***Health*BASKET**
Health Benefits and Service Costs in Europe
SP21-CT-2004-501588

Approaches for Cost/Price Assessment in Practice

Poland

Health*Basket* - Work Package 6

Project Team:

Adam Kozierkiewicz MD
Wojciech Trąbka MD, PhD
Maciej Stamirski MsC
Waldemar Stylo MsC

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I. Descriptive part

a. Price setting

1. Health services

1.1. Characteristic of the system

In Poland the public funds covering expenditures on health care come from four sources:

1. The Social Insurance Institution (ZUS) – the institution collecting contributions for social and health insurance and pensions from the employed or/and persons conducting non-agricultural business activity.
2. The Agricultural Social Insurance Fund (KRUS) – the institution collecting contributions from farmers.
3. The state budget – covering:
   - contributions of some social groups entitled for health care services and
   - a part of health care services called highly specialized procedures
   - local authorities' budgets – financing execution of tasks and competences of local governments.

There are three main channels of public health care expenditures:

1. The National Health Fund
2. The Ministry of Health
3. local authorities/ governments

In table 1 there is a list of legal Acts enclosed; laws and decrees, which obligations of public authorities and also private entities (persons and legal entities) in each of the existing subsystems of health protection; both health care and public health.

Table 1. List of documents determining the benefit package and its level of explicitness (source: Benefit package and costs of services – Health Basket, Report I - POLAND).

Document/act	
Constitution	
health insurance law	
.	decree on dental care
.	decree on basic and supplementary pharmaceuticals
.	decree on pharmaceuticals for chronically ill
.	decree on prevention services
.	decree on prevention services- school medicine
.	decree on medical good and materials
.	decree on medical good and materials
.	decree on medical transportation benefits

.	decree on spa therapy services
.	decree on highly specialized procedures
.	*services procurement documentation*
.	
mental health protection law	
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social insurance law	
.	decree on rehabilitation measures
.	
farmers social insurance law	
.	*missing decree*
.	
Penal Code	
.	
alcohol abuse law	
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drugs abuse law	
.	
law on foreigners	
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national rescue system law	
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rescue services law	
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Labour Code	
.	decree on prevention measures for employees
.	decree on prevention measures for self-employed and others
.	
occupational medicine law	
.	decree on occupational medicine in defence services
.	decree on occupational medicine in internal affairs services
.	decree on occupational medicine in penitentiary services
.	decree on occupational medicine in National Railways
.	
.	
infectious diseases law	
.	decree on immunisations of employees
.	decree on obligatory immunisations
Road traffic law	

.	decree on obligatory drivers health tests

Obligations of the public authorities derived from the legal regulations are financed from public sources, which amount to 70% of the total health expenditure in Poland. Private expenditure (estimated as 30% of the total health expenditure) is mainly out-of-pocket payment with minor supplemental role of private insurance and quasi-insurance. As far as private expenditure is concerned, no regulations regarding pricing and costing can be discussed. ***For further analysis, only the area of universal health insurance will be taken into consideration, because of its magnitude and dominating role as regards the provision of health services and goods in Poland.***

The fundamental legal instrument regulating financing of health care services in the frames of universal health insurance is the Law of 27 August 2004 on health care services financed by public funds**[1]**. It defines among others rules of functioning of the NFZ and financing of goods and services in universal insurance system.

The tasks of local authorities falling within the scope of health care (at voivodeship, powiat, gmina[1] level) are regulated by many legal instruments of a different order. They are mentioned in the Law and in:
- the Act of 8 March 1990 on Gmina Self-Government,
- the Act of 5 June1998 on Powiat Self-Government ,
- the Act of 5 June1998 on Voivodeship Self-Government,

which appoint local bodies as health care 'organizers', without detailed recommendation what this role should be like and without indication of what public funds shall be spent on. Other regulations define in more the tasks of local authorities; however, leaving the decisions on contracting health care providers as well as modification and setting contracts' value under management of local authorities. To the most important legal instruments belong:
- the Act of 26 October 1982 on education in sobriety and alcoholism counteracting[6],
- the Act of 19 August 1994 on mental health protection [2],
- the Act of 27 August 1997 on occupational and social rehabilitation and employment of the disabled,
- the Act of November 1995 on the protection of health against the consequences of tobacco use,
- the Act of 7 January 1993 on family planning, protection of human foetus and conditions under which abortion is permitted,
- the Act of 27 June 1997 on occupational medicine[12].

1.2. Scope of financed services

1.2.1. The National Heath Fund

The contributions collected by ZUS and KRUS together with subsidies from the state budget are transferred to the National Health Fund (NFZ), which is a payer purchasing health care services from providers. The definite majority of public expenditures on health care is transferred through this channel.

[1] *Respectively, third, second and first level of local government administration in Poland*

Services and goods (materials, pharmaceuticals) financed by the NFZ are defined on a basis of:
- „negative basket" – a list of statutory exclusions of medical procedures non-financed by the NFZ. Some exclusions are conditional. The conditions are verified by national and regional consultants. The list was created by the Ministry of Health in cooperation with self-government of physicians.
- „positive basket" - lists of dental procedures, reimbursed pharmaceuticals and prosthetic materials financed by the NFZ. Among those mentioned above, for pharmaceuticals and prosthetic materials the reimbursement level has been legally set, while dental services enlisted are completely financed from public funds.
- „assumed basket" – determination of general scope of financed health care services and its further clarification by the NFZ while defining so called contracted products (e.g. 'in-patient curative care' and a list of circa 1390 products contracted by the NFZ in the hospital sector).

1.2.2. The Ministry of Health

The list and scope of *highly specialized procedures* financed by the state budget is defined by the Minister of Health regulation issued on the grounds of art.15, section 3, of the Law on health care services financed by public funds. The regulation provides details on services, like scope, method of transfer, price setting rules and assessment of their quality.

On that basis the services are automatically excluded from the catalogue of health care services financed by the NFZ and provided on the grounds of contracts concluded by providers directly with the Ministry of Health which is hereto a payer. Compared with the NFZ the total sum of public expenditures borne by this channel is minor and in 2005 it did not exceed 380 million PLN. On a national scale there are not quite 70 providers that have signed contracts with the Ministry of Health.

Highly specialized procedures financed by the state budget, from the part being at disposal of a Minister of Health, encompass among others bone marrow transplantation, liver, kidney, lung or heart transplantations, special kinds of radiotherapy, some heart valves corrections etc.

1.2.3. Local authorities

The tasks of local authorities falling within the scope of health care are regulated by many legal instruments. Compared to the channels of public expenditures on health care mentioned above a role and an operation scale of local authorities is marginal.

In general, the tasks of region (voivodeship) self-government include: maintaining voivodeship centres of occupational medicine, prevention through the pro-health programs concerning prevention and elimination of particular diseases, health promotion programs in the field of occupational medicine, keeping up psychiatric health care units, activities in the field of mental health, particularly of children and youth, alcoholism prevention and alcohol problems solving, protection of health against the consequences of tobacco use.

The tasks of county (powiat) self-government include: sharing participation costs of the disabled and their carers in rehabilitation camps, supply of rehabilitation equipment, orthopaedic articles and aid items granted to the disabled, drawing up a security plan for medical rescue services and ensuring an appropriate quality of the services provided in social care homes adapted to the particular needs of people with mental disorders, participation in the execution of tasks in the field of mental health protection, particularly of children and youth, and protection of health against the consequences of tobacco use, alcoholism prevention and alcohol problems solving, carrying out tasks in the field of health inspection, prevention of contagious diseases and infections, providing expectant mothers with health, social and legal care.

The tasks of municipal (gmina) self-government include: ensuring the availability of primary health care services, obstetrics and gynaecology and dentistry in accordance with the minimal security plan for out-patient health care settings, alcoholism prevention and alcohol problems solving, care services for persons with mental disorders.

1.3. Health-services financing system

1.3.1. The National Health Fund

1.3.1.1. Basic rules

The specific tasks of the NFZ include carrying out open competitions/calling for proposals, conducting negotiations, concluding contracts for provision of health care services, monitoring their provision and settling the accounts. This last task was practically transferred to regional level, to the voivodeship branches of the NFZ. The director of the NFZ voivodeship branch is, according to the art.107 of the Law, in charge of:

- carrying out of contracting proceedings for provision of health care services;
- concluding and settling contracts for provision of health care services
- controlling and monitoring contracts' execution.

The proceedings aiming at conclusion of contracts are conducted by open competition and negotiations. According to the art. 148 of the Law the basic assessment criteria for proposals encompass particularly price, number of proposed health care services and costs. The last criterion is especially interesting as it suggests that offerents provide access to their cost data.

Under the decree of the NFZ's president (5/2004, appendix 20, §23) the receivables being a subject matter of the contract are accounted for in accordance with 3 health-services financing systems:

- financing system for services with defined unit price,
- financing system for services with defined annual capitation fee
- financing system for services with defined lump sum.

The receivables for provision of services with defined unit price equal to the sum resulting from the multiplication of a number of provided services, their point value and point unit price. The receivables for services provided to the persons entitled on the grounds of coordination regulations (resulting from EEC Council Regulation No 1408/72) are calculated

by a provider in an analogical way, separately for each member state in which a patient was treated and with a detailed list of services provided.

The monthly receivables for provision of services with defined annual capitation fee, equal to the multiplication of a number of beneficiaries covered by care and ½ of the annual capital rate. The persons entitled to services on the grounds of coordination regulations are accounted for like the other beneficiaries (provided that a provider signed them up on the list of persons covered by care) or on the separate grounds specified in the contract. The NFZ defined kinds of services, which are especially accounted for in the relation to capitation fees e.g. *an appointment at the doctor's as a part of coordination system.*

The monthly receivables for provision of services with defined lump sum equal to ½ of the annual amount due for a given scope of services. In case of services provided to the persons entitled on the grounds of coordination regulations the receivables for provision of services amount to actual costs incurred by a provider. The voivodeship branch of the NFZ has the right to demand a detailed calculation of costs from a provider.

Table 2. Juxtaposition of services and rules of financing by the NFZ in 2005

Kind of services (NFZ products)	SHA category	Financing system	Accounting unit	Comments
Specialist outpatient care	HC 1.3.3. HC 4.2.	unit price	accounting points	
Patient transport and emergency rescue	HC 4.3.	lump sum	twenty-four hour readiness	

Primary medical care: ▪ PHC[2] medical services; ▪ PHC nursing services; ▪ PHC midwifery services; ▪ school nursing services; ▪ night and holidays outpatient medical & nursing care ▪ night and holidays medical & nursing home care ▪ ambulance transportation in PHC	HC 1.3.1. HC 6.1. HC 6.2. HC 6.3.	annual capitation fee	Single beneficiary	In the structure of the annual capitation fee the following percentage division of financial means is binding: ▪ medical care: 74,5 %; ▪ nursing care: 25,5 %.
In-patient curative care - branches	HC 1.1. HC 1.2.	unit price	accounting points, person/day	The most important limitations: ▪ In case of more than one service provided to a patient during his/her stay only one service in a given scope shall be indicated ; ▪ Cost of service includes cost of medicinal products ▪ Cost of service includes cost of anesthesiological services, ▪ Service with the same disease unit provided to the insured by a provider within 14 days from the day of completing the service is usually indicated as one service
In-patient curative care – admission unit and hospital rescue unit	HC 1.1.	lump sum	twenty-four hour readiness	
Psychiatric care and addictions treatment:	HC 1.1. HC 1.3.3. HC 1.2.	unit price	accounting points, person/day	

[2] Primary Health Care

▪ diagnostic services ▪ therapy ▪ services of rehabilitative care ▪ services of nursing care				
Palliative care	HC 3.1. HC 3.2. HC 3.3.	unit price	person/day	
Rehabilitative care	HC 2.1. HC 2.2. HC 2.3. HC 2.4.	unit price	accounting points	
Dental care	HC 1.3.2.	unit price	accounting points	For particular groups of dental services there are defined maximal price correction indicators, which can be used by the NFZ.
Immediate dental care	HC 1.3.2.	lump sum	readiness to provide services and services provided during 12-hour duty	The financing amount for readiness to provide services and for services provided during 12-hour duty equals to the multiplication of a point unit price accepted for general dental care and correction indicator – 4000.
Prevention programs	HC 6.4.	unit price	accounting points	
Rehabilitative care/sanatorium	HC 2.1. HC 2.3.	unit price	person/day	
Separately contracted health care services	HC 1.2.	unit price	accounting points	

The catalog of so called *products* (particular kinds of health care services) and their value was created by the working groups organized by the NFZ central office. First works were done by the Ministry of Health and Health – Insurance Funds (Kasa Chorych) in 1999 and successive years. The works were later continued within the confines of the National Association of Health – Insurance Funds. In the end they were included into the operation scope of the NFZ central office.

Since the beginning of insurance system in Poland the 'technology' of works has remained unchanged. The teams of experts are appointed from the representatives of particular medical specializations, representatives of organization of persons governing health care units and third party payer. Those persons define *products,* conditions of their delivery and set their

point value. Team composition and method of work (including meetings' frequency) is not specified by any regulations; however, an important function is held by the national consultant[3] in the particular field of medicine or if necessary, voivodeship consultants and renowned experts associated with learned societies. Unit products and their value expressed in accounting units are defined on the basis of team members' work experience and previous versions of the catalog.

At present, those decisions are binding for all branches of the NFZ and providers across the country. Currently, the 6th version of the catalog has been already issued, whereas the first version, for the year 2004, was published in autumn 2003. In respect to a great number of reservations voiced by the users, subsequent modifications for the particular fields of products were issued during the year, bringing in changes in the appropriate regulations of the contracts concluded between the NFZ and providers.

Here below enclosed sample of catalog content in a form of chosen unit products in hospital care and their description. The table presents product code, specialization of departments which are entitled to provide the service, point value and conditions required for providing the service.

[3] National consultant in a specific field of medicine is a position for which the Minister of Health nominates prominent representatives of the field. The consultants are advisors of the Minister of Health and other officials, they are responsible for national policy towards given field of medicine, medical standards and quality issues. Presently there is ab. 60 national specialists in 60 distinguished fields of medical science.

LP	KOD	SPECJALNOŚCI MEDYCZNE (wg Rozp. MZ z dnia 16 lipca 2004)																																									
		36 ALERGOLOGIA	01 ANESTEZJOLOGIA I INTENSYWNA TERAPI	37 ANGIOLOGIA	02 AUDIOLOGIA I FONIATRIA	03 CHIRURGIA DZIECIĘCA	04 CHIRURGIA KLATKI PIERSIOWEJ	39 CHIRURGIA NACZYNIOWA	05 CHIRURGIA OGÓLNA	40 CHIRURGIA ONKOLOGICZNA	41 CHIRURGIA PLASTYCZNA	06 CHIRURGIA SZCZĘKOWO-TWARZOWA	42 CHOROBY PŁUC	07 CHOROBY WEWNĘTRZNE	08 CHOROBY ZAKAŹNE	09 DERMATOLOGIA I WENEROLOGIA	43 DIABETOLOGIA	44 ENDOKRYNOLOGIA	47 GASTROENTEROLOGIA	50 HEMATOLOGIA	12 KARDIOCHIRURGIA	53 KARDIOLOGIA	54 KARDIOLOGIA DZIECIĘCA	57 NEFROLOGIA	20 NEONATOLOGIA	21 NEUROCHIRURGIA	22 NEUROLOGIA	58 NEUROLOGIA DZIECIĘCA	23 OKULISTYKA	60 ONKOLOGIA I HEMATOLOGIA DZIECIĘCA	24 ONKOLOGIA KLINICZNA	25 ORTOPEDIA I TRAUMAT. NARZ. RUCHU	26 OTORYNOLARYNGOLOGIA	28 PEDIATRIA	67 REUMATOLOGIA	29 POŁOŻNICTWO I GINEKOLOGIA	69 TOKSYKOLOGIA KLINICZNA	71 TRANSPLANTOLOGIA KLINICZNA	34 UROLOGIA	71 UROLOGIA DZIECIĘCA	48 GERIATRIA	52 IMMUNOLOGIA	49 IGINEKOLOGIA ONKOLOGICZNA
1	5.06.00.0000001					X	X	X	X	X	X	X				X										X						X	X			X			X	X			X
2	5.06.00.0000002					X	X	X	X	X	X	X														X						X	X	X		X			X	X			
3	5.06.00.0000003					X			X																	X																	
4	5.06.00.0000004					X	X	X	X	X	X	X	X	X	X	X			X	X				X		X	X	X	X	X	X	X	X			X			X	X			
5	5.06.00.0000005					X			X			X																		X				X									
6	5.06.00.0000006					X	X	X	X	X	X	X		X					X	X	X					X	X			X	X	X	X	X		X			X		X	X	X
7	5.06.00.0000007					X	X	X	X	X	X	X	X	X	X				X	X				X		X	X		X	X	X	X	X			X			X	X			
8	5.06.00.0000008					X	X	X	X	X	X	X				X										X			X			X	X			X			X	X			
9	5.06.00.0000009					X			X																																		
10	5.06.00.0000010					X			X			X														X	X	X				X		X							X		
11	5.06.00.0000011										X																		X														
12	5.06.00.0000012					X			X			X														X	X	X				X		X							X		
13	5.06.00.0000013					X	X	X	X			X														X						X	X			X			X	X			
14	5.06.00.0000014					X			X			X																					X										
15	5.06.00.0000015					X	X	X	X	X	X	X									X	X	X			X			X			X	X			X		X	X	X			
16	5.06.00.0000016					X			X			X																					X	X									
17	5.06.00.0000017					X			X																																X		
18	5.06.00.0000018		X			X	X	X	X	X		X	X	X					X		X					X	X			X	X		X	X		X			X	X	X	X	X
19	5.06.00.0000019					X	X	X	X	X	X	X														X			X			X	X			X			X	X			
20	5.06.00.0000020					X			X	X																													X	X			
21	5.06.00.0000021					X	X	X	X			X	X	X								X		X			X	X				X	X	X		X			X		X		

LP	ŚWIADCZENIE ZDROWOTNE	WARTOŚĆ PUNKTOWA	WARUNKI WYKONANIA						
			TRYB AMBULATORYJNY	JEDNODNIOWY	HOSPITALIZACJA	ZGODA PŁATNIKA	OŚRODEK REFERENCYJNY	DOKUMENTACJA DODATKOWA	UWAGI
1	NACIĘCIE POWŁOK - EWAKUACJA, SĄCZKOWANIE KRWIAKA I/LUB ROPNIA, CIAŁO OBCE - USUNIĘCIE Z POWŁOK LUB Z NATURALNYCH OTWORÓW CIAŁA, ZAOPATRZENIE RAN POWIERZCHOWNYCH	5	X	X	X				
2	USUNIĘCIE LUB WYMIANA RURKI TRACHEOSTOMIJNEJ, CEWNIKA, STOMII, TAMPONADY, DRENU STAWU	5	X	X	X				
3	WODNIAK PRZYMÓZGOWY-EWAKUACJA	300			X				
4	BIOPSJA / BIOPSJA ASPIRACYJNA CIENKOIGŁOWA Z DIAGNOSTYKĄ MIKROSKOPOWĄ BEZ UŻYCIA TECHNIKI OBRAZOWEJ (Z BADANIEM HIST-PAT) DOTYCZY RÓWNIEŻ BIOPSJI TARCZYCY POD KONTROLĄ USG	15	X	X	X				
5	KRWAWIENIA PO EKSTRAKCJACH I INNYCH ZABIEGACH STOMATOLOGICZNYCH - LECZENIE WYMAGAJĄCE HOSPITALIZACJI	10			X				
6	ŻYWIENIE DOJELITOWE (ZA KAŻDY DZIEŃ ŻYWIENIA)	10		X	X				MOŻNA SUMOWAĆ Z WYJĄTKIEM OIT
7	PUNKCJA DIAGNOSTYCZNO - TERAPEUTYCZNA JAM CIAŁA, STAWU, ZATOK, SKÓRY I TORBIELI Z PEŁNĄ DIAGNOSTYKĄ (CYTOLOGIA, MIKROBIOLOGIA, ANALITYKA)	10	X	X	X				
8	WYCIĘCIE POJEDYNCZYCH ZMIAN ZE SKÓRY, BŁON ŚLUZOWYCH I TKANEK MIĘKKICH Z NIEZBĘDNĄ DIAGNOSTYKĄ (W TYM BADANIE HIST-PAT)	15	X	X	X				
9	USUNIĘCIE PAZNOKCIA, ŁOŻYSKA PAZNOKCIA LUB OBRĄBKA NASKÓRKOWEGO	10	X	X	X				
10	WSTRZĄŚNIENIE MÓZGU I OBRAŻENIA RÓŻNYCH OKOLIC CIAŁA - OBSERWACJA I LECZENIE ZACHOWAWCZE - DIAGNOSTYKA PODSTAWOWA	40			X				
11	ZAOPATRZENIE CHIRURGICZNE (WYCIĘCIE / ZESZYCIE) RAN POWIERZCHOWNYCH SPOJÓWKI I APARATU OCHRONNEGO OKA	20	X	X	X				
12	WSTRZĄŚNIENIE MÓZGU - OBSERWACJA I LECZENIE ZACHOWAWCZE - DIAGNOSTYKA ROZSZERZONA (TK/MR)	85			X				
13	ZAOPATRZENIE CHIRURGICZNE RAN BĄDŹ WYCIĘCIE ZMIANY ZE SKÓRY Z OKOLIC WSTRZĄSORODNYCH (SZYJA, DÓŁ PACHOWY, OKOLICA KROCZA) W ZNIECZULENIU MIEJSCOWYM Z BADANIEM HISTOPATOLOGICZNYM	20	X	X	X				
14	ZŁAMANIE KOŚCI TWARZOCZASZKI - LECZENIE ZACHOWAWCZE (PRZED PRZEKAZANIEM DO OŚRODKA REFERENCYJNEGO)	20		X	X				
15	DYSKWALIFIKACJA Z PLANOWEGO ZABIEGU OPERACYJNEGO / INWAZYJNYCH PROCEDUR KARDIOLOGICZNYCH Z POWODU UJAWNIONYCH W SZPITALU PRZECIWWSKAZAŃ (NP. CHOROBY INFEKCYJNE, KARDIOLOGICZNE, ZMIANA SPOSOBU POSTĘPOWANIA - ODSTĄPIENIE OD LECZENIA OPERACYJNEGO), NIE WYMAG	15			X				
16	TAMPONADA NOSA TYLNA WYMAGAJĄCA HOSPITALIZACJI	70			X				
17	ZŁAMANIE MIEDNICY - Z PRZERWANIEM OBRĘCZY - LECZENIE ZACHOWAWCZE (PRZED PRZEKAZANIEM DO OŚRODKA REFERENCYJNEGO)	25			X				
18	ŻYWIENIE POZAJELITOWE W PRZYPADKACH NIEWYDOLNOŚCI JELITOWEJ OSTREJ LUB PRZEWLEKŁEJ, ZESPOŁU KRÓTKIEGO JELITA, PRZEDŁUŻAJĄCEJ SIĘ NIEDROŻNOŚCI POOPERACYJNEJ LUB Z INNEGO POWODU (ZA KAŻDY DZIEŃ ŻYWIENIA)	25			X				MOŻNA SUMOWAĆ
19	PLASTYKA KOREKCYJNA ZNIEKSZTAŁCEŃ BLIZNOWATYCH I UBYTKÓW POURAZOWYCH RÓŻNYCH OKOLIC CIAŁA - WYCIĘCIE I ZESZYCIE	25	X	X	X				
20	WYMIANA LUB USUNIĘCIE CEWNIKA W PRZETOCE NERKOWEJ	25	X	X	X				
21	LECZENIE TROMBOLITYCZNE STREPTOKINAZĄ (ZAWAŁ SERCA, ZATOROWOŚĆ PŁUCNA, ZAKRZEPICA)	30			X				MOŻNA SUMOWAC

Tabel. 3. Sample of catalog of *products* in hospital care; columns enclose sequential number, product code, specialties of departments which are entitled to provide the service (marked x), name of the product, point value, additional conditions (eg. possibility to provide in ambulatory care, one day surgery etc.) (source: www.nfz.gov.pl, entry date 21.06.2005)

The contracts between the voivodeship branches of the NFZ and providers are concluded once a year. The number of units of each contract product and the unit price is set in PLN individually for each provider.

If a contract product has a point value, price setting refers to a point. In 2003 an initial price for an accounting point in hospital care amounted in average to 10 PLN (2,5 Euro).

A contract product is the most detailed category of description within the scope of every kind of services. For example, *ACCOUNTING POINT IN AN ALLERGY CLINIC* would be the contract product in the field of specialist outpatient care in alergology.

Prices of particular accounting units can differ dependently on:

- contract product
- provider (each proposes own price in the offer)
- voivodeship (operation area of the particular NFZ's branch)

The differences in prices between voivodeships can be significant, even up to 10%-20%. The differences within single voivodeship are usually lower.

As indicated in the results of the NFZ's inspection conducted by the Supreme Chamber of Control (NIK), the prices of accounting units for the same products used in contracting process for the year 2004 differed among themselves 'from 100% up to 1100%' [11]:
- in out-patient health care from 3 up to 13,8 PLN for an accounting point,
- in psychiatric care and addictions treatment from 13 up to 170 PLN (*1100%*) for a person/day and from 3.5 up to 10.81 PLN for an accounting point,
- in rehabilitative care – person/per day – from 20 up to 182 PLN.

From the explanations presented to the NIK's inspectors by the NFZ's representatives it appeared that the accounting amounts for particular units depended on affluence of the branch, number of services contracted by a given provider and his good will. In many cases it happened that providers tried to lower the prices maximally during the tender to obtain at least minimal contract scope. Dentists are a good example of that. To set national level of prices their representatives presented the calculation of costs whereas particular doctors (see: below) and the same time some medical practitioners drastically lowered the prices in the proposals submitted to the NFZ, to receive any contract, since it attracts patients, also those who pay privately.

1.3.1.2. Examples of contracts

The NFZ displays the data concerning concluded contracts on its websites. For each voivodeship branch and for each kind of services the lists of providers is presented, together with the lists of contract products, number of contracted units ('summary contract number'), contract product value, ('summary contract amount') and product unit price ('average price of product').

Here below examples of these data are displayed. They were grouped in regard to accounting units. In order to demonstrate price differences within the same voivodeship the data from 2 competitive contracts from one branch (Śląskie Voivodeship) is presented. In order to demonstrate price differences between voivodeship branches the contract data from other branch (Podkarpackie Voivodeship) was additionally enclosed. Short review is to be found under each comparison.

Examples of accounting points –Dentistry

Śląski OW (Śląskie Voivodeship Branch)
Private Dentist's Surgery XXX
Year 2005

Product code	Product name	position in contract	Amount of given product	Total price for the amount	Average unit price
07.1800.122.02	PUNKT ROZLICZENIOWY W PORADNI STOMATOLOGICZNEJ - V GRUPA ŚWIADCZEŃ STOMATOLOGICZNYCH – PROTETYKA	1	240000	20 904,00	0,087100
07.1800.125.02	PUNKT ROZLICZENIOWY W PORADNI STOMATOLOGICZNEJ - VII GRUPA ŚWIADCZEŃ STOMATOLOGICZNYCH - OGÓLNOSTOMATOLOGICZNE	1	528000	35 376,00	0,067000
07.1800.126.02	PUNKT ROZLICZENIOWY W PORADNI STOMATOLOGICZNEJ - VII GRUPA ŚWIADCZEŃ STOMATOLOGICZNYCH - OGÓLNOSTOMATOLOGICZNE DLA DZIECI	1	132000	8 844,00	0,067000

Śląski OW (Śląskie Voivodeship Branch)
Private Health Care Unit (ZOZ) YYY
Year 2005

Product code	Product name	position in contract	Amount of given product	Total price for the amount	Average unit price
07.1800.122.02	PUNKT ROZLICZENIOWY W PORADNI STOMATOLOGICZNEJ - V GRUPA ŚWIADCZEŃ STOMATOLOGICZNYCH – PROTETYKA	1	600000	51 480,00	0,085800
07.1800.125.02	PUNKT ROZLICZENIOWY W PORADNI STOMATOLOGICZNEJ - VII GRUPA ŚWIADCZEŃ STOMATOLOGICZNYCH - OGÓLNOSTOMATOLOGICZNE	1	1320000	87 120,00	0,066000
07.1800.126.02	PUNKT ROZLICZENIOWY W PORADNI STOMATOLOGICZNEJ - VII GRUPA ŚWIADCZEŃ STOMATOLOGICZNYCH - OGÓLNOSTOMATOLOGICZNE DLA DZIECI	1	330000	21 780,00	0,066000

Podkarpacki OW (Podkarpackie Voivodeship Branch)
Individual Dental Practice ZZZ
Year 2005

Product code	Product name	position in contract	Amount of given product	Total price for the amount	Average unit price
07.1800.122.02	PUNKT ROZLICZENIOWY W PORADNI STOMATOLOGICZNEJ - V GRUPA ŚWIADCZEŃ STOMATOLOGICZNYCH - PROTETYKA	1	240000	21 600,00	0,090000
07.1800.125.02	PUNKT ROZLICZENIOWY W PORADNI STOMATOLOGICZNEJ - VII GRUPA ŚWIADCZEŃ STOMATOLOGICZNYCH - OGÓLNOSTOMATOLOGICZNE	1	360000	25 200,00	0,070000
07.1800.126.02	PUNKT ROZLICZENIOWY W PORADNI STOMATOLOGICZNEJ - VII GRUPA ŚWIADCZEŃ STOMATOLOGICZNYCH - OGÓLNOSTOMATOLOGICZNE DLA DZIECI	1	240000	16 800,00	0,070000

From the above data it can be assumed that e.g. the XXX provider from the Śląskie Voivodeship sold, for the year 2005, 240.000 accounting points of 'prosthodontics' product with the code '07.1800.122.02'. Each accounting point costs 0.0871 PLN, so on account of that the provider should make a revenue of 20.904 PLN from the sale of the discussed product in 2005. His competitor from the Śląskie Voivodeship sold the same product for the unit price lower by 0.0013 PLN, but in bigger quantity (600.000 points). On the other hand, the selling price of the provider from the Podkarpackie Voivodeship was higher by 0.0021 PLN, despite the same amount of points sold.

Examples of accounting point and lump sums - Hospitals

Śląski OW (Śląskie Voivodeship Branch)
Hospital XXX
Year 2005

Product code	Product name	position in contract	Amount of given product	Total price for the amount	Average unit price
03.4000.023.02	PUNKT ROZLICZENIOWY W ODDZIALE CHORÓB WEWNĘTRZNYCH - HOSPITALIZACJA	1	340427	3 404 270,00	10,000000
03.4000.023.02	PUNKT ROZLICZENIOWY W ODDZIALE CHORÓB WEWNĘTRZNYCH - HOSPITALIZACJA	2	340428	3 404 280,00	10,000000
03.4100.023.02	PUNKT ROZLICZENIOWY W ODDZIALE KARDIOLOGICZNYM - HOSPITALIZACJA	1	76832	768 320,00	10,000000
03.4200.023.02	PUNKT ROZLICZENIOWY W ODDZIALE DERMATOLOGICZNYM - HOSPITALIZACJA	1	76119	761 190,00	10,000000
03.4220.023.02	PUNKT ROZLICZENIOWY W ODDZIALE NEUROLOGICZNYM - HOSPITALIZACJA	1	137947	1 379 470,00	10,000000
03.4240.023.02	PUNKT ROZLICZENIOWY W ODDZIALE ONKOLOGICZNYM - HOSPITALIZACJA	1	158092	1 580 920,00	10,000000
03.4240.128.02	PUNKT ROZLICZENIOWY W SCHEMACIE LECZENIA W CHEMIOTERAPII W ODDZIALE ONKOLOGICZNYM	1	82950	829 500,00	10,000000
03.4260.023.02	PUNKT ROZLICZENIOWY W ODDZIALE INTENSYWNEJ TERAPII - HOSPITALIZACJA	1	329310	3 293 100,00	10,000000

03.4401.023.02	PUNKT ROZLICZENIOWY W ODDZIALE PEDIATRYCZNYM - HOSPITALIZACJA	1	165509	1 655 090,00	10,000000
03.4421.023.02	PUNKT ROZLICZENIOWY W ODDZIALE NEONATOLOGICZNYM - HOSPITALIZACJA	1	40412	404 120,00	10,000000
03.4421.024.02	PUNKT ROZLICZENIOWY W ODDZIALE NEONATOLOGICZNYM - PROCEDURY NIELIMITOWANE	1	98942	989 420,00	10,000000
03.4450.023.02	PUNKT ROZLICZENIOWY W ODDZIALE GINEKOLOGICZNO-POŁOŻNICZYM - HOSPITALIZACJA	1	327413	3 274 130,00	10,000000
03.4456.024.02	PUNKT ROZLICZENIOWY W ODDZIALE POŁOŻNICZYM - PROCEDURY NIELIMITOWANE	1	140319	1 403 190,00	10,000000
03.4500.023.02	PUNKT ROZLICZENIOWY W ODDZIALE CHIRURGII OGÓLNEJ - HOSPITALIZACJA	1	429144	4 291 440,00	10,000000
03.4501.023.02	PUNKT ROZLICZENIOWY W ODDZIALE CHIRURGII DLA DZIECI - HOSPITALIZACJA	1	194669	1 946 690,00	10,000000
03.4580.023.02	PUNKT ROZLICZENIOWY W ODDZIALE CHIRURGII URAZOWO-ORTOPEDYCZNEJ - HOSPITALIZACJA	1	407757	4 077 570,00	10,000000
03.4600.023.02	PUNKT ROZLICZENIOWY W ODDZIALE OKULISTYCZNYM - HOSPITALIZACJA	1	246261	2 462 610,00	10,000000
03.4610.023.02	PUNKT ROZLICZENIOWY W ODDZIALE OTOLARYNGOLOGICZNYM - HOSPITALIZACJA	1	137037	1 370 370,00	10,000000
03.4611.023.02	PUNKT ROZLICZENIOWY W ODDZIALE OTOLARYNGOLOGICZNYM DLA DZIECI - HOSPITALIZACJA	1	68310	683 100,00	10,000000
03.4640.023.02	PUNKT ROZLICZENIOWY W ODDZIALE UROLOGICZNYM - HOSPITALIZACJA	1	163760	1 637 600,00	10,000000
03.4900.008.03	RYCZAŁT W IZBIE PRZYJĘĆ	1	365	1 277 500,00	3500,000000

(Śląskie Voivodeship Branch)
Hospital XXX
Year 2005

Product code	Product name	position in contract	Amount of given product	Total price for the amount	Average unit price
03.4000.023.02	PUNKT ROZLICZENIOWY W ODDZIALE CHORÓB WEWNĘTRZNYCH - HOSPITALIZACJA	1	155612	1 556 120,00	10,000000
03.4220.023.02	PUNKT ROZLICZENIOWY W ODDZIALE NEUROLOGICZNYM - HOSPITALIZACJA	1	103834	1 038 340,00	10,000000
03.4421.023.02	PUNKT ROZLICZENIOWY W ODDZIALE NEONATOLOGICZNYM - HOSPITALIZACJA	1	15376	153 760,00	10,000000
03.4421.024.02	PUNKT ROZLICZENIOWY W ODDZIALE NEONATOLOGICZNYM - PROCEDURY NIELIMITOWANE	1	24049	240 490,00	10,000000
03.4450.023.02	PUNKT ROZLICZENIOWY W ODDZIALE GINEKOLOGICZNO-POŁOŻNICZYM - HOSPITALIZACJA	1	135416	1 354 160,00	10,000000
03.4456.024.02	PUNKT ROZLICZENIOWY W ODDZIALE	1	42763	427 630,00	10,000000

	POŁOŻNICZYM - PROCEDURY NIELIMITOWANE				
03.4500.023.02	PUNKT ROZLICZENIOWY W ODDZIALE CHIRURGII OGÓLNEJ - HOSPITALIZACJA	1	190000	1 900 000,00	10,000000
03.4600.023.02	PUNKT ROZLICZENIOWY W ODDZIALE OKULISTYCZNYM - HOSPITALIZACJA	1	402640	4 026 400,00	10,000000
03.4900.008.03	RYCZAŁT W IZBIE PRZYJĘĆ	1	365	365 000,00	1000,000000

Podkarpacki OW (Podkarpackie Voivodeship Branch)

Hospital YYY
Year 2005

Product code	Product name	position in contract	Amount of given product	Total price for the amount	Average unit price
03.3300.008.03	RYCZAŁT W SZPITALNYM ODDZIALE RATUNKOWYM	1	365	1 460 000,00	4000,000000
03.4000.023.02	PUNKT ROZLICZENIOWY W ODDZIALE CHORÓB WEWNĘTRZNYCH - HOSPITALIZACJA	1	294300	2 943 000,00	10,000000
03.4050.023.02	PUNKT ROZLICZENIOWY W ODDZIALE GASTROENTEROLOGICZNYM - HOSPITALIZACJA	1	139300	1 393 000,00	10,000000
03.4100.023.02	PUNKT ROZLICZENIOWY W ODDZIALE KARDIOLOGICZNYM - HOSPITALIZACJA	1	1206291	12 062 910,00	10,000000
03.4150.023.02	PUNKT ROZLICZENIOWY W ODDZIALE TOKSYKOLOGICZNYM - HOSPITALIZACJA	1	139700	1 397 000,00	10,000000
03.4220.023.02	PUNKT ROZLICZENIOWY W ODDZIALE NEUROLOGICZNYM - HOSPITALIZACJA	1	506200	5 062 000,00	10,000000
03.4260.023.02	PUNKT ROZLICZENIOWY W ODDZIALE INTENSYWNEJ TERAPII - HOSPITALIZACJA	1	402100	4 021 000,00	10,000000
03.4280.023.02	PUNKT ROZLICZENIOWY W ODDZIALE REUMATOLOGICZNYM - HOSPITALIZACJA	1	141300	1 413 000,00	10,000000
03.4401.023.02	PUNKT ROZLICZENIOWY W ODDZIALE PEDIATRYCZNYM - HOSPITALIZACJA	1	735028	7 350 280,00	10,000000
03.4401.128.02	PUNKT ROZLICZENIOWY W SCHEMACIE LECZENIA W CHEMIOTERAPII W ODDZIALE PEDIATRYCZNYM	1	200	2 000,00	10,000000
03.4421.023.02	PUNKT ROZLICZENIOWY W ODDZIALE NEONATOLOGICZNYM - HOSPITALIZACJA	1	222300	2 223 000,00	10,000000
03.4421.024.02	PUNKT ROZLICZENIOWY W ODDZIALE NEONATOLOGICZNYM - PROCEDURY NIELIMITOWANE	1	310900	3 109 000,00	10,000000
03.4450.023.02	PUNKT ROZLICZENIOWY W ODDZIALE GINEKOLOGICZNO-POŁOŻNICZYM - HOSPITALIZACJA	1	462900	4 629 000,00	10,000000
03.4456.024.02	PUNKT ROZLICZENIOWY W ODDZIALE POŁOŻNICZYM - PROCEDURY NIELIMITOWANE	1	293000	2 930 000,00	10,000000
03.4500.023.02	PUNKT ROZLICZENIOWY W ODDZIALE CHIRURGII OGÓLNEJ - HOSPITALIZACJA	1	285200	2 852 000,00	10,000000

03.4501.023.02	PUNKT ROZLICZENIOWY W ODDZIALE CHIRURGII DLA DZIECI - HOSPITALIZACJA	1	460100	4 601 000,00	10,000000
03.4570.023.02	PUNKT ROZLICZENIOWY W ODDZIALE NEUROCHIRURGICZNYM - HOSPITALIZACJA	1	429300	4 293 000,00	10,000000
03.4580.022.02	PUNKT ROZLICZENIOWY W ODDZIALE CHIRURGII URAZOWO-ORTOPEDYCZNEJ - HOSPITALIZACJA JEDNODNIOWA	1	12500	100 000,00	8,000000
03.4580.023.02	PUNKT ROZLICZENIOWY W ODDZIALE CHIRURGII URAZOWO-ORTOPEDYCZNEJ - HOSPITALIZACJA	1	586834	5 868 340,00	10,000000
03.4581.023.02	PUNKT ROZLICZENIOWY W ODDZIALE CHIRURGII URAZOWO-ORTOPEDYCZNEJ DLA DZIECI - HOSPITALIZACJA	1	382400	3 824 000,00	10,000000

From the above data it can be assumed that the unit value of accounting points for contract products in hospital care is the same for 2 competitors from the Śląskie Voivodeship as well as for the provider from the Podkarpackie Voivodeship. More over, it is identical for different contract products (10 PLN). The only exception is here the product of 1-day hospitalization in traumatology ward, which is a little cheaper, but it can be found only by the provider from the Podkarpackie Voivodeship. It's an interesting point that there are significant differences in prices for admission units between competitors from the Śląskie Voivodeship. 24-hour readiness to provide services serves here as an accounting unit and its value equals to 3.500 PLN in one hospital and 1.000 PLN in another. The amount of sold units is in both cases the same and equals to 365 - that is to the number of days in a calendar year. A characteristic feature of hospital products is a long list of so called *unit products,* which are something between a medical procedure as defined for example in the International Classification of Medical Procedures (ICD-9-CM) and diagnostic group as defined in DRG**.** Therefore, under each position of accounting point in particular departments there is a list of more than 1000 single *unit products.*

Examples of lump sums – emergency rescue

Śląski OW (Śląskie Voivodeship Branch)

Emergency Unit XXX
Year 2005

Product code	Product name	position in contract	Amount of given product	Total price for the amount	Average unit price
09.3112.032.08	DOBOKARETKA ZESPOŁU RATOWNICTWA MEDYCZNEGO "W"	1	730	1 248 300,00	1710,000000
09.3114.032.08	DOBOKARETKA ZESPOŁU RATOWNICTWA MEDYCZNEGO "R"	1	365	773 800,00	2120,000000

Śląski OW (Śląskie Voivodeship Branch)
Emergency Unit YYY
Rok 2005

Product code	Product name	position in contract	Amount of given product	Total price for the amount	Average unit price
09.3114.032.08	DOBOKARETKA ZESPOŁU RATOWNICTWA MEDYCZNEGO "R"	1	365	773 800,00	2120,000000

09.3112.032.08	DOBOKARETKA ZESPOŁU RATOWNICTWA MEDYCZNEGO "W"	1	1095	1 872 450,00	1710,000000

Podkarpacki OW (Podkarpackie Voivodeship Branch)
Emergency Unit XXX
Year 2005

Product code	Product name	position in contract	Amount of given product	Total price for the amount	Average unit price
09.3112.032.08	DOBOKARETKA ZESPOŁU RATOWNICTWA MEDYCZNEGO "W"	1	365	638 750,00	1750,000000
09.3114.032.08	DOBOKARETKA ZESPOŁU RATOWNICTWA MEDYCZNEGO "R"	1	365	784 750,00	2150,000000

Emergency rescue is accounted for on the basis of a lump sum system with 24-hour readiness as accounting unit. In the examples showed above the amount of sold units equals to 365 what stands for annual readiness of an ambulance; bigger amount indicates that there is more than one vehicle on standby. There are no price differences between providers from the Śląskie Voivodeship and the unit price of the provider from the Podkarpackie Voivodeship is higher by 1-2%.

Examples of capitation fee – Primary medical care

Śląski OW (Śląskie Voivodeship Branch)
Health Care Unit (ZOZ) XXX
Year 2005

Product code	Product name	position in contract	Amount of given product	Total price for the amount	Average unit price
01.0010.078.09	KWOTA ZA PORADĘ LEKARZA POZ DLA UBEZPIECZONEGO SPOZA TERENU OW NFZ W P(GAB) LEK POZ	1	0	0,00	18,000000
01.0010.089.01	KAPITACJA W OPIECE LEKARSKIEJ W P(GAB) LEK POZ - UBEZPIECZENI 0-6 RŻ	1	0	0,00	7,575000
01.0010.090.01	KAPITACJA W OPIECE LEKARSKIEJ W P(GAB) LEK POZ - UBEZPIECZENI 7-65 RŻ	1	0	0,00	5,050000
01.0010.091.01	KAPITACJA W OPIECE LEKARSKIEJ W P(GAB) LEK POZ - UBEZPIECZENI POWYŻEJ 65 RŻ	1	0	0,00	8,585000
01.0010.159.09	KWOTA ZA PORADĘ LEKARZA POZ UDZIELONĄ UBEZPIECZONEMU NA PODSTAWIE PRZEPISÓW O KOORDYNACJI W P(GAB) LEK POZ	1	0	0,00	18,000000
01.0010.159.09	KWOTA ZA PORADĘ LEKARZA POZ UDZIELONĄ UBEZPIECZONEMU NA PODSTAWIE PRZEPISÓW O KOORDYNACJI W P(GAB) LEK POZ	2	0	0,00	38,000000
01.0032.079.09	KWOTA ZA ŚWIADCZENIE PIELĘGNIARKI ŚRODOWISKOWO-RODZINNEJ DLA UBEZPIECZONEGO SPOZA TERENU OW NFZ W P(GAB) PIELĘG ŚRODOW-RODZIN	1	0	0,00	5,000000
01.0032.092.01	KAPITACJA W OPIECE PIELĘGNIARSKIEJ	1	0	0,00	1,105000

	ŚRODOWISKOWO-RODZINNEJ - UBEZPIECZENI 0-6 RŻ				
01.0032.093.01	KAPITACJA W OPIECE PIELĘGNIARSKIEJ ŚRODOWISKOWO-RODZINNEJ - UBEZPIECZENI 7-65 RŻ	1	0	0,00	0,850000
01.0032.094.01	KAPITACJA W OPIECE PIELĘGNIARSKIEJ ŚRODOWISKOWO-RODZINNEJ - UBEZPIECZENI POWYŻEJ 65 RŻ	1	0	0,00	1,445000
01.0032.160.09	KWOTA ZA ŚWIADCZENIE PIELĘGNIARKI ŚRODOWISKOWO-RODZINNEJ UDZIELONE UBEZPIECZONEMU NA PODSTAWIE PRZEPISÓW O KORDYNACJI W P(GAB) PIELĘG ŚRODOW-RODZIN	1	0	0,00	5,000000
01.0032.160.09	KWOTA ZA ŚWIADCZENIE PIELĘGNIARKI ŚRODOWISKOWO-RODZINNEJ UDZIELONE UBEZPIECZONEMU NA PODSTAWIE PRZEPISÓW O KORDYNACJI W P(GAB) PIELĘG ŚRODOW-RODZIN	2	0	0,00	9,500000
01.0034.004.01	KAPITACJA W OPIECE POŁOŻNEJ ŚRODOWISKOWO-RODZINNEJ	1	0	0,00	0,440000
01.0034.080.09	KWOTA ZA ŚWIADCZENIE POŁOŻNEJ ŚRODOWISKOWO-RODZINNEJ DLA UBEZPIECZONEGO SPOZA TERENU OW NFZ W P(GAB) POŁOŻ. ŚRODOW-RODZIN	1	0	0,00	5,000000
01.0034.161.09	KWOTA ZA ŚWIADCZENIE POŁOŻNEJ UDZIELONE UBEZPIECZONEMU NA PODSTAWIE PRZEPISÓW O KORDYNACJI W P(GAB) POŁOŻNEJ	1	0	0,00	5,000000
01.0034.161.09	KWOTA ZA ŚWIADCZENIE POŁOŻNEJ UDZIELONE UBEZPIECZONEMU NA PODSTAWIE PRZEPISÓW O KORDYNACJI W P(GAB) POŁOŻNEJ	2	0	0,00	9,500000

Śląski OW (Śląskie Voivodeship Branch)
Health Care Unit (ZOZ)YYY
Year 2005

Product code	Product name	position in contract	Amount of given product	Total price for the amount	Average unit price
01.0010.078.09	KWOTA ZA PORADĘ LEKARZA POZ DLA UBEZPIECZONEGO SPOZA TERENU OW NFZ W P(GAB) LEK POZ	1	0	0,00	18,000000
01.0010.089.01	KAPITACJA W OPIECE LEKARSKIEJ W P(GAB) LEK POZ - UBEZPIECZENI 0-6 RŻ	1	0	0,00	7,575000
01.0010.090.01	KAPITACJA W OPIECE LEKARSKIEJ W P(GAB) LEK POZ - UBEZPIECZENI 7-65 RŻ	1	0	0,00	5,050000
01.0010.091.01	KAPITACJA W OPIECE LEKARSKIEJ W P(GAB) LEK POZ - UBEZPIECZENI POWYŻEJ 65 RŻ	1	0	0,00	8,585000
01.0010.159.09	KWOTA ZA PORADĘ LEKARZA POZ UDZIELONĄ UBEZPIECZONEMU NA PODSTAWIE PRZEPISÓW O KOORDYNACJI W P(GAB) LEK POZ	1	0	0,00	18,000000
01.0010.159.09	KWOTA ZA PORADĘ LEKARZA POZ UDZIELONĄ UBEZPIECZONEMU NA PODSTAWIE PRZEPISÓW O KOORDYNACJI W P(GAB) LEK POZ	2	0	0,00	38,000000
01.0032.079.09	KWOTA ZA ŚWIADCZENIE PIELĘGNIARKI ŚRODOWISKOWO-RODZINNEJ DLA UBEZPIECZONEGO SPOZA TERENU OW NFZ W P(GAB) PIELĘG ŚRODOW-RODZIN	1	0	0,00	5,000000

01.0032.092.01	KAPITACJA W OPIECE PIELĘGNIARSKIEJ ŚRODOWISKOWO-RODZINNEJ - UBEZPIECZENI 0-6 RŻ	1	0	0,00	1,105000
01.0032.093.01	KAPITACJA W OPIECE PIELĘGNIARSKIEJ ŚRODOWISKOWO-RODZINNEJ - UBEZPIECZENI 7-65 RŻ	1	0	0,00	0,850000
01.0032.094.01	KAPITACJA W OPIECE PIELĘGNIARSKIEJ ŚRODOWISKOWO-RODZINNEJ - UBEZPIECZENI POWYŻEJ 65 RŻ	1	0	0,00	1,445000
01.0032.160.09	KWOTA ZA ŚWIADCZENIE PIELĘGNIARKI ŚRODOWISKOWO-RODZINNEJ UDZIELONE UBEZPIECZONEMU NA PODSTAWIE PRZEPISÓW O KORDYNACJI W P(GAB) PIELĘG ŚRODOW-RODZIN	1	0	0,00	5,000000
01.0032.160.09	KWOTA ZA ŚWIADCZENIE PIELĘGNIARKI ŚRODOWISKOWO-RODZINNEJ UDZIELONE UBEZPIECZONEMU NA PODSTAWIE PRZEPISÓW O KORDYNACJI W P(GAB) PIELĘG ŚRODOW-RODZIN	2	0	0,00	9,500000
01.0034.004.01	KAPITACJA W OPIECE POŁOŻNEJ ŚRODOWISKOWO-RODZINNEJ	1	0	0,00	0,440000
01.0034.080.09	KWOTA ZA ŚWIADCZENIE POŁOŻNEJ ŚRODOWISKOWO-RODZINNEJ DLA UBEZPIECZONEGO SPOZA TERENU OW NFZ W P(GAB) POŁOŻ. ŚRODOW-RODZIN	1	0	0,00	5,000000
01.0034.161.09	KWOTA ZA ŚWIADCZENIE POŁOŻNEJ UDZIELONE UBEZPIECZONEMU NA PODSTAWIE PRZEPISÓW O KORDYNACJI W P(GAB) POŁOŻNEJ	1	0	0,00	5,000000
01.0034.161.09	KWOTA ZA ŚWIADCZENIE POŁOŻNEJ UDZIELONE UBEZPIECZONEMU NA PODSTAWIE PRZEPISÓW O KORDYNACJI W P(GAB) POŁOŻNEJ	2	0	0,00	9,500000

Podkarpacki OW (Podkarpackie Voivodeship Branch)
Health Care Unit (ZOZ) XXX
Year 2005

Product code	Product name	position in contract	Amount of given product	Total price for the amount	Average unit price
01.0010.002.01	KAPITACJA W OPIECE LEKARSKIEJ W DPS	1	278	3 399,94	12,230000
01.0010.078.09	KWOTA ZA PORADĘ LEKARZA POZ DLA UBEZPIECZONEGO SPOZA TERENU OW NFZ W P(GAB) LEK POZ	1	12	216,00	18,000000
01.0010.089.01	KAPITACJA W OPIECE LEKARSKIEJ W P(GAB) LEK POZ - UBEZPIECZENI 0-6 RŻ	1	12528	91 955,52	7,340000
01.0010.090.01	KAPITACJA W OPIECE LEKARSKIEJ W P(GAB) LEK POZ - UBEZPIECZENI 7-65 RŻ	1	188000	919 320,00	4,890000
01.0010.091.01	KAPITACJA W OPIECE LEKARSKIEJ W P(GAB) LEK POZ - UBEZPIECZENI POWYŻEJ 65 RŻ	1	22900	190 528,00	8,320000
01.0010.159.09	KWOTA ZA PORADĘ LEKARZA POZ UDZIELONĄ UBEZPIECZONEMU NA PODSTAWIE PRZEPISÓW O KOORDYNACJI W P(GAB) LEK POZ	1	6	228,00	38,000000
01.0032.079.09	KWOTA ZA ŚWIADCZENIE PIELĘGNIARKI ŚRODOWISKOWO-RODZINNEJ DLA UBEZPIECZONEGO SPOZA TERENU OW NFZ W P(GAB) PIELĘG ŚRODOW-RODZIN	1	12	60,00	5,000000

01.0032.092.01	KAPITACJA W OPIECE PIELĘGNIARSKIEJ ŚRODOWISKOWO-RODZINNEJ - UBEZPIECZENI 0-6 RŻ	1	7014	9 679,32	1,380000
01.0032.093.01	KAPITACJA W OPIECE PIELĘGNIARSKIEJ ŚRODOWISKOWO-RODZINNEJ - UBEZPIECZENI 7-65 RŻ	1	143164	151 753,84	1,060000
01.0032.094.01	KAPITACJA W OPIECE PIELĘGNIARSKIEJ ŚRODOWISKOWO-RODZINNEJ - UBEZPIECZENI POWYŻEJ 65 RŻ	1	19804	35 647,20	1,800000
01.0032.160.09	KWOTA ZA ŚWIADCZENIE PIELĘGNIARKI ŚRODOWISKOWO-RODZINNEJ UDZIELONE UBEZPIECZONEMU NA PODSTAWIE PRZEPISÓW O KORDYNACJI W P(GAB) PIELĘG ŚRODOW-RODZIN	1	6	57,00	9,500000
01.0034.004.01	KAPITACJA W OPIECE POŁOŻNEJ ŚRODOWISKOWO-RODZINNEJ	1	34220	20 875,20	0,610029
01.0034.080.09	KWOTA ZA ŚWIADCZENIE POŁOŻNEJ ŚRODOWISKOWO-RODZINNEJ DLA UBEZPIECZONEGO SPOZA TERENU OW NFZ W P(GAB) POŁOŻ. ŚRODOW-RODZIN	1	12	60,00	5,000000
01.0034.161.09	KWOTA ZA ŚWIADCZENIE POŁOŻNEJ UDZIELONE UBEZPIECZONEMU NA PODSTAWIE PRZEPISÓW O KORDYNACJI W P(GAB) POŁOŻNEJ	1	6	57,00	9,500000
01.0041.110.01	KAPITACJA W OPIECE PIELĘGNIARSKIEJ W ŚRODOWISKU NAUCZANIA I WYCHOWANIA - TYP SZKOŁY I	1	54254	113 933,40	2,100000
01.0041.120.01	KAPITACJA W OPIECE PIELĘGNIARSKIEJ W ŚRODOWISKU NAUCZANIA I WYCHOWANIA - TYP SZKOŁY II	1	44040	129 477,60	2,940000

In the primary medical care settling accounts is based on the annual capitation fee per one person signed up on the provider's list. Within a year a provider makes a revenue from the sales of these services, which amounts to a number of beneficiaries on the list (accounting unit) and negotiated annual capitation fee (unit price).

There are no differences in the annual capitation fees between the competitors from the Śląskie Voivodeship, whereas they can be noticed between the Śląskie and Podkarpackie Voivodeships. For example, for the product with the code '01.0010.090.01' (capitation in medical care – the insured in an age between 7 and 65) the annual fee for the exemplary providers from the Śląskie Voivodeship amounts to 5.05 PLN whereas for an exemplary provider from the Podkarpackie Voivodeships is lower and amounts to 4.89 PLN. On the other hand, for the product with the code 01.0032.093.01' (capitation in district/family nursing care - the insured in an age between 7 and 65) the exemplary fee in the Śląskie Voivodeship amount to 0.85 PLN while in the Podkarpackie Voivodeships it is higher and amounts to 1.06 PLN.

Among contract products in the field of 'primary health care', next to the capitation fees, there are also separate fees for services provided to the insured from outside a voivodeship branch and/or on the grounds of coordination regulations (EEC Council Regulation No 1408/71). The last case concerns persons who were not signed up by a provider on the list of people covered by care (for those singed up the basic capitation fees apply). The above examples show clearly that the prices paid by the NFZ for those categories of beneficiaries are higher than in case of the insured residents of a voivodeship branch.

Person/day – Palliative care

Śląski OW (Śląskie Voivodeship Branch)
Treatment Care Facility XXX
Year 2005

Product code	Product name	position in contract	Amount of given product	Total price for the amount	Average unit price
06.9600.026.04	OSOBODZIEŃ W PIELĘGNIARSKIEJ OPIECE DŁUGOTERMINOWEJ	1	41975	881 475,00	21,000000

Śląski OW (Śląskie Voivodeship Branch)
Nursing Care Facility YYY
Year 2005

Product code	Product name	position in contract	Amount of given product	Total price for the amount	Average unit price
06.9600.026.04	OSOBODZIEŃ W PIELĘGNIARSKIEJ OPIECE DŁUGOTERMINOWEJ	1	14235	298 935,00	21,000000

Śląski OW (Śląskie Voivodeship Branch)
Nursing Care Facility ZZZ
Year 2005

Product code	Product name	position in contract	Amount of given product	Total price for the amount	Average unit price
06.5160.026.04	OSOBODZIEŃ W ZAKŁADZIE PIELĘGNACYJNO-OPIEKUŃCZYM	1	14600	686 200,00	47,000000

Śląski OW (Śląskie Voivodeship Branch)
Nursing Care Facility QQQ
Year 2005

Product code	Product name	position in contract	Amount of given product	Total price for the amount	Average unit price
06.5160.026.04	OSOBODZIEŃ W ZAKŁADZIE PIELĘGNACYJNO-OPIEKUŃCZYM	1	21900	1 007 400,00	46,000000

Podkarpacki OW (Podkarpackie Voivodeship Branch)
Nursing Care Facility XXX
Year 2005

Product code	Product name	position in contract	Amount of given product	Total price for the amount	Average unit price
06.5160.026.04	OSOBODZIEŃ W ZAKŁADZIE PIELĘGNACYJNO-OPIEKUŃCZYM	1	14235	711 750,00	50,000000
06.9600.026.04	OSOBODZIEŃ W PIELĘGNIARSKIEJ OPIECE DŁUGOTERMINOWEJ	1	730	15 330,00	21,000000

In the palliative care a person/day indicator serves as an accounting unit. Based on that, the amount of sold units equals to the multiple of the number of days in a calendar year – one person treated within a year is the equivalent of 365 units. The above examples comprise 2 contract products – person/day in the long-term care facility and person/day in nursing care. There are no differences in price for the nursing care day, despite provider and region.

The price of one day stay in the care facility differs between the competitors from the Śląskie Voivodeship by 1 PLN. In the Podkarpackie Voivodeship is higher by 3-4 PLN.

1.3.1.3. Allocation of financial means to the NFZ's voivodeship branches

The contracts for provision of health care services concluded by each NFZ's voivodeship branch have to be covered by the budgets of these branches. The individual budgets influence the number and scopes of the contracts as well as the set price. According to the art. 118 of the Law, the expenditures planned by the NFZ for financing of health care services for the insured are allocated to the voivodeship branches on the basis of the number of the insured registered in a given voivodeship branch and health risk indicator, assigned to the group of the insured, who were distinguished on account of their age and sex and in relation to the group of reference. The amount of financial means is later corrected by the migration indicator.

On August 4, 2005 the Minister of Health issued the regulation on detailed procedure and criteria of allocation of funds, intended for financing of health care services for the insured, between the NFZ central office and its voivodeship branches. The regulation contains algorithm and the calculation rules of budgets assigned to the individual NFZ's voivodeship branches.

Recently, the regulation stirs up emotions, especially in local societies, up to forming committees for *patient protection* protesting against 'unjust allocation of funds'.

The algorithm sets the pattern of distribution of the available intended funds deriving from all sources using the criterion of the number of insured individuals in all the voivodeship branches as well as retaining some amount for the expenses of the head office. In capitation distribution which takes into account the value of health care services for the insured in particular voivodeships the following features are considered:

- health risk indicator, assigned to the group of the insured, who were distinguished on account of their age and sex
- migration indicators, arising from a relation of the insured registered in a voivodeship branch of the Fund and beneficiaries having valid health care services contracts with one of the voivodeship branches of the Fund different than the proper voivodeship branch of the Fund.
- highly specialized services, arising from the value of the highly specialized service as a special group of health care services of the highest production costs, offered by the service providers, who have valid contracts on providing health care services with a proper voivodeship branch of the Fund.

A number of homogeneous payment units of services (and their value) supplied to insured individuals is established for each previous year on the basis of statistical reports (of the service providers) on fulfillment of contracts concluded between the Fund and the service providers in previous years.

The following algorithm determines the amounts of the intended costs in particular branches, and at the same time it determines the amounts of intended income of the branches:

$$P^n = P \times (1 - u_{ws}) \times \left(\frac{\sum_{i=1}^{l} (S^{n,i} \times k^i)}{\sum_{x=1}^{16} \sum_{i=1}^{l} (S^{x,i} \times k^i)} + w \times m^n \right) + P \times u_{ws} \times ws^n$$

where:

n – represents one of the sixteen voivodeship branches of the Fund
x – represents the x-th branch of the Fund (x=1,…,16)
i – represents the i-th group of the insured (I=1,…,l)
l – the number of the groups of the insured in accordance with paragraph 5 subparagraph 1
P – the expenses of all the voivodeship branches of the Fund intended for the financing of health care services for the insured
u_{ws} – the share of all the expenses intended for highly specialized services in the expenses of all the voivodeship branches of the Fund intended for the financing of health care services for the insured
S_{in}, - the number of the insured in one of the sixteen voivodeship branches of the Fund in the i-th group of the insured, in the year of planning
S_{ix}, - the number of the insured for the x-th voivodeship branch of the Fund in the i-th group
of the insured, in the year of planning (x=1,…,16)
k_i – the average health risk indicator for the i-th group of the insured
w – balance/weight/importance of migration indicators, identical for average indicators of migration for each voivodeship branch of the Fund
m_n – average migration indicator for the n-th voivodeship branch of the Fund
ws_n – average highly specialized services indicator for the n-th voivodeship branch of the Fund

Four groups of the insured distinguished on account of their age and sex have been determined in the regulation: the insured aged below 6 y.o., the insured male aged 7-49 y.o.,, the insured females aged 7-49 y.o., the insured aged 50 and more y.o.

While calculating the amount of funds for the particular voivodeship branch of the National Health Fund for the following year, stages are designed in compliance with the regulation. At the

first stage, the amount of the intended funds shall be determined according to the aforementioned algorithm. If such calculations reveal that one of the branches is allowed lesser amount of funds than defined in the financial plan for the previous year, the other algorithm shall be applicable.

The below algorithm introduces corrections into the calculations of the budgets estimated for particular voivodeship branches of the NFZ in a way that if for a given branch the new budget is smaller than last year, the budget equal to the previous one is appointed, at the cost of the branches for which the new budget is higher. The total sum of budgets remains unchanged. The corrections are defined as follows:

$$P^{n}_{ost} = \begin{cases} P^{n}_{rp}, & \text{if} \quad \Delta P^{n} \le 0 \\ P^{n}_{wyj} - \Delta P_{\le 0} \times \dfrac{\Delta P^{n}}{\Delta P_{>0}}, & \text{if} \quad \Delta P^{n} > 0 \end{cases}$$

where:
n – represents one of the sixteen voivodeship branches of the NFZ
P^{n}_{rp} – the planned expenses of one of the sixteen voivodeship branches of the NFZ in the year of planning,
P^{n}_{wyj} - the planned expenses of one of the sixteen voivodeship branches of the NFZ, having taken into account health risk indicator, migration and highly specialized services (estimated in compliance with the first algorithm)
ΔP^{n} - the difference defined by the following formula: $\Delta P^{n} = P^{n}_{wyj} - P^{n}_{rp}$
$\Delta P_{\le 0}$ – the total sum of absolute values of non-positive differences ΔP^{n} out of all branches
$\Delta P_{>0}$ - the total sum of positive differences ΔP^{n} out of all branches

Thus, the above algorithm serves as a kind of ‘safety lock’, which prevents a decrease of branch’s budget, regardless of purely indicatory calculations.

1.3.2. The Ministry of Health

According to the regulation on highly specialized services quoted above, the Minister of Health concludes, having consulted the National Transplantation Council, contracts with providers for the subsequent year till December 31 of the preceding year. The Council expresses the opinion on the number of people waiting for transplantations and the number of providers capable of carrying out highly specialized services. The prices of services are set once a year on the grounds of providers’ proposals, opinion of the Council, calculations of service costs and service prices set in the contracts from 2 previous years.

The first list in the 1999 was formulated on a basis of medical experts' knowledge on demand, costs and historical data regarding utilization of the procedures. According to informants in and out of the Ministry, it seems that the payment for highly qualified services was in fact more a custom and tradition, then anything else, that some services are financed centrally.[15]

Also a number of highly qualified services was changing. Chronological changes on the list looked as follows:

- The first list in 1999 was very long, and consisted of three groups; A1-31, B1-8, C1-13. Some of the procedures were composed ones and entire number of procedures was 52.

- In a year 2000 the list was reduced to 39 items. A part of the procedures from 1999 were connected to each other and some were shifted to be funded by Sickness Funds.

- In a year 2001 there were only 23 highly qualified procedures on the list. First 10 procedures were entirely financed by the Ministry of Health, whilst the rest were co-financed by Ministry and the Sickness Funds.

- In a year 2002, there were only 20 procedures on the list and similar division of financial responsibility like in 2001 remained.

- For a year 2003, Minister of Health decided to withdraw two the most frequent procedures from the list – coronaroplasty and coronarography. For the year 2004 general conditions remained similar

- For a year 2005 a shorter list was formed.

Until a year 2000, the principles and procedures called for in the Act have not been developed. Only the list was published. In a year 2000, for the first time criteria were published for highly qualified procedures, as follows:

1 Financing to come from only one source (the Ministry of Health);
2 The service should "beyond regional character";
3 High unit price of a service;
4 A possibility of identification the population demand for the service;
5 High level of technical complexity;
6 High index of effect/cost;
7 Susceptibility to monitoring the process of service delivery.

At the beginning of a year 2000, the Minister of Health brought together a group of experts to prepared the technical conditions, the staff and other requirements to set up and run negotiations for the highly qualified procedures and to design and make contracts with service providers. Ultimately, five negotiating groups were created each of which carried out 120-140 negotiations. In each case, the Ministry had estimated the costs of the procedures as well as technical requirements. In some cases, the applying specialists had inflated the costs and over-stated the technical requirements. The final result of the negotiations was a set of 626 contracts with 136 service providers to cover a total of 125,085 highly qualified procedures for an amount of almost 730 million zlotys.

The Minister of Health intended to further develop this new system through a decree in 2001. The main guidelines of the new system had been stated to be the following[4]:

1 An assurance of the open character of the selection and making of contracts for highly-qualified procedures;
2 A system of selection and evaluation in accord with the criteria for highly-qualified procedures;
3 A better specification of the definition of such procedures and of their description;
4 Standardizing the level of services nation-wide;
5 Full transparency of the process of decision-making;
6 Law and practice in accord with European principles concerning the financing of health services from the national budget.

In addition, it was considered the list should be updated annually. This update should have also been based on clear criteria and mechanisms. Included in such criteria would be that the procedures should be accepted in the general medical world, and not only in Poland, should be too expensive for individuals or sickness funds, and should depend on a group of specialists of unique skills. The Ministry had made a progress in designing this procedure, and had in fact developed a 16 points criteria list that summarized the Ministry of Health requirements for use in developing and evaluating individual applications. With a change of the government this route was put off.

Firstly, except a year 2000, every subsequent year the amount of money dedicated for this budgetary target declined, or at least did not rise, what in a context of inflation seems it dropped down.

Secondly, the range of procedures, enlisted in the decrees, decreases and the most frequent ones were shifted to, either Sickness Funds or “health programs”.

[4] Presentation of dr Jacek Graliński, Director of Public Health Department of the Ministry of Health, conference of the Centre of Health Information Systems, February 2001

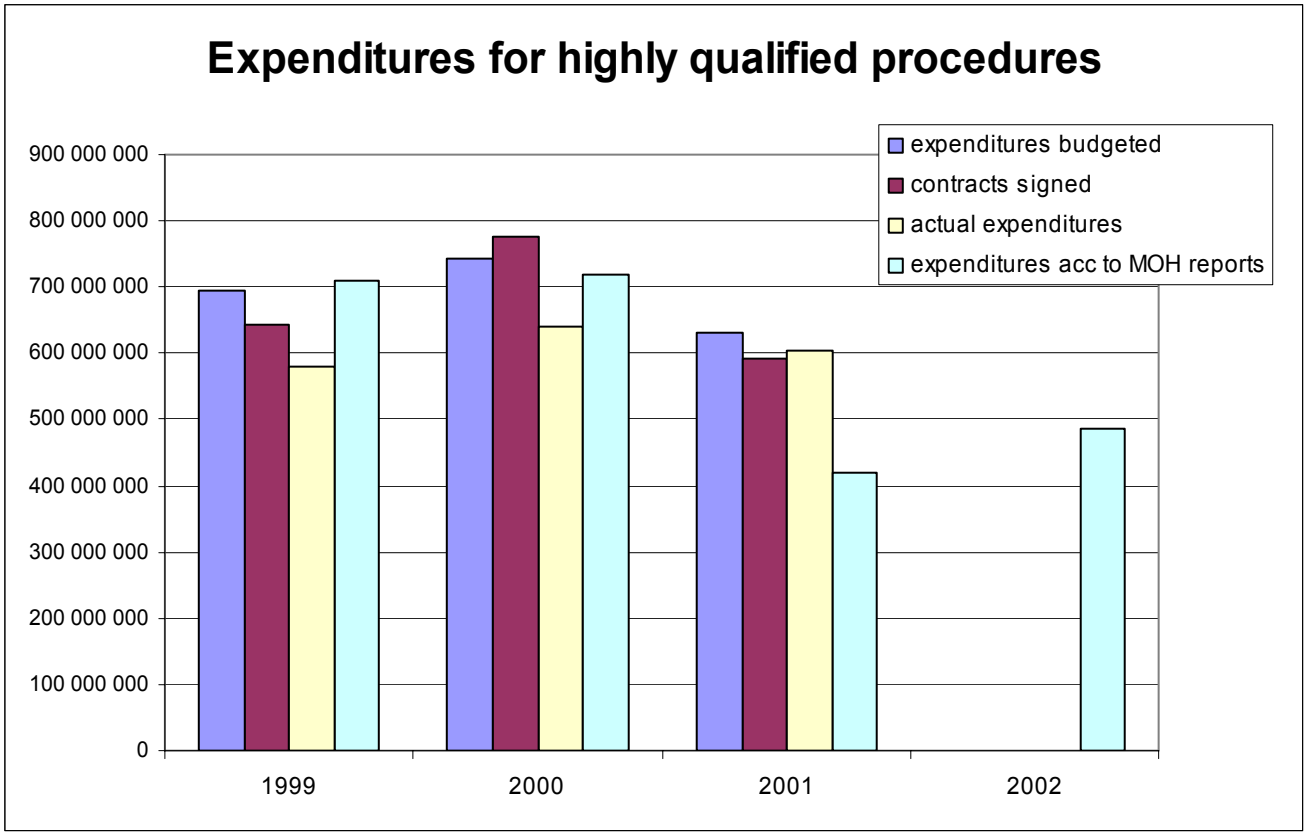

Chart 1. Expenditures for highly qualified procedures; budgeted in budgetary acts 1999, 2000, 2001 (source: NIK[17]), contracted (source: NIK), actually spent (source: NIK), expenditures according to MoH reports (source: MoH www.mz.gov.pl).

		1999				2000			2001			2002
Summary	Name		Average price	Quantity	Funds	Average price	Quantity	Funds	Average price	Quantity	Funds	
1	Autologous bone marrow transplantation with immunosuppressive treatment (1 year)	?	48605	382	18567000	42994	356	15306000	43000	410	17630000	
2	Allogenic bone marrow transplantation with immunosuppressive treatment, donor being relative (1 year);	?	122714	184	22579285	101711	187	19590000	103068	190	19583000	
3	Allogenic bone marrow transplantation with immunosuppressive treatment, donor not being relative (1 year);	?	235857	35	8255000	200000	47	9400000	200000	65	13000000	
4	Liver transplant with immunosuppressive treatment (1 year);	?	222054	70	15543800	137311	119	16340000	190517	120	22862000	
5	Renal transplant with immunosuppressive treatment (1 year);	?	51201	768	39322000	34130	868	29625075	34104	913	31137000	
6	Renal and pancreas transplant with immunosuppressive treatment (1 year);	?	100778	18	1814000	60000	18	1080000	70000	22	1540000	
7	Heart transplant with immunosuppressive treatment (1 year);	?	126461	155	19601500	92000	130	11960000	96000	130	12480000	
8	Lung transplant with immunosuppressive treatment (1 year);	?	152000	6	912000	0	0	0	92000	2	184000	
9	Heart and lung transplant with immunosuppressive treatment (1 year);	?	152000	6	912000	120000	1	120000	107000	2	214000	
11	Surgical correction of inborn defect of the heart in the new-born;	?	8322	1045	8696000	10048	1148	11534900	10165	1373	13955900	
12	Coronary artery bypass surgery;	?	5000	16762	83810000	5087	24326	123745000	5154	30852	159009400	
13	Coronary artery angiography;	?	900	45900	41310000	900	65760	59184000	849	77181	62968800	
14	Immunoablation in bone marrow aplasia	?	29376	85	2497000	29954	65	1947000	29380	75	2203500	
15	Open heart surgery with extra-corporeal circulation;	?	12354	5876	72592600	13004	4786	62235600	12695	5271	66914600	
16	Radiotherapy – sterotactics, planners, conformal, more than one fraction daily, radical treatment of head and neck, radiation of entire lymphatic system;	?	7274	7815	56849000	8274	5576	47528600	8541	6000	51248000	
17	Brachytherapy with brain stereotaxis.	?	4449	263	1170000	4941	205	1012900	4790	207	991500	
18	Ciclosporine therapy of children with nephrosis syndrome	?	6207	290	1800030	0	0	2550000	7102	360	2556800	
19	Cochlear implants;	?	60000	68	4080000	65000	90	5850000	65000	105	6825000	
20	Diaphragm stimulator in high spinal cord injury	?	208333	6	1250000	193333	1	230000	230000	4	920000	

Table 1 Reports on purchasing of selected highly qualified procedures, their prices and funds spent on purchasing (source: MoH www.mz.gov.pl)

In a table above, the list of procedures were placed, which were consequently paid by state budget from 1999 to 2002. The table exhibits numbers of procedures purchased although author is not confident if this was actually purchased or only contracted, and not necessarily provided during the planned time frames. The other column presents average price per procedure, and the last shows total volume of purchase (amount spent) the particular procedure.

1.4.Medicines and medicinal products

1.2.4. Lists of medicines and medicinal products

Other rules than for health care services apply to payments for medicines and medicinal products, which are regulated by the Law of July 5, 2001 on prices [5]. According to the art.5, the official prices of curative and medical products included in the lists of the basic and supplementary drugs and the list of medicines and medicinal products prescribed for contagious or psychiatric diseases, mental disability and some chronic, inborn or acquired diseases free of charge, for a lump sum or a partial payment, are set on the grounds of the regulation on health care services financed by public funds.

The regulation of the Minister of Health of December 17, 2004 introduces, next to the lists of basic medicines, the list of supplementary pharmaceuticals which can be purchased for 30% or 50 % of the price. Another regulation issued on the same day introduces the list of medicines and medicinal products prescribed to patients, suffering from contagious or psychiatric diseases, mental disability and/or some chronic, inborn or acquired diseases, free of charge, for a lump sum or a partial payment (30% or 50%).

The medicines comprised on the lists are grouped based on the name of substances. Each entry is described by the following parameters: sequential number, PSM, name, form and dosing, package in compliance with the register of products, unit lump sum package, availability category and package EAN13 code. Here below enclosed headings and first entries of the lists (respectively, basic and supplementary medicines purchased for 30% and 50 %; for chosen diseases free of charge, for a lump sum or partial payment – 30% or 50%).

LIST OF BASIC MEDICINES

Załączniki do rozporządzenia
Ministra Zdrowia
Załącznik nr 1

Wykaz leków podstawowych

Lp.	PSM	Nazwa, postać i dawka leku	Opakowanie zgodne z Rejestrem Produktów Leczniczych Dopuszczonych do Obrotu na terytorium Rzeczypospolitej Polskiej	Jednostkowe opakowanie ryczałtowe[1]	Kategoria dostępności	Kod EAN13 opakowania
1. Acebutololum						
1)	B	Abutol *tabl. powl. 200 mg*	20 tabl.	30 tabl.	Rp	5909990453214
2)	B	Abutol Long 400 *tabletki dojelitowe o przedłużonym uwalnianiu 400 mg*	30 tabl.	30 tabl.	Rp	5909990838318
3)	B	Acecor *tabl. powl. 400 mg*	30 tabl.	30 tabl.	Rp	5909990996515
4)	B	Sectral *tabl. powl. 200 mg*	30 tabl.	30 tabl.	Rp	5909990109920
5)	B	Sectral *tabl. powl. 200 mg*	20 tabl.	30 tabl.	Rp	5909990172115
6)	B	Sectral *tabl. powl. 400 mg*	30 tabl.	30 tabl.	Rp	5909990110018
7)	B	Sectral *tabl. powl. 400 mg*	30 tabl.	30 tabl.	Rp	5909990458615
2. Acenocoumarolum						
1)	B	Pabi - Acenocoumarol *tabl. 4 mg*	60 tabl.	60 tabl.	Rp	5909990042616
2)	B	Acenocumarol *tabl. 4 mg*	60 tabl.	60 tabl.	Rp	5909990055715
3)	B	Syncumar *tabl. 4 mg*	50 tabl.	60 tabl.	Rp	5909990279715

LIST OF SUPPLEMENTARY MEDICINES PURCHASED FOR 30% OF THE PRICE

Wykaz leków uzupełniających wydawanych za odpłatnością 30% ceny leku.

Lp.	PSM	Nazwa, postać i dawka leku	Opakowanie zgodne z Rejestrem Produktów Leczniczych Dopuszczonych do Obrotu na terytorium Rzeczypospolitej Polskiej	Kategoria dostępności	Kod EAN13 opakowania
1. Acetazolamidum					
1)	B Δ	Diuramid *tabl. 250 mg*	20 tabl.	Rp	5909990033911
2. Aciclovirum					
1)	B	Cusiviral *maść do oczu 30 mg/g*	1 op. 4,5 g	Rp	5909990187911
2)	B	Virolex *maść do oczu 30 mg/g*	1 op. 4,5 g	Rp	5909990273317
3. Acitretinum					
1)	B	Neotigason *kapsułki 10 mg*	100 kaps.	LzRp	5909990697021
2)	B	Neotigason *kapsułki 25 mg*	100 kaps.	LzRp	5909990699925
4. Alfuzosinum					
1)	B	Dalfaz *tabl. powl. 2,5 mg*	30 tabl.	Rp	5909990681211
2)	B	Dalfaz SR5 *tabl. powl. o przedłużonym uwalnianiu 5 mg*	20 tabl.	Rp	5909990812714
3)	B	Dalfaz Uno *tabl. o przedłużonym działaniu 10 mg*	30 tabl. w blistrach	Rp	5909990837816

LIST OF SUPPLEMENTARY MEDICINES PURCHASED FOR 50% OF THE PRICE

Załącznik nr 3

Wykaz leków uzupełniających wydawanych za odpłatnością 50% ceny leku.

Lp.	PSM	Nazwa, postać i dawka leku	Opakowanie zgodne z Rejestrem Produktów Leczniczych Dopuszczonych do Obrotu na terytorium Rzeczypospolitej Polskiej	Kategoria dostępności	Kod EAN13 opakowania
1. Aciclovirum					
1)	B	Acyklowir 200 *tabl. 200 mg*	35 tabl. w blistrach	Rp	5909990499410
			35 tabl. w pojemniku	Rp	5909990499427
2)	B	Acyklowir 400 *tabl. 400 mg*	35 tabl.	Rp	5909990499519
3)	B	Antivir *tabl. 200 mg*	20 tabl.	Rp	5909990349715
4)	B	Apo-Acyclovir 200 *tabl. 200 mg*	35 tabl. w butelce	Rp	5909990924110
5)	B	Apo-Acyclovir 400 *tabl. 400 mg*	35 tabl. w butelce	Rp	5909990924011
6)	B	Heviran *tabl. powl. 200 mg*	30 tabl.	Rp	5909990840014
7)	B	Heviran *tabl. powl. 400 mg*	30 tabl.	Rp	5909990840113
8)	B	Heviran *tabl. powl. 800 mg*	30 tabl. w blistrach	Rp	5909990840229
			30 tabl. w fiolce	Rp	5909990840212
9)	B	Ranviran *tabl. 200 mg*	25 tabl.	Rp	5909990940714
10)	B	Ranviran *tabl. 400 mg*	56 tabl.	Rp	5909990940813
11)	B	Ranviran *tabl. 800 mg*	35 tabl.	Rp	5909990940912
2. Acidum citricum + Kalii citras + Natrii citras					
1)		Citrolyt *granulat do przygotowania roztworu doustnego*	1 op. 220 g	Rp	5909990210817

LIST OF SUPPLEMENTARY MEDICINES AND MEDICINAL PRODUCTS PURCHASED FREE OF CHARGE UNDER § 1 OF THE REGULATION

Załączniki do rozporządzenia Ministra Zdrowia

Załącznik nr 1

Wykaz leków i wyrobów medycznych, wydawanych bezpłatnie*, ze względu na choroby, o których mowa w § 1 rozporządzenia

Lp.	PSM	Nazwa, postać i dawka leku albo wyrobu medycznego	Opakowanie zgodne z Rejestrem Produktów Leczniczych Dopuszczonych do Obrotu na terytorium Rzeczypospolitej Polskiej oraz Rejestrem Wytwórców i Wyrobów Medycznych	Kategoria dostępności	Kod EAN13 opakowania
1) Nowotwory złośliwe					
1. Aminoglutethimidum					
1)	B Δ	Aminoglutetimid *tabl. 250 mg*	100 tabl.	Rp	5909990139118
2. Azathioprinum					
1)	B	Azathioprine *tabl. 50 mg*	50 tabl.	Rp	5909990138517
2)	B	Azathioprine *tabl. 50 mg*	30 tabl.	Rp	5909990232826
			50 tabl.	Rp	5909990232819
3)	B	Imuran *tabl. powl. 25 mg*	100 tabl.	Rp	5909990144211
4)	B	Imuran *tabl. powl. 50 mg*	100 tabl.	Rp	5909990277810
3. Buprenorphinum					
1)	B ⊖	Bunondol *tabl. podjęzykowe 0,2 mg*	60 tabl. w blistrach	Rpw	5909990351725
			60 tabl. w fiolce	Rpw	5909990351718
2)	B ⊖	Bunondol *tabl. podjęzykowe 0,4 mg*	30 tabl. w blistrach	Rpw	5909990351824
			30 tabl. w fiolce	Rpw	5909990351817

LIST OF SUPPLEMENTARY MEDICINES AND MEDICINAL PRODUCTS PURCHASED FOR A LUMP SUM UNDER § 1 OF THE REGULATION

Załącznik nr 2

Wykaz leków i wyrobów medycznych, wydawanych po wniesieniu opłaty ryczałtowej*, ze względu na choroby, o których mowa w § 1 rozporządzenia

Lp.	PSM	Nazwa, postać i dawka leku albo wyrobu medycznego	Opakowanie zgodne z Rejestrem Produktów Leczniczych Dopuszczonych do Obrotu na terytorium Rzeczypospolitej Polskiej oraz Rejestrem Wytwórców i Wyrobów Medycznych	Jednostkowe opakowanie ryczałtowe[1]	Kategoria dostępności	Kod EAN13 opakowania
1) Nowotwory złośliwe						
1. Fentanylum						
1)	N Δ	Durogesic *plaster TTS 25 mcg/h*	5 plastrów po 10 cm^2	5 szt.	Rpw	5909990765416
2)	N Δ	Durogesic *plaster TTS 50 mcg/h*	5 plastrów po 20 cm^2	5 szt.	Rpw	5909990765515
3)	N Δ	Durogesic *plaster TTS 75 mcg/h*	5 plastrów po 30 cm^2	5 szt.	Rpw	5909990765614
4)	N Δ	Durogesic *plaster TTS 100 mcg/h*	5 plastrów po 40 cm^2	5 szt.	Rpw	5909990765713
2. Megestrolum						
1)	B	Megace *zawiesina doustna 40 mg/ml*	1 butelka 240ml	120 ml	Rp	5909990437627

LIST OF SUPPLEMENTARY MEDICINES AND MEDICINAL PRODUCTS PURCHASED FOR 30 % OF THE PRICE UNDER § 1 OF THE REGULATION

Załącznik nr 3

Wykaz leków i wyrobów medycznych, wydawanych po wniesieniu opłaty w wysokości 30% ceny leku albo wyrobu medycznego, ze względu na choroby, o których mowa w § 1 rozporządzenia

Lp.	PSM	Nazwa, postać i dawka leku albo wyrobu medycznego	Opakowanie zgodne z Rejestrem Produktów Leczniczych Dopuszczonych do Obrotu na terytorium Rzeczypospolitej Polskiej	Kategoria dostępności	Kod EAN13 opakowania
1) Choroby psychiczne lub upośledzenia umysłowe					
1. Fluoxetinum					
1)	B A	Andepin *kapsułki 20 mg*	30 tabl. w blistrach	Rp	5909991065515
			30 tabl. w słoiku	Rp	5909991065522
2)	B A	Apo-Flox *kapsułki 20 mg*	30 kaps.	Rp	5909990993819
3)	B A	Bioxetin *tabl. 20 mg*	30 tabl.	Rp	5909990372317
4)	B A	Deprexetin *kapsułki 20 mg*	30 kaps.	Rp	5909990747610
5)	B A	Fluoksetyna *tabl. 10 mg*	30 tabl.	Rp	5909990770137
			90 tabl.	Rp	5909990770144
6)	B A	Fluoksetyna *tabl. 20 mg*	30 tabl.	Rp	5909990770236
			90 tabl.	Rp	5909990770243
7)	B A	Fluoxetin *kapsułki 20 mg*	30 kaps.	Rp	5909990770311
8)	B A	Salipax *kapsułki 20 mg*	30 kaps.	Rp	5909991060329
9)	B A	Seronil *kapsułki 20 mg*	30 kaps.	Rp	5909990374410
			100 kaps.	Rp	5909990374427
10)	B A	Seronil *tabl. powl. 10 mg*	30 tabl.	Rp	5909990374311
			100 tabl.	Rp	5909990374328
2. Fluvoxaminum					
1)	B A	Fevarin *tabl. powl. 50 mg*	60 tabl.	Rp	5909990347728
2)	B A	Fevarin *tabl. powl. 100 mg*	30 tabl.	Rp	5909990347827

LIST OF SUPPLEMENTARY MEDICINES AND MEDICINAL PRODUCTS PURCHASED FOR 50 % OF THE PRICE UNDER § 1 OF THE REGULATION

Załącznik nr 4

Wykaz leków i wyrobów medycznych, wydawanych po wniesieniu opłaty w wysokości 50% ceny leku albo wyrobu medycznego, ze względu na choroby, o których mowa w § 1 rozporządzenia

Lp.	PSM	Nazwa, postać i dawka leku albo wyrobu medycznego	Opakowanie zgodne z Rejestrem Produktów Leczniczych Dopuszczonych do Obrotu na terytorium Rzeczypospolitej Polskiej	Kategoria dostępności	Kod EAN13 opakowania
1) Choroby psychiczne lub upośledzenia umysłowe					
1. Buspironum					
1)	B A	Mabuson *tabl. 5 mg*	30 tabl.	Rp	5909990700516
2)	B A	Mabuson *tabl. 10 mg*	30 tabl.	Rp	5909990700417
3)	B A	Spamilan *tabl. 5 mg*	30 tabl.	Rp	5909990028719
4)	B A	Spamilan *tabl. 10 mg*	30 tabl.	Rp	5909990028818
2. Moclobemidum					
1)	B A	Aurorix *tabl. powl. 150 mg*	30 tabl.	Rp	5909990094813
2)	B A	Aurorix *tabl. powl. 300 mg*	30 tabl.	Rp	5909990419814
3)	B A	Mobemid *tabletki powlekane 150 mg*	30 tabl.	Rp	5909990995813
4)	B A	Moclobemid *tabl. 150 mg*	30 tabl.	Rp	5909990458929
5)	B A	Moklar *tabl. powl. 150 mg*	30 tabl.	Rp	5909990953714
3. Tianeptinum					
1)	B A	Coaxil *tabl. powl. 12,5 mg*	30 tabl. w blistrze	Rp	5909990370214

1.2.5. Price setting rules

The rules of setting the prices for medicines and medicinal products are defined in the Law of July 5, 2001 on prices. According to the Law, the Team for Medicines Management (Zespół do Spraw Gospodarki Lekami) attached to the Ministry of Health is established. Its tasks encompass forming and presenting to the Minister opinions on the lists and official prices of medicines and medicinal products, after taking into account the criteria like the level of prices in the countries with similar national income per inhabitant, price competitiveness, influence of medicine on treatment costs, size of supplies, production costs, medicine effectiveness, and influence on elimination of diseases posing a significant epidemiological and/or civilization threat.

The Law says that the wholesale margin calculated by a wholesaler from the official wholesale price amounts to 8.91%. In case of a decrease in the interest rates set by the Monetary Policy Council bigger than 30% compared to their value on the Law's issue date, the margin shall also be decreased by at least 10%. The below table presents the retail margin calculated, in compliance with the Law, by pharmaceutical traders.
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Wholesale price (PLN)	Retail margin calculated from wholesale price
0-3,60	40%
3,61-4,80	1,44 zł
4,81-6,50	30%
6,51-9,75	1,95 zł
9,76-14,00	20%
9,76-14,00	20%
14,01-15,55	2,80 zł
15,56-30,00	18%
30,01-33,75	5,40 zł
33,76-50,00	16%
50,01-66,67	8,00 zł
66,68-100,00	12%
Above 100,00	12,00 zł

The Minister of Health issues to the above Law the regulations determining the value of wholesale and retail prices. According to the Law, he shall be guided by best interests of both consumers and entrepreneurs involved in production and trade of medicines and medicinal products and take into account financial possibilities of the NFZ and the opinion of the Team for Medicines Management.

At present the regulations of December 20, 2004, January 20, 2005 and March 15, 2005 on the official wholesale and retail prices of medicines and medicinal products are in force. The regulations introduce binding official wholesale and retail prices set in PLN for basic and supplementary medicines and for medicines and medicinal products prescribed free of charge,

for a lump sum or a partial payment to patients suffering from contagious or psychiatric diseases, mental disability and/or some chronic, inborn or acquired diseases.

The list of prices is also grouped based on the name of substances. Each entry is described by the following parameters: sequential number, name, form and dosing, package in compliance with the register of products, package EAN13 code, official wholesale price and official retail price. Here below enclosed headings and first entries of the lists.

LIST OF OFFICIAL PRICES OF MEDICINES AND MEDICINAL PRODUCTS

Załącznik do rozporządzenia Ministra Zdrowia
z dnia 20 grudnia 2004 r. (poz. 2733)

WYKAZ CEN URZĘDOWYCH NA LEKI I WYROBY MEDYCZNE

Lp.	Nazwa, postać i dawka leku albo wyrobu medycznego	Opakowanie zgodne z Rejestrem Produktów Leczniczych Dopuszczonych do Obrotu na terytorium Rzeczypospolitej Polskiej oraz Rejestrem Wytwórców i Wyrobów Medycznych	Kod EAN 13 opakowania	Cena urzędowa obowiązująca [w złotych]	
				Cena hurtowa	Cena detaliczna
1.	**Acarbosum**				
1)	Glucobay *50 tabl. 50 mg*	30 tabl.	5909990285419	15,70	18,53
2)	Glucobay 100 *tabl. 100 mg*	30 tabl.	5909990285518	21,85	25,78
2.	**Acebutololum**				
1)	Abutol *tabl. powl. 200 mg*	20 tabl.	5909990453214	5,87	7,63
2)	Abutol Long 400 *tabletki dzielitowe o przedłużonym uwalnianiu 400 mg*	30 tabl.	5909990838318	18,97	22,38
3)	Acecor *tabl. powl. 400 mg*	30 tabl.	5909990666515	18,45	21,77
4)	Sectral *tabl. powl. 200 mg*	30 tabl.	5909990109920	9,94	11,93
5)	Sectral *tabl. powl. 200 mg*	20 tabl.	5909990172115	6,59	8,54
6)	Sectral *tabl. powl. 400 mg*	30 tabl.	5909990110018	18,54	21,88
7)	Sectral *tabl. powl. 400 mg*	30 tabl.	5909990458615	18,45	21,77
3.	**Acenocoumarolum**				
1)	Pabi - Acenocoumarol *tabl. 4 mg*	60 tabl.	5909990042616	8,77	10,72
2)	Acenocumarol *tabl. 4 mg*	60 tabl.	5909990055715	9,31	11,26
3)	Syncumar *tabl. 4 mg*	50 tabl.	5909990279715	10,97	13,16

1.2.6. Imperfections of medicines reimbursement system in Poland

The issues of price control of medicinal products in the UE are defined by the Council Directive 89/105/EEC of 21 December 1988 relating to the transparency of measures regulating the prices of medicinal products for human use and their inclusion in the scope of national health insurance systems, usually called the transparency directive. It lays down the requirements for internal regulations of the member states introducing price control in the marketing of the medicinal products or control of profit made by medicines traders.

Those requirements relate mostly to the necessity of attaining appropriate transparency of the pricing process and the reimbursement status. The member states are obliged to adopt arrangements on medicinal products reimbursement and official pricing in a form of administrative decisions, well-justified and issued in certain time frames set in the Directive.

Furthermore, the member states are obliged to ensure the possibility of submitting an appeal against the adopted decisions, whereas according to Polish laws, the procedure of issuing of

regulations on the lists of reimbursable medicinal products and setting the official prices is in practice the source of legal resolutions on medicines reimbursement and prices. The regulations are binding both for reimbursement and prices. Thus, there is no possibility of appeal. The resolution as legislative act can not be subject to prosecution.

It is however possible to appeal against the decision to the Team for Medicines Management, which is later considered by the Ministry of Health. The resolution of the Team is, within 7 days from the adoption date, handed over to the applicant and the Minister of Health who decides on reimbursement and prices. Within 14 days from the date of receiving the notification the applicant has the right to appeal to the Minister of Health for another examination of the application or in the event of official price settlement to the Minister of Health in cooperation with the Minister of Finance. Nevertheless, this way of appealing does not fulfill the requirements of the directive, because the opinion of the Team for Medicines Management is not binding for the Minister of Health.

According to the directive, the decision on including the medicine on the list of reimbursable medicines and its price shall be adopted within 180 days from the date of submitting application complying with formal requirements. Under the directive, in the absence of such decision the applicant has the right to sell the product for the price which he proposed. In accordance with Polish laws, issuing of regulations on the lists of reimbursable medicinal products and setting the official prices is not hedged with any time limits. The time limits provided in Polish laws do not apply to appeal examination period, but they only specify the period of presenting by the Team for Medicines Management the opinion on submitted applications.

1.5.Orthopaedic articles, aid items and others

On December 17, 2004 the Minister of Health issued the regulation on the detailed list of medical products being orthopaedic articles and aid items, value of beneficiary own share in the purchasing price, granting criteria, exploitation period and orthopaedic articles being subject to reparation dependently on medical recommendation and the supplying order.

The above regulation comprises the detailed list of products, description of granting criteria (including medical recommendations, list of specializations of entitled doctors and exploitation period) and the value of own share in the purchasing price. The share can amount to 0% (‘free of charge’), 30% or 50%. Here below enclosed headings and first entries of the lists of orthopaedic articles and aid items.

Załącznik nr 1

Część I

DETAILED LIST OF ORTHOPAEDIC ARTICLES GRANTED TO BENEFICIARIES, GRANTING CRITERIA, EXPLOITATION PERIOD, VALUE OF OWN SHARE IN PURCHASING PRICE

Lp.	Rodzaj wyrobów medycznych będących przedmiotami ortopedycznymi	Kryteria przyznawania			Wysokość udziału własnego świadczenio-biorcy w cenie nabycia
		wskazania medyczne	lekarze upoważnieni do wystawiania zleceń na wydanie wyrobów medycznych będących przedmiotami ortopedycznymi	okres użytkowania	
1	2	3	4	5	6
1	Proteza kończyny dolnej*	Amputacje w obrębie kończyny dolnej	ortopeda, chirurg, lekarz rehabilitacji medycznej	raz na 3 lata**	bezpłatnie
2	Proteza tymczasowa*	Pierwszorazowo po amputacji w obrębie kończyny dolnej	ortopeda, chirurg, lekarz rehabilitacji medycznej	zgodnie z zaleceniami lekarza	bezpłatnie
3	Proteza robocza kończyny górnej*	Amputacje w obrębie kończyny górnej w przypadku, kiedy stan kikuta pozwala na zaprotezowanie tego rodzaju protezą	ortopeda, chirurg, lekarz rehabilitacji medycznej	raz na 3 lata**	bezpłatnie

DETAILED LIST OF AID ITEMS GRANTED TO BENEFICIARIES, GRANTING CRITERIA, EXPLOITATION PERIOD, VALUE OF OWN SHARE IN PURCHASING PRICE

Lp.		Rodzaj środka pomocniczego	Kryteria przyznawania			Wysokość udziału własnego świadczenio-biorcy w cenie nabycia
			wskazania medyczne	lekarze upoważnieni do wystawiania zleceń na wydanie środków pomocniczych	okres użytkowania	
1	2	3	4	5	6	7
1		Soczewki okularowe korekcyjne (w tym soczewki korekcyjne barwione) umożliwiające dokładne widzenie i zapobiegające znużeniu oka		okulista	dzieci i młodzież do 18 roku życia każdorazowo w razie zmiany korekcji	bezpłatnie
	a)	Soczewki do bliży i dali	wady wzroku wymagające korekcji		dorośli raz na 2 lata	30%
	b)	Soczewki pryzmatyczne	w okresie leczenia zeza		zgodnie z zaleceniami lekarza	bezpłatnie
	c)	Soczewki dwuogniskowe	dzieci i młodzież do 18 roku życia zgodnie z zaleceniami lekarza		każdorazowo w razie zmiany korekcji	30%
			dorośli - stan zdrowia całkowicie uniemożliwiający dokonywanie zmiany okularów		raz na 2 lata	30%

Medicines and medical products purchased directly by producers or pharmaceutical wholesaler by in-patient care units (hospitals) in order to perform health care services on the grounds of contracts concluded with the NFZ are also covered by official regulations.
Their list and prices are determined in the appropriate regulations of the Minister of Health.

1.6.Summary

1. The valuation of highly specialized procedures is centralized and carried out in a form of negotiations between providers and the Ministry of Health with the National Transplantation Council as consultative body.
2. The NFZ's health care services valuation system consists of 2 phases. The service is firstly valued in the accounting units and they are later valuated in PLN.
3. The first stage is conducted on the national level and is binding for all participants. The second stage is carried out on the regional level in a form of an open competition or negotiation between providers and voivodeship branches of the NFZ and it is individually binding for the parties concluding the contract.
4. There are different financing systems and accounting units for different kinds of services. The following accounting units can be distinguished: accounting point and a patient/day indicator (for the unit price system), 24-hour readiness and 12-hour duty (for the lump sum system) and beneficiary (for the annual capitation fee system).
5. The only payer reimbursing costs of services in the universal insurance system is the NFZ, represented by its voivodeship branches, which conclude contracts with providers from their area of operations. On the account of that, it is impossible for one provider to get different prices for the same services in the same time.
6. The prices depend on the voivodeship branch budget and provider's proposal, so the payer can pay different prices to different providers for the same services in the same time.
7. During the contract binding period the prices of particular accounting units and in effect the prices of services are fixed.
8. The current health care services valuation system does not provide for price fluctuation dependently on factors like different quality or segmentation of providers, although In practice , in the negotiation process, those elements influence the decision on the price level accepted by the NFZ by a given provider.
9. The services provided to the persons entitled on the grounds of coordination regulation are accounted for based on E-125 form handed around the payer and the provider; in case of unit price system the services are accounted for identically like those provided to national inhabitants.
10. In the annual capitation fee system, the services provided to the persons entitled on the grounds of coordination regulation are accounted for identically like those provided to national inhabitants (if they were signed up by a provider on the list of persons covered by care) or on the grounds of separately rate set for unit services.
11. In the lump sum system, the services provided to the persons entitled on the grounds of coordination regulation are accounted for based on the actual costs incurred by a provider. In result the prices for the services like emergency rescue, medical transportation,

admissions, hospital emergency unit and immediate dentistry can vary from the prices used for the insured by the NFZ.

12. Medicines and medicinal products, dependently on qualification group, are reimbursable, in 100%, 70% or 50 %, in the amount equal to the difference between the market and lump sum price, and/or non-reimbursable.
13. Wholesale and retail prices for medicines and medicinal products are statutory. Wholesale and retail prices are defined in the regulations of the Minister of Health.

b. Up-date of costs and prices

Under the Law on health care services financed by public funds the NFZ's president shall, in cooperation with the Minister of Finance and the Minister of Health, prepare an annual income and expenditures forecast for 3 subsequent years, based on the information obtained from the directors of voivodeship branches of the Fund (art. 120). The financial plan for a subsequent year is prepared based on these forecasts and taking into account the branches' financial plans. The up-date of the NFZ's expenditures on health care, in monetary units for particular kinds of services and divided into voivodeship branches, is conducted annually. Here below enclosed the NFZ's plan for 2005, comprising the list of costs of health care services for the insured (item B 2.1. – B.2.15., marked with color).

NFZ FINANCIAL PLAN FOR 2005

Details		**Amount** ('000 PLN)
1.	Premium brutto (1.1+1.2), incl:	**34 284 984**
1.1	From ZUS	31 198 398
1.2	From KRUS	3 086 586
2.	Planned update of premium level (2.1+2.2), incl:	**1 014 160**
2.1	From ZUS	923 063
2.2	From KRUS	91 097
3.	Costs of collection and documentation of premiums (3.1+3.2)	**71 824**
3.1	Costs of collection and documentation of premiums by ZUS	64 335
3.2	Costs of collection and documentation of premiums by KRUS	7 489
A.	Netto revenue (1 - 2 - 3 + A1+A2)	**33 274 500**
A1	Revenue from coordination system (1408/71)	56 000
A2	Revenue from specific duties delegated by Government	19 500
B.	Costs (B1+B2+B3)	**32 787 410**
B1	Obligatory financial reserves (general)	**342 850**
B2	Costs of services and goods for insurees (B2.1+...+B2.15), incl:	**32 425 060**
B2.1	Primary care	3 677 159

B2.2	Ambulatory specialist care	2 317 332
B2.3	Hospital care	13 723 770
B2.4	Psychiatric care and substance abuse therapy	1 086 214
B2.5	Rehabilitation	884 020
B2.6	Long term care	518 831
B2.7	Dentistry	973 736
B2.8	Spa therapy	356 467
B2.9	Emergency and medical transportation	938 254
B2.10	Preventive programs	105 000
B2.11	Other services	884 886
B2.12	Prosthetic devices, medical appliances and materials	417 644
B2.13	Drugs reimbursement	6 141 747
B2.14	Services and goods provided within coordination system (1408/71)	400 000
B2.15	Reserve	0
B.3	Health programs performed on request	**19 500**
C.	Financial results (A - B)	**487 090**
D.	Administrative costs (D1+...+D9)	**350 900**
E.	Other revenues (E1+E2)	**300**
F.	Other costs (F1+...+F4)	**151 059**
G.	Banking revenues (G1)	**23 776**
H.	Banking costs (H1+H2)	**9 207**
I.	Financial result brutto (C - D + E - F + G - H)	**0**
J.	Profits and loses (J1-J2)	**0**
K.	Total revenue (I + J)	**0**
L.	Other financial costs	**0**
M.	Financial result netto (K -L)	**0**
O	Planned amount for future loses	**0**
P	Revenues - total	**34 384 560**
R	Costs - total	**34 384 560**

The up-date of health care services values is irregular. It is possible to change the catalog of services, because of e.g. significant increase of costs. The application can be submitted by the providers or by the NFZ's voivodeship branches. However, the procedure of implementation of changes or catalog up-date is not defined in any regulations. The decision is adopted arbitrarily by the central office, which is not obligated by any way to implement changes. The new catalog can include new products, descriptions or unit values. It is announced by the regulation of the NFZ's president. It is binding in the whole country and attached in form of appendix to the existing contracts.

The up-date of product values expressed in their accounting units is mostly a result of squabbles among different lobbies in the working groups working on new versions of the catalog of services. The only method directly based on economic calculation relates to 'hospitalization under payer's consent'. This procedure can be started provided that the individual consent of the NFZ for financing of the services not mentioned in the catalog has been obtained. The NFZ demands costs estimation from the provider (presented on its forms). According to the valuation conducted in this way, the product can be later added to the new versions of the catalog. However, in the current catalog these products are rather 'trace'.

Up-dating of accounting unit values expressed in PLN for particular contract products takes place annually during an open competition or negotiation leading to conclusion of contracts for provision of services. It is based on the analysis of the results from last years, providers' cost forecasts, competition among providers and the NFZ's budget presumptions. In special cases the accounting unit price can be renegotiated during a year. It happens when the budget of voivodeship branch changes during the contract binding period.

1. Summary

1. The up-date of health care services values in accounting units is irregular. The up-date of accounting unit prices expressed in PLN is conducted annually in a connection with conclusion of contracts for provision of services.
2. Both providers and the NFZ voivodeship branches can apply for the up-date of services value expressed in accounting units; the NFZ central office can, but is not obliged to, consider these applications.
3. The up-date of health care services values in accounting units depends on factors which have a negative effect on financial results of more providers or on expenditure structure of voivodeship branches (sudden increase in the number of particular services).
4. The changes in accounting unit prices result from the way the contracts were executed in the previous years, internal cost calculations and providers' organizational changes and changes in the budgets of the NFZ voivodeship branches (also during binding period)

c. Assessment of costs

1. General situation

The assessment of costs of health care services, in the frames necessary for proper conclusion of contracts for health care services, belongs to the special tasks of the NFZ (art.97). In practice however, the NFZ lacks data on the actual costs incurred by providers for particular kinds of services. The NFZ does not even have an access to the annual financial reports,

except for those which are presented as an element of financial report in the National Court Register. However, those reports are presented in a paper form and they cannot be used for cross-sectional analyses. They can only be used individually in special, mostly conflictual, cases. Each provider calculates, on the basis of own finance and accounting data, the cost of services to know what prices to propose in his offer. The accuracy of these estimations varies and depends on provider's scale of operations, internal accounting rules and quality of controlling analyses.

In the public statistics system there are, admittedly, reports on financial situation of entities (MZ-03 SEMI-ANNUAL/ANNUAL financial report of autonomous public health care units and SP 3 reports on enterprise business activity (Attachment 1), but in practice they are not frequently used, especially not by the NFZ in the price setting procedure.

On the other hand, the accounting rules for providers are defined in the Accounting Act which is binding for all business entities. There is no obligation of keeping the accounting books in a way that would allow the distinguishing of the possible biggest amounts of costs and assigning them to particular services in order to get reliable profitability calculations for particular services.

At the same time, the Regulation of the Minister of Health and Social Welfare of December 22, 1998 on the special rules of cost accounting in the public health care units is a special legal instrument directly concerning providers, although not all of them, but just those classified as public health care units.

2. Cost accounting in the public health care units (ZOZ) – legal regulations

2.1. Introduction

Till the end of 1998 the public health care services were operating, with a few exceptions, as budgetary units. That was a legal form in which the expenditures of public health care units were mainly covered from the state budget. The financial means for ZOZ's activity were assigned by the voivode who was functioning as the founding body.

The financial means flow was as follows.

$$\text{voivode} \Rightarrow \text{voivodeship physician} \Rightarrow \text{budgetary unit}$$

In the mid 90's a part of the units was experimentally transformed into so called autonomous public health care units (SPZOZ). By the end of 1998 all the health care units were transformed into this organizational form, which was to be financed by the Health-Insurance Funds - the payers in the universal health insurance system since January 1, 1999.

Within costs and expenditures in the budgetary units so called budgetary articles (expenditure aims) were binding. The health care unit budget was planned according to those articles.
Here below the lists of the abovementioned chapters.

§ 11 - employees' personal salaries based on the calculation table

§ 17 - rewards from the unit reward fund
§ 41 - contributions for social insurance,
§ 42 - contributions for Labor Fund,
§ 21 - rewards and other personal expenditures,
§ 28 - national business trips,
§ 29 - foreign business trips,
§ 31 - materials and equipment (underwear, work clothes, perishable items, fuels, materials for renovations, cleansing agents, office articles),
§ 32 – food supplies,
§ 33 – medicines and medicinal products,
§ 34 – medical equipment,
§ 35 - energy (thermal/electric energy, water, gas)
§ 36 - material services (current renovations, equipment repairs, transport, postal and telecommunication charges, others),
§ 37 - non-material services (trainings, others),
§ 43 - deductions on social benefits fund,
§ 67 - taxes and charge on gminas' budgets

According to the chapters, the expenditures and personal costs were precisely defined by the superior body and their level was connected with the employment structure. The Health Department determined the number of full-time equivalent (FTE) positions in a given facility and on that basis assigned the financial means for salaries. All other 'personal' chapters derived from salaries and therefore they were also defined top-down. The financial means assigned for expenditures and material costs constituted a definite amount. In the case of these expenditures there was a free flow among the chapters – expenditure aims. The Health Department assigned also founds for investments. These expenditures related only to fixed assets and the precise purchasing intention was defined top-down.

The cost accounting in the public health care units has been practiced in Poland for several dozen years, but its boom started in the early 90's. This was due to the information need resulting from changing health care organization systems and needs and possibilities of decision-makers on different levels of management. The efforts connected with cost accounting aimed at the knowledge of costs of conducting activity in the health care and were calculated on the below levels:

- ZOZ
- Kind of medical activity (in-patient health care, primary health care etc.)
- Cost centres (department, clinic etc)
- Cost carriers:
  - average patient day
  - average person treated
  - medical procedure
  - medicines administered to patient
  - patient.

This means that at first only the information about the cost of health care unit as a whole was needed, then the cost data of each kind of medical activity, to get finally to needs on the cost-carriers level. The last level has not been universally reached, although it is available in some units.

2.2.Elaboration of ZOZ cost accounting system – the beginning

The new rules of cost accounting were introduced in 1992 and that was a turning point in the approach to monitoring of utilization of resources in the treatment process. The directive stated that, parallel with making a record of current expenses to an accuracy of the budgetary articles, the costs should be recorded to a level of cost centres. According to the directive, the records should be kept both by type and by object, although with bigger emphasis placed on object-oriented costing (cost centres). The directive specified also the method of costs settlements among cost centres.

The attempts to introduce changes into the cost accounting in the direction of object-based costing were made in 1995. Within the confines of a research project financed by the government[5], the data on utilization of resources and working time spent by a sequence of so called medical procedures were collected. The calculation of medical procedure costs was done on that basis and on the grounds of prior prepared methodology. Unfortunately, the project was not properly incorporated into the ZOZ cost accounting system and it was not continued on the national level. Some time later, one of the project team members[6] decided not only to continue the works, but also to refine detailed solutions in a way that the calculation of medical procedure costs was integrated into the cost accounting system. It resulted in the creation of the cost accounting system, on the level of particular hospitals in the Olsztyn Voivodeship and on the level of the whole voivodeship, providing the information on costs of all medical procedures and, what is more important, on individual costs of treatment. After proper grouping and processing of collected data it was also possible to obtain the data on costs of treated disease units. In the effect of improved accounting and recording solutions more accurate information about costs could be provided.

The next step in the development of ZOZ cost accounting was the regulation of the Minister of Health on cost accounting[14]. This cost carriers - oriented system of cost accounting arranged and modified the accounting solutions which were previously practiced in the hospitals in the Olsztyn Voivodeship – they were based on the unit costs of medical procedures estimated with the use of division calculation with coefficients.

2.3.Current ZOZ cost accounting system

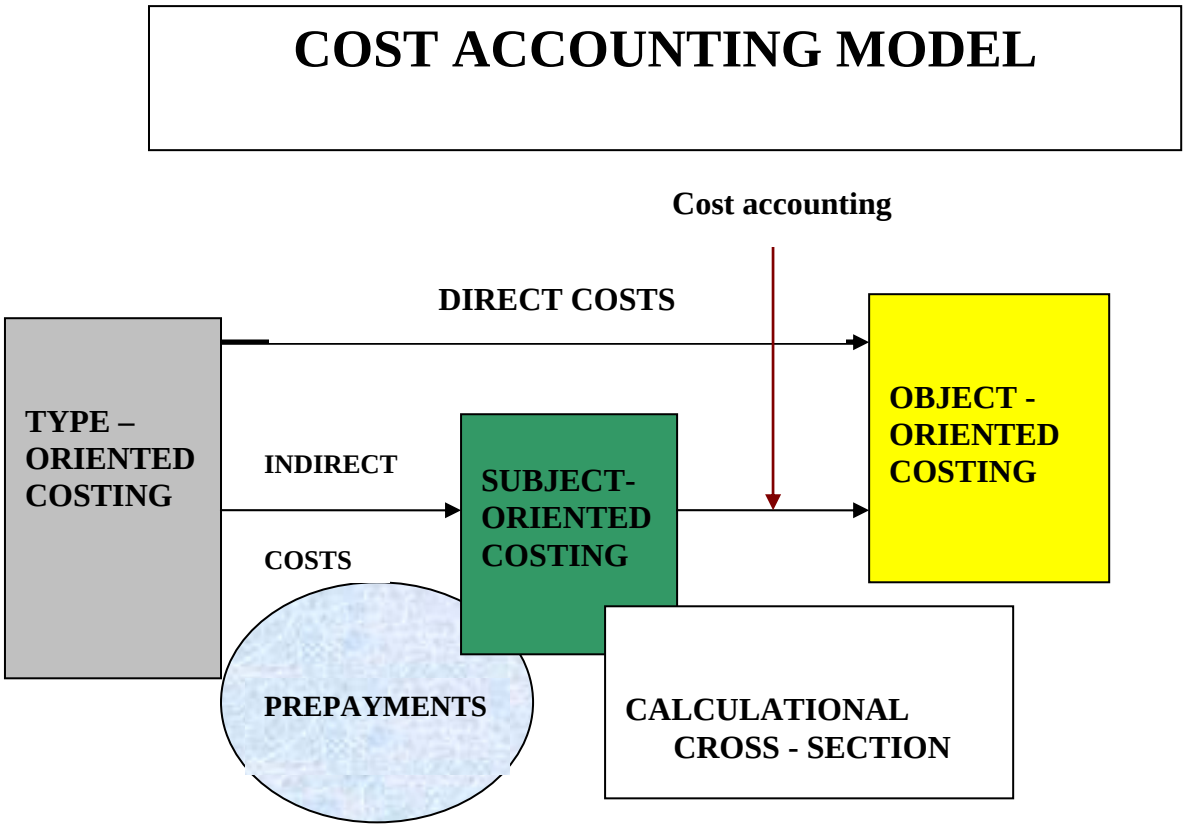
The methodology enabling the calculation of many different cost objects (from simple medical encounter to very complex medical services) with a high accuracy was described in the regulation of the Minister of Health. It allows to calculate the costs of different types of activity measures, which can be subject to financing by public payers, e.g. the cost calculation of measures aggregated by homogeneous patients' groups (DRG). The regulation sets down in greater detail the requirements considering the rules of cost accounting. It introduces the obligation of keeping the record of costs both by type and by object. To present tasks of cost accounting in the management process the below definition has been enclosed:

[5] ordered research project - PBZ 077-02, carried out from 1995 to 1996 in 20 Polish hospitals under directions of prof. dr hab. Kazimierz Roszkowski

[6] mgr Franciszek Gajek, Economic Director of the ZOZ in Mrągowo and later in the voivodeship hospital in Olsztyn

'Cost accounting encompasses all the activities aiming at reflecting medical procedures conducted in a unit through gathering, grouping and interpretation, within defined sections, of own manufacturing costs and marketing of health care services, which are the effect of operations of health care unit, measured in a quantitative and qualitative manner for a given period of time, in order to obtain possible comprehensive information necessary for estimation of results and unit management'.[7]

The regulation comprises a cost accounting model for health care units - schematically presented below - based on full cost accounting, but adapted to information needs resulting from the specificity of operations performed by health care units.



The regulation sets the requirements for type-oriented costing and keeping a record of costs in the object-oriented costing. For the type-oriented costing the regulation specifies kinds of costs, which in the minimal range shall be distinguished, partly because of financial accountancy requirements, but mainly because of management accountancy, which scope is being constantly broaden in the health care units.

§ 2 item 2

Costs records in the type-oriented costing:

1) utilization of resources, including:
   a) medicines,
   b) food,
   c) single-use equipment,
   d) laboratory reagents and diagnostic materials,

[7] I.Kulis, M.Kulis, W.Stylo, *Cost accounting in health care units* , UWM Vesalius, Cracow 1999, p. 9.

e) fuels,
2) energy utilization, including:
a) electric energy,
b) thermal energy,
3) external services, including:
a) renovation,
b) transportation,
c) external medical services,
d) others,
4) taxes and fees,
5) salaries, including:
a) salaries under employment agreement,
b) salaries under commission and specific-task agreements
6) employees' allowances including:
a) contributions on social and health insurance, Labor Fund
b) deductions on social benefits fund,
7) depreciation,
8) other costs, including:
a) business trips,
b) *third party liability insurance (OC) and property insurance.*

The regulations lays down the guidelines for the structure of costs records in the object/subject –oriented costing as it defines the cost centers, which shall be distinguished:

§ 1.

1. In the public health care unit, hereinafter referred to as 'unit' there are to be differentiated
1) cost generating places i.e. an organizational section of the unit structure, group of organizational sections or a part of it,
2) defined scopes of operations,
hereinafter referred to as 'cost centres'.
2. Cost centres can be divided into:
1) Cost centers connected with provision of health care services, hereinafter referred to as 'primary activity cost centres',
2) Cost centers connected with conducting activities supporting the basic activity hereinafter referred to as ' supporting activity cost centers'
3) Cost centre connected with managing the unit as a whole, hereinafter referred to as ' management cost centre'
3. The detailed list of cost centers mentioned in the 2 item is defined by the director of the health care unit. (…)

There are also other paragraphs which apply to the rules of keeping a record of costs, concerning the method of keeping a record of costs in the cost centers, where the direct and indirect costs shall be distinguished. At the same time, the regulation defines the direct costs as those which can be assigned to the cost driver in the cost centre.

2.4.Subject - oriented costing

In the health care units there are 3 kinds of costs centres:

- *primary activity cost centres,*
- *supporting activity cost centers*
- *management cost centers.*

Subject-oriented costing singles out as primary activity cost centres departments and clinics as well as other units conducting medical procedures, like operating rooms or diagnostic laboratories. As the example can serve a laboratory with different work-rooms, which can be classified (or a part of them) as separate cost centres, dependently on the need and the possibility of differentiation and assignment of specific costs. In this way, the rule known in the English language literature as *Activity – Based Costing* (ABC) has been put in practice. Because of classifying the majority of medical costs to the category of *primary activity cost centres*, there is no need to divide the *supporting activity cost centers* into medical and non-medical ones, because in the cost accounting both first and the second are treated in the same way.

To the management costs centers belong all administrative and management sections/units and other organizational sections generating costs of an unit-wide character. However, due to the supervision exercised over the public health care services, mainly by their founding bodies, and the need of controlling of utilization of public founds allocated to health care units for provision of services, it is advised to distinguish the centers generating unit-wide costs and those connected with unit managements from the management costs centers.

The detailed division into cost centers can vary in particular health care units, because it depends in great measure on specificity of operations performed by health care units. According to the regulation, the detailed list of cost centers is defined by the head of the health care unit. In the cost accounting the phases of cost allocation among cost centers and unit cost calculation are significant, because they are connected with the specificity and diversity of operations performed by health care units. The allocation of costs accumulated in the supporting activity cost centers is based on the services provided to the particular centers with the defined calculation units (sterilization room - e.g. number of sterilized instruments in kg, laundry – number of washed clothes in kg, kitchen- number of patient fed per day). If this is not possible or if single time defining of performed activities for particular centers is not effective, the allocation of costs is based on adopted distribution keys.

Different distribution keys can be used, among which to the most frequently used belong: surface in square meters, volume in cubic meters, number of energy receivers etc. The methods of costs allocation used before the regulation was issued reflected the actual costs quite accurately, thus the regulation left their choice under the director.

All costs assigned to the definite medical activity for a given period of time, excluding management costs, can be estimated having the operational costs accounted for. At this point the requirements of financial accountancy end, giving a place for the calculations connected with management to meet the internal needs of health care units. At this stage the unit cost-carrier selected out in particular primary activity cost centres are calculated and processed, dependently on the needs of management accountancy. The appropriate processing of the

collected data determines the accuracy of the final information about cost of health services, which can be marketed.

2.5.Object - oriented costing

Cost object is interesting for both, cost accounting and management accountancy. The regulation specifies the cost - carriers in particular types of the primary activity cost centres, whereas in the supporting activity cost centres they are defined by the director of the health care unit.

3. The detailed list of cost centres (...) is defined by the director of the health care unit:
1) in the primary activity cost centres being hospital departments – a patient day and a patient with assigned medicines and medical procedures
2) in other primary activity cost centres – medical procedures
3) in the supporting activity cost centres – services provided by those centres.

The abovementioned cost – carriers in the primary activity cost centres can have temporary or final character. Their classification depends on the measures of health care unit activities or in the other words, on the way how the marketed health care services are defined. The simplest cost - carrier for calculation is a patient day on the specific hospital department. The simple division calculation described in the § 3 of the regulation is used for estimation of the unit cost of a patient day.

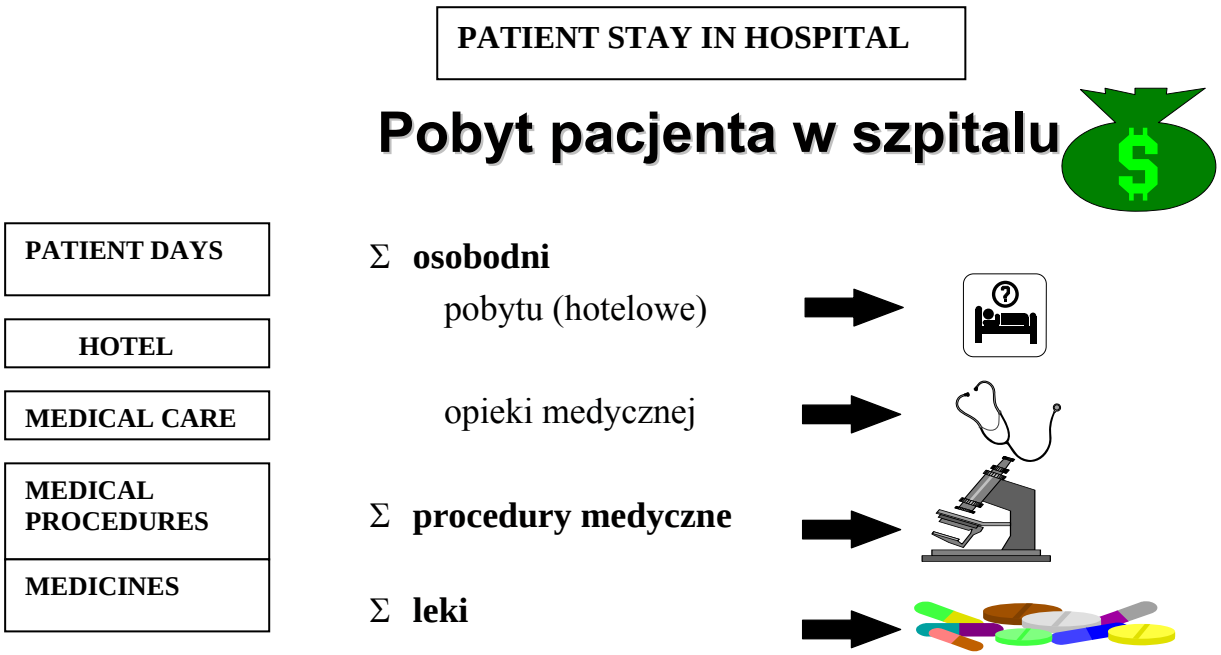
> ***§ 3.*** *The cost of a patient day in the primary activity cost centre being a hospital department is calculated by dividing the sum of direct and indirect costs of the centre, excluding the cost of medicines assigned to patient, by the number of patient days in the adopted account period.*

Much more difficult to calculate is the cost of the cost - carrier being a medical procedure, understood as a basic medical service provided to a patient outside the hospital department or on the hospital department but within the scope of other than hospital department primary activity centre. The regulation precisely describes how to calculate properly the unit cost of medical procedures. It lays down the way the required data shall be prepared for using the PLN value of direct cost as accounting units necessary for calculating the unit costs of medical services. It is a method of allocating the indirect cost to unit medical procedures performed in the adopted account period, since the allocation is based on postulated indirect costs estimated on the grounds of direct utilization of resources.

In order to harmonize the nomenclature and identifiers and to settle the dispute over the definition of medical procedure in the meaning of this cost accounting, the standardized classification of procedures has been acknowledged. Most health care units base on the International Classification of Medical Procedures ICD-9-CM.[13][8] This classification is recognized as the basis for a statistical data transfer, on the grounds of the Statistical Research Program, too. The regulation showed how the system of keeping a record and cost accounting in the units should look like to enable the costing of medical procedure, including the treatment costs of particular patients.[12]

[8] *International Classification of Medical Procedures – second Polish edition – Classification of Laboratory Tests (Klasyfikacja Badań Laboratoryjnych),* UWM „VESALIUS", Cracow 1999.

The below drawing (No. 2) shows from which elements of the cost centers we can valuate the costs of a hospital patient day or the costs of a specific disease unit, which can also serve as cost centers after applying the appropriate cost accounting.



The details are not discusses in the legal regulations, since they have to be adapted to the specific cost objects, which costs are valuated dependently on units' information needs and requirements set by a payer at different development stages of health services contracting system. A patient with assigned medicines and medical procedure constitutes a fundamental cost-carrier in a health care unit. Such definition of a cost-carrier is used when the costs of treatment on the hospital department are assigned to a patient - in a form of a multiplication of the cost of a patient-day, number of days of stay, costs of medical procedures carried out for him (outside the department) – taking into account the quantity and types of performed procedures and their unit costs as well as the costs of medicines applied to the patient during the hospitalization.

3. Examples of stomatological procedures costing in selected institutions in Cracow

3.1. Introduction

Health services payment should equally reflect both the level of the services provided and all indispensable costs incurred in respect of those services. The above arises from the provisions of the Law on health care services financed by public funds, which govern that procedures aiming at concluding contracts shall involve competition for tenders as well as negotiations and that under art. 148, the basic assessed characteristics of the tender shall particularly include price, the number of provided health care services and costing. Following the above logic, the costing of medical procedures shall necessarily include all the costing elements referring to the standards of conditions in which the health care service should be performed, materials that should be used and the personnel who perform the service. Therefore, in this

case, costs may be referred to as postulated or standard costs i.e. costs which need to be incurred in order to satisfy quality requirements and assure a necessary degree of patient's safety during patient's treatment.

In the opinion of the Chamber of Physicians experts, public payers did not and still do not have at their disposal a reliable valuation of all health care services financed from General Health Insurance. Hence, the prices health services providers are paid in many cases are relatively coincidental or based on highly out-of-date historic costs. As a result, in the spring of 2003, dentists[9] from the Supreme Medical Council commissioned the preparation of the costing of stomatological procedures financed from the universal health insurance, at the same time stipulating the required standard of those services.

3.2. The assumptions and the method of performing the costing.

The costing of individual dental procedures was performed on the basis of a quantitative statement of resources used during a typical medical procedure, which constitutes an annex to the regulation[14][10]. The table of materials and medical equipment usage (material costs) as well as the table of working time spent by personnel on performance of a procedure (personnel costs) included in the annex to the regulation were used. The tables have been completed by the dentist and dentist' assistants and technicians employed in non-public health care centres in the area of Cracow and Myślenice as well as in an independent public health care units - Wojewódzka Przychodnia Stomatologiczna w Krakowie. In accordance with the regulation, a valuation of direct material costs of the performance of particular dental procedures has been prepared on the basis of the statements of materials usage completed by health care units. The prices included in the price-lists of dental materials suppliers have been taken into account. Work costs have been calculated on the basis of work time cards prepared by health care units, assuming that the **cost of one hour's work** is:

- dentist PLN 15 (EUR 4) per hour
- dentist' assistant PLN 10 (EUR 2.5) per hour
- technician PLN 12 (EUR 3) per hour

A ratio describing the relation between direct and indirect costs of medical procedures in particular primary activity costs centres and indirect costs margin have been calculated. Addition of indirect and direct costs of dental procedures enabled the calculation of costs of conducting a procedure. Addition of the institution's costs margin in the form of management costs enabled the calculation of the prime costs of procedures sale.

The ratio obtained as a result of juxtaposition of direct costs of the procedures, manufacturing costs and prime costs of sale enabled to determine the share of the direct cost of procedure performance and the share of the cost of procedure production in the total cost of dental procedure. The above ratios were used to determine indirect and institution's costs margin for the direct costs of particular dental procedures obtained as a result of the valuation of resources usage (direct materials and effort input), listed in the quantitative statements on

[9] In Poland the Chamber of Physicians congregates both physicians and stomatologists

[10] The regulation of the Minister of Health and Social Welfare of December 22, 1998 on the special rules of cost accounting in the public health care units (Dz. U. Nr 164, poz. 1194)

materials usage during a typical performance of stomatological procedures, which specify the postulated materials usage.

Both direct and indirect costs should be added in order to calculate the costs of particular procedures production. It was achieved by determining the direct costs margin ratio. The ratio has been calculated on the basis of the costs data of Wojewódzka Przychodnia Stomatologiczna w Krakowie. It has been assumed that personnel employed in the institutions spend 90% of work time on work directly related to dental procedures and 10% of time on other activities not related to any particular procedure directly. Therefore, indirect costs of dental procedures involve total depreciation costs, energy costs, external services, taxes and payments, other costs as well as 10% of personnel costs (salaries and employee benefits) borne in the dental studio. As a result of the performed calculations, the shares of indirect and direct costs in the costs centres as well as indirect costs margin ratios have been determined. Since, the particular clinics perform to a certain extent the same medical procedures, for the purpose of further calculations referring to all performed dental procedures an average indirect costs margin ratio has been decided upon. Having applied the calculated indirect costs margin ratio, costs of particular dental procedures production have been obtained.

The next phase of calculations consisted in taking into account the share of institution's costs in the costs of particular procedures. In the selected clinics, where the survey took place, those were the costs of the management and administration. Having added the management and administration costs margin i.e. the institution's costs to each of the stomatological procedures, the prime costs of sale of particular dental procedures were obtained. The prime costs of sale of particular dental procedures were calculated following the above described method, assuming that standards of those procedures satisfy the basic requirements concerning both patient and personnel's hygiene and safety.

3.3. Conclusion

In the opinion of the Chamber of Physicians the above costing of particular dental procedures indicate that in order to perform a particular medical service according to the expected standard stipulated by a group of consultants of the Minister of Health in 1999, particular costs need to be borne. In the case of health care services performed for the insured patients, which are financed from the universal health insurance, the costs borne by the health services provider in respect of performing a particular service must be the basis for the establishment of prices.

Provision of any product or service involves particular costs, which as for the dental procedures have been calculated in this study. In the opinion of the Chamber, the calculated costs of particular procedures constitute the minimum necessary to satisfy the basic requirements of hygiene and safety. It has been assumed that the widely applied dental materials, which will indeed not satisfy most demanding patients but will ensure the basic level of durability and reliability of the treatment, will be used.

Since the aim of this study is preparation of the costing of particular dental procedures and not the sale costing, the provider's profit is not taken into account.

4. Physician work evaluation pilot program

In September 2002, the Supreme Medical Council[8] took steps to enforce Physicians Convention Resolution of 1998 on development of the physicians work valuation system[9]. Long expressed need for the appropriate valuation and determining the level of salaries of the physicians, who feel frustration resulting from inadequate pay in the public health care sector, became the basis for the work. Although, significant organizational changes took place in the mid-90's a large number of physicians run their own businesses, practices or non-public health care units, the need for valuation of physicians' work has not decreased. On the contrary, it has been acknowledged that the diversity of forms and methods of employment causes even a greater need for development of a concise and well documented method of evaluation of physicians work. Therefore, the Chamber of Physicians commissioned an expertise concerning the possibility of adjusting a foreign system of physicians work evaluation. The result of the expertise was the suggestion for CPT and RBRVS system as the most mature and widely tested system, adaptable in Polish conditions. The solution taken from the United States has appeared to be universal, especially in respect of evaluation of the physicians work. The suggested system of physicians work valuation includes:

- the terminological set for medical procedures and their definitions, known as CPT-4 (*Current Procedural Terminology*) in the USA.
- Point and quote scales referring to particular medical procedures performed by the physicians known as RBRVS (*Resource Based Relative Value Scale*) in the USA.

The System presents detailed weighting of particular procedures and services performed by the physicians based on the assessment of the physician's effort, required competence and education as well as mental stress and other elements strictly concerning a physician. The weighting does not include costs, which are not the part of a physician's work (e.g. material costs), thus it is universal to apply and insensitive to geographical and time differences.

In the future, the suggested system will facilitate negotiations concerning salaries between physicians and employers – management of the health care centres, but it will be also helpful in determining rates of contracts concluded between (public) payer and the physician's practice. In the other instance, however, it is indispensable to add practice costs, which are not the physician's work.

As a consequence of the Chamber of Physicians President's decision, affirmed by the resolution of the Supreme Council, the Chamber put an effort in order to adapt American set of medical procedures terminology CPT-4 (*Current Procedural Terminology)* to Polish conditions. Therefore, an agreement with *American Medical Association* was concluded, on the basis of which the Chamber acquired the right to translate two chapters of CPT-4 and testing them in Polish units. The results of the pilot program will be decisive for the possible further steps in the form of translation of the rest of the chapters and possible modification of the system in its Polish version. The aim of the pilot program was to determine to what extent CPT-4 would be appropriate as a tool for evaluation of a physician work in the Polish health care system, including the assessment of the financing objectives as well as for other objectives such as *inter alia* increase of the health care quality.

Pilot program concerning the chapters on Gynaecology and Obstetrics (GynObs) as well as Evaluation and Specification of Conduct was carried out in 12 domestic units; hospitals, clinics both private and public, the part of which specialized in Gynaecology and Obstetrics

while other specialized in different fields. During the pilot program, physicians working in those units were asked to note the codes of procedures in compliance with CPT-4 as well as other data concerning the performed services such as age and sex of the patient, diagnosis (ICD-10), medical procedure (ICD-9-CM) and accounting code from the NFZ catalogs. Earlier, the physicians were trained how to apply CPT-4 and were given appropriate materials. In a short survey, each of the coding physicians presented also his/her opinion on: CPT-4 degree of its difficulty, advantages and disadvantages s/he noticed during the program.

As a result of several weeks of pilot program 9000 records with CPT codes were collected. Next they were entered into MS Excel spread sheets, then verified, corrected and analysed by means of the statistical software SPSS. The summary revealed that all the records, with the exception of CPT-4 code, were provided with ICD-10 codes (diagnosis), 7800 of them had ICD-9-CM codes (procedures) and over 4000 were connected with the NFZ codes.

For the management of the Chamber of Physicians, CPT system as well as RBRVS-based valuation of physicians work should in the future constitute a tool for contracting some of the health care services, especially those performed by physicians and their businesses i.e. practices and outpatient units. For this purpose, nevertheless, except for adjusting the terminology of medical procedures, which is currently being carried out, verification and localization of particular services evaluation point scales will be necessary – especially if there is a necessity of evaluation of in-work costs in respect to physicians, for instance, material costs and intermediate-level personnel payment costs.

5. Costings in practice

Firstly, the explained above rules of cost accounting introduced by the virtue of ministerial regulation are binding only for public health care units, and secondly, constitute only a set of financial and accounting tools, which may be used in many ways and to a different extent of accuracy. Above all, nevertheless, these tools are only instruments of managing the business of a health care service provider, and as such remains an internal source of information. Data on the costs of particular medical services are neither equivalent to standardization system nor are they comparable between different service providers. They do not enable automatic integration, which would support the cyclical countrywide analysis.

Yet, they constitute a basis for such activities as presented above, fragmentary programmes concerning particular branches and groups of service providers. First of all, such programs provide useful partial data, and secondly, they support the creation of procedural framework and specific experience. In the future, it shall result in the implementation of a universal medical services costing system. As it might be seen from the above-mentioned examples, the activities of the benefits services as well as the activities of the National Health Fund supported by the Ministry of Health focus on the actions of particular parties of the system. Undoubtedly, these activities encounter a great deal of obstacles. It seems, however, that there is a growing conviction that the purchase price of health care services in the public system should be based on their manufacturing price, and not only on negotiation strengths of the parties.

At present, however, accurate costing does not constitute a point of reference for the price setting. On the one hand, from the provider's point of view, prices binding in the previous years and conclusions drawn from the achieved financial results and the information

concerning the competitors (data concerning the concluded contracts are public and available on the NFZ website) constitute the reference point. On the other hand, from the point of view of the payer, the information concerning the performance of the contracts in the previous year, budget for a particular year and the forecast of demand for services in a particular year are the reference point.

6. Summary

1. At present, the NFZ does not have instruments for carrying out effective cost analysis of particular services through the measurement of the resources usage at the individual level (*micro-costing*). Hence, the NHF is left with aggregated historic data concerning performance of contracts, which can be used only to determine prices (and not the costs).
2. Procedures of calculating the costs of particular services of providers are not standardized. They a differentiated in respect of method, tools as well as degree of accuracy.
3. Service providers apply micro-costing approach using their own accounting data (more or less accurate), and partially gross-costing approach using public historic data concerning the information on the contracts concluded by the competitors.

Framework for Section I of Report

Sector (Functional Categories				Cost Assessment				Price Setting			
				Used?	Units of resource usage	Source of resource usage	Source of monetary value	Unit of price/payment	Ambit of price setting/negotiation	Variability of prices depending on…	Updating
HC 1	Services of curative care			Not used routinely Incidentally used by some groups of providers					Regional (voivodeship)	Region, Provider	Yearly
	HC 1.1	…						account points, 24-hour availability, man days			
	HC 1.2.	…						account points			
	HC 1.3										
		HC 1.3.1	…					Beneficiary			
		HC 1.3.2						account points, availability on duty			
		HC 1.3.3						account points, man days			
HC 2	Services of rehabilitative care										
	HC 2.1	…						account points, man days			
	HC 2.2.							account points			
	HC 2.3.	…						account points, man days			
	HC 2.4	…						account points			
HC 3	Services of long-term nursing care										
	HC 3.1	…						man days			
	HC 3.2	…						man days			
	HC 3.3	…						man days			
HC 4	Ancillary services to health care										
	HC 4.2	…						account points			
	HC 4.3	…						24-hour availability			
HC 6											
	HC 6.1.							Beneficiary			
	HC 6.2.							Beneficiary			
	HC 6.3.							Beneficiary			
	HC 6.4.	…						account points			
*Answers**				yes / no	single items … … maximal aggregation	real data … … estimations	real data … … estimations	single item … day/case … aggregated budgets	national … regional … local	volume /+ quality /+ other1 /+ other2 /+ other3/+	Real … … estimated

II. Analysis

a. Advantages and Disadvantages of the System

Health Care Reform of 1999 was carried out with the motto of *money following the patient* in mind. This motto reflected several solutions, which were to solve the earlier problems of the Health Care System:
- low productivity of health care units
- poor care of medical personnel to satisfy patients' needs
- the lack of motivation to improve performance among units and their management.

In 1999, financing mechanisms based on pro-production motivations were introduced; fee-for-service in outpatient health care (except primary care), fee-for-admission and later, fee-for-case in hospital care. At the beginning, each health-insurance fund (Kasa Chorych) developed its own purchasing methods according to its own needs and rules. With time, health-insurance funds developed cooperation systems, working out common methods. At the end of 2004, health-insurance funds were centralized and unified catalogs of services binding for the whole country were introduced.

Owing to annual competitions for tenders and publicity of data found in the contracts, the system governed by the NFZ shows capability of self-improvement. As a result service providers are more inclined to save money and carry out more accurate cost analysis. Payer is on the other hand more inclined to perform the accepted valuations in a manner allowing for the purchase of all the indispensable services. The process involves a set of problems, the most important of which are:

- the character and form of public health care units activities – they are not subject to restrictions of the Trade Companies Code, which results in a fact that to a certain extent, those units are not oblige to focus on financial results. As a rule, they are non-for-profit entities, but what is more important they are not subject to bankruptcy regulations and at the same time they are considered by the local authorities and community as institutions providing employment and a sense of pride of a local community. In effect, those units do not pay as much attention to aspects of activity costs as private units. Excessive employment, lack of control of medicines and materials usage, lack of discipline and corruption are the main disadvantages and legacy of the decades of communist system, which have not been eradicated from the public health care units and at present undermine officially launched mechanisms of the system monopolistic position of the payer – the situation of the payer is a convenient one, since it is the payer who is the sole purchaser of some types of services (e.g. majority of hospital services), the providers are compelled to accept the prices offered by the payer. As a result, the payer tends to minimalize the prices, yet this phenomenon unequally concerns the services; it is a matter of chance and partially a matter of effective lobbying, which 'product lines' in the health care system are or are not well financed.

- method and manners of constructing the catalogs of services – creation of health care financing systems was and still is carried out at the administration level of the payer.

The payer's experts and officers create the methods of financing the services, based on their own experience, hardly ever allowing for a more extensive consultation. This is a general manner in which the lists of the so-called medical products i.e. the items in the catalog of services in the particular fields of health care (such as outpatient treatment, hospitalization etc.) are prepared. Such manner results in a fact that the lists reflect personal experiences and preferences of their authors and that the lists are incomplete (e.g. from the point of view of the scope of medicine possibilities) and the terminology used is incoherent and ambiguous. Recently, some effort has been put in order to combine these *products* with officially applied classification systems such as ICD-10 and ICD-9-CM, as well as new solutions have been suggested (see: the Supreme Chamber of Physicians Efforts).

- method and manner of determining point values of particular *products* – the aforementioned groups of the payer's experts and officers not only specify the list of the so-called *products,* but they also estimate the relative point value of particular products on the basis of their own experience and opinions, hardly ever having the data on production costs of these services at their disposal. This element of the system is the most sensitive and the least perfect, as it is subject to a very intensive lobbying and it generates a great deal of harm arising from inappropriate valuation. This element will be subject to a significant verification in the near future, according to the announcements of the NFZ management.[11]

As it has been described above, the value of accounting units expressed in points are identical within the framework of each product included in the contract. Thus, inappropriate ratios between the values of the products cannot be smoothed by differentiated valuation of those units in PLN. In effect, (regardless of the provider, costs, region and budget) some individual products may be unprofitable globally while other maybe excessively profitable. Such phenomena are observed, yet because of the lack of reliable cross-sectional cost data at the level of particular services it is impossible to solve this problem systematically. Products value realignment performed by the means of accounting units is not systematic and is not included within the framework of accurate procedures. It is carried out when irregular updates of the successive versions of the catalog of services are issued by the NFZ central office and it is a result of internal clashes between representatives of different medical specializations, promoting their own branches.

As a consequence, some services are financed by other within the health care units (cross-subsidisation) – within the framework of one product included in the contract. In the case of some individual products, the provider may not possess the relevant knowledge as they do not have accurate calculations of variable unit costs and observe only profitability ratio at different general levels. In the case of these products, where this phenomenon is clearly discernible, the natural reaction of service providers is the reduction of unprofitable services or low-profit services (e.g. through limiting access to such services) and focusing on high-profit services. On the other hand, public units incur debts, which is the consequence of the lack of focusing on financial results and the lack of combination of the valuation of services with a certain average level of their performance costs.

[11] Personal communication with the president of the NFZ J. Millerem and Vice-President M. Kamińskim, on August 31, 2005

b. Summary

1. The health care financing system within the framework of the NFZ concentrates on setting the prices in a manner providing relative balance between the supply of health services and the demand for them, maintaining the priority of liquidity and avoiding debts on the side of the payer. It is partially carried out by limiting the access to the services (insufficient number of health benefits in reaction to the needs expressed by the insured) and partially by compelling providers to perform services below their production costs. Costing is prepared with a different degree of accuracy by the providers for their own use.
2. The ratio of service prices to their costs may vary depending on the provider and especially on the provider's economy and thrift, but also on product line as some products are more cost-effective than others.
3. Structural discrepancies concerning the values of the individual products expressed in accounting units, impossible to eliminate by diversity of market prices of those units, may cause excessive limitations of access to underestimated services or on the contrary ill-founded supply of those services and generating demand for them by the providers.
4. The most significant disadvantage of the system i.e. the imperfection of the catalogue of the benefits concerning individual products value expressed in accounting units, arises from the lack of public, independent (from the lobbies of particular medical branches) and representative costing of particular services, prepared by specifying and measuring the number and the monetary value of the used resources (*micro-costing*).
5. The summary of the report in respect of free movement of patients among the member states policy is presented in the following table.

Perspective	Objective	Problem	Answer
Purchaser	Improved management of cross-border care or re-evaluate cross-border purchasing policies.	Whether the cost of a particular service differs among purchasers and/or regions and/or providers within a country and from member state to member state or not?	The costs of services vary depending on the provider. The costs of benefits vary depending on region and the provider.
	Improve effective purchasing and reduce inappropriate care	Whether the reimbursement for a service includes a standard set of items or not?	The standards concerning provision of particular types of services exist, although they are settled with different accuracy. The standards constitute an element of the contract with NHF and are not widely known among patients.
Provider	Providers can improve the local delivery system or governments to revisit their standards, minimum requirements policies.	Whether the production costs of a particular service differ among providers and from member state to member state (comparing technical efficiency of providers)	Yes.

	Improve allocative efficiency and effective purchasing Harmonize cost accounting in health care	Whether patients' insurance claims cover "reasonable" costs or not? Are there significant cross subsidisations or not?	A phenomenon of cross-subsidation exists. Unified and accurate rules of preparing costings are not disseminated.

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