



 NA HOMOLCE  
HOSPITAL

Annual Report 2005

# We are one of the most modern European hospitals.

## We offer state-of-the-art diagnostic and therapeutic procedures

We are professionals and provide top quality care in all areas of medicine. We provide our patients with the fastest and least invasive procedures to identify their disorder and to treat it effectively. We provide nationwide coverage for the Czech Republic in areas that require unrivalled methods and techniques, particularly our cardiovascular program and neuroprogram. We strive to achieve prestigious accreditation and certification, to ensure us a secure position in the European health care field.

## We have satisfied clients

We treat our clients with respect, which reinforces the prestige of our hospital. We realize that, whatever the situation, our role is to serve our clients. We respond to the most demanding requirements from our clients at a European and global level. We always display a high standard of behavior and work in partnership with our clients.

## We are a friendly hospital

We can significantly improve the quality of life for our patients by the quality of our care. We are ready and willing to work with others, both within the hospital and at other centers at home and abroad. We are happy to share our knowledge and experience and actively participate in training and research programs. We can fulfill the needs of our clients, partners and employees thanks to our long-term financial stability.

## We support our employees, our employees support us

We are building our future on the personal development of our staff - the basic resource of a highly effective hospital. We encourage helpful and fair interpersonal relationships. We value our employees' loyalty to our common goals. We respect the hospital employee code and maintain and develop standards of behavior for the hospital employees.







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Na Homolce Hospital  
– a JCI accredited facility





About us

# Introduction

The long-term goal of Na Homolce Hospital is to become one of the leading European hospitals, with nationwide specializations, providing complex diagnostic and therapeutic care in the areas of cardiovascular diseases and the clinical neurosciences. The three pillars on which our hospital is founded are the high quality of health care we offer, our customer orientation and economic stability.

I am delighted to be able to report that in all three areas 2005 was an extremely successful year for Na Homolce Hospital.

The hospital's annual turnover rose by 13% as against the previous year, to over 2.8 mil. CZK, which represents over twice the rate of growth recorded by other Czech hospitals. Na Homolce financial health is also confirmed by the more than 59 mil. CZK it made in profits after tax, and the fact that it was the only state-run hospital to pay its suppliers within ninety days. Our income from our paying clientele, predominantly foreigners, was the only area that declined. This came about as a result of our accession to the European Union, as we now apply the same rates for treatment of citizens from other member states as to Czech nationals.

The hospital's excellent financial results were favorably reflected in employee remuneration rates. Where the average wage in the Czech Health Service was 19,030 CZK in 2005, in Na Homolce Hospital it rose to 30,028 CZK.

We also had a successful record of investments. One of the most important areas of expenditure in the past year was undoubtedly the creation of a Center for Robotic Surgery, the first of its kind in the Czech Republic, as well as the opening of our digital x-ray unit.

A definite turning point in the hospital's history last year was the award of JCI international accreditation, which clearly points out the level of quality and safety of the care we provide and confirms Na Homolce Hospital as one of the foremost health care facilities, both in Europe and the world. We now take for granted the high quality of our diagnostic and therapeutic procedures and the hospital boasts teams of highly qualified experts equipped with state-of-the-art technology. Instead, our efforts have been turned to the rigorous monitoring of complex treatment processes and the identification and elimination of any factors which might lead to errors or inaccuracies. During 2005 our efforts in the area of quality management focused primarily on ensuring patient safety and privacy, improving the quality of medical records and preventing nosocomial infections.

The preparation for JCI accreditation was very demanding and it is very gratifying for me to be working with a team of people who are capable of achieving a common goal and who also understand that these efforts are not simply invested to a single end, such as the accreditation itself, but are part of a continuous process of improvement of health care standards.

2005 was also important for me personally, because I retained my position as Managing Director of Na Homolce Hospital before a selection committee from the Czech Ministry of Health. I am very pleased, and see it as an appreciation of my work, that the hospital staff supported me in this position, thereby showing their approval for the direction that the hospital has taken.

Modifications in the Czech health care system are awaiting us in the near future. One of these concerns a change in the status of the hospital under the terms of the Act on public hospitals, which, to a certain extent, affects the current relations between the hospitals and their founder, the Czech Ministry of Health. This act allows hospitals greater freedom in strategic decisions concerning their orientation and development, as well as higher investment funds to support these decisions.

The results we achieved in 2005 provide a solid base for the further development of Na Homolce Hospital in investments into the modern technologies that belong to contemporary medicine, in improving the quality of the care provided and rewarding the work of all quality staff members.

I am convinced that 2006 will be at least as successful as 2005 in all aspects and that we will confirm our position as one of the foremost and most up-to-date European hospitals.



**Oldřich Šubrt,**  
Managing Director, Na Homolce Hospital

# Hospital Management and Statutory Bodies

## Hospital Management



**Oldřich Šubrt, M.D., Ph.D., MBA**  
Managing Director



**Milan Ročeň, M.D.**  
Director of Treatment  
and Preventive Care



**Iva Rečová, M.Sc.**  
Director of Internal Audit and Control



**Pavel Brůna, M.Sc.**  
Finance Director



**Jan Kapal, M.Sc.**  
Director of Hospital Operations



**Pavel Chyňa, M.Sc.**  
Human Resources Director



**Ing. Slavěna Podloucká, MBA**  
Marketing Director



**Libuše Budská**  
Head Nurse

## Supervisory Board

Chairperson

**Milan Fafejta, M.Sc.**

Vice-Chairperson

**Assoc. Prof. Eliška Jelínková, M.S., Ph.D.**

Members

**Martin Kocourek, M.Sc.**

**Jan Polák, M.Sc. (Arch.)**

**Petr Sláma, M.Sc.**

**Miroslava Ouředníková, Ph.D.**

**Pavel Henyš, M.D.**

**Libuše Budská**

# Organizational Structure 2005

## Supervisory Board

## Managing Director

### Managing Director's Office

#### Secretariat

#### Hospital pharmacy

#### IT Department

Hardware  
Software  
Analysis unit

#### Independent Services

Legal  
Quality Management  
Health and Safety at Work  
FireService and Emergency  
Planning

### Treatment and Preventive Care Division

Director for Treatment  
and Preventive Care  
Hospital Hygiene Officer

### Internal Audit and Control Division

Director for Internal Audit and Control

#### Departments

Performance audit  
Internal audit  
Financial control

### Hospital Wards

#### Neuroprogram

Neurosurgery  
Neurology  
Stereotactic  
and radiation neurosurgery

#### Cardiovascular Program

Vascular surgery  
Cardiology  
Cardiac surgery

#### General Medical Care Program

General surgery  
Gynecology and minimally invasive surgery  
Internal medicine  
ENT/head and neck surgery  
Anesthesiology and resuscitation

### Outpatient Clinics

Neurosurgery  
Neurology  
Stereotactic and radiation  
neurosurgery  
Vascular surgery  
Cardiology  
Cardiac surgery  
General surgery  
Gynecology  
Internal medicine  
ENT  
Clinical oncology  
Nephrology  
Ophthalmology  
Pediatrics  
Dentistry  
Dermatology  
Allergology and clinical immunology  
Psychiatry



<b>Finance Division</b>	<b>Hospital Operations Division</b>	<b>Human Resources Division</b>	<b>Marketing Division</b>
Director of Finance	Director of Hospital Operations	Director of Human Resources	Director of Marketing
<b>Departments</b>	<b>Departments</b>	<b>Departments</b>	<b>Departments</b>
Economic Accountancy Controlling Health care economics Contracts and revisions Analysis Operational records of assets	Operational and economic management Procurement and storage of non-medical supplies Catering Transportation Automated transportation system Energy and water management Maintenance Technical and inspection activities Technical management of hospital operations Medical technology Accommodation	Personnel Department Salaries Specialist Employment and Selection Specialist Training and Development Specialist	PR – Press Officer Production and publicity Marketing of specialized programs
<b>Common Examination and Treatment Units</b>	<b>Other Medical Units</b>	<b>Head Nurse's Office</b>	
Clinical biochemistry, hematology, immunology Clinical microbiology and antibiotic center Radiodiagnostics Nuclear medicine/PET center Pathology Central sterilization and hygiene Physiotherapy	Hemodialysis Center Operating theaters Industrial medicine Department of Medical Physics	Central Registration Central Admissions Pediatric Records Patient information service	

# Na Homolce Hospital

## A Specialized Health Care Center providing Nationwide Coverage for Cardiovascular and Neurosurgical Treatment

### Neurological-neurosurgical Program

Comprehensive care for patients suffering from diseases of, or injuries to, the central and peripheral nervous system, as well as diseases of, or injuries to, the spine. The three independent program centers provide a full range of care, from diagnostic services and therapy by conservative methods, through complex neurosurgical operations, including radiosurgery and stereotactic surgery, to the latest methods of interventional neuroradiology. Part of the treatment process also covers related physiotherapy and long-term follow-up of patients.

- Department of Neurology
- Department of Neurosurgery
- Department of Stereotactic and Radiation Neurosurgery

### Cardiovascular Program

Comprehensive care for patients suffering from diseases of the cardiovascular system, the heart and blood vessels. The three independent program units focus on complex diagnostics and treatment by conservative methods, as well as surgical treatment of cardiac and vascular diseases including interventional radiology. Medical care includes special physiotherapy for patients with diseases of the circulatory system and follow-up of selected groups of patients.

- Department of Cardiology
- Department of Vascular Surgery
- Department of Cardiac Surgery

### General Medical Care Program

A comprehensive range of general health care treatment, supported by a large outpatient clinic and related wards. The four independent hospital wards within this program offer patients a complete range of up-to-date diagnostic and therapeutic procedures for diseases related to internal medicine and general surgery, particularly minimally invasive surgery. These are closely linked to extensive outpatient services provided by clinics covering individual specializations.

- Department of Internal Medicine
- Department of General Surgery
- Department of Gynecology and Minimally Invasive Surgery
- Department of ENT/Head and Neck Surgery
- Department of Anesthesiology and Resuscitation

## Basic data

	to 31. 12. 2004	to 31. 12. 2005	index
Staff	1,611	1,624	101%
Beds	357	357	100%
Number of admissions	19,406*	18,128*	93%
Number of interventions	14,331	14,613	102%
Number of outpatient examinations	1,029,991	1,105,868	107%

## Number of admissions

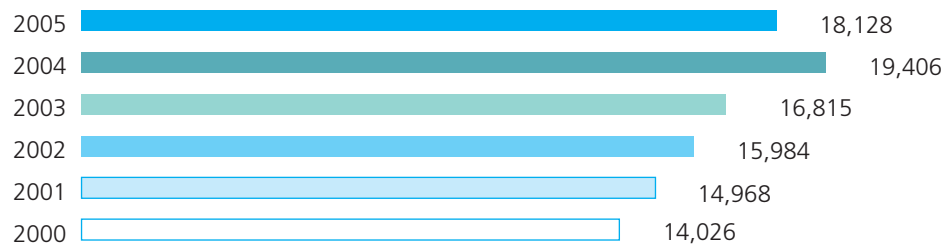
	to 31. 12. 2004	to 31. 12. 2005	index
Neurology-neurosurgery program	5,038*	4,505*	89%
Cardiovascular program	8,297*	8,003*	96%
General Medical Care Program	6,869*	6,358*	93%

## Number of beds to 31. 12. 2005

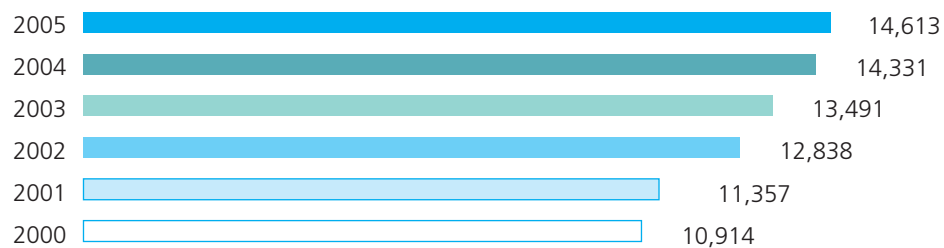
	ICU beds	total	%
Neurology-neurosurgery program	26	106	30
Cardiovascular program	67	147	41
General Medical Care Program	39	104	29
Total	132	357	100

Note: \* The number of admissions given it the first two charts differ because of differing approach to the calculation of patient transfers between individual departments during their hospital treatment.

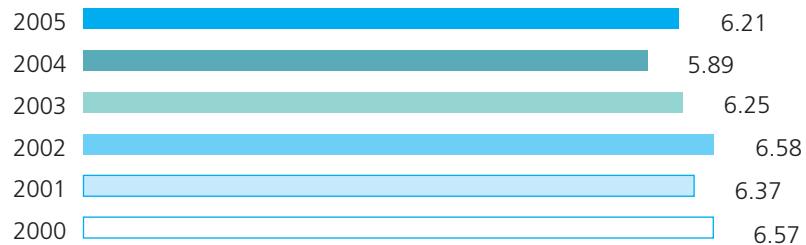
### Number of admissions 2000–2005



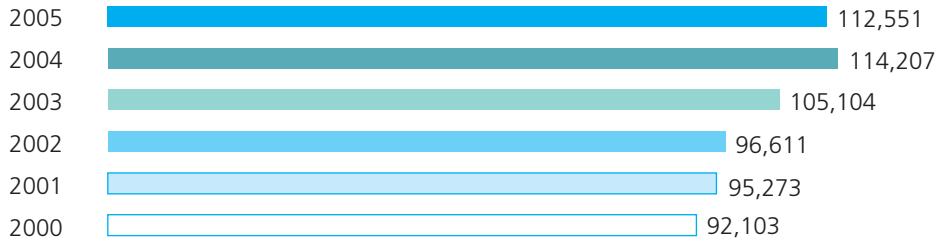
### Number of interventions (including one-day surgery) 2000–2005



### Average length of stay 2000–2005



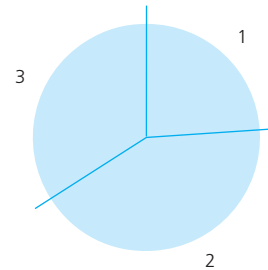
### Number of days of treatment 2000–2005



### Breakdown of the main diagnoses in 2005 (in %)

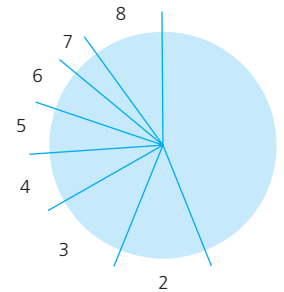
#### Program

1. Neurological-Neurosurgical Program	24
2. Cardiovascular Program	42
3. General Medical Care Program	34



#### Groups of diagnoses

1. Diseases of the circulatory system	44
2. Neoplasms	12
3. Diseases of the musculoskeletal system and connective tissues	11
4. Diseases of the urogenital system	7
5. Diseases of the digestive system	6
6. Diseases of the nervous system	6
7. Diseases of the respiratory system	4
8. Miscellaneous diagnoses	10



## Mortality 2000–2005

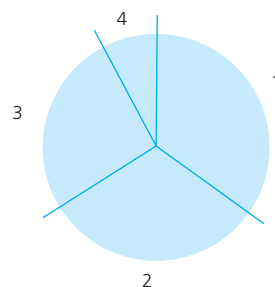
	2000	2001	2002	2003	2004	2005
NHH	1.9%	2.2%	2.1%	1.6%	1.6%	1.5%
Neurology	2.2%	2.3%	2.2%	3.7%	1.9%	1.8%
Neurosurgery	1.7%	2.1%	1.5%	1.5%	1.7%	1.9%
SRN	0.0%	0.1%	0.1%	0.3%	0.0%	0.0%
Cardiology	1.4%	1.7%	1.4%	1.2%	1.0%	1.0%
Cardiac Surgery			3.2%*	2.5%	3.0%	2.4%
Vascular Surgery	2.5%	3.4%	2.3%	2.2%	2.1%	2.3%
Internal Medicine	4.2%	4.3%	3.2%	3.0%	4.0%	4.7%
General Surgery	1.2%	1.1%	0.5%	0.2%	0.5%	0.1%
Gynecology	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
ENT	0.4%	0.1%	0.6%	0.2%	0.0%	0.0%

\* for the period from May 2002 to March 2003

### Origin of admitted patients in 2005 as a %

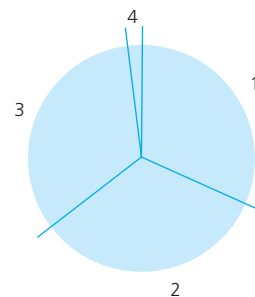
#### Neurological-Neurosurgical Program

1. Prague	35
2. Central Bohemia	31
3. Bohemia	26
4. Moravia	8



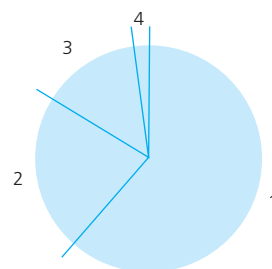
#### Cardiovascular Program

1. Prague	29
2. Central Bohemia	35
3. Bohemia	34
4. Moravia	2



#### General Medical Care Program

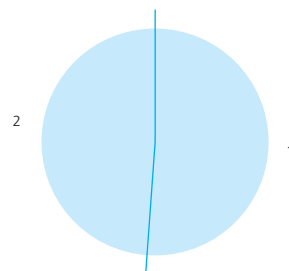
1. Prague	61
2. Central Bohemia	23
3. Bohemia	14
4. Moravia	2



## Statistical Data for 2005 (in %)

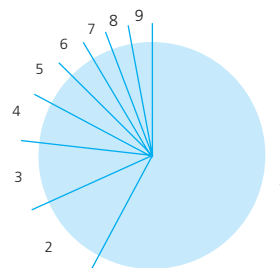
### Gender

1. Male	51
2. Female	49



### Health Insurance Company

1. (111) General Health Insurance Company, Prague	68
2. (207) OZP Bank and Insurance Company, Prague	11
3. (211) Interior Ministry Health Insurance Co., Prague	8
4. (201) Czech Military Health Insurance Company, Prague	5
5. (217) METAL ALIANZE Health Insurance Company	3
6. (222) Czech National Health Insurance Company, Prague	2
7. (209) ŠKODA Mladá Boleslav Works Health Insurance Company	1
8. (205) Miners Insurance, Ostrava	1
9. (213) The Fraternal Fund, Ostrava	1

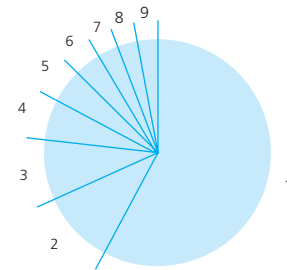




### Referral for admission

- 1. Another attending physician
- 2. Another facility
- 3. G.P.
- 4. Another department
- 5. Outpatient clinic
- 6. Emergency physician
- 7. Miscellaneous

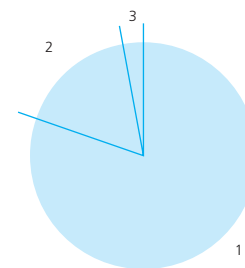
82  
5  
4  
4  
3  
1  
1



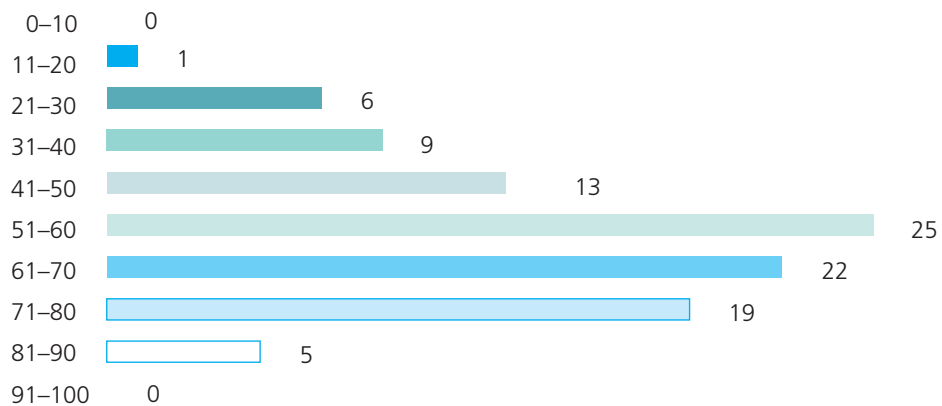
### Type of admission

- 1. Planned
- 2. Emergency
- 3. Other

82  
17  
1



### Breakdown by age – in ten-year groupings



## Na Homolce Hospital Benchmarking

### Bed occupancy as a % 2000–2005

	NHH	CR
2005	90	80
2004	92	82
2003	91	73
2002	93	76
2001	92	75
2000	88	74

### Average length of treatment (in days) 2000–2005

	NHH	CR
2005	6.2	8.0
2004	5.9	8.1
2003	6.3	8.1
2002	6.6	8.4
2001	6.4	8.5
2000	6.6	8.6

# 2005 News

## FEBRUARY

- All outpatient records made accessible in digital form 24 hours a day.
- Standardised format for all wards patient paper medical records.

## MAY

- Dr. Oldřich Šubrt, Ph.D., MBA were reappointed as Managing Director of Na Homolce Hospital by a selection committee from the Czech Ministry of Health.
- Introduction of transtelephonic home monitoring for CRT-ICD heart failure patients for the first time in the Czech Republic.

## JUNE

- Na Homolce Hospital passed the JCI international committee audit and was awarded JCI accreditation.

## SEPTEMBER

- Introduction of endoscopic knee joint surgery.

## OCTOBER

- **Gala opening of the first Czech Center of Robotic Surgery in Na Homolce Hospital.**

A new standard of quality in minimally invasive surgery and patient care will be achieved with the MULTIDISCIPLINARY ROBOTIC OPERATING THEATER. During the opening ceremony, the unique da Vinci robotic operating system was premiered. It will assist the Na Homolce Hospital departments of General Surgery, Urology, Gynecology, Vascular Surgery and, in the future, Cardiac Surgery and Neurosurgery. The first patients underwent robotic-assisted surgery before the end of 2005. Na Homolce's Center of Robotic Surgery will also act as a national and international training center for robotic surgery.

Robotic operating systems improve the precision, control and skill of surgical procedures, performing at a level that cannot be reached by human surgeons. They also enable surgeons to undertake types of minimally invasive procedures that could not be performed with the existing technology.

Robotic operating systems represent the highest possible level of surgical safety for patients.

## NOVEMBER

- **Gala Presentation of the JCI International Accreditation Certificate**

2005 represented an important milestone in the history of Na Homolce Hospital. The key project for this year was to achieve public acknowledgement of the high quality of the hospital's services by the award of an international health facility accreditation from Joint Commission International (JCI).

The first half of the year was spent preparing for the accreditation audit, and required input from almost every single hospital employee. In June, the JCI committee conducted a week-long accreditation audit to establish the extent to which Na Homolce Hospital complied with the standards required by the JCI international organization, and found it well above standard. On the basis of these results, the hospital was awarded JCI quality certification, which was officially presented to the Hospital Director, Dr. Oldřich Šubrt, Ph.D., MBA, in November 2005, by the Director of JCI's European offices, Dr. Paul Van Ostenberg. Na Homolce Hospital is one of only two hospitals in the Czech Republic to bear the title of an accredited JCI medical center.

## DECEMBER

- Opening of the new facilities for the DNA Diagnostics Laboratory.
- Christmas concert by the chansonniere, Hana Hegerová for Na Homolce Hospital partners and employees.

## Personnel and Social Policies

**2005 was also the year of international accreditation for human resources. Personnel procedures that had been fully implemented over the past year were evaluated for compliance with JCI standards and contributed to last June's successful accreditation assessment.**

**Staff numbers** were also partially affected by the accreditation process. Additional employees had to be taken on in certain areas, particularly among the medical staff, in order to implement procedures and make them conform to accreditation standards. This minor increase did not however impact work efficiency.

**In 2005, Na Homolce Hospital employed 1,624 staff members (average adjusted staff numbers), representing a 0.8% growth from 2004. Employee fluctuation was only 3.1%, which attests to an extremely stable employee base.**

**Pay rises** were determined on the one hand by the legislation passed over the course of the year, and on the other, more importantly, by a system aimed to motivate employees in the form of adjustable performance-related elements in the remuneration package. These were paid as special bonuses on the basis of quality standards, work efficiency and maintaining budgeted expenses in specific areas.

**Na Homolce Hospital paid out 585,183,975 CZK in staff wages in 2005. The average wage rose by 6.5% against 2004 to reach 30,028 CZK.**

**The Social Program** is funded from the Cultural and Social Fund, created by the employer. These funds are used to finance social, educational, medical, sporting and cultural events for staff members.

**In 2005, in compliance with the Collective Bargaining Agreement, 12.7 mil. CZK was paid into the Cultural and Social Fund.**

Detailed personnel and wage data for individual employee categories in 2005 are listed in the tables below.

### Personnel and Wage data for 2005

NHH	physicians			pharmacists	nursing staff § 5	medical staff § 7-21
	dept. heads	physicians (14)	physicians (11-13)			
total wages paid (CZK)	22,003,069	142,118,760	35,116,849	4,212,970	199,722,719	33,802,059
average number of employees	18	161	61	7	694	109
average wage (CZK)	101,866	73,711	48,211	50,012	23,974	25,909
index (%)	0	2.4	2.7	0	3.3	2.1

### Personnel and Wage data for 2005 (sequel)

NHH	medical staff § 22-28	medical staff § 29-42	other medical staff § 43	THP		auxiliaries	total
				management	others		
total wages paid (CZK)	15,402,301	34,931,808	3,096,037	6,176,482	61,793,346	26,807,575	<b>585,183,975</b>
average number of employees	44	172	6	8	221	124	<b>1,624</b>
average wage (CZK)	29,224	16,969	41,613	64,338	23,314	18,001	<b>30,028</b>
index (%)	4.1	6.6	6.8	0	3.0	2.6	<b>3.1</b>

Physicians and pharmacists in compliance with Act no. 95/2004 Coll.

Other medical staff in compliance with Act no. 96/2004 Coll.

§ 5, 6 registered nurses, midwives

§ 7-21 Radiography staff, laboratory assistants, dietary nurses, assistant pharmacists

§ 22-28 specialized graduate medical staff (clinical psychologists, biochemists, nuclear physicists) and physiotherapists

§ 29-42 assistant nurses, medical orderlies, ambulance drivers

§ 43 other non-specialized medical personnel

NHH management – managing director, directors and managers reporting directly to the managing director





Quality

# Clinical programs – summary of activities

## Neurological-neurosurgical program (NEUROPROGRAM)

### DEPARTMENT OF NEUROLOGY

**Head of Department Miroslav Kalina, M.D., Ph.D.**

The department focuses on diagnostics and the non-surgical treatment of diseases of the brain, spinal cord, peripheral nerves and muscular apparatus, using special electrophysiological and ultrasonic diagnostic methods. It also provides complex outpatient and inpatient care in these specialized areas. The department includes an **Epilepsy Center**, providing specialized outpatient and ward care for patients suffering from epilepsy. It comprises two epilepsy counseling units and an epilepsy monitoring unit (EMU) which, in addition to its other activities, conducts long-term monitoring and selection of patients for epileptosurgical treatment and provides consultancy for neurological centers throughout the Czech Republic. In 2005, 232 patients were admitted to the EMU, of whom 14 were monitored by surgical implantation of electrodes and 32 were indicated for epileptosurgical treatment. The treatment of epileptic patients over the year was marked by strong interdisciplinary cooperation between the hospital's neuroscience departments and, alongside the Department of Neurology and following established tradition, contributions were made by the Department of Neurosurgery, the Department of Stereotactic and Radiation Neurosurgery, the Department of Radiodiagnosics and the Department of Nuclear Medicine/PET Center. Na Homolce is one of the three largest epileptologic and epileptosurgical centers in the Czech Republic, with the highest number of operated patients.

The **specialized Intensive Care Unit** for the treatment of acute and critical neurological cases also serves as a postgraduate training center for neurological intensive care. During the course of 2005, thirteen intra-arterial thrombolyses and twelve intravenous thrombolyses were performed on intensive care patients, while a further 11 patients with polyradiculitis or suffering from severe myasthenia received comprehensive treatment.

Outpatient care covers, in addition to the outpatient clinic for the treatment of general neurological disorders, the **neurovascular clinic** and the **spinal counseling unit**, which also refers patients for surgical interventions to the spinal canal, as well as the **evoked potentials laboratory**, the **electromyographic laboratory** and the **transcranial Doppler ultrasound unit**.

The Department of Neurology contributed to 3 grant projects in 2005.

### Basic data

Number of beds	33
standard	27
intensive care	6
Number of physicians	13
Number of general nursing staff	45
Number of outpatient examinations	16,563
Epilepsy clinic	1,196
Number of patient admissions	1,295
Number of days of treatment	9,509
standard	7,546
intensive care	1,963
Bed occupancy rate (as a %)	80.39
standard	77.85
intensive care	91.90
Average length of stay (in days)	7.34
standard	6.06
intensive care	8.88

## DEPARTMENT OF NEUROSURGERY

**Head of Department: Vladimír Dbalý, M.D.**

In 2005 the Department of Neurosurgery focused on further developing its complex diagnostic, surgical and follow-up care of patients suffering from diseases of the central and peripheral nervous system in order to provide comprehensive and safe treatments to improve the quality of life of its patients.

As usual, patient therapy fell into four key areas, namely the **neurooncological, neurovascular, epileptosurgical and spinal programs**. A total of 2,107 operations were performed during 2005. 2,190 patients were admitted to the department's wards and 10,524 outpatients were examined. The mortality rate for operated patients was 0.8% in 2005, total mortality rate of the Department in 2005 was 1.9%.

In the **Neurooncological program**, apart from the standard, and from the most part combined treatment of patients, a number of experimental projects were further developed. These mainly involved the TTF project (the treatment of malignant primary cerebral tumors by magnetic pole). The Na Homolce Department of Neurosurgery was the first unit in the world to use this method for treatment of 15 patients and the department has been invited to collaborate internationally in this area and to present its results in the USA, where this method has received FDA approval and has now been approved as a multicentric randomized study, with Na Homolce Hospital as the primary center. The use of perioperative navigation and functional navigation during cerebral surgery was intensively developed during 2005, which enabled a **Center of Excellence in navigated neurosurgery to be opened within the department, serving the Czech Republic and countries in the eastern European region**.

Under the **Neurovascular Program**, the Department of Neurosurgery continued during 2005 to centralize patients with diseases of the intracranial vessels at Na Homolce Hospital, offering the option of combined treatment of these diseases by open surgery or endovascular intervention. Patients with these potentially life-threatening diseases are provided with 24-hour care from a team of experienced specialists.

Na Homolce's Department of Neurosurgery **Epileptosurgical Program** is one of the leaders in its field in the Czech Republic. Working together with the Department of Neurology, the Leksell Gamma Knife unit, the Department of Radiodiagnostics and the PET Center, the total number of indicated and operated patients stabilized at between thirty and forty annually and the total number of patients with drug resistant epilepsy operated on here has already reached 200. Resections were performed on patients using standard navigation techniques and stimulation treatment was also used (the application of vagal nerve stimulators). Treatment of chronic pain was further developed in partnership with the Department of Anesthesiology and Resuscitation (neurostimulation of the spinal cord.)

Within the framework of the **Spinal Program**, Na Homolce's Department of Neurosurgery has been ranked for several years now as one of the most successful and active centers in the Czech Republic. Surgery is performed on the whole length

of the spine using all access paths to treat degenerative diseases as well as trauma and oncological patients. So called "minimally invasive" spondylosurgery, using navigational or transcutaneous techniques is by far the preferred method. Na Homolce's Department of Neurosurgery is a **Center of Excellence in neurosurgery for the dynamic stabilization of the cervical spine** (Bryan, Prestige, Prospace) **for the Czech Republic and countries in the eastern European region.**

Na Homolce Hospital's Department of Neurosurgery organized the National Czech Neurosurgical Society's "Working Days" event in 2005.

Two grant projects were completed by the Department of Neurosurgery in 2005.

#### Basic data

Number of beds	65
standard	45
intensive care	8
high dependency	12
Number of physicians	17
Number of general nursing staff	84
Number of outpatient examinations	10,524
Number of patient admissions	2,190
Number of days of treatment	20,260
Bed occupancy rate (as a %)	91.52%
Average length of stay (in days)	9.25

#### Breakdown of surgical interventions in 2005

Cerebral tumors	188
Cerebro-vascular diseases	75
Spinal diseases including tumors	1,153
Injuries	78
Epileptosurgery	25
Miscellaneous	588
Total	2,107

#### Number of surgical interventions 2000–2005

2000	2001	2002	2003	2004	<b>2005</b>
1,744	1,837	1,930	1,974	2,203	<b>2,107</b>

## DEPARTMENT OF STEREOTACTIC AND RADIATION NEUROSURGERY

**Head of Department: Roman Liščák, M.D., Ph.D.**

The clinical activity of the department is focused on the non-invasive radiosurgical treatment of certain types of cerebral tumors, cerebral vascular malformations and functional diseases of the brain using the **Leksell gamma knife** as well as stereotactic and functional neurosurgery. The outpatient clinic, in addition to providing consultation and follow-up care for the department's neurosurgical patients, also offers specialized ophthalmologic care. In 2005, the department opened a specialized outpatient clinic for patients with movement disorders and the oncological outpatient clinic, which had previously received chemotherapy, was closed down when its function was taken on by the Department of Oncology.

The number of patients treated in the department increased to 798 in 2005. The total number of surgical interventions performed in the department exceeded 1,000 (including Leksell gamma knife irradiation and other surgical interventions). Neurostimulators were implanted in sixteen patients. The department continued to treat temporal epilepsy by stereotactic electrocoagulation of the amygdalohippocampal area of the brain and a further 11 patients were treated by this method.

The department still retained a small percentage of Slovak patients (10 patients in 2005) as part of its overall mix. Also, as has become traditional, among the patients irradiated by the Leksell gamma knife in 2005 were patients from the Ukraine, to whom this treatment was offered free under the terms of a tripartite agreement between Na Homolce Hospital, the Charta'77 Foundation and the Ukraine (five patients) and those who received the same conditions as Czech nationals (eleven patients).

During 2005 we continued to work in association with the Střešovice ÚVN Eye Clinic on an internal grant project to study the effects of treating the late stages of glaucoma by Leksell gamma knife and the influence of Leksell gamma knife irradiation on the progress of age-influenced macular degeneration. Both projects are supported by the Elektra company. The number of patients with ophthalmologic indications for irradiation by the Leksell gamma knife made up 8.4% of all referrals last year.

The Department of Stereotactic and Radiation Neurosurgery is the only center of its kind in the Czech Republic and the Eastern European region. The quality of its work and the range of its experience have ranked it among the foremost centers of its type worldwide.

Three grant projects were completed by the Department of Stereotactic and Radiation Neurosurgery in 2005.

**Basic data**

Number of beds	
short stay	8
Number of physicians	6
Number of supervised medical staff, health care professionals and x-ray assistants	7
Number of general nursing staff	10
Hospital Wards	
Number of patient admissions	1,020
Number of operations carried out using the Leksell gamma knife	798
Number of other stereotactic operations	211
Number of days of treatment	1,415
Bed occupancy rate (as a %)	78.44
Average length of stay (in days)	1.39
Outpatient clinic	
Number of outpatient examinations	2,695
Number of written outpatient consultations	1,159
Number of patients attending the oncological clinic	0
Number of patients attending the eye clinic	74
Number of neurophysiological examinations	178

**Number of patients treated by Leksell gamma knife from 2000–2005**

2000	2001	2002	2003	2004	<b>2005</b>
566	735	781	803	856	<b>798</b>

### Radiosurgical treatment by Leksell gamma knife broken down by individual diagnosis 2000–2005

	2000	2001	2002	2003	2004	<b>2005</b>
Malignant tumors of the brain	34%	30%	31%	33%	32%	<b>30%</b>
Benign tumors of the brain	41%	34%	37%	39%	36%	<b>37%</b>
Functional diseases of the brain	14%	16%	14%	10%	12%	<b>14%</b>
Vascular malformations of the brain	11%	9%	9%	9%	10%	<b>11%</b>
Eye indications		11%	9%	9%	11%	<b>8%</b>

### NEUROPROGRAM 2000–2005

#### Development in the number of Neuroprogram patient admissions

	2000	2001	2002	2003	2004	<b>2005</b>
Gamma knife	669	815	788	768	1,121	<b>1,020</b>
Neurology	866	1,042	970	1,145	1,376	<b>1,295</b>
Neurosurgery	2,112	2,226	2,402	2,470	2,541	<b>2,190</b>
Total	3,647	4,083	4,160	4,383	5,038	<b>4,505</b>

#### Development in the number of Neuroprogram outpatient examinations

	2000	2001	2002	2003	2004	<b>2005</b>
Gamma knife	2,212	2,583	2,544	2,553	2,245	<b>2,695</b>
Neurology	13,333	13,654	14,115	15,755	16,079	<b>16,563</b>
Neurosurgery	7,318	7,913	9,020	9,559	10,679	<b>10,524</b>
Total	22,863	24,150	25,679	27,867	29,003	<b>29,782</b>



## Cardiovascular program

### DEPARTMENT OF CARDIOLOGY

**Head of Department: Associate Professor Petr Niederle, M.D., Ph.D.**

The clinical activities of the department cover the complete range of preventive, diagnostic and therapeutic methods for patients with diseases of the heart and blood vessels, or with a high risk of incurring these diseases. Just as in previous years, the department provided full coverage of several individual specialized areas in 2005. **Acute cardiology** along with its acute cardiac care is devoted to the examination and intensive care of patients suffering from acute and critical conditions and the monitoring of their essential vital functions. **Invasive cardiology** deals with diagnostics of diseases of the coronary arteries, including therapeutic interventions. In 2005 a total of 2,589 coronographies were performed and 1,103 stents were implanted. Invasive cardiology also covers cardiac electrophysiology, particularly the diagnostics and treatment of cardiac rhythm disorders. For some time now, Na Homolce Hospital has been one of the largest European centers specializing in this field, and last year 3,827 diagnostic and therapeutic interventions were performed, including the implantation of pacemakers and defibrillators, radiofrequency ablations and other types of interventions. A world first was registered in 2005 when a robotic assisted ablation was performed on a patient with atrial fibrillation using the Hansen system, and the following procedures were performed for the first time ever in the Czech Republic: isolation of the pulmonary vein using a cryoballoon, transtelephonic home monitoring of CRT-ICD heart failure patients, the use of Non Excitatory Pacing methods in the treatment of advanced heart failure and the Tandem Heart system was used during an ablation for ventricular tachycardia.

**Non-invasive cardiology** continued to offer patients a wide range of diagnostics of cardiovascular diseases during this period, including electrocardiography stress and echocardiography tests, as well as long-term monitoring of cardiac rhythm and blood pressure, among others.

**Clinical cardiology** traditionally covers diagnostics and treatment of cardiovascular diseases both in hospital wards and specialized outpatient clinics, and shared in providing the final treatment and physiotherapy for acute conditions and in the treatment of chronic diseases of the circulatory system. The specialized **Heart Failure Unit**, which offers continuous follow-up of patients with heart failure and cares for patients at a less advanced stage of the disease, monitored a total of 767 patients during 2005.

In 2005, the Department of Cardiology continued in its work on the BARI 2D multicentric study, in which Na Homolce is the only European center to participate.

### Basic data

Number of beds	52
standard	30
high dependency	4
intensive care	18
Day care clinic	4
Number of physicians	24
Number of general nursing staff	88
Number of outpatient examinations	46,313
Number of patient admissions	4,523
Number of days of treatment	17,174
standard	10,981
intensive care	6,193
Bed occupancy rate (as a %)	91.53
standard	88.49
intensive care	97.47
Average length of stay (in days)	3.80
standard	4.30
intensive care	3.15

### Specialized interventions in 2005

Angiography Center	
Coronarography (SKG)	2,589
Ventriculography (LVG)	1,033
Right-side angiocardiography	5
Pulmonary artery angiography	14
Catheterization R	1
Catheterization R-L	332
Coronary angioplasty (PTCA)	893
Direct angioplasty (ATU) (URGENT)	246
Stents	
number of patients	796
number of stents	1,103
Bulbus aortography	195
Alcohol septal ablation	2
Occlusion of ventricular septal defect (Amplatz)	10
Intracoronary ultrasound	10
Other angiographies	342
Complications	
fatal	1 AIM (0.1%)

### Electrophysiology Center in 2005

Primary implantation and exchange of pacemakers	827
Electrophysiology	1,841
Implantation and reimplantation of ICDs	355
Biventricular stimulation	173
RF ablations in total	471
Extraction of electrodes	52
Right ventricle biopsy	27
Implantation of IV port for the administration of drugs	17
Implantable arrhythmia monitor (REVEAL)	12
Pacemaker implantation/exchange in outpatient regime	787
Total	3,828
Complications	
pneumothorax	21 (0.55%)
hemothorax	2 (0.05%)
a-v fistula	3 (0.08%)
perforations/electrode penetrations	4 (0.10%)
fatal	2 (0.05%)

### Outpatient clinics

General cardiology	11,820
Pacemakers	7,403
Angiology	1,895
Heart failure clinic	767

### Non-invasive cardiology

Echocardiography	4,976
transesophageal examination	472
dobutamin loaded	2
Total	5,450
ECG stress test	1,029
Holter ECG	1,501
Blood pressure monitoring	1,305
TT test	31
Spiroergometry	74
6 minute walking test	50

## DEPARTMENT OF VASCULAR SURGERY

**Head of Department: Assoc. Prof. Pavel Šebesta, M.D., Ph.D.**

The department deals with surgical and angioradiological invasive diagnostics and treatment of diseases of the vascular system, primarily the narrowing or complete occlusion of the blood vessels as a result of atherosclerosis. It is the only center of its type, with nationwide coverage of complex vasculo-surgical problems, ranging from radical replacement of the thoraco-abdominal aorta to palliative interventions such as radiofrequency sympathectomy. 2005 saw a further increase in the numbers of surgical and endovascular interventions. The range of surgical interventions, just as in previous years, covers **operations on the arteries supplying the brain**, which have long constituted the largest group of procedures, **operations on the thoracic and abdominal aorta including surgical and endovascular treatment of aneurysms, the reconstruction of the pelvic arteries and the arteries serving the lower limbs, as well as surgery to treat varicose veins and other congenital malformations of the vascular system.**

The department provides 24-hour emergency surgical care for all critical vasculo-surgical conditions.

In association with the Department of Cardiac Surgery, we continued to provide an interdisciplinary program of care for patients with complex disorders of the aortic arch during 2005, primarily focusing on endovascular treatment of these diseases.

Vascular surgery was one of the departments that began using Na Homolce Hospital's da Vinci robotic operating system in 2005. For the first time in the Czech Republic and the eastern European region, a team of vascular surgeons performed 5 robotic-assisted vascular operations - iliofemoral and aortofemoral bypasses.

Na Homolce's Department of Vascular Surgery serves as a training center in vascular surgery for postgraduate studies at the Institute of Health Care Postgraduate Education. It also functions as a specialized consultancy for acute and complicated angiosurgical cases.

### Basic data

Number of beds	61
standard	36
intensive care	11
high dependency	14
Number of physicians	19
Number of general nursing staff	109
Number of outpatient examinations	14,029
Number of patient admissions	2 494
Average length of stay (in days)	7.97
Number of days of treatment	19,882
standard	11,960
intensive care	3,377
high dependency	4,545
Bed occupancy rate (as a %)	93.36
standard	94.35
intensive care	90.41
high dependency	93.02
Average length of stay (in days)	7.97
standard	5.63
intensive care	25.30
high dependency	3.10

### Total number of reconstructions performed from 2000–2005

2000	2001	2002	2003	2004	<b>2005</b>
1,345	1,349	1,552	1,573	1,625	<b>1,410</b>

### Breakdown of vascular and general surgical interventions in 2005

Other vascular operations	742
Operations on branches of the aortic arch	265
Pelvic reconstructions	70
Aortofemoral reconstructions	119
Abdominal aneurysms	89
Stent implants	125

## DEPARTMENT OF CARDIAC SURGERY

**Head of Department: Štěpán Černý, M.D., Ph.D.**

The Department of Cardiac Surgery deals with complex surgical treatment of heart disease and the major endothoracic vessels. Its activities also cover outpatient monitoring of selected groups of patients before and after surgical intervention.

The scope of cardiosurgical operations last year reflected the range of these interventions throughout the Czech Republic, though their breakdown reveals a slight tendency for the department to specialize in valvular surgery, which makes up 44% of the unit's operations. During the course of 2005 a total of 864 cardiosurgical interventions were performed, including implanting epicardial pacing systems, representing a 4% increase in surgical procedures as compared to 2004. The program of surgical maintenance of the mitral valves and reconstruction of the left ventricle was further developed, while the ratio of mitral valvuloplasty reached 74.5% of the total number of mitral interventions. The unit worked in association with the Department of Cardiology for the successful development of the program of perioperative cryoablations in patients with chronic atrial fibrillation during the period under review, when 132 patients were treated using this method. Na Homolce currently performs the highest number of these interventions in the Czech Republic.

Working together with the Department of Cardiac Surgery and the Department of Radiodiagnostics, the interdisciplinary program of care for patients with complex disorders of the aortic arch, primarily focusing on the endovascular treatment of these diseases, was continued in 2005.

A new development in 2005 was the launch of a systematic program of care for adult patients with congenital heart diseases. The program consists of a specialized outpatient clinic for adult congenital heart diseases, which has taken over the care of around 1,500 patients who had previously been monitored at Motol Teaching Hospital. The second element of this specialized care is the surgical and post-operative care, which is carried out in collaboration with the pediatric Cardiocenter at Motol.

### Basic data

Number of beds	34
standard	14
intensive care	7
semi intensive care	13
Number of physicians	19
Number of general nursing staff	84
Number of outpatient examinations	2,257
Number of patient admitted	986
Number of days of treatment	10,960
standard	4,237
intensive care	2,432
high dependency	4,291
Bed occupancy rate (as a %)	88.32
standard	82.92
intensive care	95.19
high dependency	90.43
Average length of stay (in days)	11.12
standard	3.12
intensive care	2.67
high dependency	4.47

### Surgical interventions in 2005

Isolated aortocoronary reconstructions	396
Combined aortocoronary reconstructions (EACI, MAZE etc)	42
Coronary valve replacement/reconstruction	375
Isolated operations on the ascending aorta and the aortic arch	22
Epicardial pacing electrode implants	12
Miscellaneous (myxoma, pericardectomy, PM extraction)	17
Total	864
MAZE procedures (combination ACB and valvular surgery)	132
Acute and emergency operations	163
Planned operations	701

## CARDIOVASCULAR PROGRAM 2000–2005

### Development in the numbers of Cardiovascular Program patient admissions

	2000	2001	2002	2003	2004	<b>2005</b>
Cardiac Surgery	312	322	325	669	962	<b>986</b>
Vascular Surgery	2,380	2,400	2,884	2,736	2,743	<b>2,494</b>
Cardiology	2,982	3,058	3,972	3,984	4,592	<b>4,523</b>
Total	5,674	5,780	7,181	7,389	8,297	<b>8,003</b>

### Development in the number of Cardiovascular Program outpatient examinations

	2000	2001	2002	2003	2004	<b>2005</b>
Cardiac Surgery	439	452	487	1,440	1,714	<b>2,257</b>
Vascular Surgery	9,722	9,793	10,463	11,516	11,763	<b>14,029</b>
Cardiology	23,241	24,988	28,561	29,059	28,136	<b>46,313</b>
Total	33,402	35,233	39,511	42,015	41,613	<b>62,599</b>



## General Medical Care Program

### DEPARTMENT OF INTERNAL MEDICINE

**Head of Department: Associate Professor Jan Kábrt, M.D., Ph.D.**

The department's activities consist of ensuring preventive, diagnostic and conservative treatment for diseases of an internal origin, with important sub-specializations in the areas of **artificial nutrition and metabolic care, gastroenterology, diabetology, endocrinology and pneumology**. The intensive care unit is dedicated to patients suffering from acute internal diseases. The care provided during 2005 included the conservative treatment of diseases of the kidneys and urinary system, which the Department of Internal Medicine provided in collaboration with the Department of Nephrology, as well as care of patients suffering from diseases of the immune system provided in association with the Clinical Immunology unit. Care of oncological patients was provided together with the Department of Oncology. National specializations over the past year have primarily focused on the care of patients with functional disorders of the small intestine, who require long-term special nutrition, as well as the use of endosonography for the diagnosis and treatment of diseases of the digestive tract and the use of autofluorescent bronchoscopy for patients with pulmonary problems.

The Department of Internal Medicine also expanded to take on a outpatient clinic in Český dům (Czech House) in Moscow, specializing in internal medicine, which was opened in November 2005.

The Department of Internal Medicine also acted as a training center in the specialized field of "Artificial Nutrition and Metabolic Care" in 2005.

**Basic data**

Number of beds	29
standard	21
intensive care	8
Number of physicians	25
Number of general nursing staff	49
Number of outpatient examinations	39,765
internal medicine clinic	30,536
Gasteroenterological examinations	9,722
Spirometry	2,740
Number of patient admissions	1,110
Number of days of treatment	9,433
standard	6,721
intensive care	2,712
Bed occupancy rate (as a %)	92.05
standard	90.67
intensive care	95.66
Average length of stay (in days)	8.50
standard	6.41
intensive care	8.32

**Specialized interventions in 2005**

Gastroscopy	2,233
Coloscopy	1,926
Endoscopic sonography	558
ERCP	427
Endoscopic papillosphincterotomy	236
PEG	10

## DEPARTMENT OF ONCOLOGY

**Head Physician: Tomáš Vlášek, M.D.**

The Department of Clinical Oncology specializes in the **treatment and follow up of adult patients with malignant tumors**. A total of 1,032 patients were treated in the department during 2005, using chemotherapy, hormonal therapy and other treatments, including follow-up post-operative rehabilitation. The overwhelming majority of patients are treated for breast, colorectal and lung cancer, which are the most commonly occurring tumors in the country. Treatment of patients throughout the hospital is undertaken by a team of specialists in the onco-surgical, oncointernal and onco-mammological fields, who participate in the diagnostics, treatment and subsequent follow up of patients, including providing treatment for pain. The range of treatment methods for oncological patients was expanded in 2005 by the insertion of central venous ports for systemic chemotherapy with the help of the Department of Vascular Surgery and, in indicated cases, chemoembolization of liver metastases, or thermoablations in association with the Department of Radiodiagnostics.

A project to create a network of oncological centers in 2005 meant that the Na Homolce Department of Oncology became part of a united comprehensive oncological grouping, together with the Department of Radiation Oncology at Motol Hospital and the Central Military Hospital's Department of Clinical Oncology.

### Basic data

Number of physicians	3
Number of general nursing staff	3
Number of outpatient examinations	8,074
Number of cycles of chemotherapy	3,135
complications entailing emergency admission	0

## DEPARTMENT OF GENERAL SURGERY

**Head of Department: Pavel Beňo, M.D.**

The department provides a wide range of services covering diagnostics and surgical treatment in the areas of **general surgery, orthopaedics and urology**, while the outpatient clinic also includes **counseling centers for mammology, phlebology, abdominal and bariatric surgery, an orthopaedic outpatient clinic, a urological clinic and a clinic for minor surgical interventions**. The intensive care unit provides post-operative care for complicated and life-threatening cases.

In the field of general surgery, as in previous years, abdominal and thoracic surgery was performed using minimally invasive methods in all areas of laparoscopic surgery and one-day surgery was prioritized. Care continued to be provided in oncological surgery of the digestive system and mammology. In 2005, the **surgical team** performed the standard range of interventions, primarily using intraoperative radiofrequency methods for the treatment of liver metastases in colorectal carcinoma as well as laparoscopic reconstructions of inguinal and frontal hernias, laparoscopic bariatric surgery (for morbid obesity) and operations for anal prolapse and hemorrhoids using the Long method, or laparoscopic procedures to treat gastro-esophageal reflux disease. During the period under review, further developments were made in the most demanding laparoscopic surgical procedures on the colon, rectum and gastrointestinal tract using the harmonic scalpel. 2005 saw the first use of the da Vinci robotic operating system for bariatric surgical procedures (gastric bypass and adjusted gastric bandage) as well as in operations to treat gastro-esophageal reflux disease and hiatus hernia.

Na Homolce Hospital's Department of General Surgery is a national training center for anal prolapse surgery and the Longs method of treatment of hemorrhoids.

**Orthopaedic operations** last year included the total replacement hip, knee, shoulder and ankle joints, as well as the reimplantation of joints. **The orthopaedic navigational** system was routinely used for surgery on large joints during 2005. Arthroscopic surgery was newly introduced in 2005 (particularly in procedures on the knee joint and reconstruction of the cruciate ligaments).

The Na Homolce Department of General Surgery is a reference center for ankle joint surgery and a training center for knee joint surgery using an LCS rotating plate and the Orthopilot orthopaedic navigation system.

**Urological operations** included, as in previous years, open and endoscopic surgery on the urinary system, including urological oncosurgery, using minimally invasive laparoscopic, cystoscopic and ureterorenoscopic surgical techniques. In 2005, the da Vinci robotic operating was introduced into urological surgery for the first time ever in the Czech Republic (particularly for radical prostatectomies, pyeloplasty and kidney resections).

**Basic data**

Number of beds	31
standard	16
intensive care	15
Number of physicians	19
Number of general nursing staff	47
Number of outpatient examinations	39,923
Number of patient admissions	2,194
Number of surgical interventions	2,448
minor outpatient interventions	1,965
Number of days of treatment	10,039
standard	8,388
intensive care	1 651
Bed occupancy rate (as a %)	93.33
Average length of stay (in days)	4.58
standard	3.29
intensive care	3.51

**Number of outpatient examinations in 2005**

Surgery	19,480
Orthopaedics	9,016
Urology	6,751
Total	34,247

**Number of patient admissions by diagnosis in 2005**

Neoplasms	256
Diseases of the digestive system	942
Orthopaedic disorders	326
Urological disorders	212
Benign tumors	59
Other conditions	448

**Number of surgical interventions in 2005**

Surgery	1,606
Urology	290
Orthopaedics	552
Minor outpatient interventions	1,965

## DEPARTMENT OF GYNECOLOGY AND MINIMALLY INVASIVE SURGERY

**Head of Department: Pavel Bartoš, M.D., M. MED.**

The services provided by the department include the diagnostics and surgical treatment of gynecological diseases. The complete range of pelvic and gynecological surgery was concentrated into six clinical programs in 2005.

**The Oncological and Oncolaparoscopic program** includes classical, laparoscopic, laparoscopically assisted and laparovaginal surgery for tumors of the cervix, ovaries, endometrium and vulva. The department's modern methods and state-of-the-art equipment have contributed to significant improvements in the speed and precision of oncolaparoscopic interventions. A total of 146 radical operations were performed on gynecological cancers.

**Urogynecological and reconstructive surgery** covers surgical treatment of urine incontinence and complex surgical procedures for cases of pelvic organ prolapse and urine incontinence, where emphasis is placed on finding a laparoscopic solution to the problems which arise. 312 patients were operated on for problems related to complex urogenital prolapse using reticulate implants. A procedure referred to as laparoscopic global repair was standardized in 2003 and subsequently adopted by other gynecological centers in the Czech Republic. The department is an accredited center in this area for the treatment of urethropexy incontinence using the transobturator approach.

**Complex diagnostics and endometriosis surgery** offers patients from throughout the Czech Republic a comprehensive treatment program comprising radical laparoscopic surgery, a predictive histological diagnosis of growth factors and subsequent hormonal treatment with a final check up to assess its success. The department is a CSGE national reference center for ultraradical surgical excision of endometriosis of the rectovaginal sept involving resection of the vaginal walls.

In 2005, the department's surgical unit launched a **robotic operating program**, using the da Vinci operating system, which was used for the first time in the Czech Republic for radical surgery of gynecological carcinoma. The robotic operating system represents a totally new level of quality, particularly in oncogynecological surgical procedures and in reconstruction surgery for disorders of the pelvic floor, as well as other indications.

**General gynecological surgery** offers surgical treatment for infertility, myomatosis of the uterus, adnexal tumors and cysts, as well as with problems involving post-operative adhesions, chronic pelvic pain, inflammation and congenital development disorders of the uterus, in particular aplasia of the uterus and vagina.

**The hysteroscopic program** includes diagnostic and surgical endoscopy of the cavity of the uterus for cases of dysfunctional hemorrhage, polyposis, congenital defects of the uterus, adhesion, cancer of the uterus and submucous myomas.

Overall, the number of surgical interventions totaled 2,101 operations in 2005, of which **75%**, including oncological interventions, **were performed laparoscopically** or hysteroscopically, i.e. by what are referred to as minimally invasive methods.

The Department of Gynecology and Minimally Invasive Surgery is the headquarters of the secretariat and chair of the Czech Association of Gynecological Endoscopy and Pelvic Surgery (CSGE) and an accredited center for gynecological oncosurgery (CSGE).

In 2005, the department organized the 7th International Congress of Gynecological Laparoscopy, which was attended by almost 300 delegates and a number of foreign lecturers. The department also organized two national workshops on urogynecological and oncosurgical programs featuring direct broadcasts from the operating theaters

#### Basic data

Number of beds	26
standard	20
intensive care	6
Number of physicians	7
Number of general nursing staff	19
Number of outpatient examinations	22,951
Number of surgical interventions	2,101
of which minor operations	862
Number of days of treatment	7,244
standard	5,934
intensive care	1,310
Bed occupancy rate (as a %)	85.72
standard	90.03
intensive care	70.43
Average length of stay (in days)	3.66
standard	2.19
intensive care	1.77

#### Number of surgical interventions in 2005

Minor surgical interventions	862
Major surgical interventions	1,093
for malignant tumors	146

## DEPARTMENT OF ENT / HEAD AND NECK SURGERY

**Head of Department: Jan Paska, M.D.**

The department specializes in diagnostics and conservative and surgical treatment of diseases of the ears, nose and throat. Surgical interventions in 2005 included what is referred to as **one-day surgery**, as well as a **complete range of head and neck surgery**, specialised on comprehensive oncological ENT surgery, cophosurgical interventions, surgery to the nose and paranasal cavities including endoscopic interventions, complex surgery on the thyroid gland, adenotomy, as well as reconstructive surgery in the area of the head and neck, microsurgery on the larynx, operations to the soft tissues of the head and neck and surgery for injuries to the facial bones.

Na Homolce Hospital's ENT Department is one of only two centers in the Czech Republic to perform surgical **interventions of the jaw, including TEP surgery**. The department's outpatient clinic again provided a comprehensive range of services during 2005, including specialized counseling in **oncology, otoneurology, cophosurgery, otoprothetics, a rhinology clinic, a clinic for thyroid disorders, a clinic for corrective nose surgery and a pain treatment clinic**. There was a significant expansion of the services provided by the **sleep and snoring disorders clinic**, particularly in terms of its collaboration with the Department of Neurology and sleep disorders laboratories. The department also has a **specialized pediatric care**.

### Basic data

Number of beds	10
standard	8
intensive care	2
Number of physicians	7
Number of general nursing staff	19
Number of outpatient examinations	35,489
Number of patient admissions	1,072
Number of surgical interventions	1,714
Number of days of treatment	3,856
standard	3,205
intensive care	651
Bed occupancy rate (as a %)	96.40
standard	98.90
intensive care	59.45
Average length of stay (in days)	3.58
standard	2.15
intensive care	2.47

### Number of surgical interventions in 2005

Adenotomies	231
Operations under local anesthetic	485
Operations under general anesthetic	1,145
Operations using tracheotomy	114



## DEPARTMENT OF NEPHROLOGY

**Head of Department: Lukáš Svoboda, M.D.**

The Department of Nephrology provides **24-hour nephrological care and an entire range of renal replacement therapy for patients suffering from chronic and acute renal failure**. The department also includes a nephrological outpatient clinic for the diagnostics and treatment of kidney disease as well as a specialized counseling unit for ischaemic kidney disorders and an outpatient clinic for peritoneal dialysis. **The Hemodialysis Center** is open 24 hours a day and has ten dialysis units, including one cubicle for patients suffering from hepatitis B and one cubicle for patients with hepatitis C. Comprehensive continuous dialysis treatment covers chronic and acute hemodialysis, hemofiltration, hemodiafiltration, plasmapheresis, hemoperfusion, peritoneal dialysis and continuous renal replacement therapy methods. In 2005 the cumulative mortality rate of chronic patients remained below average Czech and European rates.

The reputation the Na Homolce Hospital Department of Nephrology enjoys at a Czech and European level is strengthened by its long-term efforts to create an integrated rehabilitation program for dialysis and transplant patients. The sports club for these patients, part of the Czech Sporting Association, was founded in association with Na Homolce Hospital and not only devotes itself to educational and informational activities, but primarily to the organization of sporting activities for dialysis and transplant patients, including their representation at international sporting events every year.

### Basic data

Number of full-time physicians	3
Number of general nursing staff	18
Number of dialysis units	10
of which 1 cubicle for patients with type B hepatitis	
of which 1 cubicle for patients with type C hepatitis	
Number of dialysis monitors	17
Number of monitors for continuous hemopurification	4
Number of outpatient examinations	11,623

### Interventions performed in 2005

18522-chronic hemodialysis	8,006
18521-acute hemodialysis	398
18530-hemofiltration	766
18513-home CAPD, IPD	311
18550-hemodiafiltration	13
18580-plasmapheresis	5
78813-CVVH-continuous veno-venous hemofiltration	279
18310-Biopsies	7
Clinical tests	1,557

## DEPARTMENT OF ANESTHESIOLOGY AND RESUSCITATION (ARO)

**Head of Department: Milan Ročň, M.D.**

The Department of Anesthesiology and Resuscitation provides comprehensive care for patients during surgery as well as in the periods prior to and following their operations, handling the administration of general anesthesia and the more demanding types of regional anesthesia. The Resuscitation unit provides comprehensive diagnostics and treatment of patients whose general state of health is affected by disorders to their vital functions, so severe as to be life-threatening and who require the highest level of intensive care. The overwhelming majority of cases involve patients with injuries to the brain and cranium. The facilities provided by the center include a hyperbaric chamber offering the possibility of artificial lung ventilation and other specialized methods of reanimation. The pain management clinic deals with problems experienced by patients in chronic pain.

In 2005 the AR Department was involved in one grant project.

### Basic data

Number of beds	8
Number of physicians	25
Number of general nursing staff	61
Number of outpatient examinations	1,549
Number of patient admissions	76
Number of days of treatment	2,779
Bed occupancy rate (as a %)	97.03
Average length of stay (in days)	37.05
Breakdown of units	
1 resuscitation unit	
7 central operating theaters	
3 operating theaters for general surgery	
2 operating theaters for gynecology	
6 other operating theaters and clinics (ENT, stereotaxis, x-ray, dentistry and eye clinic)	

### Summary of selected anesthesiology interventions in 2005

Numbers anesthetized for interventions lasting longer than 2 hours	3,648
Number of regional blockages	1,458
Number of patients over the age of 70 anesthetized	1,874
Number of children anesthetized	261
Number of anesthetics administered for acute interventions	1,532
Number of other anesthetics administered	1,109
Total number of interventions	9,882

## GENERAL MEDICAL CARE PROGRAM 2000–2005

### Development in the numbers of General Medical Care Program patient admissions

	2000	2001	2002	2003	2004	<b>2005</b>
ENT	707	876	788	949	1,133	<b>1,076</b>
Internal Medicine	1,060	1,026	1,006	1,023	1,234	<b>1,110</b>
Gynecology and Minimally Invasive Surgery	1,686	1,916	2,016	1,986	2,094	<b>1,978</b>
General Surgery	1,780	1,874	2,095	2,156	2,408	<b>2,194</b>
<b>Total</b>	<b>5,233</b>	<b>5,692</b>	<b>5,905</b>	<b>6,114</b>	<b>6,869</b>	<b>6,358</b>

### Development in the numbers of General Medical Care Program outpatient examinations

	2000	2001	2002	2003	2004	<b>2005</b>
ENT	31,401	33,542	29,327	31,612	35,202	<b>35,489</b>
Internal Medicine	42,310	44,515	45,296	45,769	44,093	<b>39,765</b>
Gynecology and Minimally Invasive Surgery	22,611	21,580	22,768	24,855	23,650	<b>22,951</b>
General Surgery	30,954	33,592	37,268	39,255	42,705	<b>39,923</b>
Nephrology	8,170	9,271	10,174	10,141	10,799	<b>11,623</b>
Oncology	–	–	–	–	5,157	<b>8,074</b>
<b>Total</b>	<b>135,446</b>	<b>142,500</b>	<b>144,833</b>	<b>151,632</b>	<b>161,606</b>	<b>157,825</b>

## SUMMARY OF ACTIVITIES OF THE COMPLEMENTARY SERVICES

- Department of Radiology
- Department of Clinical Microbiology and Antibiotic Center
- Department of Nuclear Medicine/PET Center
- Department of Pathology
- Department of Clinical Biochemistry, Hematology and Immunology
- Department of Central Sterilization and Hygiene

### DEPARTMENT OF RADIODIAGNOSTICS

**Head of Department: Ladislava Janoušková, M.D., Ph.D.**

During 2005, the unit continued to provide services both to its own hospital as well as to other health care facilities, including those with non-stop service. The scope of its activities covers diagnostic examinations in all areas of radiodiagnostics, with emphasis on diseases of the nervous, locomotive and cardiovascular systems, as well as on vascular and non-vascular interventions.

It continued to apply **endovascular techniques** over the past year, working closely with the vascular and cardiac surgery departments on a program to implant stents in aneurysms of the abdominal and thoracic aorta and the pelvic circulatory system, with the total number of interventions reaching 121 this year. Na Homolce Hospital is ranked first in the Czech Republic for the number of implants performed. It also continued the program of endovascular treatment of cerebral aneurysms using a detachable coils, with the introduction of a new type of coils known as Hydrocoils, as well as the use of remodelling techniques in the treatment of wide-necked aneurysms using stents. The range of revascularization treatments for cerebrovascular diseases was expanded and a new type of angioplasty balloon was brought into practice for the treatment of stenosis of smaller cerebral arteries, while treatment of local intracranial thrombolysis continued for cases of acute occlusion of the cerebral arteries.

One of the **non-vascular methods** that came into more frequent use during 2005 was percutaneous vertebroplasty in the treatment of compress fractures of the vertebrae, caused either by osteoporosis, tumor or bone lesions in other locations.

A new method of diffuse tractography of the white matter was introduced into **magnetic resonance imaging examinations** and more specific procedures were established for functional MR imaging using the BOLD method for neuronavigational surgery and deep brain stimulation.

Special on-the-fly calibration (the C.A.R.E.dose) now enables us, in the interests of radiation hygiene, to reduce the radiation doses given to patients in **CT examinations** by 30-50%.

In the field of radiography, a state-of-the-art unit providing digital radiography (Revolution XR GE) came on line in September 2005, and has allowed us to conclude the **process of digitalization and to transfer to film-free imaging** (with the exception of mammograms). This means that the image is available on the hospital IT system immediately after the examination.

The Department of Radiodiagnostics was involved in 3 grant projects in 2005.

### Technical Equipment

Angiography Center	1x Multistar Siemens
	1x Toshiba CAS
	1x theater OEC 9700
CT unit	1x Siemens Somatom Plus 4
	1x Siemens Sensation
MR unit	1x Magnetom Impact Expert 1 T
	1x Magnetom Symphony 1,5 T
USG unit	1x Toshiba Aplio
	1x Toshiba Eccocee
	1x Logiq 9
Mammography	1x Lorad M-IV
Basic equipment	4 radiosopic and radiographic units, mobile x-ray unit
PACS	Workstations, scanners, printers, laser cameras, data archives

**Basic data**

Number of physicians	18
Number of laboratory technicians	23
Number of general nursing staff	9

**Specialized therapeutic interventions in 2005**

PTA	845
Implantation of stents into abdominal and thoracic aortal aneurysms	121
Endovascular treatment of cerebral aneurysms using GDC	39
Local thrombolysis and PTA in the extra- and intra-cranial area	57
Vascular embolization and interventions to the head and spine	16
CT-guided radicular injections	417
Drainage of abscesses and cysts, guided biopsies	45
Vertebroplasty	59
Radiofrequency ablations	18
Breast node biopsies	141

**Selected radiodiagnostic examinations in 2005**

Computer tomography	11,922
Magnetic resonance	12,125
Angiography	17,051
Ultrasound examinations	17,217
Mammography	7,517
Total number of radiodiagnostic examinations	120,179

## DEPARTMENT OF NUCLEAR MEDICINE/PET CENTER

**Head of Department: Assoc. Prof. Otakar Bělohlávek, M.D., Ph.D.**

The services provided by the center include **scintigraphic functional imaging**, which includes **PET** (positron emission tomography) and **PET/CT** (a combination of positron emission tomography and computer tomography) mainly used to diagnose disorders of an oncological, neurological and cardiovascular nature. Further services provided by the center include RSA **immunoanalytic laboratory testing techniques** – radiosaturation analysis and chemiluminescence.

During 2005, the Department of Nuclear Medicine/PET Center continued to serve patients in other health care facilities throughout the Czech Republic as well as those in Na Homolce Hospital (primarily in providing PET and PET/CT examinations). The number of PET interventions and examinations rose to 6,298 as compared with 2004, representing an increase of 8.5%. 62.5% of PET examinations were performed using the hybrid PET/CT Siemens Biograph duo LSO scanner, with the rest being performed on the Siemens ECAT EXACT PET scanner. Na Homolce is one of the largest European centers of its kind in terms of the numbers of PET examinations performed.

The year-on-year increase in tests conducted by the immunoanalytic laboratory was 6.5% and the increase in the number of assays was 5.8%.

The Department of Nuclear Medicine/PET Center has been awarded ISO 9001-2000 certification on the basis of a certification audit carried out by the Det Norske Veritas firm of auditors.

The center participated in 3 grant projects in 2005.

**Basic data**

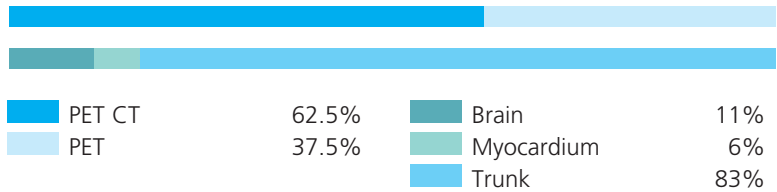
Number of physicians	7
Number of college graduates/ other medical staff	2
Number of general nursing staff	6
Number of qualified personnel/ laboratory technicians	11
Technical equipment	
Instruments	
2 scintillation cameras	
1 positron emission tomography camera	
1 positron emission tomography and CT camera	
Imaging station	
Immunoanalysers	

**Number of interventions/examinations in 2005**

Radiography	
number of interventions	6,086
number of examinations	2,000
Positron emission tomography	
number of interventions	6,298
Laboratory tests	
number of interventions	145,288
number of assays	114,121



### Breakdown of PET + PET CT examinations in 2005



### Breakdown of radiographic examinations in 2005

Myocardium	43%
Skeleton	31%
Phlebography	11%
Lungs	6%
Kidneys	4%
Brain	4%
Miscellaneous	1%
Leucocytes	0%

### Breakdown of immunoanalytic assays in 2005

Thyroid gland screening	45%
Onco-markers	30%
Non-thyroid hormones	15%
Pregnancy screening	10%
Miscellaneous	0%

## DEPARTMENT OF CLINICAL BIOCHEMISTRY, HEMATOLOGY AND IMMUNOLOGY

**Head of Department: Miroslav Průcha, M.D., Ph.D.**

In the field of **clinical biochemistry** the department provides a routine biochemical service for both hospital wards and outpatient clinics in Na Homolce Hospital, and focuses on the diagnosis and treatment of critically ill patients admitted to the hospital. In the case of inpatients in a critical state, testing is carried out directly in the wards (POCT diagnostics), and all patients are screened for mineral levels, enzyme activities, substrate concentrations, cardiomarker levels, amino acid, selected prohormones, vitamins, the full range of lipids and drug levels and their metabolites, and pharmacokinetic analyses are provided on the concentrations measured.

During 2005, the clinical biochemistry unit continued to provide services to general practitioners, pediatricians and other specialists working in the field. An important part of the work carried out by the biochemical unit concerns the analysis of lipid metabolism disorders. Over the past year, the Club of Parents of Children suffering from Lipid Disorders continued to provide a metabolic counseling service, which concentrated in particular on rehabilitation, reconditioning and educational activities for club members. The instrument park was renewed in 2005 and two new Unicel DxC 800 clinical systems, provided by Beckman Coulter, were installed.

In **hematology**, the laboratory provides a routine service for clinical units and conducts specialized analysis of coagulation parameters, for the Department of Vascular Surgery in particular. Again in 2005, **the Immunology Laboratory** applied a wide spectrum of examination methods focusing on the diagnosis of immunopathological conditions broken down by individual hospital unit. Testing methods included autoimmune diseases and primary and secondary immunodeficiency conditions. The laboratory performs highly specialized testing of patients in intensive care units, focusing on diagnosing and treating septic patients and has exclusivity in this area for the Czech Republic. An important part of this activity concerns the diagnosis of allergies in relation to the activities of the hospital's interdisciplinary Center for Allergies and Clinical Immunology. In 2005, the laboratory expanded its offer of specific IgE antibodies for new food, professional, animal and drug allergens and automatized these procedures. In the range of auto-antibodies, new diagnostic methods were introduced for coeliac disease and autoimmune hepatopathy. The Allergology and Clinical Immunology Outpatient Clinic introduced a world first in the diagnostics and control of bronchial asthma: – measurement of exhaled leukotrienes.

**The Transfusion Center** ensures the supply of blood and blood derivatives to the clinical departments.

**The Laboratory for Cerebrospinal Fluid and Neuroimmunology** carries out routine analyses of serum and cerebrospinal fluid and cytological analyses on patients with diseases of the central and peripheral nervous system. It also serves a long-term function as a reference center for cerebrospinal fluid laboratories in the Czech and Slovak Republics, particularly in the area of cytological analysis. The laboratory is a SEKK (External Quality Control System) reference laboratory for the System of External Quality Control in tests on cerebrospinal fluid in the Czech Republic and Slovakia.

**The DNA Diagnostic Laboratory** carries out molecular genetic diagnostics of hereditary diseases and genetic predispositions for serious diseases commonly occurring in the population. Within the hospital it primarily focuses on specific cases, depending on the needs of individual units. In 2005, the laboratory moved to a new location, which has enabled further development in molecular genetic methods and a whole series of new diagnostic techniques have been introduced. The DNA Diagnostic Laboratory is a member of the Neurogenetic Center at Charles University's Second Medical Faculty and a member of the Czech Groups for Chronic Lymphocytic leukemia (CLL) HS. In 2005 it acted as a reference laboratory and organized external quality controls for CLL diagnostics in the Czech Republic. The Department of Clinical Biochemistry, Hematology and Immunology has been included in the system for external quality control in the Czech Republic (SEKK), in Germany (INSTAND), and in Holland (SKZL). It has been awarded ISO 9001-2000 certification on the basis of a certification audit carried out by the Det Norske Veritas firm of auditors.

The Department of Clinical Biochemistry, Hematology and Immunology contributed to 5 grant projects in 2005.

### Basic data

Number of physicians	12
Number of college graduates/ other medical staff	4
Number of laboratory technicians	34
Number of general nursing staff	9
Total number of examinations	2,200,557

### Breakdown of laboratory tests

Department of CBHI	Number
Total biochemistry (including POCT)	1,736,253
Hematology	242,274
Spinal fluid screening	80,590
Immunology	98,937
DNA diagnostics laboratory	12,597
Blood bank	29,906
<b>Total laboratory tests</b>	<b>2,200,557</b>

### Breakdown of DCBHI outpatient numbers

Type of clinic	Number
Metabolic	6,549
Hematology	1,913
Immunology and allergology	5,025
Neuroimmunological	961
<b>Total</b>	<b>14,448</b>

## DEPARTMENT OF CLINICAL MICROBIOLOGY AND ANTIBIOTIC CENTER

**Head of Department: Vlastimil Jindrák, M.D.**

The Department of Clinical Microbiology provides **laboratory diagnostics of community and nosocomial infectious diseases or complications** in hospitalized patients, as well as consulting to deal with their diagnosis, treatment and prevention. The department's consultants participate in routine interdisciplinary work in a team of specialists to provide the highest possible level of treatment for both ward patients and outpatients. The laboratory diagnostic services, has traditionally been provided both to Na Homolce Hospital as well as to primary care general practitioners and specialists working in the field.

An important part of the department's activities consists of the work of **the Antibiotic Center**, which deals with antibiotic practices in Na Homolce Hospital as well as in primary outpatient care. In 2005 the total numbers of patients with infectious complications who required consultation with specialists from the Antibiotic Center rose again. The number of patients whose condition required the intervention of the Antibiotic Center represented 10.1% of all inpatients. There was a relative increase in certain indicators showing the cost of parental antibiotics (overall costs and hospitalization costs) but the costs per day of treatment fell and their proportion of the overall outgoings for drugs represented 14%, which means a minimal year-on-year rise. In 2005, the IT technology for the Antibiotic Center's consultation system underwent a fundamental upgrade, moving to the prescription of generic antibiotics.

In the area of **prevention and control of infection**, the monitoring system for nosocomial infections, entailing weekly and quarterly evaluations of the epidemiological situation and detailed monthly protocols assessing indicators of blood system infections, has been brought into routine operation and the early warning system for serious epidemiological cases has been much improved. The software used to support these activities has been gradually brought up to speed.

Part of the activities of the Department of Clinical Microbiology also involved participating in, or organizing, specialist projects. During 2005, the unit was invited to collaborate on three international projects incorporated in the European Union 6th framework program. The first of these is **ABS (Antibiotic Strategy) International**, coordinated from Austria and focusing on the implementation of a rational approach to the use of antibiotics and the prevention of antibiotic resistance in hospitals. The second is the **BURDEN Project**, coordinated from Germany and focusing on an assessment of the clinical and epidemiological outcomes of antibiotic resistance. It directly follows on from the ongoing European Antimicrobial Resistance Surveillance System (EARSS) which the Department of Clinical Microbiology has been involved with since 2000.

The third is the **IPSE (Improvement of Patient Safety in Europe)**, coordinated from France and focusing on

the area of nosocomial infections and their control in hospitals At a national level, **the Register of nosocomial infections** project, managed by the Czech Ministry of Health, is still continuing. During 2005 an innovative protocol for infections of the blood stream was completed, along with the appropriate information technology and the register will be brought into routine operation in eight Czech hospitals in January 2006.

The Department of Clinical Microbiology has been awarded ISO 9001-2000 certification on the basis of a certification audit carried out by the Det Norske Veritas firm of auditors.

#### Basic data

Number of physicians	4
Number of college graduates/ other medical staff	1
Number of laboratory technicians	17
Number of examinations	126,379

#### Consultations for antimicrobial therapy in admitted patients 2000–2005

	2000	2001	2002	2003	2004	<b>2005</b>
Number of consultations	4,287	5,069	6,076	6,960	7,291	<b>8,493</b>
Number of patients consulted	905	1,024	1,266	1,559	1,622	<b>1,833</b>
Proportion of patients consulted out of the total of admitted patients	6.5%	6.8%	7.5%	9.3%	8.4%	<b>10.1%</b>

## Number of examinations performed 2000–2005

### Na Homolce Hospital

	2000	2001	2002	2003	2004	<b>2005</b>
Bacteriology	35,251	39,018	41,473	45,952	54,306	<b>51,582</b>
Serology	11,330	12,257	14,282	15,194	17,238	<b>15,506</b>

### External clients

	2000	2001	2002	2003	2004	<b>2005</b>
Bacteriology	44,809	47,387	48,985	47,969	54,209	<b>49,001</b>
Serology	8,727	8,343	9,380	9,989	11,889	<b>10,290</b>

### Total number of microbiological examinations

	2000	2001	2002	2003	2004	<b>2005</b>
Bacteriology	80,100	86,405	90,458	93,921	108,517	<b>100,583</b>
Serology	20,084	20,500	23,652	25,183	29,133	<b>25,796</b>

# Na Homolce Hospital Quality Management in 2005



JCI accredited facility

One of the main pillars ensuring the hospital's stability is the high quality service it provides over the long term. Its endeavors to provide top quality medical care, in compliance with clearly defined standards, encouraged Na Homolce Hospital to apply for the internationally recognized Joint Commission International (JCI) accreditation for healthcare organizations. In June 2005, Na Homolce successfully passed the final accreditation audit and was only the second Czech hospital the international JCI auditors recommended to be awarded of the "global badge of quality" - the Joint Commission International (JCI) international accreditation. The JCI Quality Certificate was then ceremonially presented to Na Homolce Hospital's Managing Director by Dr. Paul van Ostenberg, Director of JCI's European headquarters, in November 2005. Also attending the ceremony were Dr David Marx, a JCI/JCR board member, Dr Ivan Staněk, Chairman of the Board of the Czech Joint Commission on Accreditation, representatives of the Czech Ministry of Health and health insurance companies, heads of hospitals and physicians from throughout the republic.

## JCI Accreditation

Joint Commission International (JCI) is an international organization with one hundred years of history, which accredits specialized health organizations. Accredited hospitals guarantee their patients safety and top quality care by continuously tracking, analyzing and improving quality markers in all areas of hospital operations. In the event a hospital is awarded JCI accreditation, it must comply with a total of 1,032 markers that directly affect patient safety and the reliability of medical procedures. These markers are incorporated in 368 precisely defined accreditation standards covering all areas concerning the management and provision of medical care, and with which the hospital must comply in order to be awarded JCI accreditation. JCI accreditation is awarded for three years, after which the health care organization must again apply for approval.





## ISO 9001:2000 certified facility

Three hospital departments – the Department of Clinical Biochemistry, Hematology and Immunology, the Department of Clinical Microbiology and Antibiotic Center and the Department of Nuclear Medicine/PET Center were awarded quality management certification for their laboratory and diagnostic services, confirming their compliance with ISO 9001:2000 norms. The ISO certification requirements not only require improved staff-patient relations, but also increased personnel safety. The aim of this quality management system is to ensure early discovery and elimination of various risks, which leads to increased safety in the provision of medical care.



## Quality monitoring and management in 2005

During 2005, Na Homolce Hospital focused on further improving its systems for monitoring and improving the quality of service it provides, primarily in three main areas:

### Patient Safety and Privacy

In 2005, procedures were drawn up for Na Homolce medical staff covering their behavior during the examination or admission of patients, during doctor's visits, when communicating with patients, informing them of their condition and in other situations, in order to ensure the highest possible level of privacy for patients. A pilot scheme was initiated using a communication system of picture cards for patients with communication barriers.

### The Quality of Patient Records

One of the principal care-related areas an accredited hospital has to deal with is patient safety. A major part of this concerns the clear and unambiguous identification of patients and medical supplies. In 2005 the main focus was on updating medical records, a requirement subsequent to the new amendment to the health regulations, bringing them into line with current legislation and making them easier to find on the hospital intranet. The individual stages were as follows:

- creating electronic medical records in preparation for a "paper-free" hospital,
- completing the system of pain records and introducing amended documentation,
- extending the tracking system for bedsores by including photographs of treatment of the injured areas on inpatients,
- presentation of records at the JCI international conference on quality at Wiesbaden, where Na Homolce Hospital's medical records are being adopted as an example of good practice for JCI's global recommendations.

### Prevention and Control of Infection

Another area of interest in terms of improving the quality of care entailed monitoring the occurrence of nosocomial infections, which consisted of:

- drawing up uniform procedures for the pre-operative preparation of patients by European standards (to reduce the risk of injury and subsequent microbial colonization of the protective skin layer),
- unifying aspiration systems for secreta in intensive care units, using closed urinary drainage systems and extending the range of disposable supplies used,
- introducing a new system to isolate infectious patients by using screens in the wards,
- moving from a system of local sterilization units for each individual department to a central sterilization center introducing unified central venous cannulation procedures.

# Research grants in Na Homolce Hospital in 2005

## Grant National Institutes of Health, USA

**(National Heart, Lung and Blood Institute, National Institute of Diabetes and Digestive and Kidney Diseases)**

**Title:** International multicentric BARI 2D Study (Bypass Angioplasty Revascularization Investigation 2 Diabetes)

**Period:** 2002–2007

**Authors:** University of Pittsburgh Graduate School of Public Health and 40 other university medical centers in the USA and Canada, Na Homolce Hospital in Europe

### Co-authors for Na Homolce Hospital:

Petr Neužil, M.D., Ph.D.

*Dept. of Cardiology, Na Homolce Hospital*

Štěpánka Stehlíková, M.D.

*Dept. of Internal Medicine, Na Homolce Hospital*

The project aims to research the most effective method of treating ischaemic heart disease in patients suffering from type 2 diabetes. The study investigates whether the early treatment of ischaemic heart disorder by angioplasty, coronary bypass or pharmacological methods produces better results for type 2 diabetics.

## Grant NS 1296

**(Na Homolce Hospital and Elekta)**

**Title:** Treatment of Glaucoma with the Leksell Gamma Knife at the Early Stages of the Disease

**Period:** 2003–2008

### Authors for Na Homolce Hospital:

Assoc. Prof. V. Vladyka, M.D.,

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Gabriela Šimonová, M.D., Ph.D.

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Prof Martin Kořán, Ph.D.

*Clinical Psychologist, Na Homolce Hospital*

Ph.D. Roman Liščák, M.D., Ph.D.

*Department of Stereotactic and Radiation Neurosurgery, Na Homolce Hospital*

Josef Novotný, M.Sc.,  
*Department of Medical Physics,*

*Na Homolce Hospital*

Daniela Tlacháčová, M.A.

*Department of Stereotactic and Radiation Neurosurgery, Na Homolce Hospital*

### Grant NS 1297

#### (Na Homolce Hospital and Elekta)

**Title:** Can Leksell gamma knife treatment stop the progress of the disease and improve vision in age-dependent macular degeneration?

**Period:** 2003–2008

#### Authors for Na Homolce Hospital:

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and Radiation Neurosurgery, Na Homolce Hospital*

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### Grant IGA NR/ 8105-3 and MSMT 0021620808

**Title:** The activity of dipeptidyl peptidase IV and their structural homologues (DASH) in cerebral tumors

**Period:** 2004–2006

#### Author:

Prof. Alexi Šedo, M.D., Ph.D.

*Institute of Molecular Biology, ČSAV*

#### Co-authors for Na Homolce Hospital:

Vladimír Dbalý, M.D.

*Department of Neurosurgery, Na Homolce Hospital*

Assoc. Prof. Josef Marek, M.D., Ph.D.

*Department of Pathology, Na Homolce Hospital*

### Clinical Study

**Title:** The treatment of malignant cerebral tumors by continuous electrical current (TTF – Tumor Treatment Field). In association with NovoCure, Israel

**Period:** 2004–2007

#### Authors for Na Homolce Hospital:

Valdimír Dbalý, M.D.

*Department of Neurosurgery, Na Homolce Hospitaly*

František Tovaryš, M.D.

*Department of Neurosurgery, Na Homolce Hospital*

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#### Grant: no. NR 8232-3/2004

**Title:** Neurophysiological aspects of spinal cord neurostimulation for the treatment of chronic pain

**Period:** 2004–2006

#### Author:

Assoc. Prof. Andrej Stančák, Ph.D.,

*3rd Medical Faculty, Charles University*

#### Co-authors for Na Homolce Hospital

Ivan Vrba, M.D.,

*AR Department, Na Homolce Hospital*

Jaroslav Tintěra, Ph.D.,

*Institute of Clinical and Experimental Medicine*

### Grant GA ČR 309/05/0693

**Title:** Early diagnosis of memory disorders caused by neurodegenerative diseases and therapeutic lesions  
**Period:** 2005–2005

**Author:**

Jakub Hort, M.D., Ph.D.,  
*2nd Medical Faculty, Charles University*

**Co-Author for Na Homolce Hospital:**

Miroslav Kalina, M.D.,  
*Department of Neurology, Na Homolce Hospital*

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### Grant IGA 7773-3

**Title:** Frontal cervical discectomy - ensuring stability after radical surgery for degenerative diseases to the cervical vertebrae. A comparative study  
**Period:** 2004–2006

**Author:**

Martin Häckel, M.D., Ph.D.,  
*Neurosurgical Clinic, 1st Medical Faculty, Charles University*

**Co-Author for Na Homolce Hospital:**

Assoc. Prof. Ivana Štětkářová, Ph.D.,  
*Department of Neurology, Na Homolce Hospital*

**Participating Specialist for Na Homolce Hospital:**

Jiří Chrobok, M.D.,  
*Department of Neurosurgery, Na Homolce Hospital*

### Grant NR8523-3

**Title:** Treatment of severe spasticity in multiple sclerosis by long-term intrathecal administration of baclofen  
**Period:** 2005–2007

**Author:**

Assoc. Prof. Ivana Štětkařová, M.D., Ph.D.,  
*Department of Neurology, Na Homolce Hospital*

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### Grant NF 7623-3

**Title:** Huntington's Disease: Analysis of relationships between the clinical, functional and morphometric findings  
**Period:** 2002–2005

**Author:**

Assoc. Prof. Jan Roth, M.D., Ph.D.,  
*Neurology Clinic, 1st Medical Faculty, Charles University*

**Co-Author for Na Homolce Hospital:**

Josef Vymazal, M.D., Ph.D.,  
*Department of Radiodiagnosics, Na Homolce Hospital*

### Grant NR 7823-3

**Title:** A comparison of the results of electrical cortical stimulation and functional magnetic resonance

**Period:** 2004–2006

**Author:**

Martin Sameš, M.D., Ph.D.

*Department of Neurosurgery, Masaryk Hospital, Ústí nad Labem*

**So-author for Na Homolce Hospital:**

Josef Vymazal, M.D., Ph.D.,

*Department of Radiodiagnostics, Na Homolce Hospital*

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### Grant NR8491-3

**Title:** Relationship found between the form of amyotrophic lateral sclerosis and the level of cognitive impairment, markers of neurodegeneration and cerebral atrophy

**Period:** 2005–2007

**Author:**

Peter Rizoň, M.D.,

*Neurology Clinic, Institute of Post-Graduate Medical Studies*

**Co-Author for Na Homolce Hospital:**

Josef Vymazal, M.D., Ph.D.,

*Department of Radiodiagnostics, Na Homolce Hospital*



#### Grant 1A8629-5

**Title:** The use of deep brain stimulation in the treatment of Parkinson's Disease and other extrapyramidal movement disorders

**Period:** 2005–2009

**Author:**

Prof. Evžen Růžička, M.D., Ph.D.,

*1st Medical Faculty, Charles University*

**Co-Author for Na Homolce Hospital:**

Dušak Urgošik, M.D., Ph.D.

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#### Grant IGA MZ ČR NC 7460-3

**Title:** The use of three-dimensional gel dosimetry to confirm irradiation procedures in radiation oncology

**Period:** 2003–2005

**Author:**

Assoc. Prof. Josef Novotný, Ph.D.

*Department of Medical Physics, Na Homolce Hospital*

### Grant GA ČR 202/05/H031

**Title:** The use of ionizing radiation in dosimetry and radiological physics

**Period:** 2005–2007

**Author:**

Assoc. Prof. Tomáš Čechák, Ph.D.,

*Czech Technical University*

**Co-Author for Na Homolce Hospital:**

Assoc. Prof. Josef Novotný, Ph.D.

*Department of Medical Physics, Na Homolce Hospital*

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### Grant IGA MZ ČR NC 7568:

**Title:** The importance of positron emission tomography (PET) with 18-fluorodeoxyglucose (18-FDG) in diagnosing malignant lymphoma in children and adolescents

**Period:** 2003–2005

**Author:**

Edita Kabičková, M.D.,

*Children's Oncological Clinic Motol Teaching Hospital*

**Co-Author for Na Homolce Hospital:**

Assoc. Prof. Otakar Bělohávek, M.D., Ph.D.

*Department of Nuclear Medicine/PET Center Na Homolce Hospital*

**Research Center established by the Ministry of Education, Youth and Sports: IM0002375201**

**Title:** Center of neuropsychiatric studies - Neurobiology in clinical practice

**Contribution of Na Homolce Hospital to the project:**

Utilization of positron emission tomography in the study of neuropsychiatric disorders.

**Period:** 2005–2009

**Author:**

Prof. Cyril Höschl, M.D., Ph.D.

*Psychiatric Center, Prague*

**Co-author for Na Homolce Hospital:**

Assoc. Prof. Otakar Bělohávek, M.D., Ph.D.

*Department of Nuclear Medicine/PET Center Na Homolce Hospital*

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**Grant IGA MZ ČR: NR 8033-6**

**Title:** Reduction in the toxicity of primary treatment of advanced Hodgkins lymphoma

**Period:** 2004–2009

**Author:**

Jana Marková, M.D.

*Department of Clinical Hematology, Karlovy Vary Teaching Hospital*

**Co-author for Na Homolce Hospital:**

Assoc. Prof. Otakar Bělohávek, M.D., Ph.D.

*Department of Nuclear Medicine/PET Center, Na Homolce Hospital*

### Grant NR 8304-3

**Title:** The importance of establishing markers for inflammation and oxidative stress in condensates of exhaled air, in order to monitor and manage the progression of cystic fibrosis (CF)

**Period:** 2005–2007

**Author:**

Assoc. Prof. Jaromír Musil, M.D.,  
*2nd Medical Faculty, Charles University*

**Co-Author for Na Homolce Hospital:**

Miroslav Průcha, M.D., PhD.  
*Department of Clinical Biochemistry, Hematology and Immunology, Na Homolce Hospital*

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### Grant IGA NA 7452-3

**Title:** Correlations between the genotype and phenotype of family-related hypercholesterolemia in children and adolescents

**Period:** 2003–2005

**Author:**

Prof. J. Hyánek, M.D., Ph.D.  
*Department of Clinical Biochemistry, Hematology and Immunology, Na Homolce Hospital*

### Grant NF 7625-3

**Title:** Idiopathic generalized epilepsy: Correlation between genotypes and phenotypes. Analysis of gene mutation for voltage-gated sodium-channels (SCN1A, SCN1B, SCN2A)

**Period:** 2002–2005

**Author:**

Aleš Tomek, M.D.

*Motol Teaching Hospital*

**Co-Author for Na Homolce Hospital:**

Václav Maňoška, M.D.

*Department of Clinical Biochemistry, Hematology and Immunology, Na Homolce Hospital*

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### Grant NR 8124-3

**Title:** Autosomal dominant spinocerebral ataxia – extending molecular genetic diagnostics and on-going longitudinal multidisciplinary study of patients' families

**Period:** 2003–2005

**Author:**

Alena Zumrová, M.D.

*Children's Neurological Clinic, Charles University 2nd Medical Faculty, Motol Teaching Hospital*

**Co-Author for Na Homolce Hospital:**

Václav Maňoška, M.D.

*Department of Clinical Biochemistry, Hematology and Immunology, Na Homolce Hospital*

# A Selection of Publications in 2005

(containing prestigious publications, whose authors or co-authors are from Na Homolce Hospital)

## Foreign Publications

### Magazine Articles

BAUER, P. – KOTLIAROVÁ, S. – MAŤOŠKA, V. :Fluorescent Multiplex PCR: Fast Method for Autosomal Dominant Spinocerebellar Ataxias Screening. *Russian Journal of Genetics*, 2005, vol. 41, no. 6, pp. 675–678. ISSN 1022-7954.

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BĚLOHLÁVEK, O. – VOTRUBOVÁ, J. – SKOPALOVÁ, M. – FENCL, P. The detection of aortic valve infection by FDG-PET/CT in a patient with infection following total knee replacement. *Europ. Journal of Nuclear Medicine a. Mol. Imaging*, 2005, vol. 32, no. 4, pp. 518–518. ISSN 1619-7070.

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ČÁP, P. – PEHAL, F. – CHLÁDEK, J. – MALÝ, M. Analysis of exhaled leukotrienes in nonasthmatic adult patients with seasonal allergic rhinitis. *Allergy*, 2005, vol. 60, no. 2, pp. 171–176. ISSN 0105-4538.

---

GUILLERMINET, C. – GSCHWIND, R. – MAKOVIČKA, J. – SPĚVÁČEK, V. – SOUKUP, M. – NOVOTNÝ, J. Comparative study of polyacrylamid gels and thermoluminescent dosimeters used in external radiotherapy. *Radiation Measurements*, 2005, vol. 39, no. 2, pp. 39–42. ISSN 1350-4487.

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KALOVÁ, E. – VLČEK, K. – JAROLÍMOVÁ, E. Corresponding results in real space and computer tests: allothetic orientation and memory for time sequence is impaired in early stages of Alzheimer's disease. *Behavioural Brain Research*, 2005, vol. 159, no. 2, pp. 175–186. ISSN 0166-4328.

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KOUBA, M. – MAALOUFOVÁ, J. – CAMPR, V. – BĚLOHLÁVEK, O. – DRUGOVÁ, B. G-CSF stimulated islands of haematopoiesis mimicking disseminated malignancy on PET-CT and MRI scans in a patient with hypoplastic marrow disorder. *British Journal of Haematology*, 2005, vol. 130, no. 6, pp. 807–807. ISSN 0007-1048.

LIŠČÁK, R. – VLADYKA, V. – ŠIMONOVÁ, G. – VYMAZAL, J. – NOVOTNÝ, J. Gamma knife surgery of brain cavernous hemangiomas. *Journal of Neurosurgery*, 2005, vol. 102, no. January, pp. 207–213. ISSN 0022-3085.

---

MAGAGE, S. – LINHART, A. – BULTAS, J. – VOJÁČEK, J. – MATES, M. – PALEČEK, T. – POPELOVÁ, J. – TINTĚRA, J. – ASCHERMANN, M. – GOLDMAN, M. – DESNICK, R. Fabry Disease: Percutaneous Transluminal Septal Myocardial Ablation Markedly Improved Symptomatic Left Ventricular Hypertrophy and Outflow Tract Obstruction in a Classically Affected Male. *Echocardiography*, 2005, vol. 22, no. 4, pp. 333–339. ISSN 0742-2822.

---

MAJALI, M. – NOVOTNÝ, J. Computational model for the estimation of the extracranial doses received during Leksell gamma knife model C treatment. *Journal of Neurosurgery*, 2005, vol. 102, no. January, pp. 14–18. ISSN 0022-3085.

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MICHÁLEK, P. – DOLEČEK, L. – ŠTÁDLER, P. Ganglion impar block in noncancer perineal pain: What drugs, what strategy?. *Anesthesiology*, 2005, vol. 103, no. 1, pp. 212–213. ISSN 0003-3022.

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NEUŽIL, P. – WEICHET, J. – MALCHANO, Z. – REDDY, V. Integration of 3 Dimensional cardiac computed tomography images with real-time electroanatomic mapping to guide catheter ablation of atrial fibrillation. *Circulation*, 2005, vol. 112, no. 2, pp. e35–e36. ISSN 0009-7322.

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NOVOTNÝ, J. – VYMAZAL, J. – TLACHÁČOVÁ, D. – SCHMITT, M. – CHUDA, P. – URGOŠÍK, D. – LIŠČÁK, R. Does new magnetic resonance imaging technology provide better geometrical accuracy during stereotactic imaging?. *Journal of Neurosurgery*, 2005, vol. 102, no. January, pp. 8–13. ISSN 0022-3085.

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PEKOVÁ, S. – MARKOVÁ, J. – PAJER, P. – DVOŘÁK, M. – CETKOVSKÝ, P. – SCHWARZ, J. Touch-down reverse transcriptase-PCR detection of IgV(H) rearrangement and. *Molecular diagnosis*, 2005, vol. 9, no. 1, pp. 23–34. ISSN 1084-8592.

RŮŽIČKA, E. – URGOŠÍK, D. – JECH, R. – ROTH, J. – VYMAZAL, J. – MEČÍŘ, P. – VLADYKA, V. Hemiparkinsonism and levodopa-induced dyskinesias after focal nigral lesion. *Movement Disorders*, 2005, vol. 20, no. number 6, pp. 759–762. ISSN 0885-3185.

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ŠIMONOVÁ, G. – NOVOTNÝ, J. – LIŠČÁK, R. Low-grade gliomas treated by fractionated gamma knife surgery. *Journal of Neurosurgery*, 2005, vol. 102, no. January, pp. 19–24. ISSN 0022-3085.

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ŠINDELÁŘOVÁ, Š. – MICHALOVÁ, K. – ZEMANOVÁ, Z. – RANSDORFOVÁ, Š. – BŘEZINOVÁ, J. – PEKOVÁ, S. – SCHWARZ, J. – KARBAN, J. – CMUNT, E. Incidence of chromosomal anomalies detected with FISH and their clinical correlations in B-chronic lymphocytic leukemia. *Cancer Genetics and Cytogenetics*, 2005, vol. 160, no. 1, pp. 27–34. ISSN 0165-4608.

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TLACHÁČOVÁ, D. – SCHMITT, M. – NOVOTNÝ, J. – MAJALI, M. – LIŠČÁK, R. A comparison of the gamma knife model C and the Automatic Positioning System with Leksell model B. *Journal of Neurosurgery*, 2005, vol. 102, no. January, pp. 25–28. ISSN 0022-3085.

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URGOŠÍK, D. – LIŠČÁK, R. – NOVOTNÝ, J. – VYMAZAL, J. – VLADYKA, V. Treatment of essential trigeminal neuralgia with gamma knife surgery. *Journal of Neurosurgery*, 2005, vol. 102, no. January, pp. 29–33. ISSN 0022-3085.

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VESELÁ, M. – ŠTĚTKÁŘOVÁ, I. – LISÝ, J. Prevalence of C1/C2 involvement in Czech rheumatoid arthritis patients, correlation of pain intensity, and distance of ventral subluxation. *Rheumatology International*, 2005, vol. Jan 22, no. 1, pp. 1–7. ISSN 0172-8172.



VLADYKA, V. – LIŠČÁK, R. – ŠIMONOVÁ, G. – PILBAUER, J. – HEJDUKOVÁ, I. – NOVÁČEK, L. Progress in glaucoma treatment research: a nonrandomized prospective study of 102 patients with advanced refractory glaucoma treated by Leksell gamma knife irradiation. *Journal of Neurosurgery*, 2005, vol. 102, no. January, pp. 214–219. ISSN 0022-3085.

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VOJÁČEK, J. – MATES, M. – POPELOVÁ, J. – PAVEL, P. Perforation of the right atrium and the ascending aorta following percutaneous transcatheter atrial septal defect closure. *Interactive CardioVascular and Thoracic Surgery*, 2005, vol. 4, no. 4, pp. 157–159. ISSN 1569-9293.

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**In June 2005, the Czech Cardiovascular Surgery Association awarded the 2004 prize for the best published work in the field for the paper:**

ŠTÁDLER, P. – ŠPAČEK, M. – BĚLOHLÁVEK, O. – MICHÁLEK, P. Diagnosis of vascular prosthesis infection by means of the FDG-PET/CT scan. *Journal of Vascular Surgery*, 2004, 40, p. 1246–1247.

## Domestic Publications

### Monography

ČERTÍK, B. - MACHART, S. - NOVÁK, M. Diseases of the carotid and large vessels of the aortal arch. 1st. ed. Prague: Grada Publishing, a.s., 2005. 164 s. ISBN 978-80-247-1268-0.

---

KUTÁLKOVÁ, D. Czech Speech Therapy 2004. 1st. ed. Prague: Galén, 2005. 182 s. ISBN 978-80-7262-383-9.

---

KUTÁLKOVÁ, D. How to prepare your child for school. 1st. ed. Prague: Grada, 2005. 168 s. ISBN 978-80-247-1040-2.

---

KUTÁLKOVÁ, D. Selection from the work of Prof. Miloš Sovák. 1st. ed. Prague: Galén, 2005. 202 s. ISBN 978-80-7262-384-6.

---

KUTÁLKOVÁ, D. Speech development step by step. 1st. ed. Prague: Grada, 2005. 100 s. ISBN 978-80-247-1026-6.

---

NIEDERLE, P. Adult echocardiography. 2nd. ed. Prague: Triton, 2005. 395 s. ISBN 978-80-7254-718-0.

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VOJTĚCH, Z. Atlas of adult electroencephalography, Part 1. 1st. ed. Prague: Triton, 2005. 495 s. ISBN 978-80-7254-704-3.

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### Book Chapters

ČÁP, P. Kašel. In Pneumology. Prague: Karolinum, 2005, pp. 40–47. ISBN 978-80-246-0993-5.

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FENCL, P. – ZAVORAL, M. Imaging methods. In Pancreatic carcinoma. Prague: Galén, 2005, pp. 137–150. ISBN 978-80-7262-348-8.

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FENCL, P. CT colonography measurement of stricture length - an useful method in rectosigmoideal stenting. In Stenting in the gastrointestinal tract. Hradec Králové: Olga Čermáková, 2005, pp. 121–127. ISBN 978-80-86703-04-6.

CHYTKA, T. Principles of radiosurgery in treating tumors of the CNS. In Neurology 2005. Prague: Triton s.r.o., 2005, pp. 87–95. ISBN 978-80-7254-613-8.

---

JINDRÁK, V. – URBÁŠKOVÁ, P. – NYČ, O. Antibiotics. In Pharmacotherapy of internal diseases. Prague: Grada publishing, 2005, pp. 491–539. ISBN 978-80-247-0839-3.

---

KOŘÁN, M. Task Force on Traffic Psychology EFPA. In Psychological Days 2004. Olomouc: Palacký University, Olomouc, 2005, p. 72–72. ISBN 978-80-244-1059-3.

---

KUTÁLKOVÁ, D. Speech disorders in childhood. In Problem children and play. Prague: Nakladatelství Dr. Josef Raabe s.r.o., 2005, pp. 1–25. ISBN 978-80-86307-15-2.

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KUTÁLKOVÁ, D. Changes for the better or worse? Comparison of results from two questionnaire polls. In Czech Speech Therapy 2004. Prague: Galén, 2005, pp. 56–72. ISBN 978-80-7262-383-9.

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MANDYSOVÁ, E. – KMONÍČEK, P. – MRÁZ, T. Echocardiography in catheter-based occlusions for septal defects in the atria, ventricles and the left atrial appendage. In Echocardiography, Part 1 - Adult Echocardiography. Prague: Triton, 2005, pp. 330–333. ISBN 978-80-7254-718-0.

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MANDYSOVÁ, E. – MELUZÍN, J. – TÁBORSKÝ, M. Tissue doppler echocardiography. In Echocardiography, Part 1 - Adult Echocardiography. Prague: Triton, 2005, pp. 71–80. ISBN 978-80-7254-718-0.

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MANDYSOVÁ, E. – NEUŽIL, P. Echocardiography for cardiac rhythm disorders. In Echocardiography, Part 1 - Adult Echocardiography. Prague: Triton, 2005, pp. 308–315. ISBN 978-80-7254-718-0.

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MANDYSOVÁ, E. Tricuspid and pulmonary defects. In Echocardiography, Part 1 - Adult Echocardiography. Prague: Triton, 2005, pp. 133–141. ISBN 978-80-7254-718-0.

PROCHÁZKA, T. Computer and quantitative EEG, brain mapping. In Atlas of adult electroencephalography Part 1. Prague: Triton, 2005, pp. 461–493. ISBN 978-80-7254-704-3.

---

ŠTĚTKÁŘOVÁ, I. Electrophysiological methods in the diagnosis of spinal dysfunction. In Peter V and coll: the spine and spinal cord. Prague: Galén, 2005, pp. 59–62. ISBN 978-80-7262-336-5.

---

ŠTĚTKÁŘOVÁ, I. Electrophysiological findings in central spinal lesions. In Habilitation and Inauguration Lectures at the First medical faculty, Charles University in Prague 2004. Prague 5: Galen, 2005, pp. 100–106. ISBN 978-80-7262-338-9.

---

ŠTĚTKÁŘOVÁ, I. Casuistry. In Peter V and coll: the spine and spinal cord. Prague: Galén, 2005, pp. 154-155. ISBN 978-80-7262-336-5.

---

VOJTĚCH, Z. – MAREČKOVÁ, I. Normal EEG with vigilance. In Atlas of adult electroencephalography. Prague: Triton, 2005, pp. 175–346. ISBN 978-80-7254-704-3.

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VOJTĚCH, Z. Artefacts. In Atlas of adult electroencephalography. Prague: Triton, 2005, pp. 22–174. ISBN 978-80-7254-704-3.

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VOJTĚCH, Z. Description of EEG samples. In Atlas of adult electroencephalography. Prague: Triton, 2005, pp. 13–18. ISBN 978-80-7254-704-3.

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VOJTĚCH, Z. Rules of localization in EEG. In Atlas of adult electroencephalography. Praha: Triton, 2005, pp. 19–21. ISBN 978-80-7254-704-3.

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VOJTĚCH, Z. EEG of normal sleep. In Atlas of adult electroencephalography. Prague: Triton, 2005, pp. 347–460. ISBN 978-80-7254-704-3.

VOJTĚCH, Z. Introduction. In Atlas of adult electroencephalography. Prague: Triton, 2005, pp. 9–11. ISBN 978-80-7254-704-3.

---

WOHL, P. – JIRKOVSKÁ, A. – WOHL, P. – WOHL, R. – ZAZULA, R. – PELIKÁNOVÁ, T. – KEISLICOVÁ, E. Nutritional care of diabetics with diabetic foot. In A yearbook of intensive care medicine 2005. Prague: Galén, 2005, pp. 91–104. ISBN 978-80-7262-344-0.

---

WOHL, P. – KRUŠINOVÁ, E. – WOHL, P. – WOHL, R. – ZAZULA, R. – PELIKÁNOVÁ, T. Insulin resistance - metabolic inflexibility of energy substrates in diabetics. In A yearbook of intensive care medicine 2005. Prague: Galén, 2005, pp. 78–84. ISBN 978-80-7262-344-0.

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WOHL, P. – WOHL, P. – WOHL, R. – DRASTICH, P. – ZAZULA, R. Acute complications of non-specific intestinal infections. In A yearbook of intensive care medicine 2005. Prague: Galén, 2005, pp. 174–179. ISBN 978-80-7262-344-0.

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WOHL, P. – WOHL, P. – WOHL, R. – ZAZULA, R. Acute liver failure. In A yearbook of intensive care medicine 2005. Prague: Galén, 2005, pp. 153–157. ISBN 978-80-7262-344-0.

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WOHL, P. – WOHL, P. – WOHL, R. – ZAZULA, R. Alcoholic liver disease. In A yearbook of intensive care medicine 2005. Prague: Galén, 2005, pp. 158–164. ISBN 978-80-7262-344-0.

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WOHL, P. – WOHL, R. – ZAZULA, R. – WOHL, P. – PELIKÁNOVÁ, T. Vascular pancreatic complications. In A yearbook of intensive care medicine 2005. Prague: Galén, 2005, pp. 213–216. ISBN 978-80-7262-344-0.

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WOHL, R. – BENEŠ, P. – WOHL, P. – ZAZULA, R. – PELIKÁNOVÁ, T. Complications of parenteral nutrition. In A yearbook of intensive care medicine 2005. Prague: Galén, 2005, pp. 116–126. ISBN 978-80-7262-344-0.

# Teaching activities in 2005

## Undergraduate teaching

The following specialized units from Na Homolce Hospital participated in the teaching of students from Charles University's Faculties of Medicine, the Faculty of Physical Education and Sport, the Technical University's Faculty of Natural Sciences and the University of Southern Bohemia

Department of Neurology	CU 1st MF, CU 3rd MF
Department of Neurosurgery	CU 1st MF, CU 3rd MF
Department of Stereotactic and Radiation Neurosurgery	CU 3rd MF, TUFNS
Department of Cardiology	CU 3rd MF
Department of Cardiac surgery	CU 3rd MF
Department of Vascular Surgery	CU 2nd MF
Department of Internal Medicine	CU 3rd MF
Department of General Surgery	CU 3rd MF
Department of Nephrology	CU 2nd MF, FPES, USB
Department of ENT	CU 2nd MF
Department of Radiodiagnostics	CU 1st MF, CU 3rd MF, TUFNS, USB
Department of Nuclear Medicine/PET Center	CU1st MF, CU 3rd MF, TUFNS
Department of Clinical Microbiology and Antibiotic Center	CU 1st MF, CU 2nd MF

## Post graduate teaching with the Institute for Post Graduate Studies

The following specialized units from Na Homolce Hospital participated in the post graduate teaching of physicians and nursing through the IPGS

Department of Neurology	Acute neurology
	Neurological intensive care
	Epileptology
Department of Neurosurgery	Neurotraumatology
	Neurooncology
Department of Stereotactic and Radiation Neurosurgery	Stereotactic neurosurgery
Department of Cardiology	Echocardiograms
Department of Vascular Surgery	Vascular surgery
Department of General Surgery	Surgery
Department of Gynecology and minimally invasive surgery	Laparoscopic oncological gynecology
Department of AR	Anesthesiology and resuscitation
	Emergency medicine

Department of Radiodiagnostics	Neurology
	Radiology
Department of Nuclear Medicine/PET Center	Nuclear Medicine
	Radiodiagnostics
Department of Clinical Biochemistry, Hematology and Allergology	Clinical Immunology
	Allergology
	Spinal fluid
	Urine sediments
Department of Clinical Microbiology and Antibiotic center	Clinical Microbiology
	Anesthesiology and resuscitation
	Intensive care medicine
	Infectious medicine

## Other training activities:

Department of stereotactic and radiation neurosurgery	postgraduate training for TUFNS
Department of General Surgery	training of physicians for the International Health Medical Education Consortium project
ARO	courses for GPs sponsored by the Medical Chamber
Department of Nephrology	Medea postgraduate nursing training
Department of Radiodiagnostics	training for the European School of magnetic resonance
Department of Nuclear Medicine/PET Center	courses for foreign specialists and advisory activities for a model project sponsored by the International Atomic Energy Agency (IAEA)

## Training and reference centers

Department of Neurosurgery	Center for navigational neurosurgery for CR and the countries of the eastern European region
	Center for dynamic stabilization of the spine (Bryan, Prestige) for CR and countries of the eastern European region
Department of Cardiology	Center for resynchronization treatment of heart failure (biventricular stimulation) for EU countries
Department of General Surgery	Center for anal prolapse and Long hemorrhoid surgery for CR
	Center for ankle joint surgery
	Center for knee joint surgery using an LCS rotating plate
	Center for Orthopilot orthopaedic navigation
Department of Gynecology and Minimally Invasive Surgery	Center for gynecological oncosurgery
Department of Clinical Biochemistry, Hematology and Allergology	Reference laboratory for the system of external quality control in clinical biochemistry
	Reference laboratory for the system of external quality control in spinal fluid
	Reference laboratory for the system of external quality control in CLL diagnostics



## Czech Medical Chamber accreditation for training in the physicians' lifetime training program

CMC accreditation has been awarded to specialized Na Homolce Hospital units in the following areas:

- Allergology and Clinical Immunology
- Anesthesiology and Resuscitation
- Dermatovenerology
- Epidemiology
- Balneology and Physiotherapy
- Gynecology and Obstetrics
- Surgery
- Internal Medicine
- Medical Microbiology
- Cardiology
- Cardiac Surgery
- Clinical Biochemistry
- Neurology
- Neurosurgery
- Nuclear Medicine
- Ophthalmology
- Otorhinolaryngology (ENT)
- Pathological Anatomy
- Pediatrics
- Radiodiagnostics

# Principal Memberships of Professional Societies, Committees and Councils

## Department of Neurology

**Czech Neurological Society – Czech Medical Society** (Committee Member)  
**Czech League Against Epilepsy – Czech Medical Society** (Committee Member)  
**Specialist Board of Neurology – Czech Medical Chamber** (Committee Chair)

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## Department of Neurosurgery

**Czech Spondylosurgical Society – Czech Medical Society** (Vice-Chair of the Company)  
**World Federation of Neurosurgical Societies**  
**European Association of Neurosurgical Societies**

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## Department of Stereotactic and Radiation Neurosurgery

**European Society for Stereotactic and Functional Neurosurgery – ESSFN** (Executive Committee Member)  
**Czech Neurological Society – Czech Medical Society – Extrapyrarnidal Section** (Committee Member)

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## Department of Cardiology

**Echocardiography Working Group - Czech Society of Cardiology** (Working Group Committee Member)  
**Interventional Cardioangiology Working Group - Czech Society of Cardiology** (Working Group Committee Member)  
**Arrhythmia and Permanent Cardiac Stimulation - Czech Society of Cardiology** (Committee Chair and Working Group Committee Member)  
**Academic Council of Charles University's 3rd Medical Faculty** (Member)  
**Council of the Cardiovascular Disease Research Center** (Czech Ministry of Education, Youth and Sports) (Member)  
**Scientific Council of Poděbrady Spa a.s.** (Member)

### Department of Cardiac Surgery

**Czech Society for Cardiovascular Surgery – Czech Medical Chamber** (Society Committee Member)

**European Association for Cardio-thoracic Surgery**

**European Society for Cardiovascular Surgery**

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### Department of Vascular Surgery

**Czech Society for Cardiovascular Surgery – Czech Medical Chamber** (Vice-Chair and Society Committee Member)

**Accreditation Commission for Vascular Surgery – Czech Ministry of Health** (Commission Chair)

**European Society for Cardiovascular Surgery** (National Delegate)

**European Society for Vascular Surgery**

**International College of Surgeons**

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### Department of Internal Medicine

**Czech Society for Artificial Nutrition and Intensive Metabolic Care - Czech Medical Chamber**

(Society Committee Member)

**European Society for Parenteral and Enteral Nutrition**

**Department of Gynecology and Minimally Invasive Surgery**

**Czech Society for Gynecological Endoscopy and Pelvic Surgery – CSGE** (Society Chair)

**European Society for Gynaecological Endoscopy – ESGE** (Member of the Society's Scientific Council)

**European Institute of Telesurgery – EITS, Robotic Surgery** (Council Member)

### Department of Nephrology

**International Society of Nephrology**

**American Society of Nephrology**

**Health Care Without Harm Europe Foundation** (Advisor to the Foundation)

**World Transplant Games Federation** (National Delegate)

**European Transplant and Dialysis Sports Federation** (National Delegate)

**Sports Club for Dialysis and Transplant Patients – Czech Association of Internally Handicapped Sportsmen and Women** (Vice-Chair)

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### Department of Radiodiagnostics

**Czech Radiological Society** (Committee Member)

**Czech Neuroradiological Society** (Vice-Chair)

**Association of Interventional Radiologists – Czech Radiological Society** (Committee Member)

**European Society of Neuroradiology** (National Delegate)

**Academia Medica Pragensis** (Member of the Advisory Board)

**European Society for Magnetic Resonance in Medicine and Biology**

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### Department of Nuclear Medicine/PET Center

**Czech Society of Nuclear Medicine – Czech Medical Society (Vice-Chair for Foreign Relations)**

**European Association of Nuclear Medicine** (National Delegate)

**European Society of Gastrointestinal and Abdominal Radiology**

**Cardiovascular and Interventional Radiological Society Europe**

**Society of Cardiovascular and Interventional Radiology USA**

## Department of Clinical Biochemistry, Hematology and Immunology

**European Atherosclerotic Society**  
**Immunocompromised Host Society**  
**EFNS Scientific Panel for CSF**  
**European CSF Consensus Group**  
**Society for the Study of Inborn Errors of Metabolism**  
**American Association of Clinical Chemistry**  
**American Heart Association**  
**International Federation of Clinical Chemistry**  
**International Society for Newborn Screening**

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## Department of Clinical Microbiology/Antibiotic Center

**Advisory Board for Bacteriology at the State Institute of Health** (Advisory Board Chair)  
**Working Group for nosocomial infections** (working group coordinator)  
**Committee for the National Program of Antibiotic Policies – Czech Ministry of Health** (Committee Secretary)  
**Expert Commission for Medical Microbiology – Czech Medical Chamber and Scientific Board** (Expert Commission Chair)  
**European Society of Clinical Microbiology and Infectious Diseases – ESCMID** (National delegation for the European branch)  
**European Study Group on Antibiotic Policies – ESGAP at ESCMID** (Member of the ESGAP Executive Committee)  
**IPSE – Improving Patient Safety in Europe – project** (National Delegate)  
**Council for Registering nosocomial infections – Health Care and Pharmacies Division at the Czech Ministry of Health** (Council Chair)  
**Society of Microbiology laboratory technicians** (Committee Member)

# Customer Orientation



# Patient Safety

**Patient safety was again a priority in 2005. Accreditation not only signals that a medical facility has complied with all the required standards in its organization and provision of health care, but also that it is making systematic efforts to improve its performance in these areas and to reduce any potential risks to patients and staff.**

## Quality and Safety Committee

Na Homolce Hospital has introduced a system to improve quality and safety, in order to minimize the human error element in the provision of medical care. It is based on the conscious identification of errors and deficiencies in the organization and provision of patient care and the progressive phasing in of programs to eliminate or improve them. Na Homolce has established key processes that play an important role in ensuring high quality and safe care for its patients. Examples of some of these are the administration of drugs, controlling nosocomial infections, monitoring patient satisfaction, etc. Dozens of markers are tracked in order to assess the stage of these processes in the hospital and to ensure their safety. Not only has the hospital been monitoring patient falls and detecting bedsores and infections, but also errors that have occurred in the administration of medication or serious failures in diagnostic or therapeutic procedures. The tracking system also covers the timely detection of errors (for example, the fact that a patient is allergic to a particular drug being discovered just before it is administered), which have to be eliminated. The Quality Management advisory board for Na Homolce Managing Director is the Quality and Safety Committee, where physicians and nurses are represented as well as administrative and technical personnel. The twenty-two member board is interdisciplinary, which enables it to make complex evaluations of reported adverse events and the results of specific quality markers. The committee also serves as a channel for employee suggestions and practical observations from different departments. It then carries out risk analyses and proposes remedial and preventative measures to the hospital executive.



## Patient Safety and Privacy

One of the principal elements of medical care is patient safety and a fundamental part of this is the clear identification of patients and medical supplies. In 2005, Na Homolce patients began to be routinely issued with identification bracelets. A plastic PID (Personal Identification) bracelet is worn on their wrist, marked with a barcode that not only clearly identifies the patients, but also provides information on all the interventions that have been, or are due to be performed on them during their hospital stay.

An important factor contributing to a reduction in the number of prescription errors has been the introduction of an integrated record of prescription medication that is applied throughout the hospital. All prescriptions for drugs to be administered to ward patients follow a standard format and are filed in the same folder in the medical records in every hospital department.

An essential aspect of patient care required by the accreditation standards is patient privacy during health care delivery. Na Homolce Hospital continually strives to consistently monitor and control how the patient's right to privacy is upheld in a variety of situations.

## Rights of patients and their families

An essential part of providing medical care is the right of patients to be clearly informed of the nature of their illness and the proposed treatment, including details of any available alternatives and its likelihood of success. A special hospital directive also provides a register of major diagnostic or therapeutic interventions which require the patient's written consent. Without this consent, the intervention cannot be performed. The patient has the right to refuse any proposed diagnostic or therapeutic intervention, again by signing a written statement. Na Homolce Hospital also lays great emphasis on maintaining the confidentiality of all information concerning the medical condition of its patients. On admission to hospital, patients are always asked to provide the names of those people who have the right to be informed of their state of health.

# Responses to questionnaires on patient satisfaction from 2000 to 2005

(on a scale of 1-5)

## Admissions procedure

2005	1.13
2004	1.12
2003	1.12
2002	1.13
2001	1.12
2000	1.12

## Standard of care provided

2005	1.09
2004	1.09
2003	1.08
2002	1.10
2001	1.09
2000	1.10

## Staff attitude and willingness to help

2005	1.13
2004	1.12
2003	1.13
2002	1.12
2001	1.12
2000	1.13

## Explanations given of the patient's condition

2005	1.20
2004	1.19
2003	1.26
2002	1.27
2001	1.29
2000	1.29

## Interest in the patient and his or her needs

2005	1.19
2004	1.21
2003	1.21
2002	1.20
2001	1.20
2000	1.20

## Sufficient information provided on discharge

2005	1.15
2004	1.19
2003	1.23
2002	1.22
2001	1.25
2000	1.27

# Unique medical interventions performed at Na Homolce Hospital in 2005

- The application of a Tandem Heart machine for temporary cardiac support in electrophysiology during an ablation for ventricular arrhythmia. This technique was used for the first time in the Czech Republic.
- A robotic-assisted ablation was performed using the Hansen CCS for atrial fibrillation. This intervention was performed for the first time ever.
- The pulmonary veins were isolated using a laser balloon and a cryo balloon to treat atrial fibrillation. This intervention was performed for the first time in the Czech Republic.
- Non Excitatory Pacing methods were introduced to treat advanced heart failure. This intervention was performed for the first time in the Czech Republic.
- A robotic-assisted bariatric intervention was performed for the first time in the Czech Republic using the da Vinci system – an adjustable bandage was applied to the stomach and a mini-gastric bypass was created.
- A robotic-assisted sleeve gastrectomy (stomach resection) using the da Vinci system, was performed for the first time in the Czech Republic.
- Laparoscopic fundoplication surgery for esophageal reflux disease and diaphragmatic hernia was performed using the da Vinci robotic operating system for the first time in the Czech Republic.
- Robotic-assisted laparoscopic reconstructions of incisional hernias were performed for the first time in the Czech Republic using the da Vinci system.
- A robotic-assisted cholecystectomy was performed for the first time in the Czech Republic using the da Vinci system.
- A robotic-assisted radical prostatectomy was performed for the first time in the Czech Republic using the da Vinci system.
- A laparoscopic hysterectomy with pelvic lymphadenectomy was performed by the da Vinci robotic operating system for the first time in the Czech Republic.
- A robotic-assisted iliofemoral and aortofemoral bypass was performed for the first time in the Czech Republic using the da Vinci system.

# Patient Clubs

## Club for parents of children suffering from lipid disorders

This Club was established in 1995 through the Clinic for Metabolic Disorders in Na Homolce Hospital. It links families with children suffering from inherited disorders related to the metabolism of lipids, known as hypercholesterolemia. Patients who have inherited this disorder have increased levels of cholesterol in their blood, which gives rise to a high risk of cardiovascular diseases. Basic treatment for children suffering from this disorder involves following a controlled low-calorie diet, with medication prescribed for those patients who are worst affected. The Club is affiliated with the Association for the assistance of chronically ill children, and in 2005 its membership totaled 111. The Club is run primarily by medical volunteers and parents. Parents, doctors and dietary nurses work closely together to form good health habits in families at risk, to provide information on health nutrition and suitable types of food products, as well as new discoveries concerning the treatment of hypercholesterolemia. The Club's traditional and popular activities include the publication of the club magazine, Cholesterol, organized water therapy exercises in the Na Homolce Hospital pool, day or weekend trips, and, most of all, the summer fitness camp, focusing on a low cholesterol diet and exercise. During the summer of 2005, children and their parents met for what was the ninth week-long therapeutic camp with a low-calorie diet in Terchová, Slovakia. The Club for parents of children suffering from lipid disorders plays an important part in preventing cardiovascular disease by encouraging good nutrition and eating habits as well as increased physical activity.

**Contact details:** Club for parents of children suffering from lipid disorders, Clinic for Metabolic Disorders  
Na Homolce Hospital, Roentgenova 2, 150 30 Prague 5  
Tel.: 257 273 229, E-mail: vera.martinkova@homolka.cz

## Klub AA Homolka

Klub AA Homolka was established by the Department of Pediatric Allergology and Clinical Immunology in Na Homolce in 1998. It brings together families with children suffering from allergies and asthma. Last year there were 120 members (families), representing not only patients treated at Na Homolce, but also those from other units in Prague and elsewhere. The club's activities are diverse, ranging from the retrieval and circulation of information concerning individual allergic diseases, through the organization of discussions with experts for the parents, to the publication of the club magazine, Motýlek (Butterfly), which includes contributions from the children themselves, or organizing entertaining and educational activities for the young patients. The most popular club event is the annual three-week trip to the sea for children with allergies, when they are accompanied by medical professionals. This is for school-age children suffering from atopic eczema, bronchial asthma, allergic rhinitis, immune disorders or repeated respiratory infections. Last year the children spent their therapeutic holiday in Messagal, Greece. Club AA Homolka is a member of the Association for the assistance of chronically ill children.

**Contact details:** Klub AA Homolka, Dept. of Pediatric Allergology and Immunology  
Na Homolce Hospital, Roentgenova 2, 150 30 Prague 5  
Tel.: 257 272 017

## Sports club for dialysis and transplant patients – Czech Sporting Association

The sports club for dialysis and transplant patients was established by the Hemodialysis Center at Na Homolce Hospital in 1995. It is a member of the Association of internally handicapped sportsmen and women and also a member of the WTGD and EDTPF international federations. Last year it united 192 active members and a number of supporters from throughout the Czech Republic. The club's activities are not confined to creating and promoting an integrated physiotherapy program for patients who have to rely on artificial kidney treatment, or those living with a transplanted kidney (the creation of education and reference materials for the disabled, specialized lectures), but also extend into putting these ideas into practice. Examples of this are the organization of the annual winter and summer sporting competitions for dialysis and transplant patients. In 2005 the twelfth annual games were held in the Czech Republic with the participation of Slovak and Austrian patients. Czech sportsmen and women brought back 4 medals from the 6th International Games for dialysis and transplant patients in Bormio, Italy, held under the auspices of the WTGF, and the same number were won at the Olympic Games for dialysis and transplant patients, also under the patronage of the WTGF, in London, Ontario, Canada.

**Contact details:** Sports club for dialysis and transplant patients, Hemodialysis Center  
Na Homolce Hospital, Roentgenova 2, 150 30 Prague 5  
Tel.: 257 272 220, E-mail: lukas.svoboda@homolka.cz



A stylized graphic of a globe is positioned on the left side of the page. It features a dark grey base, a light grey top, and a teal-colored band around the middle. The globe is partially cut off by the left edge of the frame.

# Economic Stability

# Report by the Supervisory Board on Management Activities in 2005

The Supervisory Board of Na Homolce Hospital is empowered by its Memorandum of Association, issued by the Czech Ministry of Health. Its activities are governed by legal directives and are developed to reflect the general interests of the hospital and its patients. The principal criteria influencing the board's supervisory activities are the first-class quality and scope of the health care provided and the maintenance of the hospital's long-term financial stability.

The composition of the Supervisory Board remained unchanged in 2005, and comprised the following members:

<b>Chairperson:</b>	Milan Fafejta	
<b>Vice-Chairperson:</b>	Assoc. Prof. Eliška Jelínková, M.S., Ph.D.	
<b>Members:</b>	Libuše Budská	Dr. Miroslava Ouředníková
	Pavel Henyš, M.D.	Jan Polák, M.Sc. (Arch.)
	Martin Kocourek, M.Sc.	Petr Sláma, M.Sc.

5 meetings of the Supervisory Board were held in 2005.

The primary function of the Supervisory Board was to control and monitor:

- effective financial management of the hospital in compliance with the approved business plan,
- planned investments and their funding,
- management of payables and receivables with a view to maintaining solvency,
- fulfilling the hospital's long-term development strategies,
- the process of international accreditation,
- preparation of the business plan for 2006.

We can certify that the Supervisory Board found no deficiencies in the areas it controlled.

The Supervisory Board congratulates the hospital on successfully passing an international accreditation audit, resulting in its being awarded JCI accreditation, which, added to its previous ISO certification, proves that Na Homolce Hospital is a truly first-class institution, even by global standards.

The Supervisory Board thanks the Managing Director, Dr. Oldřich Šubrt, Ph.D., MBA, members of the executive and all employees of Na Homolce Hospital for their work during 2005.



**Milan Fafejta, M.Sc.**  
Chairperson of the Supervisory Board



## Auditors's Opinion

The Company's statutory body is responsible for keeping correct, accurate, complete, supportable, clear and well structured accounting records in a way that gurantees their durability. The auditor's duty is to write a report and express an opinion on the Company's financial statements and its annual report in compliance with Act No. 254/2000 Coll., on Auditors and the Czech Republic's Chamber of Auditors.

Based on our evaluation of auditing procedures used nothing has come to our attention that causes us to believe that the accounting records of the audited company do not give a true and fair picture of the company's accounting and financial situation.

We have verified the compliance of information on the audited organization for the previous period, as shown in the annual report, with the audited financial statements compiled as at 31 December 2005. In our opinion, this information complies, in all material respects, with these financial statements from which they were drawn .

Čelákovice, 18 April 2006



**ATLAS AUDIT s.r.o.**  
**Tomáš Bartoš**  
Auditor, Licence No. 300

# Economic Information

## Balance Sheet (in thousands of CZK)

<b>ASSETS</b>	<b>as of 31. 12. 04</b>	<b>as of 31. 12. 05</b>
<b>A. Fixed assets</b>	<b>1,690,370</b>	<b>1,668,913</b>
1. Intangible fixed assets	52,096	62,922
2. Accumulated depreciation of intangible fixed assets	-28,894	-34,572
3. Tangible fixed assets	2,807,186	2,885,445
4. Accumulated depreciation of tangible fixed assets	-1,233,304	-1,338,169
5. Financial investments	93,286	93,286
<b>B. Current assets</b>	<b>733,714</b>	<b>813,017</b>
1. Inventory	51,467	57,082
2. Receivables	443,189	528,899
3. Financial assets	52,088	122,618
5. Temporary credit accounts	186,970	104,418
<b>TOTAL ASSETS</b>	<b>2,424,084</b>	<b>2,481,930</b>
<b>LIABILITIES</b>		
<b>C. Own resources</b>	<b>1,803,509</b>	<b>1,819,909</b>
1. Property funds	1,722,549	1,661,678
2. Financial funds	19,528	99,034
5. Net income	61,432	59,197
<b>D. Other resources</b>	<b>620,575</b>	<b>662,021</b>
1. Reserves	2,550	3,400
2. Long-term liabilities	154,173	136,937
3. Short-term liabilities	339,286	377,665
4. Bank credits	120,000	140,000
5. Temporary debit accounts	4,566	4,019
<b>TOTAL LIABILITIES</b>	<b>2,424,084</b>	<b>2,481,930</b>

## Profit and loss statement (in thousands of CZK)

	as of December 31st 2004	as of December 31st 2005
I. Revenue from merchandise	135,069	150,706
A. Costs of goods sold	113,854	126,098
Sales margin	21,216	24,608
II. Production	2,241,614	2,527,398
1. Revenue from own products and services	2,241,614	2,527,398
B. 1. Material and energy consumption	1,134,762	1,341,167
2. Services	167,220	222,860
Value added	939,632	963,371
III. Operating grants	5,313	3,478
C. Personnel expenses	735,409	786,458
1. Wages and salaries	515,327	550,678
2. Social security expenses	191,650	207,250
3. Social expenses	28,432	28,530
D. Taxes and fees	1,285	181
GROSS OPERATING REVENUE	229,467	204,818
E. Depreciation of tangible and intangible fixed assets	129,494	129,803
IV. Revenue from sales of tangible and intangible fixed assets and materials	67	484
F. Net book value of tangible and intangible fixed assets sold	591	51
Revenue from tangible and intangible fixed asset sales	-523	432
V. Accounting for reserves and accruals and deferrals	0	0
G. Additions to reserves and accruals and deferrals	850	850
Difference between accounted reserves, accruals and deferrals	-850	-850
VI. Revenue from sales of securities	0	0
H. Securities sold	0	0
VIII. Other revenue	65,210	95,192
I. Other operating expenses	93,131	100,642
J. Income tax	9,248	9,951
PROFIT FOR THE CURRENT ACCOUNTING PERIOD	61,432	59,197

## Breakdown of costs by type in 2005

Material	48%
Energy	1%
Staff	29%
Depreciation	5%
Miscellaneous	17%

## Breakdown of costs by unit in 2005

Health Care Sector	81%
Commercial Sector	5%
Administrative Sector	14%
Cardiovascular program	36%
Neuroprogram	9%
General Medical Care program	12%
Complementary Services	17%
Outpatient clinics outside the main programs	1%
Anesthesiology and Resuscitation program	3%
Sterilization	1%
Health Care Commercial Department	3%
Pharmacy	3%
Rentals	1%
Economy and management	8%
Technical and operational	6%

## Breakdown of costs by revenue in 2005

General Health Insurance Company	61%
Other health insurance companies	27%
Direct payments	1%
Miscellaneous revenue	11%

# Na Homolce Hospital Benchmarking 2005

## Bed occupancy rate (in %)



## Average length of treatment (in days)



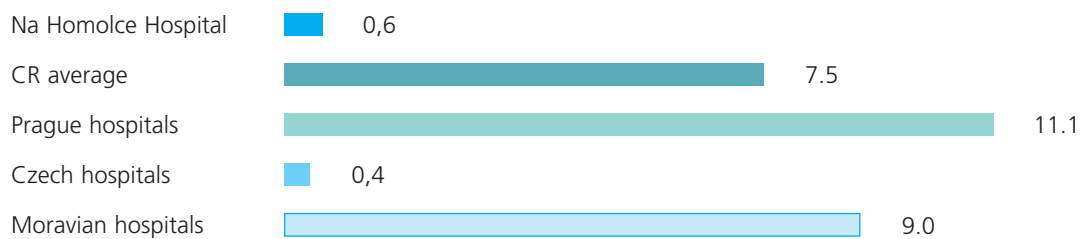
## Average monthly salary (in CZK)



### Overdue receivables as a percentage of total costs (in %)



### Overdue payables as a percentage of total costs (in %)



# Operating Efficiency

## Costs and revenues 2000–2005 (in million of CZK)

	2000	2001	2002	2003	2004	<b>2005</b>
Costs	1,344	1,640	1,924	2,189	2,386	<b>2,708</b>
Revenues	1,397	1,665	1,982	2,218	2,456	<b>2,777</b>

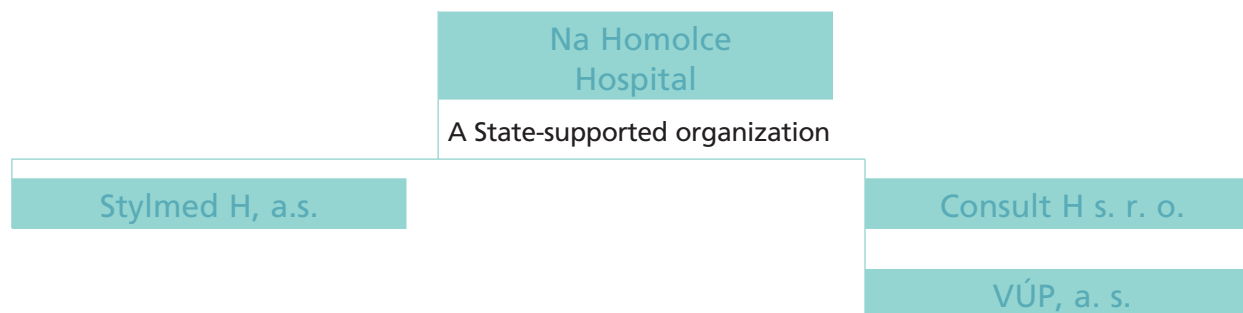
## Costs effectiveness 2000–2005 (in %)

	2000	2001	2002	2003	2004	<b>2005</b>
	3.95%	1.56%	3.03%	1.31%	2.57%	<b>2.18%</b>

## Overdue receivables 2000–2005 (in million of CZK)

	2000	2001	2002	2003	2004	<b>2005</b>
	70.0	34.2	23.5	167.1	198.9	<b>196.8</b>

# Economic Structure



## Stylmed H, a. s.

### Roentgenova 2, Prague 5

Date established: January 7th, 1998

Ownership structure to December 31st, 2005: Na Homolce Hospital 70%  
Other shareholders 30%

Sphere of business: Distribution of health care appliances  
Distribution of pharmaceuticals

Stylmed H, a.s. was established for the purpose of combining bulk purchases of health care materials and pharmaceuticals originally only for Na Homolce Hospital, but now for a group of customers from a series of health care facilities. Given its strong position as a primary supplier, the company guarantees its customers low prices year-round through a number of discounts as well as reductions based on the volume of turnover.

Stylmed H performed all the tasks established for it by Na Homolce Hospital in 2005. A year-on-year comparison of a basket of consumables supplied to Na Homolce Hospital shows a 2% drop in prices in 2005 (representing savings of around 14 million CZK). In addition to the savings it made from the lower prices, the hospital also received a bonus of 14 million CZK on turnover. The Supervisory Board is responsible for deciding how to put to use the 70% of profits due to the hospital.

Tasks for 2005	2005 Results
Increase in the cost of health care consumables < 0%	-5.4%
Increase in the cost of separately charged consumables < 0%	-1.1%
Operating costs as a percentage of the total < 6.8%	5.8%
Pre-tax profits > 10 million CZK	24.8 mil. CZK



## Consult H, s. r. o.

### **Roentgenova 2, Prague 5**

Date established: June 20th, 1996

Ownership structure to December 31st, 2005: Na Homolce Hospital 100%

Sphere of business: Business, financial, organizational and economic advisory services

The company provides advisory services for the health care sector, mainly specializing in the area of legal structuring and consulting for health care facilities undergoing restructuring, introducing financial controls and implementing management control tools. Its goal is to be an organization that is systematically employed to solve problems for individual health care facilities or for a network of hospitals at the regional level. It helps to provide high-quality, accessible and low cost health care and organizes conferences and workshops dealing with the themes set out above.

In 2005 Consult H was also a service organization, holding shares in the Výzkumný ústav pletářský, a.s. in Brno.

The company reported profits for the 2005 financial year.



# Contacts

## Na Homolce Hospital

<b>Registered office:</b>	Roentgenova 2, 150 30 Prague 5
<b>ID No.:</b>	00023884
<b>Tax ID No.:</b>	CZ00023884
<b>Telefon:</b>	257 271 111
<b>Fax:</b>	257 210 689
<b>e-mail:</b>	<a href="mailto:hospital@homolka.cz">hospital@homolka.cz</a>
<b>http:</b>	<a href="http://www.homolka.cz">www.homolka.cz</a>



## Notes



