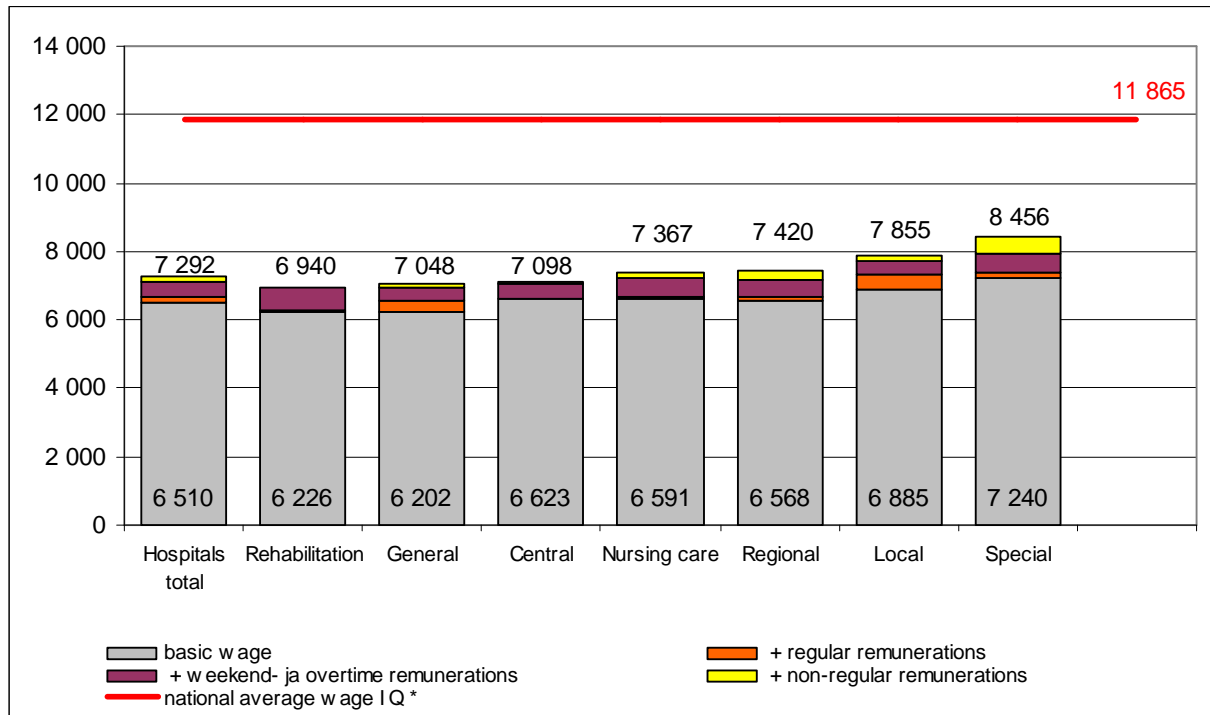


Data source: National Institute for Health Development (TAI)

*Data source: Statistics Estonia

The average monthly wage of caring personnel and assistant nurses working in hospitals was 7,292 kroons with all additional remunerations. By the types of hospitals, the caring personnel working for special hospitals received the highest monthly wage and the caring personnel working in rehabilitation hospitals received the lowest monthly wage. (Figure 22).

Figure 22. Average monthly wage of full-time working caring personnel and assistant nurses, by type of hospital, March 2010 (in kroons)



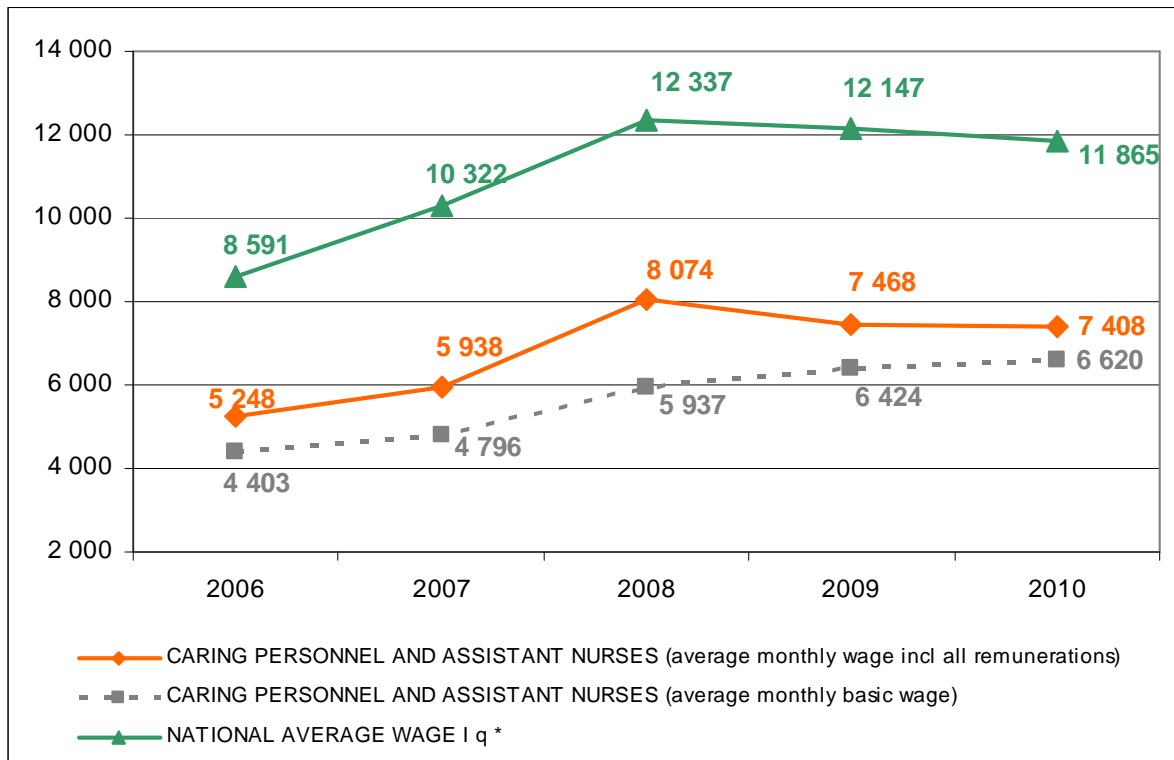
Data source: National Institute for Health Development (TAI)

*Data source: Statistics Estonia

Figure 23 presents changes in caring personnel’ wage over the period of 2006-2010 compared with the average wage of the republic. The largest rise in caring personnel’ wages took place – similarly to physicians and nurses – in 2007-2008 when the average monthly wage of full-time working caring personnel increased 36%. During that period there were two pay rises according to the collective agreement: from 1 January 2007 the minimum rate of caring personnel’ hourly wage rose from its former level of 23 kroons to 29 kroons and from 1 January 2008 to 33 kroons respectively.

Similarly to nurses, the caring personnel’ basic monthly wage has increased within two recent years and the total monthly wage has decreased. The rise in basic monthly wage is related to the larger number of working hours, since the basic hourly wage has decreased. In 2009 there were more working hours than in 2008 and in 2010 more than in 2009. There has been a reduction in additional remuneration probably due to the economic recession.

Figure 23. Changes in the average monthly wage of caring personnel and assistant nurses in 2006-2010 (in kroons)



Data source: National Institute for Health Development (TAI)

*Data source: Statistics Estonia

6 The wages of specialists related to the provision of health care services and ambulance technicians

6.1 Hourly wage

For the purposes of this analysis, bioanalysts, laboratory technicians, radiographers, dental technicians and other middle-level specialists working for dental care providers, as well as motion therapists and physiotherapists have been included in the specialists related to the provision of health care services. In March 2010, the average basic hourly wage of full-time working specialists related to the provision of health care services (hereinafter referred to as specialists) was 64 kroons, which is 4 kroons or 6% lower than in the previous year (Table 7). The median rate of basic hourly wage fell from 63 kroons to 60 kroons.

Table 7. Basic hourly wage of specialists related to the provision of health care services, by type of health care provider, March 2010 (in kroons and %)

	Average	Change compared with 2009	Change compared with 2009 (%)	Median rate	Percentile 25	Percentile 75	Standard deviation
SPECIALISTS RELATED TO THE PROVISION OF HEALTH CARE SERVICES TOTAL	64	-4	-6%	60	54	71	22
Family doctor's office	60	-4	-6%	59	53	65	13
Specialist health care	61	-6	-9%	56	52	66	25
Dental care	67	-2	-3%	60	47	75	31
Emergency care	47	-5	-10%	45	31	56	19
Rehabilitation	74	-10	-12%	71	65	82	21
Other providers	66	-4	-6%	61	60	71	15
Hospitals total	66	-4	-6%	63	61	71	13
<i>Regional hospital</i>	70	-4	-5%	60	60	74	17
<i>Central hospital</i>	61	-5	-8%	60	55	61	14
<i>General hospital</i>	71	-1	-1%	76	57	83	20
<i>Rehabilitation hospital</i>	55	-2	-4%	57	50	60	9
<i>Nursing hospital</i>	69	0	0%	61	49	83	26
<i>Special hospital</i>	63	-7	-10%	60	55	70	11
AMBULANCE TECHNICIANS	53	-3	-6%	52	51	54	4

Data source: National Institute for Health Development (TAI)

The specialists earned the highest basic hourly wage at health care providers (74 kroons), where mostly laboratory technicians were occupied, and the specialists working for rehabilitation care providers received the lowest basic hourly wage (47 kroons). In classifying

occupations, this analysis rests upon the International Standard Classification of Occupations (ISCO), according to which also masseurs and masseuses belong to the same group as physiotherapists and motion therapists. In the wage agreement of health care personnel masseurs and masseuses are not considered to be specialists associated with providing health care service and therefore the terms and conditions of the agreement do not apply to them. This can be the reason why the wage of the specialists working for rehabilitation care providers is noticeably lower than the average. The basic hourly wage of the specialists working in hospitals decreased from 70 kroons to 66 kroons or by 6% in 2010. In comparison by the hospital types, the specialists in rehabilitation hospitals had the highest hourly wage and in nursing care hospitals the lowest.

With all regular additional remunerations, the hourly wage of specialists rose by 4 kroons making 68 kroons altogether (Table 8). Additional remuneration comprised the largest share of the wage for the specialists working for dental care providers; their wages increased therefore by 9%. In comparison by the hospital types, specialists received additional remuneration most in local hospitals.

Since 1 January 2008, according to the collective agreement of health care personnel the same minimum wage rate – 60 kroons per hour – has applied both to the specialists related to the provision of health care services and nurses and midwives. In the agreement bioanalysts, physiotherapists, occupational therapists and radiographers are considered to be specialists related to the provision of health care services. In March 2010 the basic hourly wage of 25% of specialists remained below the agreed minimum rate. When looking at the wage together with all regular additional remunerations, the given share drops to 19%. It is necessary to emphasise that the group of specialists under study in this analysis is wider than that one specified in the wage agreement. This analysis includes also the middle-level specialists related to providing dental care services and the above mentioned masseurs and masseuses to whom the wage agreement does not apply.

In March 2010 the average basic hourly wage of ambulance technicians was 53 kroons (Table 8). Compared to the previous year, there was a decrease of 3 kroons or 6% in their wages. With all regular additional remunerations, their hourly wage was 6 kroons or by 12% higher. The contracting parties set a goal in the collective agreement to increase the minimum hourly rate of an ambulance technician up to 42 kroons in the course of 2007. In March this year

there were no ambulance technicians who would have received an hourly wage lower than the agreed minimum rate.

Table 8. Basic hourly wage and total hourly wage of specialists related to the provision of health care services and share of specialists who were remunerated below the minimum rate, by type of health care provider, March 2010⁵ (in kroons and in %)

	Average basic hourly wage	Average total hourly wage	Difference in kroons	Difference in %	Employees paid less than minimum rate(%), basic hourly wage*	Employees paid less than minimum rate(%), total hourly wage*
SPECIALISTS RELATED TO THE PROVISION OF HEALTH CARE SERVICES TOTAL	64	68	4	6%	25%	19%
Family doctor's office	60	61	1	2%	40%	32%
Specialist health care	61	66	5	8%	38%	33%
Dental care	67	73	6	9%	45%	32%
Emergency care	47	49	2	4%	73%	65%
Rehabilitation care	74	74	0	0%	12%	12%
Other providers	66	70	4	6%	8%	6%
Hospitals total	66	70	4	6%	5%	3%
<i>Regional hospital</i>	70	71	1	1%	0%	0%
<i>Central hospital</i>	61	65	4	7%	16%	11%
<i>General hospital</i>	71	72	1	1%	16%	16%
<i>Rehabilitation hospital</i>	55	55	0	0%	36%	31%
<i>Nursing hospital</i>	69	71	2	3%	32%	32%
<i>Special hospital</i>	63	74	11	17%	24%	7%
AMBULANCE TECHNICIANS	53	59	6	12%	0%	0%

Data source: National Institute for Health Development (TAI)

* The percentages have been calculated out of the occupied posts within a given type of health care provider.

6.2 Monthly wage

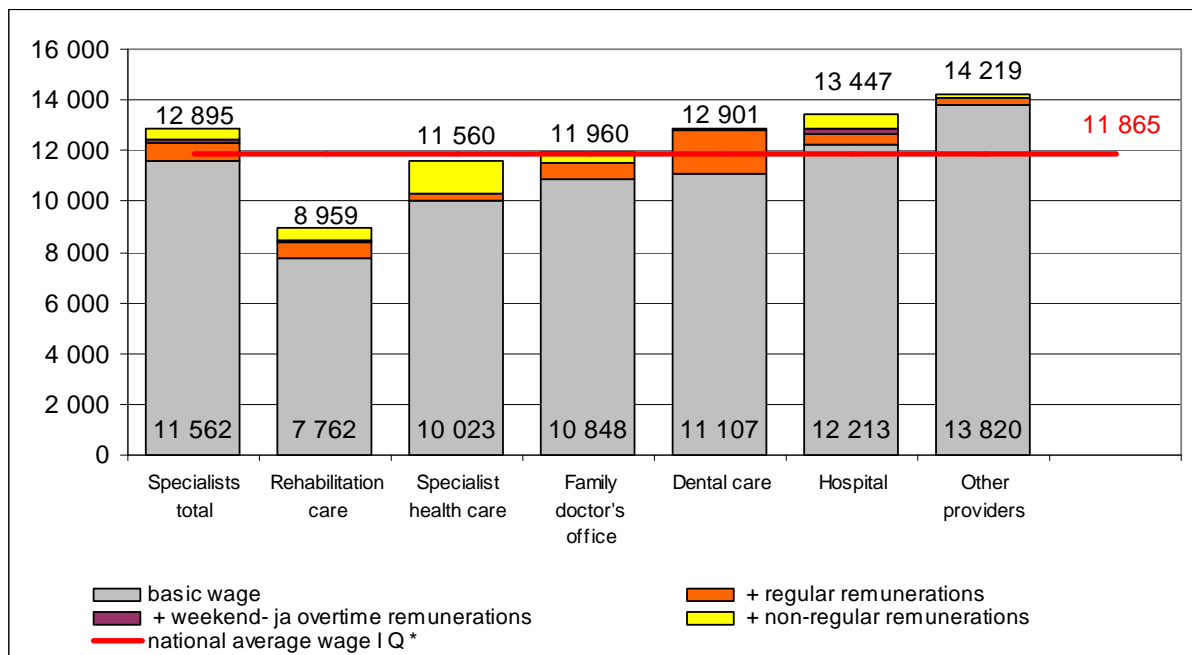
In March the average monthly wage of full-time working specialist related to the provision of health care services was 12,895 kroons which is 2% less than in 2009 (Figure 24). Similarly to the above mentioned occupation groups, the wage has decreased on account of additional remuneration since the basic monthly wage is the same compared to the previous year.

The monthly wage of specialist related to the provision of health care services was 9% higher than the state's average monthly wage in the same period. Specialists working for

⁵ In March 2010 there were more working hours (184 hours) than in an average month (168 hours). Thus, in case of employees receiving a fixed wage the hourly wage should have been 55 kroons according to the conditions of the minimum wage rate agreement.

rehabilitation care and specialist health care providers received less than the state’s average wage. At other health care providers monthly wages are higher than the state’s average. Specialists working for other health care providers (laboratories, diagnostics providers, medical facilities of prisons) – among them, the most frequently presented professions were those of a laboratory technician and bioanalyst – received the highest monthly wage.

Figure 24. Average monthly wage of full-time working specialists related to the provision of health care services, by type of health care provider, March 2010 (in kroons)



Data source: National Institute for Health Development (TAI)

*Data source: Statistics Estonia

The average monthly wage of ambulance technicians with all additional remunerations was 11,829 kroons (Annex, Table 22) which was 2% lower than it was in 2009, however, similarly to all above described occupation groups, wages decreased on account of additional remunerations since also in this group the share of basic wage had risen by 2%.

Conclusions

The hourly wages of health care personnel decreased in March 2010 compared to the previous year. The basic hourly wages of physicians working part-time and full-time decreased 7 kroons or by 5%. In contrast to other providers of health care services, the basic hourly wages of physicians working in hospitals increased. The hourly wages of nurses and midwives and specialists related to the provision of health care services decreased 4 kroons or by 6% and the hourly wages of caring personnel and assistant nurses fell by 2 kroons. Ambulance technicians received 3 kroons per hour less than in the previous year. The slight decrease in hourly wages can be influenced by the larger number of working hours in March this year.

The average monthly wage of health care personnel working full-time, including all additional remunerations (both regular and non-regular) dropped in all occupation groups compared to 2009: physicians 4%, specialists related to the provision of health care services, nurses and midwives and ambulance technicians 2% and caring personnel 1%.

Monthly wage decreased primarily on account of additional remunerations since basic monthly wage increased for caring personnel, nurses as well as for ambulance technicians; remained the same for specialists related to the provision of health care services and decreased for physicians by 1% while additional remunerations were cut by 18%. The decrease in additional remunerations can be caused by the economic recession and the cuts actuated thereby.

The growth in average basic monthly wage is partially influenced by the circumstance that there were more working hours (184 hours) in March 2010 than in March 2009 (176 working hours). This means that the employees whose wage was calculated on the basis of the amount of hours worked received a higher wage in March 2010.

Reference material

1. Statistics Estonia database. www.stat.ee (used 11.10.2010)
2. Minister of Social Affairs Regulation No. 9 „The procedure for the assumption of a payment obligation of an insured person by the health insurance fund and the methods for calculation of the payments to be made to health care providers” („Kindlustatud isikult tasu maksmise kohustuse Eesti Haigekassa poolt ülevõtmise kord ja tervishoiuteenuse osutajatele makstava tasu arvutamise meetodika”) of 19 January 2007. Appendix to the State Gazette RTL 2007, 8, 135; 2009, 48, 696.
3. Collective minimum hourly wage rate agreement of health care personnel. www.riiklikepitaja.ee
4. Amendment to Regulation No 12 „The list of health care services of the Estonian Health Insurance Fund” («Eesti Haigekassa tervishoiuteenuste loetelu») of the Government of the Republic of 10 January 2008. www.riigiteataja.ee

Appendix

Table 9. Number of independent health care providers who presented the report, by county and type of provider, March 2010

	TOTAL	Hospital	Family doctor's office	Specialist health care	Dental care	Emergency care	Rehabilitation care	Other providers
TOTAL	1233	58	476	198	426	5	27	43
Harju county	453	14	138	82	189	2	9	19
..Tallinn	367	8	96	76	163	2	9	13
Hiiu county	14	1	6	2	5	0	0	0
Ida-Viru county	114	10	54	16	28	1	3	2
Jõgeva county	40	3	20	6	11	0	0	0
Järva county	34	2	20	1	11	0	0	0
Lääne county	28	3	11	4	8	0	2	0
Lääne-Viru county	76	2	31	16	22	0	0	5
Põlva county	33	2	18	3	9	0	1	0
Pärnu county	81	3	24	13	32	0	7	2
Rapla county	27	2	14	2	6	0	0	3
Saare county	44	1	20	6	13	1	1	2
Tartu county	155	8	58	24	57	1	1	6
..Tartu	114	4	35	24	43	1	1	6
Valga county	33	3	16	5	7	0	2	0
Viljandi county	59	3	28	12	15	0	0	1
Võru county	42	1	18	6	13	0	1	3

Data source: National Institute for Health Development (TAI)

Table 10. Posts occupied by health care personnel, according to type of health care provider, occupation and by type of employment contract, March 2010⁶

		Total	Hospital	Family doctor's office	Specialist health care	Dental care	Emergency care	Rehabilitation care	Other providers
Physicians	Total	5389,06	2871,36	891,44	581,6	831,47	78,74	76,93	57,52
	Employment contract	4631,06	2691,36	727,44	332,6	717,47	69,74	44,93	47,52
	Contract for services	479	180	37	199	25	9	25	4
	FIE	279	0	127	50	89	0	7	6
Nurses and midwives	Total	7913,82	5830,65	941,14	376,71	161,66	269,34	94,5	239,82
	Employment contract	7683,82	5777,65	913,14	302,71	152,66	254,34	91,5	191,82
	Contract for services	218	53	28	73	9	15	3	37
	Self-employed person	12	0	0	1	0	0	0	11
Caregiver and assistant nurse	Total	3824,95	3444,23	6,1	45,1	234,3	34,72	54,5	6
	Employment contract	3785,95	3416,23	6,1	43,1	232,3	33,72	48,5	6
	Contract for services	39	28	0	2	2	1	6	0
Specialist related to the provision of health care services	Total	1539,81	853,7	25,04	85,85	361,06	0	157	57,16
	Employment contract	1466,81	827,7	23,04	79,85	356,06	0	129	51,16
	Contract for services	73	26	2	6	5	0	28	6
Ambulance technician	Total	407,1	194,28	1	7,95	0	203,87	0	0
	Employment contract	390,1	194,28	0	7,95	0	187,87	0	0
	Contract for services	17	0	1	0	0	16	0	0
Total	Total	19074,74	13194,22	1864,72	1097,21	1588,49	586,67	382,93	360,5
	Employment contract	17957,74	12907,22	1669,72	766,21	1458,49	545,67	313,93	296,5
	Contract for services	826	287	68	280	41	41	62	47
	Self-employed person	291	0	127	51	89	0	7	17

Data source: National Institute for Health Development (TAI)

⁶ In case of employees working under contract for services and self-employed persons, their calculated workload equals 1, i.e. they have a full work load since no data on their workload has been presented in the reports. For this reason, the number of occupied posts may be overestimated to some extent.

Table 11. Division of occupied posts, according to the type of health care provider, March 2010 (%)

	Total	Hospital	Family doctor's office	Specialist health care	Dental care	Emergency care	Rehabilitation care	Other providers
Physicians	100%	53%	17%	11%	15%	1%	1%	1%
Nurses and midwives	100%	74%	12%	5%	2%	3%	1%	3%
Caregiver	100%	90%	-	1%	6%	1%	1%	0%
Specialist related to the provision of health care services	100%	55%	2%	6%	23%	-	10%	4%
Ambulance technician	100%	48%	-	2%	-	50%	-	-
TOTAL	100%	69%	10%	6%	8%	3%	2%	2%

Data source: National Institute for Health Development (TAI)

Table 12. Posts occupied by hospital health care personnel, according to the type of hospital, occupation and employment contract, March 2010⁷

		TOTAL	Regional hospital	Central hospital	General hospital	Rehabilitation hospital	Nursing care hospital	Special hospital	Local hospital
Physicians	Total	2871,4	1278,4	837,7	523,9	14,0	27,5	129,3	60,5
	Employment contract	2691,4	1264,4	783,7	461,9	12,0	24,5	89,3	55,5
	Contract for services	180,0	14,0	54,0	62,0	2,0	3,0	40,0	5,0
Nurses and midwives	Total	5830,7	2389,1	1756,7	1211,7	32,0	140,3	156,5	144,5
	Employment contract	5777,7	2387,1	1750,7	1181,7	32,0	139,3	146,5	140,5
	Contract for services	53,0	2,0	6,0	30,0	-	1,0	10,0	4,0
Caregiver and assistant nurse	Total	3444,2	1459,4	811,3	762,6	40,3	209,8	58,2	102,8
	Employment contract	3416,2	1437,4	810,3	760,6	40,3	207,8	57,2	102,8
	Contract for services	28,0	22,0	1,0	2,0	-	2,0	1,0	-
Specialist related to the provision of health care services	Total	853,7	370,6	217,4	154,9	55,6	15,9	11,9	27,4
	Employment contract	827,7	360,6	213,4	153,9	50,6	13,9	9,9	25,4
	Contract for services	26,0	10,0	4,0	1,0	5,0	2,0	2,0	2,0
Ambulance technician	Total	194,3	39,3	32,3	109,5	-	4,3	-	9,0
	Employment contract	194,3	39,3	32,3	109,5	-	4,3	-	9,0
	Contract for services	-	-	-	-	-	-	-	-
TOTAL	Total	13194,2	5536,7	3655,3	2762,6	141,9	397,8	355,8	344,2
	Employment contract	12907,2	5488,7	3590,3	2667,6	134,9	389,8	302,8	333,2
	Contract for services	287,0	48,0	65,0	95,0	7,0	8,0	53,0	11,0

Data source: National Institute for Health Development (TAI)

⁷ In case of employees working under contract for services and self-employed persons their calculated workload equals 1, i.e. they have a full work load since no data on their workload has been presented in the reports. For this reason, the number of occupied posts may be overestimated to some extent.

Table 13. Posts occupied by hospital health care personnel, according to the type of hospital, March 2010 (%)

	TOTAL	Regional hospital	Central hospital	General hospital	Rehabilitation hospital	Nursing care hospital	Special hospital	Local hospital
Physicians	100%	45%	29%	18%	0%	1%	5%	2%
Nurses and midwives	100%	41%	30%	21%	1%	2%	3%	2%
Caregiver	100%	42%	24%	22%	1%	6%	2%	3%
Specialist related to the provision of health care services	100%	43%	25%	18%	7%	2%	1%	3%
Ambulance technician	100%	20%	17%	56%	0%	2%	0%	5%
TOTAL	100%	42%	28%	21%	1%	3%	3%	3%

Data source: National Institute for Health Development (TAI)

Table 14. Posts occupied by health care personnel, according to the type of health care provider, occupation and sex, March 2010⁸

		Total	Hospital	Family doctor's office	Specialist health care	Dental care	Emergency care	Rehabilitation care	Other providers
Physicians	Total	5 389,1	2 871,4	891,4	581,6	831,5	78,7	76,9	57,5
	man	1 347,3	909,7	109,4	160,1	114,2	26,7	14,8	12,5
	woman	4 041,7	1 961,7	782,1	421,5	717,3	52,1	62,2	45,0
Nurses and midwives	Total	7 913,8	5 830,7	941,1	376,7	161,7	269,3	94,5	239,8
	man	183,4	90,3	38,0	9,8	-	44,4	1,0	-
	woman	7 730,5	5 740,4	903,2	367,0	161,7	224,9	93,5	239,8
Caregiver and assistant nurse	Total	3 824,9	3 444,2	6,1	45,1	234,3	34,7	54,5	6,0
	man	182,2	163,4	0,5	-	3,2	15,2	-	-
	woman	3 642,7	3 280,9	5,6	45,1	231,1	19,5	54,5	6,0
Specialist related to the provision of health care services	Total	1 539,8	853,7	25,0	85,9	361,1	-	157,0	57,2
	man	80,7	42,1	1,0	7,3	11,5	-	14,8	4,1
	woman	1 459,1	811,6	24,0	78,6	349,6	-	142,3	53,1
Ambulance technician	Total	407,1	194,3	1,0	8,0	-	203,9	-	-
	man	391,9	183,5	1,0	8,0	-	199,4	-	-
	woman	15,3	10,8	-	-	-	4,5	-	-
TOTAL	Total	19 074,7	13 194,2	1 864,7	1 097,2	1 588,5	586,7	382,9	360,5
	man	2 185,5	1 388,9	149,8	185,1	128,8	285,7	30,5	16,6
	woman	16 889,3	11 805,3	1 714,9	912,1	1 459,7	301,0	352,4	343,9

Data source: National Institute for Health Development (TAI)

⁸ In case of employees working under contract for services and self-employed persons their calculated workload equals 1, i.e. they have a full work load since no data on their workload has been presented in the reports. For this reason, the number of occupied posts may be overestimated to some extent.

Table 15. Division of posts occupied by health care personnel, according to the type of health care provider, occupation and sex, March 2010 (%)

		Total	Hospital	Family doctor's office	Specialist health care	Dental care	Emergency care	Rehabilitation care	Other providers
Physicians	man	25%	32%	12%	28%	14%	34%	19%	22%
	woman	75%	68%	88%	72%	86%	66%	81%	78%
Nurses and midwives	man	2%	2%	4%	3%	0%	16%	1%	0%
	woman	98%	98%	96%	97%	100%	84%	99%	100%
Caregiver	man	5%	5%	8%	0%	1%	44%	0%	0%
	woman	95%	95%	92%	100%	99%	56%	100%	100%
Specialist related to providing healthcare service	man	5%	5%	4%	9%	3%	0%	9%	7%
	woman	95%	95%	96%	91%	97%	0%	91%	93%
Ambulance technician	man	96%	94%	100%	100%	0%	98%	0%	0%
	woman	4%	6%	0%	0%	0%	2%	0%	0%
TOTAL	man	11%	11%	8%	17%	8%	49%	8%	5%
	woman	89%	89%	92%	83%	92%	51%	92%	95%

Data source: National Institute for Health Development (TAI)

Table 16. Posts occupied by physicians, according to their profession and sex, March 2010⁹

	TOTAL		Men		Women	
	posts occupied	%	posts occupied	%	posts occupied	%
TOTAL	5 389,1	100%	1 347,3	25,0%	4 041,7	75,0%
Dentist	910,0	100%	119,9	13,2%	790,1	86,8%
family doctor	847,8	100%	108,0	12,7%	739,9	87,3%
obstetrical care physician and gynaecologist	297,2	100%	35,9	12,1%	261,3	87,9%
anaesthetics and intensive care physician	290,4	100%	132,7	45,7%	157,7	54,3%
general surgeon	210,2	100%	156,4	74,4%	53,8	25,6%
radiologist	207,5	100%	76,4	36,8%	131,1	63,2%
podiatrist	202,1	100%	9,5	4,7%	192,6	95,3%
general practitioner	201,9	100%	48,8	24,2%	153,1	75,8%
psychiatrist	200,4	100%	54,5	27,2%	145,9	72,8%
cardiologist	178,9	100%	64,5	36,0%	114,4	64,0%
emergency medical physician	175,4	100%	67,0	38,2%	108,4	61,8%
orthopaedist	149,7	100%	106,8	71,3%	43,0	28,7%
ophthalmologist	144,7	100%	22,1	15,3%	122,5	84,7%
internist	137,4	100%	28,6	20,8%	108,8	79,2%
neurologist	128,8	100%	26,5	20,6%	102,3	79,4%
physician of laboratory medicine	126,9	100%	16,5	13,0%	110,5	87,0%
otorhinolaryngologist	118,5	100%	32,8	27,7%	85,6	72,3%
physiatrist and rehabilitation physician	108,4	100%	16,0	14,8%	92,4	85,2%
dermatovenerologist	101,0	100%	14,2	14,1%	86,8	85,9%
pulmonologist	67,8	100%	16,1	23,7%	51,7	76,3%
oncologist (radiotherapy and chemotherapy)	57,3	100%	17,3	30,1%	40,0	69,9%
pharmacologist, pathologist	54,0	100%	13,8	25,6%	40,2	74,4%
occupational health doctor	50,5	100%	13,6	26,9%	36,9	73,1%
rheumatologist	47,8	100%	10,1	21,0%	37,7	79,0%
endocrinologist	45,0	100%	6,9	15,2%	38,1	84,8%
gastroenterologist	44,5	100%	13,3	29,8%	31,3	70,2%
urologist	43,4	100%	35,4	81,7%	8,0	18,3%
infectiologist	36,0	100%	5,0	13,9%	31,0	86,1%
cardiovascular surgeon	34,0	100%	27,1	79,7%	6,9	20,3%
haematologist	32,1	100%	5,3	16,5%	26,8	83,5%
nephrologist	28,1	100%	9,0	32,0%	19,1	68,0%
orthodontist	27,1	100%	2,0	7,4%	25,1	92,6%
oral and maxillofacial surgeon	23,6	100%	5,8	24,4%	17,9	75,6%
neurosurgeon	18,7	100%	13,4	71,7%	5,3	28,3%
children's surgeon	12,5	100%	7,3	58,0%	5,3	42,0%
prothesist	12,4	100%	0,0	0,0%	12,4	100,0%
toracal surgeon	7,1	100%	4,8	67,6%	2,3	32,4%
plastic and reconstructive surgeon	5,1	100%	4,0	78,4%	1,1	21,6%
clinical geneticist	4,7	100%	0,0	0,0%	4,7	100,0%
Clinical pharmacologist	0,5	100%	0,5	100,0%	0,0	0,0%
physician of other profession	0,3	100%	0,0	0,0%	0,3	100,0%

Data source: National Institute for Health Development (TAI)

⁹ In case of employees working under contract for services and self-employed persons their calculated workload equals 1, i.e. they have a full work load since no data on their workload has been presented in the reports. For this reason, the number of occupied posts may be overestimated to some extent.

Table 17. Posts occupied by nurses and midwives, according to profession and sex, March 2010¹⁰

	TOTAL		Men		Women	
	occupied posts	%	occupied posts	%	occupied posts	%
TOTAL	7 913,8	100%	183,4	2%	7 730,5	98%
general nurse	3 384,4	100%	42,2	1%	3 342,2	99%
family nurse	813,9	100%	30,8	4%	783,1	96%
emergency care nurse	682,9	100%	64,4	9%	618,5	91%
anaesthesiology and intensive care nurse	463,6	100%	10,0	2%	453,6	98%
midwife (secondary specialised education)	390,3	100%	0,3	0%	390,0	100%
surgical nurse	307,3	100%	2,0	1%	305,3	99%
radiology nurse	270,0	100%	11,5	4%	258,5	96%
children's nurse	258,3	100%	0,8	0%	257,5	100%
psychiatric nurse	252,7	100%	7,0	3%	245,7	97%
rehabilitation nurse	251,0	100%	3,0	1%	248,0	99%
intensive care nurse	247,1	100%	6,0	2%	241,1	98%
oncology nurse	140,8	100%	1,0	1%	139,8	99%
home nurse	131,1	100%	1,5	1%	129,6	99%
school nurse	128,5	100%	0,0	0%	128,5	100%
pulmonary nurse	71,0	100%	0,0	0%	71,0	100%
infection control nurse	54,8	100%	0,0	0%	54,8	100%
diabetes nurse	21,0	100%	0,0	0%	21,0	100%
occupational health care nurse	20,7	100%	1,0	5%	19,7	95%
public health nurse	13,3	100%	0,0	0%	13,3	100%
medical assistant	10,4	100%	2,0	19%	8,4	81%
clinical nurse	0,8	100%	0,0	0%	0,8	100%
mental health nurse	0,3	100%	0,0	0%	0,3	100%

Data source: National Institute for Health Development (TAI)

¹⁰ See the footnote in Appendix 1

Table 18. Posts occupied by specialists related to the provision of health care services, according to profession and sex, March 2010¹¹

	TOTAL		Men		Women	
	occupied posts	%	occupied posts	%	occupied posts	%
TOTAL	1 539,8	100%	80,7	5,2%	1 459,1	94,8%
radiographer	27,5	100%	3,2	11,4%	24,4	88,6%
assistant dentist	422,8	100%	15,5	3,7%	407,3	96,3%
motion therapist, physiotherapist	494,1	100%	41,8	8,5%	452,2	91,5%
bioanalyst, laboratory technician	595,5	100%	20,3	3,4%	575,2	96,6%

Data source: National Institute for Health Development (TAI)

¹¹ In case of employees working under contract for services and self-employed persons their calculated workload equals 1, i.e they have a full work load since no data on their workload has been presented in the reports. For this reason, the number of occupied posts may be overestimated to some extent.

Table 19. Average age of health care personnel, according to occupation and the type of health care provider, March 2010

		Total	Hospital	Family doctor's office	Specialist health care	Dental care	Emergency care	Rehabilitation care	Other providers
Physicians	Total	49	48	51	53	46	42	56	54
	man	48	47	51	52	42	38	56	49
	woman	49	48	51	53	47	44	57	55
Nurses and midwives	Total	44	44	47	47	43	39	46	47
	man	40	38	51	51	-	33	24	-
	woman	45	44	46	47	43	40	47	47
Caregiver and assistant nurse	Total	47	48	55	47	43	28	49	49
	man	37	38	28	-	32	28	-	-
	woman	48	48	58	47	43	28	49	49
Specialist related to providing healthcare service	Total	44	43	53	44	46	-	47	33
	man	39	35	54	36	46	-	45	29
	woman	44	44	53	44	46	-	47	33
Ambulance technician	Total	44	46	23	47	-	43	-	-
	man	44	46	23	47	-	43	-	-
	woman	38	39	-	-	-	36	-	-
TOTAL	Total	46	46	49	50	45	40	49	47
	man	45	45	51	52	42	40	50	45
	woman	46	46	49	50	46	40	49	47

Data source: National Institute for Health Development (TAI)

Table 20. Managers and residents-physicians, according to their occupation and the type of health care provider, March 2010¹²

		Total	Hospital	Family doctor's office	Specialist health care	Dental care	Emergency care	Rehabilitation care	Other providers
Physicians	Total	5389,1	2871,4	891,4	581,6	831,5	78,7	76,9	57,5
	manager	1044,2	352,6	347,8	97,1	217,6	6,0	10,8	12,4
	resident-physician	342,2	316,7	9,5	7,3	7,5	1,0	-	0,2
Nurses and midwives	Total	7913,8	5830,7	941,1	376,7	161,7	269,3	94,5	239,8
	manager	289,3	232,3	6,0	15,8	3,0	6,2	7,8	18,4
Caregiver and assistant nurse	Total	3824,9	3444,2	6,1	45,1	234,3	34,7	54,5	6,0
	manager	3,0	-	-	-	3,0	-	-	-
Specialists related to the provision of health care services	Total	1539,8	853,7	25,0	85,9	361,1	-	157,0	57,2
	manager	29,8	22,5	-	0,5	4,8	-	-	2,0

Data source: National Institute for Health Development (TAI)

¹² In case of employees working under contract for services and self-employed persons their calculated workload equals 1, i.e. they have a full work load since no data on their workload has been presented in the reports. For this reason, the number of occupied posts may be overestimated to some extent.

Table 21. Wages of health care personnel, according to their occupation group and the type of health care provider, March 2010 (in kroons)

	Average basic hourly wage	Average total hourly wage	Average basic monthly wage	Average monthly wage with all additional remunerations
PHYSICIANS	126	140	21 038	25 343
Family doctor's office	118	121	21 007	22 380
Specialist health care	144	148	19 585	21 678
Dental care	130	145	16 869	19 283
Emergency care	128	137	22 450	23 629
Rehabilitation care	98	102	18 117	18 117
Other providers	145	151	20 731	24 412
Hospitals total	124	143	22 365	29 380
Regional hospital	117	137	21 859	32 195
Central hospital	138	156	23 377	28 057
General hospital	118	136	21 496	28 360
Rehabilitation hospital	110	122	22 285	24 485
Nursing care hospital	152	152	23 305	26 605
Special hospital	139	155	23 087	29 727
Local hospital	123	131	21 423	23 910
NURSES AND MIDWIVES	65	70	11 849	13 325
Family doctor's office	64	66	11 501	12 220
Specialist health care	69	71	11 747	13 052
Dental care	76	77	12 874	13 840
Emergency care	74	78	13 668	14 993
Rehabilitation care	53	54	8 834	8 993
Other providers	64	68	11 095	12 061
Hospitals total	64	70	11 923	13 698
Regional hospital	65	72	12 214	14 490
Central hospital	66	70	12 017	13 345
General hospital	62	68	11 344	12 884
Rehabilitation hospital	55	61	10 369	11 340
Nursing care hospital	60	64	11 607	13 101
Special hospital	77	84	14 048	15 998
Local hospital	60	65	11 276	12 884
CARING PERSONNEL AND ASSISTANT NURSES	37	40	6 620	7 408
Family doctor's office	39	39	5 466	5 799
Specialist health care	47	48	7 654	8 178
Dental care	53	56	7 886	9 068
Emergency care	46	50	8 494	9 201
Rehabilitation care	39	41	5 806	6 205
Other providers	48	50	8 525	8 525
Hospitals total	35	38	6 510	7 292
Regional hospital	35	38	6 568	7 420
Central hospital	36	39	6 623	7 098
General hospital	34	38	6 202	7 048
Rehabilitation hospital	33	38	6 226	6 940
Nursing care hospital	36	39	6 591	7 367
Special hospital	41	42	7 240	8 456
Local hospital	34	38	6 885	7 855

Table 21. Wage of health care personnel, according to occupation group and the type of health care provider, March 2010 (in kroons) (continuation)

	Average basic hourly wage	Average total hourly wage	Average basic monthly wage	Average monthly wage with all additional remunerations
SPECIALISTS RELATED TO THE PROVISION OF HEALTH CARE SERVICES	64	68	11 562	12 895
Family doctor's office	60	61	10 848	11 960
Specialist health care	61	66	10 023	11 560
Dental care	67	73	11 107	12 901
Rehabilitation care	47	49	7 762	8 959
Other providers	74	74	13 820	14 219
<i>Hospitals total</i>	66	70	12 213	13 447
Regional hospital	66	70	11 980	13 877
Central hospital	70	71	12 617	13 023
General hospital	61	65	11 751	13 235
Rehabilitation hospital	71	72	13 451	13 722
Nursing care hospital	55	55	9 237	9 237
Special hospital	69	71	14 195	14 407
Local hospital	63	74	11 432	13 331
AMBULANCE TECHNICIANS	53	59	10 096	11 829

Data source: National Institute for Health Development (TAI)

Table 22. Average amount of dividends paid to the owners working for their own establishments and the average income of self-employed persons per month in 2009 (in kroons)

	Average amount of dividends paid to the owners working at their own establishments per month	Average income of self-employed persons per month
TOTAL	14 342	17 635
TOTAL (excl. nursing care)	14 398	17 950
Family doctor's office	12 638	28 677
Specialist health care and diagnostics	19 197	10 756
Dental care	11 582	7 809
Emergency care	-	-
Rehabilitation care	12 618	2 708
Nursing care	6 389	7 095
Other providers	-	10 515
Hospital	26 654	-

Data source: Estonian Tax and Customs Board