

ANNUAL REPORT 2006

HNA HOMOLCE
HOSPITAL

Na Homolce Hospital, a JCI accredited facility

We are one of the most modern
European hospitals

We provide health care in all areas of medicine

We specialize in disorders of the cardiovascular and nervous systems

We offer state-of-the-art diagnostic and therapeutic procedures, some of which are unique in the Czech Republic

We use fast and minimally invasive methods to diagnose and treat your condition

Our specialists are professionals in their fields

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About us





Introduction

It was in the mid nineteen nineties that Na Homolce Hospital set itself a clear strategy for its future development. The goal was to create a top-quality and sought after facility that would take its place in the Czech Republic's public health system. Provision of top-quality professional care was to be accompanied by the offer of fully comprehensive coverage in certain specialized program areas.

Given the high concentration of modern diagnostic and therapeutic equipment and thanks to the quality of its professional teams, the hospital has become a unique center over the past few years, providing complex care for patients with vascular diseases, both in cardiovascular medicine as well as in the clinical neurosciences. The hospital is now equipped to apply the latest stereotactic and robotic methods, while introducing new minimally invasive therapeutic techniques to Czech medicine.

Credit for the success of this process is due to the entire hospital staff and management, under the leadership of the previous long-term Director, Dr Oldřich Šubrt.

During 2006, Na Homolce Hospital continued to live up to its vision of a specialized pan-European hospital. Handing over control to the new management team went hand in hand with its efforts to best respond to the patients' needs. We believe that the most important of these is for top quality care. The key to achieving this goal is to reinforce patients' confidence in the health care staff, to achieve international accreditation and to maintain economic stability.

Last year's financial results are similar to those of preceding years. The hospital achieved post-tax profits of 55 million CZK and for the first time successfully attacked a figure of three billion crowns in turnover. These returns (profit margin of 1.9%) represent a compromise between providing a maximum level of care to the greatest number of patients and securing the future of the hospital in the sense of providing sufficient funds to motivate staff and to purchase the equipment needed to introduce new techniques into the Czech health care service.

These excellent financial results enabled us to raise average wages for Na Homolce employees to 32,928 CZK this year as against an average of 24,292 CZK in other Czech hospitals.

17,992 patients were admitted to Na Homolce Hospital during 2006 and a total of 14,431 operations were performed. The average treatment time was 6.1 days, while bed occupancy was around 89%. Despite the fact that the total number of interventions was stable for the second consecutive year, we managed to increase the value added for patients in the form of an 89% rise in productivity, despite providing treatment for more serious and complicated forms of disease from the finances available.

As we are well aware that our funds are limited, we work intensively to create clinical protocols, which enable us to manage each patient's stay in our hospital in order to provide quality treatment at a reasonable price. Since our JCI international accreditation does not allow us to compromise on the quality of care and the use of state-of-the-art techniques, these clinical protocols place pressure on us to eliminate unnecessary activities that place ethical or financial burdens on the patient, while using the most effective combination of medical expertise, equipment and supplies. The future for health care lies in the professionalization of non-medical services, which may not play a direct role in the treatment, but without which quality treatment cannot be provided. Apart from clinical protocols, these include providing support for the decision-making process, the close relationship between the key markers tracked and the personal motivation of the medical staff and ensuring that the documentation is accessible to both patients and staff.

A fundamental goal for the activities of Na Homolce Hospital in the future is to ensure high quality specialized care, which is carefully targeted to the patient's needs, while at the same time remaining cost-effective.



Dr Vladimír Dbalý

Managing Director, Na Homolce Hospital

Hospital Management and Statutory Bodies

HOSPITAL MANAGEMENT AND STATUTORY BODIES

HOSPITAL MANAGEMENT IN 2006

Managing Director

Oldřich Šubrt, M.D., Ph.D., MBA (1.1.2006-14.9.2006)

Vladimír Dbalý, M.D. (temporarily appointed by the Ministry of Health 15.9.2006-30.11.2006, officially appointed after a selection process by the Ministry of Health from 1.12.2006 onwards)

Director of Treatment and Preventive Care

Milan Ročeň, M.D.

Finance Director

Pavel Brůna, M.Sc.

Human Resources Director

Pavel Chyťá, M.Sc.

Director of Internal Audit and Control

Iva Rechová, M.Sc.

Director of Hospital Operations

Jan Kapal, M.Sc.

Head Nurse

Libuše Budská

SUPERVISORY BOARD (1.1.2006-4.7.2006)

Chairperson

Milan Fafejta, M.Sc.

Vice-Chairperson

Assoc. Prof. Eliška Jelínková, 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

HOSPITAL MANAGEMENT IN 2007 (TO 1.1.2007)



Vladimír Dbalý, M.D.

Managing Director



Michal Toběrný, M.D.

Director for Treatment
and Preventive Care



Petr Kolouch, M.D.

Director for Quality, Safety
and Accreditation



Pavel Brůna, M.Sc.

Finance Director

Organizational Structure

(to 31.12.2006)

Supervisory Board

Managing Director

Managing Director's Office

Secretariat

Hospital Pharmacy

IT Department

Hardware
Software
Analysis Unit
Technical Documentation Unit

PR and Communications Department

Communications
Production and Publicity

Independent Services

Legal
Quality Management
Health and Safety at Work
Fire Service and Emergency Planning

Treatment and Preventive Care Division

Director for Treatment and Preventive Care

Hospital Hygiene Officer

Hospital Wards

Neuroprogram

Neurosurgery
Neurology
Stereotactic and Radiation Neurosurgery

Cardiovascular Program

Vascular surgery
Cardiology
Cardiac surgery

General Medical Care Program

General Surgery
Gynecology
Internal Medicine
ENT/head and neck
Anesthesiology and Resuscitation

Internal Audit and Control Division

Director for Internal Audit and Control

Performance audit
Internal audit
Financial control

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

Finance Division	Hospital Operations Division	Human Resources Division	Health Resort Division
Director of Finance	Director of Hospital Operations	Director of Human Resources	Health Resort Director
Departments	Departments	Personnel Department	Departments
<ul style="list-style-type: none"> Economic Accountancy Controlling Health care economics Contracts and Revisions Analysis Operational Records of Assets Marketing of Specialized Programs Projects 	<ul style="list-style-type: none"> 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 	<ul style="list-style-type: none"> Salaries Specialist Employment and Selection Specialist Training and Development Specialist 	<ul style="list-style-type: none"> Operations Sales and Accommodation Finance Health Personnel
Common Examination and Treatment Units	Other Medical Units	Head Nurse's Office	
<ul style="list-style-type: none"> Clinical Biochemistry, Hematology and Immunology Clinical Microbiology and Antibiotic Center Radiodiagnostics Nuclear Medicine/PET center Pathology Central Sterilization and Hygiene Physiotherapy 	<ul style="list-style-type: none"> Hemodialysis Center Operating Theaters Industrial Medicine Department of Medical Physics 	<ul style="list-style-type: none"> Central Registration Central Admissions Pediatric Records Patient information service 	

Organizational Structure

(to 1.1.2007)

Managing Director		
Managing Director's Office	Treatment and Preventive Care Division	Quality, Safety and Accreditation Division
Secretariat	Director for Treatment and Preventive Care	Director for Quality, Safety and Accreditation
Hospital Pharmacy	Biomedical Engineering Department	Departments
Human Resources Division	Health Resort Division	Quality Control
Internal Audit and Control Division		Documentation and Archives
Contracts and Revisions Department		Medical Physics
PR and Communications Department		IT
Legal Department		Hospital Hygiene Officer
Marketing Department		Health and Safety at Work Officer
		Fire Service and Emergency Planning Officer
	Hospital Wards	Outpatient Clinics
	Neuroprogram	Neurosurgery
	Neurosurgery	Neurology
	Neurology	Stereotactic and Radiation Neurosurgery
	Stereotactic and Radiation Neurosurgery	Vascular Surgery
	Cardiovascular Program	Cardiology
	Vascular surgery	Cardiac Surgery
	Cardiology	General Surgery
	Cardiac surgery	Gynecology
	General Medical Care Program	Internal Medicine
	General Surgery	ENT
	Gynecology	Clinical Oncology
	Internal Medicine	Nephrology
	ENT/head and neck	Ophthalmology
	Anesthesiology and Resuscitation	Pediatrics
		Dentistry
		Dermatology
		Allergology and Clinical Immunology
		Psychiatry

Finance and Operations Division

Director of Finance and Operations

Hospital Operations Department

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
Investments
Accommodation

Finance and Sales Department

Accountancy
Controlling
Health Care Economics Department
Analysis Department
Project Management Department
Sales Department

Common Examination and Treatment Units

Clinical Biochemistry, Hematology and Immunology
Clinical Microbiology and Antibiotic Center
Radiodiagnostics Department
Nuclear Medicine/PET Center
Pathology
Physiotherapy

Other Medical Units

Hemodialysis Center
Central Operating Theaters and Central Sterilization
Robotic Surgery Center
Industrial Medicine specialist

Nursing Division

Head Nurse – outpatients
Head Nurse – wards
Department Matrons for departments with
no head nurse
Metabolic outpatient clinic assistant
Laboratory assistants, physiotherapists
and other medical personnel

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 department and related wards. The four independent hospital wards within this program offer patients a complete range of diagnostic and therapeutic procedures for diseases related to internal medicine and general surgery, particularly minimally invasive surgery. These are closely linked to the extensive outpatient department with clinics covering individual specializations.

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

Basic data

	to 31.12. 2005	to 31.12. 2006	index
Staff	1,623	1,706	105%
Beds	357	357	100%
Number of patient admissions	14,773	14,621	99%
Number of interventions	14,613	14,431	99%
Number of outpatient examinations	1,105,868	1,140,588	103%

Number of admissions

	to 31.12. 2005	to 31.12. 2006	index
Neurology-neurosurgery program	4,505	4,461	99%
Cardiovascular program	8,003	7,700	96%
General Medical Care Program	6,358	6,492	102%
Total	18,128	17,922	99%

Number of beds to 31.12. 2006

	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%

Mortality 2000–2006

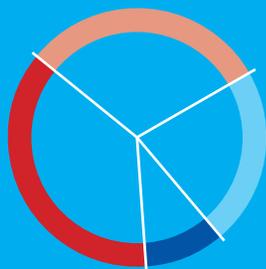
	2000	2001	2002	2003	2004	2005	2006
NNH	1.9%	2.2%	2.1%	1.6%	1.6%	1.5%	1.5%
Neurology	2.2%	2.3%	2.2%	3.7%	1.9%	1.8%	1.4%
Neurosurgery	1.7%	2.1%	1.5%	1.5%	1.7%	1.9%	1.3%
SRN	0.0%	0.1%	0.1%	0.3%	0.0%	0.0%	0.0%
Cardiology	1.4%	1.7%	1.4%	1.2%	1.0%	1.0%	0.8%
Cardiac Surgery			3.2%*	2.5%	3.0%	2.4%	3.1%
Vascular Surgery	2.5%	3.4%	2.3%	2.2%	2.1%	2.3%	2.3%
Internal Medicine	4.2%	4.3%	3.2%	3.0%	4.0%	4.7%	5.0%
General Surgery	1.2%	1.1%	0.5%	0.2%	0.5%	0.1%	0.1%
Gynecology	0.0%	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%	0.1%

* for the period from May 2002 to March 2003

Origin of admitted patients in 2006 as a %

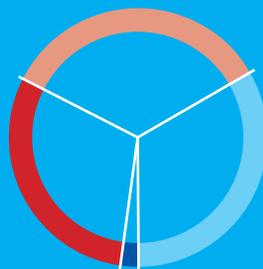
Neurological-Neurosurgical Program

Prague	37
Central Bohemia	31
Bohemia	22
Moravia	10



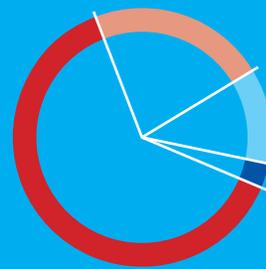
Cardiovascular Program

Prague	30
Central Bohemia	34
Bohemia	33
Moravia	2

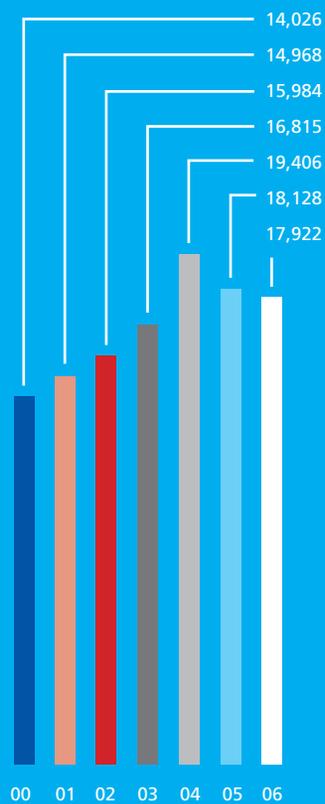


General Medical Care Program

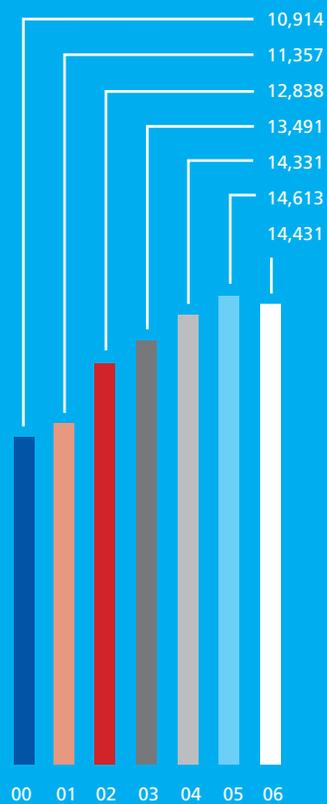
Prague	63
Central Bohemia	22
Bohemia	12
Moravia	3



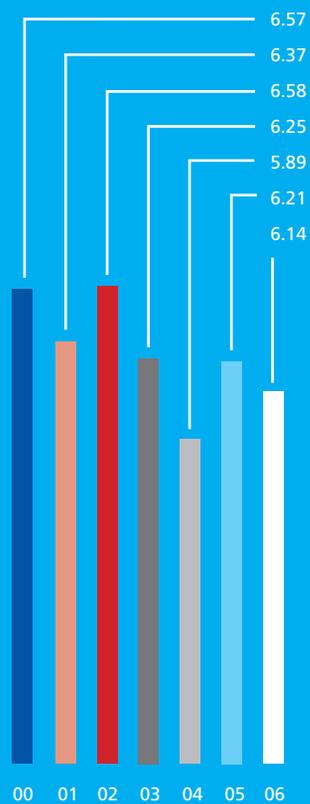
Number of admissions 2000–2006



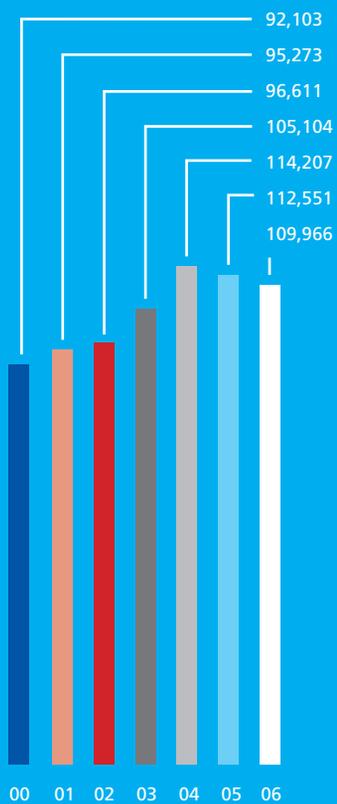
Number of interventions (including one-day surgery) 2000–2006



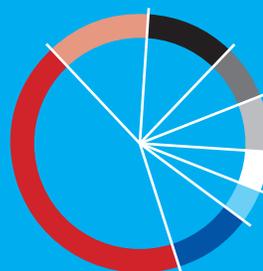
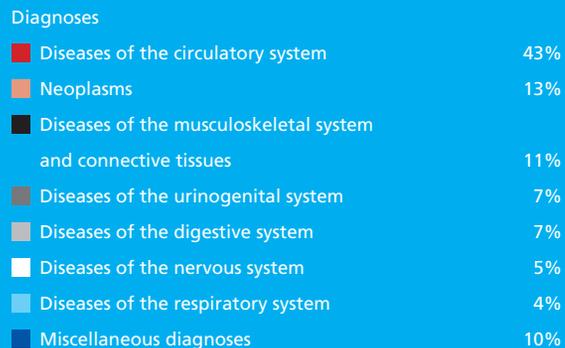
Average length of stay 2000–2006



Number of days of treatment
2000–2006



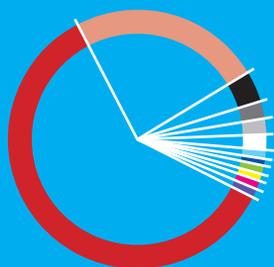
Breakdown of the main diagnoses in 2006



Outpatients in 2006

Origin of patients

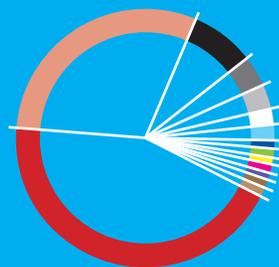
Prague	60%
Central Bohemia	24%
Ústí Region	4%
Southern Bohemia	2%
Liberec Region	2%
Karlovy Vary Region	2%
Plzen Region	1%
Hradec Králové Region	1%
Highland Region	1%
Pardubice Region	1%
Moravia-Silesia Region	1%
Southern Moravia	1%
Zlín Region	0%
Olomouc Region	0%



Inpatients in 2006

Origin of patients

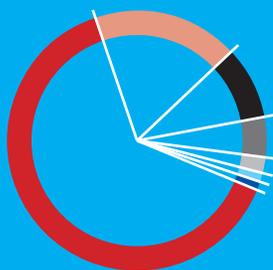
Prague	44%
Central Bohemia	30%
Ústí Region	8%
Liberec Region	4%
Karlovy Vary Region	3%
Plzen Region	2%
Hradec Králové Region	2%
Moravia-Silesia Region	1%
Pardubice Region	1%
Highland Region	1%
Southern Bohemia	1%
Southern Moravia	1%
Zlín Region	1%
Olomouc Region	1%



Outpatients in 2006

Health Insurance Company

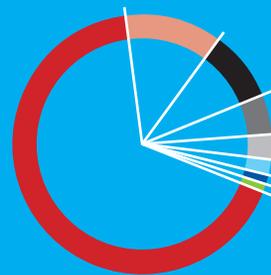
111 General Health Insurance Company, Prague	63%
207 OZP Bank and Insurance Company, Prague	18%
211 Interior Ministry Health Insurance Co., Prague	9%
201 Czech Military Health Insurance Company, Prague	5%
217 METAL ALIANZE Health Insurance Company	2%
222 Czech National Health Insurance Company, Prague	1%
209 ŠKODA Mladá Boleslav Works Health Insurance Company	1%
Others – foreigners and private patients	0%
205 Mining Health Insurance Company, Ostrava	0%
213 The Fraternal Fund, Ostrava	0%



Inpatients in 2006

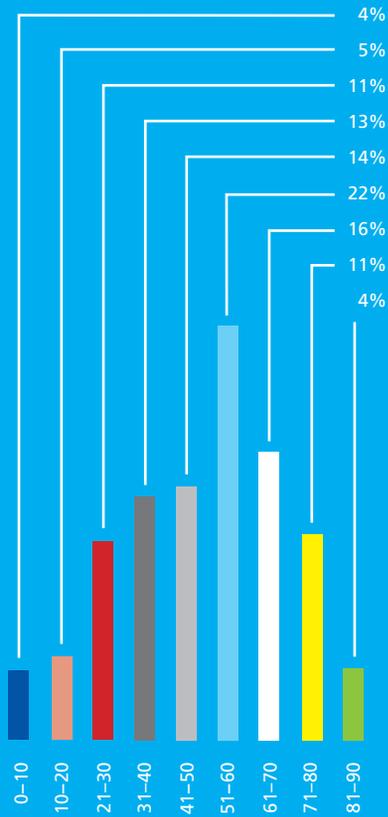
Health Insurance Company

111 General Health Insurance Company, Prague	67%
207 OZP Bank and Insurance Company, Prague	12%
211 Interior Ministry Health Insurance Co., Prague	9%
201 Czech Military Health Insurance Company, Prague	5%
217 METAL ALIANZE Health Insurance Company	3%
222 Czech National Health Insurance Company, Prague	2%
Others – foreigners and private patients	1%
209 ŠKODA Mladá Boleslav Works Health Insurance Company	1%
213 The Fraternal Fund, Ostrava	0%
205 Mining Health Insurance Company, Ostrava	0%



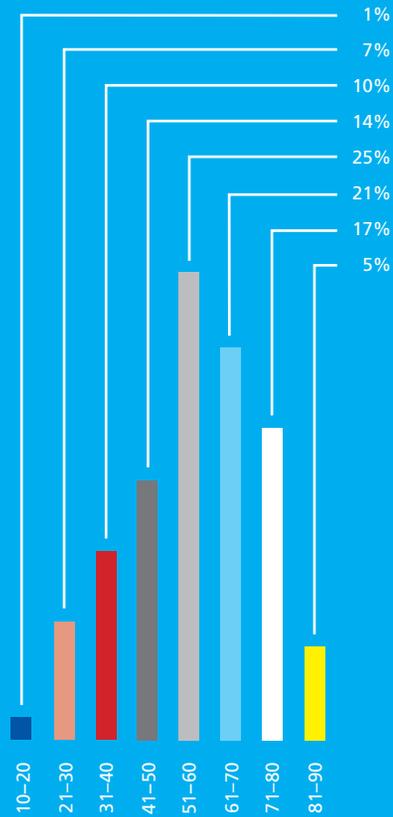
Outpatients in 2006

Breakdown by age



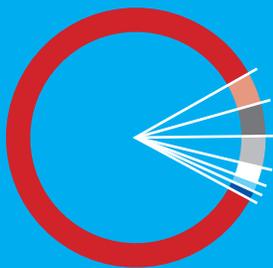
Inpatients in 2006

Breakdown by age



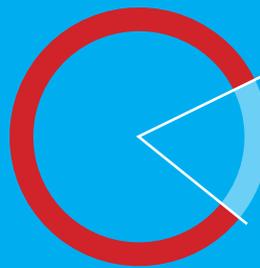
Referral for admission

External physician	84%
Another department	4%
External facility	4%
Emergency physician	4%
G.P.	2%
Ambulance physician	1%
Miscellaneous	1%



Type of admission

Planned	82%
Emergency	18%



Na Homolce Hospital Benchmarking

Bed occupancy as a % 2000–2006

	NNH	CR
2006	89	78
2005	90	79
2004	92	79
2003	91	73
2002	93	76
2001	92	75
2000	88	74

Average length of treatment (in days) 2000–2006

	NNH	CR
2006	6.1	7.9
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

2006 News

APRIL

- The Czech Ministry of Health transferred the Mánes Karlovy Vary health resort, along with all state properties within its competence, including claims and liabilities, to Na Homolce Hospital, a state-supported organization.

MAY

- A system that uses DNA to detect bacterial infections was introduced.

SEPTEMBER

- Oldřich Šubrt, M.D., Ph.D., MBA, voluntarily resigned as Managing Director of Na Homolce Hospital.
- Until such time as a public selection procedure was held, the Czech Ministry of Health appointed Dr Vladimír Dbalý, Head of the Department of Neurosurgery, as interim Director.
- Construction began on a new electrophysiological and catheterization complex, which will be the first in the Czech Republic to be equipped with the NIOBE magnetic navigation system for cardiac electrophysiology.
- Launch of a comprehensive treatment program for diseases of the lower jaw.

OCTOBER

- [The anniversary of the launch of the first Czech Center of Robotic Surgery at Na Homolce Hospital.](#)

Over the past year the robotic operating theater has been used for general surgical, urological, gynecological and vascular surgical procedures. Between October 2005 and December 31st 2006, a total of 175 patients underwent robot-assisted interventions, of whom 149 were operated on during 2006. The robotic operating system improves the precision, control and skill of the surgical procedure to a level that cannot be achieved by humans. It also enables surgeons to undertake types of minimally invasive procedures that could not be performed using hitherto existing technology. Robotic operating systems provide patients with the highest possible level of operating safety. The Na Homolce Hospital Center of Robotic Surgery also acts as a national and international training center for robotic-assisted surgery.

NOVEMBER

- The extension to the Department of Cardiac Surgery's post-operative and resuscitation unit was completed, with a resultant increase in capacity.

DECEMBER

- At the end of the official selection procedure, the Czech Health Minister appointed Dr Vladimír Dbalý Managing Director of Na Homolce Hospital.
- The opera singer, Dagmar Pecková sang at a Christmas concert for Na Homolce Hospital partners and staff, held at the Vinohrady theater.

Personnel and Social Policies

In 2006, the area of personnel management was characterized by the stability of the activities carried out at Na Homolce Hospital. Human resource processes, which had received accreditation during the previous year, complied with acceptable standards of quality.

Staff numbers were affected by a decision taken by the Czech Ministry of Health to transfer responsibility for the Mánes health resort, based in Karlovy Vary, to Na Homolce Hospital with effect from April 1st 2006. A major staff change occurred on September 14th 2006, when Dr Olbrich Šubrt decided, after a long and extremely successful career at the hospital, to tender his resignation. Dr Vladimír Dbalý was appointed Managing Director at the end of the year. In 2006, Na Homolce Hospital employed 1,706 staff members (average adjusted staff numbers), representing an increase of 8% on 2005 figures. Staff fluctuation was 4.8%, which underlines the extremely stable nature of the employee base.

Salaries continued to maintain an upward trend during 2006, due to the efficiency of the activities performed and the fact that individual budgets were adhered to. The wage structure remained motivational in nature, and was linked to compliance with financial restraints while maintaining quality standards for the care provided. Na Homolce Hospital paid out 675,602,121 CZK in 2006. The average wage rose by 9.9% against 2005 to reach 33,001 CZK.

The Social Program is funded from the Cultural and Social Needs Fund, created by the employer. These funds are used to finance social, educational, medical, sporting and cultural events for staff members. In 2006, in compliance with the Collective Bargaining Agreement, 15.6 mil. CZK was paid into the Cultural and Social Needs Fund.

Detailed personnel and wage data for individual employee categories in 2006 are listed in the tables below

Personnel and Wage data for 2006

NNH	Physicians			Pharmacists	Nursing staff § 5
	Dept. heads	Physicians (14)	Physicians (11-13)		
Total wages paid in CZK	23,007,460	157,317,712	42,960,151	3,629,622	233,422,198
Average number of employees	18.00	166.86	62.93	5.46	718.52
Average wage in CZK	106,516	78,568	56,889	55,397	27,072
Index %	0.00	1.35	4.88	16.85	4.83

Personnel and Wage data for 2006, cont.

Medical staff § 7-21	Medical staff § 22-28	Medical staff § 29-42	Other medical staff § 43	TES		Auxiliaries	Total
				Management	Other		
39,467,362	16,826,610	41,328,137	3,068,486	7,752,335	72,695,834	34,126,214	675,602,121
110.81	42.20	180.33	5.48	8.58	232.01	154.85	1,706.03
29,681	33,228	19,098	46,662	75,295	26,111	18,365	33,001
2.53	5.14	9.11	13.69	3.38	1.90	4.64	4.76

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 nursing staff § 5

§ 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

NNH 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 ward care in these specialized areas. The department includes an [Epilepsy Center](#), providing specialized outpatient and ward care for patients suffering from epilepsy. This 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 2006, 256 patients were admitted to the EMU, of whom 11 were monitored by surgical implantation of electrodes and 36 were indicated for epileptosurgical treatment. Routine treatment by stereotactic thermolesions, which is a global priority, represented a major advance. 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 Radiodiagnostics and the Department of Nuclear Medicine/PET Centrum. Na Homolce is one of the three largest epilepsy 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 2006, eleven intra-arterial thrombolyses and sixteen intravenous thrombolyses were performed on intensive care patients, which represented an increase on 2005 figures. The number of patients in critical condition suffering from failure of the vital organs stabilized.

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 [Sleep Disorder Center](#), which includes a sleep laboratory with two monitored beds enabling monitoring by sleep polygraphy, was opened in April 2006. By the end of the year, 176 patients had been admitted to the Center.

The Department of Neurology contributed to 3 grant projects in 2006.

Basic data

Number of beds	33
standard	27
intensive care	6
Number of physicians	14
Number of general nursing staff	47
Number of outpatient examinations	18,798
Number of patient admissions	1,477
Number of days of treatment	9,483
standard	7,658
intensive care	1,825
Bed occupancy rate (as a %)	80.76
standard	79.67
intensive care	85.68
Average length of stay (in days)	6.42
standard	5.51
intensive care	8.08

DEPARTMENT OF NEUROSURGERY

Head of Department: Vladimír Dbalý, M.D.

In 2006 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](#). The total number of operations performed during 2006 rose to 2,115. 2,128 patients were admitted to the department's wards and 12,240 outpatients were examined. The mortality rate for operated patients was 0.14% in 2006.

In the [Neurooncological program](#), apart from the routine, and for the most part combined treatment of patients, a number of experimental projects were further developed. This 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 to treat 16 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 2006, through the Center of Excellence in navigated neurosurgery for the Czech Republic and countries in the eastern European region. A new project to equip operating theaters with perioperational MRI was launched in 2006 in order to further improve the quality of perioperational diagnostics.

Under the [Neurovascular Program](#), the Department of Neurosurgery continued to centralize patients with diseases of the intracranial vessels at Na Homolce Hospital during 2006, offering the option of combined treatment of these diseases by open surgery or endovascular intervention. A team of experienced specialists provide patients suffering from these potentially life-threatening diseases with 24-hour care.

Na Homolce's Department of Neurosurgery [Epileptosurgical Program](#) is one of the largest centers in the Czech Republic. Working together with the Department of Neurology, the Leksell Gamma Knife unit, the Department of Radiodiagnostics and the PET Centrum, 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 around 240. Resections were performed on patients using standard navigation techniques and stimulation treatment was also applied (the application of vagal nerve stimulators).

Treatment of chronic pain was further developed in partnership with the Anesthesiology and Resuscitation department (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.

2 grant projects were completed by the Department of Neurosurgery in 2006.

Basic data

Number of beds	65
standard	45
intensive care	8
intermediate	12
Number of physicians	17
Number of general nursing staff	85
Number of outpatient examinations	11,240
Number of patient admissions	2,115
Number of days of treatment	20,165
Bed occupancy rate (as a %)	90.88
Average length of stay (in days)	9.54

Breakdown of surgical interventions in 2006

Cerebral tumors	209
Cerebro-vascular diseases	121
Spinal diseases including tumors	1,191
Injuries	70
Epileptosurgery	38
Miscellaneous	486
Total	2,115

Number of surgical interventions 2000–2006

2000	2001	2002	2003	2004	2005	2006
1,744	1,837	1,930	1,974	2,203	2,107	2,115

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, neurophysiological and neurological care.

The number of patients treated in the department increased to 870 in 2006. The total number of surgical interventions performed in the department exceeded 976 (including Leksell gamma knife irradiation and other surgical interventions). Neurostimulators were implanted in sixteen patients. The department still retained a small percentage of Slovak patients (12 patients in 2006) as part of its overall mix. Also, as has become traditional, among the patients irradiated by the Leksell gamma knife in 2006 were patients from the Ukraine, who were offered this treatment free under the terms of a tripartite agreement between Na Homolce Hospital, the Charta '77 Foundation and the Ukraine (12 pediatric patients) and those who received the same conditions as Czech nationals (twelve patients).

During 2006 we continued to work in association with the Střešovice ÚVN Eye Clinic on an internal grant project to study the effects of treating the early 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 7% 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 2006.

Basic data

Number of beds	
short stay	8
Number of physicians	6
Number of supervised medical staff, health care professionals and x-ray assistants	6
Number of general nursing staff	12
Hospital Wards	
Number of patient admissions	870
Number of operations carried out using the Leksell gamma knife	802
Number of other stereotactic operations	174
Number of days of treatment	1,191
Bed occupancy rate (as a %)	71.19
Average length of stay (in days)	1.37
Outpatient clinic	
Number of outpatient examinations	3,110
Number of written outpatient consultations	1,428
Number of patients attending the oncological clinic	0
Number of patients attending the eye clinic	53
Number of neurophysiological examinations	206
Number of neurostimulators implanted	10

Number of patients treated by Leksell gamma knife

2000	2001	2002	2003	2004	2005	2006
566	735	781	803	856	798	802

Radiosurgical treatment by Leksell gamma knife broken down by individual diagnosis

	2000	2001	2002	2003	2004	2005	2006
Malignant tumors of the brain	34%	30%	31%	33%	32%	30%	26%
Benign tumors of the brain	41%	34%	37%	39%	36%	37%	45%
Functional diseases of the brain	14%	16%	14%	10%	12%	14%	12%
Functional diseases of the brain	11%	9%	9%	9%	10%	11%	10%
Eye indications		11%	9%	9%	11%	8%	7%

NEUROPROGRAM 2000–2006

Development in the number of Neuroprogram patient admissions

	2000	2001	2002	2003	2004	2005	2006
Gamma knife	669	815	788	768	1,121	1,020	870
Neurology	866	1,042	970	1,145	1,376	1,295	1,477
Neurosurgery	2,112	2,226	2,402	2,470	2,541	2,190	2,115
Total	3,647	4,083	4,160	4,383	5,038	4,505	4,462

Development in the number of Neuroprogram outpatient examinations

	2000	2001	2002	2003	2004	2005	2006
Gamma knife	2,212	2,583	2,544	2,553	2,245	2,695	3,110
Neurology	13,333	13,654	14,115	15,755	16,079	16,563	18,798
Neurosurgery	7,318	7,913	9,020	9,559	10,679	10,524	11,240
Total	22,863	24,150	25,679	27,867	29,003	29,782	33,148

CARDIOVASCULAR PROGRAM

DEPARTMENT OF CARDIOLOGY

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

The clinical activities of the department cover the complete spectrum 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 2006. [Acute cardiology](#) along with its coronary unit 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 2006 a total of 2,499 coronographies were performed and 1,062 stents were implanted. Invasive cardiology also covers cardiac electrophysiology, and in particular 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 3,831 diagnostic and therapeutic interventions were performed, including the implantation of pacemakers and defibrillators, radiofrequency ablations and other types of intervention. In 2006, the following procedures were performed for the first time in the Czech Republic: the application of implantable systems for patients with advanced heart failure, offering the option of home monitoring and feedback for the hospital's heart failure clinic, the implantation of a wireless ICD, enabling a significant improvement in safety for patients at risk of sudden cardiac arrest, the introduction of a new method for monitoring arterial fibrillation, enabling the diagnosis of arterial fibrillation over the long term. Robotic assisted ablations continued to be performed on patients with atrial fibrillation using the Hansen system over the past year. Construction began on a new electrophysiological and catheterization complex, which will be the first in the Czech Republic to be equipped with the NIOBE magnetic navigation system for cardiac electrophysiology.

[Non-invasive cardiology](#) continued to offer patients a wide range of diagnostics of cardiovascular diseases during this period, including ultrasound, electrocardiography stress tests and echocardiograms, 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 as well as in 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 care for patients at a less advanced stage of the disease, monitored a total of 1,213 patients during 2006.

In 2006, 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. An additional grant project was initiated in collaboration with IKEM (Institute of Clinical and Experimental Medicine).

Basic data

Number of beds	52
standard	30
intermediate	4
intensive care	18
Day care clinic	4
Number of physicians	24
Number of general nursing staff	92
Number of outpatient examinations	47,312
Number of patient admissions	4,318
Number of days of treatment	16,154
standard	10,145
intensive care	6,009
Bed occupancy rate (as a %)	87.47
standard	84.43
intensive care	91.79
Average length of stay (in days)	3.74
standard	3.81
intensive care	2.75

Specialized interventions

Angiografický sál	
Coronarography (SKG)	2,499
Ventriculography (LVG)	945
Right-side angiocardiography	13
Pulmonary artery angiography	19
Catheterization R	1
Catheterization R-L	321
Percutaneous Coronary Intervention (PCI)	842
Direct angioplasty (AIM)	210
Stents	
number of patients	775
number of stents	1,062
Bulbus aortography	147
Alcohol septal ablation	1
Occlusion of ventricular septal defect (Amplatz)	19
Enhanced external counterpulsation	10
Tandem Heart	2
Pericardial puncture	3
Other angiographies and specialized procedures	200
Complications	
emergency bypass (CABG)	1 (0.4%)
mortalities	0

Electrophysiology Center

Primary implantation and exchange of pacemakers	721
Electrophysiology	1,878
Implantation and reimplantation of ICDs	423
Biventricular stimulation	198
RF ablations in total	425
Extraction of electrodes	69
Right ventricle biopsy	17
Implantation of IV port for the administration of drugs	2
Implantable arrhythmia monitor (REVEAL)	21
Outpatient pacemaker implantation/exchange	522
Total	3,831
Complications	
pneumothorax	17 (0.44%)
hemothorax	2 (0.05%)
a–v fistula	2 (0.05%)
perforations/electrode penetrations	6 (0.16%)
fatal	2 (0.05%)

Outpatient clinics

General cardiology	12,875
Pacemakers	7,827
Angiology	1,942
Heart failure clinic	1,213

Non-invasive cardiology

Echocardiography	5,217
esophagus examination	608
dobutamin load	1
Total	5,826
ECG stress test	1,108
Holter EKG	1,770
Blood pressure monitoring	1,264
TT test	41
Spiroergometry	99
6 minute walking test	16

DEPARTMENT OF VASCULAR SURGERY

Head of Department: 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. The range of surgical interventions, just as in previous years, covers [operations on the arteries supplying the brain, 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 2006, primarily focusing on endovascular treatment of these diseases.

Vascular surgery was one of the departments that used Na Homolce Hospital's [da Vinci robotic operating system](#) for the second year running. In 2006 a total of 38 robot-assisted operations took place, of which 4 were operations for abdominal aneurysms, and 34 involved aortofemoral reconstructions. Robotic-assisted vascular surgery can achieve excellent results; certain of our procedures are unique worldwide, and have been well received by the professional public abroad, particularly in the US.

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.

Na Homolce's Department of Vascular Surgery was involved in organizing the celebrations for the ninth Congress of the European Society for Vascular Surgery (ESVS), which was held in Prague in September 2006.

Basic data

Number of beds	61
standard	36
Intensive care	11
intermediate	14
Number of physicians	18
Number of general nursing staff	105
Number of outpatient examinations	14,804
Number of patient admissions	2,506
Number of days of treatment	18,825
standard	12,000
Intensive care	3,353
intermediate	3,473
Bed occupancy rate (as a %)	93.46
standard	94.64
Intensive care	90.33
intermediate	92.56
Average length of stay (in days)	7.51
standard	3.40
Intensive care	2.84
intermediate	3.01

Total number of reconstructions performed

2000	2001	2002	2003	2004	2005	2006
1,345	1,349	1,552	1,573	1,625	1,410	1,585

Breakdown of vascular and general surgical interventions in 2006

Operations on branches of the aortic arch	277
Pelvic reconstructions	54
Aortofemoral reconstructions (including 34 robot-assisted anastomoses)	130
Abdominal aneurysms (including 4 robot-assisted)	76
Reconstructions of the arteries supplying the limbs	444
Stentgrafts in the subrenal aortoiliac position	51
Other vascular operations	553

DEPARTMENT OF CARDIAC SURGERY

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

The Department of Cardiac Surgery deals with complex surgical treatment of diseases affecting the heart 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 in 2006 comprised 47% of the unit's procedures. During the course of 2006 a total of 789 cardiosurgical interventions were performed, including the implantation of epicardial stimulation systems, representing a slight decrease in the number of surgical procedures as a result of the building works that were taking place in the department. The program of surgical maintenance of the mitral valves and reconstruction of the left ventricle was further developed, while the ratio of mitral valvuloplasty again exceeded 70% 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 141 patients were treated using this method. Na Homolce remains the center performing the highest number of these interventions in the Czech Republic.

Working together with the Department of Vascular 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 2006.

The systematic program of care for adult patients with congenital heart conditions was fully developed during 2006. The program consists of a specialized outpatient clinic for adult congenital heart conditions and a separate operating theater and post-operative care, which is carried out in the Na Homolce Department of Cardiac Surgery, in collaboration with the pediatric Cardiocenter at Motal Teaching Hospital.

Basic data

Number of beds	34
standard	14
intensive care	7
semi intensive care	13
Number of physicians	21
Number of general nursing staff	85 (+10 theater nurses)
Number of outpatient examinations	3,017
Number of patient admitted	876
Number of days of treatment	10,182
standard	4,106
intensive care	2,342
Intermediate	3,734
Bed occupancy rate (as a %)	82.05
standard	80.35
intensive care	91.66
Intermediate	78.69
Average length of stay (in days)	11.62
standard	3.16
intensive care	2.87
Intermediate	4.49

Surgical interventions

Isolated aortocoronary reconstructions	327
Combined aortocoronary reconstructions (EACI, MAZE etc)	46
Coronary valve replacement/reconstruction	363
Isolated operations on the ascending aorta and the aortic arch	22
Epicardial stimulator electrode implant	16
Miscellaneous (myxoma, pericardectomy, PM extraction)	15
Total	789
MAZE operations (combination ACB and valvular surgery)	141
Acute and emergency operations	151
Planned operations	638

CARDIOVASCULAR PROGRAM 2000–2006

Development in the numbers of Cardiovascular Program patient admissions

	2000	2001	2002	2003	2004	2005	2006
Cardiac Surgery	312	322	325	669	962	986	876
Vascular Surgery	2,380	2,400	2,884	2,736	2,743	2,494	2,506
Cardiology	2,982	3,058	3,972	3,984	4,592	4,523	4,318
Total	5,674	5,780	7,181	7,389	8,297	8,003	7,700

Development in the number of Cardiovascular Program outpatient examinations

	2000	2001	2002	2003	2004	2005	2006
Cardiac Surgery	439	452	487	1,440	1,714	2,257	3,017
Vascular Surgery	9,722	9,793	10,463	11,516	11,763	14,029	14,804
Cardiology	23,241	24,988	28,561	29,059	28,136	46,313	47,312
Total	33,402	35,233	39,511	42,015	41,613	62,599	65,133

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 nature, with important sub-specializations in the areas of [artificial nutrition and metabolic care](#), [gastroenterology](#), [diabetology](#), [endocrinology](#), [obesitology](#) and [pneumology](#). The intensive care unit is dedicated to patients suffering from acute internal diseases. The care provided during 2006 included 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 sanguifacient/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 artificial 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 runs an emergency service for acute patients who are not admitted directly to the hospital's specialist departments. The internal medicine unit in the Český dům (Czech House) in Moscow also continued its work as part of the Department of Internal Medicine in 2006

The Department of Internal Medicine also acted as a training center in the specialized field of „Artificial Nutrition and Metabolic Care“ in 2006.

Basic data

Number of beds	29
standard	21
intensive care	8
Number of physicians	23
Number of general nursing staff	48
Number of outpatient examination	44,104
internal medicine clinic	33,391
gasterenterological examinations	10,586
Spirometry	2,783
Flexible and Autofluorescent Bronchoscopy	963
Number of patient admissions	1,082
Number of days of treatment	9,499
standard	6,803
intensive care	2,696
Bed occupancy rate (as a %)	90.74
standard	89.00
intensive care	95.47
Average length of stay (in days)	8.78
standard	6.67
intensive care	8.64

Specialized interventions in 2006

Gastroscopy	2,306
Coloscopy	2,006
Endoscopic sonography	581
ERCP	522
PEG	17

DEPARTMENT OF ONCOLOGY

Head of Department: Tomáš Vlášek, M.D.

The Department of Clinical Oncology specializes in the [treatment and follow up of adult patients with malignant tumors](#), using anti-tumor chemotherapy, hormonal therapy and other treatments, including follow-up post-operative rehabilitation. The overwhelming majority of patients are treated for breast, colorectal and lung carcinoma, 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, which participate in the diagnostics, treatment and subsequent follow up of patients, including providing treatment for pain. The range of treatment methods for oncological patients in 2006 included routine treatment processes for individual types of diagnosis, with the frequent use of biological, or targeted anti-tumor therapies, particularly for colorectal cancer. The department continued to work with the Department of Radiodiagnostics to perform chemoembolizations or radiofrequency ablations of liver metastases.

In 2006, the Department of Oncology participated in the TTF international project (treating malignant tumors by magnetic pole). Two patients with locally advanced breast carcinomas were the first in the world to be treated by this method during the year under review.

Na Homolce's Department of Oncology became part of a united complex 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	7,577
Number of cycles of chemotherapy	3,274

DEPARTMENT OF GENERAL SURGERY

Head of Department: Pavel Beňo, M.D.

The department provides a wide spectrum of services covering diagnostics and surgical treatment in the areas of [general surgery](#), [orthopedics and urology](#), while the outpatient clinic also includes counseling centers for [mammology](#), [phlebology](#), [abdominal surgery and bariatric surgery](#), [an orthopedic 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 2006, the surgical team performed the standard range of interventions, primarily using intraoperational radiofrequency ablation 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. 2006 was the second year of operation of the [da Vinci robotic operating system](#), which was principally used 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 Surgery is a national training center for anal prolapse surgery and the Long method of treatment of hemorrhoids.

Orthopedic operations last year included the total replacement of joints, including shoulder and ankle joints, as well as the reimplantation of joints. The orthopedic navigational system was routinely used for surgery on large joints during 2006. Arthroscopic surgery was re-introduced at the end 2006 and the beginning of 2007 (in particular procedures on the knee and shoulder joints and reconstruction of the cruciate ligaments).

The Na Homolce Department of Surgery is a reference center for ankle joint surgery and a training center for knee joint surgery using a LCS rotating plate and the Orthopilot orthopedic 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 uretherorenoscopic surgical techniques. The year under review was the second year when urological surgical procedures used the [da Vinci robotic operating system](#) (primarily 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	44,217
Number of patient admissions	2,372
Number of surgical interventions	2,319
Minor outpatient interventions	1,562
Number of days of treatment	10,371
standard	8,714
intensive care	1,657
Bed occupancy rate (as a %)	96.67
Average length of stay (in days)	4.37
standard	3.11
intensive care	3.14

Number of outpatient examinations

Surgery	21,644
Orthopedics	13,338
Urology	9,235
Total	44,217

Number of patient admissions by diagnosis

Neoplasms	297
Diseases of the digestive system	436
Orthopedic disorders	652
Urological disorders	157
Benign tumor	98
Morbid obesity	56
Other conditions	676

Number of surgical interventions

Surgery	1,304
Urology	249
Orthopedics	671
Robot-assisted operations	95
Minor outpatient interventions	1,562

DEPARTMENT OF GYNECOLOGY AND MINIMALLY INVASIVE SURGERY

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

The services provided by the department include the diagnosis and surgical treatment of gynecological diseases. The complete spectrum of pelvic and gynecological surgery was concentrated into five clinical programs in 2006: [oncogynecological surgery](#), [urogynecological surgery](#), [complex diagnostics and endometriosis surgery](#), [surgery for congenital defects](#) and [routine laparoscopic and hysteroscopic surgery](#).

Oncogynecological surgery includes classical, laparoscopic, laparoscopically assisted and laparovaginal surgery for tumors of the vulva, cervix, uterus and ovaries. 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 124 radical operations were performed on gynecological carcinomas.

[Urogynecological surgery](#) covers surgical treatment of incontinence and complex surgical procedures for cases of pelvic organ prolapse and muscular insufficiency of the pelvic floor, where emphasis is placed on finding a laparoscopic solution to the problems which arise. 311 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 the unit 2003 and subsequently adopted by other gynecological centers in the Republic.

[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 verify its success. Na Homolce's Department of Gynecology is still one of the few centers in the Czech Republic to perform radical surgical excision of the rectovaginal septal endometriosis, a procedure that involves the resection and suturing of the vaginal walls.

2006 was the second year in which the [da Vinci robotic operating system](#) was used for gynecological surgery, representing 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 myomatosis, adnexal tumors and cysts, chronic pelvic pain, inflammation and congenital development disorders of the uterus.

Overall, the number of surgical interventions totaled 2,000 operations in 2006, of which 83%, including oncological interventions, were performed laparoscopically or hysteroscopically, i.e. by what are referred to as minimally invasive methods.

The Department of Gynecology 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 2006, the department organized the 8th International Congress of Gynecological Laparoscopy, as well as two national workshops with 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	8
Number of general nursing staff	21
Number of outpatient examinations	20,603
Number of surgical interventions	2,000
of which oncological operations	124
Urogynecological surgery using reticulate implants	311
Proportion of minimally invasive methods	83%
Number of days of treatment	7,577
standard	6,070
intensive care	1,507
Bed occupancy rate (as a %)	90.86
standard	92.59
intensive care	84.52
Average length of stay (in days)	3.7
standard	2.14
intensive care	1.89

Radical oncogynecological operations

Vulvar carcinoma	3
Cervical carcinoma	44
Endometrial carcinoma	45
Ovarian carcinoma	31
Fallopian Tube carcinoma	1

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 2006 included what is referred to as [one-day surgery](#), as well as a [complete range of head and neck surgery](#), concentrating 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. Surgery to the base of the skull was developed in cooperation with the Department of Neurosurgery.

A [Program of comprehensive treatment of the lower jaw](#) was launched in 2006 and a jaw clinic began routine operations. Therapy for diseases of the lower jaw requires the widest possible range of treatment modalities – from conservative treatment methods, through minimally invasive methods (arthrocentesis under local anesthetic, initial arthroscopic surgery) to open surgery on the temporomandibular joint, including its total replacement.

The department's outpatient clinic again provided a comprehensive range of services during 2006, including specialized counseling in [oncology](#), [otoneurology](#), [cophosurgery](#), [otoprosthesis](#), [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 practice](#).

Basic data

Number of beds	11
standard	8
intensive care	3
Number of physicians	8
Number of general nursing staff	19
Number of outpatient examinations	35,522
Number of patient admissions	988
Number of surgical interventions	1,589
Number of days of treatment	3,757
standard	3,092
intensive care	665
Bed occupancy rate (as a %)	94.95
standard	99.50

intensive care	61.75
Average length of stay (in days)	3.80
standard	2.20
intensive care	1.55

Number of surgical interventions

Adenotomies	190
Operations under local anesthetic	407
Operations under general anesthetic	867
Operations using tracheotomies	116
TEP/TMJ surgery	9

DEPARTMENT OF NEPHROLOGY

Head of Department: Lukáš Svoboda, M.D.

The Department of Nephrology provides [non-stop nephrological care and an entire range of hemopurification treatments for patients suffering from chronic and acute kidney failure](#). The department also includes a nephrological clinic providing diagnostics and treatment of kidney disease as well as a specialized counseling unit for ischemic 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, plasmaphoresis, hemoperfusion peritoneal dialysis and continuous elimination methods. In 2006 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.

Basic data

Number of full-time physicians	3
Number of general nursing staff	16
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	18
Number of monitors for continuous hemopurification	4

Number of outpatient examinations	10,381
Number of patients monitored in the nephrology clinic	1,165
Number of patients sent for kidney transplants	8

Interventions performed

Hemodialysis	5,903
acute hemodialysis	478
Hemodiafiltration	1,642
Hemofiltration	981
Continuous techniques	204
Plasmaphoresis	5

DEPARTMENT OF ANESTHESIOLOGY AND RESUSCITATION (ARO)

Head of Department: Milan Ročeň, 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 local anesthesia. The Resuscitation unit provides comprehensive diagnostics and treatment of patients whose general state of health is affected by disorders to their basic vital functions, so severe as to be life-threatening and who require the highest level of medical 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 pulmonary ventilation and other specialized methods of reanimation treatment. The pain management clinic deals with problems experienced by patients in chronic pain.

In November 2006 the Department of Anesthesiology and Resuscitation organized the traditional Na Homolce Anesthesiological Days for the eighth consecutive year.

The Department of Anesthesiology and Resuscitation contributed to 1 grant project during 2006.

Basic data

Number of beds	8
Number of physicians	24
Number of general nursing staff	58
Number of outpatient examinations	1,549
Number of patient admissions	79
Number of days of treatment	2,761
Bed occupancy rate (as a %)	96.67
Average length of stay (in days)	41.7

Breakdown of units

- 1 resuscitation unit
- 7 central operating theaters
- 3 operating theaters for general surgery
- 2 operating theaters for gynecology
- 9 other operating theaters and units (ENT, stereotaxis, x-ray, dentistry, eye clinic, CAR, NM-PET, GASTRO, bronchiology, hyperbaric chamber)

Summary of selected anesthesiology interventions in 2006

Numbers anesthetized for interventions lasting longer than 2 hours	3,675
Number of local anesthetics	1,222
Number of patients over the age of 70 anesthetized	1,916
Number of children anesthetized	214
Number of anesthetics administered for acute interventions	1,457
Number of other anesthetics administered	1,371
Total number of anesthetics administered	9,855
Interventions in the pain clinic	504

GENERAL MEDICAL CARE PROGRAM

Development in the numbers of General Medical Care Program patient admissions

	2000	2001	2002	2003	2004	2005	2006
ENT	707	876	788	949	1,133	1,076	988
Internal Medicine	1,060	1,026	1,006	1,023	1,234	1,110	1,082
Gynecology	1,686	1,916	2,016	1,986	2,094	1,978	2,050
Surgery	1,780	1,874	2,095	2,156	2,408	2,194	2,372
Total	5,233	5,692	5,905	6,114	6,869	6,358	6,492

Development in the numbers of General Medical Care Program outpatient examinations

	2000	2001	2002	2003	2004	2005	2006
ENT	31,401	33,542	29,327	31,612	35,202	35,489	35,522
Internal Medicine	42,310	44,515	45,296	45,769	44,093	39,765	44,104
Gynecology	22,611	21,580	22,768	24,855	23,650	22,951	20,603
Surgery	30,954	33,592	37,268	39,255	42,705	39,923	44,217
Nephrology	8,170	9,271	10,174	10,141	10,799	11,623	10,381
Oncology					5,157	8,074	7,577
Total	135,446	142,500	144,833	151,632	161,606	157,825	162,404

SUMMARY OF ACTIVITIES OF THE COMPLEMENTARY SERVICES:

- Department of Radiodiagnostics
- Department of Nuclear Medicine
- Department of Clinical Biochemistry, Hematology and Immunology
- Department of Clinical Microbiology
- Department of Pathology
- Department of Central Sterilization and Hygiene

DEPARTMENT OF RADIODIAGNOSTICS

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

During 2006, the unit continued to provide services to Na Homolce as well as to other health care facilities, including those with non-stop operations. 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.

The department continued to apply [vascular 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 97 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 neuroradiological interventions, namely the treatment of cerebral aneurysms using a detachable coil, with optional remodeling techniques using stents, and revascularization treatments for cerebrovascular diseases, including intra-arterial thrombolysis for cases of acute occlusion of the cerebral arteries.

One of the [non-vascular methods](#) that came into more frequent use during 2006 was percutaneous vertebroplasty, alongside the introduction of a new method, kyphoplasty, to treat compress fractures of the vertebrae, due to osteoporosis or from other causes, and Na Homolce leads all other Czech medical facilities in this area of interventional radiology.

A feature of 2006 was the introduction of diffuse imaging into routine clinical practice for [magnetic resonance imaging](#) examinations, with the perspective of developing diffusion tensor imaging for white matter tractography for routine use by 2007. 2006 also saw the development of functional MR imaging using the BOLD method for neuronavigational surgery and deep brain stimulation.

Quality markers for mammography screening tracked to December 31st 2005 placed Na Homolce's mammogram unit in sixth place out of the 49 units in the Czech Republic that were evaluated.

In the field of radiography, 2006 saw the completion of the process of video digitalization. At the end of the examination, the image is immediately available on the hospital IT system, which has allowed us to conclude the process of [digitalization and to transfer to film-free imaging](#) (with the exception of mammograms and ultrasound examinations).

In 2006, the Department of Radiodiagnostics completed 3 grant projects.

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 2006

PTA	404
Implantation of stents into abdominal and thoracic aortal aneurysms	97
Endovascular treatment of cerebral aneurysms using GDC	27
Local thrombolysis and PTA in the extra- and intra-cranial area	102
Vascular embolization and interventions to the head and spine	28
CT-guided radicular injections	1,082
Drainage of abscesses and cysts, guided biopsies	47
Vertebroplasty	69
Kyphoplasty	7
Radiofrequency ablations	33
Breast node biopsies	107
Biopsies of other locations	47

Selected radiodiagnostic examinations in 2006

Computer tomography	12,860
Magnetic resonance	12,101
Angiography	16,449
Ultrasound examinations	14,199
Mammography	7,416
Total number of radiodiagnostic examinations	119,000

DEPARTMENT OF NUCLEAR MEDICINE/PET CENTER

Head of Department: Otakar Bělohávek, 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 [immunoanalytic laboratory testing techniques](#) including RSA (radiosaturation analysis) and chemiluminescence.

During 2006, 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 fell slightly to 6,181 as compared to 2005, representing a decrease of 1.9%. 64.5% 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. As the department has achieved maximum output under the present conditions over the past two years, there is no option for further growth. In terms of the number of PET examinations performed, Na Homolce is one of the largest European centers of its kind and is now probably the leader in its field.

After six consecutive years of year-on-year growth, the number of assays performed by the [immunoanalytic laboratory](#) fell slightly in 2006 due the failure of our external supplier. Two new assays were introduced into clinical practice: parathormon and vitamin D2.

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 2006.

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 technician	11
Technical equipment	
Instruments	
2 scintillation cameras	
1 positron emission tomography camera	
1 positron emission tomography and CT camera	
Imaging station	
Immunoanalysers	

Breakdown of PET + PET CT examinations in 2006

Radiography	
number of interventions	6,269
number of examinations	1,930
Positron emission tomography	
number of interventions	6,181
Laboratory tests	
number of interventions	133,237
number of assays	103,361

Breakdown of PET + PET CT examinations in 2006

Brain	0.2%
Myocardium	5.0%
Trunk	94.8%
PET/CT	64.5%
PET	35.5%

Breakdown and number of radiographic examinations in 2006

Myocardium	47%
Skeleton	29%
Phlebography	10%
Lungs	5%
Kidneys	5%
Brain	4%
Miscellaneous	1%
Leucocytes	0%

Breakdown and number of immunoanalytic assays in 2006

Thyroid screening	47%
Onco-markers	31%
Non-thyroid hormones	10%
Pregnancy screening	11%
Miscellaneous	1%

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 2006, the clinical biochemistry unit continued to provide services to general practitioners, pediatricians and other specialists working in the field. Attempts to expand and improve the range of services offered to clinical departments resulted in an extension of the range of examinations offered and a reduction of the time spent waiting for results. The biochemical laboratory modernized its equipment park by upgrading its biochemical analysers and through the purchase of an automatic urine screening system. In compliance with the latest recommendations from the Czech Society of Clinical Biochemistry and the Czech Diabetologist Society, diagnostic techniques to determine diabetes mellitus were adjusted and a new method of measuring insulin levels was introduced. A single type of glucose meter was imposed hospital-wide.

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 [hematology](#) laboratory provides a routine service for clinical units and conducts specialized analysis of coagulation parameters, for the Department of Vascular Surgery in particular. The Transfusion Center ensures a supply of blood and blood derivatives. In order to improve the transport conditions for blood preparations, blood transport vehicles were monitored in 2006 by electronic chip, which provided information on the time taken and the temperature during transportation.

Again in 2006, 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. The range of examination modalities also includes functional screening performed in the department's clinics, some of which are also unique to the Czech Republic.

In 2006, the laboratory expanded its offer of diagnostic options for autoimmune diseases with SLE diagnostics, autoimmune diabetes mellitus diagnostics and others. Assays on MSHP phagocytes by subjective microscopic evaluation were replaced by flow cytometrics. The allergology and clinical immunology clinic continued to perform its unrivalled non-invasive diagnostics using eosinophil counts for bronchial asthma and a national conference with international guests was organized on this theme in January 2006 at Na Homolce Hospital.

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, as well as the quantitative and qualitative examination of serum and cerebrospinal fluid. 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 2006, the laboratory was able to operate in its new premises, which have 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 ČLS JEP.

The Department of Clinical Biochemistry, Hematology and Immunology is part of the system of external quality control in the Czech Republic (SEKK), Germany (INSTAND), the Netherlands (SKZL) and Great Britain (NEQAS). 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 2 grant projects in 2006.

Basic data

Number of physicians	12
Number of college graduates/other medical staff	4
Number of laboratory technicians	33
Number of general nursing staff	9
Total number of examinations	2,190,836

Breakdown of laboratory tests in 2006

DCBHI	Number
Total biochemistry (including POCT)	1,723,553
Hematology	238,555
Spinal fluid screening	75,716
Immunology	99,847
DNA Diagnostics laboratory	23,744
Blood bank	29,421
Total laboratory tests	2,190,836

Breakdown of DCBHI outpatient numbers

Type of clinic	Number
Metabolic	6,537
Hematology	1,897
Immunology and allergology	5,644
Neuroimmunological	887
Total	14,965

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 consultative work 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 have 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 2006 the total number of patients with infectious complications who required consultation with specialists from the Antibiotic Center remained stable. During the period under review, there was a change in the structure of antibiotics used, with a slight increase in the consumption of secondary, or more expensive, antibiotics as a result of an increase in infections that were multi-resistant in origin. As far as their proportion of the overall outgoings for drugs was concerned, the situation within the hospital remained stable, however the cost per day of treatment and admission costs rose. Consumption of antibiotics continues to decrease in the Neuroprogram departments and in the ARO department, while remaining stable in the Cardiovascular program. In 2006 the IT system for detailed monitoring of the breakdown of consumption of antibiotics throughout the hospital was routinely used and work continued on an Internet application to use the same system in a network of hospitals, including the use of an inter-hospital comparison of antibiotic consumption markers.

In the area of [prevention and control of infection](#), a new monitoring system for nosocomial infections was brought into operation, enabling hospital-wide continuous and prospective surveillance. The results are regularly distributed by the infection control team to contact physicians and heads of clinical departments, as well as to hospital management. In addition to reliable data on the occurrence of nosocomial infections in the hospital, the new system is able to follow the etiology of individual cases of infection, as well as any resistance to antibiotics. This means that from 2006, routine and continuous evaluations can be made of the clinical importance of antibiotic resistance and primary antibiotic treatment procedures can be precisely determined. At the end of 2006, an information system enabling the monitoring of invasive procedures as a risk factor for the occurrence of certain groups of nosocomial infection was launched.

Part of the activities of the Department of Clinical Microbiology also involved participating in, or organizing, specialist projects. During 2006 the European Union's [ABS \(Antibiotic Strategy\) International](#) project was launched, 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. A total of 9 EU Member States are participating in this project, which is supported and financed from the European Commission budget. Na Homolce Hospital is one of the partner centers from the Czech Republic and 5 other major Czech hospitals have been invited to participate. During the period under review, collaboration also progressed on another European Union project – [IPSE \(Improvement of Patient Safety in Europe\)](#), focusing on the area of nosocomial infections and their control in hospitals. During 2006 a complex questionnaire evaluating the situation in the CR in areas covered by the project was completed and a detailed timetable for evaluating antibiotic resistance and the consumption of antibiotics in intensive care units was launched (WVP5). As

regards the national project for a [Register of nosocomial infections](#), eight hospitals began routine use of the record of nosocomial infections of the blood supply and work began on a new record of infections in surgical sites, which is due to be completed in the first half of 2007, with the pilot project being launched in the Autumn of 2007. This protocol is fully compatible with the European system for the surveillance of nosocomial infections, HELICS, and enables data to be directly registered in the European database. Work also began on the bilateral WHO-BCA project, which has been organized on the basis of an agreement between WHO-EURO and the Czech Ministry of Health in 2006 and 2007. The Department of Clinical Biology at Na Homolce Hospital is co-author of a project which focuses on the rational use of antibiotics.

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	113,377

Consultations for antimicrobial therapy in admitted patients

	2000	2001	2002	2003	2004	2005	2006
Number of consultations	4,287	5,069	6,076	6,960	7,291	8,493	7,922
Number of patients consulted	905	1,024	1,266	1,559	1,622	1,833	1,970
Proportion of patients consulted out of the total of admitted patients	6.5%	6.8%	7.5%	9.3%	8.4%	10.1%	10.4%

NUMBER OF EXAMINATIONS PERFORMED

Na Homolce Hospital

	2000	2001	2002	2003	2004	2005	2006
Bacteriology	35,251	39,018	41,473	45,952	54,306	51,582	54,726
Serology	11,330	12,257	14,282	15,194	17,238	15,506	16,511

External clients

	2000	2001	2002	2003	2004	2005	2006
Bacteriology	44,809	47,387	48,985	47,969	54,209	49,001	35,680
Serology	8,727	8,343	9,380	9,989	11,889	10,290	6,460

Total number of microbiological examinations

	2000	2001	2002	2003	2004	2005	2006
Bacteriology	80,060	86,405	90,458	93,921	108,515	100,583	90,406
Serology	20,057	20,600	23,662	25,183	29,127	25,796	22,971

MÁNES KARLOVY VARY HEALTH RESORT

Head of the Department of Spa Care, Dr. Miroslav Wimmer, M.Sc.

Head Physician, Bohumil Spěvák, M.D.

The Czech Ministry of Health transferred the Mánes Karlovy Vary health resort, along with all state properties within its competence, including claims and liabilities, to Na Homolce Hospital, a state-supported organization.

The Mánes Karlovy Vary Health Resort provides complex and contributory health-resort care for adults and children with illnesses of the digestive tract and defects of the intermediary metabolism and endocrine glands (diseases of the liver, gall bladder and biliary tract, stomach and enteral conditions, diabetes and obesity). In 2006, the range of services also included relaxation and remedial stays and weight-loss programs, as well as stays for parents with children that provide child care and a children's program free of charge for those undergoing treatment. Complex and contributory care is offered both to health insurance clients and to self-paying clients from the Czech Republic and abroad.

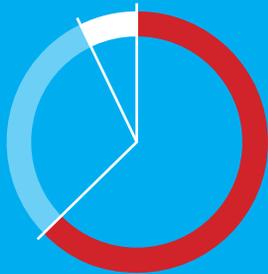
Basic data (April to December 2006)

Number of beds	157
1 st class	124
2 nd class	33
Total staff numbers	75
Number of physicians	2
Non-medical graduate staff – psychologist	1
Number of nurses	14
Number of dietary nurses	2
Assistant nursing staff	4
Bed occupancy in days	33,662
Insured clients	21,278
Self-paying guests	10,084
Hotel guests	2,300

Number of health resort procedures provided	41,954
Adults	25,185
Children and adolescents	16,769
Number of insured patient	851
Metabolic disorders – children and adolescents	315
Illnesses of the digestive tract – children and adolescents	240
Illnesses of the digestive tract – adults	156
Metabolic disorders – adults	140

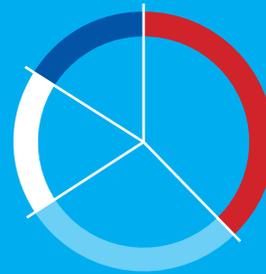
Breakdown of bed occupancy

■ Insured clients	63%
■ Self-paying clients	30%
■ Hotel guests	7%



Breakdown of care for insured clients

■ Metabolic disorders	
– children and adolescents	38%
■ Illnesses of the digestive tract	
– children and adolescents	28%
■ Illnesses of the digestive tract – adults	18%
■ Metabolic disorders – adults	16%



Na Homolce Hospital Quality Management in 2006



A JCI ACCREDITED FACILITY

One of the main pillars ensuring the hospital's stability is the high quality service it provides. 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 on 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 for the award of the „global badge of quality“ – the Joint Commission International (JCI) international accreditation. In 2008 Na Homolce will have to pass a JCI reaccreditation audit in order to receive JCI accreditation for a further three years.

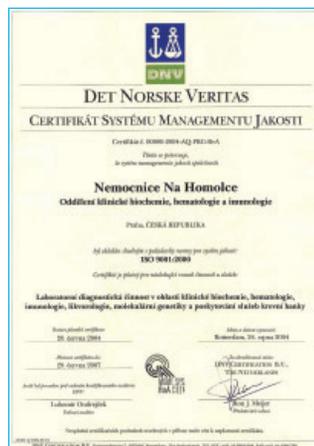
JCI ACCREDITATION

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

Three hospital departments – the Department of Clinical Biochemistry, Hematology and Immunology, the Department of Clinical Microbiology/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 AND SAFETY COMMITTEE

A system to improve quality and safety has been introduced at Na Homolce Hospital in an aim to minimize the element of human error in the process of providing health 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. Some examples of these are the administration of drugs, the control of nosocomial infections, monitoring patient satisfaction, etc. Dozens of markers are tracked in order to assess the extent to which these processes are being followed in the hospital and to ensure that they are safe. 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 the hospital 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 to channel employee suggestions and practical observations from different departments. It then carries out risk analyses and proposes remedial and preventative measures to the hospital executive.

Research Grants in Na Homolce Hospital in 2006

A JCI ACCREDITED FACILITY

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 ischemic heart disease in patients suffering from type 2 diabetes. The study investigates whether the early treatment of ischemic heart disorder by angioplasty, coronary bypass or pharmacological methods produces better results for type 2 diabetics.

Grant NR 9093-4

Title: Genetic determination in acute coronary syndrome – a population study

Period: 2006–2009

Author: Professor Vladimír Staněk, M.D., Ph.D. – IKEM

Co-author for Na Homolce Hospital:

Professor Petr Niederle, M.D., Ph.D. – Department of Cardiology, Na Homolce Hospital

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., Ph.D. – Department of Stereotactic and Radiation Neurosurgery, Na Homolce Hospital

Roman Liščák, M.D., Ph.D. – Department of Stereotactic and Radiation Neurosurgery, Na Homolce Hospital

Gabriela Šimonová, M.D., Ph.D. – Department of Stereotactic and Radiation Neurosurgery, Na Homolce Hospital

Josef Novotný, M.Sc. – Department of Medical Physics, Na Homolce Hospital

Professor Martin Kořán, Ph.D. – Clinical Psychologist, 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 halt the progress of the disease and improve vision in age-dependent macular degeneration?

Period: 2003–2008

Authors for Na Homolce Hospital:

Assoc. Prof. V. Vladyka, M.D., Ph.D. – Department of Stereotactic and Radiation Neurosurgery, Na Homolce Hospital

Roman Liščák, M.D., Ph.D. – Department of Stereotactic and Radiation Neurosurgery, Na Homolce Hospital

Gabriela Šimonová, M.D., Ph.D. – Department of Stereotactic and Radiation Neurosurgery, Na Homolce Hospital

Josef Novotný, M.Sc. – Department of Medical Physics, Na Homolce Hospital

Prof. Martin Kořán, Ph.D. – Clinical Psychologist, Na Homolce Hospital

Daniela Tlacháčová, M.A. – Department of Stereotactic and Radiation Neurosurgery, Na Homolce Hospital

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:

Vladimír Dbalý, M.D. – Department of Neurosurgery, Na Homolce Hospital
František Továryš, M.D. – Department of Neurosurgery, Na Homolce Hospital

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-author for Na Homolce Hospital:

Ivan Vrba, M.D. – AR Department, Na Homolce Hospital

Grant GA ČR 309/05/0693

Title: Breakdown in spatial orientation in the initial stages of Alzheimer's Disease.
Period: 2005–2007

Author: Jakub Hort, M.D., PhD. – 2nd Medical Faculty, Charles University

Co-author for Na Homolce Hospital:

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

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 NR 8523-3

Title: Treatment of severe spasticity in multiple sclerosis by long-term intrathecal administration of baclofen.

Period: 2005–2007

Author: [Assoc. Prof. Ivana Štětkářová, M.D., Ph.D.](#) – Department of Neurology, 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

Co-author for Na Homolce Hospital:

[Josef Vymazal, M.D., Ph.D.](#) – Department of Radiodiagnostics, Na Homolce Hospital

Grant NR 8491-3

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 NR 8937-4

Title: Extrapiramidal disease – correlation between the morphological, functional and clinical findings

Period: 2006–2009

Author: [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 Uργοšík, M.D., Ph.D.](#)

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

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

Title: Center of neuropsychiatric studies – Neurobiology in clinical practice
Contribution made by Na Homolce Hospital to the project: Utilization of positron emission tomography in the study of neuropsychiatric disorders.
Period: 2005–2009

Author: [Professor 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

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 8843-4

Title: Drug-resistant focal epilepsy with normal MRI findings: An analysis of the etiopathogenesis and an evaluation of the benefits of different diagnostic methods.

Period: 2006–2009

Author: Pavel Kršek, M.D., Ph.D. – 2nd Medical Faculty, Charles University

Co-author for Na Homolce Hospital:

Assoc. Prof. Otakar Bělohávek, M.D., Ph.D. – Department of Nuclear Medicine/PET Center, Na Homolce Hospital

Grant NR8304-3

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.

Grant FT-TA3/053

Ministry of Industry and Trade, CR
TANDEM program

Title: Development of a new generation of diagnostic sets for in vitro diagnostics of cardiovascular diseases based on molecular biotechnological methods.

Period: 2006–2010

Author: Josef Fišer, M.D. – GeneTICA s.r.o.

Co-author for Na Homolce Hospital:

Václav Mat'oška, M.D. – Department of Clinical Biochemistry, Hematology and Immunology, Na Homolce Hospital

Teaching Activities in 2006

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 others:

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

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
Department of Neurosurgery	Neurotraumatology
	Neurooncology
	Spondylosurgery
Department of Stereotactic and Radiation Neurosurgery	Neurosurgery
Department of Cardiology	Echocardiograms
Department of Vascular Surgery	Vascular surgery
Department of Surgery	Surgery
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	Clinical Microbiology
	Infectious medicine

OTHER TRAINING ACTIVITIES

Department of Neurology	Post-graduate training for the League against Epilepsy
Department of Radiodiagnostics	Training for the European School of magnetic resonance
Department of Nuclear Medicine/PET Center	Professional courses for the IAEA, Vienna
	Post-graduate training for doctorate studies
Department of Clinical Biochemistry, Hematology and Immunology	Post-graduate training for the Czech Society for Arteriosclerosis, Czech Medical Chamber Pediatric Society
Department of Medical Physics	Post-graduate training for doctorate studies

TRAINING AND REFERENCE CENTERS

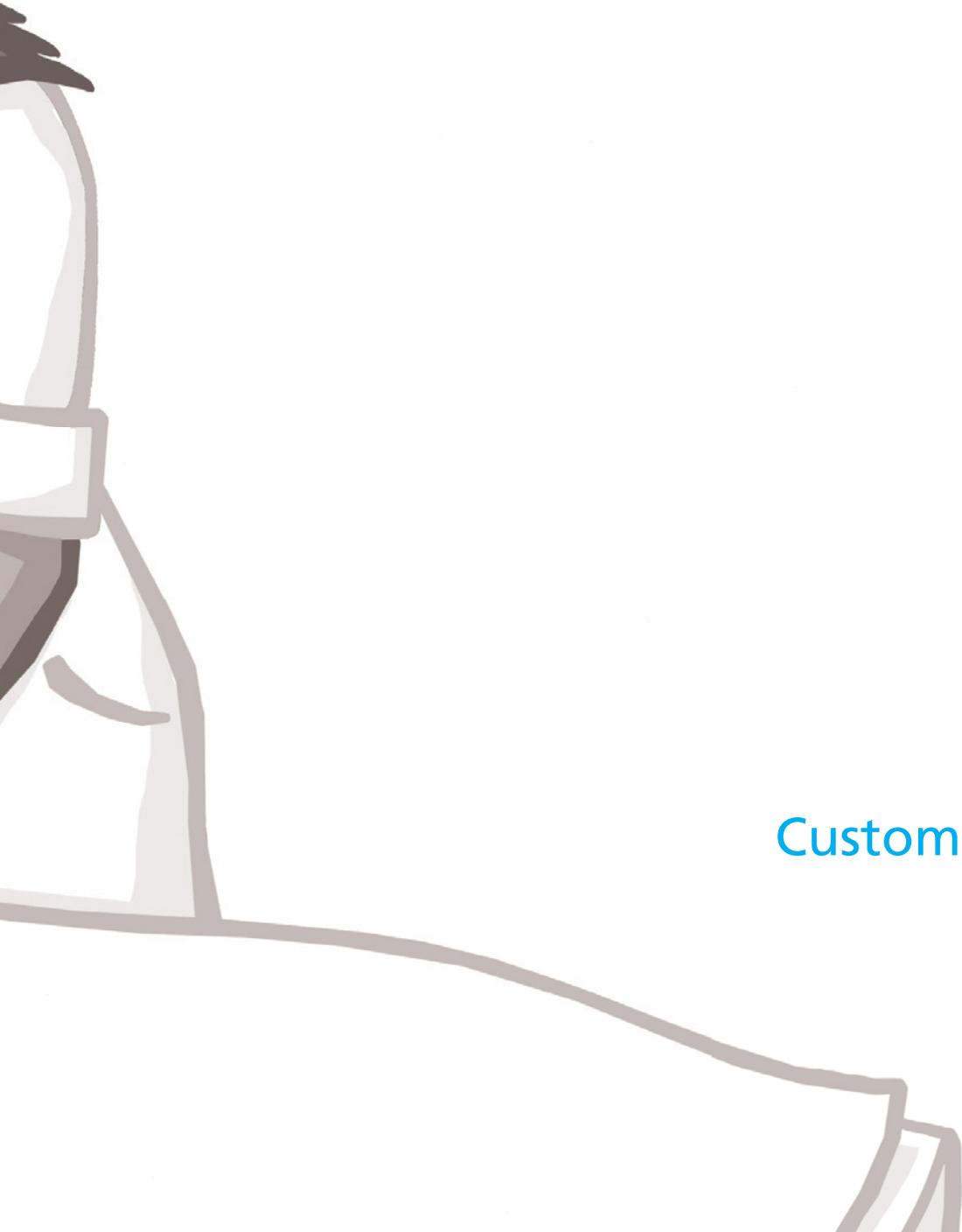
Department of Neurosurgery	Center for navigational neurosurgery for CR and the countries of the eastern European region
	Center for dynamic stabilization of the spine (Bryan, Prestige) for CR and countries of the eastern European region
Department of Cardiology	Center for resynchronization treatment of heart failure (biventricular stimulation) for EU countries
Department of 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 orthopedic navigation
Department of Clinical Biochemistry, Hematology and Immunology	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 PHYSICIAN'S LIFETIME TRAINING PROGRAM

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

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





Customer Orientation



The Quality of Care and Patient Safety in 2006

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.

MONITORING AND CONTROL SYSTEM FOR QUALITY OF CARE AND PATIENT SAFETY

In 2006 Na Homolce Hospital continued to apply a system of continuous monitoring to improve the quality of its services, particularly in the following areas:

- Monitoring patient satisfaction
- Maintaining records on admission examinations in the patient records in compliance with internal operating procedures
- Keeping medical records and ensuring that they are complete and up-to-date
- Monitoring drug and medical supplies in clinical units
- Recording and monitoring bed occupancy rates
- Monitoring and reporting errors in drug administration
- Recording unplanned re-operations as a proportion of the total number of procedures
- Supervision, monitoring and prevention of events that place patients at risk (categories such as: major failure of diagnostic or treatment procedures, failure of the facility or equipment, unpredictable reactions by patients, patient falls)
- Improving documentation to record bedsores
- Monitoring the quality of laboratory practices
- Prevention and control of nosocomial infections
- Monitoring safety in units using radiation equipment
- Evaluating employee satisfaction
- Risk management (monitoring and reporting work-related accidents incurred by staff members)

The monitoring and control of the quality and safety markers listed above is carried out in the form of external audits of medical and non-medical units in Na Homolce Hospital by a team of auditors made up of internal and external specialists. The aim of these audits is to detect and remedy discrepancies between hospital practice and the JCI accreditation standards. Heads of the individual departments, or their appointed representatives, also attend the audits. A detailed study of the cumulated findings from the external audits is always drawn up and then analyzed by the auditors and the department under review, after which checks are made to discover whether the deficiencies have been eliminated or measures to avoid them have been introduced.

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 Na Homolce, patients are routinely issued with identification bracelets. All inpatients wear a plastic PID (Personal Identification) bracelet 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 a uniform record of the prescription and administration of medication throughout the hospital. All prescriptions for drugs to be administered to ward patients are filed in the same folder in the medical records in every hospital department.

An essential aspect of patient care tracked by the accreditation standards is patient privacy during health care delivery. In order to apply this principle, procedures have been drawn up for communication with patients, and all Na Homolce hospital staff must comply with these.

In association with the National Council for the Disabled, Na Homolce introduced "Ten commandments for communication with handicapped patients" and developed internal principles for caring for different types of handicapped patients.

RIGHTS OF PATIENTS AND THEIR FAMILIES

An implicit element of the provision of 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 procedures which require the patient's written consent. Without this consent, the procedure cannot be performed. The patient obviously 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.

A Questionnaire on Patient Satisfaction in 2006

Overall figures for the period between January and December 2006
 Total number of responses 2,854
 Scale 1–5

Inpatient Satisfaction Rates

Number of Responses	1,926
1. Required to move after admission if required	1.11
2. Orientation within the hospital	1.47
3. Organization of central admissions procedure	1.17
4. Waiting time for admission to the department	1.39
5. Hygiene	1.13
6. Amount and quality of food	1.26
7. Personal comfort and privac	1.19
8. Quietness of the department	1.19
9. Examination appointments kept	1.14
10. Explanations given of your condition	1.15
11. Treatment provided for pain	1.07
12. Staff cooperation with your family	1.10
13. Nurses' attitude and willingness to help	1.08
14. Attitude of the physicians	1.06
15. Sufficient information provided on discharge	1.11

Outpatient Satisfaction Rates

Number of Responses	928
1. Orientation within the hospital	1.54
2. Attitude of the staff and their willingness to help	1.24
3. Length of time spent waiting for examinations	1.55
4. Privacy during examinations	1.20
5. Environment and personal comfort	1.23
6. Explanations given of your condition	1.20
7. Meeting your expectations of the visit	1.25
8. Information provided concerning future treatment	1.20
9. Was it a planned appointment?	1.10
Average rate for all patients	1.22
Inpatients	1.20
Outpatients	1.29

Unique medical interventions performed in Na Homolce Hospital in 2006

The application of implantable systems for patients suffering from advanced heart failure, offering the possibility of home monitoring and providing feedback to the hospital's Heart Failure Clinic. Performed for the first time in the Czech Republic.

- The implantation of a wireless ICD, greatly improving the safety of patients at risk of sudden cardiac arrest. Procedures performed for the first time in the Czech Republic.
- The introduction of new types of atrial fibrillation monitors that provide long term diagnostics of atrial fibrillation. Performed for the first time in the Czech Republic.
- A full surgical operation to dissect the aorta using a new technology that combines a stentgraft and a vascular prosthesis in a single intervention. Performed for the first time in the Czech Republic.
- A robotic-assisted operation for an aneurysm of the pelvic artery using the da Vinci system. Procedure performed for the first time in the world.
- A robotic-assisted operation for an aneurysm of the aorta using the da Vinci system. Procedure performed for the first time in the Czech Republic and for the second time in the world.
- A robotic-assisted reconstruction of the aorta using the da Vinci system. Procedure performed for the first time in the world.
- A robotic-assisted lower anterior resection for rectosigmoid cancer using the da Vinci system. Procedure performed for the first time in the Czech Republic.
- A robotic-assisted right-side hemicolectomy for colon cancer using the da Vinci system. Procedure performed for the first time in the Czech Republic.

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. 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 2006, children and their parents met for what was the tenth week-long therapeutic camp with a low-calorie diet in Dolní Ždár, near Jindřichův Hradec. 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, Czech Republic
Tel.: +420 257 273 229, 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. The membership (families), does not only consist of patients treated at Na Homolce, but is also made up of those from other facilities 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-day 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, Czech Republic
Tel.: +420 257 272 017, Email: jaroslava.simonickova@homolka.cz

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. The club unites both 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 2006 the thirteenth annual games were held in the Czech Republic with the participation of foreign patients. Czech sportsmen and women brought back the traditional medals from the European Games for dialysis and transplant patients, which in 2006 were held in Peczi, Hungary, winning the SKI TROPHY, as they did last year in Bormio, Italy.

Contact details: Sports club for dialysis and transplant patients, Hemodialysis Center
Na Homolce Hospital, Roentgenova 2, 150 30 Prague 5, Czech Republic
Tel.: +420 257 272 220, E-mail: lukas.svoboda@homolka.cz





Economic Stability

Report by the Supervisory Board on Management Activities in 2006

The Supervisory Board of Na Homolce Hospital was established by the Czech Ministry of Health, with effect from January 1st 1996. On the basis of a decision arising from Czech Ministry of Health Decree no. 259/2006 Coll., of May 24th 2006, the activities of the Supervisory Board have been brought to a close, after more than ten years, with effect from July 4th 2006.

In 2006, as in previous years, the work of the Supervisory Board was governed by the provisions of the Memorandum of Association, issued by the Czech Ministry of Health, in compliance with all the applicable legal norms and its activities were performed in accordance with 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.

Between January 1st and July 4th 2006, the Supervisory Board was made up of the following members:

Chairperson: Milan Fafejta, M.Sc.

Vice-Chairperson: Assoc. Prof. Eliška Jelínková, M.S., Ph.D.

Members: Libuše Budská, Pavel Henyš, M.D., Martin Kocourek, M.Sc., Dr. Miroslava Ouředníková, Jan Polák, M.Sc. (Arch.), Petr Sláma, M.Sc.

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
- the provision of first-class medical care
- ensuring the hospital's long-term strategic development.

The Supervisory Board reports that it has found no serious deficiencies and thanks the management and the entire staff of Na Homolce Hospital for their work in 2006.

In conclusion, and concerning the termination of the activities of Na Homolce Hospital's Supervisory Board, I should like to thank all its members for their work, which always took place in a constructive and amicable atmosphere. I should also like to thank the hospital management for their willingness to cooperate with the Supervisory Board. I extend my best wishes to Na Homolce Hospital and hope that it continues to maintain its standing as a top-quality medical institution.

Milan Fafejta, M.Sc.

Chairperson of the Supervisory Board



Auditor's Report

The Company's statutory body is responsible for keeping correct, complete, documented and clear accounting records that are structured in a way that will guarantee 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 the auditing procedures used, no facts have come to our attention that might cause 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 that the information on the audited organization for the period under review, as shown in the Annual Report, complies with the audited financial statements compiled as at 31st December 2006. It is our opinion that this information complies, in all material respects, with those financial statements from which it was drawn.

Čelákovice, 3rd May 2007



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



Economic Information

BALANCE SHEET (IN THOUSANDS OF CZK)

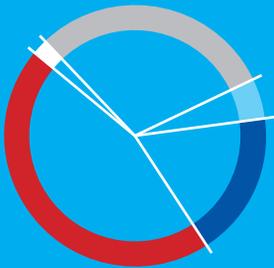
ASSETS	as at 31.12.05	as at 31.12.06
A. Fixed assets	1,668,913	1,616,527
1. Intangible fixed assets	62,922	69,698
2. Accumulated depreciation of intangible fixed assets	-34,572	-40,533
3. Tangible fixed assets	2,885,445	2,999,816
4. Accumulated depreciation of tangible fixed assets	-1,338,169	-1,442,840
5. Financial investments	93,286	30,386
B. Current assets	813,017	998,668
1. Inventory	57,082	39,923
2. Receivables	528,899	615,138
3. Financial assets	122,618	175,852
5. Temporary credit accounts	104,418	167,755
TOTAL ASSETS	2,481,930	2,615,195
LIABILITIES		
C. Own resources	1,819,909	1,866,333
1. Property funds	1,661,678	1,603,963
2. Financial funds	99,034	207,315
5. Net income	59,197	55,055
D. Other resources	662,021	748,863
1. Reserves	3,400	4,250
2. Long-term liabilities	136,937	63,647
3. Short-term liabilities	377,665	413,984
4. Bank credits	140,000	260,000
5. Temporary debit accounts	4,019	6,982
TOTAL LIABILITIES	2,481,930	2,615,195

PROFIT AND LOSS STATEMENT (IN THOUSANDS OF CZK)

PROFIT AND LOSS STATEMENT	as at 31.12.05	as at 31.12.06
I. Revenue from merchandise	150,706	168,432
A. Costs of goods sold	126,098	148,145
Sales margin	24,608	20,287
II. Production	2,527,398	2,721,160
1. Revenue from own products and services	2,527,398	2,721,160
B. 1. Material and energy consumption	1,341,167	1,405,178
2. Services	222,860	213,550
Value added	963,371	1,102,432
III. Operating grants	3,478	2,108
C. Personnel expenses	786,458	918,667
1. Wages and salaries	550,678	647,958
2. Social security expenses	207,250	239,475
3. Social expenses	28,530	31,234
D. Taxes and fees	181	222
GROSS OPERATING REVENUE	204,818	205,938
E. Depreciation of tangible and intangible fixed assets	129,803	145,056
IV. Revenue from sales of tangible and intangible fixed assets and materials	484	163
F. Net book value of tangible and intangible fixed assets sold	51	279
Revenue from tangible and intangible fixed asset sales	432	-117
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	95,192	126,572
I. Other operating expenses	100,642	131,433
J. Income tax	9,951	0
PROFIT FOR THE CURRENT ACCOUNTING PERIOD	59,197	55,055

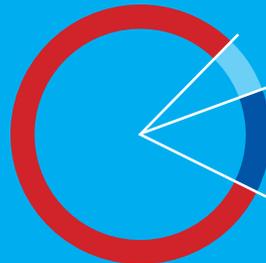
Breakdown of costs by type in 2006

Material	45%
Energy	2%
Staff	30%
Depreciation	5%
Miscellaneous	18%



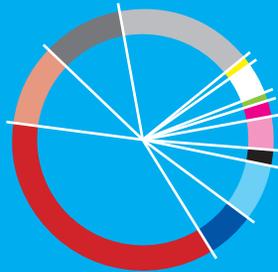
Breakdown of costs by unit in 2006

Health Care Sector	80%
Commercial Sector	7%
Administrative Sector	13%



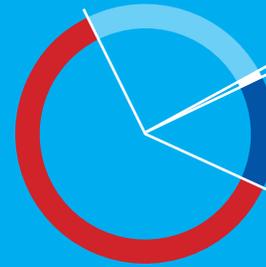
Breakdown of costs by unit in 2006

Cardiovascular program	36%
Neuroprogram	10%
General Medical Care program	10%
Complementary Services	17%
Outpatient clinics outside the main programs	1%
Anesthesiology and resuscitation program	4%
Sterilization	1%
Health Care Commercial Departments	2%
Pharmacy	4%
Rentals	2%
Economy and management	7%
Technical and operations	6%



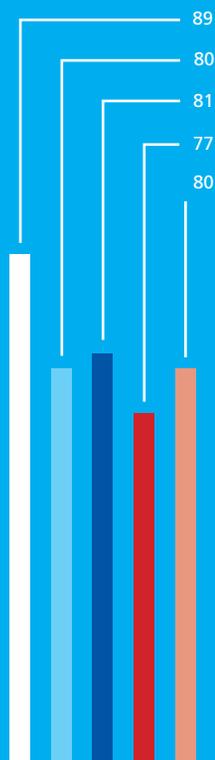
Breakdown of revenue in 2006

General Health Insurance Company	61%
Other health insurance companies	24%
Direct payments	1%
Miscellaneous revenue	14%

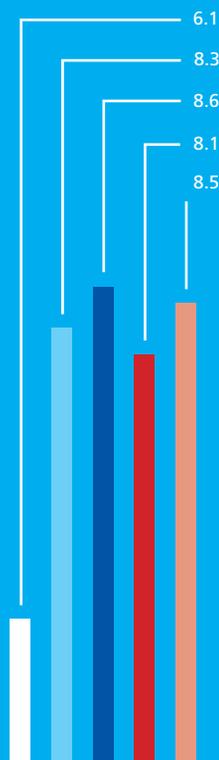


Na Homolce Hospital Benchmarking 2006

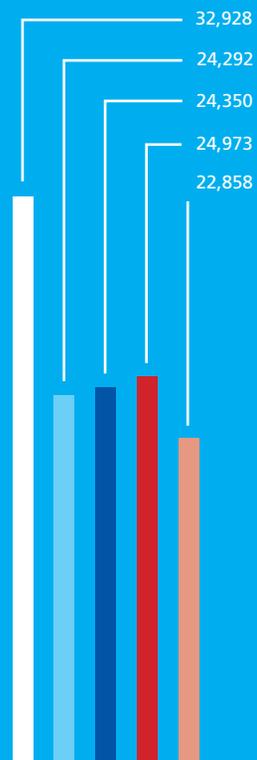
Bed occupancy rate (as a %)



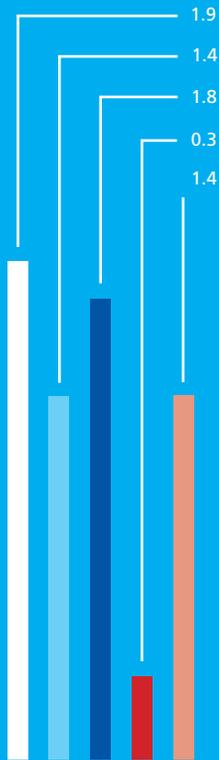
Average length of treatment (in days)



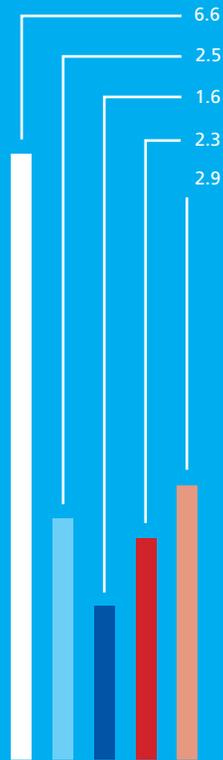
Average monthly salary (in CZK)



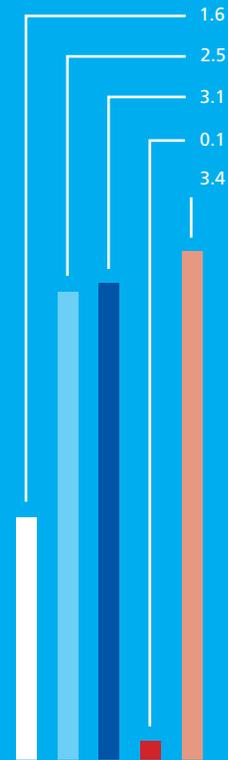
Cost effectiveness (as a %)



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



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



- Na Homolce Hospital
- Assoc. of Teaching Hospitals average
- Prague hospitals
- Czech hospitals
- Moravian hospitals

Operating Efficiency

Costs and revenues from 2000–2006 (in mil. CZK)

	2000	2001	2002	2003	2004	2005	2006
Costs	1,344	1,640	1,924	2,189	2,386	2,708	2,963
Revenues	1,397	1,665	1,982	2,218	2,456	2,777	3,018

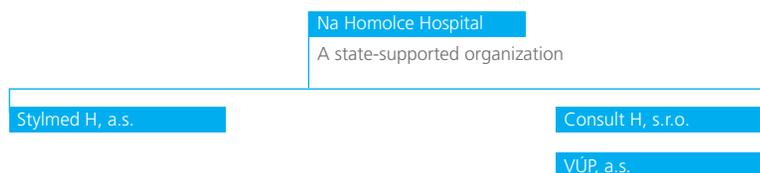
Cost effectiveness from 2000–2006 (as a %)

	2000	2001	2002	2003	2004	2005	2006
	3.95	1.56	3.03	1.31	2.57	2.18	1.86

Overdue receivables from 2000–2006 (in mil. CZK)

	2000	2001	2002	2003	2004	2005	2006
	70.0	34.2	23.5	167.1	198.9	196.8	198.6

Economic Structure



Stylmed H, a.s.

Roentgenova 2, Prague 5

Date established: January 7th, 1998

Ownership structure to December 31st, 2006: 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 set for it by Na Homolce Hospital in 2006. A year-on-year comparison of a basket of consumables supplied to Na Homolce Hospital shows a further 1.3% decrease in prices in 2006, in 2005 they dropped by 2%, (which can be expressed in financial terms as savings of around 10.4 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. Stylmed H also provided gifts valued at 4,125 million CZK to support the hospital's activities.

Tasks for 2006	2006 Results
Increase in the cost of health care consumables < 0%	-4.9%
Increase in the cost of separately charged consumables	-0.4%
Operating costs as a percentage of the total < 6.5%	5.7%
Pre-tax profits > 10 mil. CZK	20.8 mil. CZK

Consult H, s.r.o.

Roentgenova 2, Prague 5

Date established: June 20th, 1998

Ownership structure to December 31st, 2002: 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.

In 2006 Consult H acted a service organization to sell 100% of VUP shares to the share holders.

Consult H reported profits for the 2006 financial year.

Contact Details

Na Homolce Hospital

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