

# Financing of home nursing in Belgium

KCE reports 122C

Federaal Kenniscentrum voor de Gezondheidszorg Centre fédéral d'expertise des soins de santé Belgian Health Care Knowledge Centre 2010

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#### **Executive summary**

#### SCOPE OF THIS REPORT

The main objective of this study is to provide knowledge to assess to what extent an alternative or adapted financing scheme for home nursing in Belgium is needed and possible. An important question is whether the financing principles can be based on a patient case-mix.

This study is limited to homecare nursing as currently reimbursed at the Belgian federal level through the National Institute for Health and Disability Insurance (NIHDI). Home help services, social services, general practitioners, occupational therapists, physiotherapists, as well as community nursing activities such as preventive mother and child care, psychiatric care, midwifery, school health nursing and occupational nursing are beyond the scope of this study. Financing is studied from the provider perspective. Patients accessibility and equity are not addressed.

This report describes the financing of home nursing in Belgium as in 4 selected European countries. It also discusses measures of patient dependency in Activities of Daily Living, currently used for case-mix financing. Finally, it reports Belgian stakeholder opinions on issues related to the future financing of home nursing in Belgium.

#### **METHODS**

This study is based on a literature search conducted in peer reviewed literature. However, the report relies heavily on grey literature from governmental websites and policy documents. The information collected on the organisation and financing of home nursing in neighbouring countries was completed and/or validated by local experts.

The technique of a stakeholder dialogue was used to discuss strengths and weaknesses of the current Belgian financing of home nursing. A stakeholder dialogue is a qualitative data collection technique giving stakeholders a voice, listening to their opinions and arguments on the issue at stake in an interactive group process. Three groups of key stakeholders were selected from both the Flemish and Walloon communities: actors involved in the policy negotiations and implementation of financing home nursing (different governmental instances, NIHDI, federal and community administrations, sickness funds, ...), representatives from self-employed nurses and representatives from employee nursing organisations. The sickness funds were also considered to be the representatives of the patients.

#### **RESULTS**

#### CURRENT SITUATION IN HOME NURSING

#### The Belgian context

In 2004, 6% of the Belgian population received a visit of a home nurse. Use of home nursing is more frequent in older age. In persons 75 years or older, 28% received home nursing. Since 1998, yearly expenditures for home nursing make up 4.1% to 4.5% of total health care expenditures by the NIHDI. Since 1999, the yearly proportional increase of home nursing expenditures averaged 6.9%, compared to the 5.9% average increase of total health care expenditures. In recent years, the organizational context and the complexity of care provided in home nursing has changed due to shorter lengths of hospital stays, increased importance of day hospital admissions, higher demands for collaboration between nurses, higher need for integration of nursing care in primary care, Integrated Services for Home Care (ISHC- (Geïntegreerde Diensten voor Thuisverzorging, GDT; Services Intégrés de Soins à Domicile, SISD)) and increased interest of home nurses to participate in shared care provision with hospitals.

#### The organisation of home nursing in Belgium

Home nursing is provided by nurses employed by private not-for-profit organizations and by self-employed nurses. Home nurses are involved in new organisational initiatives such as and interdisciplinary primary care practices. Since 2009, nurses take part in the development of care pathways dedicated to patients with chronic disease.

There are two qualification levels of nurses (bachelor-level (A1) and diploma-level (A2)). Nurses of both qualification levels are authorized to perform all clinical nursing interventions. In addition, after an additional training, they can be recognized by the NIHDI as specialist nurses in diabetes and specialist nurses in wound care. They may perform interventions such as diabetes education and visits for wound care advice. Ongoing pilot projects aim at focusing nurses more on technical and specialized nursing activities while delegating basic nursing interventions to professional care assistants under supervision of a nurse.

#### The financing of home nursing in Belgium

Home nursing in Belgium is funded at the federal level (NIHDI). Different payment systems contribute to the financing of home nursing. The most important ones are lump sum payment and fee-for-service. There is additional financing for specific costs for home nursing organizations and for costs related to information and communication technologies. Reduced social tax contributions play an additional role. Specific arrangements cover particular nursing activities (e.g. nursing assistance in haemodialysis and peritoneal dialysis at the patient's home).

The per diem lump sum system covers nursing interventions for patients with deficiencies in the activities of daily living (ADL). Patients dependency is assessed by the Belgian Evaluation Scale for Activities of Daily Living (BESADL), which is adapted from the Katz scale. Medical prescription is not needed for hygienic care in this regulation.

The fee-for-service system covers technical nursing interventions, which require a doctor's prescription. In order to limit supply-induced care provision in the fee-for-service financing, a maximum day-limit was fixed, which equals the smallest lump sum, i.e. for the lowest level of dependency (level A).

The nomenclature of nursing activities is obsolete, complex and lacks integration: e.g. a lot of technical home nursing activities regularly performed are not currently included, the rules avoiding cumulative reimbursement lack consistency...

The financing of home providers is not differentiated in function of their qualification levels, with the sole exception that some nursing interventions are only reimbursed when they are performed by specialized nurses.

The organisation and financing of home nursing in other countries

We described the general characteristics of home nursing in four selected West-European countries: France, England, the Netherlands and Germany.

In France, three types of home care providers co-exist: I) "hospital at home" providing hospital-level care for patients with serious, acute or chronic illnesses; 2) nursing home care services (SSIADs); 3) independent nurses (IDEL) that perform nursing activities independently or in collaboration with SSIADs. Nursing homecare organisations employ two times more nursing aids than nurses. Labour differentiation is setting through by orienting nurses on technical nursing activities and delegating basic nursing tasks to nursing aids. Home nursing is financed in a dual system: a lump sum 'per diem' and envelope financing for the SSIAD; the fee for service system for the IDEL. Homecare organisations are financed based on a daily fixed price taking into account average nursing time required and patients' case-mix. The nurse qualification level is not taken into account.

In England, community care is at the core of the health services model. Wherever possible, patients should receive care in the community in order to relieve pressure on hospital admissions. Home care and nursing is provided through primary care trusts or by private independent providers. Nurses training levels and responsibilities are highly differentiated. Reference costs are the average cost to the National Health Service (NHS) for providing a defined service in a given financial year. The introduction of reference costs is linked to a payment by results way of funding. Community services are not subject to payment by results but district nursing (as a speciality domain) is included in the reference costing. Providers located in some areas of the country have higher costs due to external market forces, which is taken into account (e.g. London and South East have higher costs for staff, land and/or buildings).

In the Netherlands, home nursing is mostly provided by non-governmental not-for-profit local and regional home care organisations, operating under nationally organised umbrella organisations. The qualification structure for nurses is differentiated into five levels. There is a trend to orient nurses on technical and specialized nursing activities by delegating basic tasks to nursing aids and helpers. The financing of home nursing care is based on the patient's case mix. An emerging financing issue is the nursing and treatment provided after early discharge from hospital (e.g. children). Transfer nurses are financed by the hospitals themselves or are subcontracted to home care organisations.

In Germany, social-profit organisations, municipal services and many private nursing services provide home nursing. The introduction of a long term care insure has been important. There is labour differentiation to provide the different nursing services. Home nursing is financed on a fee-for-service basis with a strict hierarchy of service entitlement (specialized nursing, basic nursing, and home help as a supplement to nursing). Specialized nursing is financed when it is on doctor's prescription. The same care, provided by different categories of nursing or caring personnel, implies a different tariff. The introduction of morbidity-oriented risk structure compensation ("morbi-RSA") in the financing system aims to prevent patient selection by sickness funds and to improve care for chronic patients.

## MEASURES OF PATIENTS' DEPENDENCY FOR CASE MIX FINANCING

Five patients' dependency measurement tools were assessed: I) The Belgium Evaluation Scale of Patients' dependency in ADL activities (BESADL), 2) The Belgian Scale for eligibility to dependence allowance for elderly people (APA), 3) The Resident Assessment Instrument adapted for home care (RAI-HC), 4) The Gerontologic autonomy ISO resource groups system (AGGIR), 5) The Functional Autonomy Measurement System (SMAF).

The use of patients' dependency measurement tools for funding purposes was rarely reported in the literature. The ideal case-mix tool should group patients into standardised groups, meaning that they are estimated to consume the same amount of

resources. According to the literature, a perfect case-mix tool does not exist for financing purposes. The validity and reliability of the currently used ADL assessment instruments appear to be too weak to differentiate patients to be financed under a feefor-service or in the daily lump sum regulation. A particular question is how to take into account the part of the intervention covered by the family and informal caregivers.

When introducing patient dependency measurement tools, there is always a weighting between purpose of use, usability, precision, reliability and validity, and workload. All methods used to record the case-mix induce an administrative workload, with some differences between the instruments. The use of dependency measurement tools by the providers themselves may lead to an up-coding and thus require a well-developed system of control.

Objective parameters to adjust or define the tariffs are currently lacking in Belgium. No literature is found on the reforms of nursing nomenclatures. Methodologies applied to revise medical nomenclatures could be used to revise the nursing nomenclature. These methods can be comparative or based on real cost calculations. If the latter method is chosen, accounting data (cost and categories of costs per home nursing provider) and activity data (all nursing activities per patient) are necessary.

#### STAKEHOLDER DIALOGUE

Stakeholders directly involved in the home nursing domain shared a common critique on the lack of a global vision on the organisation of health care provision. Stakeholders argued that the organisation model of health care (including the role of home nursing) should be well reflected before changing/adapting the financing system. They explained the current lack of a clear vision partly as a result of the division of political healthcare responsibilities in Belgium.

Stakeholders disapproved the fact that too many different mechanisms and financing sources currently contribute to the financing of home nursing, leading to complexity and overlap. They did however recommend to further develop a mixed financing approach. Comments addressed on the one hand content issues with regard to the list of activities and on the other hand the complexity of the current scheme. The current fees were generally criticized because they do not cover the real costs of home nursing. The fee-for-service financing mechanism was considered as inadequate for new tasks such as support and counselling, assessment, patients education, coordination, communication... Reflections were also made on the need to take into account workload and use of time in determining fees.

Arguments for reforms ranged from requesting a radical change into a completely new financing system to pleading for incremental adaptations of the current system, involving the introduction of pay for quality, working out better control mechanisms and clarity about sanctions.

The emerging coordination and management tasks of nurses have to be taken into consideration to differentiate costs between self-employed nurses and employee-nurses organisations. Financing mechanisms should consider labour market issues, (such as attractiveness of home nursing) and should differentiate tariffs according to nurses qualifications.

Stakeholders considered registration and assessment tools as essential, but did not agree on the objectives of the use of an assessment instrument. Stakeholders reflected on the administrative burden of a comprehensive assessment: some considered extended data collection and information gathering as necessary and feasible, others pleaded for a simple instrument. Some stakeholders even suggested to develop a new instrument, developed for and adapted to the particular home nursing context in Belgium.

#### DISCUSSION

This report used a rather narrow approach on the concept of home nursing. This approach is determined by the existing financing framework at the federal level in Belgium. On many issues the delineation between home nursing and home care is difficult to make, though. Future discussions should clarify the differences and complementarities between care and nursing and should try do develop a better conceptualisation of support, care, basic nursing and coordination tasks, taking into account the current debates on the content of the nursing profession. This will necessarily imply a reflection on and coordination of financing policies of the home care domains within the Belgian political competencies.

In a broader perspective, a political reflection is needed on the intended role of health services functions within an overall vision on health services provision. Two major societal shifts are to be considered. First, the length of stay reduction in hospitals, which causes a transfer of a number of specialised and technical nursing activities (requiring particular skills) to the home environment. Second, the major demographic changes with a growth of the aging population and an expected growing need for chronic care in the home environment. A debate is for instance needed on the extent to which hospitals and home nursing providers can work in a complementary way for patients in need for highly specialized nursing care at home. This can impact on the choice made with regard to financing regulations (activities partly funded under hospital regimes or not). It is clear that this is not a technical, but a societal (political) choice.

When thinking of a reform of the financing system, the following issues are worth considering too.

The current Belgian financing system is not using a financing mechanism based on the number of patients in home nursing (capitation financing). Neither is it advocated by Belgian home nursing stakeholders.

The Belgian model uses per diem lump sum financing. The literature demonstrates that a per diem lump sum financing gives incentives to providers to reduce costs per patient-day. It challenges the policymakers to take accompanying measures to guarantee accessibility, quality and affordability for patients (e.g. France) since this way of financing can result in deficits or in a refusal of caring for very dependent patients.

The further refinement and actualisation of mixed financing model is probably the most acceptable way to go along. Aspects that will need adaptations or refinements are:

- Updating the nursing nomenclature on content level as well as tariffs.
   Recent policy initiatives to improve nurses' knowledge of the nomenclature and the administrative rules to apply them should be emphasised.
- Clarifying to what extent task differentiation in nursing and caring
  professions should be taken into account in the financing rules (including
  whether tariffs should be adapted towards qualification levels or can be
  included in the cost aspects when setting the tariffs). A recent
  Interministerial Conference took the initiatives to differentiate home
  nursing, home care an home help/
- Clarifying the distinction between health care delivery and social care delivery.
- Developing and implementing tools and methods for case-mix financing taking into account the feasibility (combining the administrative workload with the daily clinical activities of nurses), the usability of the instruments and their validity and reliability with regard to the purposes of use of the instruments.
- Developing incentives to promote communication and coordination between nurses, with other caring professions and medical specialists, including care approaches guaranteeing continuity of care.

- Using financing systems based on performance and quality of care: e.g.
  care providers who are able to prevent the deterioration of patient
  status, who are putting effort in teaching and training to develop the
  autonomy of the patient should obtain financial incentives if they reach
  these goals.
- Optimising the accompanying control procedures.

The development of a new financing approach should consider effects on labour market issues. An inadequate financing of the home nursing sector could have an impact on the attractiveness of the home nursing profession. Moreover, the better financing of the specialised nursing acts is inducing a potential problem of cherry picking of nurses combining a main job with a part-time job as self-employed home nurse performing only specialized nursing interventions. This raises concerns both with regard to the continuity of care and the quality from a holistic nursing perspective.

#### RECOMMENDATIONS

- I. A profound political reflection is needed on the respective roles of different health services functions (hospitals, primary care, home nursing, home care, nursing homes, informal care) and on how these functions connect within an overall vision on health services provision. One of the future challenges will be to assess to what extent the developments in tele-monitoring, patient support tools and independent living technologies will affect on how nursing care and support can be organised and financed. This general debate will require structured negotiations between the different political levels.
- 2. A mixed financing system in home nursing is probably the most acceptable and appropriate financing system in Belgium. However, the use of financing mechanisms should continuously be assessed against the background of the societal objectives put forward in the vision on health care provision (e.g. for chronic patients, self-care support and independent living should be supported, increasing the abilities of patients and their families rather than getting support for punctual technical nursing acts. A lump sum financing corrected for quality results and evidence based nursing practice could be used to realise these objectives).
- 3. A clearer distinction should be made between post-acute care and long term care
  - a. It could be discussed whether some specific post-acute care can also be financed via a parallel hospital financing system (DRG or case-mix) as is the case in some neighbouring countries. This choice is often made to stimulate early discharge and reduction of hospital length of stay. A further reflection is needed on the collaboration between hospitals and home nursing. A better collaboration would enable to mobilise the necessary skills for specialised nursing care. One should also reflect on how to employ sufficiently qualified nurses in the home nursing sector. Neighbouring countries are allowing the subcontracting of specialised post acute care to home nurse providers, while the care is assessed according to the quality standards of the hospitals. The choices made are clearly societal/political in nature and are linked to the roles attributed to different health services and the available competencies to provide adequate nursing care.
  - b. Long-term care payment needs to more clearly disentangle basic care and follow-up of chronic conditions from technical care to handle the current complexity and overlap in financing rules. Payment for chronic conditions should be based on an evaluation of patient dependency for lump sum financing. Technical or specialised care should be based on a fee-forservice payment system with adequate tariffs

- 4. Little is currently known on the cost structure of home nursing. It is recommended to study to what extent fees/tariffs cover real costs. A further debate needs to get form on the collection of data to document these real costs, as currently no standardised data are available for all home nursing providers. Cost calculations should take into account the organisational characteristics of the providers, e.g. the different logistic structure and the so-called back-up services of the different types of home nursing providers (large organizations, self-employed nurses). Based on this analysis, policy makers can decide whether organisations specific characteristics should be taken into account in the financing of home nursing. A similar debate should take place on the specificities of regional characteristics (urban/rural) and whether specific compensation should be provided according to what criteria.
- 5. Part of the financing can be based on dependency categories or resource utilization groups, which need to be better defined. A field study with primary data-collection is needed in a Belgian home nursing context performing a comparative validation (reliability and validity) of instruments, including an assessment of usability of different dependency scales in the daily practice of home nursing.
- 6. In terms of quality of care, it has to be considered to what extent characteristics of the nurses such as their qualification, level of expertise and experience should be taken into account. If nurses are considered as equally competent and price indifferent, there will be an incentive to hire the less costly nurses. If they are paid differently, a discussion will be needed on the criteria used to justify different payments. This debate needs to be integrated in the reflection on overall health care provision and quality of care. Within this logic, the practice of nurses combining a main job outside home nursing with a part-time job as self-employed nurse performing only specialized nursing interventions to patients at home (cherry picking) should be evaluated given the concerns with regard to the continuity and quality of care from an integrated care perspective.
- 7. Further methodological reflections are needed on how "pay for performance" or "pay for quality" can be introduced in home nursing.

### **Scientific summary**

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#### **GLOSSARY**

ADL	Activities of Daily Living			
AGGIR	The Gerontological autonomy iso resources groups (Autonomie			
	Gérontologique Groupes Iso-Ressources)			
APA	Aide à la Personne Agée – APA scale			
BESADL	Belgian Evaluation Scale for Activities of Daily Living (adapted Katz			
	scale)			
COPD	Chronic obstructive pulmonary disease			
FPS Public Health	Federal Public Service Public Health			
GDT	Geïntegreerde Diensten voor Thuisverzorging (see ISHC)			
GP	General Practitioner			
IADL	Instrumental Activities in Daily Living			
ICF	International Classification of Functioning			
ICT	Information and Communication Technologies			
ISCO	International Standard Classification of Occupations			
ISHC	Integrated Services for Home Care (see GDT-SISD)			
LTCI	Long Term Care Insurance			
MAB	Maximum Billing			
MDS	Minimum Data Set			
NHI	National Health Insurance			
NIHDI	National Institute for Health and Disability Insurance			
PAB	Personal Assistance Budget			
RAI	Resident Assessment Instrument			
RUG	Resources Utilization Groups			
SISD	Services Intégrés de Soins à Domicile (see ISHC)			
SMAF	Système de Mesure de l'Autonomie Fonctionnelle (Functional			
	Autonomy Measurement System)			

#### I INTRODUCTION

#### I.I SCOPE OF THE STUDY

Originally designed as a fee-for-service system in the 1960s, the Belgian public financing system of home nursing was gradually adapted towards a mixed fee-for-service and lump sum payment system, complemented with additional financing regulations. Currently, four payment systems and one special arrangement contribute to the financing of home nursing at the federal level (see for details chapter 2.5). Arguments frequently expressed against the current financing system are: the nomenclature is obsolete and non exhaustive, the financing system lacks clarity, the negotiated tariffs have little or no relation to real production costs, the current financing does not take into account new challenges faced by healthcare providers at all levels of the healthcare system (primary care, secondary care and tertiary care).

The purpose of the study is to provide knowledge to assess to what extent an alternative or adapted financing scheme for home nursing in Belgium is needed and possible. An important additional question is whether the financing principles can be based on a patient case-mix basis.

The scope of this study is limited to homecare nursing that is currently reimbursed at the Belgian federal level through the National Institute for Health and Disability Insurance (NIHDI). Professionals providing home care like home help services, social services, general practitioners, occupational therapists, physiotherapists, etc. and community nursing activities such as preventive mother and child care, psychiatric care, midwifery, school health nursing and occupational nursing are beyond the scope of this study.

The study uses the perspective of financing the providers, even if we acknowledge that changes to the reimbursement schemes or changes in the provision of services can have a major impact on equity and accessibility issues for the target populations. The issue of co-payments both as a societal equity question as well as an element of the financing regulations is not considered.

#### I.I.I RESEARCH QUESTIONS

Situation in Belgium

- How is home nursing currently financed in Belgium?
- Who provides home nursing in Belgium?

Dependency measurement tools for case mix financing

- What is known about the dependency and care profile of the patient population?
- Which instruments can be applied to take into account case-mix of patients in home nursing?

#### Neighbouring countries

- What are the insurance mechanisms to entitle patients to different forms of care and nursing?
- How is the provision of home nursing organised in each country?
  - What type of organisations are involved (public, semi-public, private, self employed or organised)?
  - Are there any relevant issues with regard to nursing and related care professions to be considered in view of the financing system? (in particular do qualification structures affect the organisation and financing of home nursing)?
  - o If any, what were the major changes and motivations to adapt the organisational model of health care provision? (e.g. the new roles of hospitals in post-acute and disease specific chronic care)?

- What are the key components of the financing of home nursing?
  - What are the main financing mechanisms (fee for services, case mix, different forms of lump sum)?
  - o To what extent has one introduced case-mix financing (and if available, does one have reported advantages or backdrops of this system)?
  - o Is there a relevant distinction to be made between nursing, care and support?

#### Perceptions of stakeholders

 What are the opinions of Belgian stakeholders towards the currently applied financing model of home nursing in Belgium?

Lessons for adapting the Belgian current financing system

• In light of the answers to the above research questions, what is the feasibility of adapting or introducing a new financing regulation? Which would be the broad outlines of this system, specifically with regard to measurement protocols, and control mechanisms?

#### 1.1.2 Methods

The research questions were formulated in ECLIPSE-format for the literature review 1.

- Expectations: description and critical appraisal of actual financing models in home nursing
- Client group: Patients receiving nursing care at home
- Location: Community/ home care
- Impact: Expected impact of a new financing mechanism: more adequately representing costs of care
- Professionals: Home nurses, independent on how they are organised (selfemployed nurses, group-practices of self-employed nurses, nursing care organisations with salaried nurses)
- Service: Home nursing services

A literature search was performed in following databases: Medline, Embase, Cinahl, Econlit and Cochrane database of systematic reviews. Searches in the databases Medline and Embase were performed using a combination of MeSH terms and subheadings linked to "Financing, Organised", "Financing, Government", "Financing, Personal", "Capital Financing", "Organisation and Administration", "Organisational Innovation", "Nursing Services", "Home Care Services", "Home Care Agencies", "Home Nursing", "Belgium". The research on case-mix assessment used a combination of MeSH terms related to "Fees and Charges", "Costs and Cost Analysis" and scales used for the assessment of patient's dependency level (Katz, Resource Utilization Groups, Resident Assessment Instrument, AGGIR, SMAF and APA).

Reference lists of eligible articles were subsequently reviewed, in order to find additional relevant publications (snowball method). This review was not limited to research articles. Systematic and narrative literature reviews, as well as prescriptive articles (expert opinion) and reports from grey literature were included in the current review. (See appendix I)

Main sources of information were documents and annual reports from NIHDI website (http://www.inami.fgov.be in French; <a href="http://www.riziv.fgov.be">http://www.riziv.fgov.be</a> in Dutch) and a recent NIHDI report on home nursing<sup>2</sup>. Other grey reports provided general overviews and outlines, basic or partial descriptions and analysis of minor topics on organisational and financial aspects of home nursing<sup>3-5</sup>.

A lot of the relevant "descriptive" information on the organisation and financing of home nursing in neighbouring countries was obtained through collecting grey literature (official government, websites, research and policy reports). The descriptive information was collected through an incremental search of documents and accessible official websites. Local experts were contacted to complete and/or validate the information found in all documents and websites.

#### 1.1.3 Structure of the report

After this introduction, chapter two presents the organisation and financing of home nursing in Belgium. Chapter three compares the organisation and financing of home nursing in 4 European countries. The fourth chapter discusses case-mix tools for home nursing. The fifth chapter makes an overview of opinions and remarks of Belgian stakeholders on the current financing system. The final chapter resumes the acquired knowledge to reflect on alternative financing methods for home nursing.

#### 2 HOME NURSING IN BELGIUM

#### 2.1 THE BELGIAN HEALTHCARE SYSTEM: OVERVIEW

The Belgian health system is a Bismarck type of compulsory national health insurance, which covers the whole population and has a very broad benefits package<sup>3</sup>.

The Belgian health system is mainly organised on three levels, i.e. federal, regional and community levels. Since 1980, part of the responsibility for health care policy has been devolved from the federal Government to the community levels. The communities are responsible for so-called person-related matters, such as healthcare and welfare. The 1980 Institutional Reform Act defines the person-related matters in the sphere of health care policy as intramural and extramural curative health care and the policy regarding health education, health promotion and preventive health care. In both cases, the law provides important exceptions as a result of which the federal Government has kept important powers. Interministerial Conferences (composed of the ministers responsible for health policy from the federal and regional governments) have to facilitate cooperation between the federal Government and the communities. They have no binding decision-making power.

Since the Health Insurance Act of 9 August 1963, compulsory health insurance is combined with a private system of health care delivery, based on independent medical practice, free choice of service provider and predominantly fee-for-service payment. The 1963 law endorsed the financing, reimbursement and organisation principles of Belgian health care. Important elements introduced by this law are:

- Introduction of a fee-for-service system of reimbursement through a system of medical nomenclature;
- Introduction of a system of conventions and agreements between sickness funds and health care providers, setting the prices for medical services and regulating their financial and administrative relationship.

All individuals entitled to health insurance must join or register with a sickness fund: either one of the six sickness funds, including the health insurance fund of the Belgian railway company, or a regional service of the public Auxiliary Fund for Sickness and Disability Insurance<sup>3</sup>.

Patients participate in health care financing via co-payments. There are two systems of payment: (i) a reimbursement system, for which the patient pays the full costs of services and then obtains a refund for part of the expense from the sickness fund, which covers ambulatory care; and (ii) a third-party payer system, for which the sickness fund directly pays the provider while the patient only pays the co-insurance or co-payment, which covers inpatient care and pharmaceuticals.

The National Institute for Sickness and Disability Insurance (NIHDI) is responsible for the general organisation and financial management of the compulsory health insurance. Its most important tasks are to prepare and implement legislation and regulation, to prepare the budget, to monitor the evolution of health care spending, to control whether legislation and regulation are correctly implemented by health care providers and sickness funds and to organise the consultation between the different actors involved in the compulsory health insurance<sup>3</sup>.

Within the NIHDI, besides other stakeholders, home nurses' professionals' associations are represented in the Agreement Commission for home nursing. In other agencies they are represented in different advisory bodies dealing with organisational issues.

#### Key points

- The Belgian health system is a Bismarck-type of compulsory national health insurance.
- The Belgian health system is organised on three levels, i.e. federal, regional and community levels impacting on the complexity in the organisation of home care.
- Patients in Belgium participate in health care financing via co-payments.

## 2.2 DEVELOPMENTS RELEVANT FOR BELGIAN HOME NURSING

The current debate on home care financing in Belgium is strongly embedded in the discussions on an adequate tackling of future healthcare needs of the ageing population, the changing complexity of home nursing and the development of new organisational models in providing home nursing services. One of the societal and policy objectives for the future is aiming at substituting institutional healthcare as much as possible by alternatives, among which home care, and home nursing will be an important component. This policy shift is necessary because of demographic changes (including expected changes in available workforce), in issues of long term dependency and social participation, and not to be forgotten issues of an efficient allocation of public resources. Recent reports forecasted an increase of expenditures for nursing home care in order to adequately tackle health problems of the ageing Belgian population and to provide a supply of nursing care as an alternative for institutionalisation<sup>2,5</sup>. For the period 1971 to 2000, the yearly increase of public healthcare expenses due to the ageing of the population was estimated to be around 0.5%. This yearly increase of public expenses in health care could be as high as 0.7% for the years 2001 to 20307. This is mainly due to some chronic diseases which are associated to higher age such hypertension, diabetes, osteoporosis, cataract, and glaucoma<sup>3, 8</sup>.

In recent years, the organisational context and the complexity of care provided in home nursing has changed due to shorter lengths of hospital stays, increased importance of day hospital admissions, higher demands for collaboration between nurses, higher need for integration of nursing care in primary care and increased interest of home nurses to participate in shared care provision with hospitals as we see in a higher use of care pathways<sup>9</sup>.

The Belgian public financing system of home nursing seems not to be fully adapted to these evolutions and challenges. Since 1998, yearly expenditures for home nursing make up 4.1% to 4.5% of total health care expenditures by the NIHDI (Table I). Since 1999, the yearly proportional increase of home nursing expenditures averaged 6.9%, compared to the 5.9% average increase of total health care expenditures.

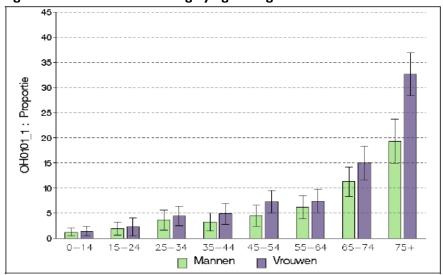
Table 1: Expenditures for home nursing in thousands of euros

Vear		g (specific costs	NIHDI total yearly expenditures		Proportion of expenditures for home nursing within total healthcare
	€	evolution since the year before	€	evolution since the year before	expenditures
1998	472 090	/	11 294 044	I	4.18%
1999	510 894	8.2%	12 029 060	6.5%	4.25%
2000	548 140	7.3%	12 820 059	6.6%	4.28%
2001	562 689	2.7%	13 774 374	7.4%	4.09%
2002	612 586	8.9%	14 162 558	2.8%	4.33%
2003	658 721	7.5%	15 438 166	9.0%	4.27%
2004	712 773	8.2%	16 822 358	9.0%	4.24%
2005	742 415	4.2%	17 250 196	2.5%	4.30%
2006	799 495	7.7%	17 735 291	2.8%	4.51%
2007	857 456	7.2%	18 873 404	6.4%	4.54%
	_	Average = 6.9%	_	Average = 5.9%	

Source: http://www.riziv.fgov.be/presentation/nl/publications/annual-report/index.htm: annual reports 1998 – 2007 consulted November 26, 2008

According to the population health survey in 2004, 6% of the Belgian population received a visit of a home nurse. Women (8%) received more frequently visits by home nurses than men (5%). Use of home nursing is more frequent in older age. In persons 75 years or older, 28% received home nursing (Figure I). Use of home nursing was associated to educational status: persons with low formal scholar education made more use of home nursing, even after correction for age and gender. Use of home nursing was not associated to the degree of urbanisation of the patient's residence. According to the population health survey of 2004 and after correction for age and sex, use of home nursing was different in the regions. In Flanders, 6% of the population made use of home nursing. In the Walloon region almost 8% of the population made use of home nursing (Figure I).

Figure I: Use of home nursing by age and gender



Legend: Proportie: Proportion; Mannen: Men; Vrouwen: Women

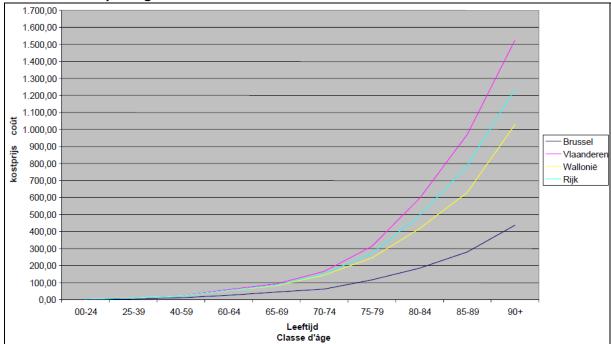
Source: Population health survey, 20048

http://www.iph.fgov.be/epidemio/epinl/crospnl/hisnl/table 04.htm

Three profiles of patient groups were identified. The most common profile concerns people of an average age of 60 who are in need of home nursing for about one month following a hospital stay. The second most common profile relates to patients who need homecare for less than a month, mostly younger people. The third most common profile regards dependent people after the age of 75 who require chronic care.

Findings of the Intermutualistic Agency<sup>2</sup> revealed that average expenditures for home nursing increased with age and were higher in Flanders than in the Walloon Region and Brussels (Figure 2).

Figure 2: Average costs (in euros) of home nursing per inhabitant per age and per region



Legend: Leeftijd/Classe d'âge : age categories; Kostprijs/coût : costs; Regions: Vlaanderen :

Flanders / Wallonië: Walloon region / Rijk: Belgium

Source: NIHDI, 2005<sup>2</sup>

#### 2.3 THE NATURE OF HOME NURSING

Although home nursing is on many occasions of a curative and temporary nature, it is very often considered as 'long term care'. In an international context, there is a steadily developing 'fading borderline' between nursing care and other personal and social care for long term care, on issues as the delivery, professional groups as well as financing aspect.

However, this report focuses particularly on home nursing, as this is financed within the federal NIHDI framework.

Home nursing as a community care provider is on the borderline of cure and care. According to the International Standard Classification of Occupations (ISCO) defined by the International Labour organisation, nursing professionals (ISCO 08 2221) are seen as professionals being full members of the interdisciplinary team: "Nursing and midwifery professionals treat and care for the physically or mentally ill, the elderly, and mothers and their babies. They assume responsibility for the planning and management of the care of patients, including the supervision of other health care workers, working in teams with medical doctors and others in the practical application of preventive and curative measures, and dealing with emergencies as appropriate."

In this report we use 'community care' as a general term for care at home. We distinguish home nursing, home care and home helping. All those services can be considered as a continuum<sup>10</sup>.

#### Key points

- The Belgian public financing of home nursing seems not to be fully adapted to demographic and health care system evolutions and challenges.
- Three main profiles of patient groups home care were identified. The most common profile concerns people of an average age of 60 who are in need of home nursing for about one month following a hospital stay. The second profile is composed with younger patients who need homecare for less than a month. The third most common profile concerns dependent people after the age of 75 who require chronic care.
- The scope of this study is limited to homecare nursing that is currently reimbursed at the Belgian federal level through the public payer NIHDI. It focuses on nursing activities.
- The main objective of this study is to assess whether the financing of professional homecare nursing services can be adapted whilst taking into account the relative patient case-mix.

#### 2.4 THE ORGANISATION OF HOME NURSING IN BELGIUM

#### 2.4.1 Self-employed or employee nurses

Home nursing in Belgium is organised in two ways: via employee-nurses and via self-employed nurses. Employee-nurses in home care are employed by private not-for-profit organisations with a specific focus on home nursing. A small proportion of employee-nurses is employed by the local public centres for social welfare and by self-employed nurses. For most self-employed nurses, delivering nursing care at the patient's home is their main and sole professional activity. Other self-employed nurses are working under a mixed professional statutory: on the one hand they are employee-nurses in a hospital, a nursing home or a medical practice (a general practice or a medical specialist's practice) and on the other hand, beyond their working hours, they may develop self-employed professional activity in delivering nursing care at home.

Currently, there is no federal register for nurses in Belgium. Consequently, exact numbers of self-employed nurses and employee-nurses are not known. In 2002, the proportion of employee-nurses was estimated to be 42% to 43% of all home nurses in Belgium, which is the most recently public available estimation<sup>2</sup>.

The NIHDI publishes yearly the numbers of registered nurses and midwives who received an identification number from NIHDI.

In the last 10 to 15 years, self-employment became more attractive, financially as well as organisationally<sup>2</sup>. Explanations for higher attraction of self-employment in home nursing might be that there is no hierarchical relationship with a supervisor and by visiting more patients and delivering more nursing care, self-employed nurses have the possibility to acquire a higher income. The personnel cost structure is different between self-employed and employee-nurses. As a result, the proportion of the expenditures for home nursing spent in employee-nurses decreased from approximately 60% in the 1990s to approximately 40% of all NIHDI-expenditures in home nursing in 2005<sup>2</sup>.

#### 2.4.2 Qualification levels

Nurses who work in home nursing need to have one of both nursing qualifications that are recognized by the directive 2005/36/EC and have to apply for a NIHDI-identification number. In Belgium, two levels of nurses (bachelor-level (A1) and diploma-level (A2)) comply to the EC directive.

As with other health care professionals, the authenticity of nursing diplomas is verified by provincial medical committees of the Federal Public Service Public Health, Food Chain Safety and Environment. Anyone who is not properly registered is not allowed to practise. The licence is given for an unlimited time – that is, once health care professionals have been given the right to practise, they do not have to prove continuing professional education. However, in cases of malpractice, licences can be withdrawn.

Five qualification levels have been determined that provide care and nursing activities (Table 3). Nursing assistant is a lower educational level of the nursing profession (obtained after two years of professional nursing education); this qualification level is fading out. Two nursing specialties are recognized by NIHDI for nurses of both qualification levels after completion of a post-graduate 40 hours-course: specialist nurse in diabetes and specialist nurse in wound care.

In 2007, pilot projects were launched on the employment of care assistants in home nursing. Care assistants are allowed to perform a limited list of nursing interventions which are delegated by a nurse and under supervision of a nurse (Royal Decree 12 January 2006, published on 3 February 2006). There are explicit requirements for the qualification and recognition as a care assistant (Ministerial Circular Letter of 8 November 2006, published on 14 December 2006). They can only be employed by services for home nursing which are eligible to receive financing for specific costs of services for home nursing.

Table 2: Overview of nursing formal qualifications

Qualification	Level of performance
Nurse BA or Nurse (A2) + extra qualification	May perform all nursing interventions and some specific interventions: diabetes education and visits for wound care advice
Nurse BA level (A1)	May perform all nursing interventions
Nurse (A2)	May perform all nursing interventions
Nursing assistant	May perform all nursing interventions except specific technical nursing interventions
Care assistants	Limited list of nursing interventions in experimental setting

#### 2.4.3 New organisational forms including nursing

#### 2.4.3.1 Coordination of home care

Initiatives for coordination of home care were implemented on the federal and the community level. Integrated Services for Home Care (ISHC; Geïntegreerde Diensten voor Thuisverzorging, GDT; Services Intégrés de Soins à Domicile, SISD) were created in 2003 as a federal initiative. The main task of an ISHC is to organise multidisciplinary consultation of primary care professionals and to support the elaboration of multidisciplinary care plans. The reimbursed activities for ISHCs has grown from 222 cases in 2003 to almost 10 000 cases in 2007 (Table 3).

Table 3: Yearly expenditures for the activities of Integrated Services for Home Care

		Yearly growth of number	
Year	Number of cases*	of cases	Expenditures
2003	222		€ 6 860
2004	3 147	1	€ 95 415
2005	4 266	+ 35.6%	€ 127 195
2006	7 55 1	+ 77.0%	€ 230 155
2007	9 796	+ 29.7%	€ 299 389

Source: NIHDI; OW 2008/29

#### 2.4.3.2 Interdisciplinary primary care practices

Another development is the integration of home nursing into interdisciplinary primary care practices. In an exploratory survey of general practitioner's practices<sup>11</sup>, it was found that in 8 practices of 30 a nurse was practicing and in 7 out of 30 practices there were intentions to engage a nurse. Most nurses were part-time (a few hours per week) employees of the general practice, receiving wages. Self-employed nurses in the general practice are still exceptional. Tasks performed by nurses in general practices were reception and administration, coordination of the secretariat, first aid and nursing interventions such as blood sampling, ECG, spirometry tests, skin allergy tests, injections, diabetes consultations, blood pressure monitoring, ...

The nurse is reimbursed on the fee-for-service basis for the number of nursing interventions included in the nursing nomenclature.

#### 2.4.3.3 Palliative support networks

Palliative support networks were implemented since 1997 in population area's of 300,000 to 1 000 000 inhabitants. Their objective is to provide support for the regular professional care providers in patients with palliative care: GPs, home nurses, social services, nursing homes, ... Lump sum fees for palliative patients are provided for home nursing.

#### 2.4.3.4 Care trajectories

In 2009, care pathways were introduced with the objective of organising the multidisciplinary care for a patient with chronic disease-specific pathology (Royal Decree of January 21<sup>st</sup>, 2009, published February 6<sup>th</sup>, 2009). Patients with type 2 diabetes or with chronic renal insufficiency may agree on a care contract for four years with the GP and the medical specialist. From September 1<sup>st</sup> 2009, home nurses are involved for giving education to patients with type 2 diabetes. Home nurses, having participated in the required training of a diabetes-educator, may request a specific registration number from NIHDI. Each of the educational nursing interventions is prescribed by the GP per session of a half hour.

<sup>\* &#</sup>x27;cases' is the word used by NIHDI to identify how many times a nomenclature activity was administered to a patient. In this matter, a 'case' is an interdisciplinary consultation on a patient's problems, in which at least the patient's GP and home nurse participate.

#### Key points

- Home nursing is organised via nurses employed by private not-for-profit organisations and via self-employed nurses.
- Two levels of nurses (bachelor-level (AI) and diploma-level (A2)) may perform all clinical nursing interventions.
- Specialist nurse in diabetes and specialist nurse in wound care may perform additional interventions such as diabetes education and visits for wound care advice.
- Pilot projects are ongoing to introduce care assistants in home nursing. They are allowed to perform a limited list of nursing interventions which are delegated by a nurse and under supervision of a nurse.
- New organisational initiatives include:
- I) Integrated Services for Home Care to organise multidisciplinary consultation of primary care professionals and to support the elaboration of multidisciplinary care plans;
- 2) The integration of home nursing into interdisciplinary primary care practices;
- 3) Care pathways aiming to organise the multidisciplinary care for a patient with chronic disease-specific pathology.

#### 2.5 THE FINANCING OF HOME NURSING IN BELGIUM

#### 2.5.1 Healthcare financing concepts

#### 2.5.1.1 Typology of provider payment systems

Healthcare financing is the way in which money is allocated to the provider of care<sup>12</sup> by health care payers (e.g. government, insurers, patients). Providers can be both individual caregivers (GPs, specialists, physical therapists, home nurses...) and institutional providers (hospitals, nursing homes, home health agencies...)

Jegers et al.  $(2002)^{13}$  make a distinction between fixed and variable payment systems on the basis of the relationship between activities and payment. A payment system is considered as 'fixed' when the reimbursed amount does not change as activities increase or decrease. A payment system is considered as 'variable' when variation in activities induces changes in payment. Fixed and variable systems can be distinguished on the micro-level as well as on the macro-level.

In a variable system on the micro-level, there is a direct link between the providers' income and his activity. A classical example is a fee-for-service payment system in which for every service a fee is paid. It is expected that it gives caregivers a strong incentive to increase activity. The incentive is highly related to the marginal payment rate compared to the marginal cost to produce an extra unit of activity.

In a fixed system on the micro-level, the provider is not remunerated for the production of extra units. He receives a 'lump sum' which is determined ex-ante and not related to his production. An example is the lump sum for palliative care in which the payment is fixed and independent from the actual care given to this patient. It is clear from this example that the payment system has to be considered as more fixed (less variable) as the unit of reimbursement is on a more aggregate level on the following continuum: per item-of-service, per diem, per case, per patient, per period<sup>13</sup>.

A financing system that is fixed at the macro-level, is called a closed-end system. Policy-makers (insurers, politicians) determine a ceiling of expenditures, which may not be exceeded during a certain period (budget system). A financing system without any budget limits either on a global level or for certain health care expenses is called an open-end financing system.

A second dimension to classify reimbursement systems for health care is the distinction between retrospective and prospective systems<sup>13</sup>. This characteristic of a system concerns the relation between the provider's income and his costs for providing the service<sup>14</sup>. In a retrospective payment system the provider's own costs are fully or partially reimbursed ex post. In a prospective payment system (PPS) the provider's payment rates or budgets are determined ex ante. Contrary to retrospective systems, there is no link with the individual costs of the provider. Since the provider's costs have to be financed with a given amount of money, these systems have more incentives to stimulate efficiency than retrospective systems. In most prospective systems, providers are allowed to keep financial surpluses (or at least a certain percentage of them). In case of a deficit, the caregivers are financially accountable either fully or partially.

Jegers et al. (2002)<sup>13</sup> discuss the relation between retrospective/prospective and fixed/variable. Although these concepts are related, there are essential differences. The dimension retrospective/prospective refers to the presence/absence of a link between reimbursement for the provider and his costs. The dimension variable/fixed describes the presence/absence of a link between reimbursement for the provider and his activities. Although 'activities' are related to costs, they are not identical. In retrospective systems, providers typically are reimbursed for extra production and real costs are fully (or partially) covered. The healthcare payers bear the financial risk since expenditures cannot be predicted ex ante. A fully retrospective system is therefore always variable. However, the reverse is not always true. A variable system can be prospective as well (e.g. case-mix payments).

#### 2.5.1.2 Unit of reimbursement

Reimbursement systems for health care providers can also be classified according to the unit of financing. Frequently used units are the item-of-service (fee-for-service system), patient group (case mix system), patient (capitation system), period (salary system, budget system) and patient-day (per diem system).

#### 2.5.1.3 Impact of reimbursement on quality and cost

Weber and Wheelright (1995)<sup>15</sup> discussed some frequently used reimbursement systems and their impact on various aspects of quality and cost containment.

- Fee-for-service: healthcare providers are simply billed for their services. This
  system requires a list (nomenclature) of services with specific billing rules. It
  provides the healthcare provider extensive freedom in evaluating and treating
  the patient. The financial incentives stimulate to do perhaps more than is
  medically necessary.
- 2. Case mix systems (e.g. Diagnoses Related Groups): healthcare providers are billed according to the patients they care or treat. Patients are classified in "so called homogeneous" groups according to medical diagnoses or care profile. A healthcare provider (or hospital) will receive the fee for all patients classified in the same patient groups, regardless of how sick the individual patient is, how costly the individual patient is to treat or how many services actually were delivered, how long the patient stayed in the hospital or health system. Case mix systems are developed to give healthcare providers an incentive to reduce treatment costs and length of stay. It also aims at a more adapted financing of the provider according to its patients profile.
- 3. Global fee: the global fee method is comparable to a case-mix method. It pays an overall fee for the services of all health professionals. Health professionals together are left to negotiate how this fee would be split. The advantage to the payer is that the total cost per patient is known.
- 4. Capitation: Under this system, the provider receives a fixed payment each month to cover a group of patients, regardless of the number of patients actually treated or the amount of treatment required.

The different payment mechanisms lead to different provider behaviours. There is strong evidence that an improper setup of the payment mechanisms can reduce the quality of services<sup>16</sup>. Within its 'World Health Report 2000' the WHO modelled the impact of provider payment systems<sup>17,18</sup>. Alternative payment systems are mainly developed to contain costs (as reaction to fee-for-service systems). They may affect quality problems such as preventing health problems (integration of patients' health risk into pricing practice, incentives for quality improvement and innovation), responsiveness to legitimate expectations (reduction of fragmentation, patient oriented treatments), providing services and solving health problems (availability of high class evidence based therapy, prohibition of economically founded exclusions) (Table 4).

Table 4: Provider payment mechanisms and provider behaviours

		Provider behaviour mechanisms			
Payment mechanisms	Prevent health problems	Response to legitimate expectations	Deliver services	Contain costs	
Fee-for-service	+/-	+++	+++		
Diagnosis related payment	+/-	++	++	++	
Global budget	++	+/-		+++	
Capitation (with competition)	+++	++		+++	

Source: WHO, 200018

Key: (+++) very positive effects; (++) some positive effects; (+/-) little or no effect; (--) some negative effects; (---) very negative effects.

#### 2.5.2 Historical background

Financing of home nursing was initiated in 1948. Key-data in the development of financing home nursing were 1964, 1988, 1997 and 2001.

In 1964, a first national agreement for reimbursement of eight nursing care interventions was accepted by NIHDI: hygienic care, injection, wound care, cupping glasses, enema, bladder irrigation and catheterization, and finally vaginal irrigation. It was the start of the development of extensive nomenclature of nursing activities. This initial scheme has been changed several times, mainly aiming at controlling and optimising public expenses.

Based on the observation that costs for home nursing were rising, various measures for controlling costs were introduced since the end of the 1980's. In 1988, a day-limit for reimbursement of home nursing was introduced. In 1991, the Belgian Evaluation Scale of ADL (BESADL) and a mixed payment system for home nursing were introduced.

In 1997, it was accepted that nursing was more than a sum of individual activities. A reimbursement scheme for nursing process and holistic nursing care was provided by means of basic care provision. An additional reimbursement was provided for specific technical nursing interventions such as the administration and supervision of parenteral nutrition, intravenous or subcutaneous infusion, and administration via epidural catheter.

Since 2001, home nursing activities were linked with the patients' condition. One of the first applications was higher reimbursement levels for palliative patients (essentially limited to two months). Since 2001, there is a specific arrangement for nursing assistance in haemodialysis and peritoneal dialysis at the patient's home<sup>19</sup>. Other examples (already mentioned) are the reimbursement of nursing interventions for diabetic patients. In 2003, specific consults of specialist nurses in diabetes and/or wound care were financed.

In 2009, a fee for one nursing consultation per year to develop a care plan was introduced. The care plan should include: I) a description of the need for nursing care, 2) a list of current nursing problems based on a theoretical nursing model or classification and, 3) personalized objectives for the nursing care.

#### 2.5.3 Current situation

Currently, four payment systems and one special arrangement contribute to the financing of home nursing at the federal level:

- I. A mixed system of fee-for-service payment and lump sum payment: the nomenclature of nursing interventions and activities;
- 2. Specific costs for home nursing organisations (since 2002);
- 3. Subsidy for the costs related to computerization;
- 4. Reduced social tax contributions (Social Maribel) and Social Agreements between the federal government, organisations of employers and organisations of employees.

#### 2.5.3.1 The Nomenclature of Nursing Interventions and Activities

Two types of nursing interventions and care provisions have to be distinguished: a feefor-service system for technical nursing interventions and a lump sum system for nursing interventions for patients suffering from dependency/deficiencies in the activities of daily living (ADL)<sup>20</sup>.

The nomenclature of home nursing summarizes a limited list of nursing care activities/interventions which are reimbursed by NIHDI (appendix 3).

The rules and tariffs for financing home nursing are endorsed by the agreement committee. In the agreement committee, representatives of home nurses on the one hand and representatives of health insurance organisations on the other hand negotiate which nursing interventions are financed and they determine the tariffs of the interventions. The Medical Evaluation and Inspection Department of the NIHDI is responsible to control care delivery.

#### **ADL-measurement**

The distinction between fee-for-service financing and lump sum financing are based on the scores on the Belgian Evaluation Scale for Activities of Daily Living (BESADL). BESADL is an adaptation of the 'Index of ADL'<sup>21</sup>. The tool evaluates the six original domains of the 'Index of ADL': bathing (personal hygiene), dressing, transfer, toileting, continence, and eating (feeding). Each function is scored I (no help) to 4 (complete help), a higher score indicating higher dependency. Inter-rater accuracy of the dependency evaluations is under continuous supervision of the medical and nurse advisors of NIHDI and health insurance agencies.

A patient is considered as dependent for a function if the score for that function is higher than 2. Using a Boolean logic algorithm a global score is classified in one of four hierarchical dependency levels: baseline level (no dependency or low dependency level); level A (dependency for bathing, dressing and transfer or toileting); level B (dependency for bathing, dressing, transfer, toileting and continence or eating); level C (the highest score for at least five functions, except continence or eating, which may have a score 3) (Table 5).

Table 5: Criteria for determining levels of nursing care at home using the Belgian Evaluation Scale (BESADL)

	BES	Financing type
	scores	
No ADL dependency	111111	Fee-for-service financing
Minimal dependency for washing	211111	Fee-for-service financing, 2 hygienic care sessions allowed per week (on weekdays)
Minimal dependency for washing and	221121	Fee-for-service financing, daily hygienic
dressing and nocturnal urinary incontinence		care allowed
while continence during the day		
Minimal dependency for washing and	221111	Fee-for-service financing, daily hygienic
dressing and moderate to severe dementia		care allowed
(medical certificate)		
Total dependency for washing and dressing	441111	Fee-for-service financing, daily hygienic
		care allowed
Dependency for washing, dressing, and	333111 or	Level A (palliative) lump sum payment
transfer or toileting	331311	
Dependency for washing, dressing, transfer,	333323 or	Level B (palliative) lump sum payment
continence and toileting or eating	333332	
The score equals 4 for washing, dressing,	444443 or	Level C (palliative) lump sum payment
transfer, continence and toileting or eating	444434	

The scoring is embedded in a list of hierarchical mapping criteria, which makes that theoretical combinations are in some cases mapped in a higher level (for details see Arnaert (1999)<sup>22</sup>.

Home care patients reimbursed under at least level A dependency require daily hygienic care. A minimal dependency respectively identified by BESADL-scores or a doctor's attestation confirming moderate to severe dementia, determines the subject's eligibility for daily hygienic nursing care.

#### Financing and BESADL

Globally, 64 billing codes can be classified in various categories (see appendix 2). The same billing codes apply for employed or self-employed home nurses.

- Low dependent patients are reimbursed through fee-for-service related payments. With exception of hygienic nursing care, a doctor's prescription is required for reimbursement of all nursing interventions in the fee-for-service payment system.
- Patients who score highest on care dependency (BESADL measurements) are reimbursed through per diem lump sums. The lump sum system is a type of fee-for-service payment system based on the number of days of care<sup>20</sup>. For patients with at least level A dependency, all nursing interventions are reimbursed by a lump sum per day, which covers all nursing care delivery on one day. Payments are calculated on the need for nursing care during 24 hours per day. A doctor's prescription is not required for reimbursement of nursing care delivery under the lump sum system, except for technical interventions under fee-for-service such as injections, wound care, bladder care, gastro-intestinal care, specific technical nursing interventions, ...).
- Additional per diem lump sums apply to palliative care and diabetic patients.

Over half of the overall amount (407 million euro) is reimbursed for per diem care in patients for whom the degree of dependency is established by means of the BESADL scale. In 2003, 18 511 healthcare professionals delivered reimbursed homecare with an average reimbursed amount of 34 483€ per professional.

Pseudo codes are established in order to document the nursing interventions in patients under the lump sum payment system. These pseudo codes have to be transmitted along with the nomenclature codes of the lump sum payments.

Patients with a palliative medical certificate receive higher reimbursement on top of general reimbursement rules for home nursing.

#### Calculating the tariff

The tariff/honorarium for each nursing intervention is calculated by multiplying a generic value of the key-letter W with a specific coefficient for that nursing intervention: e.g. for hygienic care on weekdays at the patients' home, the coefficient equals 1.167 (see Appendix 2). The honorarium equals € 4.82 and it was calculated by multiplying € 4.13113 (value of W on January 1<sup>st</sup>, 2009) with 1.167 (coefficient of hygienic care on weekdays). The value of the key-letter W depends on the Belgian health index which is used for adapting the nurse's wages.

For the years 1995-2005, the evolution of W-value was lower (+17%) than the evolution of the health index (+18%), which means that the evolution of tariffs was lower than the evolution of the nurse's wages. As a consequence, organisations employing home nurses were confronted with higher personnel cost increases than the incremental fees-for-service. Since 2006, the evolution of the W-value equals the evolution of the health index.

The value of the coefficient is determined by the NIHDI agreement committee and is specific for each activity delivered at a particular moment (week-weekend) and location (at home, group homes for handicapped persons, ...). Using different values of the coefficient, different tariffs were established for care provision on weekdays and during the weekend or official holidays.

Honoraria were determined for a limited set of nursing interventions delivered in the nurse's practice room or in a temporary or final group homes for handicapped persons. The honorarium/fee for a single nursing intervention may change by adjusting the coefficient. For example, in 2007, the tariffs for intravenous injections were re-evaluated by adjusting the coefficient from 0.484 to 0.532 (+10%).

#### Limitation and ceilings

In order to limit supply-induced care provision in the fee-for-service financing, a maximum day-limit was fixed based on the amount of level A lump sum payment.

With regard to costs of materials, there is no general rule. It is assumed that an implicit consensus exists (in the agreement committee and in NIHDI) that the honorarium/fee for common technical nursing interventions includes the costs of small disposable materials needed for administering these nursing interventions (G. Lombaerts, NIHDI, 2009; personal communication). With regard to more expensive materials for specific technical nursing interventions (e.g. the tube for connecting an intravenous perfusion), a NIHDI-guideline on the nursing intervention 'Installation of a permanent catheter or material/needle for medication administration in an implantable medication infusion device', which specifies that the required materials are comprised in the honorarium.

The required average numbers of visits per day in patients in the lump sum financing system are:

- Level A lump sum financing: 1.15 visits per day on average
- Level B lump sum financing: 1.40 visits per day on average
- Level C lump sum financing: a minimum of 2 visits per day

#### Linking reimbursement to qualifications

In the past, reimbursement and tariffs were generally not linked to the qualification level of the nurse: all nurses were authorized to perform most of the nursing interventions of the nomenclature. Recently there is a growing trend to allow reimbursement of some nursing interventions only if they are performed by nurses with higher professional qualifications. For example, self-management education of a diabetic patient is only reimbursed if performed by a specialist nurse in diabetes.

Since 1997, payment for specific technical nursing interventions was limited to acts performed by diploma and bachelor nurses. In 2006, a list of nursing interventions which may be delegated from nurses to care assistants was published. Reimbursement of nursing interventions by care assistants was introduced under experimental conditions in 2007.

## Reimbursement of nursing interventions for patients with a specific medical disease/condition.

The presence of a specific medical diagnosis is a condition for the administration of specific nursing interventions:

- I. payment of daily hygienic care for patients with moderate to severe dementia, documented by a doctor's certificate.
- payment of preparation and administration of medication in patients with schizophrenia or bipolar mood disorder. For these chronic psychiatric patients, the prescribing medical doctor must document these medical conditions in the patient's medical files.
- 3. nursing interventions in patients with type 2 diabetes on doctor's prescription: education and follow-up. The number of diabetes educations administered by home nurses have gradually increased from 132 patients in 2003 to 856 patients in 2007 (Source: NIHDI reports). The follow-up aims to enhance self-management of diabetic patients. In 2002, diabetic patients received on average more than one visit of a home nurse per day<sup>23</sup>.
- 4. palliative care. Since 2001, expenditures for palliative patients in home care gradually increase (Table 6).

Table 6: Evolution of the expenditures in home nursing care in palliative patients

Year	Expenditures in palliative nursing care at home	Evolution since the year before	Percentage of total expenditures in home nursing
2001	531 446.61 €	1	0.09%
2002	16 755 329.48 €	1	2.76%
2003	25 482 177.28 €	+ 52.1%	3.94%
2004	33 808 746.28 €	+ 33.7%	4.83%
2005	38 646 023.78 €	+ 14.3%	5.30%
2006	43 546 760.74 €	+ 12.7%	5.57%
2007	49 977 027.60 €	+ 14.8%	5.94%

Source: NIHDI reports 'Palliative care'

#### Rules for avoiding cumulative reimbursements

Rules were established to avoid double payments from a combination of nursing care delivery at home with care delivery in another setting. Double payments from the budget of home nursing and the budgets of homes for the aged, skilled nursing facilities, day centres, day hospitals, psychiatric nursing homes are prohibited. Neither is it allowed to combine specific nursing interventions of the nomenclature. For example, combination of the nursing interventions with regard to simple wound care (nomenclature codes 424336, 424491, 424631, 424793) or complex wound care (codes 424351, 424513, 424653, 424615) with the visit and advice of a specialist nurse in a patient with specific wound care (424395, 424690, 424852) is not allowed.

#### Co-payments for the patient

While for most outpatient health care, patients are in principle required to pay up-front the full fee and then claim reimbursement with their sickness fund<sup>3</sup>, regulations for nursing care delivery at home allow the third-party payer system. Patients only pay user charges.

Generally, the level co-payments of the patient for home nursing is (approximately) 25% of the tariff. For some nursing interventions patients do not have to contribute, e.g. the lump sum payments for specific nursing interventions in diabetic patients, or payments for nursing interventions in palliative patients.

In order to promote accessibility of nursing care, the personal contribution of the patient is not collected by many home nursing providers. Moreover, in recent years the NIHDI took some decisions to reduce the level of co-payment.

- in 2007, the personal contribution was reduced from 25% to 20% for the levels B and C lump sum payment of nursing care.
- in 2008, the personal contribution for the levels B and C lump sum payment was again reduced from 20% to 15% (Program Law of 21.12.2007, registered on 31.12.2007).

#### Control

There are currently two control procedures in home nursing:

- I. Inspectors of the Medical Evaluation and Inspection Department of the NIHDI check the proper use of the Belgian Evaluation Scale and check whether past reimbursements of nursing care match the actual care delivery. Although it is a basic task of the NIHDI Medical Evaluation and Inspection Department to control nursing care delivery, currently there are no reports available on control mechanisms on some of the general principles in the nursing payment system, e.g.:
  - a. minimal activity requirements in the lump sum payment system. In some NIHDI reports, average numbers of visits per day are shown for the global care delivery in the Belgian population.
  - b. under-registration of pseudo-codes is a well-known problem2. For patients with lump sum payments, invoices should mention pseudo-codes for the first to the fifth visit and for the nursing interventions. A lack of administrative control on billing data can potentially explain this problem.
- 2. Medical advisors of the sickness funds united in the National College of Medical Advisors, in cooperation with the Health Care Department of the NIHDI, perform checks of the proper use of the Belgian Evaluation Scale. For both procedures, a visit and consultation of the patient at home is required. They recently developed a new procedure for control of the proper use of the assessment instrument. Since January 2009, the Health Care Department of the NIHDI monthly selects a fixed number of home nurses for control in a random sample per province. These selected nurses receive a letter confirming that their patients might be visited by the medical advisors within a few weeks and that in between, the nurses may change/adapt the evaluation scores attributed to the patients. A second random sample of home nurses is selected from the first sample and medical advisors actually carry out control of the care dependency levels of all patients with lump sum financing in this second sample. If the National College of Medical Advisors detects systematic abuse of the assessment instrument by a home nurse, then the nurse's file is referred to the Health Care Department of the NIHDI for further investigation, eventually for a legal prosecution. Medical advisors of sickness funds are responsible for control. At each time of a control 10% of the overall prevalent patient population under lump sum payments is randomly selected to be controlled by medical advisers of the sickness funds. There is no control of patients receiving hygienic care delivery in the fee for service

system, which is a huge and growing number. There are no criteria for defining systematic abuse of the assessment instrument, and it is not clear which sanctions are to be foreseen and which defence or lawful counsel a nurse may apply or which are the procedures for appeal.

#### 2.5.3.2 Specific costs for home nursing organisations

Since 2002, specific costs for home nursing organisations are financed (Royal Decree of 16 April 2002, modified by the Royal Decree of 7 June 2004). Specific costs were defined as costs for organisation, coordination, programming, continuity, quality and evaluation. The objective of this subsidy was to promote collaboration of home nurses.

In order to receive a subsidy for specific costs, the following criteria have to be met:

- The organisation is under authority and supervision of a nurse who is responsible for planning, coordination, programming, continuity, quality and evaluation.
- The organisation is employing a minimum of 7 full-time-equivalent nurses, not including the supervising nurse.
- The organisation is exclusively employing employee-nurses; there are no selfemployed nurses.
- The organisation implements permanent education for at least 20 hours per year per full-time-equivalent nurse.
- The organisation guarantees consultation and peer review for at least 25 hours per year per full-time-equivalent nurse.
- The organisation uses one unique third party payer's number.

Originally, only organisations working with employee-nurses could receive this subsidy. Since I September 2004, associations of self-employed nurses can receive a subsidy too. The subsidy is paid every three months and amounts II I5I euro for I4 full-time-equivalent nurses, not including the supervising nurse. Services applying for this subsidy have to document the number of nurses employed by the service and the activities of the service during the preceding trimesters. The yearly expenditures for these costs significantly increase from one year to another (Table 7).

Table 7: Yearly expenditures for specific costs of organisations for home nursing

8				
Year	Expenditures	Evolution since the year before		
2003	11 820 752 euro			
2004	12 775 478 euro	+8.08%		
2005	13 517 473 euro	+5.81%		
2006	14 424 044 euro	+6.71%		
2007	15 369 389 euro	+6.55%		

Source NIHDI: OW 2008/54, November 2008

#### 2.5.3.3 Subsidy for costs relative to the use of a computer software

Since 2006, a yearly financing of  $\in$  350 per nurse was introduced for costs relative to the use of a certified computer software. From 2008, the subsidy is  $\in$  800 per nurse. The introduction of the VINCA standard, which is an experiment in 2008-2009 will allow easier control of care provision in the future , because for every visit by a home nurse, the patient's identity will be checked electronically using the SIS-card or the E-ID card.

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#### 2.5.3.4 lob creation in home nursing by reduced social tax contributions and social agreements (2000 and 2005)

Although reduced tax contributions as a measure of financing home nursing do not belong to the core scope of the present study, these measures represent an important and structural part of the financing mechanisms in home nursing. Since 1997, a tax reduction (Social Maribel) was introduced of a fixed amount per trimester for each employee with at least 49% FTE employment. Part of the employer's social tax contribution is refunded to create additional employment of employee-nurses and to reduce job strain in not-for-profit healthcare and welfare organisations of employeenurses (Table 8).

Table 8: Overview of the effect of Social Maribel measures: social tax reductions and job creation

Year	Payments to the social fund	Measure	Social tax reduction	Number of created employments in half-time-equivalents
1997		Maribel I	80.57 euro	113
1998	2 949 524.47	Maribel 2	161.13 euro	159
1999	5 310 870.88	Maribel 3	241.70 euro	180
2000	7 067 903.00	Maribel 4	288.18 euro	28
2001	7 745 888.02			
2002	7 739 068.00			
2003	9 915 771.10	Maribel 4+	288.18 euro	136
2004	10 598 669.64	Maribel 5	332.00 euro	80
2005	12 060 404.15	Maribel 6	354.92 euro	61
2006	12 060 404.15			
2007	12 164 627.00			5
2008	12 164 627.00			1
2009	12 164 627.00			
Total	111 942 384.41			763

Source: personal communication, Social Funds Maribel

#### 2.5.3.5 Specific arrangement for nursing assistance in haemodialysis and peritoneal dialysis at the patient's home

Since 2001, the Agreement Committee for hospitals adopted lump sum funding for haemodialysis and peritoneal dialysis at the patient's home. The arrangement consisted of a lump sum payment to the hospital, which might or might not include a payment for nursing assistance at home (Table 9). If a home nurse carries out the nursing assistance at the patient's home, she has to make an agreement with the hospital in order to receive the payment from the hospital.

Type of dialysis Difference: Payment for Payment for dialysis at home dialysis at home payment for with nursing without nursing nursing assistance assistance assistance at home **Haemodialysis** € 289.55 per € 241.06 per € 48.49 per haemodialysis haemodialysis haemodialysis **Continued ambulant** € 866.32 per week € 685.79 per week € 180.53 per week peritoneal dialysis (€ 25.79 per day) € 123.76 per day Continued ambulant € 97.97 per day € 25.79 per day peritoneal dialysis, not every day of the week € 102.11 per week **Continued cyclic** € 866.32 per week € 763.21 per week peritoneal dialysis (€ 14.73 per day) **Continued cyclic** € 123.76 per day € 109.03 € 14.73 per day peritoneal dialysis, not every day of the week

Table 9: Lump sum payments to hospitals for financing dialysis at home

It was stated in the Agreement Committee for home nursing (NIHDI) that payments for nursing assistance in dialysis at home were too low<sup>19</sup>. In 2006, this specific payment system for dialysis at the patient's home was used for I 938 patients (32.5%; both with and without nursing assistance) of a total of 6 504 dialysis patients in Belgium<sup>24</sup>.

#### 2.5.4 Types of home nursing activities financed

#### 2.5.4.1 Basic care provision

The reimbursement of basic care provision interventions (first, second, and third visit) was implemented in the fee-for-service payment system to support the use of a structured nursing process: tasks include the global observation and assessment of the patient; the planning and evaluation of nursing care; health counselling of the patient and his support system; creation and maintenance of a nursing record for the patient; travelling expenses.

#### 2.5.4.2 Nursing consultation

In 2009, an annual fee for a nursing consultation (nomenclature number: 429015; W-coefficient equals 5.555; RD 15/12/2008, Belgische Stadsblad/Moniteur Belge 29/12/2008) was added to the nomenclature of home nursing interventions. This fee funds the development of a care plan that holds a description of the need for nursing care, the present nursing problems described according to a theoretical nursing model or classification and personalized objectives of the nursing activities. Various classification schemes can be used such as Henderson<sup>25</sup>, Roy<sup>26</sup>, Gordon<sup>27, 28</sup>, Carpenito, or the Resident Assessment Instrument<sup>29,30</sup>. NIHDI has published a model for documenting all elements of the nursing consultation / nursing care plan. This new nomenclature is an incentive to adopt nursing theory and classifications in the care delivery in order to promote holistic and comprehensive nursing care.

#### 2.5.4.3 Hygienic care

There is an ongoing discussion on hygienic care delivery. Delivering hygienic care to patients is often considered as an unproblematic nursing activity with little professional challenge and which requires no nursing qualification<sup>31</sup>. The Revenue Court (Rekenhof/Cour des Comptes) states that care assistants financed by the Walloon and Flemish communities perform too much household tasks and not enough basic personal care activities<sup>32</sup>. On the other hand, it was argued that hygienic care delivery was more than a mere instrumental intervention. It is a core activity mostly accompanied by other psychosocial and technical interventions<sup>33</sup>.

Moreover, hygienic care delivery may be financed by a fee for service or lump sum payment (see supra). In 2006, 55% of all nursing activities registered by a nomenclature code or a pseudo-code was hygienic care: 40 694 808 hygienic care codes on a total of 74 453 692 nursing care codes (nomenclature codes and pseudocodes)<sup>2,5</sup>. Verhaevert (2005)<sup>2</sup> questions whether the increased expenditures for hygienic care in the fee-forservice financing system are adequate.

## 2.5.4.4 Technical nursing activities

A comparison of the home nursing nomenclature with the list of nursing activities listed in the Belgian Royal Decree Nr.78 (on the nursing profession) learns that just a limited number of technical nursing activities are incorporated in the nomenclature on home nursing. Some of these activities (such as nursing interventions and follow-up for artificial airway) are not (or seldom) performed at home. But others such as oxygen administration are indeed performed and not reimbursed. Some activities in the nomenclature are more detailed (such as wound care). Some are less detailed (e.g. 425213: Gastro-intestinal care, enema) (see appendix 2).

#### 2.5.5 Discussion

#### 2.5.5.1 Price-cost relationships

A general disadvantage of the mixed fee-for-service and lump sum system is that it consists mainly of negotiated tariffs with little or no relation to real production costs<sup>2,3,</sup> Therefore, it could be considered to develop a better insight in the actual cost structure and the tariff. This issue has been introduced in different working documents of the NIHDI. Studies have to be planned to investigate direct costs of different profiles of care delivery:

- The costs for personnel: the actual time spent in care delivery is the main personnel cost. A difficulty is that personnel cost structures are different for employee-nurses and self-employed nurses2.
- The material costs: although several technical nursing interventions require
  the use of disposable materials such as perfusion tubes etc. and generate
  significant material costs, there is no general rule for compensating material
  costs and it is not known which proportion of the costs is due to material
  costs.
  - Reimbursement of disposables: generally, it is presumed that reimbursement includes the payment of the disposable materials needed for administering these nursing interventions. However, often specific needles and other materials are needed. Prices may vary in the private dispensary.

## 2.5.5.2 The home nursing nomenclature

## A diversity of home nursing tasks

The financing of home nursing has to be discussed against the background of an evolving healthcare sector and evolving home care sector in particular. One of the issues to be considered is the wide diversity of activities and tasks in home nursing. Gosset et al.  $(2007)^4$  conclude that the current activity profile of home nurses is characterized by complex interventions combining technical and non technical interventions. The latter include communication, collaboration and observation/prevention. However, complex interventions are currently not reimbursed within the NIHDI nomenclature. Furthermore, home nurses regularly perform activities that are not included in the nomenclature list, such as preparation of medication, control of blood glucose values, (un)dressing of patients, counselling of psychiatric patients, measuring the blood pressure, peritoneal dialysis, prevention and education, emotional support of patients and their family, positioning of patients, interventions at night, ocular drops, administration, and communication with other disciplines.

Heyrman et al. (2007)<sup>35</sup> list complex technical nursing care delivery which are continuously performed at home and which are of comparable intensity and complexity as interventions carried out in the hospital. Consequently, they state that 12 complex technical home nursing activities need to be added to the current nomenclature of home nursing:

- 1. Administration of a peripheral perfusion
- 2. Intra-venous bolus injection of medication
- 3. Assistance in the placement of a central venous catheter via percutaneous punction
- 4. Red blood parts transfusion
- 5. Transfusion of blood plates
- 6. Assistance in replacing a cystocath-catheter
- 7. Assistance in replacing a percutaneous gastrostomy catheter
- 8. Assistance in ascites punction
- 9. Assistance in pleural punction
- 10. Assistance in placement of epidural catheter for analgesic treatment via PCApump
- II. Parenteral nutrition
- 12. Therapeutic nutrition during less than 60 minutes

## The nomenclature of nursing interventions is complex and lacks integration

The rules for combining/cumulating nursing interventions are very complex and lack consistency: for example, combining the basic care provision I<sup>st</sup> visit (nomenclature code 425014 on weekdays) with a visit of a specialist nurse in a patient with specific wound care is prohibited but cumulating the I<sup>st</sup> visit with diabetes educational care provision and follow-up visits is allowed. During the diabetes educational sessions, a specific nursing patient file on diabetes has to be created and maintained which is similar/comparable to the wound care patient file. In this matter, little reasonable arguments can be found for a different payment for a diabetic patient and a patient with specific wound care.

#### Insufficient specificity of nomenclature codes

There are several examples of singular nomenclature codes representing very different nursing interventions:

- the same nomenclature code represents vaginal irrigation and airway aspiration;
- nursing interventions for sub-cutaneous infusion, parenteral nutrition, intrathecal analgesia and epidural anaesthesia have one common code.

Moreover, many nursing activities are not reimbursed within the nomenclature framework. As nursing practice is evolving, new nursing interventions should be introduced in the nomenclature and interventions that have become obsolete should be removed. The fee schedule seems to be too slowly adapted to change<sup>3</sup>.

#### Administrative workload

Fulfilling administrative formalities for obtaining reimbursement for specific technical nursing interventions induces an administrative burden. Some initiatives have been taken in 2008 from nurses' representatives to abandon the request for payment to the medical advisor of the patient's health insurance organisation.

## 2.5.5.3 Control procedures

The main role of the medical advisors is to control 10% of the overall prevalent patient population under lump sum payments. However, no control is foreseen for the increasing number of patients receiving hygienic care delivery in the fee for service system. It could be discussed whether control of the proper use of the evaluation instrument should be expanded to all patients receiving hygienic care (inclusive hygienic care in the fee-for-service payment system).

An additional problem is that no criteria are available for identifying a systematic abuse of the assessment instrument, neither is it clear which sanctions are to be foreseen and which appeal procedures are available for nurses.

In some NIHDI reports global average numbers of visits per day are shown for the global care delivery in the Belgian population (see higher, note CCW 2008/35 of June 2008), but systematic analyses of individual nurses care practices or home nursing organisations are lacking, although this would be a relatively simple job for a mutuality or NIHDI using administrative data on invoices of nursing care provision.

#### Key points

- Four payment systems contribute to the financing of home nursing at the federal level:
- I. A mixed system of fee-for-service payment and lump sum payment;
- 2. Specific costs for home nursing organisations;
- 3. A subsidy for the costs related to computerization;
- 4. Reduced social tax contributions and Social Agreements.
- A specific arrangement covers nursing assistance in haemodialysis and peritoneal dialysis at the patient's home.
- The fee-for-service system covers technical nursing interventions.
- The lump sum system covers nursing interventions for patients suffering from dependency/deficiencies in the activities of daily living (ADL). Patients dependency is assessed by scores on the Belgian Evaluation Scale for Activities of Daily Living (BESADL).
- In the fee-for-service payment system, a doctor's prescription is required for reimbursement of all nursing interventions (excepted for hygienic nursing care). This is not true for nursing care delivery under the lump sum system (excepted for technical acts that require a doctor's prescription under the feefor-service payment system).
- To limit supply-induced care provision in the fee-for-service system, a maximum day-limit is fixed on the amount of level A lump sum payment.
- The qualification structure is highly differentiated for nurses. Specialized nurses have an extended role to autonomously take care of chronic patients with diabetes or wounds at home.
- There is a current trend to focus nurses on technical and specialized nursing activities by delegating basic nursing tasks to care assistants.
- The financing of home providers is not based on their qualification levels.
   However, specific nursing interventions are only reimbursed when they are performed by specialized nurses.
- Regulations for nursing care delivery at home allow the third-party payer system. Patients only pay user charges.
- The nomenclature of nursing activities seems obsolete: a lot of complex technical home nursing activities regularly performed are not currently included.
- The nomenclature of nursing interventions is complex and lacks integration; the rules avoiding cumulative reimbursement lack consistency.
- Control procedures are incomplete.

## 3 CROSS-NATIONAL COMPARISON

## 3.1 INTRODUCTION

This section of the report aims at collecting information on how some other countries organise and finance home nursing. The scope of this chapter is to provide an overview of the organisation of home care services and in particular the financing of professional home nursing in a selection of countries representing different European Welfare State Regimes.

Four Western European countries were included (France, UK, Germany, the Netherlands) representing different funding structures. Germany, France and the Netherlands have their roots in Bismarck-oriented social security systems with similarity in the organisation of home care and nursing (importance of non profit providers and services). The United Kingdom (UK) is included as representing an originally Beveridge oriented country with state financed health and social services.

Data collection was based on a literature review, including grey literature such as reports from international or national institutions, and contacting local experts.

## 3.2 RESULTS

The summary findings are reported in Table 10. For more detailed information, the complete case studies can be found in Appendix 4.

#### 3.2.1 The financing of home nursing

#### 3.2.1.1 Funding of home nursing organisations

In England Primary Care Trusts provide primary and community services is particular geographic areas. Each PCT receives an annual budget by the Department of Health determined by the number of patients and the nursing needs of these patients. PCTs are accountable for remaining within their allotted budget and in achieving the clinical targets set out by the NHS. As long as PCTs are managing their patients and money appropriately, they have the freedom to use their budget.

In the Netherlands the health insurance model is since 2006 organised with private health insurers constrained by government conditions guaranteeing social protection. The insurers are obliged to accept all applicants. A system of risk equalisation is foreseen to prevent direct or indirect risk selection. The financial means for covering the health insurance costs are (a) nominal premiums, (b) income related contributions through taxes on income (both employer and employee and some agencies providing allowances) and, (c) government contributions. The income-related contributions and the additional money of the state are paid to a "fund" (zorgverzekeringsfonds). This fund compensates health insurers for their obligations to accept all persons.

In France and Germany home nursing is largely financed through a social health insurance scheme based on contributions from employers, employees and government contributions form taxes. Home nursing organisations are mainly funded on a fee-for-service basis. A medical referral is required for nursing acts.

In France, the financing of the nursing home care services (SSIADs) is based on a daily fixed price per person taking into account average nursing time required. It is entirely covered by the National Health Insurance Fund (CNAM). This budget is supposed to cover all expenses of the service, the remuneration of all personnel, the operation costs (local, transport, administration of the service). Technical nursing activities are reimbursed based on a list of activities (nomenclature) setting the tariffs, Other activities such as communication, coordination or psychosocial interventions are not included. The self-employed nurses (IDEL) are financed by way of conventions between the sickness funds, the state and the nursing professional organisations. Sickness funds pay fees for services within constrained budgets. Some remuneration is also paid for travel costs (both fixed prices and relative prices linked to kilometres).

Hospital at home (HAH) provide hospital-level care for patients with serious, acute or chronic illnesses in their own living environment. It aims to shorten, delay or avoid inpatient stays in acute, follow-up or rehabilitation wards whenever an admission into HAH is considered feasible. Since January 2004, hospital home care services are paid by "daily tariffs" calculated for 31 homogeneous service groups. The implementation is progressive for the public sector and only 25% of home care services are paid by these "case-mix adjusted daily tariffs" in 2005. All of the home care services provided by private hospitals which were not covered by global budgets are currently funded by these tariffs.

In Germany home nursing is financed through two main insurance schemes: statutory health insurance and long term insurance. Health care services in the outpatient sector are mainly reimbursed according to a fee-for-service system with a fixed budget and floating (point) values. Sickness funds are obliged to collectively contract with all providers of ambulatory care. Complementary money is paid by households and social services. Within the health insurance framework there is a strict hierarchy of service entitlement, ranging from medical treatment, specialized nursing, basic nursing, and home help as a supplement to nursing. Specialized nursing ('Behandlungspflege') is financed when it is prescribed by the medical profession. The same care, provided by different categories of personnel, implies a different tariff. People who are (partly) incapable of ADL-activities are eligible for care and reimbursement under long term care insurance (LTCI). The long term care insurance provides a fixed amount of cash or benefits in kind. In the LTC, tariffs are defined for bundles of treatment, per activity or per hour or in points (e.g. washing is weighed 410 points, support with eating 250 points, making a meal 150 points). For each point a monetary value is negotiated and contracted. The budget is attributed according to the score on the dependency scale ('Pflegestufe') of the patient. If this budget is insufficient, the patient has to pay himself the additional expenditures, or he can fall back on social assistance ('Sozialhilfe').

#### 3.2.1.2 Co-payments

In these countries, no co-payment is charged for home nursing. Home nursing services are free of charge or are reimbursed by the patients' health insurance.

#### 3.2.2 The organisation of home nursing

#### 3.2.2.1 Technical nursing, post acute home nursing and long term care

The UK is strongly oriented on community care. In France, the Netherlands and Germany, a clear distinction is made between acute and post acute care (rehabilitation) including often more technical and specialised home nursing and longer term care and nursing. This distinction is clearly embedded in the financing mechanisms and insurance regulations. In all countries, there is a debate on how to handle a delineation between nursing, care and support in the regulations.

#### 3.2.2.2 Home nursing providers

In France the hospital at home (HAD, hospitalisation à domicile) covers more or less complex/acute medical services which could/should be provided at a hospital but can be transferred to home with some medical co-ordination. Ambulatory nursing care provided at home (SSIAD, service et soins infirmiers à domicile) consists of less complex medical services. The SSIADs mainly take care of dependent (elderly) persons, in order to avoid or delay an hospitalization or an institutionalisation or to support the home back after an hospitalization. Many SSIADs combine nursing care with home care and home help (domestic care and meals on wheels). Home care provided by professionals are submitted to a medical prescription and are covered by the health insurance<sup>36</sup>. Two thirds of available places are managed by private organisations or not-for-profit organisations. More than 30% of available places are managed by public hospitals, municipalities or (medico-)social institutions. Independent registered nurses (IDEL: Infirmiers Diplômés d'Etat Libéraux) are the most important providers of home nursing in numbers. Independent nurses are individually responsible and work according to the medical prescription.

They use their own material and their own car. One third of their activities focuses on technical acts on medical prescription (Nursing Medical Acts or AMI –'acte médical infirmier') and two thirds on nursing care (or AIS 'acte infirmier de soins')<sup>37</sup>. Independent nurses work often in collaboration with the SSIAD and they are even partly performing activities in the nursing homes for old people (EHPAD – Etablissement d'Hébergement pour Personnes Agées Dépendantes).

In the Netherlands, home nursing is mostly provided by non-government not-for-profit local and regional home care organisations, operating under nationally organised umbrella organisations (*kruisverenigingen*). These national organisations provide all forms of care (home care, maternal care, specialised nursing care, home help, etc.). Community nurses provide services as self-employed or as an employee of a larger organisation. After the most recent reforms, more for-profit organisations and self-employed nurses positioned on the market but the number of self-employed nurses remains relative low. As part of the innovation policy in health care, the so-called "buurtzorg" initiatives (small scale community nursing initiatives) were launched in 2007<sup>a</sup>.

In Germany, different types of organisations provide home nursing and care: social-profit (e.g. Caritas, Red Cross) or municipal services (kommunale Sozialstationen) and many private Pflegedienste. Sozialstationen (public/municipal or private/social profit) provide home care and home nursing but function as community service centers too. They were initially built to reduce the demand for residential/hospital care. Their activities are thus not limited to nursing only. These social and home health services are largely provided by independent, charitable and private-commercial bodies (social service providers), partly also by municipal service providers. The size of the population served by a Sozialstation varies between 12 000 and 50 000 inhabitants, depending on its size and the degree of urbanization.

#### 3.2.2.3 Qualification level

Only in Germany there is clear link between the qualification level of the nurses and the tariffs for nursing activities.

a http://www.nivel.nl/pdf/Rapport-Buurtzorg-nieuw-en-toch-vertrouwd.pdf

Table 10: Comparison of home nursing in four countries

ı a	ble 10: Comparison of home nursir France	UK (England)		
Health insurance type and coverage	<ul> <li>Compulsory social insurance (professional categories and residence).</li> <li>Beneficiaries: persons with gainful employment or with permanent residence in France.</li> <li>Since 2004, the sickness funds are responsible for the financial stewardship of the health care system, the definition of the health care package and the regulation of prices and tariffs, the negotiation of collective agreements with the providers.</li> <li>Low level of copayment.</li> </ul>	<ul> <li>The Netherlands</li> <li>Since 2006, a standard health care insurance package was introduced, besides long term care (AWBZ) and social support regime (WMO).</li> <li>All Dutch residents are obliged to take out health insurance, paying a nominal premium, irrespective of income, age or health status.</li> <li>Private health insurers (since 2006).</li> <li>Freedom of choice and to change health insurance.</li> <li>Health insured pay an incomerelated contribution (basic premium) and a flat rate fee (supplementary premium).</li> <li>Insurance companies are not allowed to have co-payments or deductibles. They cannot deny coverage to any person or to charge anything other than their nationally set and published standard premiums.</li> </ul>	<ul> <li>Germany</li> <li>The federal government decides the global budget and which procedures to include in the benefit package.</li> <li>The National Association of Sickness Funds and the National Association of Physicians negotiate and co-decide which benefits are included in the sickness fund benefit package.</li> <li>Decentralized federal organisation.</li> <li>Social insurance model. Statutory sickness funds and private insurance cover the entire population.</li> <li>Private health insurers: Freedom of insurer choice.</li> <li>Separate long term care insurance (1995).</li> <li>Until recently, there have been almost no co-payments or deductibles. Recently, copayments for prescription drugs, doctors visits, and hospital stays, not for home nursing.</li> </ul>	<ul> <li>General taxation based model.</li> <li>Publicly funded healthcare system that provides coverage to everyone normally resident in the UK.</li> <li>It is not strictly an insurance system because (a) there are no premiums collected, (b) costs are not charged at the patient level</li> <li>Decentralised model with important role of strategic health authorities.</li> <li>NHS model with private trusts contracting for treatment and care.</li> </ul>
Home nursing providers	Different types:      I. hospital at home to provide hospital-level nursing for patients at home;      nursing home care services (SSIADs) for	<ul> <li>Private - not for profit local and regional home care organisations, operating under nationally organised umbrella organisations (kruisverenigingen).</li> <li>Recently independent or small scale nursing initiatives</li> </ul>	<ul> <li>Social-profit organisations, (municipal services)</li> <li>Private nursing services</li> <li>Important difference between basic nursing (grundpflege) and technical nursing (behandlungspflege) regulations</li> </ul>	<ul> <li>Mainly through primary care trusts</li> <li>Exceptionally by private independent providers</li> </ul>

	France	The Netherlands	Germany	UK (England)
	dependent (elderly) persons;  3. independent nurses (IDEL) (sometimes in collaboration with SSIADs).			
Labour differentiation	<ul> <li>Nursing organisations employ two times more nursing aids than nurses.</li> <li>Labour differentiation is breaking through by orienting nurses on technical nursing activities and delegating some basic nursing tasks to nursing aids.</li> </ul>	<ul> <li>The qualification structure for nurses is differentiated in five levels.</li> <li>There is a trend to orient nurses on technical and specialized nursing activities by delegating basic nursing tasks to nursing aids and helpers.</li> </ul>	<ul> <li>Labour differentiation over different nursing categories to provide the different services.</li> <li>The health insurance framework makes a strict hierarchy of service entitlement (specialized nursing, basic nursing, and home help as a supplement to nursing).</li> </ul>	Nurses training levels are highly differentiated. Nurses responsibilities are closely connected to these differentiated qualification levels.
Financing of home care nursing	<ul> <li>Lump sum 'per diem' and fixed budget for the SSIAD.</li> <li>Fee for service system for the IDEL.</li> </ul>	<ul> <li>Lump sum per patient on a needs assessment.</li> <li>Contracting to introduce competition.</li> </ul>	<ul> <li>Mainly a fee-for-service basis using needs assessment.</li> <li>Contracting to improve competition.</li> </ul>	<ul> <li>Lump sum per patient, annual fixed budgets, reference costs.</li> <li>Contracting to introduce competition.</li> </ul>
New developments in financing	<ul> <li>Regional unions of health insurance funds can conclude local contracts with health care professionals, in addition to the national agreements.</li> <li>Homecare organisations are financed based on a daily fixed price per patient taking into account average nursing time required and patients' case-mix.</li> </ul>	An emerging financing issue is the nursing and treatment provided after early discharge of a hospital. Transfer nurses are financed either by the hospitals themselves or through home care organisation.	<ul> <li>The introduction of morbidity-oriented risk structure compensation ("morbi-RSA") in the financing system aims to prevent patient selection by sickness funds and to improve care for patients with chronic diseases.</li> <li>Some pilot initiatives fund the development of integrated service provision in primary care settings.</li> </ul>	The NHS uses a model of reference costs linked to Payment by Results. Extra- market forces costs are taken into account
Nursing qualifications & financing	Qualification levels are not the basis for funding	Qualification levels are not the basis for funding.	The same care, provided by different qualification levels nursing or caring imply a different tariff.	Qualifications levels are not the basis for funding

# 4 DEPENDENCY TOOLS FOR CASE-MIX FINANCING IN HOME NURSING

### 4.1 INTRODUCTION

Since 2005, a discussion started on an alternative financing model in home nursing based on case mix instead of fee-for-service payment system (cf. Chapter 2 about disadvantages of the current funding system). A report of the NIHDI<sup>2</sup> already underlined the need for an adapted financing of home nursing. This report criticised the limited clinical use of the BESADL scale, the impossibility to establish a plan of care and to propose a good indicator of performed (and required) care. The determination of nomenclature tariffs was also criticized, not being carried out on objective bases.

In this section we develop a review of tools and data needed related to case-mix financing. Various case-mix systems for home nursing care delivery will be discussed. A critical assessment will be made of case-mix measurement tools used for financing purposes in home nursing.

This section aims at:

- Describe and assess the tools, measuring the nursing dependency of patients cared at home, which could be an alternative to the current system, and that are actually discussed in Belgium.
- Describe and assess potential relevant items to be recorded in order to calculate or adjust tariffs.

#### 4.2 RESULTS

## 4.2.1 Nursing dependency scales

Five nursing dependency tools are explored and described in detail:

- The scale used in Belgium, i.e. BESADL, which is an adaptation of the Katz's index:
- The scale used in Belgium for eligibility to dependence allowance for elderly people (Aide à la Personne âgée –APA);
- The minimum data set (MDS) of the Resident Assessment Instrument (RAI), home care version (RAI-HC);
- The gerontologic autonomy ISO resource groups system (Autonomie gerontologique groupes iso-ressources, i.e. AGGIR) used in France;
- The Functional Autonomy Measurement System (Système de Mesure de l'Autonomie Fonctionnelle, i.e. SMAF) used in Québec.

## 4.2.1.1 The Belgian Katz adapted scale (BESADL)

#### **Description**

The Belgian Katz adapted scale used in home nursing to assess the dependency level of the person is formed by six items:

- I. Washing
- 2. Dressing
- 3. Transferring and moving
- 4. Going to the toilet
- 5. Continence
- 6. Eating

Each item is scored on a four level ordinal scale (I = independent 2 = moderately dependent 3 = severely dependent 4 = totally dependent). A patient is considered as dependent if he/she gets a score of 3 for the item. The combination of these scores leads to an assessment of the dependency level of the patient (see supra):

- baseline level (no dependency or low dependency level);
- level A (dependency for bathing, dressing and transfer or toileting);
- level B (dependency for bathing, dressing, transfer, toileting and continence or eating);
- level C (the highest score for at least five functions, except continence or eating, which may have a score 3). For that category, the nurse is obliged to make at least two visits a day.

Interpretation guidelines are published on the NIHDI website and are used to control the nurse's assessment of the dependent person by the medical advisors of the social insurance agencies..

Each dependence level gives an all-in price for a day care. In 2009 these prices are:

Dependence	Day price during	Day price during		
category	the week	the week-end		
Α	€ 15.15	€22.61		
В	€ 29.19	€43.34		
С	€39.93	€59.47		

## **Validity**

A content validity analysis<sup>38</sup> shows that this scale only assesses dependency for Activities in Daily Living (ADL) and does not assess the dependency for instrumental activities (management, cooking, house holding, shopping, transport using, etc.) in daily living (IADL). It focuses on incapacities and does not meet the ICF approach proposed by the World Health Organisation International Classification of Functioning (ICF). Construct validity is good: concurrent validity with the AGGIR scale is high ( $r^2$ =0.89) and the scale is correlated with the time spent for care for ADL ( $r^2$  = 0.65). Cronbach alpha coefficient is higher than 0.9. Test-retest and external reliability are good (coefficient kappa >0.7). The mean time for care is significantly different in each group -A, B and C-(ANOVA and Games-Howel post-hoc test.)

Falez (2006)<sup>38</sup> found that the median required time for daily care for ADL is 229 minutes for category C, 200 for category B and 145 for category A. The scale is subject to a ceiling effect and underestimates high dependency levels when compared with the AGGIR scale: the highest dependency category measured with this last scale needs a median time for care of 240 min. It also seems to be subject to a "lower limit" effect, neglecting lowest dependency levels when compared with the AGGIR scale.

#### Applicability for financing purposes

Falez (2006)<sup>38</sup> concludes that the scale is quite valid, since its construct validity is linked with old concepts (incapacities in place of performance) and could theoretically be used for a funding adapted to case mix of home nursing, because of the good correlation with the workload. The Interface study (2005)<sup>39</sup> reported face validity of the scale used in nursing homes. For the caregivers, this scale gets an incomplete vision of the patient and does not give sufficient information for care planning. The advantage of this instrument is that it is currently used by nurses. All caregivers are familiar with this scale, which would not imply modifications (which imply learning) for them.

#### 4.2.1.2 The Aide à la Personne âgée —APA scale

#### Description

This scale is used in Belgium for the granting of an allowance for elderly and disabled people.

The APA scale comprised six items: moving, nutrition, hygiene, house holding, communication, need of supervision. Each item is scored 0 (no problem), I (light problems), 2 (important problems) and 3 (impossibility). The sum of the scores gives eligibility for different levels of allowance. If this score is lower than 7, there is no benefit allowance. Score from 7 up to 8 gets category allowance I, from 9 up to 11, category allowance II, from 12 up to 14, allowance category III, from 15 up to 16 category allowance IV and more then 16, category allowance V.

#### **Validity**

The content validity<sup>40</sup> shows that the scale assesses incapacities and does not meet the ICF approach. Some items measure incapacities for ADL, other ones for IADL. Moreover some items are mix assessment of ADL and IADL. The items are quite wide and heterogeneous, assessing different dimensions in one item. For example, the item concerning eating measures the ability of a patient to make his shopping and his cooking (which are IADL) and in the same time the capacity to swallow the food (which is an ADL). This scale does not assess incontinence disorders. The scale is well correlated with the Belgian scale (Spearman's correlation coefficient > 0.7) and the AGGIR scale (Spearman's correlation coefficient > 0.7). Cronbach alpha coefficient is higher than 0.8. External validity is low (kappa coefficient < 0.6).

Falez (2006)<sup>38</sup> reports that median required daily care time for dependence for ADL is 232 minutes for category V, 159 for category IV, 158 for category III, 107 for category II and 21 for category I.

## Applicability for financing purposes

The tool lacks of precision to assess the dependency of the patient and consequently for financing purposes.

#### 4.2.1.3 The Resident Assessment Instrument Home Care Version (RAI-HC)

#### Description

The RAI-HC includes two parts. The first part is the Minimum Data Set (MDS-HC) that collects standardised information of domains, critical for individuals. These domains are:

- (I) Cognition
- (2) Communication
- (3) Vision
- (4) Mood and behaviour
- (5) Social functioning
- (6) Physical functioning in activities of daily living
- (7) Continence
- (8) Medications
- (9) Socio-demographics
- (10) Nutrition and hydration
- (II) Oral/dental status
- (12) Skin conditions
- (13) Informal social support
- (14) Environmental/home safety
- (15) Preventive health measures
- (16) Diseases diagnoses

- (17) Health conditions
- (18) Service utilisation.

The second part consists of 30 problem-focused Clinical Assessment Protocols (CAPs) covering conditions that are common risks for home care clients. The CAP's areas are:

- (I) Functional performance
- (2) Sensory performance
- (3) Mental health
- (4) Bladder management
- (5) Health problems/syndromes
- (6) Service oversight.

A guideline book (265 pages for the French version 2003) should support the assessor to adequately complete the form.

RAI-HC is a member of the family of RAI. The data are collected with a so-called "Minimum Data Set" (MDS.) Once the assessment is done, it is possible to detect problems labelled "Client Assessment Protocols (CAP)" and to refer to guidelines for care planning.

The data collected can be used to develop "Quality Indicators" for potential problems. For example, rate of pressure ulcers or rate of restraint and so on.

Based on data, patients are grouped in different categories according to care load and type of care delivered by caregivers. These categories are labelled "Resources Utilization Groups (RUG)". The RUGs are based on an hierarchical method. For each RUG it is then possible to evaluate the costs of a day care.

Resource utilisation groups (RUG) are derived from the first part of the MDS-HC<sup>38, 41</sup>. They are called RUG-III/HC by analogy with the RUG-III (third version of RUG) used in the United States for the Prospective Payment System (PPS) in nursing homes. The RUG-III/HC uses seven hierarchical levels: rehabilitation, extensive services, special care, clinically complex, impaired cognition, behaviour problems and reduced physical functions. It differs from RUG-III used in skilled nursing facilities (SNF) by collapsing several groups and using instrumental activities of daily living (IADL) in addition to activities of daily livings to form 23 resources utilisation groups in place of 53 in SNF. Informal care, i.e. care delivered by non professional caregivers is used in the RUG-III/HC. Informal care time is assigned a lower cost. Case-mix indices, one for formal care alone and a second for both formal and informal care are produced.

RUG III has been tested<sup>42</sup> and refined for long-term home care clients in Canada in a study including 804 individuals seeking home care through the Michigan Care Management Program on the home and Community Based Waiver for the Elderly and Disabled. In this study, RUG III explained 33.7% of the variance of per diem cost, using cost weighted formal and informal care as the dependent variable. Resource use within groups was relatively homogeneous.

#### Validity

In the United States, the RAI-HC is used by the department of Veteran Affairs for home care clients. Hawes et al. (2007)<sup>43</sup> reported that RAI-HC showed good consistency in five countries (United States, Canada, Japan, Australia, and the Czech Republic). Content validity was tested, and convergent validity with the Barthel ADL index, the Lawton Instrumental Activities of Daily Living Scale and the Mini Mental State examination was good. Reliability across nursing home and home- and community based settings has been established.

This method is used in the USA to fund the care of the Skilled Nursing Facilities, residential care rehabilitation facilities for older people after an acute care episode in the hospital.

Poss et al. (2008)<sup>41</sup>, tested the validity of RUG-III/HC in Canada. They found that most care episodes concerned the groups of reduced physical functions (56.1%) and that less than I% concerned extensive services and behaviour problems. Tests for homogeneity showed low coefficient of variation (CV) except for two groups for formal costs. Combined formal and informal costs showed lower CV values. Explained variance for formal and informal costs had a value of 37.3%, but was 20.5% for formal costs only. However, nursing costs (3.0%) and other professional service components (physical therapy 0.7% and occupational therapy 2.3%) did not fit well by RUG-III/HC. The authors discuss that case-mix indices (CMI) set for adjusting payments to an agency responsible for formal care alone should be those based on formal care alone. The poorer fit to formal costs should not influence the choice of the CMI's. They concluded that informal care is an important piece of the cost structure in home care. Dubuc et al. (2006)<sup>44</sup> report that RUG-III focuses on the therapy and that the patient actually receives rather than he/she needs. Bernabei et al. (2008)<sup>45</sup> report examples of using RAI-III/HC in the Aged in Home Care (AdhOC) data set constructed in 11 European countries. Studies on prognostic factors showed that oral problems, particularly chewing problems were associated with a significant difference in one-year mortality. Some results suggested that the use of the MDS could reduce costs, avoiding nursing home admissions. Actually, outcomes intervention studies showed that the risk of nursing home admission was significantly lower for patients having case management. Quality indicators should provide meaningful information about the quality of care provided by the home care agencies.

An international comparison using RAI-HC across II European countries showed that what is called "home care" has different meanings in different countries. However, the authors recognise concerns with regard to the quality of data and the training of personnel. The instrument is perceived as too long which could impact on data entry<sup>45</sup>.

Dalby, Hirdes and Fries (2005)<sup>46</sup> underline the necessity to use risk adjustment methods for home care quality indicators in order to make fair comparisons across providers. A type of risk adjustment intended to control bias at the provider's level is the agency's ability to identify differences in client's clinical characteristics and select patients for admission.

In Canada, an instrument derived from RAI-HC, the Method for Assigning Priority Levels (MAPLe) identifies predictors for nursing home placement, caregiver's distress and for being rated as requiring alternative placement to improve outlook. For every increment in MAPLe, there is a substantial increase in risk of nursing home admission. The pattern for caregiver distress is more pronounced. Higher MAPLe priority levels are associated with higher weekly costs of formal care and hours of informal care. It is not recommended to use this instrument as an automated decision-making system but should help case managers to engage in a full discussion with the client and his family to develop person-based recommendations<sup>47</sup>.

#### Applicability for financing purposes

We did not find any literature about funding experiences based on the RUG derived from RAI-HC. The RAI-HC was primarily designed to assess the needs of patients with severe functional problems often requiring intensive care services at home (several times per day), usually by different professionals. This objective explains the complexity of the instrument. Consequently, the scoring of MDS is very detailed and it takes on average one-hour to record all information.

According to the Qualidem study<sup>48</sup>, MDS-RAI is the most suitable instrument in the home care sector, being the only tool that offers much more added-value for the preparation and development of an individualized plan of care. This study did not evaluate the quality of RAI for financing purposes.

## 4.2.1.4 The Gerontological autonomy ISO resource groups (Autonomie gérontologique groupes iso-ressources- AGGIR

#### Description

This assessment tool is made of two parts. The first part assesses the dependency for daily living activities and cognitive troubles. It consists of ten items, called discriminant variables:

- (I) orientation,
- (2) behaviour,
- (3) bathing,
- (4) dressing,
- (5) eating,
- (6) elimination,
- (7) transfers,
- (8) moving in home,
- (9) moving out of home
- (10)communication.

The first eight items are used to classify the person in six iso-resources groups, i.e. groups of persons needing similar levels of care for activities of daily living. Some iso-resource groups classify persons with different dependency profiles but with close needs for help: for example, iso-resource group 2 classifies persons with important orientation troubles and able to moving (wandering persons) and bedridden persons without cognitive disorders. The classification has been constructed by statistical methods using ascending hierarchical classification of Ward and multiple correspondence analyses.

The iso-resource group I (GIR I) classifies persons who are totally dependent. The iso-resource group 6 classifies persons without any dependency for the ADL but needing some help for the instrumental activities of daily living (IADL). The last two items are used at home for persons with low level of needs but having partial or total problems to move outside home and/or for calling for help (groups 6B and 6C; groups 5B and 5C.)

The system assesses what the person makes actually and does not assess the capacities to do. In that way, the assessment method meets the approach used by the World Health Organisation (WHO) International Classification of Functioning (ICF.)

Each item is scored following an ordinal method. If the person performs the activity in a coherent way, usually, entirely and alone the score is A. If the person does not perform the activity at all, the score is C. If the person performs the activity partially (i.e. not totally and/or not usually and/or not alone) the score is B. Guidelines help the assessor to choose the adequate score. Software calculates the iso-resource group.

For each resource group, it is possible to get a relative level of care needs. If the GIR I gets the value of I 000, GIR 2 gets a value of 840, GIR 3 a value of 660, GIR 4 a value of 420, GIR 5 a value of 250, GIR 6 a value of 70. It is so possible to calculate a case-mix index for a population, called weighted mean GIR. That index allows comparisons between different care services and could be a method for payment based on case mix.

The second part of the instrument consists in 7 items, assessing the dependency for instrumental activities of daily living (IADL) and called "illustrative variables" because they are not taken into account for the determination of the groups: management, cooking, house holding, shopping, transport using, medications and leisure. These items are used for patients at home but could also be used in nursing homes. They are scored in the same way than the discriminant variables.

## **Validity**

Benaim (2005)<sup>49</sup> reports that the AGGIR scale was built in institutional setting and that its use was later extended to assess dependency at home without specific validation. Such extension is doubtful because some relevant issues are not solved, as the need of supervision at home and because some productive disorders like restlessness and running away from home are not taken into account. Moreover, this scale is not a tool allowing a follow-up of the dependent person and the geriatrics generally do not recommend integrating it in the medical file.

Using a principal components analysis, Roudier and Al-Aloucy (2004)<sup>50</sup> found five factors explaining 90% of the variance. They concluded that the scale mainly takes the physical dependency into account. Dependency related to dementia would require an adaptation of the scale, integrating cognitive and behavioural troubles. Fanello et al. (2000)<sup>51</sup> observed a relationship between the AGGIR scale and the Mini Nutritional Assessment (MNA), iso-resource groups 4, 3, 2 and 1 presenting a higher risk of malnutrition. Lafont et al. (1999)<sup>52</sup> found a relationship between global cognitive performance and the dependency evaluated by the AGGIR scale but concluded that the model seems to lack sensitivity for taking in account functional impairment associated with dementia. IADL should be considered in the classification.

Falez<sup>40</sup> assessed the content validity, and concluded that this scale assesses dependency for activities in Daily Living (ADL) and for instrumental activities in daily living (IADL). He concludes that the scale meets the International Classification of Functioning (ICF) approach. Construct validity is good. Concurrent validity with the Belgian scale is high ( $r^2$ =0.89) and the scale is correlated with the time spent for care for ADL ( $r^2$  = 0.63.) Cronbach's alpha coefficient is higher than 0.9. Test-retest and external reliability are good (coefficient kappa >0.7). The mean time for care is significantly different in each iso-resource group (ANOVA and Games-Howel post-hoc test).

Falez $(2006)^{38}$  found a high correlation between the weighted mean GIR and the required time for ADL care ( $r^2$ =0.86). He found that median required daily care time for dependence for ADL is 236 minutes for iso-resource group 1, 194 minutes for iso-resource group 2, 158 minutes for iso-resource group 3, 99 minutes for iso-resource group 4, 38 minutes for iso-resource group 5 and 21 minutes for iso-resource group 6. The author concludes that the scale is valid and could allow a funding of home nursing care by case-mix based on the AGGIR scale.

The Interface study reports face validity of the scale as used in nursing homes. For the caregivers, this scale is evaluated as offering better insight in de condition of the patient than the Belgian scale, but does not offer sufficient information for care planning.

Gervais et al.  $(2009)^{53}$  compared AGGIR and SMAF. They found a good correlation between the two scales ( $r^2$ =0.86) but also discrepancies in the way the two scales classify the patients.

Coutton (2009)<sup>54</sup> compared the dependency categories of the AGGIR scale and the resources utilisation by dependent aged persons, but is not able to conclude neither whether the scale is valid nor whether the resources utilisation is adequate.

#### Applicability for financing purposes

Colvez et al. (2009)<sup>55</sup> presided a scientific committee entrusted by a French law, to adapt the dependency evaluation tools. This committee reported that the AGGIR scale alone does not constitute a complete assessment of the problems of the person. The hierarchy between discriminant and illustrative variables pushes the IADL variables, the relational life and the capacity to manage the daily life into the background. Moreover, the scale does not recognize the consequences of psychological disorders and the discriminant variables "moving out and alerting" are underestimated because they are not taken in account to calculate the iso-resource groups. Another problem reported by the committee is the small number of scientific validations of the tool. The scientific committee recommends that providers should be funded on a case-mix basis but recommends AGGIR scale only if it is integrated in a multidimensional tool allowing to develop a care plan.

#### 4.2.1.5 The Functional Autonomy Measurement System

#### Description

The SMAF (Système de Mesure de l'Autonomie Fonctionnelle) was developed in Quebec in 1982. Data used to develop this system came from a sample of 1 977 old people with autonomy troubles, in different contexts (at home and in long term institutions). Clinical evaluations and cost evaluations were performed. The SMAF creates groups of patients using their characteristics and not using care delivered. The SMAF evaluates how the person performs 29 functions covering ADL (7 items), mobility (6 items), communication (3 items), mental functions (5 items) and IADL (8 items). Each function is scored on an ordinal way: 0 (independent), - 0.5 (with difficulty), -1 (with supervision), -2 (with help), -3 (dependent). The items allow capturing disabilities related to interaction between individuals and their environments and meet the approach of ICF.

It takes about 20 to 30 minutes to assess the patient with the instrument. The scale exists in different versions (English, French and Dutch). A combined Statistical analysis (using Ward ascending classification and the K-means non-hierarchical partitioning method) with advice from a panel of experts lead to the identification of 14 homogeneous disability profiles (iso-SMAF) characterised by a gradual progression in severity of disabilities in IADL and ADL accompanied by predominant limitations either in mobility or mental functions. These 14 profiles could be classified in 5 categories. Category 1 classifies persons with IADL problems (iso-SMAF 1, 2 and 3). Category 2 classifies persons with predominant troubles for mobility (iso-SMAF 4, 6 and 9.) Category 3 classifies persons with predominant mental disorder (iso-SMAF 5, 7, 8 and 10.) Category 4 classifies persons with mental and mobility disorders needing help for mobility. Category 5 classifies bedridden persons with severe mental disorder.

The care time needed varies from 0.39 hour up to 4.07 hours a day. Some iso-SMAF profiles need care time that are not statistically different (1-2, 3-4, 7-8, 9-10, 11-12) but they differ in the type of services needed.

#### **Validity**

Dubuc et al. (2006)<sup>44</sup> described the method used to create and validate the Iso-SMAF classification. Stability of the classification was assessed with the "split sample" cross validation method. Reproducibility was assessed by using another cluster analysis method. The predictive validity was assessed by the ability of the classification to predict patients' required hours of nursing care. Homogeneity was evaluated by the coefficient of variation. Heterogeneity across profiles was assessed with t-test or Wilcoxon rank test. Content validity was established by a combination of Delphi method and nominal group technique.

The results showed a good stability and reproducibility with a good kappa coefficient obtained with the cross-validation (K= 0.67) and same cluster structures identified when using different methods. The 14 iso-SMAF classification explained 82% of the variance in nursing care time and 80% of their costs. Coefficients of variation were all less than  $0.5^{44}$ .

## Applicability for financing purposes

Tousignant et al. (2007)<sup>56</sup> showed that a theoretical budget based on the iso-SMAF profiles may highlight the under- or over funding of a facility when compared to usual funding systems. In that study, theoretical costs based on functional autonomy profiles are calculated, including costs associated with care (such as administrative costs) and operating the facility. The study concerned 1 590 persons staying in long term care facilities. The authors concluded that results of their study confirmed the feasibility of a new funding approach to long-term care facilities<sup>57</sup>.

Tousignant et al. (2009)<sup>57</sup> also described functional autonomy profiles of people living at home. They compared the adequacy of the delivered care with the required care based on the profiles in public homecare programs. In a first step they calculated the specific amount of nursing care, personal care and support services related to each ISO-SMAF profile. In a second step, they compared this theoretical required time with the duration of care and services effectively delivered. They found that only 8% of the required services were provided by professionals.

Table II summarizes the characteristics of dependency assessment instruments.

Table 11: Characteristics of dependency assessment instruments for case mix financing summary of literature review

Instrument	Explored domains	Base of the case-mix	Scientific validity	Correlation with delivered care time	Correlation with required care time	Nurses costs correlation	Applicability for financing purposes
BESADL (adapted Katz scale)	ADL	3 dependency categories	Good	Good	Good	No information	yes
APA Belgian scale	ADL and IADL	5 allowance categories	Not good	No information	Good	No information	No
AGGIR	Orientation, ADL and IADL	6 iso- resources groups	Good	Good	Good	No information	Yes
RAI	Cognition Communication Vision Mood and behaviour Social functioning ADL Continence Medications Socio-demographics Nutrition and hydration Oral/dental statute Skin conditions Informal social support Environmental/home safety Preventive health measures Diseases diagnoses Health conditions Services utilization.	23 Resources Utilisation groups	Good	Based on delivered care time	No information	Not good	Yes
SMAF	ADL Mobility Communication Mental functions IADL	14 iso-SMAF profiles	Good	No information	Good	Good	Yes

#### Key points

- Five nursing dependency tools, identified in the literature, were described: I) The Belgium Evaluation Scale of Patients' dependency in ADL activities (BESADL), 2) The Belgian Scale for eligibility to dependence allowance for elderly people (APA), 3) The Resident Assessment Instrument adapted for home care (RAI-HC), 4) The Gerontologic autonomy ISO resource groups system (AGGIR), 5) The Functional Autonomy Measurement System (SMAF).
- A perfect encompassing registration tool does not exist. A trade-off has always to be made between usability, precision, reliability & validity, and workload.
- The use of patient dependency meausrement tools for funding purposes were rarely reported in the literature.
- All methods used to record the case-mix induce an administrative workload and a risk of supply-induced demand.
- The most appropriate case-mix tool should group patients into standardised groups, meaning that they are estimated to consume the same amount of resources.

## 5 STAKEHOLDER DIALOGUE

## 5.1 INTRODUCTION

This section reports the results of four stakeholder dialogues on the current financing rules and principles in home nursing in Belgium. Stakeholders in home nursing can be defined as those groups who have an interest and/or are impacted by the theoretical policy options on financing and organising home nursing in Belgium. The stakeholder dialogue is conceived as a stakeholder consultation on opinions and arguments on issues related to the future financing of home nursing in Belgium. The stakeholder meetings aimed not at consensus recommendations neither at priority setting of issues. The details of the methods and results can be found in appendix 5.

Three groups of key stakeholders were selected: a first group is involved in the policy negotiations and implementation of financing home nursing (different governmental instances, NIHDI, federal and communities, sickness funds, ...). Furthermore, two separate groups of stakeholders were identified that deliver nursing care at home: a group of representatives from self-employed nurses and a group of representatives from employee nursing organisations. Twenty-five stakeholders participated in the stakeholder meetings.

## 5.2 THEMATIC ANALYSIS

In this part we report a summary of all comments expressed by the participants. We classified the different statements of participants in an inductively developed framework of four general themes and 19 topics (Table 12). The structuring of the four main themes and the (sub)topics might be used for gradually building up an integrated argumentation for making adaptations to the financing system. Most of the building blocks of the financing system which were discussed in the stakeholders meetings were treated in their context.

First there was the critique on the existing system (theme I), from global critiques on the division of the political competencies to more detailed critiques on several parts of the financing system. Then, focusing on the financing system itself, arguments for reforms (theme 2) were mentioned, from pleas for a fundamental and global change towards arguments for incremental changes in specific sub-mechanisms of the financing system. Focusing on nursing related topics (theme 3), merely content arguments were formulated. A fourth theme with regard to assessment and registration instruments emerged from three previous main themes: the critiques on the current financing system (theme I), arguments for reforms (theme 2) and nursing related topics (theme 3).

Table 12: Classification of themes and statements of stakeholders

Theme I: Remarks and comments on the current financing system

Topic I: General

- Lack of global vision
- Pleas to adapt the financing model to the organisation model
- Remarks on a segmented policy approach of health care sectors
- Topic 2: The Belgian political competencies
- Topic 3: Critiques on the complexity of current financing mechanisms

Topic 4: Critique on current fees

- Costs and type of nurse
- Material cost
- Cost and collaboration with hospitals
- Cost, Workload and use of time
- Real cost and informal caregivers
- Urban areas

Topic 5: Critique on the fee-for-service system

- Fee-for-service and chronic care
- Completeness of nomenclature
- Complex rules for avoiding combination of payments

Topic 6: Critique on capitation

Topic 7: Critique on lump sum financing

Topic 8: Out-of-pocket payments for patients

Other alternatives (PGB)

#### Theme 2: Arguments for reforms

Topic 9: The extent of required change: radical or fundamental?

Topic 10: Principles of financing

- Arguments for a mixed financing model
- In favour of more case-mix
- Fee-for service and lump sum for which activities?
- Pay for quality
- Decision making process on implementation of new nursing acts

Topic II: Develop better control mechanisms

- Perceived need for control
- The control working practices
- The objectives of control
- Sanctions and feedback

#### Theme 3: Nursing related topics

Topic 12: General changes in home nursing

Topic 13: Characteristics of providers of nursing care:

- Self-employed nurses (often organised in small associations) versus large organisations (of employee nurses)
- Qualification levels

Topic 14: Labour market: attractiveness of home nursing as a profession

Topic 15: the need for (higher) qualifications

- The need for specialist qualifications
- Continuous professional education

Topic 16: Labour differentiation

- Adequate mix of general and specialist home nurses
- The relation between family doctor and nurse: doctor's prescription / lack of autonomy for nurses
- The relationship between home nurses and other care professions
- Coordination with other professions
- Accreditation

#### Theme 4: Assessment and registration instruments

Topic 17: General remarks with regard to administrative tasks

Topic 18: Patient needs and nursing care

- Encourage/promote prevention, rehabilitation nursing

Topic 19: Comments on the tools

- Katz tool
- Alternatives
- Time needed for registration

## 5.2.1 Theme I: The current financing system

#### 5.2.1.1 Topic 1: General

A recurrent remark was that the Belgian organisation and financing of health care lacks a global vision on the organisation of health care delivery and, more particularly a vision on how the current financing model can be adapted to deal with the new challenges. The policies for different healthcare sectors are too segmented, approached as separate boxes: e.g. if the hospital stays become shorter, there are no provisions (there is no plan) for home nursing to take care of higher numbers and technical complexity of patients in a post-acute stage of recovery. Moreover, the increasing number of chronic conditions to care for within home care put pressure on the complexity and severity of nursing. These aspects of changing severity and complexity are expected to be embedded in a vision on the organisation of primary care and home nursing within a more broad health care perspective.

Participants urged to develop a financing system taking into account clearly defined objectives underlying the intended organisation of home nursing: the integration of home nursing with hospital based care delivery and primary care (organisational objective), the promotion of good practice, the promotion of a global view on the patient, etc. ...

#### 5.2.1.2 Topic 2: The Belgian political competencies

All participants were aware that the division of political competencies makes the organisation of home care and home nursing quite particular in Belgium: participants felt there is an issue with regard to a clear demarcation of home nursing (federal competency) and family help/social care and services (competency of the communities). Some participants argued to develop a regulating mechanism for making a clear distinction between health care delivery and social care delivery (financing should follow the organisational model). In the current situation, patients can opt for the federal health care approach or for the community care for similar care. In the grey zone between health care and social services, currently financing is an argument for the patient to choose for health care for their basic care.

#### 5.2.1.3 Topic 3: Critiques on the complexity of current financing mechanisms

All participants seemed to agree on the problematic complexity of the current financing mechanisms. Stakeholders disapproved of the fact that currently too many different mechanisms and financing sources contribute to the financing of home nursing. They mentioned: the nomenclature, specific costs of services for home nursing, social tax reductions, subsidies for software, specific arrangements with hospitals. The complexity was described a consequence of different policy measures to substitute for the shortcomings within the basic financing mechanism (the nomenclature). Many participants urged for a simple (straightforward) financing mechanism which would offer sufficient financing without additional "patchwork" systems.

#### 5.2.1.4 Topic 4: Critique on current fees

The current fees were generally criticized because they do not cover the real costs of home nursing. There was a consensus between home nurses that fees should account for real costs and include different cost aspects: personnel costs, material costs, travel costs, ... Representatives of health authorities agreed less with this statement. It was also mentioned that in a society with an increasing number of persons with chronic diseases, the fee-for-service financing mechanism is not adequate if it is used to finance new tasks such as support and counselling, assessment, education of patients, coordination, communication... These types of tasks should be integrated in a more global financing mechanism (or lump sum) of holistic nursing care of patients with a chronic disease and not a separate fees for separate activities.

Most participants agreed that no different fees for self-employed nurses and employeenurses should be introduced. However, financing should take into account different cost structures of self-employed and employee-nurses.

A particular issue concerned the current practice of nursing assistance in haemodialysis and peritoneal dialysis at home for which specific arrangements have to be made with hospitals. Critiques on these arrangements were twofold: first, financing home nursing delivery via these specific arrangements with hospitals adds to the complexity of the global financing system of home nursing; secondly, it was stated that payments for nurses in home nursing are too low.

#### 5.2.1.5 Topic 5: Critique on the fee-for-service system

### Fee-for-service and chronic care

The current fee-for-service system is designed to finance distinct/specific nursing activities. A general critique on this scheme is that it does not support a holistic nursing care process. This holistic nursing approach is considered as required in today's chronic care model. The fee for service model holds a risk that nursing care is being reduced to carry out distinct activities without taking into account other aspects of the nursing process: observation, problem detection, definition of objectives, planning, evaluation. The "nursing consultation", a nursing assessment intervention which was recently added to the nomenclature, was considered as an example of an outdated use of fee-for-service financing, because implementation of the nursing consultation was accompanied by a complex set of rules for defining and limiting the patient group in which it might be used, while in fact such an assessment should be integrated in the nursing care process of all patients receiving long-term nursing care. Moreover, for a comparable assessment and interdisciplinary discussion other regulations (e.g. the Integrated Services for Home Care) foresee a fee-for-service payment.

#### Completeness of nomenclature

Most participants agreed on the fact that many nursing interventions such as blood sampling, observation and registration of vital signs and parameters, oxygen therapy, aerosol therapy, etc. are lacking in the nomenclature, which means that there are no tariffs and payments for these nursing interventions. These activities sometimes require significant amounts of time.

Remarks were also made on the laws on the content of the nursing profession and the current list of reimbursed activities. Activities identified in the law on nursing in Belgium (Article 21 quinquies of the Royal Decree nr. 78, the Law on Nursing): observation of the health status, formulating nursing problems, giving information and advice, support of the dying person, grief support) are not identified in the nomenclature of home nursing. Some participants urge to give these intellectual activities higher priority. It is recognized though that the introduction of educational interventions for diabetic patients (2003) and the nursing consultation (2009) was considered as a significant progress in this matter.

#### Complex rules for avoiding combination of payments

Stakeholders mentioned the complexity of financing rules that allow and/or limit the financing of multiple simultaneous nursing activities in one visit or one day. These complex rules are considered as potential impediment for delivering qualitative nursing care. Moreover, the non-exclusiveness of some nomenclature codes was mentioned. Some nomenclature codes may refer to different nursing interventions, e.g. an intramuscular injection is identified by the same code as a sub-cutaneous injection. As a consequence it is not possible to identify which intervention actually has been carried out.

Participants from authorities and sickness funds observed the lack of knowledge of nurses about the nomenclature and the administrative rules to apply them.

### 5.2.1.6 Topic 6: Critique on capitation

Some stakeholders expressed their aversion for capitation payments without outcome measurement, as currently used for medical houses. They feared that the capitation would lead to patient selection and quick referral to hospital or institution for old persons.

#### 5.2.1.7 Topic 7: Critique on lump sum financing

The main critique on the current lump sum financing of nursing care is the lack of transparency. Especially the fact that only minimal criteria are used for registration of 'pseudocodes', is questioned. Because registration of 'pseudocodes' is often lacking, it is insufficiently known which nursing activities are performed for patients falling under the rules of lump sum payments.

## 5.2.1.8 Topic 8: Out-of-pocket payments for patients

Some persons reflected on the patient's out of pocket payments in home nursing. Two participants from self-employed nurses mentioned that many home nurses, employeenurses as well as self-employed nurses, did not charge for the co-payment part of the patient. They argued that it should be mandatory to ask patients to pay the personal contribution in order to hold them responsible, to take into account their personal contribution for the MAB ('maximum billing') and to avoid abuse.

The patient in the role of manager of his budget for nursing care, such as the personal assistance budget (PAB) for handicapped persons in the Flemish community, was not considered as a good model, because many patients would experience difficulties to describe their need and choose appropriate nursing care and support.

#### Key points

- Stakeholders had a general critique on the lack of a global vision on health care organisation. They explained it partly as a result of the division of political competencies on health care in Belgium.
- Stakeholders formulated detailed critiques on the fee-for service as it is currently applied via the nomenclature of home nursing: the incompleteness for financing different types of activities; the complexity resulting from application of different financing mechanisms and complex rules for financing of combined nursing activities; tariffs that insufficiently cover operational costs of workload and time, material cost, the absence vs. availability of family caregivers, time loss in urban traffic.
- Many stakeholders also emphasized the (potential) merits of the current system.

## 5.2.2 Theme 2: Arguments for reforms

## 5.2.2.1 Topic 9: The extent of required change: radical or fundamental?

Reflecting on the reform process to implement new financing mechanisms, two dominant opinions emerged: the good parts of the current system should be kept and incremental changes would be made for solving the critiques on the system. The latter participants agreed that the financing system should be a mixed system, partly fee-for-service and partly lump sum payments.

#### 5.2.2.2 Topic 10: Principles of financing

Practically all stakeholders agreed on their preference for a mixed system of fee-for-service payments for discrete nursing activities and lump sum payments for patient groups with higher case-mix levels. Some stakeholders expressed their preference to limit fee-for-service financing for simple and well defined care situations, and not to use it for complex and long term care.

Many participants pleaded that financing should take outcome and quality of care into account. It was mentioned that the organisation and collaboration of nurses in nursing practices/services yield merits for quality of nursing care and that therefore the financing mechanisms should take into account the type of organisation of home nurses.

A more flexible financing system of practices of home nurses and differentiation of functions should be implemented. In the context of this discussion, participants mentioned that quite a number of nurses combine a job in a hospital with some limited nursing activity as a self-employed home nurse. It was suggested that low activity levels and the limited availability of the part-time self-employed nurse could affect continuity and coordination of nursing activities.

Several methods for differentiating payments according to the outcome/quality of care were mentioned:

- Quality indicators and outcome parameters should be developed: e.g. patient satisfaction, HbAIc blood levels in diabetic patients.
- The fees were mentioned as a very effective lever to promote the required nursing interventions: fee for unnecessary interventions should be low whereas fees for evidence based interventions should be high.
- The use of an instrument (see further) would support the evaluation of quality of care.

## 5.2.2.3 Topic 11: Develop better control mechanisms

All stakeholders agreed on the need for control procedures, especially with regard to nursing care delivery in the lump sum financing system and share the opinion that current control procedures were suboptimal.

Home nurses requested more opportunities to develop self-control procedures using standardized and feasible instruments, without much administrative efforts. There was disagreement between the representatives from the authorities and the representatives from the sickness funds about which instance should be authorized to perform control of nursing care delivery at home.

Home nurses and participants from sickness funds had different opinions on the existing procedures for sanctions. Anyway, participants from both, self-employed nurses and large organisations of employee nurses, questioned the fact that for several years, the authorities gave little or no feedback on the activity level of home nurses.

#### Key points

- All participants agreed on the principle that the financing system should be a mixed system consisting of fee-for-service payments for specific activities combined with lump sum/case-mix financing.
- Arguments for reforms ranged from requesting a radical change into a complete new financing system to incremental adaptations of the current system, involving the introduction of pay for quality, working out better control mechanisms and clarity about sanctions.
- It was proposed to evolve towards more communication and feedback between the financing agencies and the home nurses on range and content of activities.

#### 5.2.3 Theme 3: Nursing related topics

#### 5.2.3.1 Topic 12: General changes in home nursing

Many participants focused on the shift towards the increasing health care delivery across settings (hospital – home nursing). This movement results in higher demands for complex care delivery, higher competencies and skills of general home nurses and more specialist nurses. Home nurses collaborating in a service for home nursing can easily ask advice from a specialist nurse of the service.

#### 5.2.3.2 Topic 13: Organisational characteristics of providers of nursing care:

As mentioned before, participants accepted that fees should not be differentiated for self-employed nurses and employee-nurses. Many stakeholders argued that a compensation, such as the subsidy for specific costs of services for home nursing, should be given if the collaboration in a service/practice enhances continuity and coordination of nursing care.

## 5.2.3.3 Topic 14: Labour market: attractiveness of home nursing as a profession

The attractiveness of the nursing profession in home care was raised as an aspect to consider when reflecting on financing reforms. Attractiveness of the profession was associated to the autonomy to organise oneself the work and the work hours and the opportunities for high professional care delivery that a home nurse experiences. It was suggested that in recent years self-employed nursing became more attractive (with exception for Brussels) than for employee-nurses who experience major difficulties to recruit employee-nurses.

#### 5.2.3.4 Topic 15: The need for (higher) qualifications

Within the framework of financing reforms it was mentioned that financing should take account for more specialist roles in home nursing. Currently, there are no conditions for home nurses to carry out the specific technical nursing interventions. Participants raised questions about the available expertise of home nurses to carry out specific technical nursing interventions with enough quality. It was also mentioned that training of home nurses in new nursing care techniques should be financed.

## 5.2.3.5 Topic 16: Labour differentiation

On the one hand, there will be less GPs in the future, and nurses will have to take over tasks which are currently carried out by GPs. On the other hand, there are many nursing interventions which are carried out routinely by home nurses and which might be rather easily delegated to care assistants. These evolutions will require adaptations in horizontal and vertical labour differentiation of home nurses. For many participants there seems to be a contradiction between the Royal Decree nr. 78 which allows nurses to perform some nursing interventions without a doctor's prescription and the financing system of home nursing which requires a doctor's prescription for most nursing interventions, except for hygienic nursing care delivery. Mainly self-employed nurses requested that NIHDI should install provisions for an accreditation system and/or social statutory comparable to the medical doctors.

Several participants from home nurses agreed that chronic nursing care delivery including nursing interventions with regard to personal hygiene, should not be underestimated. These basic nursing tasks are often thought upon as routine nursing tasks that can be substituted by lower qualified employees, e.g. care assistants or family aids. However, participants argued that e.g. in frail older people, an adequate assessment of the patient's status and situation is required.

In the discussion on the relationship between home nurses and professional carers, two topics emerged.

First, there was discussion about collaboration/task demarcation between nurses and other care professions (family aids from social services / services for family support/aid). A main theme in the discussion was that an adequate differentiation is needed between health care delivery including hygienic nursing care versus hygienic care by the social service. According to a participant from health authorities, it is the home nurse's professional role and competency to decide between the two systems for delivery of hygienic care. It is considered inadequate that the patient chooses for nursing care delivery for economic reasons (no personal contribution). Home nurses are expected to express leadership and to give feedback and steering/guidance to other disciplines.

Secondly, while discussing on the collaboration with care assistants in pilot studies of NIHDI on the employment of care assistants, it was mentioned that in these pilot projects special legal measures are taken to foresee supervision and opportunities for feedback between home nurses and care assistants.

A change process towards a chronic care delivery model is considered to require several adaptations in the organisation and complementary care delivery of home nursing and other types of health care and social services. Some participants focused on the fact that a shift from a care "delivery" model towards a care "management" model in home nursing would emerge: home nurses will have to adopt other roles of coordination and communication. Therefore, the chronic care model will require optimal differentiation of tasks and functions between nurses, nursing assistants and GPs.

All healthcare workers should provide information to a shared electronic patient record. Use of adequate ICT instruments is a means to reduce the time needed for consultation and coordination with other health care professionals, especially in primary care.

#### Key points

- Stakeholders refer to the fact that the changing content and provision of nursing should be considered when adapting the financing mechanisms:
- Home nursing is confronted with an increased demand for complex care delivery, for more management and coordination tasks and for more specialised nursing tasks;
- Self employed nurses and employee-nurses organisations have different costs structures. These two types of providers have their particular strengths and weaknesses for guaranteeing continuity of care;
- Financing mechanisms should consider labour market issues and attractiveness of home nursing;
- A debate is needed on nursing professional qualifications, continued professional education and the relationship with other professionals: doctors and other care professions.

#### 5.2.4 Theme 4: Assessment and registration instruments

#### 5.2.4.1 Topic 17: General remarks with regard to administrative tasks

Many participants argued that registration of data on both the patient's needs and the nursing care provided is an essential part of actual nurse's roles in home care. This is an essential condition to coordinate care, for communication, delegation, needs assessment, etc. But this obligation should go hand in hand with the development of a well elaborated data registration model.

With regard to the current situation it was criticized that financing does not account (sufficiently) for the work load of data registration, information collection and keeping a nursing record up to date. Punctual reflections were made on the current practice of registering pseudo-codes for lump sum financing: it was accepted as a useful tool but nurses expressed fear for an administrative overload. Some participants are favourable of more investments in ICT applications in order to reduce administrative workload.

## 5.2.4.2 Topic 18: Patient needs and nursing care

Participants expected in general that financing accounts correctly for the patients' need for nursing care. They mentioned several instruments which can be used for determining the need for nursing care.

The patient's nursing record was considered as a powerful tool to document nursing care, especially in patients with the lump sum payments. Mainly nurses argued that it is important that assessment of the need for nursing care should be done by home nurses.

It would not be a good choice (as it was made in the Netherlands) to allow a third external party to perform the assessment and check the patient's eligibility for nursing care.

According to the stakeholders, the current financing system offers little incentives for prevention and rehabilitation nursing and restorative nursing care.

#### 5.2.4.3 Topic 19: Comments on the assessment tools

#### BESADL tool

On the one hand there were negative critiques with regard to the limited validity and reliability of the current ADL evaluation scale in use. The BESADL tool only takes physical dependency into account, not social or other sources of need for nursing care. Persons characterized by the same level of physical dependency may represent very different workloads for home nurses. The ADL instrument is not adapted to assess the physical dependency of children. The use of the instrument does not take sufficiently into account a correction for the presence of assistive devices.

On the other hand the merits of this ADL assessment instrument were highlighted. The instrument is not perfect but it demonstrated validity in differentiating groups of patients according to their need for nursing care. It is a simple instrument that is known by all nurses, it requires little time spending and resources.

#### **Alternatives**

As mentioned before, propositions for an alternative for the Belgian adapted KATZ assessment instrument varied widely. Between all the propositions, some stakeholders expressed their preference for the RAI assessment instrument for home care (RAI-HC). Advantages of RAI were emphasized: it is seen as a complete and adequate assessment and it offers an integrated approach enabling to serve several purposes simultaneously: quality indicators, financing, support for plan of care, outcome measurement, etc ... However, the RAI instrument is considered to be too complex, too difficult, to require too much administrative efforts by home nurses. A new instrument should be simple, easy to understand and interpret.

Participants also requested a shorter screening instrument for detecting those patients who need a full RAI-assessment. It was also mentioned, both by home nurses and by representatives of sickness funds, that if RAI is used only for those patients requiring complex nursing care and/or multidisciplinary consultation, the time and effort which will be required for carrying out the assessment should be reimbursed.

#### Key points

- Registration and assessment tools were considered as an essential part of nurse's role in home care.
- Stakeholders did not agree on the objectives of the use of an assessment instrument: for control of care delivery, case-mix determination and financing, quality indicators, care planning, ...
- Stakeholders reflected on the administrative burden of a comprehensive
  assessment: some considered that such a data collection and information
  gathering was necessary and feasible, others pleaded for a simple instrument.
   Some stakeholders even suggested to develop a new instrument, specific for
  home nursing in Belgium.

#### 5.3 SUMMARY

Four main themes were most prevailing: critics on the current system, arguments for reform, specific nursing related topics, assessment and registration instruments.

Although the main critic on the current system was that a global vision on the organisation and financing system of home nursing was lacking, many stakeholders also emphasized the merits of the current system. Probably, many of the detailed critics might find their origin in this lack of global vision. A good example is the fee for the nursing consultation/assessment that was introduced in 2009. It makes use of a fee-for-service financing principles but from an integrated vision on home nursing it should be seen as an integral part of regular nursing care delivery.

The absence of a dominant global vision on the financing of home nursing might also be the reason why most stakeholders preferred a gradual/incremental change towards new procedures for financing. Stakeholders demonstrated consensus on their preference for a mixed system of fee-for-service and lump sum financing. With regard to chronic care patients, it was expected that the future lump sum payments would be based on a global case-mix index for a practice or a service of home nurses.

Although there were no propositions/statements on control procedures, optimizing control procedures was requested by both, representatives of home nurses and stakeholders from sickness funds.

There were only minor differences between opinions of stakeholders from self-employed nurses and representatives from organisations of employee-nurses. They agreed that fees should not be different for self-employed nurses and employee-nurses. They also agreed on the fact that different cost structures could be taken into account by the financing system.

Recent developments in the nursing profession might require higher levels of specialisation among home nurses, more autonomy and less dependency on GP's prescription on the one hand, and more delegation of nursing care delivery to care assistants and professional carers on the other. These developments towards new nurses' roles and tasks were mentioned, but few propositions were made on how these tasks should be financed in the (near) future.

With regard to registration and assessment instruments, different opinions were mentioned. Although most stakeholders emphasized the importance and urgent implementation of a new instrument, there was no agreement on the objectives of its use: control of care delivery, case-mix determination and financing, quality indicators, care planning, ... The administrative burden of an instrument that would require a lot of data collection, was another source for disagreement between stakeholders: some considered that such a data collection and information gathering was necessary and feasible, others pleaded for a simple instrument than the existing instruments. Some stakeholders even suggested to develop a new instrument, specific for home nursing in Belgium.

Analysis and comparison of the written scores, comments and arguments revealed no major differences with the opinions that stakeholders expressed in the discussions.

The stakeholder discussion revealed on the one hand a demand for fundamental change of the evaluation/assessment instrument, on the other hand a demand for adaptations on (sub)parts of the complex financing system which seem not to function adequately rather than a revolutionary reform of the current Belgian model. Aspects/parts of the financing system which will need adaptations are: control and sanctions, task differentiation, case-mix financing, integrating 'new' nursing interventions, coordination, continuity of care, pay for quality, ...

#### Key points

- The stakeholder discussion revealed a demand for fundamental change of the need assessment instrument, although stakeholders did not agree on the purposes of use of these instruments.
- Stakeholders prefer adaptations on (sub)parts of the complex financing system rather than a revolutionary reform of the current Belgian model.
- Aspects/parts of the financing system which will need adaptations are:
   distinction between health care delivery and social care delivery, control and
   sanctions, task differentiation, case-mix financing, integrating 'new' nursing
   interventions, communication and coordination between nurses and with
   medical specialists and GPs, insufficient nurses' knowledge of the nomenclature
   and the administrative rules to apply them, and continuity of care, pay for
   quality.

## **6 OVERALL DISCUSSION**

#### 6.1 SCOPE AND LIMITATIONS OF THE STUDY

The scope of this study is limited to homecare nursing as it is currently financed at the Belgian federal level through the NIHDI (RIZIV/INAMI). The main objective of this study is to assess to what extent the financing of professional homecare nursing services can/needs to be changed from the current scheme to an alternative financing scheme taking into account the relative patient case-mix. Different data collection approaches were used. First, the Belgian financing system for home nursing is described, mainly based on documents describing the regulations. Second, the financing systems for home nursing in a selection of Western-European countries were compared on a general level. Third, a literature review was performed on scales and instruments that could be used to support case-mix funding in home care and/or nursing. And finally, the opinions of Belgian stakeholders on the current financing regulations were explored by means of stakeholder dialogues.

The approach chosen has particular limitations:

This report uses a rather narrow approach on the concept of home nursing determined by the existing financing framework of home nursing at the federal level in Belgium. In the Belgian context, as comparable to the German situation, the financing of home nursing activities is embedded in financing regulations in which nursing activities are considered as complementing or supporting medical activities. Professional home nursing is organised and financed by the NIHDI. Welfare services such as family support services are organised and financed on a community level. Hospital nursing is organised and financed on a Federal level by the Ministry of Public Health. This division of political competencies and financing regimes makes the debate complex as nursing and care topics play at the crossroad of these domains. On many issues the delineation between home nursing and home care is difficult to make in daily practice, as demonstrate both the stakeholder dialogue on the Belgian situation and the cross-national comparison.

This study did not elaborate on the overlap, complexity and differences between the financing mechanisms on different politic levels in Belgium. A study with a broader scope (in which home nursing is embedded in the broader field of home care, long term care or chronic care) would possibly enable to develop a more overall picture on the vision and position attributed to respectively home care and home nursing in the Belgian health care sector, taking into account nursing care in (post-) acute situations and nursing within the domain of chronic general and specialised care. It is clear though that a discussion on the public financing is de facto also closely related to the debate on the intended organisation of home care and home nursing.

The study uses the perspective of financing of providers. It did not address the question of patients' accessibility and equity. It has to be recognized though, that changes to the reimbursement schemes or changes in the provision of services can have a major impact on equity and accessibility issues for the target populations. The practical conditions of this research (time and resources) did not allow to analyse the (potential) impact of changing financing and organisation regimes for the patient. Due to the hybrid and fragmented financing structure of home nursing, it is difficult to assess the level of copayment because the provision of home nursing is on the borderline with the provision of home care and help. The same or similar activities, sometimes by the same providers, is financed both along the lines of health care and long term care including social care. The financing of home nursing is relative free when it is situated in the health care but it is less so in the long term care regimes. In Germany when the lump sum budgets, allocated according to dependency degree, are exhausted, the financing needs to be topped up with out-of-pocket payments or reliance on social assistance. In the Dutch long term care insurance, there is a co-payment for home nursing dependent on the age, income (of the total household) and living situation. In the UK, public financing of home care is tested.

A methodological difficulty of the study is that the review of scientific articles yielded in just a small number of studies. Most of the information on financing of nursing and the place of home nursing in the health care system is found in grey literature, unpublished reports, policy documents and websites. We did not find any studies in which a formal evaluation of the financing approach leads to a conclusion of the effect or impact of financing mechanisms with regard to home nursing.

The search on evaluation scales was contractually limited to the BESADL-scale, APA-scale, AGGIR, RAI, and SMAF. Only few papers about case-mix funding for home care are found. Moreover, conflict of interests are frequent because the authors who publish are often linked with conception or implementation of the tool assessed. The difficulty to find independent authors and validation research explains why this research area is a field of controversy and debate. The levels of evidence are frequently low, few studies using random samples.

#### Key points

- This report uses a rather narrow approach on the concept of home nursing determined by the existing financing framework of home nursing at the federal level in Belgium. On many issues the delineation between home nursing and home care is difficult to make.
- The study uses the perspective of financing the providers. It did not address the question of patients' accessibility and equity. The economic literature clearly indicates that each financing mechanism has direct and indirect consequences for the patients.
- The search on evaluation scales was limited.

#### 6.2 THE FINANCING OF HOME NURSING

In this section, we use the framework of PEST-analysis to discuss some developments and considerations surrounding the debate on the financing of home nursing. The framework focuses on four dimensions to asses the macro-environment in which policy discussions evolve: political (P), economical (E), Social (S) and Technological (T) factors

#### 6.2.1 Political factors

During the stakeholder discussions, it was often mentioned that a more elaborated vision and perspective on the organisation of Belgian health services in general and home nursing in particular is needed. The lack of a global and integrated vision on the positioning of different health services within the societal developments has a potential negative impact on positioning of home nursing in the health care field. Some of the countries studied (e.g. Germany and the Netherlands) have introduced health insurance reforms (and thus financing) based on a debate of the role of different health service functions within a changing health care field. One of the challenging future issues in Belgian home-nursing will therefore consist of positioning the different functions of care and nursing in an organisational framework. In a Belgian context this will necessary require structured negotiations between the different Ministers at different political levels. It is currently observed that home nursing and family support services are visiting the same patients and families and sometimes offer overlapping activities, while both are financed according to different financing mechanisms. A political reform will require a clear assessment of the evolutions and choices made on the overall priorities in organising health care for a population. For home care and home nursing this will require to consider two major societal shifts. On the one hand, the length of stay reduction in hospitals going hand in hand with transfer of a number of technical and specialised nursing activities and skills between sectors. On the other hand, there are major demographic changes and a growing need for chronic care provision at home.

As a result of a shortening of length-of-stay and more day-care in hospitals, more attention will have to be paid to seamless or integrated care initiatives guaranteeing the continuity of adequate (nursing)- care for patients. But as in Belgium hospital care is organised on a politically different level than home care, the reduced length-of-stay in hospitals cannot be easily connected to formal policy initiatives on the development of new organisational modes (including the financing). This trend towards more need for care in the communities should go hand in hand with a reflection on a transfer of resources from hospitals towards the home or community care sector. At this stage, some disease related initiatives have recently been launched illustrating a disease management approach. There are clear indications though that disease oriented organisation modes (and the financing regimes) should be complemented with "function" oriented approaches (mainly because of the problematic issue of comorbidities and the complexities of care needs).

This implies that a political reflection is needed on the intended role of health services functions within an overall vision health services provision. A clear assessment should be made of the competencies needed to provide services of high quality. For this reason, some countries (e.g. the Netherlands, Germany) have chosen to finance post-acute specialised nursing within the framework of hospital activities, but allowing to contract home nursing providers. The financing schemes are also oriented on the quality of care provided. Other countries (such as France) have not adapted their financing regime for home nursing but introduced management approaches integrating task differentiation within nursing activities between carers and nurses. The recently launched pilot projects of the NIHDI on the employment of care assistants in home nursing test a similar turn. Special legal measures are taken in which nurses get the responsibility (and are financed) for the supervision and support for the care assistants. These initiatives legitimise the nurse as a supervisor of lower qualified personnel. Although these approaches are mainly a reaction to labour market conditions, they should be considered in the broader system perspective of changing roles and functions.

The political intention to revalue primary care is expressed in Belgian documents<sup>2</sup> and Protocol Agreements between federal government and the community governments have already been signed in 2001. The Integrated Services for home care were established in 2003. Recent Decrees from the Flemish Government realized some of the intentions formulated in the Protocol Agreement: the Collaboration Initiatives for primary care.

#### 6.2.2 Economical factors

Economic studies on home nursing in Belgium are scarce. Little is currently known on the cost structure of home nursing. It is thus very difficult to assess objectively to what extent the current financing is covering the real costs of home nursing provision. In the Belgian debate the discussion evolves also on the differences in cost between self-employed and home nursing organisations. However, none of the neighbouring countries studied have a financing mechanism based on the real daily cost of individual providers; they calculate reference tariffs for contract negotiations, use fee for services for technical acts (sometimes corrected for qualification levels), or pay lump sums without differentiating for the type of provider.

The information collected indicates that the current financing of home nursing in Belgium could take into account more cost generating elements for home nursing organisations. It was suggested during stakeholder meetings to compare the home nursing with the financing principles introduced for Belgian nursing homes because of the important role of nurses. These financing principles incorporate many different incentives with the underlying idea to improve quality of care. However, this research did not aim at comparing the relevance, feasibility or impact of financing principles from another sector for the home nursing sector.

An issue closely connected to the financing of the home care sector are labour market issues. The attractiveness of the nursing profession is high on the policy agenda. At this stage, it is unclear on how the labour market of nurses and carers will respond to a growing home nursing sector. In the recent history, many efforts have been paid to improve the attractiveness of the profession and to seek alternatives for the organisation of home care. Moreover, wages have raised, labour conditions have become better, specific measures for reduction of labour time at the end of the career are very innovative, home nurses are loyal to their job<sup>33</sup>. However, there is a delicate balance between the degree of autonomy of home nurses and the need to feel supported in their responsibilities. Workload or time pressure appears as a problem in home care. Workload is mainly associated with non direct patient related aspects of care. The study also indicates that home nurses are convinced that society has an incorrect perception of the home nursing profession compared with the image of hospital nursing. These observations could be important for the attractiveness of the profession.

#### 6.2.3 Social Factors

The ageing of society, the shift in health care provision and the increasing number of chronic patients induce a shift of healthcare needs in the home environment. If the turn is taken towards more home care provision, it will also be required to consider the growing number of individuals living alone. Moreover, the financing mechanisms should be assessed against the background of intended objectives. For chronic patients with a certain degree of dependency the emphasis could be set on self-care support, increasing the abilities of patients and their families, teaching and motivation activities rather than getting support for punctual technical nursing acts. The latter could be more appropriate for post acute care (e.g. as a result of early discharge or specialised nursing acts that can be provided in a home care setting). Moreover, an adapted financing scheme should take into account that people in need of long term home nursing care integrate more the role of self-care and support by informal caregivers. Integration of formal professional care delivery and informal care and mutual reinforcement by professionals and family caregivers are required.

#### 6.2.4 Technological Factors

Technological developments in health care allow to a certain extent "to bring the hospital home". Developments in tele-monitoring, patient support tools, independent living technology are considered as key factors in the future development of home care. Although home care technology has not pervaded the sector yet and most technology at home is still implemented on an experimental basis, it can be expected that the technology will change the provision of nursing, the role of informal or self care and thus the needs of the patients. One of the future challenges in the reflection on home nursing and home care will definitely be to assess to what extent these new technologies will affect on how nursing care and support could be organised and how these developments should be accounted for in the funding of home nursing.

In Belgium, some initiatives were funded on stimulating the use of technology for organisational support processes in nursing (2006 programme on software and the VINCA-project in 2008-2009). It is expected that these technologies will have both an impact on the development or registration and control of care delivery as well as to enhance the communication and sharing of information between home nurses and other professions in primary care and hospitals.

#### Key points

- A political reflection is needed on the intended role of health services functions
  within an overall vision of health services provision. One of the challenging
  issues in Belgian home-care and nursing will require structured negotiations
  between the different Ministers at different political levels.
- Two major societal shifts should be considered. On the one hand, the length of stay reduction in hospitals going hand in hand with transfer of a number of technical and specialised nursing activities and skills between sectors. On the other hand, there are major demographic changes and a growing need for chronic care provision at home.
- Little is currently known on the cost structure of home nursing. It is thus very difficult to assess objectively to what extent the current financing is covering the real costs of home nursing provision.
- An issue closely connected to the financing of the home care sector are labour market issues.
- The financing mechanisms should be assessed against the background of intended objectives. For chronic patients the emphasis could be set on self-care support, increasing the abilities of patients and their families rather than getting support for punctual technical nursing acts. The latter could be more appropriate for post acute care (e.g. as a result of early discharge or specialised nursing acts that can be provided in a home care setting).
- Developments in tele-monitoring, patient support tools, independent living technology are considered as key factors in the future development of home care. One of the future challenges will be to assess to what extent these new technologies will affect on how nursing care and support could be organised and financed

## 6.3 BUILDING BLOCKS OF A FINANCING SYSTEM FOR HOME NURSING

## 6.3.1 A mixed financing model

The financing system for Belgian home nursing responds to the characteristics of a hybrid system. A hybrid system consists of a variety of payment systems which are used simultaneously for financing care in a certain treatment setting<sup>13</sup>. This is in line with the systems found in the neighbouring countries studied where also hybrid systems are installed. Most of our Belgian stakeholders wanted to maintain this hybrid, mixed model, but also agreed on the fact that the current financing system is not well adapted to the changing needs of our healthcare system. Many issues should be dealt with such as:

- In most countries studied a difference is made between acute home care following an acute onset requiring hospital stay and long term care for patients with chronic conditions and high levels of dependency.
- Many countries make the distinction in the way they finance basic nursing and specialised, technical nursing. The former is mostly paid by a global budget based on an assessment of dependency. The latter is mostly paid on a fee-forservice basis.
- Many countries integrate home nursing and home care in one overall approach.
- In general, basic care is mostly given by caregivers with a lower qualification.
   Patient responsibility is taking and specialised care is giving by qualified nurses.
- The correspondence between tariffs and costs.

#### 6.3.2 Financing nursing interventions

According to the typology of Jegers et al. (2002)<sup>13</sup>, a fee-for-service payment system (as the main bulk of the nursing interventions are paid) is a largely variable system as home nurses increase their returns by producing more services. It has two principal benefits: access of care is guaranteed as well as provision of the best care available, at least if tariffs are high enough. Therefore governments should monitor/control that the tariffs for single nursing interventions account for the marginal costs of that intervention. Stakeholders mentioned though that tariffs of basic nursing interventions in the Belgian system, such as hygienic nursing care, wound care and injections, do not account for the workload and the time required to carry out these interventions. Neither do current tariffs account for the relative value of nursing interventions within the total nomenclature.

An important backdrop of a fee-for-service system is the supply-induced effect. Authorities should limit supply induced nursing care provision in order to cap the expenses. Assigning a predefined budget is a powerful tool.

But discussion issues of a different nature rise too. In a fee-for-service system, the nursing activity is reduced to a sum of individual nursing interventions. Moreover, it has been mentioned that the current nomenclature does not include all nursing interventions. The development of the nursing profession has demonstrated that (home) nursing is more than the sum of the separate interventions. It requires to assess the complete home care environment for each patient on self-care skills, cognitive abilities, psychological and social environment.

Based on the insights of nursing theories, some stakeholders of employee nursing organisations argued to limit fee-for-service financing to simple and well-defined nursing interventions, such as an injection, simple wound care, etc., Lump sum financing according to dependency levels could then be used for situations aiming at a more holistic nursing approach.

A particular category is the group of specific technical nursing interventions (nursing interventions for intravenous or sub-cutaneous infusion, parenteral nutrition, epidural anaesthesia, intra-thecal anaesthesia, installation of a permanent catheter or material/needle for medication administration in an implantable medication infusion device). Stakeholders agree that these more specialised technical nursing interventions are rather well financed in the current regulations, although that it lacks insight to what extent the fees cover real costs. Moreover, this part of the fee for service financing leads to questions about cherry-picking (see infra).

A debate of a different nature is the extent to which hospitals and home nursing providers can work in a complementary way in the home environment of a patient. The international comparison (e.g. France, The Netherlands, UK) learns that the financing system for highly specialized nursing care is partly embedded in the model of hospital financing rather than in the modalities of home nursing. Hospitals are allowed to perform or outsource these activities (if they want) to home nurses, but remain responsible for the quality. This decision is embedded in a thorough discussion on the notions of post acute and specialised care, on the changing roles of health providers, and is to a large extent also an issue of acceptance of which actor operates on a particular sector of the "market".

## 6.3.3 Financing per number of patients

The current Belgian financing system is not using a capitation financing mechanism. Neither is it advocated by Belgian home nursing stakeholders. In a capitation system, periodical lump sum payments are made (usually annual) per patient under the supervision of the nurses during a certain period (usually a year). This payment is done irrespective of the number of performed activities and contacts<sup>13</sup> and when capitation was mentioned in the stakeholders' discussion there was no advocate for it.

#### 6.3.4 Financing according to patient needs

The current Belgian financing approach holds partly a per diem lump sum financing. It is a variable financing system on a prospective basis 13,58. The price, independent of the real costs, is determined ex ante. This financing model gives incentives to providers to reduce costs per patient-day, while it challenges the policy makers to take accompanying measures to guarantee accessibility, quality and affordability for patients. It requires a monitoring of activities in order to prevent that providers would economise on the volume and type of appropriate services per unit of reimbursement (the patient-day). In the current Belgian per diem lump sum payment system, minimal visit rates have been defined. Control procedures were introduced. Administrative control procedures are based on an analysis of electronic billing data (the average number of daily visits per home nurse per patient per dependency category). Complementary to these administrative tests, control visits in samples of patients under lump sum financing are performed to verify whether the administrative data are valid. Concerns rise on the different meanings given to the needs of patients: home nurses focus on care relationship and assess the needs from that perspective, while NIHDI control agents focus solely on patients' functional competence. Stakeholders urge to improve the communication on these two perspectives to improve both the control procedures and the quality of care.

#### 6.3.4.1 Case mix financing

The need of the patient for nursing care is generally put forward as a key element for developing adequate financing. Stakeholders seem to agree to organise the future financing along the lines of a case-mix financing model. The general principle is that a provider receives a global financing for a period of time, based on the weighted need for nursing care (including complexity and intensity) of the patients served during that period of time.

The definition of case-mix is different when it is used in an acute relocated hospital care context or chronic long-term care context.

In the relocated acute context, case-mix refers to the diagnosis related groups (DRG) tools used in the hospital setting. This is the case in France (groupes homogènes des maladies (GHM) and groupes homogènes de séjour (GHS)), The Netherlands (DBC) and the UK (HRG) where the acute "hospital at home" care is included in the overall tariff per group. In most of these systems the tariff can be unbundled to allow home nurses to participate in the care to these patients. In France, the tariff is degressive according to the time after discharge. They are adjusted for differences in level of dependency using the Karnofsky-index.

In the long term care setting, case-mix refers to groups that are evaluating the level of dependency or morbidity in order to avoid risk selection (e.g. Germany: morbid-RSA).

The literature search on dependency measurement tools did not provide useful solution for funding home nursing. The most appropriate case-mix tool has to minimally induce cost variability between patients within the same dependency category, meaning that they will consume the same amount of resources. According to the literature, a perfect case-mix tool does not exist for financing purposes. The validity and reliability of the currently used ADL assessment instruments appear to be too weak to play a pivotal role to differentiate patients to be financed under a fee-for-service or in the daily lump sum regulation.

- There is very little scientific literature on the Belgian Katz adapted scale. It
  only assesses dependency for ADL and is not recognized to be a tool for care
  planning. There is no research about the link between the scale and the
  funding of home nursing.
- There is little scientific literature on the APA scale. It is not recognized as a tool for care planning. Its weak content validity does not allow using this scale for funding home nursing.

- RAI-HC is currently tested in Belgium by the FPS Public Health with the collaboration of some nursing home facilities and home care agencies. RAI seems to be the more complete method to assess the geriatric problems and is recognized as a complete tool for care planning at home. The derived RUG-III explains more than 38% of the variance of the costs. However, we did not find any method allowing a case-mix funding calculation based on RUG-III/HC for home care. Moreover the methodology used to obtain the different RUGs could be subject to further discussions especially for supplier induced effects: nurses could be encouraged to produce more care than needed in order to classify the patient in a higher category of payment. The correlation between the RUGs-III and the care costs are quite low. Higher values should be preferable for funding home care.
- The SMAF was never tested in Belgium. The most interesting development regarding the ISO-SMAF seems to be the link between the ISO-SMAF profiles and the theoretical costs for required time of: nursing care, personal care and support services. The ISO-SMAF profiles take also in account the IADL dependency and is potentially useful for Integrated Home Care Services (IHCS).
- There is very little scientific evidence about AGGIR The AGGIR scale correlates well with the ISO-SMAF It seems theoretically possible to create a case-mix funding for home care with the AGGIR scale.

A particular question is how to take into account the part of the intervention covered by the family and informal caregivers. There is a lack of knowledge and expertise in this area in Belgium.

In the stakeholders' discussions, there were mixed opinions on the use of the alternative assessment instruments (SMAF, RAI, ...) to the BESADL especially since these instruments are expected to serve different purposes at the same time. These mixed purposes generally lead to a debate on usability, validity and reliability issues with regard to each of these purposes. The choice for an instrument requires a thorough debate and assessment of its utility for the intended purposes. One of the main relevant topics is the administrative burden of data registration and on how this will be handled and integrated in the daily activities both of individual nurses as well as home nursing organisations. It could also be discussed to what extent the same level of detail for registration is needed for patients with different needs. The current pilot experiences with the RAI instrument give indications that such a differentiation might be required to implement a feasible registration, not impacting too much on the core activities of health professionals.

Moreover, other nursing need assessment instruments (such as North-American Nursing Diagnosis system (NANDA), the Home Health Care Classification (HHCC) or the OMAHA system<sup>59-63</sup>) exist that we did not discuss in this report. These tools are generally intended to assess the needs of patients and organise nursing care<sup>64</sup> but not for financing purposes. It has to be reminded though that the RAI instrument was initially developed for clinical and care planning purposes, and was only proposed as a tool for case-mix financing.

Besides patients needs, other patient related variables are considered too: urban area, availability of informal caregivers and supportive devices, home nursing for patients living in nursing homes. A similar adoption is seen in France and the UK where a special rate for metropolitan and rural areas is used. In 2005, a proposal for such a case-mix financing was presented in the Agreement Committee for home nursing<sup>34</sup>. Currently a special fee is already paid for home nursing in rural regions to compensate for longer distances between patients, but there are no additional payments for the city related problems such as traffic jams, parking and safety problems in urban areas. Stakeholders also warned that these problems hold a risk for insufficient future supply of home nursing in urban areas (e.g. Antwerp, Brussels).

#### 6.3.5 Financing and nurses characteristics

In determining a financing system, some characteristics of the nurses such as the qualification, level of expertise and experience could be considered. The discussion needs to consider two basic elements: the roles and functions and the activity level.

#### 6.3.5.1 The roles, functions, competencies of the general nurse in home care

In Belgium, two levels of nurses (bachelor-level (A1) and diploma-level (A2)) comply the EC Directive 2005/36/EC. Moreover, nurses can also obtain a degree on a Master level. These qualification levels have an impact on the wages, which implies that a debate on financing will require a reflection on the prices paid for nursing activities. The financing principles will induce some effects. If nurses are considered as equally competent and price indifferent, there will be an incentive to hire the less costly nurse. If they are paid differently, a discussion will be needed on the criteria used to justify different payments. Moreover, under this latter choice, it is needed to discuss the issue of professional responsibility, quality issues and the resulting organisational problems in allocating tasks to different nursing and care professionals. Because of the increasing complexity and intensity of home nursing and the fact that home nursing work independently without direct supervision from senior nurses or medical doctors, there is a shift within the European professional nursing organisations<sup>65</sup> to recommend a professional bachelor qualification level. This changing role is in line with the most recent International Standard Classification of Occupations (ISCO)<sup>c</sup> as defined by the International Labour organisation in which the description of the role of the nurse has changed a lot. Until 1988, nursing and midwifery were defined as assisting roles to the medical profession. In 2008, nurses and midwives are defined as professionals being full members of the interdisciplinary team. The ISCO-classification also defines a second-level nurse, the nursing associate professionals (ISCO 08.3221) providing care but usually work in support of nursing professionals and medical doctors.

Recent nursing classifications document that the nursing profession is subject to a process of differentiation, at least on the level of professional titles. They generally include propositions to connect the professional title with the activities they can perform. The ICN<sup>66</sup> "Nursing care continuum" identifies 5 competency levels: Nursing support worker (SW), Enrolled, registered or licensed practical nurse (EN), Registered or licensed nurse (RN), Nurse Specialist (NS), Advanced Practice Nurse (APN). Besides the five levels, specific specializations can be distinguished. Examples: a wound care nurse may perform visits for wound care advice; a specialist nurse in diabetes may visit patients for educational sessions. There is a policy issue on how to address the developments on the level of professionals in the financing regimens. It can be expected in the near future to connect nursing activities with required qualifications in the financing system too. It will also require economic simulations to estimate what the impact is of financing modalities that account for differences in qualification level on the budgets for home nursing. Complementary to that, it should imply an assessment of the quality of the care provided.

Labour differentiation is an issue discussed in may countries and affects the debate on financing. There is a general trend to orientate nurses to more technical and specialised care and delegating basic care activities to lower qualified levels. In most countries the responsibility stays with a professional nurse and there is no difference, except of Germany, in the fee according to the qualification of the caretaker delivering the care. Germany is using different tariffs according to qualification level. The lessons learned from the NIHDI pilot initiatives on care assistants (run from 2007 to 2011) should be taken into account. Gosset et al. (2007)<sup>4</sup> make some propositions related to the financing of home nursing to value the role of nurses:

- Adequate payment for more categories of specialised nurses;
- Payments for the time spent in multidisciplinary coordination meetings;
- Financing of intellectual activities;

http://www.ilo.org/public/english/bureau/stat/isco/index.htm, last visited on 30 nov 2009

 Address the shortage of nurses through adequate payment and making the home nursing profession more attractive.

## 6.3.5.2 The activity level in home nursing

The current organisation of home nursing allows that (part-time) employed nurses developed a self employed practice of home nursing. Every nurse in Belgium is entitled to be registered by the NIHDI and perform home nursing even with a minimum activity level. A particular problem was mentioned with regard to nurses who combine their hospital job with a job as part-time self-employed nurse doing some "cherry-picking" of performing some series of interventions to patients at home. This raises some concerns both with regard to the continuity of care and the quality for offering a holistic nursing approach. It could be considered to introduce a minimum level of activity of the home nurses and connect it to the financing regulations. In Germany as well as in France, there is a requirement that nurses in home care should have at least two years (Germany) and three years (France) of experience before they are allowed to practice as a self-employed nurse.

# 6.3.6 Adaptation of the current funding system, the readjustment or the calculation of new tariffs

One of the major critics of the currently used nursing nomenclature in Belgium is that tariffs do not cover the actual costs and that it lacks the use of more objective parameters to adjust the fees. Tariffs reflect the dynamics of a consensus-process rather than objective estimates of covering costs. Moreover, the current nomenclature of nursing interventions is very complex and not sufficiently specific to identify nursing interventions. Billing rules are complex (ex: rules to prevent the combination of nursing interventions) and have inconsistencies (see also chapter 2).

## 6.3.6.1 Techniques to calculate and define tariffs

The main objective of a revision of the nurses' nomenclature is to adjust tariffs in order to avoid patient selection and to have a good correspondence between costs and tariffs. Also adequate reimbursement for patients from the hospital with a need for instruments or material that is not available in the home setting should be taken into account in setting the right tariff <sup>4</sup>.

Foreign initiatives to adapt and modernise medical nomenclatures as in France  $^{67-70}$  and the United States could be inspiring on a methodological level to adapt the home nursing nomenclature.

A first technique, used in France and in The United States is the positioning of medical work of each act compared to other interventions, first within the same specialty (cardiology, pneumology, paediatrics, etc.) then between specialties. The principle is to choose an intervention, which will be the reference for the positioning of all other acts. This is usually a common intervention, not too complex and which varies slightly according to clinical situations. The assessment of the reference intervention is made by experts. The evaluation is based on various criteria such as the length, the technical complexity, the stress and the intellectual effort. Evaluations are conducted during expert meetings, leading ultimately to consensus. Beyond the medical work, the cost of the practice (vehicles, fuel, equipments, compress, etc.) has been also assessed. After this evaluation, the fee is the sum of the medical work and the cost of the practice. The existence of both values allows the adaptation of one element, independently of the other (for example the adaptation of the value reflecting the cost of the practice due for example to higher cost of fuel but no adaptation of the work value).

A second relatively complex technique consists in adjusting tariffs on the basis of actual costs. Cost studies can be conducted in full costing or in direct costing<sup>71</sup>. Cost studies require a cost study in the whole sector or in a sample of home nursing organisations in order to calculate costs of each nursing intervention. This technique requires a good information system providing two types of information: (a) resources consumed and (b) activity produced with these resources.

- Accounting data means computing total expenditure (consumables, salaries, equipment depreciation, etc.) per home nursing provider.
- Activity data include all nursing activities performed for each patient.

Furthermore, an allowance for indirect costs should also be made.

Providing accurate data is currently a problematic issue in Belgian home nursing.

The aim is to allocate costs on activity with cost drivers (for example length of time per act or weight per act) and to obtain a cost per patient based on the consumption of activity. Each patient can afterwards be aggregated according to his diagnosis, his profile of dependency, and so on. This technique is mainly developed in hospitals in Belgium<sup>69,</sup>

Some other practical considerations could be taken along too. The French nomenclature<sup>67-69</sup> describes a procedure avoiding the registration of partial acts. The approach used is well described<sup>73</sup>. All interventions made in the practice are identified and coded. Each intervention is paid taking into account the nursing workload (or medical workload) and the costs per act (cost of the practice). Nursing or medical interventions are classified based on relative values of each act compared to relative values of others in the nomenclature<sup>70</sup>.

## 6.3.7 The organisation

Organisations or services providing home nursing range from independent selfemployed nurses, over smaller groupings of self-employed nurses, over larger home nursing organisations -some with close connections to sickness-funds. The main issues with regard to financing principles are connected to differences between large organisations and self-employed nursing (individuals or small groupings). The cost structures for these different types or organisations are quite different, and a policy discussion is needed to what extent these need have to be considered in the financing principles. The logistic structure and the so-called back-up services of the different types of organisations is an issue that can be included in the debate on providing home nursing and financing for it. These discussions are connected to issues of quality of care. Home nurses need to address issues such as 7/24 continuity of care, phone permanence for emergencies and availability of nurses for questions of general practitioners and patients. Questions should also be debated on the competencies for nursing situations requiring particular knowledge. Moreover, it should be discussed on how financing of home nursing can give incentives for continuous education, to deal with basic clinical infrastructure (patient record, electronic agenda and communication) and ICT support.

In the stakeholder discussions, self-employed home nurses criticized that the current subsidies for specific costs of services for home nursing are limited to services consisting of at least 7 full-time-equivalents. Stakeholders argued that smaller practices or associations of self-employed home nurses should also receive financing for organisational measures which contribute to continuity of care.

It was also argued that different costs structures resulting from social tax differences between self-employed and employee-nurses should be taken into account by the financing system.

#### 6.3.8 The results/ performance

The current Belgian financing mechanisms for home nursing do not take account for results or performance. There was quite a consensus that the financing system and accompanying control procedures should give more incentives for quality of care. One of the problems mentioned was the current paradox between the regulation and the societal objectives to develop more independence and autonomy of the individual patients. The current financing schemes have the paradoxical effect that nursing organisations striving for this autonomy are sanctioning themselves financially. Care providers who are able to prevent the deterioration of patient status, who are putting effort in teaching and training to get the patient independent, etc. are expected to obtain financial incentives if they reach these goals. The benefits, pitfalls and feasibility of systems for pay-for-performance has recently been described in a KCE-report<sup>74</sup>.

Many of the principles that are mainly applied to medical doctors can be applied as well to other professionals as home nurses.

#### Key messages

- An important backdrop of a fee-for-service system is the supply-induced effect.
   Moreover, in a fee-for-service system, the nursing activity is reduced to a sum of individual nursing interventions, while (home) nursing is considered more than the sum of the separate interventions.
- Stakeholders agree that more specialised technical nursing interventions are rather well financed in the current Belgian regulations. It lacks insight though to what extent these fees cover real costs.
- Moreover, this part of the fee for service financing leads to questions about cherry-picking of nurses combining their hospital job with a job as part-time self-employed nurse performing only specialized nursing interventions to patients at home. This raises concerns both with regard to the continuity of care and the quality for offering a holistic nursing approach.
- A debate could be considered on the extent to which hospitals and home nursing providers can work in a complementary way in the home environment of a patient for highly specialized nursing care. This can impact on the choice for financing regulations (activities partly funded under hospital regimes).
- The current Belgian financing system is not using a capitation financing mechanism. Neither is it advocated by Belgian home nursing stakeholders.
- A per diem lump sum financing gives incentives to providers to reduce costs per patient-day, while it challenges the policy makers to take accompanying measures to guarantee accessibility, quality and affordability for patients.
- Regarding the current control procedures, concerns rise on the different meanings given to the needs of patients: home nurses focus on care relationship and assess the needs from that perspective, while NIHDI control agents focus on patients functional competence.
- Stakeholders seem to agree to that part of their financing can be based on (better defined) dependency categories or resource utilization groups. There are mixed opinions on the use of the potential alternative assessment instruments based on issues of usability, validity and reliability with regard to the purposes of each of these instruments.
- Characteristics of the nurses such as the qualification, level of expertise and experience could be considered. The financing principles will induce some effects. If nurses are considered as equally competent and price indifferent, there will be an incentive to hire the less costly nurse. If they are paid differently, a discussion will be needed on the criteria used to justify different payments.
- The logistic structure and the so-called back-up services of the different types of home nursing providers (large organisations, self employed) should be considered in the debate. However, this does not imply that financing should be adapted to the specific cost structures of each individual provider.
- There is a current paradox between the financing regulations and the societal objectives to develop more independence and autonomy of the individual patients. The current financing schemes have the paradoxical effect that nursing organisations striving for this autonomy are sanctioning themselves financially.

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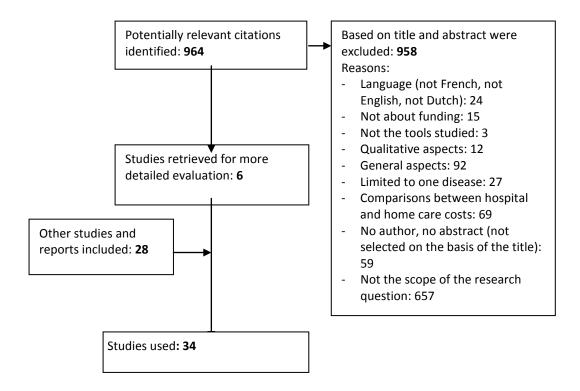
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## 8 APPENDICES

## **APPENDIX I: RESULTS SEARCH STRATEGIES**

Figure 1: Search and selection strategy for relevant literature references on dependency measuremement tools



## APPENDIX 2: THE NOMENCLATURE OF HOME **NURSING ACTIVITIES**

			Code	Coefficient	Honorarium/fee Maximum reimbursement
1.	A.	Basic care provision			
		Ist visit	425014	0.879	€ 3.63
		2nd visit	425036	0.879	€ 3.63
		3rd visit	425051	0.879	€ 3.63
	B.	Technical nursing interventions			
		I. Hygienic care	425110	1.167	€ 4.82
		2. Injection			
		- Intravenous medication injection including heparin lock flush injection via direct intravenous access	423054	0.532	€ 2.20
		- IM, SC or HD injection	423076	0.484	€ 2.00
		- IM, SC or HD injections in multiple injection sites	423091	0.508	€ 2.10
		3. Wound care			
		- follow-up on wound with bio-active wound dressing	424255	0.484	€ 2.00
		- application of ointment	424270	0.484	€ 2.00
		- application of eye drops or eye ointment after surgical treatment (limited to 14 days postoperative care period)	424292	0.484	€ 2.00
		- application of bandages, compression therapy	424314	0.484	€ 2.00
		- simple wound care	424336	1.459	€ 6.03
		- complex wound care	424351	1.599	€ 6.61
		- specific wound care	424373	2.900	€11.98
		- visit of a specialist nurse in a patient with specific wound care	424395	2.800	€ 11.57
		4. Bladder care, bladder irrigation and/or catheterization	425176	0.804	€ 3.32
		5. Vaginal irrigation or airway aspiration	425191	0.730	€ 3.02
		6. Gastro-intestinal care, enema	425213	0.730	€ 3.02
		Medication preparation and administration in chronic psychiatric patient	425736	0.180	€ 0.74
		Day limit	425390	3.825	€ 15.80
II.		Forfaitary honoraria (3)			
		Forfait A	425272	3.825	€ 15.80
		Forfait B	425294	7.371	€ 30.45
		Forfait C	425316	10.083	€ 41.65
III.		Specific technical nursing interventions			

	Intravenous of sub-cutaneous infusion, parenteral nutrition, epidural anesthesia, intrathecal anesthesia	425375	8.934	€ 36.91
	Installation of a permanent catheter or material/needle for medication administration in an implantable medication infusion device.	423113	8.934	€ 36.91
IV.	Nursing care in palliative patients			
	Lump sum level A for nursing interventions in patient with palliative status FPA	427055	10.887	€ 44.98
	Lump sum level B for nursing interventions in patient with palliative status FPB	427033	11.750	€ 48.54
	Lump sum financing level C for nursing interventions in patient with palliative status FPC	427011	14.422	€ 59.58
	Lump sum PP	427173	10.887	€ 44.98
٧.	Supplement palliative honorarium PN	427070	7.062	€ 29.17
VI.	Forfaitary honoraria for nursing interventions in diabetic patients			
	Creation of a specific nursing file for a patient with diabetes	423135	7.001	€ 28.92
	Individual education towards self-management	423150	21.002	€ 86.76
	Attendance of a nurse in an education session towards self-management	423172	8.401	€ 34.71
	Individual education towards insight	423194	7.001	€ 28.92
	Follow-up visit after an education towards self- management	423216	2.800	€ 11.57
	Follow-up of a patient who did not perform self-management of his diabetes.	423231	0.070	€ 0.29
	Extra displacement costs	418913	0.546	€ 2.26

The payments of basic care provision (first, second and third visit), the forfaitary payments and the day-limit payment include a reimbursement of travelling expenses of 0.224 W. 25% of this reimbursement is part of the patient's personal contribution.

Comment: For each care activity, the maximum daily amount of reimbursement is determined using its specific W-value. On January 1st, 2009, the value of W equals 4.13113.

## APPENDIX 3: COMPARISON BETWEEN LEGAL **NURSING ACTIVITIES AND THE NOMENCLATURE**

B-labeled nursing interventions	BI/B2	Nomenclature code and label
I.I Respiratory care		
Airway aspiration and airway drainage		425191: airway aspiration
Nursing interventions and follow-up for artificial airway	ВІ	1
Use, manipulation and use of device for assisted/artificial		
respiration	ВІ	1
Cardiopulmonairy resuscitation with non-invasive means	ВІ	1
Oxygen administration	ВІ	1
Use and follow-up of thorax drainage system	B2	1
Cardiopulmonary resuscitation with invasive means	B2	1
Blood letting	B2	1
1.2 Blood circulation		
Peripheral intra-venous catheterization, blood sampling and intra-venous catheterization with isotonic solution	ВІ	425375
Installation of a permanent catheter or material/needle for medication administration in an implantable medication infusion device.	ВІ	423113
Appplication of bandages, compression therapy for prevention or cure of venous illness	B2	424314
Preparation, administration and supervison on intravenous		
infusion and transfusion	B2	425375
Use and supervision on devices for extra-corporal circulation Gebruik van en toezicht op toestellen voor extracorporele circulatie en contrapulsatie	B2	1
To remove arterial and deep venous catheters	B2	1
Sampling blood and derivatives for transfusion	B2	1
1.3 Digestive system		
Manual removal of faeces	ВІ	425213
Preparation, administration and supervision on :		
- enema	B2	425213
- gastric intubation and suction	B2	1
Removal and replacement after fistulisation of a percutaneous gastric catheter with balloon	B2	425213
1.4 Urinary and genital system		
Vaginal irrigation	ВІ	425191
Aseptic vulva care	ВІ	425191
Preparation, administration and supervision on:		
- bladder catheterization	B2	425176
- bladder instillation	B2	425176
- drainage of the urinary tractus	B2	1
Removal and replacement after fistulisation of a supra-pubis		
percutaneous suprapubic catheter with balloon		425176 (verwijdering: 424351)
1.5 Skin and senses		
Preparation, administration and supervision on:		
	ь.	424255, 424270, 424336, 424351,
- wound care	BI	424373
- care of stoma, wound with drain	ВІ	424351
- removal of objects from the eyes	ВІ	
,		

Preparation, administration and supervision on:		
- removal of cutaneous sutures, drains and catheters	B2	424351
Irrigation of nose, eyes and ears		1
Application of warmth- en cold therapy	B2	, , , , , , , , , , , , , , , , , , ,
- therapeutic bath	B2	1
Removal of epidural catheter	B2	1
Application of therapeutic light (UV, infra-red)	B2	1
,		1
Ventouses, maggots	B2	<i>1</i>
I.6 Metabolism		
Preparation, administration and supervision on:		,
- haemodialysis	B2	/
- haemoperfusion	B2	1
- plasmaforesis	B2	1
- peritoneal dialysis	B2	1
Maintenance of the fluids balance	B2	1
1.7 Administration of medication		
Preparation and administration by the following ways:		
- oral (inclusive inhalation)	B2	1
- rectal	B2	1
- vaginal	B2	1
- subcutaneous	B2	423076, 425375
- intramuscular	B2	423076
	B2	423054, 423113
- intravenous	B2	/
- airways		<u>'</u>
- hypodermoclysis	B2	425375
- gastro-intestinal catheter	B2	/
- drain	B2	1
- eye drops	B2	424292
- ear drops	B2	1
- percutaneous	B2	423076
Preparation and administration of a medication		
maintenance dose via an catheter inserted by a doctor:		
epidural, inthratecal, intraventicular, or in the plexus, for	D2	425275
obtaining long-term analgesia	B2	425375
I.8 Special techniques		
Nursing care and supervision in premature babies using an incubator	ВІ	/
Supervision and preparation on sterilisation of materials and		
the sterilization process	ВІ	1
Manipulation of radioactive products	ВІ	1
Removal of plasters	B2	1
Drainage van intracerebral liquid via a ventrikel drain with		
permanent control of the intracranial pressure	B2	1
Formation consists of the management processing		· ·
And the state of t		
Application of immobilization of laesions, after manipulation	B2	
by a doctor, such as plastering	DZ	/
2 Administration of food and liquids	D.	425212
Enteral liquid and nutrition	ВІ	425213
Parenteral nutrition	B2	425375
3 Mobility		
Application of functional positioning of the patient using		
technical devices and supervision.	ВІ	

4 Hygien		
Specific hygienic care in preparation of medical examination		
or treatment		1
Hygienic care in patients with ADL dysfunction	ВІ	425110
5 Fysical protection		
Transport of patients requiring permanent supervision	ВІ	1
Measures for prevention or physical laesions: physical restraints, isolation, supervision		1
Measures for prevention of infections	ВІ	1
Measures for prevention of pressure ulcers	ВІ	1
6 Nursing activities with regard to the medical diagnosis and treatment		
Measurement of parameters of different biological functions	ВІ	1
Preparation and assistance in invasive medical intervention		
for diagnosis	B2	1
Using devices for observation of different functions		1
Sampling and collection of secretions en excretions		1
Blood sampling		
- by venous and capillar punction	B2	1
- by an arterial catheter which is in place	B2	1
Carrying out and reading out cutaneous and intradermo tests	B2	1
7. Assistance in medical treatments		
Management of surgical equipment and equipment for anaesthesia	ВІ	1
Preparation of the patient for anaesthesia and surgical interventions	ВІ	1
Participation, assistance and supervision during anaesthesia		1
Preparation, assistance and instrumentation during medical and surgical interventions	B2	1

## **APPENDIX 4: CROSS-NATIONAL COMPARISON**

#### **FRANCE**

#### Introduction

The French health care system is based on a social insurance model in which contributions are based on income. All citizens and legal foreign residents are covered. In addition, 90% of the population subscribes to supplementary health insurance to cover other benefits not covered under NHI.

Responsibilities are divided between the state (the parliament, the government and various ministries), the statutory health insurance funds and, after the reforms of 1996, regional and departmental authorities (DRASS [Regional health and social affairs services] and DDASS [Health and social affairs services at the department level]). The Social Security Funding Act of 2000 gave the state responsibility for the whole hospital sector, including private for-profit hospitals that previously were regulated by the insurance funds<sup>75</sup>. The Ministry of health, among other tasks, divides the budgets over different health care sectors (and if hospitals are concerned over regions).

The health insurance schemes are under the supervision of the Social Security Directorate of the Ministry of Social Security. It has the responsibility for the financial and operational management of health insurance too.

The health system is dominated by solo-based, fee-for-service private practices for ambulatory care and public hospitals for acute institutional care. Patients are free to consult each level of care and be reimbursed under NHI<sup>76</sup>.

#### Insurance framework

Three main health insurance schemes provide a uniform package of benefits: the general health insurance scheme (Régime Général), the agricultural scheme (Mutuelle Sociale Agricole, MSA) and the national insurance fund for self-employed non-agricultural workers (Régime Social des Indépendants, RSI). In addition, there remain several insurance systems for some professional groups who already had insurance coverage in 1945, including civil servants, mariners, miners, railway-workers, and employees of the national bank<sup>75</sup>.

In 2000 the Universal Health Coverage Act (Couverture Maladie Universelle, CMU) was introduced, opening up the right to statutory health insurance coverage on the basis of legal residence in France and for persons below a certain income level<sup>75</sup>.

Reimbursement is regulated through uniform rates. The financing is supported by employers, employee contributions, and personal income taxes.

Major reforms were adopted in 2004: the Public Health Policy Act and the Health Insurance Reform Act, followed in 2005 by new agreements between the national health insurance funds and medical trade unions on rules governing private practice. The Public Health Policy and Health Insurance Reform Act insist on the role of the state and parliament in priority setting in the health sector. They give more power to local and/or dedicated structures for implementation. The Health Insurance Reform Act also renewed the governance of national health insurance by reinforcing still further the position of the government in national insurance fund management. A new branch (the fifth) of the social security system was created in 2005 to provide support to people living with disabilities<sup>75</sup>.

The three main insurance funds (Régime Général, MSA and RSI) are federated in a National Union of Health Insurance Funds (Union Nationale des Caisses d'Assurance Maladie, UNCAM). This new federation has become the sole representative of the insured in negotiations with the state and health care providers. In order to regulate ambulatory health care expenditure, the director-general of UNCAM now has more power than the health insurance funds had previously, to negotiate with the doctors' unions and other professionals in private practice.

The reforms imply that health insurance funds became responsible for defining the package of care to be covered (for procedures performed by health care professionals). They get support from High Authority of Health (Haute Autorité de Santé, HAS), which is in charge of the scientific evaluation of diagnostic and therapeutic procedures and the development of clinical guidelines.

Health insurance funds define levels of co-payment abut also became responsible for meeting the financial objectives for ambulatory care expenditure. They are assumed to have the capacity and tools to control their health care costs and stay within the limits of the national target/ceiling set by parliament<sup>75</sup>.

#### Home nursing providers

### The nursing profession: qualification levels

Admission to schools of nursing is subject to possession of the baccalaureate or final secondary school diploma. All candidates have to take an entrance exam organised by the School's of Nursing (IFSI). Numbers are controlled. The training level is considered to be higher secondary level.

All practicing nurses in France must have a State diploma approved by the Ministry of Health. This diploma is obtained after three years of study combining nursing school coursework and in-hospital placements. Three years of practice in the hospital environment are required prior to practicing in the private sector.

France recognizes three specialisations in nursing, the paediatric nurse (puéricultrice), the anaesthetic nurse (infirmier anesthésiste) and the operating theatre nurse (infirmier de bloc opératoire). A nurse with at least five years professional experience can undertake training to become a nurse manager or lecturer.

France is currently in the preparatory stage for implementing the three-cycle "Bologna" higher education system (bachelor's, master's and doctorate). Nursing education is essentially a vocational three-year diploma. However, pilot projects have been launched in 2005 to develop the function of advanced practice nurses in response to the growing incidence of chronic illnesses (especially diabetes and cardiovascular diseases), and expected shortage of health care professionals. The Law has been adapted to authorize drug prescriptions by nurses. Evaluation of these experiments is currently realized. Ten new experiments look at the delegation of the follow-up of chronic patients to non-medical practitioners<sup>77</sup>.

France does not have a tariff setting depending on the qualification level of nurses, although tariffs are different for self-employed or employed nurses.

#### Providers of home nursing

In France the distinction between curative and rehabilitative home care does not really exist. The distinction is made between hospital at home (HAD, hospitalisation à domicile) which covers more or less complex/acute medical services which could/should be provided at a hospital but can be transferred to home with some medical co-ordination; and ambulatory nursing care provided at home (SSIAD, service et soins infirmiers à domicile) which consist of less complex medical services.

Moreover, independent registered nurses (IDEL: Infirmiers Diplômés d'Etat Libéraux) also provide home nursing services.

Home care ('aide ménagère' and 'aide sociale') are more and more integrated in larger networks of providers of home nursing and care services.

#### Nurses home care services (SSIADs)

The SSIADs mainly take care of dependent (elderly) persons, in order to avoid or delay an hospitalization or an institutionalisation or to support the home back after an hospitalization. In 2002, more than two thirds of patients were older than 80 years, 60% needed help to wash and get dressed, 25% were bedridden. Globally, 45% of patients suffered from psychic dependency. However, legal texts do not restrict beneficiaries of these services to old people.

d

Their scope of activity is enlarged to handicapped persons and chronic patients. Between 1980 and 2008, the number of places covered by the health insurance increased from 3 500 to 90 000. However, the objective is to obtain a park of 232 000 places in 2025, by creating 6 000 places per year to 2010, and 7 000 additional places per year since 2010.

Many SSIADs combine nursing care with home care and home help (domestic care and meals on wheels). Home care provided by professionals are submitted to a medical prescription and are covered by the health insurance<sup>36</sup>. Two thirds of available places are managed by private organisations or not-for-profit organisations. More than 30% of available places are managed by public hospitals, municipalities or (medico-)social institutions.

The minimum level of personnel defined by SSIADs is composed of 4 nurses and 8 nursing aids for 60 persons, i.e. I carer for 5 patients.<sup>d</sup> To guarantee the 24/24 hours and 7/7 days service, the SSIADs can contract with independent nurses (IDEL). More than 80% of personnel in the SSIADs are nursing aides (aide-soignantes) and cover 80% of all patients visits. They provide the basic care and support for the essential ADL, under the responsibility of the nurse. Salaried nurses essentially provide coordination and administrative tasks. For example, they organise evaluation visits to determine the organisation of care and the follow-up. They also organise the work of the other carers (nursing aids, psychological aids) and the contact with other professionals. Independent nurses (IDEL), paid fee-for-service, are recruited on a regular basis or time to time. They are competent for technical medical acts, for which only nurses are authorised to provide. These nurses covered 13% of all patients visits<sup>36</sup>.

Since the mid-'80s, the percentage of nurses' activities of personal care has risen rapidly compared to technical and clinical oriented tasks. This can be partly explained by an increase in the number of disabled patients but the fee-for-service remuneration scheme is supposed to have an effect too. Some abuses are even suspected. In an effort to refocus nurses' activity on the provision of clinical care a nursing care plan "Démarche de soins infirmier" has been introduced<sup>78</sup> to reinforce the self-employed nurse's role in the management and coordination of the care for dependent patients. Once the physician prescribes a DSI, the nurse assesses the patient's health and social needs, defines care objectives, and decides how they should be achieved using a combination of nursing care (including monitoring and prevention), personal and social care. This plan is validated by the physician and subsequently implemented by the nurse. New services provided within the context of a DSI were explicitly included in the nomenclature and are remunerated on a fee-for-service basis. The DSI is also expected to improve the traditionally limited cooperation between the social and health sectors. However, in daily practice, DSI is rarely implemented because of opposition of nurses who refuse the transfer of basic activities to other social professionals or to the family members, and the negative reaction of doctors due to the administrative burden linked to IDEL prescription approval<sup>78</sup>.

#### Independent registered nurses (IDEL)

The group of independent nurses are the most important providers of nursing home care. Independent nurses have the same training level as hospital nurses (BAC+3) but need to have a professional experience of 36 months, full-time equivalent before working as self-employed home nurses<sup>37</sup>.

Independent nurses perform the nursing activity under their own responsibility, following the medical prescription and the order of mission. S/he uses his/her own material and his/her own car. The independent nurse collaborates with nursing aids but has no teaching/coordinating role.

This was adapted to 1 carer for 4.48 persons after the working time reduction to 35 hours.

One third of their activities focuses on technical acts on medical prescription (Nursing Medical Acts or AMI –'acte médical infirmier') and two thirds on nursing care (or AIS 'acte infirmier de soins')<sup>37</sup>. In cities, the delegation of nursing tasks to nursing aids seems more difficult and a lot of independent nurses provide all tasks to old patients (medical and nursing tasks, including basic care). There is an ongoing debate on better focusing their activities, including a possibility of own prescription, and a substitution of their caring activities (AIS) by caring personnel as nursing aids (as is the case in the SSIAD). The French Court of Auditors gives in 2005 the advise of redefining the role and task of independent nurses and especially in relation with this of physicians and caring professions. The underlying issue was to reserve the health insurance financing for technical acts and the dependence allowance for tasks required by the patients' dependency. Another issued concerned the training level of nurses, too specialized to provide basic care.

Independent nurses work often in collaboration with the SSIAD and they are even partly performing activities in the nursing homes for old people (EHPAD – Etablissement d'Hébergement pour Personnes Agées Dépendantes).

#### CSI 'centre des soins infirmiers'

The CSI 'centre des soins infirmiers' are mostly local non-profit organisations which employ nurses, delivering home nursing. They are financed as the IDEL on a fee for service basis.

#### Hospital at home

The hospital at home (HAH) structures aim to provide hospital-level care for patients with serious, acute or chronic illnesses in their own living environment. According to its official definition, HAH provides total, coordinated medical care to patients in their home. Intended as a general, polyvalent care plan, its aim is to shorten, delay or avoid inpatient stays in acute wards or in follow-up or rehabilitation wards whenever an admission into HAH is considered feasible. In 2006, 164 HAH structures offered near 6 700 places functioning (approximately 3 900 in 2000) and produced almost 85 000 stays in France. Almost all are shared out between the public service and the private not-forprofit sector, essentially associations. In 2006, over two million days of hospitalization at home (HAH) were realised in France. Majorities of patients were elderly men and just delivered women. Around 7% of HAH stays ended with the patient dying at home. Patients are referred to HAH to receive one or several types of medical treatments prescribed prior to their admission. Called "component of medical treatment" they are based on the initial diagnosis established, for example, during inpatient hospitalization in medicine, surgery or obstetrics (MSO). Medical follow-up is nevertheless carried out under the supervision of the hospital doctor, in liaison with the coordinating HAH doctor<sup>79</sup>.

HAH is medically prescribed for a limited time period which is extendable in some clinical situations but, sometimes, for an initially unspecified time period. In 90% of cases, a hospital doctor prescribes HAH following inpatient hospitalization, a hospital consultation or after a visit to the hospital emergency service. A private practitioner, notably GPs, can equally prescribe HAH following a consultation or home visit.

HAH positions both as a link in the patient's care pathway and as one of the elements within an organised care network: both upstream and downstream, it operates in coordination with nurses home care services (SSIADs), home care, as well as private medical practitioners operating out of hospital.

Treatments are more complex and intensive in HAH, and the SSIADs are not accredited to provide the total care requirements. Despite its expansion, the HAH offer remains marginal within the health care system. The goal announced by the government is to obtain 15 000 HAH places available by 2010, i.e. create 11 000 new places<sup>79</sup>.

Besides their purely medical needs, the patients' level of dependency (or autonomy) is equally assessed on admission and regularly re-assessed during the course of the stay. It completes the description of the patients' overall health status. Two indicators are used and collected: on the one hand, the scale of activities of daily living (ADL) and, on the other, the Karnofsky index (KI).

## Financing structure

#### Introduction

Out-patient curative care is essentially provided by independent practitioners paid on a fee-for-service basis. The NGAP (Nomenclature Générale des Actes Professionnels) applies to procedures performed by non medical health professionals in private practice (nurses, physiotherapists, speech-therapists, and orthoptists). In this schedule, fees are linked to the production cost of each procedure, including the professional's own earnings.

In the NGAP, the 'value' of each procedure is determined by the multiplication of a coefficient by a key-letter, which is specific to each professional category. For instance, the key-letters for nurses' fees are AIS ( $\[ \in \]$ 2.40) and AMI ( $\[ \in \]$ 2.90). Nurses' procedures are rated between I AMI (e.g. for an intra-muscular injection) and I6 AIS ('home care for a sick person requiring constant observation and regular nursing care, including hygiene care, between 20 pm and 8 am').

Prices are always negotiated at the central / national level, between health insurance funds and the unions of health professionals. In the NGAP framework, there were two types of negotiation:

- first, the negotiation for the quotation of each procedure in the fee schedule;
- second, the negotiation for the national value of the key-letter.

Negotiations for the value of the key-letters take place during the preparation of national agreements which are signed between the representatives of each professional group and health insurance funds every four to five years. The values of the key-letters may change more often but there are no fixed and systematic appointment for that.

Agreements signed with nurses (as with all other healthcare professionals) include an annual target for total expenditure. Tariff increases are granted providing that the target is met. In addition, nurses must respect an individual annual ceiling; otherwise, they must pay back part of their revenue to the health insurance funds.

### Calculation of home care services costs

A national survey of home care services was launched in 2000 (ENHAD 2000), in order to describe the patient profiles demanding home care and to define "homogeneous resource use groups". The homecare tariffs currently in use are calculated from a cost model based on this survey.

The direct medical cost of a "stay" in home care is calculated taking into account all direct medical consumption of patients including medication, nursing care, cost of coordination activities, excluding wages of medical practitioners. Moreover, the cost of a number of expensive drugs (like chemotherapy) and medical care (such as dialysis, radiotherapy, etc.) are not included in the cost calculations.

First, costs are calculated for 19 "care categories" from actual data. Second, the cost of the cheapest care category is identified as "minimum direct medical cost". The "total daily cost" of a patient stay in homecare is estimated by weighting the minimum direct medical cost with a number of variables characterising the type of care. The variables included in the cost estimations are: the main care protocol, the secondary care associated, the physical and mental dependence of the patient (measured by Karnofsky index), and the length of stay (treated as non linear). In addition, a regional/geographical index is used for adjustment. This model allowed to calculate the costs of care for different combinations (of patient dependence, care, LOS, etc).

From about 1200 theoretical cost values, 31 homogenous Groups of Tariffs are established where for each tariff group the cost of providing care would not access  $\pm 10$  for the average tariff set<sup>80</sup>.

#### Financing SSIAD

The financing of the NHCS (SSIADS) is based on a daily fixed price per place taking into account average nursing time required. It is entirely covered by the National Health Insurance Fund (CNAM). The budget is based on the number of "installed" places, which can be different from the number of "authorised" places (the theoretical planned maximum) number. This budget is supposed to cover all expenses of the service, the remuneration of the personnel, the operation costs (local, transport, administration of the service). With this budget, SSIADs can employ salaried nurses and nursing aids, and appeal to independent nurses, paid fee-for-service. The reimbursement rate of nursing care is over 90% for a long period (89.5% for medical acts and 94.5% for nursing acts).

In October 2000, the nurses' fee schedule was changed to introduce the new services provided by the nurses administering care under the PSI (assessment of needs and drafting of a nursing plan, the visits necessary to its implementation, the clinical monitoring visits). In France, authorized procedures are organised into a relative hierarchy and are attributed a coefficient with respect to a unit of measurement, known as a 'key letter'. In this first version, the new procedures were attributed a specific coefficient based on the existing nurses' 'key letters'<sup>78</sup>.

In June 2002, the fee schedule was changed again, and a new 'key letter' was created for the visit during which the nursing care plan is established. This symbolic change is presented by Convergence Infirmière as a first step towards the official recognition of the concept of "nurse's visit" (the existing key letters specifically referred to the technical or personal care provided, but not the more "intellectual" component of the activity). The forms that nurses must fill in were published in October 2002. In the codicil of the National Agreement published in 2003, the DSI is included in the new convention framework and a new incentive (Professional Practice Contract) has been added. In this lump sum financing model a huge part of care activities is done by care personnel instead of nurses.

In a recent study the financing system of the SSIAD is evaluated. The financing system caused substantial problems of either under-provision for dependent persons when the budget of the SSIAD does not allow additional dependent patients, or otherwise deficits for the service. The study proposes a new system based on the cost of the structure on one hand, and the cost of the individual care to be provided ('les coûts terrain'). This cost can be based on dependency, morbidity, need for care by a nurse, availability of informal care and others.

### Financing IDEL

The IDEL is financed on the health insurance means by way of conventions between the sickness funds, the state and the nursing professional organisations. Sickness funds pay fees for services within constrained budgets. Tariffs for fees-for-service are fixed with a key letter. Technical acts are supposed to require 16 minutes of nursing time whereas nursing acts are supposed to require 30 minutes.

Part of the remuneration is also paid for travel costs (both fixed prices and relative prices linked to kilometres),

IDEL working with SSIADS transmit at the end of each month a list of all acts performed per patient, their quote in the nomenclature list, the related tariffs, and the related expenses in order to be paid. The fee for service system leads to a "supplier induced phenomenon" in order to guarantee the income of the professional. It has been observed that in area's with a shortage of home nursing, the majority of activities of IDEL are technical activities.

Chevreul K., Eon Y., Com-Ruelle L., Lelouarne J.- F., Lucier S. Le coût de la prise en charge des patients en SSIAD et ses déterminants : vers quelle tarification ? Séminaires : Mardis de l'IRDES (http://www.irdes.fr/EspaceRecherche/SeminairesHistorique2008.html)

In case of a larger supply (higher density of the professionals), the independent nurses balance their income by increasing the caring activities (AIS)<sup>37</sup>.

#### Financing Hospital at home

Until 2004, home care services were financed from a fixed budget devoted to "home care" in public and some of the private not-for-profit hospitals. This "home care" envelop had been adjusted with yearly negotiations between regional hospital agencies and the providers based on historical costs with taking into account the actual number of days produced, and some of the variations in medical activity. Most private institutions were paid by daily tariffs, but the tariff was not linked to the type of care provided and the actual resource use. There were not many for profit institutions providing home hospital care.

Since January 2004, hospital home care services are paid by "daily tariffs" calculated for 31 homogeneous service groups. The implementation is progressive for the public sector and only 25% of home care services are paid by these "case-mix adjusted daily tariffs" in 2005. All of the home care services provided by private hospitals which were not covered by global budgets are currently funded by these tariffs<sup>80</sup>.

## THE UNITED KINGDOM (ENGLAND)

#### Introduction

The National Health Service (NHS) is the publicly-funded healthcare system in England. The NHS provides the majority of healthcare to anyone normally resident in the United Kingdom, including primary care, in-patient care, long-term healthcare, etc.

The Department of Health (DH), headed by the Secretary of State for Health is responsible for the NHS. Most of the expenditure of The Department of Health is spent on the NHS.

Within the general administrations, England is organised regionally. The DH controls ten Strategic Health Authorities (SHA), which oversee all NHS operations. Each SHA is responsible for enacting the directives and implementing fiscal policy as dictated by the DH at a regional level. SHA have the responsibility of coordinating the strategies of the trusts (providing organisations) in their regions. The 2006 reforms in England restructured the SHAs. The number was reduced from 28 to 10 SHA more closely connected to government office regions<sup>f</sup>.

Various NHS trusts take responsibility for running or commissioning local NHS services. They provide services on behalf of the NHS. In the context of this project, the NHS primary care trusts (PCTs) are the most important. PCTs provide primary care services and commission secondary care services. During these 2006 reforms all Primary Care Trusts (PCTs) outside the London area were restructured. The number of PCTs reduced from 303 to 152, mainly in an effort to increase efficiency.

The NHS and Community Care Act (1990) govern health care and social care. NHS should assess and provide nursing and care for patients based on their needs, requirements and circumstances. The act introduced an *internal market* into the supply of healthcare making the state an 'enabler' rather than a supplier of health and social care provision. The Act states that it is a duty for local authorities to assess people for social care and support. This is to ensure that people who need community care services or other types of support get the services they are entitled to. Patients have their needs and circumstances assessed and the results determine whether or not care or social services will be provided.

The implementation of policy is organised by means of national service frameworks (NSFs) too. These NSF set quality requirements for care based on the best available evidence of which treatments and services work most effectively for patients, and offer strategies and support to help organisations achieve these.

f http://www.opsi.gov.uk/acts/acts2002/ukpga\_20020017\_en\_I#I

The latest years a lot of attention has been paid to integrate the different providers of care. Intermediate care, rehabilitation, rapid response and prevention of admission teams are currently considered to be at the forefront of the Government's modernization agenda. The thinking is that pressure should be removed from hospital admission and, wherever possible, patients should receive care in the community.

#### Insurance framework

The NHS provides public coverage to everyone normally resident in the UK. It is not strictly an insurance system because (a) there are no premiums collected, (b) costs are not charged at the patient level and (c) costs are not pre-paid from a pool.

Private health care develops parallel to the NHS, paid for largely by private insurance, but it is used by less than 8% of the population, and generally as a top-up to NHS services.

## Home nursing providers

#### The nursing profession: qualification levels

The National Health Service is the provider of almost all healthcare in the United Kingdom, and employs the vast majority of UK nurses and midwives. The qualification structure of the UK nurses is very differentiated. The nursing staff is split into two main groups: (a) Non-registered staff (e.g. auxiliary nurses and healthcare assistants and (b) Registered staff . This latter group is split in four levels:

- First level. Nurses make up the bulk of the registered nurses in the UK. They
  were previously known by titles such as RGN (registered general nurse),
  RSCN (registered sick children's nurse), RMN (registered mental nurse),
  RNLD (registered nurse learning disabilities).
- Second level nurse training is no longer provided, however they are still legally able to practice in the United Kingdom as a nurse. Many are now either retired or have undertaken conversion courses to become first level nurses.
- Specialist nurses. These nurses have many years of experience in their field, in addition to extra education and training. Different groups are distinguished:
  - Nurse practitioners carry out care at an advanced practice level including activities at the basic level of physicians. They commonly work in primary care (e.g. GP surgeries) or accident and emergency (A&E) departments.
  - Specialist community public health nurses among this group fall the UK district nurses. District Nurses are senior nurses who manage care within the community, leading teams of community nurses and support workers. Training as a district nurse requires registration as a nurse in the adult branch, with at least five years post-qualifying experience of professional practice. Typically much of their work involves visiting house-bound patients to provide advice and care, for example, palliative care, wound management, catheter and continence care, medication support. They may be trained to assess patient's needs for equipment provision such as mobility and independent living aids, medical equipment such as specialist beds and mattresses, as well as guidance in applying for grants and welfare benefits. Their work involves both follow-up care for recently discharged hospital inpatients and longer term care for chronically ill patients who may be referred by many other services, as well as working collaboratively with general practitioners in preventing unnecessary or avoidable hospital admissions.
  - Clinical nurse specialists nurses undertaking these roles commonly provide clinical leadership and education for the staff nurses working in their department.

- Nurse consultants these nurses are similar in many ways to the clinical nurse specialist, but at a higher level. These practitioners are responsible for clinical education and training of those in their department, and many also have active research and publication activities.
- The qualification levels of the nurses have an impact on the wage distribution (costs for the organisations employing them), but have as such not an impact on the funding and financing mechanism.

#### Provision of nursing care

In England, registered, unregistered nurses and district nurses are mostly employed by NHS Primary Care Trusts. These provide some primary and community services or commission secondary care from independent agencies in a particular geographical area. Primary Care Trusts are responsible to organise enough and accessible services for people within their area. They also became responsible for integrating and coordinating health and social care systems.

## **Financing**

Primary Care Trusts (PCTs) have their own budgets and set their own priorities, within the overriding priorities and budgets set by the relevant Strategic Health Authority they belong to and independtly the Department of Health.

Allocations to PCTs cover Hospital and Community Health Services. The Department of Health allocates revenue resource funding to PCTs on the basis of the relative needs of their populations. The allocations aim to allow PCTs to commission similar levels of health services for populations with similar needs. Revenue allocations to PCTs are informed by a formula known as the "weighted capitation formula". The weighted capitation formula uses a series of age-related and additional needs variables in calculating each PCT's 'unified weighted population'. The PCTs 'unified weighted population' determines whether the PCT requires more or less per capita funding than the English average.

Each PCT receives an annual allotment of money from the Department of Health determined by the number of patients and the characteristics of these patients. PCTs are accountable for remaining within their allotted budget and in achieving the clinical targets set out by the NHS. Allocations are not broken down into separate blocks each of which can only be used for a particular type of service. PCTs have to determine how best to use their resources to meet their local needs and priorities, within national standards and the direction and requirements set out in the Department of Health's Operating Framework for the NHS. As long as PCTs are managing their patients and money appropriately, they have the freedom to use their budget as they see fit. In case PCTs overspend their budget, the SHA will assume tight control of the PCT's spending.

A review of the weighted capitation formula was carried out by an independent committee (ACRA) between 2005 and 2008. Its recommendations form the basis for a new formula used to inform allocations in 2009-10 and 2010-11.

The main elements of the weighted capitation formula are:

- the population base the source used to count relevant PCT populations
- the need formula which accounts for differences in age and health status across PCTs
- the market forces factor (MFF) which accounts for unavoidable geographical differences in the costs of treatment across PCTs.

Separate formula's are used for health and community health care services (with different formula's for separate need formulas for acute services, maternity, mental health, and HIV/AIDS), prescribing budgets and primary care services.

http://www.dh.gov.uk/en/Managingyourorganisation/Financeandplanning/Allocations/index.htm

The NHS uses a model of reference costs<sup>h</sup>. Reference Costs are the average cost to the NHS of providing a defined service in a given financial year. The introduction of reference costs is linked to a Payment by Results way of funding. Community Services are not subject to Payment by Results but District nursing (as a speciality domain) is included in the reference costing. The model of reference costing resulted from the 1997 White Paper 'The New NHS'. Detailed cost information has been collected annually since 1998. Its main purpose is to provide a basis for comparison within (and outside) the NHS between organisations, and down to the level of individual treatments. Underpinned by a national tariff for groups of clinical procedures, NHS organisations are paid for the treatment they provide. The more productive and efficient an NHS Trust is, the more it will benefit from extra resources. Moreover, NHS Trusts are required to publish and benchmark their own costs on the same basis.

A reference cost index (RCI) is calculated showing the average cost of an organisation aggregate activity, compared with the same activity delivered at the national average cost. The index is based on the average for the provider type to allow for meaningful comparison by similar organisations. Providers based in some areas of the country have higher costs due to external market forces, which is taken into account (e.g. London and South East have higher costs for staff, land and/or buildings).

#### THE NETHERLANDS

#### Introduction

The organisation of health care in the Netherlands is going through an important reform process. The policy reforms mainly aim at introducing market elements and competition into the system. The reforms aim at putting the needs and demands of a patient more central, rather than a supply oriented model for particular patient groups or persons with impairments. Formerly, the health care model used was target group oriented, with a main focus on the "supply" side. Based on this arrangement, diverging care systems were developed for separate groups of clients. The introduction of "market principles" is expected to focus more on the demand side (via market mechanisms) as on the transversal provision of care (overlap between care needs of target groups).

Along the lines of these reforms, a professionalization and rationalization of the management principles of home nursing organisations set through, in which procedures, protocols and business process analyses penetrate the organisational modes of providing home care. Apparently these reforms have an important impact on the use and allocation of "human resources": cost-efficiency considerations are at the core of the current management of home care and home nursing.

#### Insurance framework

The Dutch health care and social support insurance is built on three 'pillars':

- The 2006 Health Care (cure) Insurance Act (ZvW) defines the mandatory private health care insurance, covering general practitioners, therapists, medication, hospital care and all the auxiliary needs.
- The Exceptional Medical Expenses Act (AWBZ) insures long-term care. It
  was introduced in 1967 and covers all mandatory public long-term care
  insurance for nursing homes/homes for the elderly, home care and
  institutional care for frail elderly people and those with psychiatric disorders
  or physical disabilities. The scope of the role of AWBZ was however
  redefined in the 2006 reforms.
- The 2007 Social Support Act (WMO) obliges local authorities, supported by national government, to provide services for those in need.

These are supplemented by laws on price controls, accreditation, quality and rights of clients.

Several public authorities have been created to monitor and support the health care model and to ensure that the health care system works effectively. The Health Care Insurance Board (college voor zorgverzekeraars, CVZ)<sup>i</sup> co-ordinates the implementation and funding of the Health care Insurance Act (ZvW) and the Exceptional Medical Expenses Act (AWBZ). The core task of CVZ is to follow up and examine whether the basic package of care provided by the ZvW and AWBZ is accessible and affordable, and whether it provides the care that is necessary. CVZ carries out three main tasks (I) Risk adjustment: dividing the contribution funds among health insurers in such as way that insurers can insure everyone, irrespective of his or her state of health; (2) Care for specific groups: implementing provisions and regulations for citizens in danger of being excluded from the health insurance system; (3) Package management: providing information and advice on the content and composition of the basic health care package.

The quality control is organised through a government inspection agency (Inspectie voor de gezondheidszorg IGZ)<sup>i</sup>. This agency also controls the (para-)medical activities and the qualifications needed to execute the work.

The Dutch care authority (Nederlandse Zorgautoriteit, NZa)<sup>k</sup> supervises the markets of health care and the positions and behaviours (contracting relationships, avoiding monopolies, etc.) of the "market players".

Theoretically, the current system distinguishes between care provided out of the health care budget (funded through health insurance and provided by insurance companies), care (through premiums for long-term care) and support (municipalities) But technically most people in long term situations need different forms of care simultaneously. This makes the system quite complex in daily practice (e.g. money from the AWBZ budget is often used to pay for clients' medical and nursing care as well as for their long-term care because boundaries are difficult to make; personal communication).

#### Health insurance

The Dutch health insurance model introduced since I January 2006 is organised around a private health insurance organisation constrained by government conditions guaranteeing social conditions and protection. The insurance system is operated by private health insurance companies. The insurers are obliged to accept every resident in their area of activity. A system of risk equalisation should facilitate the acceptance obligation for insurers and aims at preventing direct or indirect risk selection.

The financial means for covering the health insurance costs are (a) nominal premiums, (b) income related contributions through taxes on income (both employer and employee and some agencies providing allowances) and, (c) government contributions. The income-related contributions and the additional money of the state are paid to a "fund" (zorgverzekeringsfonds). This fund compensates health insurers for their obligations to accept all persons.

The health insurance comprises a standard package of essential healthcare. The insured pay a nominal premium to the health insurer. The insurer determines the level of the nominal premium, but is obliged to provide the same care to everyone for this premium. The Health Insurance Act also provides for an income-related contribution to be paid by the insured.

Employers contribute by making a compulsory payment towards the income-related insurance contribution of their employees. On top of this standard package people can take supplementary insurance, but at their own expense and choice.

http://www.cvz.nl/resources/corporate2008-eng-sep08\_tcm28-23203.pdf

i <u>http://www.igz.nl/</u>

http://www.nza.nl/site/english more info is to be found in Dutch on http://www.nza.nl/

http://www.minvws.nl/en/themes/health-insurance-system/default.asp http://www.ggzbeleid.nl/pdfzvw/vws\_brochure-ziektekostenverzekering.pdf

Before the health care reforms, people paid membership contribution to the local home nursing organisation, for which they were entitled to receive care (full reimbursement). Since 2004, co-payments were introduced (link with income and a maximum is defined). After the 2006 reforms, only maternity care is falling under the basic compulsory insurance. Patients have to opt for an additional insurance to be reimbursed for home care.

### Exceptional Medical Expenses Actm

The Exceptional Medical Expenses Act (AWBZ) is a national insurance scheme for long-term care. This scheme is intended to provide the insured with chronic and continuous care which involve considerable financial consequences. Generally speaking, everyone who is legally residing in the Netherlands and non-residents who are employed in and therefore liable for payroll tax in the Netherlands are insured.

The AWBZ is carried out by the health care insurers. People who are insured under the AWBZ and have a compulsory *health* insurance are automatically registered for entitlements under this act. Before a person can qualify for care under the AWBZ, the need for care, the type of care and the intensity of care needed is assessed leading to an indication' for care. This 'indication' is issued by an independent organisation. The client then has the choice of receiving his entitlement as care in kind, or in the form of a personal care budget (a combination of the two is also possible).

The entitlements under the AWBZ have been defined in terms of six broadly-defined functions for arranging indicated care:

- Personal care: e.g. help with taking a shower, bed baths, dressing, shaving, skin care, going to the toilet, eating and drinking.
- Nursing: e.g. dressing wounds, giving injections, advising on how to cope with illness, showing clients how to self-inject.
- Supportive guidance: e.g. helping the client organise his/her day and manage his/her life better.
- Activating guidance: e.g. talking to the client to help him modify his behavior when behavioral or psychological problems exist.
- Treatment: e.g. care in connection with an ailment, such as serious absent mindedness.
- Accommodation: e.g. sheltered housing, continuous supervision or admission to an institution.
- The Social Support Act<sup>n</sup>

On I January 2007, the Social Support Act (Wet Maatschappelijke Ondersteuning, Wmo) came into force, making the municipalities responsible for setting up social support. The aim of the Social Support Act is participation of all citizens to all facets of the society. Municipalities must provide a good cohesive system of support for their residents who are not sufficiently able to implement other solutions in certain situations, either on their own or together with others. The Ministry of Health, Welfare and Sport defines the framework in which each municipality can make its own policy, based on the composition and demands of its inhabitants.

The Wmo is a particular amendment to the former AWBZ, delegating the provision and organisation of social support to the municipalities. The Wmo guarantees that all Dutch citizens obtain care and support in cases of protracted illness, invalidity or geriatric diseases. The act encloses the area of well-being or welfare policy as well but is less important to understand the financing principles of home nursing.

http://www.minvws.nl/en/themes/exceptional-medical-expenses-act/default.asp

http://www.minvws.nl/en/themes/social-support-act/default.asp http://www.minvws.nl/includes/dl/openbestand.asp?File=/images/socialsupportact-\_tcm20-171643.pdf

## Home nursing providers

The nursing profession: qualification levels

Care related professions and the educational system distinguishes nurse, carer and helper. The qualification structure of these caring professions is divided into 5 levels. Each level is associated with a level of tasks complexity: level one is the helping auxiliary, level two the helper (helpende), level 3 nursing aid (verzorgende) The qualification levels 4 and 5 give access to the professional title of nursing:

- Qualification level 4, based on a professional training at the high school level (professionele beroepsopleiding)
- Qualification level 5 is a training trajectory at higher professional education (Bachelor level). Nurses with this degree have the competence to coordinate other people involved in the care process and to make nursing diagnoses.

Moreover, the Dutch system differentiates between "nursing specialists" and "specialised nurses". Specialised nursed have obtained certificates in particular nursing specialisations.

Since 2009, the nursing specialist° (also often called nurse practitioner) is a recognised profession after obtaining a degree on university level (Master). A nursing specialist is entitled to have a "treatment relationship" with the patient. The profession has been recognised with the aim to take over some of the medical tasks of the medical profession. Currently 5 nursing specialists are legally recognized (mental health care, preventive care in somatic conditions, intensive care in somatic conditions and chronic care in somatic conditions).

The recognition of the Nurse Practitioner (NP) as a formal professional category was originally meant to answer several human resource problems: a shortage of physicians, the need for continuity and coordination between patients and healthcare workers, and the lack of career possibilities for nurses. National experiments in twelve groups try to develop initiatives on extended roles of nurses: qualified nurse practitioners can visit patients at home, care for patients with chronic conditions (asthma, arterial hypertension, smoking etc.) and manage vaccination programmes. They may not however, make diagnoses or issue prescriptions.

On the level of home nursing, the Dutch model differentiates the home nurses child and elderly care (wijkverpleegkundige ouder en kind zorg (OKZ)) from "other" nurses.

Dutch home nurses have task descriptions that evolved from generalist nursing tasks towards task contents that require a higher level of education and skills (e.g. coordination tasks within nursing and with other professionals, medical-technical nursing tasks). Home care organisations also employ specialized nurses for specialized nursing tasks while basic personal care are increasingly performed by nursing aids and home helps.

The qualification levels of nurses are not considered as an (explicit) financing criterion. The financing of home nursing is the result of contract negotiations (see infra).

## Providers of home nursing

Home nursing is mostly provided by non-government- not for profit local and regional home care organisations, operating under nationally organised umbrella organisations (*kruisverenigingen*). These national organisations provide all forms of care (home care, maternal care, specialised nursing care, home help, etc.)

Community nurses provide services as self-employed or as an employee of a larger organisation. After the most recent reforms, more for-profit organisations and self-employed nurses positioned on the market; the number of self-employed nursed remains relative low.

http://www.verpleegkundigspecialismen.nl/

As part of the innovation policy in health care, the so-called "buurtzorg" initiatives (small scale community nursing initiatives) were launched in 2007. These local teams consist of maximum 10 to 15 community nurses and carers providing generalist nursing and care to people living in their homes. The teams provide care in a local community (wijk)<sup>p</sup>

#### Financing of home nursing

As indicated in the introduction, an important distinction has to be made between what is financed under ZvW on the one hand and AWBZ on the other. The yearly budget for AWBZ and ZvW is defined by the government. For AWBZ, this overall budget is allocated to the local care agencies ("zorgkantoren") that contract care providers for the necessary care activities.

In this recent period, the government has taken numerous cost-containment measures, mainly aiming at increasing the "efficiency" of the sector. The shift has been taken to emphasize "output financing" of the providers, based on a variant of case mix (functiegerichte bekostiging). The main financing mechanism has become contracting for care, based on a set of indications of the patients. The contracting approach does not take into account the qualifications of the nurses and carers as a point of reference. This latter part is a main point of critique in the sector of care provision, as on the one hand a lot of care and nursing is now being substituted to lower qualified personnel and on the other hand that care and nursing is being increasingly organised in "stopwatch model" undermining the care and nursing relationship.

#### General health insurance

The Dutch government introduced Diagnosis Treatment Combinations (DBC) to pay insurers mainly for patient hospitalizations. It is a DRG inspired approach but has some fundamental methodological differences too. One major difference is that DBC are not based on an internationally recognised classification system, but on 24 different systems of diagnosis classification, developed by different specialist medical associations. Another main difference with 'classical DRG-systems' is the episode of care rather than the encounter as a basis of the DBC-product.

Each DBC has a two-component price, one for the hospital, one for the medical specialist (self-employed). Nursing is considered as an element of the hospital price.

The DBC gives an incentive to insurers to decrease the number of hospitalisation days. Unlike most DRG systems, the Dutch DBC system describes the total episode of care delivered in hospitals: so not only the inpatient care but also outpatient and day care. Since I January 2010, so-called transmural or chain care-DBC's for non complex chronic conditions (COPD, diabetes care, stroke, heart failure) are being introduced. This functional model of transmural DBC financing tries to assess the costs of each phase or episode related to a pathology, theoretically regardless of the particular cost-structures of the type of providers (the hospitals, the home care sector, the rehabilitation sector,...)<sup>r</sup>.

The DBC-information offers the necessary information for the contract negotiations between health insurers, the hospitals and self-employed professionals.

http://www.nivel.nl/pdf/Rapport-Buurtzorg-nieuw-en-toch-vertrouwd.pdf

<sup>4 &</sup>lt;a href="http://www.nza.nl/nza/Nieuws/monitor\_extramurale\_awbz/">http://www.nza.nl/nza/Nieuws/monitor\_extramurale\_awbz/</a>

This functional DBC is criticized as it is considered problematic to use for people with co-morbidities

#### Long term care insurance

The financing of AWBZ care is now gradually oriented in terms of case-mix characteristics and contract negotiations<sup>s</sup>. As from January 2010, the aim is to use the case mix approach (zorgzwaartepakketten) for budget allocations, contracting for care and nursing and documenting the case mix profiles of providers.

The nursing needs are expressed as functions and classes (the higher the care needed, the higher the class). Based on this indication, the patient or client can claim care or support. This "class" is expressed as the (average) number of hours or parts of a day of care and support during a week. A class is defined for each AWBZ function. The indication office sets also the period (length) for which a patient can claim care or nursing. Functions and classes are combined in so-called "zorgzwaartepakketten" to set up the budget allocation. The 32 local public agencies (zorgkantoren to take the responsibility "to buy" care and nursing with local providers, and to control the quality of the nursing care. These agencies operate autonomous, but have tight links with local care insurers.

Patients can also apply for personal budgets". A PGB is an individually assigned, personal budget enabling an individual to negotiate himself with providers about the care arrangements he needs. The patient can also choose a mediator or agency to do it for him, or can make a combination of PGB and care organised through the care agencies. The PGB-budget is 25% lower compared to a professional care budget. The patient is not entitled to the unspent part of the cash benefits.

## Hospital displaced nursing (Ziekenhuisverplaatste zorg)

An emerging issue, against the background of health care reforms is the so-called "ziekenhuisverplaatste zorg": care nursing and treatment that is provided after early discharge of a hospital.

For this early discharge tasks are being taken up by so-called "transfer-nurses". These transfer-nurses or liaison function can be financed by the hospitals themselves or through home care organisation, but can also be taken into the process of CIZ. At this stage, it is not entirely clear on how this aspect of nursing and care has to managed financially. Since 2007, this so-called hospital displaced care *ziekenhuisverplaatste zorg* is regulated under the overall ZvW-regulations, as it is considered as part of the curative care. However home nurse organisations criticize this decision as the financing instrument would keep patient too long within the hospital setting, as no particular budget is foreseen for these transfer activities. A temporary solution was developed in 2009 that this type of nursing care could both be financed under ZvW and CIZ-AWBZ and that an intermediate contracting role has to be played by the zorgkantoren.

The 2010 solution urges to explicitly define the nursing activities in direct relation to cure interventions as part of hospital displaced nursing. Indication is needed by a medical specialist who indicates that (specialized) technical nursing is needed in the home care. A "specific" service will be developed by the Nza in order to support the contracting of care. This solution allows that these nursing activities can either be provided (bought) by hospital nurses or by home care organisations.

s <a href="http://www.nza.nl/dossier/Zorgzwaartebekostiging/zorgzwaartebekostiging">http://www.nza.nl/dossier/Zorgzwaartebekostiging/zorgzwaartebekostiging</a>

t <a href="http://www.zn.nl/De\_branche/Zorgkantoren/Werkzaamheden/index.asp">http://www.zn.nl/De\_branche/Zorgkantoren/Werkzaamheden/index.asp</a>

http://www.minvws.nl/dossiers/persoonsgebonden\_budget\_pgb/uitleg-pgb/ and http://www.pgb.cvz.nl/

http://www.minvws.nl/kamerstukken/lz/2009/bekostiging-ziekenhuisverplaatste-zorg-met-ingang-van-2010.asp

w http://www.nza.nl/aanbieder/ziekenhuiszorg/beleidsregels/88211/

#### **GERMANY**

#### Introduction

A special feature of the German Bismarck inspired health care system is the important role played by self-governing bodies of service providers (professions and health care organisations) and health insurance funds. Within a legal framework, the medical self-governing bodies (the national associations of doctors and dentists, the German Hospital Federation and the federal associations of health insurance funds) formulate and implement in detail which services will be provided and under which conditions. Only rather recently nurse associations (and other allied professionals) received formal rights to be consulted in the health care decision-making bodies.

Besides a delegation to nongovernmental corporatist bodies, the health care system is characterized by a decentralized federal organisation with actors organised on the federal as well as the state (Land) level.

The health care system is based on social health insurance and characterized by three co-existing schemes.

- The statutory health insurance covers a vast majority of the population (with mandatory and voluntary membership);
- A smaller part of the population has private health insurance. A smaller group
  of people are insured through private health insurance to fully cover health
  expenditure. Premiums vary with age, sex and medical history. Separate
  premiums have to be paid for spouses and children.
- A very small part of the population is covered by governmental sectorspecific governmental schemes (military, persons on substitution service, police, social welfare and assistance for immigrants seeking asylum).

Since the 1980s, Germany implemented many health care reforms, mainly aiming at providing more efficient and cost-effective health care services. The most distinct changes over the last 10 years are the control of freedom of choice in health care use, improving choice in health insurance, the introduction of long term care insurance and the increase in out-of-pocket payments. Policy makers have recently introduced measures to restrict utilization of services and to provide stronger guidance for patients. Contrary to many countries, German health policy makers are promoting forms of care that reduce choice for patients. The Statutory Health Insurance (SHI) Modernization Act (GMG) of 2004 and the Statutory Health Insurance Competition Strengthening Act (GKV-WSG) of 2007 constitute important turning points. The total number of sickness funds has decreased steadily after the introduction of the Health Care Structure Act of 1993 by merging into single general regional funds per Land.

In 2004, the Federal Joint Committee (G-BA)\* (laid down in Volume Five of the Social Code Book) was established. All medical professional groups and patients are represented in the governing bodies of the G-BA. The G-BA determines the benefit package of the statutory health insurance and issues legally binding directives for health care sectors. The G-BA has also been assigned with a range of responsibilities with respect to quality assurance in the health care system. The G-BA issues directives governing quality assurance in the ambulatory, inpatient and inter-sectoral spheres. All directives issued by the G-BA are submitted for approval to the Federal Ministry of Health (BMG).

The G-BA plays a very important role in ambulatory (outpatient) care too as for reimbursement matters, any new provision of care must obtain a positive assessment (based on evidence-based procedures) in terms of benefit and efficiency before it can be reimbursed by the statutory health insurance funds. The G-BA also issues the directives to safeguard medical service provision within statutory health insurance.

x <u>http://www.g-ba.de/institution/sys/english/</u>

In addition, the regulatory powers of the G-BA encompass recommendations on requirements regarding the content of disease management programs. The aim of these programs is to improve the treatment and the quality of medical provision for chronically ill patients.

The reform of 2006<sup>y</sup> focuses on the structure of health insurance funds, also induced by the fact that employers contributions have been raised. At the same time, the new reform aims to simplify health benefits, provide more choices, increase transparency and create competition among providers.

In 2008, The National Association of Statutory Health Insurance Funds (GKV-spitzenverand) was created as the central coordinating organisation for all statutory health insurance funds. The National Association of Statutory Health Insurance Funds also acts as the National Association of Long-Term Care Funds. Representing the interests of statutory health insurance at federal level, it plays an important role in concluding framework contracts and remuneration agreements in all health care sectors. The contracts concluded apply to all health insurance funds and their associations at sub national level<sup>2</sup>.

The 2006 health care policy reforms culminated in 2009 in the introduction of the health care fund (Gesundheitsfonds) introduced as a new organisation for centrally collecting and distributing the money from social security contributions and taxes to the several health insurance funds. Statutory health insurance funds will receive a flat amount for each insured person. The sickness funds may raise an additional premium to cover excess funds. But the government aims at more competition between the sickness funds.

In relation to home nursing the most important reform was the introduction of the long term care insurance. The health care system developed historically very much as a hospital-centred health care model. Until the introduction of the *Pflegeversicherung* in 1995, home care relied a lot on the role of informal family care, more than professional home care. The strong medically oriented health care model has for a long time hampered a structural development of home nursing and care. Nursing as a profession has mainly developed as an extension of the role of physicians. Home nursing developed as an extension of hospital care.

The 2006 reforms promote integration and cooperation through start-up financing for integrated care contracts within and between together long-term care and non-medical health care professions (such as speech therapists, occupational therapists, etc.). The main objectives of the 2007 reform of the German long-term care system include establishment of local LTC support centres and case managers who help organise and coordinate care; increasing benefits; development of evidence-based care standards and regular quality inspections.

#### Insurance framework

In this part, we focus on Statutory Health Insurance (SHI) and long term care insurance, and pay less attention to the private insurance. About 85% of the population is covered by a basic health insurance plan providing a standard level of coverage. The remainder opt for private health insurance, which frequently offers additional benefits.

## Statutory health insurance<sup>aa</sup>

Statutory health insurance is the major source of financing health care.

The sickness funds are responsible for collecting contributions, purchasing benefits on an in-kind basis and paying providers. Sickness funds collect the contributions directly from the employers or public agencies. Since 2009, money is allocated and redistributed through this Gesundheitsfonds.

y http://www.allhealth.org/BriefingMaterials/BertelsmannStiftung-BigBang-1171.pdf

http://www.gkv-spitzenverband.de/About\_us.gkvnet

aa <a href="http://www.deutsche-sozialversicherung.de/en/health/index.html">http://www.deutsche-sozialversicherung.de/en/health/index.html</a>

All health insurance funds are organised into the National Association of Health Insurance Funds (GKV-Spitzenverband) that participates in negotiations on remuneration and reimbursement framework contracts.

There are seven different types of sickness funds in the SHI-system: regional funds (AOK), company-based sickness funds (BKK), guild funds (IKK), substitute funds, agricultural funds (LKK), the maritime health insurance fund, and the Federal Miner's Insurance Institution (Bundesknappschaft).

Sickness fund membership is mandatory for employees whose gross income does not exceed a certain level. Members and their dependents are entitled to the same benefits. Independent of the status, the amount of contribution paid or the duration of insurance.

The Health Care Structure Act of 1993 gave members the right to choose a sickness fund freely (from 1996) and to change between funds on a yearly basis with three months' notice. All general regional funds and all substitute funds were legally opened to everyone and have to contract with all applicants. Company-based funds and the guild funds may choose to remain closed, but if they open, they too have the obligation to contract with all applicants. Sickness funds are free to set their own contribution rates, but are subject to approval by the responsible state authority.

A risk structure compensation scheme (RSC) bb seeks to equalize differences in expenditures among sickness funds (due to age, sex and disability). The Act to Reform the Risk Structure Compensation Scheme introduced Disease Management Programs (DMPs) as an instrument to reduce risk selection among funds. Upon accreditation, the sickness funds run and coordinate the disease management programs, including the contracting with providers. Four DMP were initially introduced (the first four conditions for DMPs: diabetes mellitus type II, breast cancer, coronary heart disease, and asthma/chronic obstructive lung disease).

In January 2009, the existing risk structure compensation scheme between sickness funds has been expanded to include morbidity-oriented factors<sup>cc</sup>. The measure aims at preventing risk selection, improving care for patients with chronic diseases and equalizing starting points for competition between sickness funds. The introduction of morbidity-oriented risk structure compensation ("morbi-RSA") entails a major reorganisation of financial flows.

The morbi-RSA balances differences in risk-related expenditure:

- For each insured person, sickness funds theoretically receive a uniform flat rate from the health fund. According to the risk structure of the individual insured person, there are deductions or increases.
- The morbi-RSA comprises 80 diseases, split according to different levels of severity in 106 hierarchical morbidity groups for classifying insured persons.
   These 106 morbidity groups, together with 40 age/sex risk groups and 6 groups of people receiving invalidity benefits form the basis for calculating the individual risk structure of each insured person. Additionally, sickness funds receive a flat rate for participants of disease management programs.
- The morbi-RSA follows a prospective model:
  - o All SHI schemes are regulated through the Social Code Book (SGB)
  - Technical nursing acts and competencies are at the core of the health reimbursement approach. Medical referrals are needed to be entitled for reimbursement for nursing activities under the health insurance (see infra).

http://eurpub.oxfordjournals.org/cgi/reprint/11/2/174.pdf http://www.euro.who.int/document/e85472.pdf

http://www.hpm.org/en/Surveys/Bertelsmann\_Stiftung - Germany/13/Morbidity-based\_risk\_structure\_compensation.html

## Statutory long term insurance<sup>dd</sup>

Statutory long-term care insurance (*Pflegeversicherung*) was introduced in 1994. Starting in 1995, all members of statutory sickness funds as well as all people with full-cover private health insurance were declared mandatory members. The introduction of the *Pflegeversicherung* fits into a policy aiming at strengthening home care and providing more support for family caregivers. Improving quality of care, promoting rehabilitation, promoting civic engagement and promoting self-responsibility for financing of long-term care.

The Insured population is entitled for benefits which is expected for at least six months and cannot cope with the everyday life without assistance. The benefits cover four areas: personal hygiene, feeding, mobility and household (shopping, cooking, cleaning, doing the laundry). Medical treatment (including medical technical nursing) is not part of the long-term care insurance but instead of the health insurance system. However the 'Pflegeversicherung' also reimburses some nursing care (e.g. changes of bandages, injections (Insulin), wound treatment, medicines).

A person is entitled to long-term insurance benefits only after he has been insured for at least five years. Entitlement to long term insurance benefits is given when care is expected to be necessary for at least 6 months (hence "long-term" care). Short-term nursing care continues to be funded by the sickness funds or private insurers (if included in the package).

LTCI is financed with contributions of employers and employees, and organised along the lines of the German health insurance. The care insurance funds work under the umbrella of the health insurance funds. This means that each health insurance fund has an affiliated care insurance fund as well as private insurers (as for health) for the higher income group.

The long-term care insurance offers protection against the consequences of dependency and the need for continuing nursing care. It provides either benefits-in-kind or cash benefits used to finance basic personal care and help with household chores. A combination of cash allowance and non-cash benefits is possible. In addition, the following services are provided:

- Free nursing care courses for relatives and volunteer carers,
- Care allowance for carers recruited by the insured person,
- Day and night-time care,
- Nursing aids and technical appliances,
- Subsidies for equipping the insured persons home to facilitate care.

Personal characteristics such as age, income or social status play no role in the assessment or indication of long-term care needs as a basis for the decision on whether to provide benefits or not. The benefits are determined through the degree of need assessed by the medical service of the health insurance fund. Three care categories of need have been established by law establishing the maximum amount of benefits provided through long-term care insurance:

- Care category I = considerable need of care (erheblich Pflegebedürftige), who need help with at least two or more activities of daily living (ADL) in the sphere of personal hygiene, feeding or mobility, at least 90 minutes each day, of which more than 45 minutes should be spent on meeting personal care needs. In addition, they require home help services several times a week. Benefits consist of professional home care that is tied to a maximum, or cash benefits with which a patient can buy his own home care.
- Care category II = severe need of care (Schwerpflegebedürftige): people who need help with ADL-activities at least three times a day and regularly need home help services. The help must be required for at least 3 hours a day, with more than 2 hours being spent on care related tasks

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Care category III = extreme need of care (Schwerstpflegebedürftige), people
with the most acute care needs, who require constant, round-the-clock help
with ADL-activities and regular help with household tasks. Help must be
needed for at least 5 hours a day, of which at least 4 hours must be carerelated tasks. Service benefits (home care or nursing home care) are tied to a
maximum, as well as cash benefits.

Benefits in the statutory long term insurance are available upon application by the patient only.

Home nursing (Häuslichen Krankenpflege also called Behandlungspflege ee) is still considered as delegated tasks by the medical profession (nursing activities are provided on prescription). These acts can be covered through sickness funds, through private insurance or paid out-of pocket. This aspect of home nursing has to be clearly distinguished from other forms of home care and is regulated in different funding mechanisms.

#### Home nursing providers

The nursing profession: qualification levels

Germany distinguishes three major differentiations in nursing. The 1985 law on nursing professions (Gesetz über Berufe in der Krankenpflege and Ausbildungs- und Prüfungsordnung für die Berufe in der Krankenpflege) distinguishes:

- Krankenschwester or -pfleger: nurse generalist with three years of education. Some are specialized as a community nurse (Gemeindekrankenschwester) in one additional year of part-time study that can be entered after working in the profession for at least two years. A specialization into community nursing is not compulsory for working in home nursing; only a minor part of the nurses working in the community is qualified as a Gemeindekrankenschwester
- Krankenpflegehelfer(in); auxiliary nurse, one year of education;
- Altenpfleger(in), specialized in care for the elderly, two or three years of education.

The qualification levels of the nurses have an impact on the financing of technical acts (see infra).

#### Home nursing organisations

In order to understand the rather complex way of financing and provision of home nursing, the distinction between basic nursing (grundpflege) and technical nursing (Behandlungspflege) is important.

In general terms (because clear descriptions are not readily available), one could say that the German system considers grundpflege as nursing activities independent of a pathology or disease that are general to any person, while behandlungspflege is directly connected to disease-related technical acts to support diagnostics and treatment. Besides this, the German system also distinguishes home support (such as cooking shopping cleaning etc). Ambulatory services can provide in basic nursing technical (specialized) nursing and support care.

Most of the organisations providing home care and nursing use labor differentiation over different nursing categories to provide the different services.

Different types of organisations provide home nursing and care: social-profit (e.g. Caritas, Red Cross) or municipal services (kommunale Sozialstationen) and many private Pflegedienste. Sozialstationen (public/municipal or private/social profit) provide home care and home nursing but function as community service centres too. They were initially built to reduce the demand for residential/hospital care. Their activities are thus not limited to nursing only.

ee <u>http://www.g-ba.de/informationen/beschluesse/zur-richtlinie/11/</u>

These Social and home health services are largely provided by independent, charitable and private-commercial bodies (social service providers), partly also by municipal service providers. The state and/or the social benefit funds have a safeguarding mandate here. A typical Sozialstation employs 8 to 10 nurses, either generalists or nurses specialized in care for the elderly. Volunteers and nursing aids, who perform basic nursing procedures and home help services, assist them. The size of the population served by a Sozialstation varies between 12 000 and 50 000 inhabitants, depending on its size and the degree of urbanization.

Care support centres are created within the framework of LTC to pool all care-related, medical and social services and their networking under one roof. Ideally, all actors involved in care, that is sickness/LTC funds, private long-term care insurers, municipalities, social welfare bodies and local long-term care providers should be represented in these centrally located, easy-to-reach centres. Staff for serving people falling under the long-term care and health insurance schemes, of services and facilities for old people and of the social assistance funds coordinate their activities and inform those who are seeking advice and help about the relevant social services. The care support centres must be independent. Additional to these centers the function of case-managers was formally established, aiming at coordination of care around patients.

In order to be accredited, home nursing providers are obliged by law to guarantee to provide nursing services day and night and during the weekends and bank holidays.

Since the SHI Modernization Act 2003, hospitals may treat ambulatory patients with diseases requiring highly specialized treatment on an ongoing basis, and thus provide nursing. Since 2004, hospitals may also provide care in specialties and for patients with certain rare diseases and special forms of disease progression.

Integrated care is recently identified as a separate sector. Integrated care contracts concern mainly disease-centered programs at the interface between acute hospital care and rehabilitative care, involving office-based specialists physiotherapists and family physicians. Sickness funds negotiate selective contracts with single providers or a network of providers, i.e. physicians, hospitals, rehabilitative institutions. All these services need to be accredited within their sector, but may provide services across sectors within the scope of the integrated care contract, e.g. a hospital may provide outpatient services if it has a joint contract with an ambulatory physician.

#### Financing of home nursing

In the outpatient sector, health care services are mainly reimbursed according to a feefor-service system (*Leistungen*) with a fixed budget and floating (point) values. Sickness funds are obliged to collectively contract with all providers of ambulatory care.

Investments are financed through Länder (comparable to the financing model of hospitals) and are not part of social contribution budgets.

Home nursing is financed through two main insurance schemes: statutory health insurance and long term insurance. Complementary money is paid by households and social services.

For the statutory health insurance, nursing care at home is currently included in the benefit package. Within this health insurance framework there is a strict hierarchy of service entitlement, ranging from medical treatment, specialized nursing, basic nursing, and home help as a supplement to nursing. Specialized nursing ("Behandlungspflege") is financed when it is prescribed by the medical profession. The same care, provided by different categories of personnel, implies a different tariff.

'Behandlungspflege' can be combined with 'Grundpflege' or even home help according to patient needs, when prescribed. It is initially aimed at preventing too long stays in hospitals, or should support the medical (GP) home care ('Häusliche Krankenpflege'). In practice, the reimbursement of acute "medical" nursing becomes content-wise very close to the package of care provided in the German Long Term care insurance, be it that the Grundpflege is not always considered necessary. However, the theoretical demarcation between Grundpflege and Behandlungspflege is not that easy to make in daily practice. Although the SHI Restructuring Act mandated the Federal Joint Committee (G-BA) to clarify responsibilities and improve cooperation among the sickness funds, organisational responsibilities and financing obligations are still subject to debate.

People who are (partly) incapable of ADL-activities for at least six months due to physical or mental illness are eligible for care and reimbursement under LTCI. The long term care insurance provides indemnity tariff (fixed amount of cash benefits or in kind) according to the care class each person is grouped into (see supra). Applicants are examined and grouped into one of three categories by the regional medical review boards which are jointly run by all statutory sickness funds. In the LTC, tariffs are defined for bundles of treatment, per activity or per hour or in points (e.g. washing is weighed 410 points, support with eating 250 points, making a meal 150 points). For each point a monetary value is negotiated and contracted.

The dependent person can obtain the necessary services and will be reimbursed by the budget he is attributed according to the score on the dependency scale ('Pflegestufe'). If this budget is insufficient, he has to pay himself the additional expenditures, or he can fall back on social assistance (Sozialhilfe).

# **APPENDIX 5: THE STAKEHOLDERS DIALOGUE**

#### INTRODUCTION

This section reports the results of four stakeholder dialogues on the current financing rules and principles in home nursing in Belgium.

Stakeholders can be defined as those individuals, groups or organisations that have a "stake", a position or interest, in the actions of a government (or other types of actors), because they can be directly or indirectly affected by these policies and actions. Stakeholders are all those who need to be considered in achieving project goals and whose participation and support are crucial to its success<sup>81</sup>. Stakeholders in home nursing can thus be defined as those groups who have an interest and/or are impacted by the theoretical policy options on financing and organising home nursing in Belgium.

A stakeholder dialogue refers to the processes of bringing together different stakeholders (actors) and engaging them in a dialogue and collective learning that can improve innovation, decision-making and action<sup>82</sup>. A stakeholder dialogue is mainly about giving stakeholders a voice, listening to their opinions and arguments on the issue, and to a certain extent develop an interactive group process. It can be considered as a manner of social learning, which means that different societal groups are engaged in a communicative process of understanding problems, conflicts and social dilemmas and creating strategies for improvement.

The following features characterize the stakeholder dialogue<sup>82</sup>:

- 1. it deals with a clearly bounded context and set of problems;
- 2. it involves an explicitly defined and evolving set of stakeholders with common (but often conflicting) interests;
- 3. it works across different sectors;
- 4. it follows an agreed yet dynamic process and time frame;
- 5. it is guided by negotiated and understood rules of interaction;
- 6. it deals consciously with power and conflict among stakeholders and sectors;
- 7. it engages stakeholders in learning processes (not just negotiation over fixed positions);
- 8. it aims for a balance between bottom up and top down approaches;
- 9. it aims to contribute towards effective institutional change;

The aim of this section is to explore views and perspectives of people directly involved in the financing of home nursing in Belgium. The stakeholder dialogue is conceived as a stakeholder consultation on opinions and arguments on issues related to the future financing of home nursing in Belgium. The stakeholder meetings aimed not at consensus recommendations neither at priority setting of issues. The challenge was to facilitate dialogue between people who potentially hold opposing views, with the aim to achieve a common understanding of the issue at stake<sup>83</sup>.

The specific objectives were:

- to assess what the stakeholders perceived as relevant (positive and negative)
  with regard to the current Belgian financing model and to explore whether
  their perceptions matched/confirmed principal findings from our literature
  study. Participants were invited to develop arguments with particular
  attention for their interests.
- to discuss the stakeholders view on the link between organisational nursing models and financing in the particular Belgian context.
- to question the stakeholders' view on instruments and procedures for financing nursing care delivery.

## **METHODS**

#### Selection of stakeholders

The selection of stakeholders was performed by the research team. The selection of the stakeholders seemed rather straightforward as we are operating in a stable context: issues are clearly defined and circumscribed, most of the relevant stakeholders are visible<sup>84</sup>. Three groups of key stakeholders were selected: a first group is involved in the policy negotiations and implementation of financing home nursing (different governmental instances, NIHDI, federal and community adminstrations, sickness funds, ...). Furthermore, two separate groups of stakeholders were identified that deliver nursing care at home: a group of representatives from self-employed nurses and a group of representatives from employee nursing organisations. The sickness funds were also considered to be the representatives of the patients (Table I).

Financing of Home Nursing

The selection process of the stakeholders was performed in two discussion rounds by the research team. For the selection we had to deal with practical constraints too: the discussion groups needed to be relatively small and for pragmatic reasons we organised only two discussion rounds (see infra).

Table I: Invited and participating stakeholders

Type of stakeholder	Number invited	Number	
		responded	
Organisations for self-employed nurses	5	3	
Home nursing organisations	7	5	
Sickness funds	5	3	
Authorities	4	I	
NIHDI	l l	I	
Medical houses	I	0	
Trade unions	I	0	
Integrated services for home care	3	3	

Organisations were contacted by e-mail by the KCE secretariat. Follow-up was done by the research team. All invited organisations received an e-mail defining the objectives of the study and the objectives of the dialogue, an invitation to participate in the stakeholder meeting and a short description (in the two languages) about themes that would be discussed.

Twenty-five stakeholders participated in the stakeholder meetings (see infra): eleven representatives from employee nurses, nine representatives from self-employed nurses, two representatives from authorities, three from sickness funds. Ten representatives were French native speakers, fifteen were Dutch native speakers. Globally, 14 persons participated on both stakeholder sessions while 11 persons participated in only 1 session.

## PROCEDURE OF THE STAKEHOLDERS DIALOGUE

As an input to the stakeholder dialogue, the research team developed propositions. During two consensus meetings with KCE researchers involved in the project and the external research team, short statements/propositions were formulated using insights from the literature review (Table 2). These propositions were conceived as triggers for initiating the discussion on financing matters in home nursing.

#### Table 2: Proposition used in the stakeholders dialogue

Proposition 1: The changing role of home nursing in health care requires that financing mechanisms should change.

Proposition 2: The principles for financing home nursing in Belgium must change FUNDAMENTALLY.

Proposition 3: Financing sufficiently takes into account new nursing activities.

Proposition 4: Financing is sufficiently adapted to allow for differentiation of tasks and functions between different types of nurses (care assistants and qualified nurses).

Proposition 5: The current nomenclature list of nursing interventions is incomplete and insufficiently adapted to the current nursing reality in home care.

Proposition 6: Tariffs for home nursing interventions should be based on real costs of suppliers of home nursing care.

Proposition 7: We need other instruments for care dependency to create opportunities for an appropriate financing system for home nursing.

Proposition 8: Costs and efforts for registration of care dependency are too high for an adaptation of the financing system.

For each proposition the participants received a form with the proposition and some clarification. Each proposition and clarification was read aloud by the moderator, with a short additional explanation. Then the participants were asked to score the proposition on a five point scale (do completely agree, do agree, no opinion, do not agree, do completely not agree). Participants were invited to write down key arguments why they agreed or did not agree with the proposition.

After this part the moderator invited them (one by one) to orally explain their opinion about the proposition. Other participants were invited to discuss these opinions. As soon as the round table was finished and everyone had the chance to develop his/her arguments the moderator moved to the next proposition. The dialogue took about I to I.5 hours per proposition.

The group consultation process was organised in two sessions (May 20 and June 16, 2009). In the first session, propositions I to 4 were discussed. In the second session, propositions 5 to 8. Each session was split into two groups (morning and afternoon group) of 7 to 11 people. Both sessions took 2.5 to 3 hours of discussion. The reason for splitting the groups was threefold. Firstly, the groups were too large to facilitate the group discussions (more than 20 people). Secondly, we wanted to deal with practical agenda issues. Some participants were only able to attend the morning session, others only the afternoon session. Thirdly, for methodological reasons we tried to control for potential "group thinking" effects within groups. We were interested to see if two independent groups would come to similar opinions and arguments about the same propositions.

Based on their availability participants were allocated to one of the sessions. We tried to balance the sessions according to stakeholder characteristics and aimed at language mix as much as possible. Each group was composed heterogeneously, which means that different stakeholders were represented in each group (self-employed and employee nurses, health authorities and sickness funds; French/Dutch).

During the sessions, all participants spoke their own language (Dutch or French) without simultaneous translation. If necessary for one of the participants, the moderator repeated and summarized stakeholders' statements in the other language.

Three researchers (MP, CD, LP) participated in all sessions as observers. They took notes of the discussions. All sessions were audio-taped; this audiotape was used as a backup-tool. Participants were asked to first state their name before they started speaking, which allowed to identify all statements on tape afterwards.

The proposition forms, with the scores and written arguments and opinions, were collected after the stakeholder meeting. To analyse the stakeholder-perspective from which some arguments were given, the participants were asked to put their names on the forms, with the guarantee that nobody would be quoted by name.

One of the researchers (JP) operated as moderator of the group discussions using a predefined scenario, including support questions<sup>85</sup>. One of the researchers (WS) operated as co-moderator for time-keeping, helping the moderator when necessary<sup>85</sup>.

Each session proceeded in the same way:

- I. Introduction and welcome
- 2. Identification of purpose of the study
- 3. Introduction to the method of the study and stakeholder dialogue
- 4. Introduction to group discussion
- 5. Introducing participants' (name, organisation, role)
- 6. Reading first proposition aloud + clarification (JP)
- 7. Scoring the proposition (on paper) + formulating arguments (10')
- 8. One hour group discussion per proposition
- 9. Next proposition...
- 10. Group discussion
- 11. Finalizing and thanking for collaboration

One month elapsed between the two stakeholders' sessions. The first session explored opinions on the statements I to 4. The second session focused on the statements 5 to 8.

The dialogue from the first session was transcribed and analyzed before session 2 in order to detect whether some additional issues should be discussed more in depth during the second stakeholder meeting. Between the first and the second session, a research team meeting (15 June 2009) was organised for an intermediate analysis of the first sessions, checking for saturation or emerging new priority topics. This intermediate analysis did not urge to change or adapt the original propositions 5 to 8. Due to time constraints, two propositions were discussed simultaneously: proposition 3& 4, and proposition 5&6.

## Analysis and reporting of the stakeholder dialogue:

In each stage of the raw data reporting or analysis at least two researchers were involved (MP, CD, LP, WS, ML).

The analysis was carried out as follows:

- 1. Thematic minutes of sessions according to relevant topics (MP, CD, WS, LP). Researcher triangulation of minutes and check for completeness (CD, LP).
- The arguments of the stakeholders were first thematically grouped by two
  researchers into summary raw data reports of the respective meetings. The
  reports were corrected for missing or inaccurate data by two researchers
  per session (MP, CD, LP), who participated as external observers.
- 3. This stage was followed by:
- 4. General Classification of content and control of statements for stakeholder attributes<sup>86, 87</sup>
- 5. Thematic details coding of topics according to their content (MP, CD, LP, ML). All topics were classified in a classification table.

6. Synthesizing, theorizing, re-contextualizing using inter-participant analysis and analysis of categories (ML, LP). Comparative analysis of parallel stakeholder groups.

# THEME I: REMARKS AND COMMENTS ON THE CURRENT FINANCING SYSTEM

#### Topic I: General

Quite a number of participants had comments and remarks that can be labelled as "general" in the sense that hold encompassing issues on health care organisation and policy making.

## Lack of global vision

A recurrent remark was that in the Belgian organisation and financing of health care lacks a global vision on the organisation of health care delivery and, more particularly a vision on how the current financing model can be adapted to deal with the new challenges.

- "Currently modifications to the financing system are not based on a global reflection on the financing system, but there are only small case by case adaptations" (participant 11).
- "A holistic vision is required ... it would be better to adopt a totally new financing system rather than to provide little/partial solutions using separate incremental ad hoc financing mechanisms" (participant 12; session 1).

## Pleas to adapt the financing model to the organisation model

Stakeholders argue that the organisation model of health care (including the role of home nursing) should be well reflected before changing/adapting the financing system. Participants urged to develop a financing system taking into account clearly defined objectives underlying the intended organisation of home nursing: the integration of home nursing with hospital based care delivery and primary care (organisational objective), the promotion of good practice, the promotion of a global view on the patient, etc. ...

• "The financing system should promote the integration of home nursing in the global health care delivery" (participant 11; session 2)

### Remarks on a segmented policy approach of healthcare sectors

Participants criticised the fact that the debate on financing and healthcare organisation is currently fragmented. The policies for different healthcare sectors are too segmented, approached as separate boxes: e.g. if the hospital stays become shorter, there are no provisions (there is no plan) for home nursing to take care of higher numbers and technical complexity of patients in a post-acute stage of recovery. Moreover, the increasing number of chronic conditions to care for within home care put pressure on the complexity and severity of nursing. These aspects of changing severity and complexity are expected to be embedded in a vision on the organisation of primary care and home nursing within a more broad health care perspective.

• "Healthcare is shifting towards a transmural chronic care model requiring other/higher competencies, specialisation, ... the nomenclature of home nursing is poorly adapted to this new model" (participant 2; session I).

We selected quotes illustrating the issue. Often more quotes are made by more participants on the same issue. Of course we translated the original quotes of the participants, trying to stick as close as possible to the original one.

## Topic 2: The Belgian political responsibilities

All participants were aware that the division of political competencies makes the organisation of home care and home nursing quite particular in Belgium: participants felt there is an issue with regard to a clear demarcation of home nursing (federal competency) and family help/social care and services (competency of the communities).

Some participants argued to develop a regulating mechanism for making a clear distinction between health care delivery and social care delivery (financing should follow the organisational model). In the current situation patients can opt for the federal health care approach or for the community care for similar care. In the grey zone between health care and social services, currently financing is an argument for the patient to choose for health care for their basic care.

 "the separate financing mechanisms of social services and home nursing can impact on the patient's choice in need for support and nursing care with regard to personal hygiene" (participant 11; session 2).

With regard to this issue a participant of the health authorities highlighted that the person's status should be the criterion to determine whether someone needs to receive health care services, or social services. If the person cannot be considered as a "patient", hygienic nursing care should be provided by family aides of social services organised under community competencies. The financing system should not be the reason why the patient chooses for hygienic nursing care from the health care system rather than from social care services.

 "The grey zone between social services delivery and nursing care delivery should be clarified. It should not be the patient who chooses the type of service delivery which is most advantageous in financial terms. There should be a regulating mechanism between social services delivery and nursing care delivery" (participant 11; session 2).

### Topic 3: Critiques on the complexity of current financing mechanisms

All participants seemed to agree on the problematic complexity of the current financing mechanisms. Stakeholders disapproved the fact that currently too many different mechanisms and financing sources contribute to the financing of home nursing. They mentioned: the nomenclature, specific costs of services for home nursing, social tax reductions, subsidies for software, specific arrangements with hospitals. The complexity was described a consequence of different policy measures to substitute for the shortcomings within the basic financing mechanism (the nomenclature). Many participants urged for a simple (straightforward) financing mechanism which would be sufficient for home nurses to be profitable/cost effective, without additional "patchwork" systems.

### Topic 4: Critique on current fees

The current fees were generally criticized because they do not cover the real costs of home nursing. There was a consensus between home nurses that fees should account for real costs and include different cost aspects: personnel costs, material costs, travel costs, ... Representatives for health authorities agreed less with this statement.

"Tariffs for daily lump sum payments in patients with significant ADL-dependency are adequate but tariffs of basic nursing interventions in the fee-for-service financing, such as hygienic nursing care, wound care and injections, do not account for the workload and the time which is required to carry out these nursing interventions." (participant 8; session 2)

It was also mentioned that in a society with an increasing number of persons with chronic diseases, the fee-for-service financing mechanism is not adequate if it is used to finance new tasks such as support and counselling, assessment, education of patients, coordination, communication... These types of tasks should be integrated in a more global financing mechanism (or lump sum) of holistic nursing care of patients with a chronic disease and not a separate fees for separate activities.

### Costs and type of nurse

An emerging issue was the difference between self-employed nurses and organisations employing nurses. Most participants agreed that no different fees for self-employed nurses and employee-nurses should be introduced. But complementary to this general statement employee-nurses and self-employed nurses expressed also the opinion that financing should take into account different cost structures of self-employed and employee-nurses.

#### Material cost

With regard to the financing of material costs, nurses and participants from sickness funds formulated different statements: home nurses remarked that the current fees were not corrected for the increased costs of transport, materials used, index, ... As a reaction one participant from a sickness fund suggested to disentangle the aspect of material costs from the fee for a nursing activity. Material and other costs might fluctuate because of other factors (e.g. discount on prices if nurses order large numbers of a material, which is more advantageous for large organisations).

#### Cost and collaboration with hospitals

A particular issue concerned the current practice of nursing assistance in haemodialysis and peritoneal dialysis at home for which specific arrangements have to be made with hospitals. Critiques on these arrangements were twofold: first, financing home nursing delivery via these specific arrangements with hospitals adds to the complexity of the global financing system of home nursing; secondly, it was stated that payments for nurses in home nursing are too low.

#### Cost, workload and use of time

Reflections were also made on the need to take into account workload and use of time in determining fees: one participant mentioned that time registration shows the time spent of nurses for activities for particular categories of patients has increased:

• "in the last 5 years, the average time spent in patients with lump sum level A payments has increased 5 to 10 minutes per visit" (participant 17; session 1).

Stakeholders do not request continuous and detailed time studies, but a correct assessment of the required time to care should be possible/done and connected to the use of a new patient assessment instrument (see below).

### Real cost and informal caregivers

Some participants argued that fees should also take account for the availability and the involvement of the informal caregivers.

 "The absence of an informal caregiver often leads to an increase of the workload and the time needed to carry out the nursing care". (participant 24; session I)

Other aspects requiring time of nurses were mentioned too:

• "Time is needed to care, to listen, to involve the family members in the care delivery" (participant 6; session 3)

#### Urban areas

Some participants raised the particular issue of nursing in urban environments: urban areas lead to complaints about time loss in traffic jams and parking problems

 "In urban areas costs of time loss in traffic jams and searching for parking are immense." (participant 25; session 4)

Moreover labour shortage of nurses in (big) urban centres is seen as a potential challenge.

• "Nurses can choose/select the patients they (want to) care for. Therefore, in urban areas, there is a risk of nurses shortage." (participant 12; session 4)

It was recognised though that in recent legislative propositions, the Agreement Committee has taken into account time spending and material use for calculating the tariff of nursing interventions which will be added to the nomenclature of home nurses.

 "Recently, the Agreement Committee for home nursing considered material costs while preparing new nomenclature for home nursing" (participant 22; session 4).

## Topic 5: Critique on the fee-for-service system

During the discussion many comments were made on the perceived advantages and disadvantages of the fee-for service financing: the comments addressed, on the one hand, content issues with regard to the list of activities, on the other hand, the complexity of the current scheme.

#### Fee-for-service and chronic care

The current fee-for-service system is designed to finance distinct/specific nursing activities. A general critique on this scheme (nomenclature of nursing interventions) is that it does not support a holistic nursing care process. This holistic nursing approach is considered as required in today's chronic care model. The fee for service model holds a risk that nursing care is being reduced to carry out distinct activities without taking into account other aspects of the nursing process: observation, problem detection, definition of objectives, planning, evaluation.

 "It is important that home nurses are allowed to use an assessment instrument for the intake of patients. Their job should not be restricted to carry out the activities which are prescribed by the doctor". (participant I; session 4)

The "nursing consultation", a nursing assessment intervention which was recently added to the nomenclature, was considered as an example of an outdated use of fee-for-service financing, because implementation of the nursing consultation was accompanied by a complex set of rules for defining and limiting the patient group in which it might be used, while in fact such an assessment should be integrated in the nursing care process of all patients receiving long-term nursing care.

 "Recent initiatives/solutions such as the nursing consultation and the multidisciplinary consultation in the Integrated Services for Home Care are subject to complex rules". (participant 12; session 1)

Moreover, for a comparable assessment and interdisciplinary discussion other regulations (e.g. the Integrated Services for Home Care) foresee a fee-for-service payment.

## Completeness of nomenclature

Most participants agreed on the fact that many nursing interventions such as blood sampling, observation and registration of vital signs and parameters, oxygen therapy, aerosol therapy, etc. are lacking in the nomenclature, which means that there are no tariffs and payments for these nursing interventions. These activities sometimes require significant amounts of time.

Remarks were also made on the laws on the content of the nursing profession and the current list of reimbursed activities. Activities identified in the law on nursing in Belgium (Article 21 quinquies of the Royal Decree nr. 78, the Law on Nursing): observation of the health status, formulating nursing problems, giving information and advice, support of the dying person, grief support) are not identified in the nomenclature of home nursing. Some participants urge to give these intellectual activities higher priority.

 "Part A of the Royal Decree nr. 78 is the essence of nursing but it is insufficiently represented in the nomenclature for home nursing. It should receive more attention". (participant 18; session 4) Mainly home nurses stated (in rather general terms) that financing does not take account (sufficiently) for communication and coordination with medical specialists and GPs. The evolution of health care delivery towards a model of care delivery across settings (hospital – home care – intermittent care) and the increased application of a chronic care model both require that home nurses demonstrate other competencies than a few years ago. Home nurses are expected to integrate their care delivery with the doctor's medical care.

Several participants from nurses' organisations argued that there will always be the need for integrating new nursing interventions in the nomenclature. But the uptake of new nursing activities in the nomenclature is considered to lag behind the developments in home nursing reality. Especially highly technical nursing interventions are not all represented in the nomenclature.

- "Currently, specific technical nursing interventions are only limited in the nursing nomenclature, while medical innovations evolve very quickly. But negotiations for implementation of an innovative nursing activity in the nomenclature require at least 2 years". (participant 22; session 4)
- "The legislation on the financing of home nursing is very complex. The system is based on continuous adaptations and corrections (a corrective system) which is the reason why the list of nursing activities is incomplete. The list is the result of consultation (between nurses and sickness funds). I fear that there will never be a system which will allow proactive steering. Overall, it is not too bad. Nurses may want/desire a lot but the question remains: what do the authorities want to pay?" (participant 25; session 4)

It is recognized though that the introduction of educational interventions for diabetic patients (2003) and the nursing consultation (2009) was considered as a significant progress in this matter.

## Complex rules for avoiding combination of payments

Stakeholders mentioned the complexity of financing rules that allow and/or limit the financing of multiple simultaneous nursing activities in one visit or one day.

- "Through the years, several rules for allowing or limiting combinations of nursing activities have been added to the nomenclature, which added to the complexity of the system as a whole". (participant 3; session 1)
- "Rules for allowing or limiting combinations of nursing activities are complex and can lead to abuse. We must take care that the system does not run off the rails. (participant 3; session 4)

These complex rules are considered as potential impediment for delivering qualitative nursing care.

"It is not allowed to combine some nursing activities [for obtaining funding]
although it is important that these activities are carried out simultaneously".
(participant 9; session 3)

Moreover, the non-exclusiveness of some nomenclature codes was mentioned. Some nomenclature codes may refer to different nursing interventions, e.g. an intra-muscular injection is identified by the same code as a sub-cutaneous injection. As a consequence it is not possible to identify which intervention actually has been carried out.

Participants from authorities and sickness funds observed the lack of knowledge of nurses about the nomenclature and the administrative rules to apply them. It was agreed upon by all participants that in general terms home nurses did not know the rules sufficiently. Participants of health authorities and sickness funds considered the nomenclature rules as not so complex. Part of the explanation for complaints of the complexity is potentially the result of the lack of particular criteria or particular (administrative) competency levels to become a home nurse.

### Topic 6: Critique on capitation

Some stakeholders expressed their aversion for capitation payments without outcome measurement, as currently used for medical houses. They expected that the capitation would lead to patient selection and quick referral to hospital or institution for old persons.

#### Topic 7: Critique on lump sum financing

The main critique on the current lump sum financing of nursing care is the lack of transparency. Especially the fact that only minimal criteria are used for registration of 'pseudocodes', is questioned. Because registration of 'pseudocodes' is often lacking, it is insufficiently known which nursing activities are performed for patients falling under the rules of lump sum payments.

### Topic 8: Out-of-pocket payments for patients

Some persons reflected on the patient's out of pocket payments in home nursing. Two participants from self-employed nurses mentioned that many home nurses, employeenurses as well as self-employed nurses, did not charge for the co-payment part of the patient. They argued that it should be mandatory to ask patients to pay the personal contribution in order to hold them responsible, to take into account their personal contribution for the MAB ('maximum billing') and to avoid abuse.

## Alternatives (PAB)

One stakeholder from a large organisation of employee-nurses argued that the patient in the role of manager of his budget for nursing care, such as the personal assistance budget (PAB) for handicapped persons in the Flemish Community, was not considered as a good model, because many patients would experience difficulties to describe their need and choose appropriate nursing care and support.

## THEME 2: ARGUMENTS FOR REFORMS

#### Topic 9: The extent of required change: radical or fundamental?

Reflecting on the reform process to implement new financing mechanisms, two dominant opinions emerged: most stakeholders expressed that they preferred that the good parts of the current system should be kept and that incremental changes would be made for solving the critiques on the system. Two participants explicitly urged to adopt more fundamental than just incremental changes to find a final and major solution for the global critique on the complexity of the system. The latter participants agreed that the financing system should be a mixed system, partly fee-for-service and partly lump sum payments.

"The financing system must change fundamentally but not radically. The
system must stay as a mixed system but the instruments used for determining
the financing, the keys for entrance into the system must change" (participant
10; session 1).

Stakeholders pleading for incremental changes argued that the current system, which is a mixed system, has merits.

- "Let's not throw everything overboard, let's keep the good things" ... "We should act cautiously if we want to implement invasive changes". (participant 3; session I)
- "Let us adapt the current mixed financing system: fee-for-service and lump sum financing". (participant 2; session 1)

According to these stakeholders, much of the complexity of the current system is due to subsequent adaptations and extensions to the original sound mechanism. These stakeholders mentioned that in the past, adaptations and extensions were made in order to meet recent requirements with regard to prevention, quality of care, new developments, earlier hospital discharges in acute stage of recovery, task and function differentiation, specialization, financial support for organisational matters, enhanced

importance of chronic care delivery / the chronic care model, multidisciplinary collaboration, coordination, support, counselling, ...

According to several stakeholders a main aspect to change concerns the eligibility criteria for home nursing care, the entrance to the system, should change.

• "The keys to the system must change" (participant 10; session 1).

However, participants agree that efforts are needed to achieve change:

• "organisations and nurses were asking for change since several years, but in the future they have to limit their resistance and be willing to accept changes." (participant 10; session 1).

#### Topic 10: Principles of financing

## Arguments for a mixed financing model

Most participants agreed that an adapted model of financing should be a mixed system, partly fee-for-service and partly case-mix related lump sum payments.

One representative of an association of self-employed nurses proposed that the financing model should be a good mix of four types of financing/funding: fee-for-service payments, payments for discrete nursing interventions; lump sum payments according to patient's characteristics (case-mix); payments related to the organisation of the practice; payments related to the objectives of care (outcome, quality).

• "Fee-for-service payments might be limited to the delivery of discrete nursing activities in less complex patient situations where the need for nursing care is low. The other payment mechanisms intend to cover different aspects of nursing care provision in their specific variability: e.g. continuity of care cannot be covered by a nomenclature code but it might be promoted by financing the organisation model of home nurses". (participant 23; session 2)

## Arguments for case-mix

Most of the participants agreed that case-mix financing should be introduced for the group of patients with complex needs. These patients require multiple simultaneous nursing interventions and the availability of a diversity of nursing competencies that cannot be covered by a simple nomenclature.

It was explicitly remarked that the case-mix model should not be based on medical diagnoses. Moreover, it was suggested that case-mix financing models avoiding patient selection (cherry-picking) should be preferred.

#### Fee-for service or lump sum

Practically all stakeholders agreed on their preference for a mixed system of fee-for-service payments for discrete nursing activities and lump sum payments for patient groups with higher case-mix levels, although the research team suggested an opposite model: lump sum payments for discrete and simple nursing activities and fee-for-service payments for complex care delivery.

Some stakeholders expressed their preference to limit fee-for-service financing for simple and well defined care situations, and not to use it for complex and long term care. They argued that a nursing intervention must always be adapted to the patient's situation and the nurses should always pay special attention to other aspects of nursing.

• "There is more than the nursing intervention which is reimbursed. Home nurses do much more than the activities which are financed. A nursing intervention must be adapted to the patient's situation, the nurse has to pay attention to the psychological aspects, communicates with the doctor, the pharmacist, ... " (participant 20; session 3)

## Pay for quality

Many participants pleaded that financing should take outcome and quality of care into account. There was general agreement on the principle that payments should be related to the objectives care, to the outcome, to quality of care. It was mentioned that the organisation and collaboration of nurses in nursing practices/services yield merits for quality of nursing care and that therefore the financing mechanisms should take into account the type of organisation of home nurses.

- "Financing should take account the necessary (organisational) conditions for quality of care and the indicators of good quality of care delivery" (participant 23; session 2)
- "Associations of less than 7 self-employed nurses were not eligible for receiving payments for specific costs of services for home nursing." (participant 5; session 1)

It was added that the existing financing of specific costs of services for home nursing (specific costs were defined as costs for organisation, coordination, programming, continuity, quality and evaluation; see chapter 2.) is unwieldy due to complex administrative regulations. A more flexible financing system of practices of home nurses and differentiation of functions should be implemented. It was argued that simplifying the administrative work will require that a registry of nursing practices will be installed.

In the context of this discussion, participants mentioned that quite a number of nurses combine a job in a hospital with some limited nursing activity as a self-employed home nurse. It was suggested that low activity levels and the limited availability of the part-time self-employed nurse could affect continuity and coordination of nursing activities.

- "There are cherry-pickers who have via the hospital very easy access to profitable nomenclature activities". (participant 22; session 4)
- "A registry of home nurses is required: who is employed full-time in home nursing? Who is combining employment in a hospital with partial selfemployment in home nursing? Does full-time employment in home nursing result in higher quality of care delivery than partial employment?" (participant 16; session 4)

Additionally, it was mentioned that payments related to the objectives of care, outcome, quality of care will require data registration of sufficiently large patient populations.

• "Data registration is required on every level of care delivery. Therefore an adequate data management model will be required" (participant 23; session 2)

Several methods for differentiating payments according to the outcome/quality of care were mentioned:

- Quality indicators and outcome parameters should be developed: e.g. patient satisfaction, HbAIc blood levels in diabetic patients.
- The fees were mentioned as a very effective lever to promote the required nursing interventions: fee for unnecessary interventions should be low whereas fees for evidence based interventions should be high.
- The use of an instrument (see further) would support the evaluation of quality of care.

#### Decision making process on implementation of new nursing acts

Home nurses and representatives of health authorities agreed that the introduction of nursing interventions in the nomenclature requires a heavy procedure which takes at least one year, which is too slow. Additionally, home nurses mentioned that the representatives of home nurses in the Agreement Committee often do not request for the introduction of new nursing interventions because they know that budgets are limited. It was also mentioned that recently the Agreement Committee considered a new method for provisional financing of urgently needed nursing interventions.

### Topic II: Develop better control mechanisms

#### Perceived need for control

All stakeholders agreed on the need for control procedures, especially with regard to nursing care delivery in the lump sum financing system and share the opinion that current control procedures were suboptimal. The current way of financing lacks transparency because of a lack of adequate control

Special attention is asked for the registration of activities under lump sum payment (pseudo-codes) and to the interrater reliability of the evaluation scale for the activities of daily living (Katz). Home nurses gave the example of a patient who is evaluated as incontinent by the home nurse but who denies his incontinence when he is confronted with the nurse advisor of his sickness fund because he does not know her, she is a stranger to him.

Interrater reliability of the Katz scale seems insufficient for its use in decisions on reimbursement levels for individual patients. In 40 to 50% of all controls, the nurse advisors of the health insurance funds assigned a lower score than the score assigned by the home nurse. The low interrater reliability is explained by potentially many reasons: unclear guidelines, bad scoring by nurses, the need for nursing care might change from day to day.

### The control working practices

Nurse advisors from the sickness funds experience feelings of demotivation because they were seen as the bogeyman who has to apply restrictive and sanctioning measures. They expected that the recently installed intermutualistic control procedures will yield positive results.

A participant of a sickness fund mentioned:

"The current control procedures of the Medical Evaluation and Inspection
Department of the NIHDI are not very effective and often lead to nothing".
(participant 2; session 3).

Home nurses were on the other hand pleading for better understandable procedures. They also requested more opportunities to develop self-control procedures using standardized and feasible instruments, without much administrative efforts.

There was disagreement between the representatives from the authorities and the representatives from the sickness funds about which instance should be authorized to perform control of nursing care delivery at home.

"The NIHDI and the sickness funds both have interest in paying as little
money as possible for reimbursing patients and argued that therefore an
independent controlling instance should be installed, as it is in some other
countries". (participant 10, session 3)

#### The objectives of control

A representative of home nurses argued that home nurses and authorities might have fundamentally different visions on patient assessment. Home nurses perform an assessment in the context/framework of a caring relationship with the patient. Home nurses' view is not limited to a momentary view but spans a longer period of care delivery during which a patient's need for nursing care may change with ups and downs. Medical or nursing advisors from sickness funds or NIHDI are strictly focusing on the patient's functional competence because of financing the care.

• "Home nurses perform assessments with a different point of view compared to the controlling officials and the nurse advisors. An assessment by a home nurse is an integrated aspect of a care delivery context: it also takes into account the patient's evolution over time. The officials merely assess the patient from a functional point of view". (participant 22; session 4)

Some nurses agreed with this proposition and wondered whether provincial medical committees or a new Council of Nurses could eventually do the controls<sup>68</sup>. Participants from the sickness funds confirmed that the sickness funds should keep the competence to control nursing care delivery at home. They argued:

• "Recent modifications of the control procedures (control by multiple funds simultaneously) demonstrated higher consistency, but that it will require a lot of time". (participant 4; session 1).

## Sanctions and feedback

Home nurses and participants from sickness funds had different opinions on the existing procedures for sanctions. Home nurses feared very high fines. Participants from the sickness funds stated that control procedures of the Medical Evaluation and Inspection Department of the NIHDI were not very effective and often lead to nothing, fines were not often applied (participant 2, session I).

Anyway, participants from both, self-employed nurses and large organisations of employee nurses, questioned the fact that for several years, the authorities gave little or no feedback on the activity level of home nurses.

• "There should also be a shift in the communication between NIHDI and sickness funds on the one hand and home nurses on the other, resulting in more reciprocal dialogue and educational and positive feedback". (participant 2, session I)

### THEME 3: NURSING RELATED TOPICS

## Topic 12: General changes in home nursing

Many participants focused on the shift towards the increasing health care delivery across settings (hospital – home nursing). This movement results in higher demands for complex care delivery, higher competencies and skills of general home nurses and more specialist nurses. Home nurses collaborating in a service for home nursing can easily ask advice from a specialist nurse of the service.

As a general comment, it was mentioned that the French 'hospital at home' model was not considered an adequate model for Belgium.

## Topic 13: Organisational characteristics of providers of nursing care:

# Self-employed nurses (often organised in small associations) versus large organisations (of employee nurses)

As mentioned before, participants accepted that fees should not be differentiated for self-employed nurses and employee-nurses.

It was not questioned and discussed in detail how the different cost structures could be taken into account. It may be summarized that nobody expressed the need for different tariffs for self-employed and employee nurses, but many stakeholders argued that a compensation, such as the subsidy for specific costs of services for home nursing, should be given if the collaboration in a service/practice enhances continuity and coordination of nursing care.

#### **Qualification levels**

It was questioned whether a distinction should be made between nurses who will be allowed to perform simple nursing activities in the fee-for-service system and nursing practices/services which will be allowed to deliver chronic care in the case-mix payment system? The example of France was given where these two types of nursing care delivery are split between different associations and organisations of nurses.

based on the nonverbal reactions it can be questioned whether many participants agreed with this proposition

#### Topic 14: Labour market: attractiveness of home nursing as a profession

The attractiveness of the nursing profession in home care was raised as an aspect to consider when reflecting on financing reforms. Attractiveness of the profession was associated to the autonomy to organise oneself the work and the work hours and the opportunities for high professional care delivery that a home nurse experiences. It was suggested that in recent years self-employed nursing became more attractive (with exception for Brussels) than for employee-nurses who experience major difficulties to recruit employee-nurses.

## Topic 15: The need for (higher) qualifications

#### The need for specialist qualifications

Participants stated that in home nursing the demand and need for specialised nurses had increased, e.g. specialist nurses in diabetes education in the care path diabetes, specialist nurses in care delivery in children, due to earlier discharge from hospital, ... Within the framework of financing reforms it was mentioned that financing should take account for more specialist roles in home nursing.

Currently, there are no conditions for home nurses to carry out the specific technical nursing interventions. Participants raised questions about the available expertise of home nurses to carry out specific technical nursing interventions with enough quality. Some stakeholders feared that those nurses who are not able any more to carry out this kind of specialized tasks in hospitals, decided to move to home nursing.

It was also mentioned that training of home nurses in new nursing care techniques should be financed.

Although it is clear that the demand for specialized nurses has increased, participants from self-employed nurses and employee-nurses emphasized the importance of the sufficient availability of general oriented home nurses.

The competencies of general home nurses should not be underestimated. They can take up an important role in patient support and accompaniment, introduction of assistive devices, etc.

## Continuous professional education

It was argued that the financing system does not (sufficiently) take into account the increasing demand for continued professional education.

The example was mentioned of a specialist nurse in wound care, recognized by the NIHDI, does not receive higher honorarium for carrying out wound care interventions (while the visit and offer specialist advice for patients receiving specific wound care from their regular nurse - note of the researchers).

The example of France was given, where home nurses are allowed to administer chemotherapy after they have passed an educational trajectory (similar regulations exist in the current financing system, e.g. specialist advice from a wound care specialist nurse in for patients receiving specific wound care from their regular nurse – note of the researchers)

Self-employed nurses proposed to develop an accreditation system (similar to the GPs' system?).

#### Topic 16: Labour differentiation

On the one hand, there will be less GPs in the future, and nurses will have to take over tasks which are currently carried out by GPs. On the other hand, there are many nursing interventions which are carried out routinely by home nurses and which might be rather easily delegated to care assistants. These evolutions will require adaptations in horizontal and vertical labour differentiation of home nurses.

### Adequate mix of general and specialist home nurses

Several participants from home nurses, self-employed as well as employee nurses, agreed that chronic nursing care delivery including nursing interventions with regard to personal hygiene, should not be underestimated. These basic nursing tasks are often thought upon as routine nursing tasks that can be substituted by lower qualified employees, e.g. care assistants or family aids.

However, participants argued that e.g. in frail older people, an adequate assessment of the patient's status and situation is required.

• "Carrying out 'routine nursing interventions' in vulnerable older patients allows nurses to observe and to assess the patient's status". (participant 22; session 2)

In this context it was also mentioned that currently, home nurses too often have to hurry and run, while they actually need more time to think.

"A 'thinking' general home nurse could save time and money". (participant 1; session 2)

Although it was not thoroughly discussed, several participants emphasized the specific knowledge/expertise of a general home nurse in the long term follow-up of chronically ill (older) persons, including a close personal relationship and psychological approach.

- "We need both, general home nurses and specialist nurses". (participant 15; session I)
- "Home nursing is characterized by its own knowledge/experience: long term follow up and accompaniment by the same general home nurse in a personal relationship". (participant 1; session 2)

# The relation between family doctor and nurse: doctor's prescription | lack of autonomy for nurses

Some participants suggested that doctors' prescription of nursing care delivery was suboptimal. Home nurses often have to ask the doctor to prescribe nursing care, but a doctor often does not agree with the home nurse on the appropriateness of a nursing intervention. Another complaint was that doctors often do not (correctly) prescribe the type of nursing care that a patient should require according to the home nurse. In this context, it was mentioned that doctors insufficiently know the nomenclature of home nursing.

For many participants there seems to be a contradiction between the Royal Decree nr. 78 which allows nurses to perform some nursing interventions without a doctor's prescription and the financing system of home nursing which requires a doctor's prescription for most nursing interventions, except for hygienic nursing care delivery (specific interventions which confronted home nurses with this contradiction were not mentioned in the stakeholder dialogues.)

Several stakeholders from both health authorities and home nurses suggested that prescription of wound care materials and interventions should be done by home nurses.

### The relationship between home nurses and other care professions

In the discussion on the relationship between home nurses and professional carers, two topics emerged.

First, there was discussion about collaboration/task demarcation between nurses and other care professions (family aids from social services / services for family support/aid). A main theme in the discussion was that an adequate differentiation is needed between health care delivery including hygienic nursing care versus hygienic care by the social service (see above). According to a participant from health authorities, it is the home nurse's professional role and competency to decide between the two systems for delivery of hygienic care. It is considered inadequate that the patient chooses for nursing care delivery for economic reasons (no personal contribution). It was argued that home nurses should have an overview on the person's global situation. Home nurses are expected to express leadership and to give feedback and steering/guidance to other disciplines.

• "The home nurse has to decide whether the patient should benefit from help from social services or nursing care" (participant 11; session 2).

Secondly, while discussing on the collaboration with care assistants in pilot studies of NIHDI on the employment of care assistants, it was mentioned that in these pilot projects special legal measures are taken to foresee supervision and opportunities for feedback between home nurses and care assistants.

 "When a care assistant is delivering care, it is in the context of and under continuous supervision of a structured nursing team. The home nurse stays involved". (participant 22, session 2)

With regard to the pilot studies of NIHDI, participants from home nurses stated that delegation of nursing interventions should be well considered. It should not be implemented for economic reasons.

Some alerted for the risk of fraud when nurses are collaborating with nursing assistants. Care delivery by the care assistant, but requesting the full tariff of a qualified nurse. (Currently tariffs are equal: care delivery by care assistants is reimbursed the same amount as care delivery by qualified nurses. - Note of the researcher)

Participants from all stakeholders groups stated that a fundamental discussion about the delivery of hygienic nursing care (some pleaded explicitly to delegate hygienic care delivery to care assistants and family aides) has to take place, although some professional nursing attention/presence/supervision always will be required. The qualified home nurse should have a leading role in the coordination of nursing care with care assistants and family aids.

It was mentioned that for employee-nurses it is relatively simple and already anticipated in the pilot studies on the employment of care assistants to receive feedback from care assistants and to provide supervision and coordination of care, but this is much more difficult in the collaboration with family aids.

Finally, it was often stated that the sector of home nursing should wait for the results of the pilot studies on the employment of care assistants.

#### Coordination with other professions

A change process towards a chronic care delivery model is considered to require several adaptations in the organisation and complementary care delivery of home nursing and other types of health care and social services. Some participants focused on the fact that a shift from a care "delivery" model towards a care "management" model in home nursing would emerge: home nurses will have to adopt other roles of coordination and communication. Therefore, the chronic care model will require optimal differentiation of tasks and functions between nurses, nursing assistants and GPs.

- "Specialization and function differentiation are partial solutions for higher complexity" (participant 2; session 1)
- "We must also consider which tasks might be done by home nurses instead of doctors?" (participant 4; session 1)

With this regard it was stated that the financing of home nurses and the Integrated Services for Home Care should be geared to one another.

As a complement a participant from the health authority argued that all healthcare workers should provide information to a shared electronic patient record. Use of adequate ICT instruments is a means to reduce the time needed for consultation and coordination with other health care professionals, especially in primary care.

One self-employed home nurse mentioned that coordination of different professional disciplines was different from delegation of nursing care to another discipline. For self-employed nurses delegation of nursing care might be complex/difficult.

#### Accreditation

Mainly self-employed nurses requested that NIHDI should install provisions for an accreditation system and/or social statutory comparable to the medical doctors.

## THEME 4: ASSESSMENT AND REGISTRATION INSTRUMENTS

## Topic 17: General remarks with regard to administrative tasks

Many participants argued that registration of data on both the patient's needs and the nursing care provided is an essential part of actual nurse's roles in home care. This is an essential condition to coordinate care, for communication, delegation, needs assessment, etc. But this obligation should go hand in hand with the development of a well elaborated data registration model.

• "Data registration is required on every level of care delivery. Therefore an adequate data management model will be required" (participant 23; session 2)

With regard to the current situation it was criticized that financing does not account (sufficiently) for the work load of data registration, information collection and keeping a nursing record up to date. Punctual reflections were made on the current practice of registering pseudo-codes for lump sum financing: it was accepted as a useful tool but nurses expressed fear for an administrative overload. Some participants are favourable of more investments in ICT applications in order to reduce administrative workload.

#### Topic 18: Patient needs and nursing care

Participants expected in general that financing accounts correctly for the patients' need for nursing care. They mentioned several instruments which can be used for determining the need for nursing care. Some participants stated that a nursing diagnosis system should be used for evaluating the need for nursing care. It was argued that in patients receiving highly technical nursing interventions, the ADL evaluation scale (Katz) does not describe the need for nursing care correctly. It was also mentioned that in recent years the need for support in activities of daily living (hygienic care, bathing, clothing, using the toilet, eating, etc. ) has increased because older persons are increasingly living alone, without supervision and help of family members and relatives.

Several single isolated quotes and questions or propositions were expressed with regard to the patients' needs and the required or delivered nursing care. Some participants requested that a new assessment instrument should take into account the use of time of home nurses with special attention for rehabilitation nursing/restorative nursing care (which is more time intensive).

It was mentioned that nurses do not always give feedback about how they are able to deliver the required nursing care. The patient's nursing record was considered as a powerful tool to document nursing care, especially in patients with the lump sum payments. Mainly nurses argued that it is important that assessment of the need for nursing care should be done by home nurses.

It would not be a good choice (as it was made in the Netherlands) to allow a third external party to perform the assessment and check the patient's eligibility for nursing care.

According to some participants, financing should also take account for higher needs for nursing care in patients from social vulnerable areas. Therefore, indicators of social vulnerability of patients are needed.

#### Encourage/promote prevention, rehabilitation nursing

According to the stakeholders, the current financing system offers little incentives for prevention and rehabilitation nursing and restorative nursing care.

- "Educational nursing interventions for diabetic patients are considered as a threat to nurses because in case of a successful education of the patient towards self-management of diabetes (including auto-administration of injections), the nurse no longer allowed to visit the patient for his insulin injections." (participant 9; session 3).
- "An unwanted effect of the ADL assessment for determining a patient's lump sum financing level is that, if the patient becomes more autonomous in carrying out the activities of daily living, the honorarium of the home nurse diminishes, because the daily lump sum decreases". (participant 10; session 1)

Topic 19: Comments on the tools

## Katz tool (BESADL)

On the one hand there were negative critiques with regard to the limited validity and reliability of the current ADL evaluation scale in use. The Katz evaluation scale only takes physical dependency into account, not social or other sources of need for nursing care. Persons characterized by the same level of physical dependency may represent very different workloads for home nurses. The ADL instrument is not adapted to assess the physical dependency of children. Unwanted effects of the use of the ADL assessment were described above. The use of the instrument does not take sufficiently into account a correction for the presence of assistive devices. It was mentioned that interrater reliability in control situations was low: there were significant differences between assessments of home nurses and nurse advisors of sickness funds. A participant from the health care authorities argued that clear guidelines exist for interpretation of the ADL assessment items.

On the other hand the merits of the ADL assessment instrument were highlighted. The instrument is not perfect but it demonstrated validity in differentiating groups of patients according to their need for nursing care. It is a simple instrument that is known by all nurses, it requires little time spending and resources.

A third remark was that validity and reliability of other assessment instruments will probably be similar. It was hypothesized that replacing the instrument by another one would not necessarily result in a better instrument.

#### **Alternatives**

As mentioned before, propositions for an alternative for the Belgian adapted KATZ assessment instrument varied widely. Between all the propositions, some stakeholders expressed their preference for the RAI assessment instrument for home care (RAI-HC).

Others pleaded for creating a new instrument adapted to Belgian home nursing (development, pilot test, etc.), arguing that a similar effort/work was done for the minimal nursing dataset in Belgian hospitals. These persons also argued that some specific instruments/extensions should be developed: for example instruments for financing post-operative nursing care at home, ...

With regard to the RAI assessment instrument, important objections were mentioned: the RAI instrument is considered to be too complex, too difficult, to require too much administrative efforts by home nurses. A new instrument should be simple, easy to understand and interpret (see also section: Time needed for registration).

However, advantages of RAI were emphasized too: it is seen as a complete and adequate assessment and it offers an integrated approach enabling to serve several purposes simultaneously: quality indicators, financing, support for plan of care, outcome measurement, etc ... Stakeholders from home nurses pleaded that, before RAI would be implemented, health care authorities should decide in advance which of the applications will be used in home nursing. On the question whether the same instrument should be used for planning and financing of nursing care, some participants agreed, others disagreed. Opinions on this matter were not linked to characteristics of the stakeholders.

Participants also requested a shorter screening instrument for detecting those patients who need a full RAI-assessment. It was also mentioned, both by home nurses and by representatives of sickness funds, that if RAI is used only for those patients requiring complex nursing care and/or multidisciplinary consultation, the time and effort which will be required for carrying out the assessment should be reimbursed.

A new instrument should enable external control and self-control by means of quality indicators (see earlier themes: quality of care and control).

Home nurses requested that, simultaneous with the implementation of a new instrument, there would be opportunities to receive sufficient training from NIHDI and that patients will also be informed about the instrument/method used for financing nursing care delivery.

### Time needed for registration

Use of time for the RAI-assessment was a major counter-argument to implement and use the instrument. However, opinions diverged between stakeholders.

On the one hand, representatives of health authorities, self-employed home nurses and representatives of the larger home nursing organisations disagreed on the proposition that costs and efforts for registration of care dependency are too high for an adaptation of the financing system. The participants raised issues such as:

- The cost of additional time spent in a more encompassing registration should be weighed against the cost of abuse of the current system.
- When it was argued that better data and information will be required for achieving higher quality and outcome of home nursing, it was mentioned that time investments will be needed for data registration.
- The registration cost should be financed.
- The work load of assessment and registration might be shared with other disciplines.
- ICT support will be required for efficient use of RAI.
- It is part of professional nursing to carry out a comprehensive data and information collection in order to formulate nursing diagnoses/problems.

On the other hand, self-employed nurses and employee-nurses agreed with the proposition that costs and efforts for registration of care dependency are too high. They argued that:

- RAI-assessment takes too much time.
- Nurses are reluctant to spend much time in administrative tasks.
- Administrative tasks should be limited.

## The scoring of propositions and written comments

The stakeholders' scores for the propositions are listed further and summarized as averages scores per stakeholder group in Figure 3. These scores confirm the issues which emerged during the dialogue. The written documents do not present any additional information on arguments used as compared to the discussion sessions.

Most stakeholders agreed that the changing role of home nursing required that the financing mechanisms would change (proposition I). Two participants from financing authorities disagreed. One of them did not repeat this different opinion in the group discussion, although she used her written arguments in her contribution to the discussion.

The other disagreeing stakeholder argued that the nurses' changing role did not require a change of the financing mechanisms, but that some of the instruments used within the financing mechanisms needed modification, more precisely the evaluation instrument.

Most stakeholders agreed that the principles for financing home nursing in Belgium must change fundamentally (proposition 2). However, mixed opinions on the word 'fundamentally' emerged on the scope of the required change: incremental changes versus fundamental changes. All participants agreed that the financing system should be a mixed system, existing of partly fee-for-service payments and partly lump sum payments.

There was quasi unanimous disagreement with the proposition that financing sufficiently takes into account new nursing activities (proposition 3). The only stakeholder who agreed with the proposition, argued that financing does already account for many 'new' nursing interventions.

Similar disagreement is found with the proposition that financing is sufficiently adapted to allow for differentiation of tasks and functions between different types of nurses (proposition 4). Major concern was that there was no financing for the consequences.

There was general agreement with the proposition that the current nomenclature list of nursing interventions is incomplete and insufficiently adapted to the current nursing reality in home care (proposition 5).

While all nurse stakeholders from home nurses agreed with the proposition that tariffs for home nursing interventions should be based on real costs of suppliers of home nursing care (proposition 6), a majority of stakeholders from health authorities mentioned that they had no opinion on this proposition.

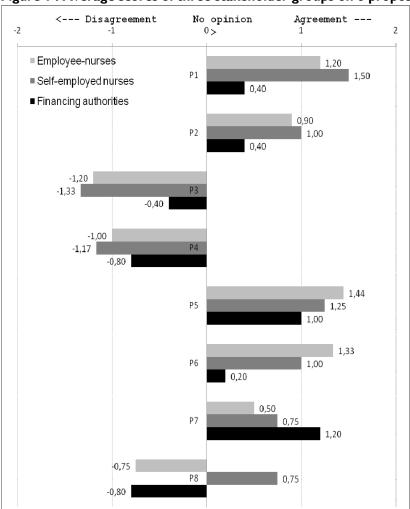
There was agreement with the proposition that other instruments for care dependency are needed in order to create opportunities for an appropriate financing system for home nursing. However, a minority of the stakeholders disagreed with or had no opinion on the proposition. There was only one extreme score (2 = I strongly agree), which might be an indication that stakeholders were cautious on the issue.

There was no consensus in the opinions on the proposition which stated that costs and efforts for registration of care dependency are too high for an adaptation of the financing system. Within each stakeholder group (financing authorities, self-employed nurses and employee nurses) there were two opinions: agreement and disagreement with the proposition.

From Figure I it can be concluded that for each separate proposition, average scores of the three stakeholder groups (employee-nurses, self employed nurses and financing authorities) were similar (agreement or disagreement) except for the 8<sup>th</sup> proposition which stated that costs and efforts for registration of care dependency are too high for an adaptation of the financing system: employee-nurses and financing authorities disagreed with the proposition; self employed nurses agreed with the proposition.

For the first six propositions, the financing authorities demonstrated more moderate opinions (closer to the 'no opinion' score) than the nurses, who formulated more explicit agreement and disagreement scores. For the  $7^{th}$  and  $8^{th}$  proposition, the financing authorities formulated more extreme scores than self employed nurses and employee-nurses.

Figure I : Average scores of three stakeholder groups on 8 propositions



PI = proposition I; P2 = proposition 2; ...

Table 3 Results of the stakeholders' written scores on the propositions used in the stakeholder dialogues

Participants	Stakeholder group	Language	Proposition 1	Proposition 2	Proposition 3	Proposition 4	Proposition 5	Proposition 6	Proposition 7	Proposition 8
Participant I	E	D	1	-1	-1	1	1	1	1	-1
Participant 2	F	D	1	1	0	-1	1	0	1	0
Participant 3	S	D	1	1	-2	-2	NA	NA	NA	NA
Participant 4	F	D	1	1	-1	-1	1	0	1	0
Participant 5	S	D	1	1	-1	-1	NA	NA	NA	NA
Participant 6	S	F	NA	NA	NA	NA	1	1	1	1
Participant 7	E	D	1	1	-1	-1	NA	NA	NA	NA
Participant 8	S	D	2	1	-1	0	1	1	0	0
Participant 9	E	F	1	1	-2	-2	2	2	/	/
Participant 10	F	F	2	1	-1	-1	1	0	2	-1
Participant 11	S	F	2	1	-1	-1	NA	NA	NA	NA
Participant 12	E	D	2	2	-2	-2	2	2	1	-2
Participant 13	E	F	1	1	-1	-1	NA	NA	NA	NA
Participant 14	E	F	NA	NA	NA	NA	1	1	1	-1
Participant 15	E	F	2	1	-1	-1	2	2	-1	2
Participant 16	F	F	-1	1	1	0	1	1	1	-1
Participant 17	E	F	1	1	-1	-1	2	1	1	-1
Participant 18	E	D	1	1	-1	-1	1	1	1	-1
Participant 19	S	F	NA	NA	NA	NA	1	1	1	2
Participant 20	S	D	NA	NA	NA	NA	2	1	1	0
Participant 21	S	D	2	1	-1	-1	NA	NA	NA	NA
Participant 22	E	D	1	1	-1	-1	1	1	1	-1
Participant 23	S	D	1	1	-2	-2	NA	NA	NA	NA
Participant 24	F	D	-1	-2	-1	-1	1	0	1	-2
Participant 25	Е	D	1	1	-1	-1	1	1	-1	-1
Average score         1.10         0.81         -1.05         -1.00         1.28         0.94         0.76         -0.41							-0.41			

Stakeholder group: F = financing authorities; S = self-employed nurses; E = employee nurses;

Language: D = Dutch; F = French; Scores: 2 = I strongly agree; I = I agree; 0 = No opinion; -I = I disagree; -2 = I strongly disagree; / = missing; NA = no attendance to that session

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