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Pharmaceutical Health Information System

PHIS Hospital Pharma Report

FINLAND

PHIS

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PHIS Hospital Pharma Report

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Executive Summary

In Finland, the responsibility for organising health care lies with about 348 (in the beginning of 2009) municipalities, that organise and/or purchase most of the health care services they need, and they mostly finance this via local taxation.

Primary care is provided in health centres owned by one or more municipalities. Hospitals provide secondary care; each municipality is a member of one of 21 hospital districts. Municipalities purchase services from their hospital districts and may also purchase services from private providers. Municipalities account for about two thirds of total health care expenditure.

There is no official definition of hospital or hospital care in Finland. In practice, the definition corresponds to the OECD definition. The subtypes of hospitals defined by OECD are relevant in Finland. There is also a classification by ownership, i.e. public and private hospitals.

Hospitals and other health care institutions may have a hospital pharmacy or a medicine centre and permission to set these up is required and obtained from the National Agency for Medicines (NAM). Hospital pharmacies and medicine dispensaries issue medicines only to their own wards and other departments. They are not allowed to sell medicines to patients or directly to the public. Only on special occasions may patients, who are being discharged or temporarily transferred to out-patient care, be issued medicines from the hospital to ensure the continuation of their medication. These medicines are supplied without charge and normally for one or two days only.

There is no legal framework regarding pricing of hospital medicines. Medicines administered in hospitals are not part of the reimbursement system; pharmaceutical companies negotiate directly with the hospitals to determine these prices.

Hospitals and health centres usually have pharmaceutical boards (pharmaceutical and therapeutic committees, PTC), which are expert bodies evaluating and recommending medicines to be approved for entry into the hospital pharmaceutical formulary. This formulary is intended to ensure safe and effective pharmacotherapy for medicines regularly needed in hospitals. These boards also negotiate medicines prices and decide on procurement. Hospitals and health centres have also formed purchasing pools to strengthen their negotiation power.

The medicines purchases within the public social welfare and health care sector are subject to public tendering in accordance with the respective legislation. Besides the medicines prices, the tendering of medicines purchases must also address safety issues as well as ensured supply of the medicines.

The hospital price consists of ex-factory price, wholesale mark-up and possible discounts agreed in tendering and price negotiations. Pharmaceuticals sold to hospitals are not subject to VAT. The hospital price corresponds to the hospital pharmacy purchase price, which can vary from hospital to hospital. There are no rules or price calculation schemes for ex-factory price, wholesale mark-up, hospital price or discounts.

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List of abbreviations

AIFA	Agenzia Italiana del Farmaco / Italian Medicines Agency
BMG	Austrian Ministry of Health
DG SANCO	Health and Consumer protection Directorate General
EAHC	Executive Agency for Health and Consumers
FIMEA	Finnish Medicines Agency
FINOHTA	Finnish Office for Health Technology Assessment
GÖG/ÖBIG	Gesundheit Österreich GmbH, Geschäftsbereich ÖBIG / Austrian Health Institute
HE	Health Expenditure
HOSHE	Health expenditure in hospitals
HOSPE	Pharmaceutical expenditure in hospitals
HPF	Hospital Pharmaceutical Formulary
HTA	Health Technology Assessment
IHHII	International Healthcare and Health Insurance Institute (Bulgaria)
NAM	National Agency for Medicines
NCU	National Currency Unit
NHI	National Health Insurance
Mio.	Million
MSAH	Ministry of Social Affairs and Health
ÖBIG	Österreichisches Bundesinstitut für Gesundheitswesen / Austrian Health Institute
OECD	Organisation for Economic Co-operation and Development
OPP	Out-of pocket payments
PHIS	Pharmaceutical Health Information System
PPB	Pharmaceuticals Pricing Board
PTC	Pharmaceutical and therapeutic committee
ROHTO	Centre for Pharmacotherapy Development
SII	Social Insurance Institution (KELA)
SUKL	Statny Ustav pre Kontrlu Lieciv / State Institute for Drug Control (Slovakia)

THE	Total Health Expenditure
THL	National Institute for Health and Welfare
TPE	Total Pharmaceutical Expenditure
TPN	Total parenteral nutrition
VALVIRA	National Supervisory Authority for Welfare and Health
VAT	Value Added Tax

Introduction

PHIS research project

PHIS (Pharmaceutical Health Information System) is a research project commissioned under the call for proposals 2007 in the priority area "health information" of the European Commission, DG SANCO. It has been commissioned by the Executive Agency for Health and Consumers (EAHC) and co-funded by the Austrian Ministry of Health (BMG).

The PHIS project aims at increasing knowledge and exchange of information on pharmaceutical policies, in particular on pricing and reimbursement, in the European Union (EU) Member States, covering both the out-patient and the in-patient sector.

This will be done via different work packages (WP) resulting in the following deliverables:

- the PHIS Glossary with key terms related to pharmaceuticals,
- the PHIS Library offering country specific information on out-patient and in-patient pharmaceutical pricing and reimbursement for the EU Member States,
- the PHIS Indicators and the PHIS Database, containing major data for the developed indicators in the Member States,
- the PHIS Hospital Pharma Report with information on pharmaceutical policies in the in-patient sector in the EU Member States, including a price survey.

The PHIS project management is a consortium of the project leader Gesundheit Österreich GmbH, Geschäftsbereich Österreichisches Bundesinstitut für Gesundheitswesen / Austrian Health Institute (GÖG/ÖBIG), which is a research institute situated in Vienna, Austria, and four associated partners:

- the Italian Medicines Agency (AIFA),
- the International Healthcare and Health Insurance Institute (IHHII), Bulgaria,
- SOGETI Luxembourg SA., which is a services provider, and
- the State Institute for Drug Control (SUKL), Slovakia
- SUKL is the WP leader of Hospital Pharma.

Further key stakeholders are the PHIS Advisory Board covering EU Commission services and agencies and other international organisations, and the PHIS network, which comprises national representatives from competent authorities and further relevant institutions from the EU Member States and associated countries.

The PHIS project runs from September 2008 to April 2011 (32 months). Further information and all deliverables are made available at the PHIS project website http://phis.goeg.at.

PHIS Hospital Pharma

The aim of the work package "Hospital Pharma" is an in-depth investigation of the in-patient sector, as systematic knowledge of pharmaceutical policies in this sector has been rather poor.

The survey is divided in two phases:

- Phase 1: General survey

Country reports on pharmaceuticals in hospitals ("PHIS Hospital Pharma Reports"), designed to describe specific pharmaceutical policies in the in-patient sector in the EU Member States (spring 2009)

- Phase 2: Case studies

A specific survey, including a price survey, provided by means of case studies, in a limited number of hospitals in a few countries (autumn 2009).

The final PHIS Hospital Report, covering information from the general survey (phase 1) and the case studies (phase 2), is scheduled for February 2010.

Methodology of the general survey

The production of the country-specific PHIS Hospital Pharma Reports is based on three steps:

1. Development of a uniform PHIS Hospital Pharma Report Template

The PHIS Hospital Pharma Report Template offers a homogenous, very detailed structure for describing the pharmaceutical pricing and reimbursement system in the in-patient sector of a country. The Template was developed by SUKL, Slovakia (Work Package leader of Hospital Pharma) in coordination with GÖG/ÖBIG (PHIS project leader) and further members of the PHIS project management. It is based on literature and internet reviews as well as interviews with experts in the hospital sector in the EU Member States. Members of the PHIS network received the draft Template for feed-back, and had an opportunity to discuss and provide personal feed-back during a meeting.

2. Collecting information and data and drafting the PHIS Hospital Pharma Report

The country-specific PHIS Hospital Pharma Reports were written by members of the PHIS network. In order to get the needed information and data, hospital experts were contacted and involved in several countries. They provided information and data in written form and during telephone conservations and personal talks. In some countries the reports (or parts of it) were written by hospital experts. In several countries, the preparatory work for drafting the PHIS Hospital Pharma Reports also included study visits of the authors to hospitals and hospital pharmacies. Information on persons and institutions involved can be found in the

"Acknowledgements" at the beginning of this PHIS Hospital Pharma Report and in section 8 "References and data sources", listing "Literature and documents" (section 8.1) and "Contacts" (section 8.2).

3. Editorial process

The draft PHIS Hospital Pharma Reports were submitted to the project management for review, which was undertaken by SUKL, Slovakia (Work Package leader of Hospital Pharma) in coordination with GÖG/ÖBIG (PHIS project leader). The review focused on checking clarity and consistency in general and with regard to the outline of the Template and terminology (PHIS Glossary). In the course of the editorial process, the reviewers contacted the authors for providing feed-back on language and content, offering suggestions for rephrasing and change and clarified open and/or misunderstanding points.

1 Background

The Finnish health care system provides comprehensive coverage to all 5.3 million residents and it is mainly tax-financed. The responsibility for organising health care lies with about 348 (in the beginning of 2009) municipalities, who organise and/or purchase most of the health care services they need, and they mostly finance this via local taxation.

The Finnish public administration system consists of three levels: state, province and municipality. The provinces are regional representatives of the central state administration. Finland is divided into five administrative provinces and the Åland Islands, the latter having autonomous status.

Municipalities have principal responsibility for organising the delivery of public health services, including primary, specialist and long-term care, nursing homes, and social services for the elderly. Primary care is provided in health centres owned by one or more municipalities. Hospitals provide secondary care. Each municipality is a member of one of 21 hospital districts. Municipalities purchase services from their hospital districts and may also purchase services from private providers. Physicians may provide services in the public system in health centres, as occupational doctors in health centres or in a private practice. Municipalities account for about two thirds of total health care expenditure.

The regulation of pharmaceutical services has been reorganised and a new Agency, the Finnish Medicines Agency (Fimea)[1], has started operations in the city of Kuopio on 1 November 2009.[2] The tasks of Fimea include the former tasks of the National Agency for Medicines (NAM) associated with medicines. The new tasks are pharmaceutical information and research, including promotion of the rational use of medicines as well as evaluation of the therapeutic value and cost/benefit of medicines.

The tasks related to medical devices have been moved to the National Supervisory Authority for Welfare and Health (Valvira). Parts of the tasks of the centre for Pharmacotherapy development have been moved to the National Institute for Health and Welfare.

The other actors in the pharmaceutical system are the Ministry of Social Affairs and Health (MSAH) and Pharmaceuticals Pricing Board (PPB), which are involved directly in the regulation of medicines. The Finnish Office for Health Technology Assessment (FinOHTA) is also indirectly involved in the pharmaceutical system.

[1] http://www.fimea.fi/index.html

[2] Fimea has started in Helsinki, but all functions will be relocated to Kuopio by 31 August 2014.

1.1 Definition and scope

There is no official definition of hospital or hospital care in Finland. In practise, the definition corresponds to the OECD definition. The subtypes of hospitals defined by the OECD are relevant in Finland. There is also a classification by ownership, i.e. public and private hospitals.

The description on hospital pricing, reimbursement and monitoring in this Hospital Pharma Report refer to all hospitals in Finland. However, there are differences according to the size of hospitals. There are hospital pharmacies in big hospitals and medicine dispensaries in small hospitals.

In hospitals, there are hospital out-patient services like ambulatory surgery for minor interventions. In 2006, there were 33.8 and in 2007 there were 43.3 ambulatory surgery period cases for 1,000 inhabitants in Finland.

1.2 Organisation

The objectives of Finnish health policy are to reduce premature deaths, to extend people's active and healthy life, to ensure the best possible quality of life for all and to reduce differences in health. The foundation of the health services is laid down in the constitution of Finland: *"Everyone shall be guaranteed by an act the right to basic subsistence in the event of unemployment, illness, and disability and during old age as well as at the birth of a child or the loss of a provider. The public authorities shall guarantee for everyone, as provided in more detail by an act, adequate social, health and medical services and promote the health of the population."*

Municipalities have the responsibility for health services. The responsibility of municipalities is laid down in the Public Health Act (1972), in the Specialist Treatment of Diseases Act (1989), and in the Mental Health Care Act (1990).

In the Public Health Act and its statutes, the tasks of the municipal public health services are guidance and preventive health care, including children's health; health education; advice concerning contraceptive measures; health surveys and screening; medical treatment, including examination and care; medical rehabilitation and first aid.

General medical treatment is provided in health centres, in in-patient departments or as home nursing care.

The legal framework for hospitals and in-patient care is given in the Act of Specialised Health Care[3]. No English translation is available. The number of hospitals is given in Table 1.1.

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[3]http://www.finlex.fi/fi/laki/ajantasa/1989/19891062?search%5Btype%5D=pika&search%5Bpika%5D =erikoissairaanhoitolaki

The specialised health care is financed by taxes of municipalities (65%), the state (28%) and the patients (18%). The municipal council approves the total municipal budget and the council of each hospital district determines the budget for hospital care within its district.

The Finnish Medicines Agency (Fimea) may permit hospitals and other health care institutions to operate a hospital pharmacy or a medicine dispensary. Hospital pharmacies are situated in big hospitals and health centres and medicine dispensaries in small ones. In 2002 there were 24 hospital pharmacies and 224 medicine dispensaries. The manager of a hospital pharmacy is required to have a M. Sc. (Pharm.) degree and the manager of a medicine dispensary is required to have a M. Sc. or a B. Sc. (Pharm.) degree. Usually there are only one or two pharmacists working in a medicine dispensary.

Hospital pharmacies and medicine dispensaries dispense medicines only to their own wards and other departments; they are not allowed to sell medicines to patients or directly to the public. They usually stock a large range of medications, including specialised and investigational medications. Hospital pharmacies typically provide medications for the hospitalised patients only, and are not retail establishments. The task of hospital pharmacies include compounding of sterile products for patients including total parenteral nutrition (TPN), and other medications given intravenously e.g. neonatal antibiotics and chemotherapy.

Table 1.1: Finland – Key data on inpatient care, 2000 and 2004–2008

Inpatient care	2000	2004	2005	2006	2007	2008
No. of hospitals[1]	389	371	352	328	311	312
Classified according to ownership						
- thereof public hospitals	347	323	303	277	259	256
- thereof private hospitals	42	48	49	51	52	56
- thereof other hospitals (please specify)	0	0	0	0	0	0
Classified according to subtypes[1]						
- thereof general hospitals	371	355	336	310	293	297
- thereof mental health and substance abuses hospitals	18	16	16	18	18	15
- thereof speciality (other than mental health and substance abuse) hospitals	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
No. of acute care beds[2]	38,864	36,608	36,541	36,327	35,130	34,097
- thereof in the public sector	37,575	35,313	35,293	34,978	33,884	32,822
- thereof in the private sector	1,289	1,295	1,248	1,349	1,246	1,275
Average length of stay in hospitals (in days)	10.3	10.0	9.9	10.0	10.1	9.7
No. of hospital pharmacies[3]	5	5	5	5	5	5
thereof no. of hospital pharmacies that serve outpatients	0	0	0	0	0	0

n.a. = not available

[1]according to OECD definition and its subtypes

[2]The number of beds has been calculated by dividing the total number of bed-days by 365 (Health Statistics in the Nordic Countries 2000-2007)

[3]This number covers only the pharmacies of the university level hospitals. The numbers of pharmacies in small hospitals or in dispensaries are unknown.

Source: OECD Health Data 2008, National Agency for Medicines; National Institute for Health and Welfare

The owners of the hospital districts are municipalities. Each hospital district has a central hospital, five of which are university-level teaching hospitals. Hospital districts are managed and funded by the member municipalities. The catchment population of hospital districts varies from 65,000 to 1.4 million inhabitants. A referral from a licensed physician is needed for access to medical care provided at the hospital districts. Life-threatening emergencies are of course exempt from this requirement.

Municipalities arrange social services, primary care and secondary as well as tertiary care services. There is also private health care, which is mainly out-patient care. In 2005, there were 17.3 million visits in private in-patient care facilities that correspond to 4% of all visits.

Table 1.2: Finland – Pharmaceuticals, 2000 and 2005–2009

	2000	2005	2006	2007	2008	2009
Authorised pharmaceuticals in total*	4,576	6,513	7,071	7,590	7,943	7,246
Human pharmaceuticals	3,994	6,626	7,122	7,429	6,714	7,018
Thereof hospital-only medicines	n.appl.	n.appl.	n.appl.	n.appl.	n.appl.	n.appl.

* including human and veterinary pharmaceuticals

n.appl. = not applicable

Method of counting: incl. different pharmaceutical forms and dosages, excl. different pack sizes

Source: National Agency for Medicines 2009

The medicines supply service of a hospital can be arranged by the hospital pharmacy or medicine dispensary or medicines can be bought from the community pharmacies. In practise, the latter is limited only for individual medicines and in private hospitals, which do not have an own hospital pharmacy or medicine dispensary. The hospital pharmacy or medicine dispensary can acquire medicines from wholesalers specialised in the distribution of medicines. Hospital pharmacies or dispensaries do not serve out-patients.

1.3 Funding

Finland has two sources of public financing for health services (dual financing): municipal financing based on taxes and National Health Insurance (NHI) based on compulsory insurance fees. Municipalities fund municipal health care services (except out-patient medicines and transport costs). NHI funds private health care, occupational health care, out-patient medicines, transport costs and sickness allowance. The health and pharmaceutical expenditure is presented in Table 1.3.

Municipalities rise funding from municipal taxes, from state subsidies and from user-fees. The main source of municipal funding for health care services is taxation. Municipal-owned health centres and hospital districts provide the majority of municipal health services, but municipalities and hospital districts may also purchase services from the private sector. There is no true purchaser-provider split in the municipal health care system, as municipalities both fund services and own the service provision organisations, although there are exceptions to this.

The State grants money to municipalities. Grants are allocated to municipalities according to a weighted capitation formula. The Government gives a decision on the ceiling for the budget expenditures over the entire electoral period. The Parliament makes the final decision on how much state resources will be allocated to the health care sector.

Since 1993 hospitals have received their revenue from the municipalities according to the services used by their inhabitants. Services are defined and prices calculated in very different ways. Municipalities negotiate annually on the provision and prices of services with their hospital district. The agreements may be revised during the year according to the actual amount and type of services provided by hospitals.

Municipalities account for the largest proportion of financing. Also the state, the Social Insurance Institution, households and employers finance a part of the expenditures. A part of the expenditure is also financed by relief funds, private insurance companies and non-profit organisations serving households.

The principal rule of the medicines financing system is that the patient and the health insurance cover the out-patient and private pharmaceutical expenditure while the rest of the medicines are paid by the municipal health care system. The two-channel financing system causes ambiguities care, encouraging the parties to shift the expenses on to the others.

Pharmaceutical expenditure is the responsibility of the municipalities in cases where the patient is in institutional care. The patient will pay a fee which depends on the place of care. The medicines included in this care have no bearing on the amount of the fee.

The Medicines Act contains provisions on possibly delivering medicines from the hospital pharmacy or medicine dispensary for the patients transferring to out-patient care. This applies to limited cases only, mainly with regard to the emergency clinic situations whereby the patient in out-patient care has no access to a pharmacy to buy medicines needed for the immediate start of the pharmacotherapy. The medicines for the continued medication will be purchased by the patients from the pharmacy, and the reimbursement is in line with the Health Insurance Act.

Table 1.3: Finland – Health and pharmaceutical expenditure, 2000 and 2004–2008

Expenditure (in million EUR)	2000	2004	2005	2006	2007	2008
Total health expenditure (THE)	9,553.5	12,529.9	13,278.2	13,891.0	14,706.3	n.a.
- thereof THE public (%)*	71	73	73	75	75	n.a.
- thereof THE private (%)**	29	27	27	25	25	n.a.
THE in hospitals (HOSHE)	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
- thereof HOSHE public	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
- thereof HOSHE private	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total pharmaceutical expenditure (TPE)	1,646	2,288	2,435	2,362	2,500	n.a.
- thereof TPE public (%)	54.7	58.6	59.0	62.6	62.0	n.a.
- thereof TPE private (%)	45.3	41.4	41.0	37.4	38.0	n.a.
Pharmaceutical expenditure in hospitals (HOSPE)	222	325	360	379	408	n.a.
- thereof HOSPE public	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
- thereof HOSPE private	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.

HOSHE = health expenditure in hospitals, HOSPE = pharmaceutical expenditure in hospitals, n.a. = not available, PE = pharmaceutical expenditure, THE = total health expenditure, TPE = total pharmaceutical expenditure

* Municipalities, State and SII (Kela)

** Households, employers, relief funds, private insurance companies and non-profit organisations serving households

Note: Data are indicated as of 31 December.

Source: OECD Health Data 2009

The following charges may be made for out-patient treatment in health centres. For in-patients there is a client fee.

- A fixed annual charge of max. € 25.60 within one year.
- A fixed charge per visit of max. € 12.80. The charge is only made for the first three visits at the same health centre during one calendar year.
- A charge of € 17.50 can be made for visits to a health centre on weekdays between the hours of 8 p.m. and 8 a.m., and on Saturdays, Sundays and public holidays. The charges do not apply to persons under 18 years of age.

Reimbursements of private physicians' fees are based on fixed charges. The National Social Insurance Institution reimburses 60% of the physician’s fee. However, in most cases the actual charge is higher and thus the reimbursement is less than 40%.

Due to language and geographical barriers, cross-border health care is insignificant in Finland (except for tourists needing unforeseen care). Statistics on this are scarce, both in

terms of people living in Finland seeking care abroad and foreigners seeking care from Finland.

Finnish residents are entitled to publicly funded unforeseen medical care in other EU/European Economic Area (EEA) Member States if they are entitled to NHI. To receive publicly financed planned treatment in another EU/EEA Member State, the patient needs authorisation from his/her hospital district or health centre (annually about 10–20 patients in Finland).

The National Social Insurance Institution (SII) handles claims for medical expenses between Finland and other EU/EEA Member States. In 2006, SII reimbursed these claims to other countries at a sum of € 3.7 million and received claims from other countries of € 10.2 million. However, these figures do not include Nordic countries, the United Kingdom, Belgium, the Netherlands, Luxembourg and Austria since Finland has agreements with them on a full or partial waiver of reimbursements of medical expenses. Patients can also claim normal NHI reimbursement for costs of unforeseen medical care when staying temporarily in countries other than EU/EEA Member States. However, as the reimbursement is rather low, people normally opt for private insurance to cover these expenses.

2 Pricing

2.1 Organisation

2.1.1 Framework

There is no legal framework regarding pricing of hospital medicines. Medicines administered in hospitals are not part of the reimbursement system. Pharmaceutical companies negotiate directly with the hospitals to determine these prices. The principle is that pharmaceutical companies may decide on the prices of their products. No rules or criteria are established for pricing. When the medicines are included in the hospital pharmaceutical formulary (HPF) effectiveness, safety and sustainable supply are taken into consideration in addition to the price.

Hospitals and health centres usually have pharmaceutical boards (pharmaceutical and therapeutic committees, PTC), which are expert bodies evaluating and recommending medicines to be approved for entry into the HPF. The HPF is intended to ensure safe and effective pharmacotherapy for medicines regularly needed in hospitals. These boards also negotiate medicine prices and decide on procurement. Hospitals and health centres have also formed purchasing pools to strengthen their negotiation power.

There is a developing trend for hospitals and health centres to group together to purchase pharmaceuticals. This can strengthen negotiating power and take advantage of economies of scale. Purchases are made at district level (although there is bulk purchasing between a few districts) and by public tender. Tenders should ensure safety and a sustainable supply of medicines. Hospital districts work with municipal authorities for primary health care, and municipalities, in the tendering process. New regulations on public competition appear to have reduced variations in discounts.

2.1.2 Hospital prices

No regulatory or legal measures for cost containment are in operation for in-patient medicines. The wholesale prices of pharmaceuticals are not regulated at market entry. The prices of medicines are based on procurement by tendering and price negotiations between hospital pharmacies/medicine dispensaries (or groups of them) and the industry.

Hospital pharmacies and medicine dispensaries are not allowed to sell pharmaceuticals to patients. They can dispense medicines to the public only in special occasions (e.g. vaccines, medication for hazardous infectious disease, for patients transferred to out-patient care) without extra charge.

The hospital price consists of ex-factory price, wholesale mark-up and possible discounts agreed in procurements and price negotiations. Medicines sold to hospitals are not subject to VAT. The hospital price corresponds to the hospital pharmacy purchasing price, which may vary from hospital to hospital. There are no rules or price calculation schemes for the ex-factory price, wholesale mark-up, hospital price or discounts.

As in the out-patient sector the wholesale mark-up is not publicly known and is negotiated between the wholesaler and the pharmaceutical company. In contrary to the hospital prices product prices in the out-patient sector are made public when the agreement has been signed. In practice, there is no easy access to the price information because the prices are not published anywhere. The hospital prices are usually available only when separately asked.

2.2 Pricing policies

2.2.1 Procurement

In principle, the decision criteria for tendering and negotiations are valid for all medicines. However, there are also other criteria, e.g. safety and availability of medicines.

The medicines purchases within the public social welfare and health care sector are subject to public tendering in accordance with the respective legislation - Act on Public Contracts (348/2007) and Government Decree on Public Contracts (614/2007). Besides the medicines prices, the tendering of medicine purchases must also address safety issues as well as ensured supply of the medicines. Hospital districts, joint municipal authorities for primary health care and municipalities collaborate on the practical level for the procedures and organisation of tendering. The aim of the tendering procedure is a purposeful and economical use of medicines, as well as a containment of pharmaceutical expenditure at a reasonable level. The pharmaceutical boards decide on procurement.

Purchases are made at district level (although there is bulk purchasing between a few districts): hospital districts work with municipal authorities to invite public tenders. New regulations on public competition appear to have reduced variations in discounts. Although there is no upper limit for discounts they tend to be no more than 60% of the wholesale price. These purchases are made by public bodies, hospitals and municipal health centres and therefore are considered to be outside competition law, partly on welfare grounds.

Under the current arrangement for procuring medicines, contracts between hospitals and suppliers can last for two to three years. The Ministry of Social Affairs and Health (MSAH) has initiated a project to develop cooperation between hospital districts for joint procurement of medicines.

2.2.2 Negotiation

Hospitals - sometimes joining hospital purchasing groups - negotiate directly with the pharmaceutical manufacturers with regards to prices and terms of delivery for pharmaceuticals. The negotiation usually concerns only individual pharmaceuticals where no treatment alternatives are available or which are not subject on tendering procedure.

3 Reimbursement

3.1 National hospital reimbursement procedure

Medicines administered only in hospitals are not part of the reimbursement system. According to the Government Decree on client fees (912/1992) no separate fee shall be charged on medicines in in-patient care. A patient only pays a client fee for the interventions and her/his stay in hospital (e.g. short term care for adults maximum € 32.50 per day). Medicines administered during the visit are included in this fee. The fee is issued based on the intervention and the expertise, not on the expenditure of the medicine. No specific budgets are provided e.g. for orphan medicines, specific diseases or high-cost medicines.

There is one exception on the above-mentioned rule. If the patient uses private health services (e.g. private hospital) the Health Insurance will only cover a part of the costs of the medicine used in in-patient care providing that the medicine is purchased from the pharmacy and the Pharmaceuticals Pricing Board has confirmed the reimbursement status and reasonable wholesale price for it. Reimbursement categories and rules for reimbursement are the same as in out-patient care[4]. The Health Insurance Act (1224/2004) and its amendments gives the overall legal framework for the medicines reimbursement system.

There are no separate financing programs for medicines used in in-patient care. The general financing of the health expenditure reflects also the financing of medicines (cf. section 1.3 Funding). Municipalities account for the largest proportion of financing. Also the state, the Social Insurance Institution, households and employers finance a part of the expenditures. A part of the expenditure is also financed by relief funds, private insurance companies and non-profit organisations serving households.

The reimbursement lists from the out-patient sector are of no relevance for the public in-patient sector, but apply to the private in-patient sector when the medicine is purchased from the pharmacy.

3.2 Hospital pharmaceutical formularies

Hospital pharmacies are required to have a hospital pharmaceutical formulary (HPF). Hospitals without pharmacies may have one as well, but no information about this is available. There is no national standard guidance for HPFs. There is no linkage between HPFs and reimbursed medicines. HPFs are formed separately. Pharmaceutical boards (pharmaceutical

[4] For details please refer to PPRI Pharma Profile Finland 2007, http://ppri.goeg.at/Downloads/Results/Finland_PPRI_2007.pdf

and therapeutic committees, PTC) within hospitals and health centres assist purchasing decisions by evaluating and recommending medicines for entry into a formulary. Hospitals and health centres are obliged to hold stocks of medicines sufficient for six months of average consumption.

Procurement of medicines and the trend towards group purchases have resulted in the development of joint formularies. Guidance is needed on standardising HPFs because there are variations in the amounts and types of medicines procured. The formulary could be used flexibly and account for factors such as variations in hospital sizes and local population health needs.

One study on hospital formularies found that processes and decisions vary greatly between hospitals (Hermanson et al. 2001). There could be a 10-fold difference in the volume of medicines in use at any given time. The study reported that the smallest hospitals had the biggest formularies with no apparent rational selection of medicines. The number of medicines in the primary medicines list varied between 100 and 800. Most hospitals also had a utility medicines (i.e. a list of medicines that have been used) list consisting of 100 to 1,100 medicines. The study noted that selections should comprise medicines with proven cost-effectiveness.

4 Consumption of pharmaceuticals

The Finnish Medicines Agency (National Agency for Medicines until 1.11.2009) collects the consumption data of pharmaceuticals used in hospitals and publishes them at national level (cf. Table 4.1). Consumption data is based on the medicine sales to hospitals. Table 4.2 indicates the Top10 pharmaceuticals in hospital use by consumption and by expenditure.

Table 4.1: Finland – Pharmaceutical consumption, 2000 and 2004–2008

Pharmaceutical consumption	2000	2004	2005	2006	2007	2008
Annual pharmaceutical consumption in total						
in packs	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
in DDD (Defined Daily Doses) per 1,000 inhabitants	n.a.	n.a.	1,563	1,535	1,590	1,661
In other measures units (e.g. unit doses, please specify	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Annual pharmaceutical consumption in hospitals						
in packs	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
in DDD per 1,000 inhabitants	n.a.	n.a.	96.5	98.9	96.9	106.6
In other measures units	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.

DDD = Defined Daily Doses, n.a. = not available

Source: National Agency for Medicines available at http://www.laakelaitos.fi/laaketieto/kulutustiedot

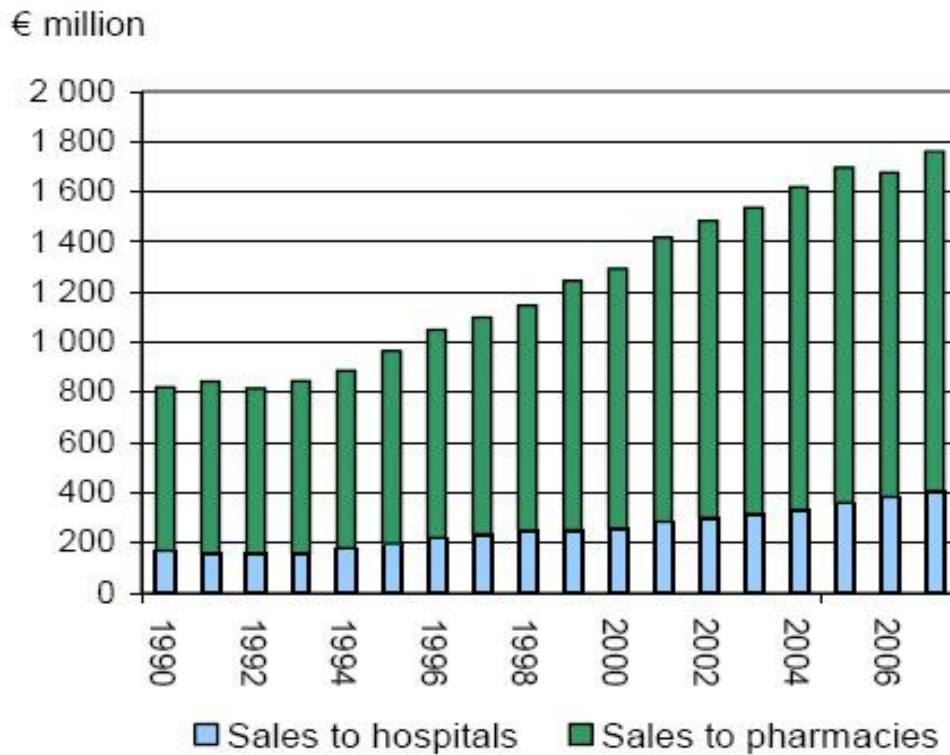
Table 4.2: Finland – Top 10 pharmaceuticals by pharmaceutical expenditure and consumption 2008 in hospitals

Position	Top pharmaceuticals used in hospitals, indicated by active ingredient, ranked with regard to consumption	Position	Top pharmaceuticals used in hospitals, indicated by active ingredient ranked with regard to expenditure
1	Furosemide	1	Cefuroxime
2	Nicotine	2	Infliximab
3	Lactulose	3	Nicotine
4	Acetylsalicylic acid, ASA	4	Rituximab
5	Paracetamol	5	Docetaxel
6	Esomeprazol	6	Trasuzumab
7	Natriumfluoride	7	Bevalizumab
8	Enoxaparine	8	Piperasillin
9	Ramipril	9	Meropenem
10	Drospirenon	10	Esomeprazol

Source: Finnish Statistics on medicines 2008, National Agency for Medicines available at http://www.laakelaitos.fi/laaketieto/kulutustiedot

In 2007 the Finnish hospitals and all public pharmacies together bought medicines worth € 1,772 million at wholesale price (cf. Figure 4.1).

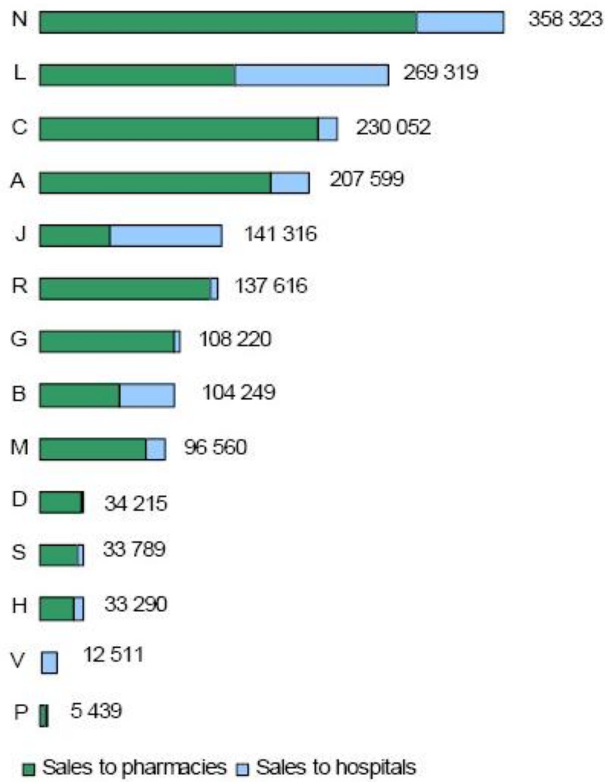
Figure 4.1: Finland – Pharmaceutical sales to pharmacies and hospitals at wholesale prices, 1990-2007



Source: Finnish Statistics on Medicines 2009

Figure 4.2 shows the main substance groups consumed by ATC code. Hospital pharmacies and medicine dispensaries provide data at hospital and department level for the internal use.

Figure 4.2: Finland – Wholesale purchases of medicines by pharmacies and hospitals by ATC category, 2007



Source: Finnish Statistics on Medicines 2009

5 Evaluation

5.1 Monitoring

Finnish Statistics on Medicines[5] has been published annually since 1987 by the National Agency for Medicines and the Social Insurance Institution KELA. The publication contains information about pharmaceutical sales and reimbursements both in out-patient and in-patient care.

Hospitals monitor the expenditure and prices of medicines used in hospitals, but the data are not publicly available.

IT-systems are very widely used in hospital pharmacies. IT basic systems are involved in daily routines such as purchase order, inventory control, stock-taking and record systems. However, there is no control for the systems and the hospitals are free to choose the one they want to.

The pharmacists´ involvement in hospitals could be developed. Clinical pharmacologists (i.e. a person who works in the hospital pharmacy) do not advise doctors; anaesthetists have some training in this area but it is insufficient. Ward pharmacists must hold a BSc (Pharm.) but do not advise or train doctors. Pharmacists could play a greater role in counselling and providing advice to patients. Medicine review is a recent voluntary initiative.

The most important tasks of a hospital pharmacy or medicine dispensary are:

- order and purchase of medicines from the wholesaler and importation
- storage of medicines and stock monitoring
- upkeep and follow-up of the obligatory medicine stocks and basic medicine selection
- storage and follow-up of pharmaceutical consumption requiring special storage or bookkeeping
- pharmaceutical information
- follow-up of pharmaceutical consumption and use
- medicines in the clinical medical trials
- free starter packages and medicine samples
- special medicine permits
- medicine manufacture and finalisation (e.g. cytostatics)
- instructions given to wards on medicine storage and handling, respective monitoring and control
- dispensing medicines to the patients (automated dosage or manual dosage)
- return and disposal of medicines

[5] www.laakelaitos.fi/medicines/drug_consumption

5.2 Assessment

The Ministry of Social Affairs and Health contributes to setting priority areas for the Finnish Office for Health Technology Assessment (FinOHTA) and the Ministry of Finance (MOF) finances its work. Topics are selected by using a formalised process. They are weighed against a set of criteria, which includes impacts on public health and budgets and the quality of proposed research methods. This is for technologies in the hospital sector, but not for medicines. FinOHTA presents hospitals with a list and the hospitals select those that should be assessed. The entire process takes from two to six months.

Any hospital related external or internal audit reports are not available.

6 Interface management

Improving cooperation between in-patient and out-patient sector is a challenge. Currently there are many ongoing local development projects and experiments concerning municipal services (for example increasing cooperation between municipalities, between primary and secondary care services and between municipalities and the private sector). However, they are not well coordinated from the national level, probably leading to increasing regional variance in structures.

7 Developments and outlook

A working group set up by the Ministry of Social Affairs and Health has drawn up national guidelines[6] for the provision of pharmacotherapy in public and private social and health care units. These guidelines are also relevant for health care settings. The purpose of the safe pharmacotherapy guidelines was to harmonise the principles for the provision of pharmacotherapy, to clarify the division of responsibilities related to its provision, and to define the minimum requirements that must be complied with in all units providing pharmacotherapy. The guidelines also give examples of good practices in pharmacotherapy.

The Finnish Medical Society Duodecim established a national decision support project under the Current Care guideline organisation. This EBMeDS project aims at developing, implementing, and evaluating a comprehensive decision support system that can be linked to any electronic health record. It consists of three subprojects[7].

There is also a research project which aim is to study the effectiveness and cost-effectiveness of the electronic decision support system in clinical practice. The other two

[6]http://www.stm.fi/c/document_library/get_file?folderId=28707&name=DLFE-4090.pdf&title=Turvallinen_laakehoito_fi.pdf

[7] http://www.kaypahoito.fi/decisionsupport/decisionsupport.htm

subprojects produce the script descriptions and scripts, aiming to establish a comprehensive national decision support database, to provide this database as a web service for electronic patient record systems suppliers and piloting the electronic decision support system in cooperation with two hospital districts.

8 References and data sources

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