

Quality improvement in general practice in Belgium: status quo or quo vadis ?

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FOREWORD

In 2006, the KCE published a report on clinical quality indicators with a conceptual framework for quality in Belgium (KCE report 41). This first report mainly focused on the quality of care in hospitals. This study in general practice is linked to this previous work and suggests specific new avenues to redesign the Belgian landscape of quality in general practice. The authorities already invested large budgets to foster the quality of care in general practice. Unfortunately, there is a lack of evidence about the efficacy of these policy measures, as for example the individual accreditation. It is now time to rethink the whole issue of quality improvement in general practice

The more or less successful experiences from other countries are lessons for Belgium: quality might become reality if necessary conditions are considered. The way forward is to focus on the practice, using formal measurement tools that are integrated in an explicit and coherent policy.

This report results from a close partnership between the KCE, departments of general practice (Antwerp and UCL) and the scientific associations of general practice i.e., Domus Medica vzw and the Société Scientifique de Médecine Générale. In particular, this collaboration allowed conducting a small scale pilot study of a European tool for improving quality in general practice. This test highlights the interest and the difficulties to implement this type of project in Belgian GP practices. Thanks to all GPs who did agree to participate to this rewarding experience.

Quality is definitely on the agenda of general practice in Europe. We hope that this report will be helpful to implement a Belgian program in this field. The ball is now in the court of the profession and of the Authorities.

Jean Pierre Closon
Deputy Director General

Dirk Ramaekers
Director General

Executive summary

INTRODUCTION

The objective of this project is to propose elements of a quality system in general practice in Belgium. Quality in general practice is one piece only of the wide system that contributes to the health of the population: quality of care in the other health care settings, lifestyle and public health policy are other important pieces of the jigsaw puzzle. However, the general practitioners care for most health problems of the population and the trends towards more accountability in the health care sector also apply to them: that explains why quality in general practice is today on the agenda of all European countries.

A former KCE report proposed a conceptual framework for a quality system in health care in Belgium. This project analyses the specific literature and experiences conducted in some countries that (tried to) implement a quality system in general practice. A second part of the project tests the feasibility of a European quality instrument for assessing the organisation of general practice. Those elements lead to a proposal for developing a quality system in general practice in Belgium.

QUALITY SYSTEM IN GENERAL PRACTICE: LITERATURE AND INTERNATIONAL EXPERIENCES

A systematic literature search in Medline and Embase analysed the papers published from 1997 to 2007 on quality systems in general practice. A more specific search focused on the tools most often cited, i.e. the practice visits, the practice audits and the peer review groups. This literature search was completed by the analysis of quality initiatives in Belgium and in five countries (i.e., France, Germany, the Netherlands, the UK and Australia). The selection of countries relied on their progress in GP quality (i.e. Germany, the Netherlands, the UK and Australia) or on their similarity with the Belgian health care system (France).

THE BELGIAN CONTEXT: SCATTERED QUALITY INITIATIVES

In Belgium, the initiatives set up at national level include guidelines, feedback on prescriptions, peer review groups (LOKs-GLEMs) and the certification of individual practitioners ("accreditation"). The scarce literature only shows a limited effect of feedback on the prescription of antibiotics whilst the LOKs-GLEMs positively influence the relationships between physicians. However, there is a lack of evidence of any effect on the care for the patient.

QUALITY IMPROVEMENT IN GENERAL PRACTICE: KEYS FOR SUCCESS

Other countries have been successfully implementing quality improvement initiatives. The primary condition for success is a national policy, supported by legislation. A pre-existing framework including the vision of the profession, the objectives of the quality system, the domains of improvement and the practical tools that will improve quality helps the further implementation of the quality system. This implementation also depends on the professional culture, on the opinion leaders, on the financing, on the organisation of general practice, on the incentives and on the patients' perspective.

The tools most often used in quality systems are the practice audits, peer review groups and practice visits. However, the literature on their effects on patient care is scarce. Peer review might improve test ordering. The GPs express their satisfaction for practice visits and peer review groups. Practice audits are moderately effective: their main limitation is that they rely on a limited number of indicators whose validity often raises question.

NATIONAL STRATEGIES TO IMPLEMENT QUALITY INITIATIVES

The five countries analysed in this report developed a strategy and tools for implementing a quality system in general practice. Most literature describes the quality initiatives in Australia, the UK and the Netherlands.

Australia recently developed an interesting quality framework thanks to a strong involvement of the profession. Some important enablers of this quality system are the support of the Royal College and the government, the definition of standards at the practice level and a national certification process based on a 3-year cycle. Regional platforms actively support the GPs by collecting, analysing the data and interacting with the practitioners.

The Netherlands also have a strong practice accreditation program based on a three-year cycle process. An external visitor coaches the practice after the practice visit. There are no direct financial incentives. However in the future, the accreditation status might influence the reimbursement process.

In the UK, the Quality and Outcomes Framework links one third of the GP remuneration to predetermined quality targets. Some conditions for initialising the system were a pre-existing professional culture for quality, the definition of clinical indicators based on the EBM literature, a powerful IT system and an accurate estimation of the budget needed for the extra payments. The QOF is the best described initiative in the indexed literature. The papers also point out some drawbacks including a risk of gaming, problems of equity (less payment in underprivileged areas), increased focus on financially rewarding conditions and the need for control in order to minimize gaming.

Those three countries invested large resources in quality improvement. The UK government spent the most significant budget i.e., 1.4 billion euros in 2004 for the additional payments of the GPs who reach the targets. This sum represents more than 23 euros per inhabitant and more than 20 percent of the previous family practice budget. The Netherlands compensate a part of the accreditation procedure (6000 euros per practice) by refunding about 1 euro of the capitation fee. Australia invested about 5 euros per inhabitant for the GP division network system in 2004/2005: the evaluation suggests that these professional networks have an impact on the GP performance. Belgium spent more than 73 000 000 euros for the GP accreditation procedure that has no demonstrated effect on the quality of care. This range of budgets invested for the same objective raises questions about the optimal budget to invest in a GP quality system. Unfortunately, the scarce available literature about their results does not allow any conclusion on their cost-effectiveness.

ASSESSMENT OF THE ORGANISATION OF THE GP PRACTICE: IS THE EPA PROCEDURE CONCEIVABLE IN BELGIUM?

The second part of the project assesses the feasibility of the European Practice Assessment Tool (EPA) in Belgian general practices. The EPA procedure deals with five organisational domains of the practice i.e., 'infrastructure', 'people', 'information', 'financial management' and 'quality and safety'. The EPA procedure consists of questionnaires for the practice, a practice visit and an interview with the main GP. The results are encoded in a central database located in Germany. The practice receives a feedback from the visitor afterwards. This procedure is one of the official accreditation procedures in Germany.

EPA procedure: low GP interest and high workload

The researchers encountered many organisational problems. First, the recruitment of the participating practices was very difficult (43 practices after 1000 letters), producing a major self-selection bias. Secondly, the provision of human resources was far beyond the initial planning and required a few days per practice by the research team. Based on these findings, the costs per practice are estimated at approximately 1000 euros per year for a three-year cycle. Human resources are important for the coordination, administration and the support of the practices. Moreover, the EPA project requires considerable IT equipment and IT support.

Satisfaction of the participants and possible implementation of EPA in the Belgian GP population

The GPs who participated appreciated the opportunity to go through the EPA process and found the feedback on the quality of their work important. That initiative increased their interest for quality improvement.

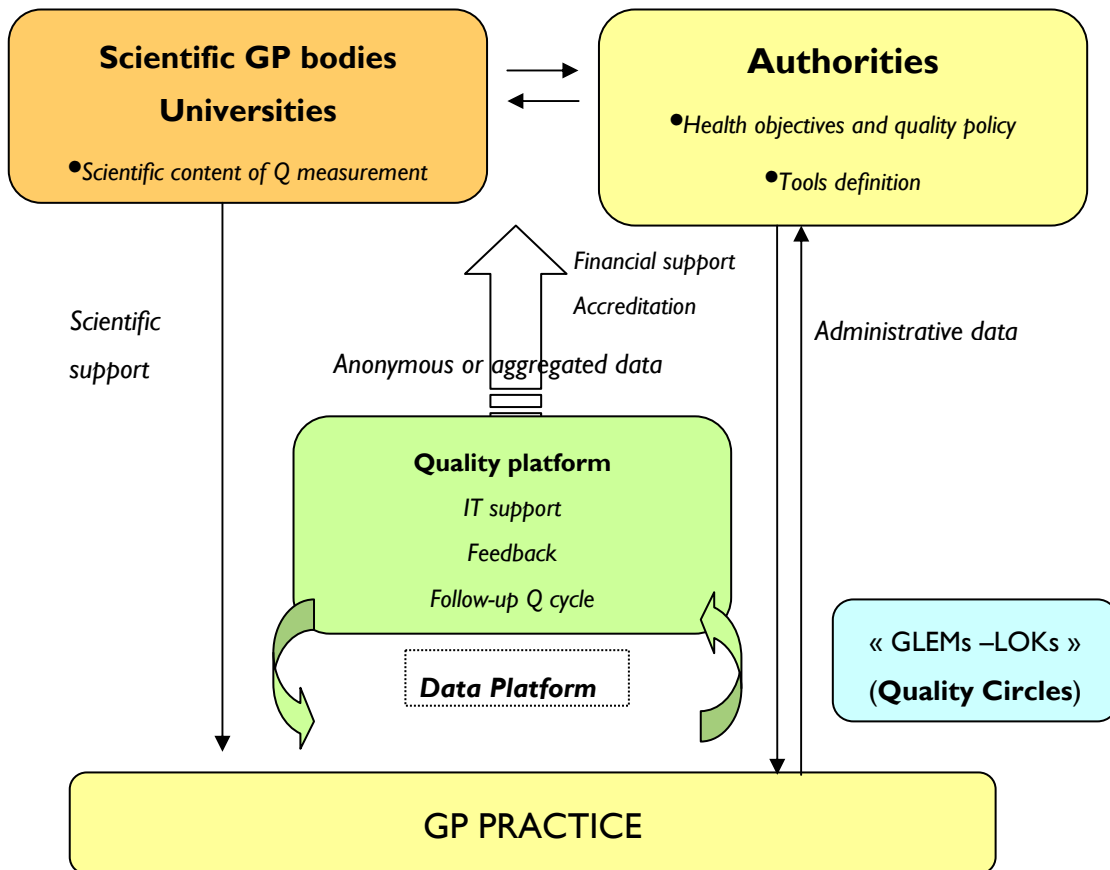
They noted potential difficulties to implement the EPA instrument at a large scale: the confidentiality of the results is a major concern and the participants thought that EPA should be organised by the profession itself. Moreover, the instrument has to be adapted to the Belgian context and to single-handed practices in particular.

A striking finding was the lack of implementation of changes after the EPA visit. The GP participants reported a need for further coaching.

Offering EPA to Belgian GPs is therefore a complex and expensive task and its impact depends on its embedding in a broader quality framework. A large-scale implementation requires an interest from the profession and a significant facilitating organisational structure.

ELEMENTS FOR A QUALITY SYSTEM IN GENERAL PRACTICE IN BELGIUM

The analysis of the quality systems in other countries and the test of EPA in Belgian practices suggest key elements for setting up a quality system in Belgium. The definition of the role of all stakeholders is a condition for implementing a quality system in GP. The heart of the system relies on the GP practices.



A Quality Platform trusted by the profession could address the following tasks:

- Implementation of procedures to collect and analyse the data using IT platforms;
- Data handling and feedback reports to practices;
- Coaching and support for single-handed and group practices;
- Certification for participation and/or for reaching targets for indicators;
- Transfer of aggregate data to the Health Authorities and quality circles (Glems/Loks) and transfer of anonymous data for research purposes.

The GP profession is important for developing a quality improvement culture in Belgium. The GP bodies (including university departments) have a role to play in the education on quality and in the development of relevant and valid balanced sets of indicators.

Health authorities play a major role in the development of a quality policy, of the legislation, the creation and support of the quality platform, the standardisation of the IT system. The Authorities have also the responsibility to define the balance between summative and formative assessment. The summative assessment has external consequences (for example financial). The formative assessment leads to personal improvement through feedback. Substantial funding is a condition for the implementation of the system.

Practical considerations are unavoidable: a quality system relies on a strong IT structure that requires the standardisation of all GP informatics using systems that allow the data extraction with minimal effort. The organisation of the practices needs an improvement (e.g. administrative and/or practical support) to allow additional quality activities. The quality measurement depends e.g., from the quality of the data registration by the GPs.

POLICY RECOMMENDATIONS FOR PROMOTING QUALITY DEVELOPMENT IN GENERAL PRACTICE

This report identified key elements for developing a successful quality system in general practice in Belgium. Many stakeholders have a specific role to play to implement a system that will have an impact on the process of care and on the outcomes at patient level.

Role of the authorities

- The will of the Authorities, a clear leadership and a national quality policy are major conditions to implement quality development in general practice. A quality improvement system for general practice concerns all GPs, working either in a single-handed practice or in a group practice;
- The Authorities have to define the stakeholders' role and a time schedule for implementation. They also define the balance between summative and formative assessment, taking into account the potential negative consequences of both types of assessment;
- The solution should take root within the existing structures, as for example the accreditation bodies of the National Institute for Health and Disability Insurance or the Ministry of Public Health. A first phase would include the setting of a quality platform with many representative stakeholders in order to look for synergy and develop concrete proposals;
- IT developments for the data collection and quality measurement should be discussed within the Be-Health Program;
- Financial support (quality platform, GPs, IT infrastructure) or reallocation of existing budgets is needed to achieve a significant improvement of the quality of care in terms of process and outcomes;
- IT providers should answer to strict conditions that allow a data extraction from routinely collected data.

Role of the profession

- A professional culture is the driving force for setting up quality initiatives in general practice. The profession has to participate in the definition of quality initiatives and to propose efficient tools to improve quality;
- The academic and GP bodies have a definite role to play to teach the (future) GPs about the concepts of quality development. They are furthermore competent for developing balanced sets of indicators including clinical and non clinical indicators.

Role of the practices and GPs

- The introduction of practice based quality development is necessary to foster quality improvement in Belgium. The practices should be aware of the formative and summative consequences of the quality measurement;
- The practices should have the necessary organization for performing quality development activities (e.g. IT, ancillary personnel);
- The accurate registration of data by the GPs is a condition to measure quality from records routinely collected.

The development, testing, implementation and evaluation of this system require a long-term vision. The foreign experiences learn that the definition of priorities and preliminary steps are necessary before any implementation. An explicit quality policy, the creation of quality platform and the involvement of academic and GP bodies for defining quality initiatives, tools and indicators are the first milestones of this promising journey.

Scientific Summary

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I INTRODUCTION: QUALITY IN GENERAL PRACTICE

The ultimate objective of any health care system is the health of the citizens. Many actors have a role to play. In particular, the public health workers and the different health care levels all interact in the health care delivery processes. Primary care and general practice in particular, are at the heart of many European health care systems¹. General Practitioners (GPs) deal with the bulk of patient encounters at relatively low cost. General practice focuses on continuity of care and on patients' environment. It is comprehensive as it deals with curative, preventive, palliative and rehabilitation aspects.²

Many tasks in health care are therefore attributed to the GP. However, the outcomes in terms of health also depend on other factors as the lifestyle or the public health policy. The health of the population is finally the result of a complex interaction between the society in general, the responsibility of individuals and the health care itself.

This study answered to a need to broaden the scope of the current quality initiatives in general practice in Belgium. Furthermore, contacts within other European stakeholders confirm general trends towards the creation of quality systems for improving quality in general practice. This project is in line with a former KCE project on clinical quality indicators that proposed a conceptual framework for a quality system in Belgium³. This project in GP puts less emphasis on the clinical indicators: the interested reader will find lists of clinical indicators for general practice of three countries in the appendices 6 to 8.

I.1 CORE COMPETENCES OF GENERAL PRACTICE

The World association of Family doctors (WONCA) recently listed the core competences of General Practitioners/Family Doctors.⁴ There are six domains of specific skills and knowledge:

- Primary care management. The GP needs to deal with many ill-defined problems. He/she coordinates the care in collaboration with other caregivers and refers the patients to adequate health services.
- Person-centred care. A GP should have a good communication with his/her patients to have an effective doctor patient relationship. He/she insures the continuity of care (in person and in time).
- Specific problem solving skills. The GPs often deal with early symptoms and undifferentiated problems. Gathering information from patients' history, physical examination and if necessary technical investigation is part of an appropriate management plan.
- Comprehensive approach. The GP often handles more than one complaint or pathology within one consultation, using elements of preventive, curative and palliative care.
- Community orientation. The GP should consider the interests of the patient and those of the community. For example, large scale preventive activities organised by general practice (e.g., flu vaccination and cervical smears) are beneficial for both parties.
- Holistic approach. The GP will address the bio-psycho-social dimensions of the problem, often during one consultation.

1.2 ACCOUNTABILITY IN HEALTH CARE

The concept of accountability covers the idea of social responsibility defined in the MESH thesaurus as ‘the obligations and accountability assumed in carrying out actions or ideas on behalf of others’. In our changing cultural and socio-economic context, the problem of accountability is an issue. The gross expenditure to health care as percentage of the BNP steadily increased over the last decennium and is now about 10 percent in Belgium⁵.

Multiple explanatory factors include the emphasis on prevention, people getting older, transfers of care from and to primary health care, new technologies and change of demands from the public. Moreover, many European countries as in Belgium have a growth rate exceeding the growth of the Gross Domestic Products.^{6, 5}

Accountability deals with access to care (material and financial), effectiveness of care, efficiency of care and importantly, the quality of care. The culture of assessing the quality of care in general practice is emerging in Europe. In 1997, the European Council recommended the development and implementation of quality improvement systems in the member states.⁷ The main steps are the specification of the desired outcome, measuring relevant indicators and changing clinical practice.⁸

1.3 QUALITY IN GENERAL PRACTICE

1.3.1 General definitions

1.3.1.1 *Quality in health care and its assessment*

Donabedian first defined health care quality in terms of structure, process and outcome⁹. Structural characteristics are relatively stable and difficult to change. Practice premises are an example. The process dimension describes the interactions like those between patients and doctors. Outcomes are the effects of health care. Ultimate outcome measures are for example death or the incidence of a heart attack. It is sometimes difficult to define valid outcome indicators. For this reason ‘intermediate’ measures are often used (for example, the average blood pressure under antihypertensive therapy instead of the number of avoided strokes attributable to the treatment).¹⁰

Quality may be measured within the organisation or by external bodies. The combination of both approaches gives a balanced view of quality. For instance, university departments of medicine in Flanders are liable for quality assessment. They perform a self-evaluation of their performance (internal) followed by an external review by a commission.¹¹

Quality assessment may have two major purposes. A formative assessment triggers internal improvement. In the formative assessment, the process of learning from feedback is crucial. Learners (doctors for example) gain knowledge from the feedbacks on data and scores. A summative assessment adds external consequences. The summative assessment leads to a conclusion, for example a ranking or even a ‘fail or pass’. For a doctor it might lead to the withdrawal of his/her certification. For a practice it might lead to a lower remuneration because the practice fails to meet a given standard.¹²

A quality improvement system is defined as follows by the Council of Europe: ‘a set of integrated and planned activities and measures at various levels in the health care organization, aimed at continuously assuring and improving the quality of patient care’.⁷ This project will adopt this definition, considering a national quality system for general practice as a comprehensive and integrated set of strategies to *develop* the quality of care.

1.3.1.2 *Quality in general practice: definitions and dimensions*

Quality in general practice is both hard to define and hard to measure.¹³ The main objective of health care is to gain health at the patient level. The World Organisation of

Family Doctors (WONCA) provided a working definition as 'the best outcomes possible given available resources and the preference and values of patients'.

Campbell et al. suggest two approaches to define quality in health care.¹⁴ In the generic approach, a single statement covers all aspects of quality of care. In disaggregated definitions one focuses on key attributes, each of one represents an inherent characteristic of quality. For instance, safety, access and clinical quality could be dimensions to address.

DIMENSIONS OF QUALITY IN GENERAL PRACTICE

The former KCE report also listed the dimensions of quality of care.³ The addition of some elements from Campbell's work enhances their applicability to the GP setting.¹⁴

- Safety: avoiding injuries to patients from the care intended to help them;
- Access to care: patients should be able to get access to services. The services are accessible in terms of distance, time, without any legal, social or financial barrier;
- Clinical effectiveness: the health professionals should be competent, provide services based on scientific knowledge to all who could benefit and refrain from providing services to those not likely to benefit;
- Patient centeredness: providing care that is respectful of and responsive to individual patient preferences and needs whilst ensuring that patient values guide major clinical decisions;
- Timeliness: avoiding delays potentially harmful;
- Equity of care: services should be available to all people. The quality of care should not vary because of personal characteristics such as gender, ethnicity, geographic location, and socioeconomic status;
- Efficiency of care: the society should get value for money by avoiding waste, including waste of equipment, supplies, ideas, and energy;
- Continuous and integrative: all contributions should be well integrated to optimise the delivery of care by the same health care provider throughout the course of care (when appropriate), with appropriate and timely referral and communication between providers.

These dimensions put emphasis on the fact that values underpin the assessment of quality of care. These values often remain implicit but should be clarified when thinking about a quality policy and quality system.

USE OF TERMS

Many terms have been used to make the concept 'quality' operational in general practice.¹⁵ The most frequently used ones are listed here.

Quality assessment identifies discrepancies between a proposed level of care and the actual quality of care after careful measurement. Quality assessment is usually performed by the profession at the individual level. Discrepancy might occur between the facets under study within the quality assessment. The proposed level of care always reflects choices made by one party. For instance some may argue that the consultation length is a valid indicator to assess the quality of a consultation while others would rather refer to the patient satisfaction.

Quality assurance deals with achieving acceptable levels of care and is often initiated by purchasers or payers of care. Clinical audit aims at raising performance in one or only a limited clinical area and relates to local needs.

Continuous quality improvement aims at improving the whole system and tries to limit unintended variation in the care processes. The implementation of a permanent system of quality management involves the whole practice team.¹⁵

The European Association for Quality In General Practice/Family medicine EQuiP (a network of WONCA Europe) adopted the terms 'Quality Development'. It focuses on the whole process and integration of different methods to improve the quality of care.

“Quality Development for general/family practice is a continuous process of planned activities based on performance review and setting of explicit targets for good clinical practice with the aim of improving the actual quality of patient care”¹⁶. Quality management deals with the management of the implementation of quality development in a practice.

This report will mostly use this concept of quality development.

STAKEHOLDERS

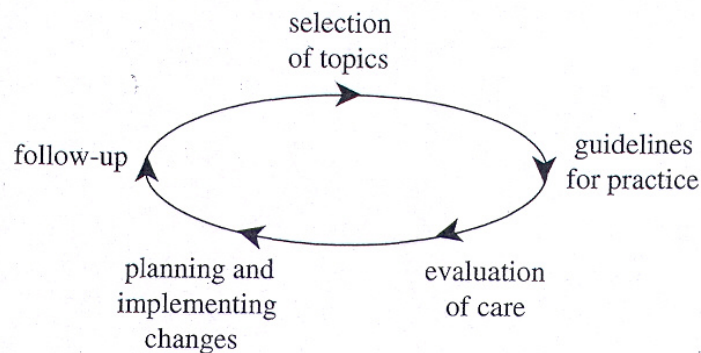
Quality can be seen from various perspectives. Three key groups each representing their core values are identified.¹⁷ The patients may have increasing demands and expectations. Purchasers are financially responsible: in Belgium the government has a main role to play in the financing of the health care system. Finally, the health care providers (as the GPs for example) are responsible for delivering adequate care at affordable costs.

1.3.2 Improving quality in general practice: the quality cycle

Quality development essentially deals with a cyclic process illustrated below.¹⁸ Going through the cycle is a process with the following steps:

- Selection of a relevant topic or set of topics for general practice: those topics should be liable for improvement;
- Selection of guidelines, criteria and standards to be used for measurement;
- Measurement using valid, reliable instruments;
- Analysis and evaluation;
- Planning and implementation of improvement;
- Assessment of the improvement activities.

Figure 1. The quality cycle (with the permission of R. Grol)



I.3.3 Methods for improving quality in general practice

Marshall and Campbell listed some methods used for improving quality in general practice¹⁹. This review adds some other initiatives.

- Development of guidelines and clinical pathways. A guideline is a work consisting of a set of directions or principles to assist the health care practitioner with patient care decisions about appropriate diagnostic, therapeutic, or other clinical procedures for specific clinical circumstances. Practice guidelines may be developed by government agencies, by institutions, by organizations such as scientific societies or governing boards or by expert panels. They can be used for assessing and evaluating the quality and effectiveness of health care in terms of measuring improved health, reduction of variation in services or procedures performed, and reduction of variation in outcomes of health care delivered. Pathways are schedules of medical and nursing procedures, including diagnostic tests, medications, and consultations designed to deliver an efficient, coordinated program of treatment (MeSH definitions).
- Audit: based on structure and clinical indicators, it is a detailed review and evaluation of selected clinical records by qualified professional personnel for evaluating the quality of medical care (MeSH definition).
- Significant event analysis: this procedure uses a well-defined structure to analyse errors, accidents or near accidents, to look for the causes and to define actions to prevent them.
- Continuing medical education includes lectures, seminars and courses.
- Personal education: reading of journals, reviews and books.
- Learning diaries or 'portfolios' are tools used by the physicians to record their personal learning project i.e., what they want to learn, the trigger for learning, the resources and the outcome of this knowledge.^{20, 21} The portfolios have three functions: personal development, assessment and learning.²² Those tools are used e.g. for the training of future GPs.^{23, 24}
- Assessment of user's care experience or satisfaction using questionnaires or patient groups.
- Peer review in Local Quality Groups (LOK and GLEM)²⁵: small groups of physicians meet on a regular basis to discuss quality topics. Peer review also refers to the visit of practices by peers.
- Accreditation and certification are formal processes and highly summative in nature to check the compliance with a set of standards. Individuals apply for certification on a voluntary basis. Certification gives a professional status e.g., certification for a medical specialty (MeSH definition). The Belgian term 'accreditation of GP' refers more specifically to a certification procedure of the individual practitioner.
- Feedback from centrally collected data and physician profiling: may be formative or summative in order to identify outliers.
- The public annual reports of the practices enhance the transparency for the society (stakeholders like patients, insurance companies/funds and accreditation bodies). It contains the status of the administrative and operational functions and accomplishments of an institution or organization (MeSH definition).

Two certification models, currently of use in industry, may also be relevant to general practice:

- ISO 9001:2000 is a quality system used in industry.²⁶ The International Organization of Standardization is hardly referenced in the international literature on quality improvement in health care for general practice.²⁷
- The European Forum Quality Award Model (EFQM) was introduced in 1992 and is a framework for assessing the management of organizations.

The aim is that participating organizations would become leaders in their field. The EFQM model looks at what an organization is doing (criteria for enablers) and what an organization achieves (criteria for results).²⁸

1.3.4 Levels of quality development initiatives

Quality development initiatives are performed at different levels. At the individual level, the individual GP improves his/her work for instance by applying individual learning agendas to record and fulfil personal learning needs. The next higher level (the practice) takes into account the premises of the practice, practice organisation and the interaction between health care workers in the practice. At a higher level, local or regional groups of GPs organise projects to improve quality for instance by improving screening activities. The central level mostly relates to initiatives of colleges of general practitioners or governments as for instance standard setting, guideline development, feedback on prescription, formal certification and accreditation procedures.¹⁸

Table I summarizes the levels with illustrations of initiatives for developing quality. The last column gives examples of the Belgian context: they will be further detailed in the next paragraph.

Table I. Levels of quality development initiatives

	Aim	Means	Examples from Belgium
Individual	Individual continuing medical education and change of practice	Self-study, distance learning, continuing medical education, skills training, case discussions, feedbacks, reminders	Vocational training and learning diaries Continuing Medical Education
Practice	Quality development with all team members of a practice	Significant incident, going through the quality cycle, implementation of a practice guideline, patient participation groups, development of procedures in the practice, practice visits, annual report	Small scale quality projects during the vocational training 'Evaluatie van Kwaliteit' support group (Domus Medica) and 'Maisons Médicales'
Local/regional	Structures and initiatives for promoting quality development at regional level	Transmural initiatives, consensus building, peer groups Clinical pathways	Continuing medical education programs (Domus Medica, SSMG and universities) Local Medical Evaluation groups (GLEMs/LOKs)
Central	Policy for promoting quality at national level	Guideline development, certification and accreditation	Guideline development by professional bodies Domus Medica and SSMG Feedback of prescription data to GPs "Accreditation" of GPs

I.4 QUALITY DEVELOPMENT IN GENERAL PRACTICE IN BELGIUM

I.4.1 Legal framework

Belgium paid attention to quality of care from the nineties onwards. A national steering comity on quality (CNPQ/NRKP) initiates and supervises quality initiatives. Most of these initiatives deal with the quality of care at individual doctor level.²⁵ Two national laws define the conditions of “accreditation” in Belgium.

A royal decree (1994) describes the accreditation scheme of the GPs. This “accreditation” differs from the concept of accreditation for the practices. The “accreditation” of individual doctors refers to the certification of doctors who fulfil specific criteria. There are four domains i.e., continuing medical education, peer review system in small groups, optimal organisation of the medical practice and rational prescription²⁹ All physicians have to keep medical records of their patients and collect at least 20 credits of continuing medical education per year, to have at least 1250 patient encounters per year, without any outlier prescription profile. The GP should attend LOK/GLEM meetings (Local Quality Evaluation Groups) at least twice a year. The “accreditation” is not mandatory but being accredited leads to extra remuneration (see the statistics in appendix 9).

The National Body for Quality Promotion (CNPQ/NRKP) was launched in 2001.²⁵ This body is responsible for development of the peer review process in all medical specialities, especially for conditions where evidence based criteria exist. It is also responsible for the approval of the indicators used for screening and monitoring colleagues with over prescription. Moreover, the CNPQ/NRKP gives recommendations for the correct use of the ‘global medical record’ (DMG/GMD).

The CNPQ/NRKP validates the current programme on the clinical pathways of diabetes mellitus and renal failure. It recently supported a Quality Award for outstanding initiatives in general practice: in 2007, 28 projects were nominated. The budget for 2008 is 14 000 euros.³⁰ Finally, the Royal decree of 2001 defines the accrediting body and comities relating to various specialities.²⁵

I.4.2 Quality development initiatives in the Belgian context of general practice

To date, quality development of general practice in Belgium has been the focus of many initiatives by different stakeholders from the profession and from governmental bodies (INAMI/RIZIV and Ministry of public health).³

At national level, the following range of activities has been set up:

- Accreditation: described in the paragraph I.4.1.²⁹
 - Peer review in Local Quality Evaluation Groups (GLEMs/LOKs): the participation to these meetings twice a year is a condition for accreditation.³¹
- Feedbacks on prescription for individual GPs: the topics already studied include the prescription of antibiotics, antihypertensive drugs and mammography screening. The standardisation of the data takes account of the number of patients seen and of the number of patients on the GP list.³² The objective of the GLEMs/LOKs is e.g., to discuss the results of the individual feedbacks and enhance their impact on the practice.
- Guidelines: both GP scientific societies develop guidelines i.e., the French speaking Société Scientifique de Médecine Générale (SSMG) and the Flemish Society Domus Medica^{33, 34}. Currently 17 French and 27 Flemish guidelines have been validated by a specific commission or more recently by the Belgian Centre for EBM (CEBAM). Most guidelines are nowadays published in both languages. The guidelines development is financed by the Federal Government and in Flanders also by the Flemish Community (for prevention).

At regional level, the following initiatives were mostly initiated by the professional bodies and by both scientific societies of general practice.

Continuous medical education: regularly organised by university departments of GP, the scientific societies of GP, the regional bodies of GPs and other parties.

Quality activities of the SSMG: the CRAQ (Cellule de Réflexion à l'Amélioration de la Qualité) gathers the French-speaking GPs interested by Quality. The main activities are the training of trainers in quality, the implementation of guidelines, the education and support for practice evaluation (feedbacks, EPA) and the support for GLEMs.

Quality activities of Domus Medica: a taskforce has set up a voluntary commitment for quality named 'Evaluatie van Kwaliteit (EKWA)'. The three main domains are clinical work, practice organisation and patients' views.³⁵ Individual practices perform a voluntary registration with the support of the EKWA group. Five-day training sessions for quality management in GP practice focus on safety management, working in team and practice guideline implementation. Training sessions for moderators focus on group work, priority setting and quality development for peer review. EKWA developed fifteen 'Ready for use' programs for peer review based on the quality cycle.

Quality initiatives by the 'Fédération des Maisons Médicales'. This organization federates 70 multidisciplinary primary health care centres. They developed, in collaboration with the primary care teams, a teaching aid designed to facilitate the implementation of the quality cycle on the field.³⁶ They also organize training of the workers and follow up of the quality projects. Many teams apply the quality cycle process to the curative and preventive work as well as to organizational tasks.

The Interuniversitair Centrum of Huisartsenopleiding (ICHO) Postgraduate students specialising in general practice have to develop a quality project during their training for their post master thesis. More than 100 quality projects run yearly in the teaching practices in Flanders. Most universities give interactive workshops to train students in quality development techniques like clinical event analysis and small projects using the quality cycle.

1.4.3 Evaluation of the outcomes of Continuous Medical Education, LOKs/GLEMs and feedbacks in Belgium

One small recent study analysed the outcomes of a training session for GPs working as coordinators in long term facilities for the elderly in Belgium. The main finding is that, despite a good satisfaction of the participants, this training did not increase the knowledge level and had no positive effects on the work.³⁷

Some studies analysed the outcomes of Local Quality Evaluation Groups (GLEMs/LOKs) and feedbacks in Belgium. In a survey among LOKs/GLEMs of all medical specialities, about 50 percent of the groups reported a higher level of knowledge. Most groups (85-90%) reported that the LOKs/GLEMs positively influenced the personal relationships among doctors.³¹

A single intervention in Local Medical Evaluation Group for the implementation of a guideline for rhino sinusitis did not improve the quality of antibiotics prescription.³⁸

A KCE report described trends towards a better quality of prescription of specific antibiotics after the feedbacks. However the use of non-first choice antihypertensive medications did not change. The Local Medical Evaluation Groups did not often discuss individual the feedback sent to individual GPs.³⁹

In conclusion, the Belgian doctors do appreciate the LOKs/GLEMs meetings but there is no evidence of their impact on GP quality of care. The feedbacks on prescription as organised by the RIZIV/INAMI do not seem either to be effective.

I.5 CHALLENGE TODAY AND OBJECTIVE OF THIS REPORT

The paragraph above shows that the quality activities in Belgium lack evidence on their effectiveness. Moreover, the set of quality development activities do not cover comprehensively all activities of the GPs. Their impact on the process and outcomes of care are either non-existent or not assessed. Finally, it is important to notice that the main focus of all initiatives is the individual GP. Until now, the quality development of the practice itself and the interactions within the primary care teams received little attention.

The challenge today is to develop a comprehensive framework for quality development for general practice in Belgium that allows for the uniqueness and holistic nature of this discipline. This report provides essential elements to develop this framework.

I.6 STRUCTURE OF THIS REPORT

The second chapter reviews the main quality systems of five countries selected for their similarity with our health care system or for their major progress in the field of quality development in GP. A systematic literature review supports the description of the countries. The objective of this chapter is to gather materials to create a concept for a Belgian quality development system in general practice. The appendices 6 to 8 lists the indicators used in the selected countries.

The third chapter reports the feasibility of the European Practice Assessment tool (EPA) as an instrument in the Belgian context. Data from Belgian general practices highlight the strengths, weaknesses and implementation of this instrument designed for assessing the quality of the organisation of a general practice.

Finally, from the previous findings, the final chapter proposes the necessary components for a framework for the quality development of general practice in Belgium.

2 QUALITY SYSTEM IN GENERAL PRACTICE: ANALYSIS OF FIVE SELECTED COUNTRIES

2.1 INTRODUCTION

This chapter reviews the quality systems in five selected countries i.e., the national quality initiatives, the indicators used and the evidence that a specific quality system improves process and outcome measures in general practice. The final objective is to derive suggestions for a quality development framework in Belgium.

2.2 METHODOLOGY

A first literature search in electronic databases (i.e., Medline, Embase and DARE) was followed by a more in-depth analysis of the five country systems using grey literature and native experts' opinions.

2.2.1 Selection of the countries

Some countries were pioneering quality initiatives in the 70's and 80's i.e., the United Kingdom, the Netherlands and Scandinavian countries. The other states followed them to some extent.² Nowadays, most Western European countries have national and local policies on quality development in general practice.

The selection of countries focused on Western European countries, in order to get results applicable to the Belgian health care system:

- France has a health care system similar to Belgium;
- Germany has a national policy for quality in family practice, obligatory for all GPs;
- The UK pioneered quality initiatives in GP and developed great innovations in that area;
- The Netherlands also have a long history of research and quality development in general practice. Moreover, collaborations exist with Belgium like for instance in the field of guidelines development.

The addition of Australia answered to the need for analysing an outstanding example of recent development of a quality system based on a preliminary conceptual framework.

The US was not included in the review because the health care system and the working conditions of general practitioners are far different from the Belgian ones. The Scandinavian countries were also excluded because they mostly publish grey literature in their native language, making it very hard to analyse comprehensively the available literature and websites from professional bodies.

2.2.2 Search strategy in electronic databases

The literature search relied on a 'waterfall' methodology, beginning with good quality reviews further completed by more recent papers. The first search strategy outlined in appendix I applied the following limitations:

- Publication date since 1996: quality systems have been set up from 1990 onwards. A few of them only were operational in the 90's.
- Publications on the selected European countries and Australia.

The last and most relevant review ended its literature search in 2003. A first complementary search analysed all types of papers since 2003 until May 2007. A second search focused more specifically on peer review, audit and practice visits as these are the major methods described in the literature about GP quality development.⁴⁰ Moreover, possible decisions about the implementation of EPA in Belgium after this field study (chapter 3) must rely on the evidence about the effectiveness of practice visits.

2.2.3 Grey literature: electronic sources and additional information on the selected countries

The main sources of information were the websites of the National Health Authorities, professional bodies and colleges and third parties engaged with quality development (see appendix 2). The results were summarized in a narrative text using the following headings:

- Organization of the health care system, with focus on family medicine/general practice;
- Quality development in action: legislation, financing, organisation and implementation;
- Evidence for the effectiveness of the system;
- Future developments.

Two national experts in the field of GP quality reviewed the description of their country. They were selected through the EQuIP working party (European Association for Quality in General Practice/Family Medicine) or by personal contacts for Australia. The natives checked the first description of their national quality system and provided further internet sources and documents. The researchers added their amendments in the text and if necessary held a telephone interview. The appendix 3 details the national representatives for each country.

2.3 RESULTS OF THE LITERATURE STUDY

2.3.1 Selected reviews and papers

The initial search of reviews yielded 937 papers. During the selection process, LS and RR independently applied the following exclusion criteria i.e., major topic not related to family medicine/general practice, focus on specific pathologies (i.e. diabetes mellitus), focus on a non-Western European country (i.e. US, Canada). The papers included concerned

- either family practice/general practice AND quality of care AND practice based evaluation systems,
- or family practice/general practice AND quality of care but not specifically about practice evaluation systems.

RR, LS and PL reached agreement on papers that were disputable for entry and selected fifty-seven papers for the reading of full texts.

A second selection was based on the following exclusion criteria i.e., other country than the five countries of interest, descriptive study of a local project, methodology for the development of clinical quality indicators (described in the former KCE report³). After full text reading by two independent readers (RR and HP) and check by LS, the researchers selected six reviews for final analysis. The selection of other interesting papers aimed at providing food for thoughts in the discussion or at completing the descriptions of the countries.

A first complementary search in Medline and Embase used an identical methodology from 2003 onwards without any limitation on the type of article. This strategy yielded 301 papers. After reading the abstracts and joint appreciation of HP, RR and LS, using the same inclusion criteria as above (but excluding the limit 'review'), 30 papers were included for the analysis.

A second complementary search in Medline looked for papers on quality circles, peer-review and audit. This search yielded 132 papers. After discarding double references, seven papers were selected. Four papers were duplicates, one paper was a letter and one paper⁴¹ was already in the selection of the reviews. Hence 31 additional papers were added to the selection.

Table 2 summarizes the origin and the number of selected papers. The appendix 4 describes briefly the selected reviews. The appendix 5 lists the papers selected from both complementary literature searches.

Table 2. Number of selected papers

	First search	Selection after review process	Selected reviews	First Complementary search	Selected papers	Second Complementary search
MEDLINE	727	43	5	250	26	132
EMBASE	87	10 (2 duplicates)	1	51	4	
CRD	103	2	Not performed	Not performed	Not performed	
COCHRANE	20	2	Not applicable	Not applicable	Not applicable	
	937	57		301	30	1
Final selection			6			31

2.3.2 Description of the selected reviews

The most recent and relevant review was the paper from Contencin et al.⁴⁰ This paper describes an overview of the current quality systems. Moreover, it addresses the strengths and weaknesses of different approaches in relation to the culture of the countries and to the health care systems. All studies included in the review addressed the doctors' behaviour but data on effectiveness on patient outcomes were not available. The authors argue that the most powerful and common instruments within quality systems in general practice are the following ones:

- Practice audits. This term has been defined above as a detailed review and evaluation of selected clinical records by qualified professionals for evaluating the quality of medical care. The analysis is often conducted by a third party. Audit implies nowadays the use of computer infrastructure.
- Peer-review. A group of GPs review and discuss about their patients or practice records. Peer reviews exist in the Netherlands and in Germany. Recent studies focused on pilots of this method in the UK.
- Practice visits. This is the most advanced and individualised peer review technique. Feedback and willingness to change are key aspects. Colleagues or peers visit the practice, offering the possibility to observe the structure and process of the practice.

The literature review of King and Wilson was the theoretical basis for launching a large scale program on quality development in Australia.⁴² The bulk of information came from the UK and Australia. These authors concluded that evidence about the effectiveness of quality development is very scarce given and because of the early stage of quality development in general practice. They listed a number of components for quality development and identified a set of precursors and enablers. For instance, a shared culture, strong leadership, effective organisation of general practitioners, professional and financial incentives are important in the Australian context. The authors see the development of primary care trusts as an important precursor to develop a comprehensive approach.

Rhydderch's paper analysed the peer reviewed literature on organizational assessments.⁴³ From the available studies, the authors discuss about an incremental scale ranging from applying minimal standards in one practice towards the emergence of an organisational culture in primary care.

Narrowing the scope to clinical care, Seddon et al. reviewed the available evidence in the UK, Australia and New Zealand.⁴⁴

Most of the studies reported chronic conditions. Gaps were identified for quality initiatives in relation with acute care, preventive care and non-technical aspects of care.

Grimshaw et al.⁴⁵ undertook a systematic review to study the effectiveness and costs of different guideline development, dissemination and implementation strategies.

Studies on cost-effectiveness of dissemination and implementation strategies are scarce. Multifaceted interventions (encompassing practice visits or written materials) do not seem to be more effective than simple interventions. From a cost-effectiveness standpoint, the simple dissemination of guidelines may be therefore more cost-effective than interventions with multiple components.

The review of Holden studied the effectiveness of audits in the UK. Substantial resources are needed to design and to implement audits. It is hard to study their isolated effects because audit is often a part of a multi targeted strategy, including for instance peer review.⁴⁶

2.3.3 Effectiveness of peer reviews, practice visits and audits

2.3.3.1 *Audit*

Most audits use a few indicators only, often derived from guidelines. The agreement on the validity of the indicators used is often low, with a risk that audit would not measure what is intended to.⁴⁷ Many GPs do not seem able to apply audit techniques.⁴⁸ There is little evidence that audit procedures improve quality of care in the practice and Holden concludes that audits seem to be moderately effective.⁴⁶

2.3.3.2 *Peer review*

The effectiveness of peer review is questionable but there is some evidence that this may lead to improved test ordering in the Netherlands.⁴⁹ There is a lack of evidence on the effectiveness in Belgium, as detailed in chapters 1 and 4.^{39, 38}

2.3.3.3 *Practice visit*

A practice is visited by a peer or, as in the Netherlands, by a specialised practice assistant or practice manager. Van den Hombergh et al. published a comparison between the scores of practice visits in single-handed and group practices.⁵⁰ Two preliminary projects in Australia and in the UK only showed the satisfaction of the participants.^{51, 52}

2.3.4 Quality indicators

The former KCE study reviewed the definitions of quality indicators and clinical quality indicators.³ One conclusion is the absence of clear-cut difference between the definitions of quality indicators and clinical quality indicators. All definitions agree on the fact that quality indicators measure a specific aspect of care.

In general practice, the most frequently used definition of quality indicators also refers to 'a measurable element of practice that can be used to assess the quality of care.'⁵³

The main domains of indicators are the following ones:

- Organisational and management indicators. This field is emerging: the Nijmegen Group had some publications whilst those indicators also play now an important role in the UK.^{54, 43, 55}
- Patients' experiences deal with how patients perceive the structure and process of care. Van den Hombergh describes the use of the EUROPEP patient questionnaire that was validated in Europe⁵⁰ It is currently also part of the European Practice Assessment tool.
- Clinical indicators. They relate to the clinical work in GP. They mostly relate to chronic conditions or prevention.^{54, 56}

An indicator is a measurement of a small part of the structure, process or outcome.

The paper from Campbell et al. and the KCE report on clinical quality indicators listed the following attributes of a good indicator^{57, 58, 3}. The measurement-related technical

characteristics are the relevance, validity, reliability, sensibility and specificity. Characteristics in connection with their use are also important i.e. a feasible data collection and an easy interpretation by the stakeholders involved. Finally, good (clinical) quality indicators should bear a potential for improvement and be acceptable within the profession.

The KCE report on clinical quality indicators proposed steps to develop quality indicators in Belgium: experts would weigh the evidence and their clinical experience.³ As the evidence evolves, indicators are subject to development. In the UK for example, indicators are yearly reviewed.⁵⁴

However, the development of indicators requires caution^{59, 56}: the UK experience shows that the agreement on the applicability and validity of indicators is low, even if they are based on scientific evidence.^{47, 60} Most indicators relate to the technical aspects of care and deal with chronic conditions. The input from patient groups is rare.

2.3.5 Precursors, enablers and incentives for implementing a quality development framework

In the UK, GPs have been long working with audits and measurement using standards: the remuneration for quality was a part of their income.⁵⁴ This history may explain the relatively easy evolution towards a quality incentive framework for GPs.⁶¹

Apart from history and culture, other influences are powerful in a quality development system e.g., feedbacks from opinion leaders, teamwork, patients' perspectives, ownership within the profession and continuous learning.⁴⁰ Effective organisation of general practitioners, professional and financial incentives were also identified by the review of King et al.⁴²

Apart from the financial incentives described above, the focus on quality of individual health care providers and a policy at the national level seem key factors for success.

2.3.6 The Quality Outcomes Framework in the UK

The Quality Outcomes Framework (QOF) is an outstanding example of programme for improving quality in general practice at a national level. The description of the QOF is the topic of many papers published in peer reviewed journals. This description will be also further detailed in the chapter 2.4.4. (UK system).

The QOF has been a major change for promoting quality in general practice in the UK.^{54, 62} Essentially, the framework offers financial incentives for general practices according to their results based on specific quality indicators. The range of 146 indicators mainly relate to coronary heart disease, hypertension, diabetes, organisation of the practice and patient experience. According to the authors of published papers, the QOF could lead to the following positive and negative consequences.

2.3.6.1 *Positive consequences of the QOF*

The authors found that the introduction of the QOF was associated with the improvement of indicators for specific chronic conditions^{63, 64}. This impact is detailed in the description of the UK system (paragraph 2.4.4.3).

Other positive changes include the improvement of GP computer systems, the development of the role of nurses in general practice, the multiplication of clinics specialised in specific chronic diseases, the emphasis on the bio-medical orientation of GPs.⁵⁴

2.3.6.2 *Negative consequences of the QOF*

However the same authors underline potential negative consequences^{54,65}: a less holistic approach, reduced continuity of care and care fragmentation are risks identified by the GPs themselves. The sets of QOF indicators mainly cover clinical and technical domains. For instance only about 40 points out of 1050 deal with psychological or psychiatric issues.⁶⁶ This means that the actual measurement and subsequent development of quality may be biased towards easy-to-measure indicators and as a consequence, the broadness and holistic nature of the construct of general practice may not be fully covered.⁶² This urges the QOF scheme to face the need for a more comprehensive approach of care.⁶⁴

A threat is the increasing importance of administrative tasks instead of taking care of the patients⁶⁵. The nurses expressed more concern than doctors about this risk for their clinical practice but also appreciated to have the responsibility for working with targets in particular areas like chronic diseases.⁶⁷

The GPs also suggested that care could worsen for conditions not included in the incentive system⁶⁵ Research on areas of care that are not in the QOF is very scarce: it is therefore impossible to counteract the hypothesis of a worse quality in these areas.

GPs show high levels of reporting quality points. The mean achievement among GPs in the UK is now more than 90 percent of available quality points.^{68, 62} Since the introduction of this quality system, the budgets considerably increased as the average GP income rose more than expected (23 percent instead of 18 percent).⁶²

The scheme may not fully respect the equity principle as practices in socially deprived areas achieve less QOF points and hence less remuneration.⁶⁶ There is evidence that larger practices, training practices and practices in privileged areas attain higher scores.^{66, 69, 70} Salaried GPs have lower QOF scores.⁶⁹

There is some evidence that higher quality points do not reflect better adherence to guidelines, indicating the gap between the relatively simple measures of quality in the QOF (relying on the record of a narrow range of computer codes) and the actual standard of care being delivered.⁷¹

2.3.7 Pan European initiatives

The literature describes three pan-European initiatives i.e., OECD Health Care Quality Indicators Project.⁷², the European Practice Assessment tool⁷³ and the Maturity Matrix.^{74, 75}

2.3.7.1 *The OECD Health Care Quality Indicators Project*

The aim of the OECD Health Care Quality Indicators Project⁷² is to collect international comparable data on health care outcomes and improvements in OECD countries. Difficulties were practical constraints when reviewing possible indicators and the delineation of the scope of general practice and primary health care in the different European countries. Consensus techniques allowed deriving a limited set of clinical and preventive indicators for primary care, including general practice. This project awaits further implementation.

2.3.7.2 *The European Practice Assessment tool*

The European Practice Assessment tool deals with the organisational aspects of the practice. A conceptual framework for the assessment and quality development of organisational aspects of GP was the basis of this European instrument.⁷³ Using modified Delphi procedures, Engels et al. worked out a set of indicators on the assessment of general practice.⁵⁵ A careful selection procedure decided on a set of indicators considered as valid in the European context. Chapter 3 details a field test of this instrument in Belgium.

2.3.7.3 *The Maturity Matrix*

The maturity matrix aims to locate a practice in the scope of quality development. This formative and informal instrument is used in association with an educational practice visit.^{74, 75} The authors start from the conceptual view that there are stages in the development of quality within practices. Using a visual representation, the results give a snapshot on the eleven 'maturity' indexes. This instrument is now translated into various languages and currently tested within European GP practices.

The following domains are covered and in each domain a range of growth, indicating the maturity of the practice on the domain is scored:

- Prescribing (one extreme is relying on written patient record as compared to the use of fully coded data on consultations),
- Audit of clinical performance (no clinical audit as compared to systematic audits with results shared by with the public),
- Use of guidelines (no guidelines policy in the practice as compared to full integration of guidelines into the clinical management systems),
- Access to clinical information (no system to retrieve the available evidence as compared to all clinicians skilled to find relevant clinical information on internet),
- Availability of prescribing data (no prescribing data available in the practice as compared to regular visits of a specialist to give independent advice on prescribing),
- Human resource management (informal arrangements as compared to written contracts between staff and practice and skill mix review),
- Continuing professional development (from no arrangement to CME budgets reviewed annually),
- Risk management (no arrangements for handling patient complaints as compared to planned evaluation of significant event analysis),
- Practice meetings (no arrangements as compared to planned practice meetings with social services),
- Sharing information with patients (no information for patients as compared to individually tailored information provided to patients about harms and benefits of treatments),
- Learning from patients (no system for collecting feedback as compared to patient engagement as a part of the routine management process).

2.3.8 Lack of evidence on the effects of quality initiatives on outcomes at the patient level

The evidence that a quality development system works at the patient level is very scarce. This literature review only identified two papers that considered the relation between the use of a quality development framework and patient experience. The first study found a positive correlation between QOF total score and patient satisfaction. These authors therefore question the construct validity of the set of indicators of the QOF.⁷⁶ In Australia, patients of GPs who went through the accreditation process also reported higher satisfaction.⁷⁷

Contencin et al. identified the cost-effectiveness of any quality system as an important issue.⁴⁰ However, the selected publications seldom mention the cost-effectiveness of quality systems and quality development initiatives. Some authors state that particular systems may waste resources as for example clinical audit.⁴⁷

Finally, the effect of a quality system on patient outcomes also depends on the modalities for implementation within the health care context.

In most European countries, the participation to quality development initiatives relies on voluntary participation. This mechanism might weaken the global effect on patients' outcomes at the population level.

However, as stated above, incentives can enhance the participation of the GPs: UK doctors largely increase their income if they adhere to the QOF. In Germany, a formal mandatory system exists: it will be further detailed in the description of the country.⁴⁰

2.3.9 Limitations of the literature study

A major problem in the analysis of the literature on quality development in general practice is the variation of the definition of this specialty according to the health care systems. To keep the concept of general practice as homogeneous as possible, this review focuses on 5 countries with health care systems similar to Belgium. However, there are also probably lessons to be learned from other efficient health care delivery structures (as the HMOs in the US).

Nearly all papers gathered data from self-selected practices. Most findings are therefore difficult to generalize to the whole population of general practitioners. Furthermore, there is considerable bias linked to the countries selected. The literature from France and Germany, both non English-speaking countries is scarce. Researchers from both countries did participate as co-authors in some publications.^{74, 78, 43, 75, 79} On the other hand, researchers from the Netherlands and the UK have often been working in consortia with many interactions between researchers.

2.3.10 Discussion of the literature search

This literature search highlights the paucity of evidence on evaluation of quality systems in general practice. On the opposite, there are many papers on quality for specific pathologies like diabetes care, which is an important issue, although a small part only of the GP's daily workload.

Quality development initiatives are growing in all selected countries and the debate of quality development in GP is only emerging. Major points for the development and implementation of successful quality systems are the followings:

- Policy and leadership are crucial. This literature search identified the UK and Australia as leading countries. In both countries, governments positively influenced the quality agenda. Legislation seems one of the most powerful enablers.
- Incentives are important for the success of any quality development system. Financial incentives may be in particular powerful, as shown in the UK literature.
- This literature review confirms the findings of the previous report i.e. the need for a careful selection and field test of the different types of indicators (clinical, organisational and patient experiences).

The next chapter details the quality systems in the five selected countries in order to complete the information from this systematic literature review. This detailed analysis highlights the conditions for implementation, the opportunities and difficulties linked to quality development systems in general practice.

Keypoints from the literature review

- **Most papers come from the UK, Australia and the Netherlands. The major elements in the development of quality systems are a national policy, a professional leadership and a careful choice of incentives for the GPs.**
- **A systematic review concluded that peer reviews, practice audits and practice visits are the most common instruments used in the quality systems in general practice. There is a lack of literature about their effects on the quality of care, even if studies show the satisfaction of the participants.**
- **The literature about the UK Quality Outcomes Framework analyses the positive and negative effects of a pay for quality system. The implementation of this scheme requires considerable budget and there is a lack of agreement about the choice of indicators that only reflect a small part of the GP daily work.**
- **Three international initiatives refer to the measurement of quality in general practice i.e., the OECD clinical quality indicators, the European Practice Assessment instrument and the Maturity Matrix.**
- **Many papers describe initiatives in self-selected practices and the results might not be applicable to the whole GP population.**
- **There is a lack of evidence about the effect of any quality system on the outcomes at the patient level.**

2.4 DESCRIPTION OF THE QUALITY SYSTEM IN THE FIVE SELECTED COUNTRIES

This analysis begins with an overview of the characteristics of the health care systems of the five selected countries (see table 3). The information comes mainly from the 'HIT Profiles' of the European Observatory on Health Systems and Policies^{80-84,5} and from the statistics of the Organisation for Economic Co-operation and Development⁶. The websites of professional bodies, national and international organisations completed this data source (see appendix 2). The appendix 3 displays the list of native experts who checked and completed the descriptions of their countries.

Table 3. Overview of the health care systems. Data from the European Observatory on Health Systems and Policies and from the OECD(#). (*significantly increasing because of a recent input in the NHS⁸⁵)

All health systems included in this review aim to cover the entire population but their organisation differs in many respects. The role of the GPs ranges from gatekeeper to non gatekeeping and competition with specialists in primary care.

	UK	AU	NL	GE	FR	BE
Sources of financing	Tax-based	Tax-based and contribution #	Tax-based and contribution	Contribution	Tax-based and contribution	Tax-based and contribution
Total health expenditure (2004, public and private US dollars per year - #)	2560(*)	3128	3094	3169	3191	3290
Total health expenditure as a percentage of GDP (#)	8.1	9.5	9.2	10.6	11.0	10.2
Public versus private expenditures as a percentage of GDP	83	68 (20.3 % out of pocket)	79(15 private and 6 out of pocket)	76.1 of households, increasing since 2004	87.8	71.4
Aim to cover population	Full	Full	Full	Full	Full	Full
Number of Physicians/100 000	164	250	315	336	333	448
Principle payment methods for GP	Capitation and quality points	Fee for service, direct payment and bulk billing	Capitation and fee for service, bulk billing ⁸⁶	Fee for service	Fee for service, direct payment	Fee for service, direct payment, some capitation, direct payment
Specialists working in primary care	No	No	No	Yes	Yes	Yes
GP acts as gatekeeper	Yes	Yes	Yes	Only is some plans	No	No

2.4.1 France

2.4.1.1 *Organisation of the health care system, with focus on general practice*

The French health system attempts to keep a balance between values like equity, freedom and efficiency. All inhabitants are insured since the implementation of the Universal Coverage Act in 2000 (CMU: Couverture Maladie Universelle). Most people (95 percent of the population) are covered by the 'régime général'.

The system is tax and contribution based. Contributions based on earnings (employers and employees contributions) are completed by social contribution ('Cotisation Sociale Généralisée'); this part is based on total income and covers 87.7% of the fluxes. The professional bodies are mainly concerned with ethical and professional practice and practice guidelines are upon the responsibility of the HAS. Furthermore, six unions are competent to sign agreements with the insurance funds. Only 29 percent of GPs are union members.

The share of the GDP on health care expenditure rose considerably, from 8.1% in 1980 to 11% in 2004. Since 1996 (the Jupé reform) there is national ceiling for health insurance expenditure ('Objectif National de Dépenses d'Assurance Maladie'). From 1971 onwards, doctors may enter in a 'conventionnement' that ceils their prices. Otherwise, they lose social and tax advantages. Agreements were signed in 1997 between the insurance funds and the GPs but they were not possible with the specialists.⁸³ This situation improved in 2005 with the signing of a new national 'convention' with professional unions of GPs and specialists.

In France, patients have a freedom of choice for health professionals. Outpatient care is mostly provided by self-employed physicians in a fee-for service system. A GP has on average 1400 patients and about 4800 patient contacts per year, including home visits (about 25 percent).⁸³

The patients choose a 'main doctor' (GP or specialist). They get a higher reimbursement when this physician refers them to others specialists than if they go straightforward to another specialist. This could be compared to some kind of gatekeeping system but without any patient list. The patients can change of 'main doctor' anytime they want without any consequence. This 'gatekeeping system' does not value the central role of a GP.

The computerisation of medical records is hampered by the lack of budget and mostly by the resistance of physicians who are afraid of any external control.

The health system combines public and private care, including for-profit hospital care. In the Jupé reform (1996), doctors are co-responsible for exceeding the budgets. However, the budgets exceeding the targets never gave rise to any refunds by doctors.⁸³

In summary, the characteristics of the French primary health care system are the following:

- A fee for service system;
- A diversified liberal offer (general practitioners, hospital emergency rooms, specialists, health centres);
- An abundant offer but unequally distributed;
- The freedom of choice for the patient;
- An insufficient coordination between health professionals and between primary and hospital care, despite of some local efficient networks.

The three main problems on the agenda are:

- Lack of primary care accessibility in rural areas, with difficulties for the continuity of care;
- Redefinition of the medical offer, including a transfer of tasks;
- Control of the health care expenses.

2.4.1.2 *Quality evaluation in action: culture, legislation, financing, organisation and implementation*

The HAS was set up by the French government in August 2004 in order to bring under a single roof a number of activities designed to improve the quality of patient care and to guarantee the equity within the health care system.⁸⁷ Its mission is to give independent advice to policy makers, professionals and patients about the quality of health services and to provide information related to products and services paid by the health insurance system. The HAS activities include e.g., the assessment of drugs, medical devices and procedures, the guidelines development, the accreditation of healthcare organisations and the certification of doctors. Training in quality issues and information provision are also key components of its work programme.⁸⁸

The regional unions of the liberal doctors (Unions Régionales des médecins Libéraux - URML) are in charge of the evaluation of the professional practices and of quality improvement.⁸⁹

Practice assessment and quality improvement activities are now mandatory for all practicing physicians. The responsibility of the procedures for quality improvement is also devoted to the 'Haute Autorité de la Santé' (HAS).⁹⁰ It is too early to say what these procedures will be and to what extent the professionals will be associated to their development. Moreover, the physicians have specific obligations as regards the quality of care e.g. continuous medical education. Finally, the development of pathways and networks of care support the promotion of integrated and continuous care at patient level.

Some initiatives and laws aim to improve the quality of care as for example:

- The FORMMEL ('Fonds de Réorientation et de Modernisation de la Médecine Libérale', 1996). The purpose of this Fund is to help with the modernization of the medical surgeries, for example by financing the computer systems.
- The FAQSV ('Fonds d'Aide à la Qualité des Soins de Ville'): offered possibilities for financing the improvement and the evaluation of the professional practices, the coordination of the care (networks) and the continuity of care (on-call health centres). The FIQS (Fond d'Intervention pour la Qualité des Soins) replaced the FAQSV in July 2007. The Fund ensures the budget distribution at regional level for health networks, continuity of care, help for installing new practices and group practices, quality improvement and coordination of care in urban settings. The mandatory evaluation of the selected projects will occur after three years whilst their funding is planned over five years.
- The DNDR (Dotation Nationale de Développement des Réseaux, created in 2001): allows the recurrent financing of health networks, supports the coordination and the complementarity of health care offer, the development of quality procedures and the continuity of care.
- The CME obligation for doctors and other health professionals (law n° 2002-303 of March 4th, 2002 art. 59.I and Law n° 2004-806 of August 9th, 2004): health professionals have to transmit to the regional council the elements justifying their participation to approved training activities.
- The obligation of individual evaluation for doctors and health professionals (Law n° 2004-810 of August 13th, 2004). The non-observance of this obligation exposes theoretically the doctor to sanctions: the 'Ordre des Médecins' should take measures in case against severe outliers: this never happened till now. A Decree (2005-346) entrusts to the URML the

responsibility to organise the Evaluation of the Professional Practices. This evaluation by the URML is organized upon the doctor's request. The EPP is mandatory and the law describes the EPP content, the implications and practical modalities.

The regional unions of sickness insurance funds (URCAM) are responsible for the coordination of the collective evaluation of the practices. Through regional programs of sick insurance, they set the priority actions for a collective evaluation of the practices (for example drop by X % of the prescriptions of statins or by Y % of the short duration medical leaves).

Those quality improvement initiatives launched in 1996 had a relatively limited impact. In 'liberal' medicine, the installation of multiple mechanisms of quality insurance did not improve the evaluation culture: the constraining mechanisms were a failure (example of RMO) and the inciting tools such as the evaluation of the professional practices (EPP) had a limited impact on the daily practice of the 'liberal' doctors.

PRACTICE GUIDELINES

The 131 'recommandations pour la pratique clinique' are accessible on the website from the HAS (Haute Autorité en Santé). Those guidelines are frequently linked with 'référentiels' for assessing the practice on specific issues. The HAS uses different development methods, mainly consensus conferences with multidisciplinary teams.⁹¹

Recently, prescription patterns changed after the introduction of guidelines but they do not seem to have any clear macro-economic impact.⁸³ To date there is no systematic evaluation at the level of the individual doctor.

PEER REVIEW GROUPS

Only one experiment of peer review groups is that of the French Society of General Medicine in Brittany, in partnership with the regional unions of the sickness insurance funds). Some groups receive a financing (FAQSV). Other peer review groups (as the groups from the Société Française de Médecine Générale) have no financial support. The participation to those groups is an item of the EPP evaluation procedure.

PRACTICE ACCREDITATION

Accreditation is mandatory for the health institutions but not for the 'liberal' practices. Some group practices piloted experiences of accreditation of 'liberal' practices for example in Brittany.

2.4.1.3 Evidence for effectiveness

There is no publication about the effectiveness of the current quality improvement mechanisms.

2.4.1.4 Future developments

The evolution is towards more transparency, as illustrated by the recent law on patients' rights. Continuous medical education is increasingly on the agenda with for example the organisation of trainings that last more than one day and the design of software that integrate guidelines within the medical record. However, the resistance of French doctors to any form of control is a serious break for the development of quality initiatives.

2.4.1.5 *Learning points and suggestions for Belgium*

The French experience illustrates some pitfalls in the implementation of a quality system at national level. First, the lack of conceptual framework underlying the initiatives entails difficulties for setting up a coherent system. Secondly, the scattered initiatives rely on the willingness of many actors with conflicting interests. The lack of an integrated quality system leads to an insufficient implementation in the practice. Finally, implementing quality initiatives is difficult when they did not involve the profession within their development.

The freedom of choice for the patients, the absence of gatekeeping system and the weak structure of 'liberal medicine' are often identified as factors hampering the quality of care whilst increasing the financial burden for the health care system. The 'quality steps' in the 'liberal' sector remain very limited, and exclusively relies on voluntary work.

Three last points are important for the French system:

- The balance between the obligation (recertification process for all practitioners; responsibility of complex pathologies by health networks) and the incitation towards voluntary investment in quality (e.g., creation of a label 'médecin engagé dans l'entretien régulier de ses connaissances', incentive to create flexible networks of prevention or duty to assume the responsibility of specific populations);
- The need for clarifying the role of each actor in quality improvement initiatives e.g. URML, Ordre des Médecins, sickness insurance funds (with a controlling section - to sanction frauds and dangerous behaviours and a counselling section - to promote quality in the practices);
- The willpower of the system to empower the patient to act as a lever for promoting health care quality: practice recommendations for the patients, perspective of a 'regional guide of the professionals of health' listing the labelled 'liberal' experts.

2.4.2 Germany

2.4.2.1 *Organisation of the health care system, with focus on family medicine/general practice*

AMBULATORY MEDICINE AND GENERAL PRACTICE

Ambulatory health care is mainly provided by private for-profit providers. GPs/Family physicians represent 55% of the physicians working in primary care. Nowadays, most GPs work in single-handed practices also in the eastern part, which is remarkable as until 1989 public polyclinics delivered most ambulatory services.⁸¹ About one out of three family physicians do not have any specialist qualification. With a 1,1 GP density for a thousand inhabitants Germany is in the middle of the European group.² Today an academic curriculum for GP exists in almost half of all (34) medical faculties.

SELECTION OF A FAMILY DOCTOR BY THE PATIENT

Sickness fund members are free to choose a family physician who cannot change during the quarter relevant for reimbursement of services for that patient.⁹² Patients frequently choose office-based specialists directly. However, one of the experts consulted in this project (J. Stock) notices today a reverse tendency: many elderly and ill people ask for a gatekeeping system, to help them going through the jungle of the health system.

REIMBURSEMENT SYSTEM

Germany has a fee for service system. The statutory health insurance (SHI) is the major source financing health care, covering 88% of the population (2003). The payment of physicians involves two major steps.

First, the sickness funds make global payments to the physicians' associations for the remuneration of all SHI-affiliated doctors, instead of paying the doctors directly. The

global payment is negotiated as a capitation per member or per insured patient, covering all services by all SHI-affiliated physicians of all specialties. In a second step, the regional associations of physicians settle the budgets among themselves.

2.4.2.2 *Quality development in action: culture, legislation, financing, organization and implementation*

CERTIFICATION

Certification is mandatory in most contracts with the sickness funds. The criteria within these contracts are about minimum yearly volumes of procedures, case-verification and the evaluation of skills.

Since 2004, continuing education is obligatory for all health professionals. Individual proof is required every 5 years.⁹² The absence of proof might lead to a reduction of reimbursement. The contracts also include agreements that physicians should start up quality development initiatives in their practices like significant event monitoring and clinical audit.

QUALITY CIRCLES

The history of quality development for general practice before 2004 in Germany was closely linked to local/regional activities in quality circles. These were organized e.g. by universities, CME courses given by specialists. The academic departments were the strongest promoters of quality development but lacked financial resources.⁹³ Quality circles were introduced in 1993. Moderators were trained and a growing network is now operational.⁴⁰ The participation to these circles is voluntary and the content of the peer review is variable. The activities are not adequately evaluated. Some of these quality circles discuss their feedback on their prescription. The acceptance of the feedback reports seems to be rather high.⁹⁴

GUIDELINES

In 1999 a committee for quality development in the German Society for General Practice (DEGAM) started guidelines development.⁹⁵ One of the characteristics of the German guidelines is that they all provide materials for the involvement of patients.⁹⁵

QUALITY INDICATORS

The 'Gesundheitskasse AOK' -the biggest group of sickness funds- together with the AQUA institute, developed quality indicators based on the work of the UK national Primary Care Research and Development Centre. The content of these indicators relies on guidelines. The indicators are used in groups or networks of GPs (quality circles).⁹⁶ Sickness funds support these quality circles and offer feedback reports on indicators. Target value is for example 70% for influenza vaccination in people over 65 years whilst the current coverage is 51%.⁹⁷

CRITICAL INCIDENT REPORT SYSTEM

The Frankfurt department of general practice has established an internet-based critical incident reporting system for general practice teams. This system works quite successfully under the title 'Jeder Fehler zählt' ('every error counts').⁹⁸

PRACTICE BASED NETWORKS

The departments of general practice in Göttingen and Heidelberg with the support of the Federal ministry of Research and Education (BMBF) have established practice based networks to analyze data from medical records based on ICD-10⁹⁹ and ICPC-2R.¹⁰⁰ The aim is to give feedback to the practices. Audit (as reported in the UK) is not yet of importance.

INTERNAL QUALITY MANAGEMENT AT THE PRACTICE LEVEL

In 2004, the government designed a law that makes the introduction of internal quality management for all practices in primary care mandatory by 2009. This law creates a free market for companies to promote their initiatives for Quality Management.

The outline of the format and a timetable are hosted at a national committee: Gemeinsamer Bundesausschuss.¹⁰¹ In October 2005 they proposed minimum standards for the quality systems that should be introduced in all general practices (goals and instruments). There is also an indication on the time frame and re evaluation of the implementation of this quality management system. In every practice, the introduction should be completed over a period of 4 years.¹⁰²

There are no financial incentives for GPs: the providers promote their activities by stating that a quality label will attract patients and give more respect to the image of the practice (culture of enterprise). The certificate validity lasts three years. The costs of the quality management depend heavily on the system used with DIN-ISO (5.600 EUR) and EFQM (2.800 EUR) being the more expensive, while EPA (1.800 EUR) and QEP (850 EUR) are much less costly.¹⁰³

- The DIN-ISO management system. This is the best known system, based on the ISO 9001 guidelines for the introduction of a QM system. The introduction of a plan and a quality manual are central.
- The EFQM system. This system is based on the European model for Excellence as described by the criteria of the EFQM award. It is not clear how EFQM is used and we found no reports on the effects of the implementation of this program.
- The European Practice Assessment. This procedure managed by the AQUA (Institut für angewandte Qualitätsförderung und Forschung im Gesundheitswesen)¹⁰⁴
- 'Qualität und Entwicklung in Praxen' (QEP)^{105, 106} has been developed by a multiprofessional team fostered by a professional body, the Kassenärztliche Bundesvereinigung.

2.4.2.3 *Evidence for effectiveness*

The evidence about the effectiveness is scarce. Germany developed substantially the Quality circle method: GPs in the quality circles seem to accept the use of quality indicators and the feedback reports.⁹⁴

2.4.2.4 *Future Developments*

Two thirds of all doctors have not yet decided which quality management system to use: recommendations from colleagues are important when selecting a system. The level of satisfaction with QM service providers is generally high.¹⁰³ There is a group of enthusiastic 'early adopters', but also a substantial number of physicians (about 25%) who are highly sceptical towards implementing quality management.¹⁰³

The use of clinical indicators on a large scale is yet not clear. Nowadays, the accreditation of practices follows the culture of private enterprise i.e., "show your values". Sickness funds are interested in accreditation schemes or similar forms of transparency about quality. However, there is no evaluation of the impact of the quality management systems on the market.

2.4.2.5 *Learning points and suggestions for Belgium*

The legislation on the mandatory introduction of a quality management system in ambulatory care is of great importance. GPs are forced by law to adhere to a program offered by for-profit organizations that operate as third parties.

The guidelines for implementation and the content of a framework are negotiated in close cooperation with the professional organizations and the government. Practices get a four-year period to start up.

The easiest program with the most participating GPs may not have a quality level similar to the most intensive program. The impact on the quality of care of these systems has not yet been assessed. A study on the outcome of the different systems can be very interesting to decide on which quality framework to choose.

2.4.3 The Netherlands

2.4.3.1 *Organisation of the health care system, with focus on family medicine/general practice*

The Netherlands has about one GP per 2300 inhabitants. GPs have role of gatekeeping. There is a trend towards group practice. Ancillary staff always helps the practice as 0.8 FTE is included in its budget. Now practices can hire management personnel ('praktijkondersteuner'), often specially trained practice nurses, to help to manage the practice and to care for special groups of patients (like patients with diabetes or chronic obstructive disease). They are present in more than 50% of the practices. Patients are listed and the remuneration of the GP depends on the number of listed patients.⁸²

Until 2006, the Dutch health care organisation was organised around general practitioners, the social health care (i.e. services for newborns, homecare for the elderly) and hospitals, most of which that were non-profit bodies.⁸²

Since 2006, political forces have changed the entire system. Insurance companies are in free enterprise and in what is called regulated competition. Also hospitals, social health institutions and GPs should compete and show more 'entrepreneurship'. The budgets come from direct payments (not related to income) to the health insurance companies and the other part is tax based, related to income. All citizens have to be insured and registered on a GP list.

The payment system for GPs changed considerably. GPs are paid on a mixed basis i.e. capitation and fee for service: either for specific activities (diagnostic and therapeutic services like ECG, spirometry, minor surgery, terminal care) or extra staff for disease management. They also get financial bonuses for quality development activities like practice accreditation or quality development projects in their own practices.⁸⁶

2.4.3.2 *Quality development in action: culture, legislation, financing, organisation and implementation*

BACKGROUND

In 2003 the Ministry of Health announced measures for improving quality both in hospitals and in general practice. These measures focus on transparency, quality development using performance indicators, innovation and efficiency with priority on patient safety and patient-centred delivery of care. The Dutch Inspectorate of Health Care supervises the performance with the help of two research institutions: Nederlands Instituut voor onderzoek van de gezondheidszorg (NIVEL) and Rijksinstituut voor Volksgezondheid en Milieu (RIVM). They monitor performance and support transparency to the patients.¹⁰⁷

In the nineties the Dutch College of General Practitioners developed practice visits. Today, the College offers continuing education programmes ('DKB pakketten') for general practitioners covering the fields of 'knowledge' (i.e. guidelines), 'learning' (i.e. learning packages, the toolbox), 'doing' (i.e. patient leaflets) and 'assessing' (including practice accreditation).

PRACTICE GUIDELINES

The Netherlands developed a set of more than 70 guidelines as well as transmural consensus pathways and primary care collaboration guidelines. The aim is to update them every five years.

PEER REVIEW GROUPS

All GPs are supposed to participate in assessment groups and over 80% participate in Pharmaceutics assessment groups (FTO) relating to their prescriptions. New initiatives

are Diagnostic assessment in groups (DTO), Transmural joint agreements, assessment on prescriptions and treatment (FTTO) and Travel advice assessment groups.

QUALITY BOX

The quality box, designed for individual practices, aims at making a quick go through some aspects of the practice. The self-assessment topics include the use of a practice computer, practice organisation and some clinical indicators of chronic diseases. After a 'quick scan' the GP may choose some issues to work on. This Quality box is used for accrediting purposes, to select practices for vocational training or for selecting practices to allocate practice nurses (personal communication).

PRACTICE ACCREDITATION

The College supervise the organisation of the practice accreditation but an independent organisation has been installed in 2005.

The practice accreditation is a three year process. The practice establishes first a relation with a practice consultant. The practice quality coordinator (doctor, manager or nurse practitioner) makes a plan with the practice-consultant. During one year, the practice collects data on:

- Practice organisation,
- Medical indicators,
- Patient satisfaction.

Efforts are required to improve data collection in order to measure the practice performance. This starts with the proper use of ICPC coding and the organisation of medical records. The practice consultant reviews these data and suggests priority areas for improvement. The practice designs a provisional plan for improvement of identified substandard aspects and sends this plan to the practice consultant.

After an agreement procedure between the practice coordinator, the team and the practice-consultant, they agree on a final plan.¹⁰⁸ Anonymous data are transmitted to the research centre WOK at the University of Nijmegen for analysis.

Currently, about 400 practices (1000 GPs) have gone through the accreditation process and the NHG claims that over 10% of the population benefit from the care of an accredited practice. The cost of the accreditation procedure relates to the number of patients in the practice and is about 6000 Euro per practice.¹⁰⁸ This is partly refunded by an increase of about one euro of the capitation fee. The incentive for the GPs is a quality label. Accreditation also results in points for mandatory re-certification (which is due every 5 years). Other incentives are the enthusiasm created within the team, better working relations and good public relations with patients and stakeholders.¹⁰⁸

The indicators used are detailed in the appendix 6. The indicators cover e.g. all indicators used in the European Practice Assessment programme.

2.4.3.3 *Evidence for effectiveness*

Van den Hombergh and other authors concluded that the accreditation system based on indicators of organisation of a practice is feasible in the Dutch context.^{109-111, 40} The practice visit method was effective in a controlled study comparing two strategies of intervention (mutual visits and visits by a non-physician professional).

The clinical indicators were not part of the initial work of van den Homberg. They have been introduced using the work of Campbell et al.¹¹²

2.4.3.4 *Future developments*

The Dutch College of GPs give an orientation for the future directions of general practice.

The set of clinical indicators will cover other topics as for instance depression and low back pain. Currently GPs may earn more if they declare to work according to some guidelines or use the quality box but in the future, accreditation might be used to select practices and fine tune payments. Practices that do not undergo the accreditation may in the future be liable to other quality control by Health Authorities. However, a special attention is needed for the data extraction from the medical records: this seems currently to be a major burden for the GPs.

2.4.3.5 *Learning points and suggestions for Belgium*

The College plays a major role in the field of general practice, although the changes in the design of the health care system may weaken its position.

The accreditation system is similar to the Australian one. The three-year process encompasses multiple quality cycles. The hypothesis is that the repeated visits and the support of the visitors who act as tutors may lead to quality improving effects.

The budget for the practice accreditation program is great. The organisation is well outlined and may be performed by a non-doctor (i.e. practice assistant) who acts as a quality manager. The independent visitors are not doctors but specifically trained. A third party under the supervision of the college supports the GPs.

The number of clinical indicators is small but the items are well referenced (see appendix 6). Until now, no firm data exist to show that the new accreditation is cost effective.

2.4.4 **United Kingdom**

2.4.4.1 *Organisation of the health care system, with focus on family medicine/general practice*

The current status of the health care context in the United Kingdom is heavily influenced by political and historical developments. Large reforms were introduced with changes of governments, especially from 1979 onwards. The National Health Service (NHS) was introduced after the Second World War GPs have worked in private practice since the start of the NHS (1948), although almost all their work was done under contract with the NHS. Hospital doctors became salaried employees in 1948.⁸⁰ Today the NHS is organised in Strategic Health Authorities and Primary Care Trusts but the health system often go through changes.

The government controls the budget of the NHS (tax-based). Out of pockets payments exist mainly for specific services in hospital care and for pharmaceutical, dental and optician services. Private insurance for these services has been increasing till 1990 and is available for working people, often as part of a income package deal.⁸⁰

From 1990 onwards the District Health Authorities (DHA) were required to assess the health care needs of their population and, from its weighted capitation based budget, to commission a range of services from providers to meet these needs. Each DHA had a department of public health responsible for carrying out the needs assessment. A contract system was introduced to formalize the link between purchasers and providers.⁸⁰

The health care system has a strong primary care focus. GPs perform 90 percent of the total medical patient contacts. The average number of GPs per practice is about three: their patient list counts approximately 1700 patients.

From 1991 to 1998, 294 GP fund holding schemes (GPFHs) were introduced. The principle was that groups of practices had a budget to purchase potentially all the

secondary care and community health care services for their patients. GPs were the principal locus of spending money in the health care system.

In 1998 there were 3500 GPFHs.⁸⁰ Fund holding was abolished by the incoming Labour administration in 2000, but a similar form of primary care purchasing is now being re-introduced under the name 'practice based commissioning'. According to public health experts, this will give to general practices and Primary Care Trusts a substantial control over the funding of hospitals and specialist care.

Since April 1999, all GPs have been required to join a primary care group. These large area based groups of GPs have responsibilities for providing primary care. However, this does not alter the individual contracting of GPs with the NHS.^{113, 80}

Commercial insurers face increased competition. The number of private hospitals is increasing. The private sector greatly increased in size recently, partly because the NHS now contracts some services from the private sector (mainly specialists). The number of GPs in private practice is still low and they mostly work in urban London.⁸⁰

GPs are self-contracting with the NHS. The payment system is a mix of capitation fees (based on the size of the patient list) and fees for specific services. These last ones include health promotion payments for achieving targets (i.e. cytology screening) and fee for service payment (i.e. minor surgery).

A new contract (introduced in 2004) aimed to reward practices for care of high quality, to improve GPs' working conditions and to ensure that patients benefit from a wider range of services in the community.¹¹³ The actual income of a GP is therefore dependent on the patient list size, specific services (e.g. pap smears, minor surgery) and points achieved in the Quality and Outcomes Frameworks.

2.4.4.2 *Quality development in action: culture, legislation, financing, organisation and implementation*

NATIONAL BODIES AND LEGISLATION

A prominent feature of the UK system is a strong emphasis on measuring and improving quality standards. New agencies were set up, including the National Institute of Clinical Excellence (NICE). This organisation produces guidelines on appropriate treatment and care of people with specific diseases and conditions within the NHS.¹¹⁴ Furthermore the Healthcare Commission, also independent, is the inspection body and the 'health watchdog' of UK. It checks that healthcare organisations are meeting standards in a range of areas including safety, cleanliness and waiting times. They use for 32 core national minimum standards.¹¹⁵

In 2002, The Royal College of General Practitioners issued basic presumption on the use of quality indicators.¹¹⁶ In 2004, they published a paper to detail the current UK system of general practice that can offer equity of access, quality of care, and economic efficiency.¹¹⁶

GUIDELINES AND AUDIT

NICE is the main national institution that develops and publishes guidelines. From 1991 onwards, GPs had to perform mandatory audits every four years.⁴⁰ However, this theoretical requirement had no time scale and has never been interpreted or evaluated.⁸⁵ The validity of auditing has been debated. The review criteria were not standardised.⁴⁷ Moreover, the overall effectiveness of audits on actual care raised question.⁴¹ Nevertheless, the UK auditing system is a powerful mean of setting standards and stimulating quality initiatives in groups of GPs and primary care organisations in general.⁴⁰ The Audit requirements have now been replaced by the requirements of the QOF scheme.

PEER REVIEW GROUPS

Local peer review groups were mainly engaged in audit and have been abolished around 2001. Peer review, as a voluntary concept, is now piloted in the UK and in Scotland in particular.^{51, 117-119}

FELLOWSHIP BY ASSESSMENT

The Royal College of GPs offer a fellowship tailored to the needs of many career patterns of modern general practice. A GP may enrol in one or more of the following categories i.e., clinical practice, patient-centred practice, leadership, teaching and education, innovation and creativity and finally academic and research. For clinical practice for example, a GP should submit the QOF points together with written testimonials of other fellows.¹²⁰ This pathway will be rigorously assessed. The QOF score does not have any great added value for the fellowship because almost all GPs get very high QOF scores.

QUALITY AND OUTCOMES FRAMEWORK (QOF)

The principles, positive and negative consequences of the QOF have been already described in the chapter 2.3.6 on the indexed literature search. The QOF reward the GPs according to the quality of care they provide. The participation to the QOF allows practices to improve substantially their income with more than 25000 £ per year.^{54, 68} The government and the British Medical Association negotiate its content. Academic advisors and the Royal College of GP assist the negotiating teams.

The QOF consists of three domains (the indicators are listed in appendix 7):

- A set of clinical indicators;
- Indicators of organisation of care e.g., medical records, patient communication, education and training, practice management, medicines management;
- Indicators about patient experience.

The process of the QOF in a practice depends on:

- Creating an IT (Information Technology) platform in the practice. A range of suppliers have inter-operable software. IT costs of practices are reimbursed by the NHS. All GPs now have full electronic records, a necessary condition for QOF payment.
- Gathering routine data on indicators.
- Preparing and forwarding anonymous data to the QOF assessor. Patients may be excluded because of various reasons, leaving the possibility to polish up results and increase points referred to as 'gaming'.^{68, 3} An assessor randomly assesses aspects during a visit and controls for 'gaming'.
- Allocating points. For the clinical indicators a threshold of X percent of patients is used (see appendix 7) i.e. at least X percent of patients with a specific disease are currently treated with a specific treatment. The total of points depends on the proportion of patients treated.
- Being allowed to charge the NHS for the points gathered (adding up to a total of 1050 points) over the 3 domains.

NATIONAL PATIENT EXPERIENCE SURVEY

The National Patient Experience Survey is a recent project (2007) run by the government. Data on patients seen in a practice are collected and analysed by a third party. The participation to this project offers an extra remuneration to the GP.¹²¹ This survey is different from the patient survey that is a part of the QOF. In the QOF survey, GPs make a plan based on the results and they involve patients in the discussion.

2.4.4.3 *Evidence for effectiveness*

Doran et al. analysed the first year results of the QOF in 8105 practices. They observed a skew towards very high achievements with a median of 96.7 percent of points (instead of 75% predicted). This suggests that the targets were easy to achieve but also may suggest considerable gaming.⁶⁸

The costs of the QOF are high: 1.4 billion euros i.e. more than 23 euros per inhabitant. However, there is some evidence for an effect on the outcomes at the patient level for chronic diseases. Roland and Campbell recently reviewed the existing evidence on the QOF.^{63, 64} A main finding was that care for some chronic diseases like asthma, diabetes and coronary heart disease was improving since the introduction of the QOF. The indicators were already improving before the QOF but the data suggest that care is now increasing at higher speed. Alternative hypotheses exist, as a better record of the data since the introduction of the target payment system. Research on pathologies not covered by the QOF is scarce: that precludes from any conclusion about the impact of the QOF on other domains of care. Other potential positive and negative consequences of the QOF were detailed in the paragraph 2.3.6.

2.4.4.4 *Future developments*

The QOF, introduced in 2004, was updated in 2006. The next update is planned in 2008-2009.

2.4.4.5 *Learning points and suggestions for Belgium*

The UK GP system early adopted the concepts of quality assessment and improvement. The first step was the development of guidelines. A major advance was the set up of payment schemes where GPs received extra remuneration when adhering to preset quality targets. The introduction of the QOF followed the first experiences of audit in the nineties. An important financial support helped to establish an IT platform that could handle all data. GPs were used to collect data and introduced ancillary personnel in their practices to support all these activities. This culture towards quality and the necessary structural implications (e.g. IT development) could inspire the Belgian situation.

Today, about one third of the GPs' income relies on achieving the standards of care. Studies suggest that targets were easy to achieve but also show that quality of care can improve by introducing a pay for performance programme.

However, some negative points of the QOF were already described above but the costs and need for control are also worth mentioning. First, the costs of the QOF are estimated around 1.4 billion euros just for rewarding the GPs. There is no available data about the costs for running the whole system. Sceptics argue that the high QOF scores are explained by the fact that the GPs already reached the targets before the system started: payments should be surplus rather than a trigger for change.⁶⁶ Secondly, a tight control scheme is necessary to minimise gaming⁶⁸: this may eventually lower the support among GPs. Additional side effects of using performance indicators were recently described. They include GPs refusing complex patients, over treatment of patients who do not benefit from proposed interventions and neglect of the areas not covered by monitoring.¹²² Although the QOF is supposed to cover the entire scope of general practice, the system is biased towards easily measurable indicators: as an example, psychiatric care has only a small number of indicators.

Moreover, one may argue that the UK system does not use the full quality cycle and is not very formative in this respect. This summative system mainly relies on the absence or presence of indicators.

A final problem is equity: practices in underprivileged areas achieve less points and hence receive less payment.⁶⁶

Another UK initiative that might inspire the Belgian situation is the fellowship of the Royal College of GPs. A pre-existing condition is a clear and leading status of scientific professional bodies.

2.4.5 Australia

2.4.5.1 *Organisation of the health care system, with focus on family medicine/general practice*

Medical care in Australia is largely funded by subsidies from the national/federal government: Medicare is a social insurance system funded by revenue from the federal government. Private health insurance is an emerging market with financial penalties for patients who take out coverage after the age of 30 years. Private insurances cover some extras and out of pocket payments. Public hospitals are free of charge. There is an extensive network of private hospitals, mainly in urban centres.

The GPs (60 percent of the medical workforce) have a gatekeeper's role and handle the bulk of medical problems. The number of GPs is about one for 1100 patients, with significant variation between rural and urban areas. Most practices are run as small business. There are approximately 6000 practices and about 2.8 full-time equivalent general practitioners per practice. The costs of medical care per capita are somewhat higher than the European average.⁸⁴ The Health Authorities have three main objectives for the organisation of health care: equity, efficiency and quality.⁸⁴

Patients are not registered with a GP and patient choice is a well-accepted principle. Individuals are free to choose the general practitioner they consult, restricted only by availability and ability to pay. However, they need to obtain a referral from a general practitioner before any consultation with a specialist. Patients may consult more than one general practitioner, since there is no requirement to enrol with only one practice. Patients may also exert a choice over the referral made by their general practitioner to a specialist or to a hospital.⁸⁴

Australia has a model mixing fee for service and payments for specific tasks. The model includes:

- Fee for service (from the patient to the doctor);
- Direct payments to the doctor (from the national government);
- Practice based payments (from the national government to the practice);
- Payments to general practice networks/divisions of general practice (from the national government).

Practice based incentives are available for information management and technology, after hours, teaching medical students, rural and remote practice as well as for specific clinical outcomes for asthma, cervical screening, diabetes, mental health and immunisation. It seems likely that over time the balance will shift in favour of payment for clinical outcomes delivered by a primary care team, rather than by the individual GP.¹²³

General Practice Teams are emerging. In larger practices, the teams are composed of GPs ('chief diagnosticians'), practice nurses, practice managers and other ancillary and allied personnel. Practice nurses become more prominent in the health care system and may generate income for the practice by performing tasks under the supervision of the GP. The number of single-handed general practitioners is decreasing.¹²⁴

New trends are the large scale Primary Care Corporations. These are for-profit organisations that employ medical and para-medical workforce and may have radiology, laboratory facilities and pharmacy facilities. They have been referred to as 'shopping centres of general practice'.

Since 2000, substantial attention has been paid to the GP role in health care delivery. Reforms in the national payment scheme include fee for service and practice based payments.¹²⁵ Examples are new arrangements for after-hours medical care and chronic disease projects (e.g., the GP Asthma Initiative, National Integrative Diabetes Programme).⁸⁴

The 'Building on Quality' project was launched to put quality of care on the agenda.¹²⁴ This project outlined a framework for future themes like continuity of care, focus on outcomes, benchmarking, evidence-based health care, consumer feedback, standards in general practice, vocational registration through a 3 year cycle, improvement of information technology.⁴²

Other quality initiatives that influence health care delivery include:

- Coordinated care trials for persons with chronic and/or complex needs;
- Health Connect and Mediconnect, e-health initiatives to share medical records;
- National Primary Care Collaboratives, a quality improvement approach using plan, do, study, act (PDSA) cycles.

2.4.5.2 *Quality development in action: culture, legislation, financing, organisation and implementation*

In a recent paper on behalf of the Royal College, Booth at al. outlined all initiatives on quality in general practice.¹²⁶ The overview covered initiatives at different levels i.e.:

- Individual GP level: fellowship of the Royal College, vocational training, continuing professional development;
- General practice level: standards of accreditation, practice accreditation, deputising services;
- Regional level: Divisions of General Practice, state governments;
- Australian national level: Faculties of general practice, national health departments.

Subsequently a quality framework was designed for the Australian GP system. The framework identifies health care initiatives that support quality in general practice and can be used as a planning tool to improve quality by identifying gaps and overlaps.

The Framework suggests that quality relates to any one or combinations of six domains:

- Capacity (facilities, workforce);
- Competence (not only GPs but also other primary care personnel);
- Financing (funding mechanisms can hinder or support quality of care);
- Knowledge and information management (right information at the right moment);
- Patient focus (improving self-care; working in harmony with patients and within teams);
- Professional values.

Furthermore, the framework considers the aspects of acceptability, accessibility, appropriateness, effectiveness, efficiency and safety. The Royal College compared the current situation to its possible improvement in a gap analysis. It reports a prioritisation process: this analysis suggest some new avenues for the Primary Health Care Strategy of the Government.¹²⁷

Figure 2. The Australian quality framework (with the permission of Teri Snowden, RACGP)



This paper also analyses specific quality development initiatives i.e. certification, fellowship, feedback on prescription, peer review, practice accreditation, practice incentives programmes, audits, networks of general practice.

CERTIFICATION

Australian doctors are required to obtain Fellowship of the Royal College to be designated as general practitioners. Doctors without any fellowship are called 'Other Medical Practitioners' and usually receive a lower Medicare rebate for the services provided. However, given a significant workforce shortage, some of these doctors have been allowed to work with full Medicare rebate in 'areas of need': they are supposed to participate in programs to achieve their College fellowship. The certification relates to consultation behaviour and patient management. Indicators are test ordering (e.g., prostate antigen screening), referral for diabetes, cardiovascular risks, prescription rates.⁷⁷

FELLOWSHIP

Fellowship is the standard of competence for working unsupervised in Australian general practice. The fellowship can be gained through various pathways. The vocational training programme is the most common one, after a conjoined examination and having worked under supervision.¹²⁸

All general practitioners must participate in a quality assurance and continuing professional development program (QA&CPD) to maintain their credential. That program recognises clinical audit, small group learning, clinical attachments, research, participation in higher education courses and writing for professional journals as well as participating in workshops.

FEEDBACKS ON PRESCRIPTIONS

Medicare annually provides prescription and pathology data to the GPs. This initiative is supported by an independent organisation, the National Prescribing Service that employs facilitators and academic detailing.¹²⁴

PEER REVIEW

Peer review is at an experimental stage and not mandatory in the Australian model.⁵²

PRACTICE ACCREDITATION

Australia has a system of general practice accreditation with standards for practices determined by the RACGP.

The measurement against those standards is carried out by two independent bodies i.e., AGPAL (Australian General Practices Accreditation Limited, non-profit) and for-profit Quality Practice Accreditation Limited.¹²⁹ Practices need to register for accreditation and indicate when a survey visit can take place. Before the practice visit, the GP or the practice performs a self assessment. Two surveyors assess the practice against the standards, criteria and a range of indicators. These indicators mainly relate to the organisation and infrastructure of the practice.

The accreditation body coordinates with the practice to find a mutually agreeable date and the practice is surveyed against the RACGP standards. Clinical indicators are not yet used except for some preventive measures like cervical smears and immunisation programmes, for which special remuneration is available and data centrally collected.¹³⁰

In July 2003, 87% of practices in Australia had undertaken accreditation against the RACGP standards.¹³¹ Some practices are in their third (three year) cycle. The costs are approximately 2200-2500 euros for a visit to a group practice. The practice accreditation leads to an increase of income. The practice is allowed to enrol in the Practice Incentive Programme that may increase the income by some 6300 euros.

PRACTICE INCENTIVE PROGRAM

Since 1998, Australia introduced the Practice Incentive Program, which offers financial incentives to practices working towards accreditation. Payments relate to aspects of general practice that contribute to quality care. These include the use of IT, provision of after-hours care, student teaching and better prescribing. Practices in rural and remote locations gain additional subsidies. The payments relate to the number of patients but not to the number of consultations. This in turn offers a gateway to remuneration of services like information management and technology, after hours care and student teaching.¹³²

AUDIT

Audit is not of major importance in Australia.

NETWORKS OF GENERAL PRACTICE

Divisions are regional networks of GPs that offer services to GPs and their practices. Australia has 120 Divisions. They work under the umbrella of the Australian General Practice Network. The Divisions of general practice play a fundamental role in the changes of general practice. In particular, quality development is their core business.¹³³

Priority areas include governance, prevention, access to health care, supporting integration and multidisciplinary care, better management of chronic diseases, general practice support, quality support, consumer focus and Workforce support.¹³⁴

2.4.5.3 *Evidence for effectiveness*

In 2004 more than 2610 practices have taken re-accreditation. Raw data indicate that many items of their practice organisation improved. For instance 6,2 % of practices introduced a system to enhance the follow up of abnormal test results.¹²³

An econometric analysis showed that there is a relation over time between the introduction of the Divisions and many improvements measured by performance indicators (for instance immunisation coverage, chronic disease management items, percentage of practices receiving cervical sign payments). However, the data do not allow inferring any causal relationship. Division characteristics mostly relate to various measures of practice infrastructure. The budget devoted to the divisions was estimated about 5 euros per capita.¹³⁴

2.4.5.4 *Future developments*

The quality framework for Australian general practice introduces basics concepts for quality development like the creation of a climate oriented towards quality, advice to use indicators and peer review with a 'no-blame culture'. Unlike the UK example this framework much more focuses on formative effects.

King and Wilson reviewed the process of development of quality care in Australia and possible actions to be undertaken. They report health care management issues like incentives to attract and retain rural GPs, blended payment systems and rewards for achieving targets (i.e. immunisation). King et al. explicitly list vocational training, development of standards for general practice, development of a general practice evaluation programme and the development of an independent accreditation system owned by the profession.⁴²

The future role for the Divisions of general practice is gaining importance because of increasing possibilities for central data collection. An example from the Adelaide Western General Practice Network is the Practice Atlas. Practice routine data processed at the level of the Network practices may use quality data as feedback or as business models and drive innovation in general practice in areas such as practice business systems, infrastructure/workforce development, and the effectiveness of health care delivered by health care providers / multidisciplinary teams.¹³⁵

2.4.5.5 *Learning points and suggestions for Belgium*

The Australian accrediting bodies are independent. There are financial incentives of the government for the general practitioners and general practices. Independent accrediting bodies assure that data handling is anonymous and secure. Because about 40 percent of practices took the 3 year cycle, their accreditation system seems feasible. The costs per GP are moderate so not excluding small practices.

The Royal College has a leadership in quality as it initiates and supports the quality initiatives. Unfortunately, there is no data on the effects of the system.

General Practice in Australia is well supported by networks. These are the regional highly effective platforms. They support and interact with practices by providing data analyses, so that GPs can manage their practice professionally. In this respect the view as to see general practice as a business offers a way forward. The business aspect refers to the GPs who need up to date data on their professional behaviour, in order to answer rapidly to the demands of the public.

Important enablers from the Australian example are:

- A national certification of general practitioners and standards upon which the certification is based;
- Standards at the practice level to ensure that there is a systematic approach to safety and quality development;
- System supports, for example regional Divisions of General practice;
- Profession leadership and active government partnerships;
- The concept of seeing general practice as a business where GPs answer to demands of the public.

The appendix 8 details the Australian indicators for accreditation.

2.5 SUMMARY AND CONCLUSIONS OF THE ANALYSIS OF FIVE COUNTRIES

Table 4 gives an overview of the quality frameworks in the five countries and Belgium. GPs in Belgium still often work in single handed practice and have a small practice size. Apart from this, the working conditions are similar to those of the French GPs. This review shows that the countries focus on a more practice based approach: the UK, Australia, the Netherlands and Germany are some examples. Adequate legislation and funding, IT platforms, independent parties are important issues.

Table 4. Quality development initiatives in the selected countries

	UK	AU	NL	G	FR	B
GP practice size	1800	1100	2300	1000	1400	500, unreliable
Single handed practices	Minority	Minority	Majority	Majority	Majority	Majority
Gatekeeper	Yes	Yes	Yes	Sometimes	No	No
Key players for quality development	Government and strong support college	Government and strong support college	Colleges, support by government and insurance companies	Government and support by insurance companies	Emerging: initiated by Government, but weak input of college	Emerging: initiated by Government, weak input of college
IT platforms	Very powerful, national, immediate	Very powerful, national and regional, immediate	Local in practice, database extending at national level, practice based	Powerful by sickness funds	Slow development	National, slow development
Summative or formative	Summative	Summative and formative	Formative, may be summative	Formative	Formative, summative blocked by jurisprudence	Formative, summative for outliers
Use of the quality cycle	No	Yes	Yes	No	No	No
Third parties	National	National (practice accreditation) and regional, owned by regional GPs	National; independent but owned by college	Commercial	National	National
Increase of income when engaging in parts of the quality framework	Large part of income	Small part of income and for accreditation	Small Increase to cover expenses	No	Only for accreditation	Only for accreditation
Evidence	Emerging, very large data sets	Weak	Weak, test ordering	No	No	No

2.5.1 Steppingstones for a quality framework: a vision based on a national policy

The existence of a national quality policy is a major condition to succeed in quality development. The professionals with the support of the Royal College set up the conceptual framework in Australia. In the UK, the success of the QOF relies on a pre-existing framework for audits that paved the path for the QOF (GPs and their organisations were accustomed to use indicators).

The scientific bodies of GPs have a strong influence in the successful countries and the profession has a culture oriented towards quality. The UK and the Netherlands have responded to the implicit needs of the society and the government adopted a plan for quality. In Australia, the GP profession developed its own vision within a quality framework. In Germany the government imposed a system that is now worked out by various commercial and competing bodies.

2.5.2 The components of a quality framework

Contencin et al. described peer review, audit and practice visits as the major components of European quality systems.⁴⁰ All countries studied in this report have their own mix of initiatives within their quality system. The UK, the Netherlands, Australia and Germany have a trend towards practice based quality development.

Usually an independent body is in charge of the data collection. In the example of Australia and in the Netherlands, GP associations (the Australian network, the Dutch College) own the data. The accreditation might also be under the responsibility of independent bodies, as in Germany or Australia, whereas in France the professional organisations are much more involved.

2.5.3 Purpose of the system: summative and formative use

The debate between summative or formative use of a quality development system is not finished. The UK QOF scheme puts the emphasis on increasing the income (summative approach) and neglects the quality cycle, whereas the Australian approach is far more formative. The GP networks provide regional feedback to practices, giving to the GPs the tools for improvement. The co-existing practice accreditation and financial incentives complements the Australian quality system.

The summative use of a quality development system may lead to professional sabotage, gaming or delegating the quality work to other members of the GP team. In the QOF (UK) high levels of exemption reporting triggers extra control on the profession. In Germany, GPs may choose their independent accrediting body and many GPs choose the easiest solution.

Probably a mix of summative and formative elements offers a way forward. As an example, the UK summative system now shifts towards more formative approaches as peer review techniques.

2.5.4 Pro and contras of clinical indicators: the UK experience

In the UK, the QOF greatly changed the landscape of general practice. The quality debate is now on the validity of the indicators. Some authors argue that they are too simplistic and do not encompass the comprehensiveness of GP care. The QOF took priority over the other quality development initiatives like audit and peer review. Nowadays, GPs try out new instruments of quality development as the Maturity Matrix.

The debate on indicators in the UK is important. Until now only process measures of quality have been addressed. Moreover, although some doubts remain on the validity of the clinical indicators: they may be too crude and not cover the entire scope of general practice. In their review, Seddon et al.⁴⁴ also concluded that most studies using indicators reported about chronic conditions whereas acute care, preventive care and non-technical aspects of care were less considered.

2.5.5 France: an outlier

France appears as an outlier in the literature review. Many initiatives were set up with a low support of the professionals. National laws exist but no national policy seems to work till now. Probably the 'Evaluation des Pratiques Professionnelles' will be the future for improving the quality of the practices. The lack of peer-reviewed literature on the quality initiatives makes the evaluation of the system more difficult.

2.5.6 Conditions for implementation

The choices for quality development methods depend on the national culture and legislation: the findings of the literature may therefore not easily apply to the Belgian situation. For instance, the introduction of a system similar to the UK-QOF project requires major structural changes like for example changing the professional culture, building a powerful IT main frame, ensuring data transmission from the practice to third parties and reforming the payment systems. The budget impact is a major issue: the UK experience shows that the initiators of the system underestimated the results of the GPs and therefore the financial budget linked to the QOF.

In some countries, GPs have to adopt the quality debate within their practices because of an increasing competition and pressure from external bodies. In these countries, general practice is more subject to open market values. In Germany, the contracts between physicians and health insurers stipulate the need for quality development procedures. In Australia, large-scale commercial general practices create an increasing competition where quality might play a role. The Netherlands developed a competition for contracts with insurance companies. In the future, insurance companies may select GPs based on their enrolment in the practice accreditation scheme of the NHG.

Conclusion of the literature review on quality system in foreign countries

- **A comprehensive framework, either summative -rewarding targets as in the UK- or formative as in Australia is a pre existing condition for a quality development system.**
- **Leadership and collaboration with governments, a strong system support (either national or regional), support of individual practices and financial incentives must be addressed.**
- **Countries that succeed in effective quality development systems have national well performing and efficient IT system for routine data collection, extraction and data management by trustworthy third parties.**
- **There is a lack of evaluation of the effectiveness on patients' outcomes. The evaluation of any system, when available, relies on soft or intermediate endpoints like patient satisfaction and physicians' opinions.**
- **There is a lack on data on the cost-effectiveness of all quality systems.**

3 EPA INSTRUMENT: APPLICABILITY IN THE BELGIAN CONTEXT

3.1 INTRODUCTION

The EQuIP working party (European Association for Quality in General Practice/Family Medicine) is a working group within the WONCA association (World Organization of National Colleges, Academies and Academic Associations of General Practitioners/Family Physicians).¹³⁶ Six European countries from this party, namely Belgium (Flanders), France, Germany, the Netherlands, Switzerland (German speaking part) and the UK (England and Wales) joined their efforts to develop the European Practice Assessment (EPA) instrument.

The EPA procedure assesses the organisation of a practice. The five domains are 'infrastructure', 'people', 'information', 'financial management' and 'quality and safety'. Every domain is subdivided in so-called dimensions. The indicators of the dimensions were selected after a literature review and consensus techniques within the EQUIP group. The domain 'quality and safety' assesses how the practice minimizes risks for patients and doctors and how the practice handles patient complaints. The domain 'information' includes such as protection of the privacy, practice brochure, specialized information for physicians aspects and other practice members. Within the domain 'infrastructure' aspects on premises, medical equipment and accessibility of the practice are evaluated. The working conditions, the training and education, perspective of the patients and staff members are assessed in the domain 'people'. Finally, the domain 'financial management' includes aspects on financial leadership and planning.

The EPA instrument was developed and initially tested with more than 270 practices in Europe, including 30 voluntary Flemish practices^{73, 137} A European forum used the feedback of the participating practices to improve the instrument in 2005-2006. The revised final English version of EPA was available in February 2007 and translated for this project (see below). The computerised system of EPA is Visotool®, now hosted at the AQUA Institut in Göttingen, Germany.¹⁰⁴

Currently, no instrument is available in Belgium to assess the practice organisation and management and this project chose the EPA instrument for the following reasons:

- A former pilot test showed the interest of EPA for a sample of voluntary Belgian GP practices;
- EPA is nowadays the only validated European instrument for organisational audit in general practice;
- This instrument could allow comparisons within and between European countries;
- There is an IT infrastructure and acceptable know-how in Germany to run the instrument;
- EPA and EPA-like instruments are already used in larger accreditation systems in The Netherlands, Germany and Switzerland.

The aim of this part of the study was to test the feasibility and acceptability of the final version of the EPA instrument in Belgium. This chapter describes the process and the results of the EPA procedure in participating practices and explores the barriers and suggestions for implementation.

3.2 METHODOLOGY

3.2.1 EPA instrument

The EPA procedure consists of questionnaires, a practice visit and a structured interview. In each practice, a GP completes the registration form with administrative data, practice characteristics, the names and job function of all the colleagues. After entering these baseline data in Visotool[®], personalised questionnaires are delivered to the practice, together with a letter of explanation and additional study material. The practice returns four completed questionnaires to the facilitators before the visit:

- A questionnaire for the principal doctor (or the practice manager) (60 items);
- A questionnaire for every GP or medical doctor working in the practice (21 items);
- A questionnaire for all other staff, including non-doctors and ancillary staff (29 items);
- A questionnaire for patients; completed by 40 patients in the waiting room (32 items).

The participating main GP or practice manager takes care that all questionnaires are completed. The future visitor enters all questionnaires in Visotool[®]. The preparation takes 1 to 8 weeks. Details of the questionnaires are in the appendix 10.

The schedule of the visit is adapted to each practice but a theoretical example can be described as follows. The visitor arrives between 9:00 and 10:00 a.m. The external visitor uses UMTS/GPRS technology on a dedicated laptop to enter additional data 'on the spot'. Until 11:00 a.m., all 132 items of the observer's checklist are completed. At 11:00 a.m., the 'main GP' reserves one hour for the structured interview. Between 12:00 and 1:30 p.m., the visitor has time to enter all data in Visotool[®]. Between 1:30 p.m. and 3:00 p.m., the practice stops all non-urgent activities for the team meeting with the feedback (see table in appendix 10 for more details on questionnaires and indicators).

The researchers of this project translated the entire instrument including items, questionnaires, instruction forms and letters for correspondence into Dutch and French. They checked afterwards twice all translations. AQUA specialists organised a training session of two days for all visitors and coordinators, using the visitation software (Visotool[®]) and exercise role-plays.

3.2.2 Sampling

Sampling aimed at recruiting a representative sample of Belgian GPs, with the following distribution: 10 GPs working in a single-handed practices, 6 duo and 4 group practices, equal distribution of gender; 20 GPs in Flanders and 20 in the Walloon region. (See appendix 9 for national statistics on GP characteristics).

The databases of Domus Medica and of SESA (Centre d'études socio-économiques de la Santé de l'Université Catholique de Louvain) were used to select a random sample of GPs from three provinces (Antwerpen, Hainaut and Namur). This selection of provinces facilitated the data collection and the representativeness of rural and (sub-)urban areas. The first 20 GPs who answered to the invitation were enrolled in the study, taking into account the distribution profile described as above. After two weeks, telephone calls surveyed 30 non-responders in Flanders.

3.2.3 The process of the practice visit

A team consisting of one coordinator, two co-organisers and ancillary staff from the Department of General Practice of the University of Antwerp supported the organisation. In total six external visitors, three in each region, performed on average six visits each. Three visitors were GPs in training, one was a senior practice assistant, one a quality engineer and one a non-GP medical doctor.

After agreeing on a visitation date, a team member personally delivered all questionnaires and study material, and clarified any final questions. If a team member was not available, the material was sent by post.

The analysis, interpretation and feedback of the visitation results took place at the visitation day during the 'team meeting'. The results could be demonstrated online-on-the-spot, by use of a wireless internet connected laptop using the Visotool[®]. As an alternative and for backup reasons the feedback report was downloaded as a PDF file (e.g. in case of connection problems).

After the visit, the practices received accreditation forms and completed feedback reports.

3.2.4 Qualitative evaluation of the EPA process

3.2.4.1 *Field notes of visitors*

All visitors wrote field notes immediately after the practice visit, answering the following questions:

- What were the practice and visitor's first impressions about this EPA visit?
- Did the practice members perceive the EPA visit as useful?
- Did the practice members have ideas or plans for quality development following this EPA visit?

The field notes were coded in QRS Nvivo[®] 2.0 to synthesise these experiences.

3.2.4.2 *Focus groups of general practitioners*

A focus group method addressed the following questions:

- How did the GPs experience the EPA evaluation?
- Was this model of practice evaluation useful for their practice?
- Is this model of practice evaluation useful and applicable for the quality evaluation of general practitioners in general?

All general practitioners who participated to the EPA study were invited to the focus groups. Participants received 100 euros and accreditation points. One focus group was held in Flanders and the other one with French-speaking GPs. A trained moderator led the group. One of the co-researchers observed the process but none had been engaged in the practice visits.

After the discussion, the investigators wrote up and agreed on the general perspectives of the three topics. The texts were transcribed and analysed by two independent researchers. All researchers received the final version for approval.

3.3 RESULTS

3.3.1 Organisational process

3.3.1.1 *Recruitment of GPs for the EPA visit*

The first mailing to 500 GPs (250 in Flanders and 250 in the Walloon region) resulted in 10 participants in Flanders and 6 in the Walloon region. A second mailing to 500 GPs yielded 17 more candidates in Flanders and 10 candidates in the Walloon region. Two more doctors (from the Walloon region) agreed to participate after the telephone call.

After sending 500 invitations in Flanders, the final response of more than 20 practices allowed a selection based on practice characteristics. Two initially enrolled practices decided to quit the project: one practice because of practical reasons, the other practice perceived the patient questionnaires as insurmountable to perform. According to this solo GP, they required too much explanation to the patients, were too time consuming and interfered with the confidential doctor-patient relationship. Therefore, another practice in Flanders was included, resulting in participation of 21 practices. In the Walloon region, all interested GPs were included in the study.

The participating practices were not representative for the population of Belgian GPs, neither for socio-demographic properties (gender, age, region), nor for practice organisation.

Many participants were active as GP trainer, academic assistant or members of professional organisations.

Thirty Flemish non-responders drawn from the first mailing were contacted by phone. In spite of assessing reasons for non-response and giving more background information, none of them was motivated to participate in the EPA-study. The main reason (53%) was the overflow of patients at the time of the study (flu season). A substantial part (23%) no longer worked as a GP, or they were not interested in the study (20%).

3.3.1.2 *Preparatory activities by the facilitating team*

The facilitating team performed a large number of preparation tasks detailed in appendix 10. In both regions, the investment in time and personnel (preparation, administration, and logistics) was underestimated. The coordinators had to add new tasks and hire new personnel.

The team members were workers from the GP academic departments of the University of Antwerp and of the UCL. They all needed to be bi- or multilingual (Dutch/French and English), to be familiar with the EPA procedure and to be able to work with Visotool®. Especially the external visitors needed to be trained on the content of EPA. Good communication skills were of utmost importance to communicate with the practice members. The non-doctor visitors performed equally well.

3.3.1.3 *Practice visit*

The visits were conducted between May and July 2007. In the most efficient time schedule, a practice visit lasted 4 hours. Due to technical problems and delays in sending the completed questionnaires, many visits were spread over two days.

The practice visit disturbed minimally the general practice activities. Only a short check of the consultation rooms and the doctors' bags for the emergency medications was necessary.

3.3.1.4 *Technical support*

During the visit and the team meeting, the external visitors used Internet connection by UMTS technology to present the results directly from the Visotool®-website. Unfortunately, technical support was necessary in half of the visits, due to problems with logging in to the UMTS network, the use of the portable PCs or getting used with the Visotool website. In most cases, a Belgian researcher could solve the problem but one third of the practice visits required a technical support from the German helpdesk. Some GPs working in a single-handed practices suggested feedback visits on Saturdays, which was not feasible because the German support was not available.

3.3.2 Qualitative evaluation of the process

3.3.2.1 *Field notes and the GP's appreciation of EPA at the time of the practice visit*

Fifteen field notes were available for review, mostly for visits in Flanders (N=14).

WAS THE EPA VISIT APPRECIATED AND PERCEIVED AS USEFUL?

Most participants showed a positive attitude towards EPA. They generally appreciated the visitor and perceived the visit as peer review to evaluate objectively the practice organisation. The topics most mentioned were the emergency medications, complaint management, colleagues' vaccination status follow-up (e.g. hepatitis A and B), patient information on practice organisational topics and fire-safety.

EPA identified unsuspected aspects that may need attention. Some practices already active in quality development, were stimulated to re-activate or to go on with their actions. The EPA procedure initiated action by GPs not familiar with quality development.

REMARKS OF THE PARTICIPANTS

The GP coordinators had to ensure the confidentiality of the whole procedure: personal contacts between coordinators and practices were highly useful.

As mentioned above, one GP quitted the procedure after having received the questionnaires. Others also found that some questionnaires contained ill-translated sentences, causing doubt on the interpretation and goal of these items for both the GPs as for the practice visitors.

GPs working in single-handed practices frequently noted that items on practice organisation were applicable for group practices only. Some items were not adapted to the local context or out of date (for example the use of videotapes for patient information). Some GPs found missing aspects such as disinfectant procedures or patient centeredness in the consultation.

Some visitors and participants found the time schedule and preparation time insufficient. Not all GPs were present to check their doctor's bags. Despite of the written information and frequent phone calls, some GP team members did not have any clear idea of the procedures at the visit day.

PRESENTATION OF RESULTS TO PARTICIPATING PRACTICES

GPs appreciated their personalised feedback report afterwards and reported that the presentation of those data was clear. The visitor helped to understand the data and explained the background of the values of the indicator scores. The visitors stressed that it was up to the team members to decide if a high or low score is relevant to their practice.

GPs generally appreciated this personalised and secure setting. Several GPs expressed concerns on the confidentiality of the data: they stressed that they would not show their data to controlling bodies.

3.3.2.2 Focus groups

Two focus groups were held with Dutch- and French-speaking participant GPs, six participants in each group. The participation was excellent and all questions were discussed. All participants were men. The mean age was around 50 years. Participants worked in different types of practices. All participants stated at the beginning that they would recommend EPA to a colleague and would agree to participate if they had the possibility to do so.

Some differences appeared in the analysis of the results of both groups as detailed below. However, both groups found that many items were not applicable to their context. They argued that the target group of the instrument was group practices rather than single-handed practices.

« Beaucoup de questions qui étaient sans objet pour des pratiques solo. Moi j'avais l'impression que c'était le genre d'études qui étaient faites dans des institutions »

RESULTS OF THE FLEMISH FOCUS GROUP

How did GPs experience the EPA evaluation?

GP's were enthusiastic about the openness they experienced between colleagues in their practice and with the visitor. They appreciated the freedom to implement or not the change.

All participants would expect a more thorough appraisal, with more suggestions; certainly on practice organisational aspects.

The distribution of the patient questionnaires in the waiting room raised a problem in some practices.

The participants appreciated that EPA directed attention to previously non-studied domains of the practice. Some participants felt that the scores in the pentagraph were incorrect and that the pentagraph was too superficial. All participants found the scores difficult to understand and needed more detailed explanation.

Overall they experienced the practice checklist in the EPA visit to be too long, making some items rather uninteresting or even 'ridiculous'.

'En dat vond iedereen wel eens interessant, om eens te kijken: ah ja, die aspecten, daar scoren we blijkbaar slecht op, kunnen we daar iets aan veranderen, moeten we daar iets aan veranderen? En daar waren de collega's eigenlijk wel enthousiast over'

'Het mocht wat kritischer, en wat diepgaander, om een 'ISO 2000 norm te halen', bij manier van spreken.'

Is this model of practice evaluation useful for the practice itself?

The participants were satisfied that some new and interesting domains of their practice were highlighted, although not all elements of the questionnaires and checklist seemed relevant. Especially, they valued the patients' appreciations as measured by the patient questionnaires, as this had never been performed before. EPA also triggered reflection with other colleagues in the practice.

None of the participants reported any formal plans for improvement in the practice but they agreed that a follow-up of the results would facilitate the implementation of the findings of the visit. Practical arrangements would be easy to implement (e.g. to put a thermometer in the fridge) but other items were more difficult to deal with without any support and follow-up. Implementing change seemed easier when working in a group practice. The lack of time and other priorities were also major reasons for not implementing changes. In conclusion, expertise and consultancy are important preconditions for success.

'Dus als daar een soort van regelmaat in komt, gelijk een klassieke praktijkvisite, zoals er ook nog andere formules bestaan, zou dat iets anders zijn, waar je effectief van kunt zeggen: ah ja dat is eigenlijk een goede gedachte, dat zou ik eens kunnen doen.'

‘Veel aspecten zijn niet haalbaar in een standaard Vlaamse praktijk ...’

‘Ik vond ook dat er een aantal items waren die niet zo euh toepasbaar waren in onze setting’.

‘Het is teveel gefocust op groepspraktijk. Ze houden geen rekening met solo ...’

Is this model of practice evaluation useful and applicable for the quality evaluation of general practitioners in general?

All Flemish participants agreed that the instrument should be first adapted to the Belgian context and single-handed practices before offering it at GPs at a larger scale. Moreover, all participants suggested using it on a voluntary basis, without any involvement of the Authorities. Some kind of financial rewards or accreditation could support the participation. The scientific professional bodies could organise the EPA procedure as independent parties. Scores of individual practices could be used for benchmarking but the discussion with colleagues of other practices is still threatening.

‘dat heel duidelijk is gezegd van: kijk, dat is de informatie die wij hebben verzameld, het is voor u grotendeels zelf om te zien wat je ermee doet. En dat vond ik juist het positieve eraan, dat er niet werd gezegd van, dat het niet met het vingertje was’

‘Maar hou het dan heel individueel, want anders krijg je zo’n soort Michelinijds met sterretjes en vorkjes.’

RESULTS OF THE FRENCH-SPEAKING FOCUS GROUP

How did GPs experience the EPA evaluation?

GPs received a sense of confirmation for their way of doing their job. They opposed the idea of inspection to the idea of introspection. Participants were afraid that the evaluation and validation would in fact lead to standardise all GP practices. Some GPs argued that the results could lead to a sense of guilt, i.e. not achieving the highest standards.

Some changes in the practice were implemented after the practice visit but problems were also identified without any solution to date. Participants suggested that the GLEMs could be useful to discuss the results and foster improvement.

‘Au départ cette étude ça m’avait tenté parce qu’on voit dans les entreprises, il y a des audits, allez, les gens se remettent en question. Et nous, dans notre petite pratique solo, on n’est jamais remis en question, enfin moi je ne me sens pas remis en question dans mes rapports avec mes patients. Donc je voyais cette étude comme une occasion de me remettre en question à ce niveau-là. Moi je trouve ça très positif. On le fait partout, pourquoi pas chez nous ?’

Is this model of practice evaluation useful for the practice itself?

For patients

The GPs were interested in patients’ opinions of the practice. There was some concern that data could be used for ‘marketing’. Patients collaborated easily to the survey. However, in some cases, there were problems with practical issues, for instance logistics in the waiting rooms.

EPA tool

As stated above, the absence of administrative staff is a barrier for the EPA procedure. It seems quite ambitious to compare the Belgian practices with others in Europe, to organise a self-evaluation of the practices and in the same time to give feed back to the Authorities.

Questionnaires and checklists

The questionnaires were sometimes difficult to understand. They could be shorter and simpler. Furthermore, not all items have the same importance. For example, the item about the printer seems less relevant but the access for handicapped people is important. The lack of questions about the home visit was perceived as a problem.

The GP noted interesting questions about staff or about practical aspects like the fridge temperature or the expiry date of drugs. Some missing areas included the sterilisation of equipment for instance.

Validity

The validity of the items is an important issue to convince the GPs that this tool is relevant for their practice. They need reassurance that the items reflect the quality of care at the patient level.

‘Ce que j’entends, si on le propose, c’est qu’il faut aussi prouver que les items sont valides, en tout cas dire : voilà, ces items-là ont été incorporés dans le questionnaire parce que, à grande échelle, on a pu prouver que ça améliorerait la qualité.’

Visitor and feed back

The role of the visitor is very important but some GPs did not receive yet the written evaluation. Other ones did not understand their results and needed help for the interpretation.

‘La grosse conclusion de l’étude, c’est que ça nous a amenés à voir ça plus en face. Nous on ne voyait que notre côté, on ne voyait pas le côté du personnel. On pense qu’on pense pour l’autre, hein, toujours. Mais en pratique on voit qu’on ne pensait pas tout à fait comme l’autre pensait. Et donc on est dans la problématique et on va y travailler’

Is this model of practice evaluation useful and applicable for the quality evaluation of general practitioners in general?

More quality of care and more professionalism in the service offered to the population are positive consequences of this evaluation. The GP identified the risk of using a tool that is not fully adapted: the credibility among GPs will be lost.

Suggestions for improvement were the followings:

- The questionnaires should be linked to the objectives and to the national context;
- The GPs should be convinced that items are valid and suitable for their own practice;
- Data collection must be a smooth process without any problem like translation errors, presentation, software problems, incorrect feedback;
- The presentation and interpretation of the results must be attractive and lead to the reflection of the participants.

According to the GPs, EPA can be used in the profession. Its large-scale implementation requires a professional organisation. It should be organised by a scientific society and not for instance, by ‘test achats – test aankoop’ because there is no clear link between the quality of care and the perception of the patients.

The question about the accreditation or recertification raised a controversy: if there is a quality of care improvement and financial consequences, why not? However, the GPs were afraid of new constraints put upon them.

‘Je pense qu’il faudrait présenter ça, à nouveau que ce ne soit pas un outil de contrainte, et voilà. Il y en aura toujours certains qui ne le feront pas, et même dans ceux qu’on pense qui sont les plus volontaires.’

Moi je pense qu'il faut le proposer à un plus grand nombre possible, le canal des GLEMS est un bon canal. Je serais partisan de le préconiser aux autres. C'est un outil intéressant, on en retire toujours quelque chose. C'est un outil de réflexion.'

3.3.3 Outcome evaluation

3.3.3.1 Results of the EPA procedure

The response rate for the questionnaires sent to the participating practices was more than 80%. The high score for the domain 'information' (73%) was mainly the result of the high number of participants using an electronic medical record, internet access for all the practice members, and the presence of clear written information to patients on the practice characteristics. The dimensions 'prevention' and 'information for patients on medical care' yielded 46% and 47% respectively, due to the lack of any prevention program and the absence of patient information leaflets.

The domain 'people' had the second best score, with a mean of 75%. Patient satisfaction reached nearly 90%; the job satisfaction score of the non-GP practice members was 80%; the GPs' satisfaction was 76%.

The domain 'infrastructure', with a mean score of 62%, included two extremes: a high level for computer safety (89%) versus a low level for the management of medical and non-medical materials and for the facilities for disabled people, babies and children.

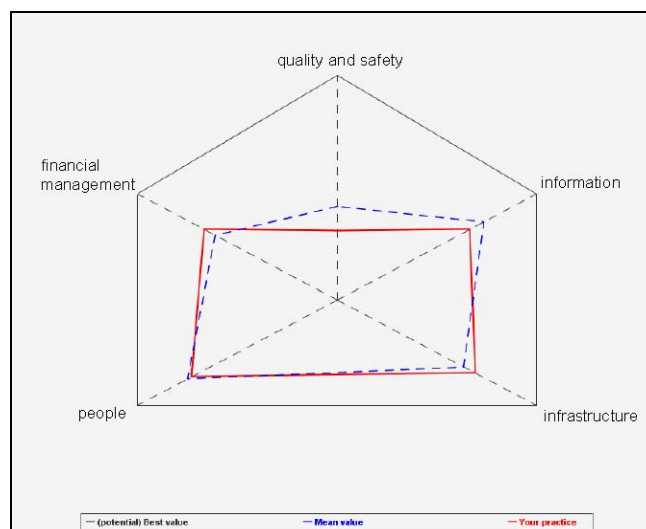
The domain 'financial management' had a mean score of 58%. Practices often do not have any financial plan, defined allocation of the financial responsibilities or active control of the cash flow.

The domain 'quality and safety' had a mean score of 41%. Although in daily practice medical materials are sterilised and sharp objects collected in special containers, most practices did not have any written and controlled procedures about infection prevention, critical incident analysis, patients' complaint management and yearly check of the medical and non-medical materials.

The feedback given in Visotool refers to the five domains. The results are presented in a pentagraph (figure 3). The continuous line (red) and a dashed line (blue) represent the results of all indicators for an individual practice (red) and the mean results of all practices (blue). The closer the lines are to the domain names, the better are the results in this domain.

The results of any practice can be compared to all practices in the same setting (urban/rural), with practices of the same type (single-handed/group) or within any other predefined selection.

Figure 3: example EPA feedback pentagraph generated by Visotool®



3.4 DISCUSSION: EPA IN BELGIUM?

3.4.1 Organisational load for implementing the EPA procedure

The recruitment of the practices was difficult. Thousand letters and 60 phone calls could only recruit 43 interested practices. Participants were therefore highly self-selected and most of them were active in academic and/or professional bodies.

The provision of human resources planned initially was insufficient. The coordination, administrative work, preparation of the visit, visits to the practices, solving of practical problems and communication with Germany required a few days per practice. Supplementary unplanned administrative support was necessary.

The training of the facilitating team included the knowledge of basic concepts of EPA, of the procedures and communication skills. Those preliminary data show that non-GP visitors perform equally well as GP visitors and that they are well accepted.

The participants concluded that only one visit, as performed here, is not enough to foster quality improvement initiatives. There is a need for further coaching as in Australia and in the Netherlands. However, this pilot study made the GPs more sensitive to quality development in their practice.

The price for the EPA project is estimated below. Assuming that handbooks and procedures are adapted to the Belgian context, the hypothesis is that in the first year practices are enrolled and collect data. During the second and third year, tutors coach the practices (approximately 2 days of face to face contacts with the practice). The price of external human resources could be estimated around 600 Euro per practice per year. Moreover overhead, location, IT infrastructure and data engineering (for instance by the AQUA institute) need to be added to the budget. The costs for the entire project may be approximately 1000 Euro per year per practice. Assuming that a GP serves about 1000 inhabitants, this would be one euro per patient per practice per year.

Table 5. A worked out example for the manpower needed for a three year project. The adaptation of the instruments, the human resources needed to set up IT platforms and data handling are not considered in this table.

	Role	FTE
First year	GP coordinator	0.5
	administrative support	0.5
	Tutor	1
Second year	GP coordinator	0.5
	administrative support	0.5
	Tutor	1.5
Third year	GP coordinator	0.5
	administrative support	0.5
	Tutor	2

3.4.2 Perception of the visitors and participant GPs

The conclusions are limited by the sample size of the project (field notes and focus groups) but the participating GPs valued the feedback of the visit, including the analysis of not previously studied domains. This confirms the evaluation of the former EPA project in Flanders in 2004.¹³⁷

Few practices planned implementation of change. A better follow-up after the visit and the use of EPA within a broader quality development system could enhance this process. In this project, EPA was a one time project, without any subsequent activities.

Many GPs reported more interest in the quality development of their practice after the EPA visit. However, they also reported that the instrument, in its present form, did not entirely fit the Belgian reality of general practice and the single-handed practices in particular. Still many Dutch and German GPs also work solo and apply the EPA tool. However their practices do employ personnel.

The application of EPA in Belgium would require an adaptation. Some questions were not applicable (i.e. using written material instead of electronic sources for patient information) whilst other ones were not included (i.e. concerning home visits).

Finally, the participant GPs considered a large-scale implementation during the focus groups. They suggested an implementation on a voluntary basis resulting in anonymous data that could allow the benchmarking of their practice with other practices.

3.5 CONCLUSION: EPA PROJECT

EPA addresses the organisation and the management of the practice. This pilot project aimed to study the feasibility of the European Practice Assessment tool in a sample of voluntary GPs.

This pilot project encountered serious difficulties for attracting participating GPs. One reason could be that the Belgian GPs did not clearly perceive their potential win in this experience: they are not familiar with the culture and concepts of quality improvement. Possibly considering a general practice as a business (as in Australia), needing adequate data input for its management, is not yet common sense in Belgium.

The small sample size of this study, with selection biases, hampers the extension of the findings to the population of Belgian GPs. Our participants appreciated the opportunity to go through the EPA process. They laid emphasis on the necessary adaptation to the Belgian context and requested more coaching for implementing changes in the practice.

The implementation of EPA requires that the practices would be able to run the quality cycle work, from the data collection to the feedback and change implementation. This capacity encompasses a culture of openness and safety for receiving feedback and creating plans for quality development. Dedicated time for the quality improvement is needed. This type of quality activity is currently not financed. In its present form, EPA like projects are hard to organise for GPs working in a single-handed practices.

Some GPs suggest a role for LOKS/GLEMS. They could be involved in the recruitment of practices and for the discussion after the procedure. Confidentiality of data is of major importance.

To date, only limited data exist on the way GPs change behaviour while using the EPA instrument¹³⁸. The limited results among Belgian participants showed little change. This finding shows the need for subsequent contacts with the visitor in a more than one cycle project.

Offering EPA-like instruments to GPs is a complex and expensive task. Its large-scale implementation requires a significant facilitating and organisational structure. In the Netherlands, the total cost for a 3-year project using an EPA-like instrument is estimated around 2000 euros per GP per year (about 1 euro per patient per year).

This study did not focus on clinical indicators. This domain however, becomes more prominent in foreign systems as in the Netherlands and Australia whilst it is of central importance in the UK. A practice based approach may easily encompass the careful introduction of clinical indicators when adequate IT infrastructure and coaching are available.

The cost-effectiveness of the procedure is a central issue. The outcome of introducing practice based evaluation can possibly lead to

- A culture of quality development among GPs,
- New roles for LOKs and GLEMs,
- Introduction of target payments for the indicators that are included,

- The availability of large databases of anonymous data to enhance the credibility of the GP work.

Key points European Practice Assessment project

- **Spontaneous participation rate among GPs was low;**
- **GPs appreciated the feedback on their practice;**
- **EPA needs adaptations to fit the Belgian context;**
- **Data should be handled and interpreted with great care;**
- **GPs stress the need for coaching for improving their practice;**
- **The costs per practice can be estimated at about 1000 euro per practice per year;**
- **The GPs who participated think that a large-scale implementation would require adaptations in the instrument: the implementation on a voluntary basis with anonymous data would allow a comparison between practices.**

4 ELEMENTS FOR A QUALITY DEVELOPMENT FRAMEWORK FOR GENERAL PRACTICE IN BELGIUM: STATUS QUO OR QUO VADIS?

Quality development in general practice is only emerging in Belgium. Successful countries needed a long period (10 to 15 years) to achieve results. This work gives directions to set up a system for quality development in general practice in Belgium. The first section proposes a brief evaluation of the current quality development initiatives in general practice described in chapter 1.4. The data from the review of the five countries (chapter 2) and elements of the feasibility study of EPA (chapter 3) give additional features for a quality development framework in Belgium.

4.1 EVALUATION OF CURRENT QUALITY DEVELOPMENT INITIATIVES IN GENERAL PRACTICE IN BELGIUM

Few studies analyzed the impact on the current Belgian quality development strategies. Most strategies focus on the individual GP whilst no strategy targets the GP practice.

'Accreditation' for GPs in Belgium requires GPs to fulfil criteria e.g., CME, peer review and minimum number of patients. It is not mandatory: GPs may perform acts without being 'accredited' but with a lower remuneration. However, most practicing GPs did earn an 'accreditation' that allows higher payments. Unfortunately, there are few data on the effectiveness of this procedure i.e., on its effect on the quality of care provided by 'accredited' GPs versus the GPs who are not 'accredited'. More research is needed to explore the effectiveness of this 'accreditation' procedure and CME sessions. Among others, the use of learning agendas and portfolios may be considered.

Peer Review groups (LOKs – GLEMs) also play a major role in the Belgian quality landscape. Doctors believe they are important but firm evidence of their efficacy is lacking. The trends towards group practices and large-scale after-hours care services in Belgium will provide other means for GPs to build professional relationships. Peer review might be successful but its role needs careful revision. Maybe the formal use of the quality cycle, based on real, timely and trustable data could improve the value of the GLEM/LOK meetings.

Finally, the effectiveness of feedback on prescription has not been demonstrated for GPs. Only a small number of GPs, who are definitely outliers, see their behaviour questioned. The double role of the RIZIV/INAMI, both payer and controller, creates mistrust among the GPs: in the EPA field study (chapter 3), GPs frequently mentioned they fear the handling of their data by any governmental agency.

The cost of the existing 'accreditation' procedure for GPs in Belgium can be estimated using the RIZIV/INAMI statistics on reimbursed consultations and 'forfait' data. In 2005, 25 396 607 consultations have been done by 10 223 accredited GPs¹³⁹. This represents an extra budget of 68 316 873 euros when multiplying the extra fee of 2.69 euros (rate 2007) by the number of consultations. The global lump sum budget for GP accreditation ('forfaits') was 5 474 398 euros in 2005. The sum of both budgets can be estimated at least at 73 791 271 euros. A few other nomenclature codes are not considered in this estimation e.g., technical acts and patient surveillance.

4.2 LESSONS FROM THE REVIEW OF FIVE COUNTRIES

The literature in the countries under study showed that a single intervention is not likely to lead to any considerable increase in quality. The most successful countries (Australia, the Netherlands and the UK) have a strong culture of quality but a long time (10-15 years) was needed before any tangible impact. This triple experience also shows that the introduction of quality development is a driving force for boosting up the role of general practice in the health care system.

The most remarkable finding is that these countries apply quality development strategies at multiple levels. They focus on the level of the practice that is the most important and currently missing in Belgium.

In these countries the working conditions are usually more favourable for the general practitioners than in Belgium. The practice infrastructure includes nearly always personnel who perform medical acts or help with organisational issues. There is a strong IT infrastructure. Those conditions support the implementation of quality initiatives. The quality development either relates to remuneration (UK) or to the need for doctors to have data for comparison with colleagues (Australia and Germany) or both (the Netherlands).

Implementing a quality development system implies a comprehensive strategy with the following six important domains, as adapted from the Australian example:

- Professional values within the group of GPs: the intrinsic values and driving forces to increase the quality of care;
- Empowering the patient's role in quality;
- Improving competences: the GPs should have training on quality development. The basic assumptions of quality development should be core values of the profession. A support to practice quality development besides patient care is necessary;
- Capacity: GP practices should be organised to handle the workload as general practice covers a broad range of needs. People need rapid and safe care for acute and emergency situations, well organised care for ongoing complex conditions, empathic and supportive care for special needs;
- Improving the knowledge and information management in the practice is essential to set up quality initiatives. Performing IT systems are important;
- Financing is a necessary condition for developing quality initiatives.

The appendix 12 gives a possible illustration that relates to flu vaccination.

The following conclusion can be drawn from this literature search:

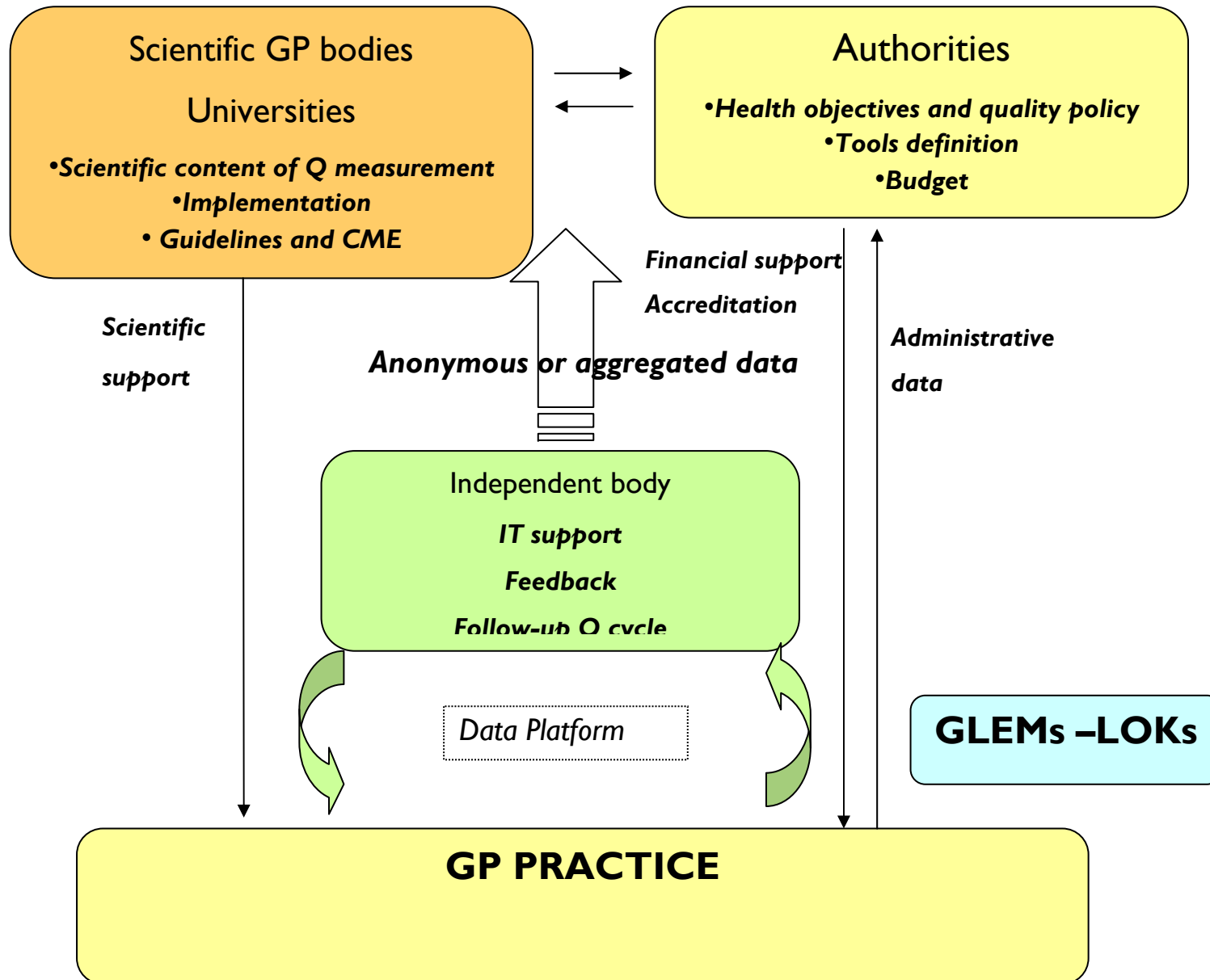
- **Until now, the accreditation scheme in Belgium did not show to lead to any measurable improvement in quality;**
- **In Belgium, the quality development at the GP practice level is missing;**
- **The successful countries analyzed in this report have a finely tuned approach towards quality development (e.g. the combination of different elements as a framework, a legislation, different stakeholders, involvement of the profession);**
- **A good organization in the practice (e.g. IT infrastructure, personnel) is a prerequisite for the successful implementation of quality initiatives;**
- **The Dutch and Australian examples give an estimation of the minimal budget needed for a practice based quality development system i.e. from 1 to 5 euros per inhabitant per year;**
- **A quality development system offers a better visibility and accountability of general practice to the public and stakeholders.**

4.3

10 ELEMENTS FOR A QUALITY FRAMEWORK IN BELGIUM

A former KCE project developed a framework for a quality system in Belgium (see appendix 11). The first step is the definition of a quality policy i.e., "a formal statement by the government that encompasses the necessary strategies to achieve the health objectives as determined by the policy makers and society". Within the quality policy, a quality indicator system should be a core initiative where data on a number of quality indicators are systematically collected, summarized and used for feedback to the stakeholders.

The following diagram and paragraphs illustrate how elements specifically interact to build up a quality development system in general practice.



Ten key issues can be identified for developing the framework. All stakeholders need to be involved in the development and the validation process of this framework in order to achieve success. The German and UK examples learn that legislation coupled with specific financial incentives is a powerful stimulus.

4.3.1 Need for professional culture change

The GPs should continuously bear in mind the importance of quality improvement principles when performing their daily work. GPs should become familiar with the concepts of quality development, measurement of indicators and the use of the quality cycle.

The involvement of GP opinion leaders and scientific bodies is the most critical precondition to succeed in quality development initiatives at the individual, practice, regional and national levels. Australia is the most outstanding example of the power of the profession to launch effective quality programs. Opinion leaders of general practice in the UK, Australia and the Netherlands closely interact with the academics. The GP opinion and scientific leaders in these countries outlined the concepts of the quality development programmes and subsequently marketed these to the professional bodies.

In Belgium, academic departments and scientific bodies also have to take up their position in the quality debate. They must define the content of the quality initiatives and how the profession will achieve their successful implementation.

4.3.2 Health Authorities in a future quality system

The role of the Health Authorities is first to address a quality policy that deals with priority aspects and anticipates the different steps from data collection to the use of results for further improvement. Authorities must also define the tools that should be promoted for quality improvement in general practice. The choice of the most appropriate tools must adhere to the scientific literature and experience from other countries, as described in this report.

A very powerful drive for change is a legal framework that introduces the requirements for quality development. The UK and Dutch professional bodies have referred to implicit thread of formal regulations on quality. The UK and Australia are successful illustrations of the need for a pre-existing legal framework. The consequences of registration of data for quality measurement will be clearly determined beforehand.

Political will and leadership are needed to put the development of quality in general practice on the political agenda, including the specification of a time frame in which general practice should adhere to a quality development scheme.

Furthermore the Authorities have a facilitating role:

- To support a platform that will collect the data and to create an independent trustworthy body that will provide feedbacks to the GPs and stakeholders;
- To promote and financially support standardised IT equipment that allows the collection of routine data for the measurement of quality indicators.

4.3.3 Stakeholders

All countries that have adopted successful quality development strategies have a finely tuned interaction between the key groups influencing the choice of quality measures i.e. purchasers, patients and physicians.¹⁷ For Belgium the following stakeholders could take part in quality development i.e., general practitioners, scientific GP bodies, regional organisations of general practice, academic departments of general practice, other organisations of primary health care like nursing and regional multi-professional bodies, GP unions, sickness funds and the Intermutualistic agency (IMA/AMI), INAMI/RIZIV, organisations of patients and software suppliers.

The role of each stakeholder can not be precisely defined from this scientific project but the scheme suggests that scientific bodies are important for the development of tools and indicators whilst other stakeholders are important for the development of IT infrastructure. Patient organisations may become more important in the debate on quality as is observed in surrounding countries.

4.3.4 Emphasis on the GP practice

Four of the five countries studied focused on quality development at the level of the practice. This is today one important missing link in general practice quality development in Belgium. As group practices and primary care teams are emerging, the practice and practice team level will become more important.

Although there is a trend towards group practices, most GPs in Belgium today still work in single-handed practices. Any quality development project should target both types of practices, keeping in mind the equity principle i.e., all patients must benefit from quality development initiatives.

4.3.5 Internal and external drivers for change

An essential point is to show to individual GPs what they win from the quality development approach in their practice. The foreign experiences show the need for a careful balance between the formative and summative use of any future scheme for quality development. The UK example largely shows the unintended consequences of a summative approach 'we come to see how you are doing' (see chapter 2.3.6). The Australian approach is essentially different and addresses the general practice as a business. Here the essential question is 'how well am I doing?' The available literature does not give any firm answer about the optimal balance between internal and external drivers for change.

4.3.6 Organizational capacity of the practices for quality development; manpower and IT

The EPA study highlighted the lack of capacity of the practices. Most Belgian GPs, in particular when working in single-handed practices, do not benefit from any ancillary support (e.g., secretary, practice assistant). Many tasks needed for a quality development project require an extra effort from the GP him/herself. This may hamper the feasibility of quality development initiatives in the practice.

The introduction of GP models that include ancillary workforce within the practices is a way forward. In The Netherlands, the practice assistant plays a major role in quality activities and the GP can also delegate simple medical acts to him/her. In the UK, all GP practices, even single-handed, have medical and administrative personnel to support the GP in his/her medical and administrative work. These examples call for a reconsideration of the current organisation of the Belgian GP practices: they have to switch from a model where the GP performs all tasks to a model where he can delegate specific tasks to co-workers who have different skills.

IT infrastructure is essential for the collection of clinical indicators but in Belgium IT systems effectively supporting quality development projects are not yet available. The current IT systems use different software packages that are not systematically adapted to routine data extraction.¹⁴⁰ Entering data should be easy for the practitioner and ancillary personnel and integrated in his/her usual electronic medical record to optimize the data collection^{141,142}. All software packages need to allow data extraction for measuring quality indicators. The IT packages used in general practice should therefore adhere to these conditions before their certification. A more formal approval is therefore rapidly needed. The UK and Dutch experiences show that IT support and a financial aid to the practices allow the development of a performing IT infrastructure in a short period of time.

The measurement of indicators also depends on the quality of the data recorded during the consultations. All practices should use an electronic medical record. The GPs are responsible for recording in a standardised way the data that will be used for quality measurement. As an illustration, the correct diagnosis is required to identify any group of patients at risk. The Belgian experience of Resoprim showed the difficulty to extract data for quality from GP electronic records¹⁴³.

4.3.7 Development of a set of quality indicators

Small projects, using a limited number of indicators may help GPs get started with quality development. The feedback they will receive can lead them to the use of the quality cycle. Practices should own their quality project and perhaps choose the indicators with the biggest win (in terms of acceptability, feasibility, reliability, validity and sensitivity to change). It must be bared in mind that indicators need to reflect a common aspect of care for which there is potential for development.

4.3.7.1 *Types of indicators*

The countries analyzed in this report use a balanced set of indicators. Structural indicators deal with the premises and the resources of the practices, organizational indicators highlight how the practice is organized and the satisfaction of the workers in the practice. Patient satisfaction indicators describe the perception of the services by the patients.

Besides these indicators, the use of clinical indicators becomes more prominent. The UK developed an impressive number of clinical indicators. In Australia clinical indicators have not been introduced yet and in the Netherlands the practice accreditation scheme has only a very limited number of clinical indicators.

4.3.7.2 *Development of a balanced set of indicators for Belgium*

A well balanced set of indicators is fundamental for being accepted by the GPs in Belgium and its development requires a preliminary agreement on priorities. The development of the sets of indicators should follow the process described in the conceptual framework formerly developed by the KCE (see appendix 11). Universities, scientific bodies and possibly insurance bodies have a role to play.

The source of indicators needs a careful attention. The clinical indicators can be derived from Belgian clinical guidelines and scientific bodies have the knowledge to propose some of them. The transfer of indicators between countries is a second option, taking care of the necessary adaptations.¹⁴⁴ Organizational indicators are proposed in the EPA instrument. The feasibility test showed that the entire set of indicators did not perfectly fit the Belgian situation. However, this comprehensive set is a valid source for the development of a Belgian national set as other organizational indicators (for example from the Dutch scientific professional body, NHG).

4.3.8 Role of the scientific GP bodies

The involvement of the profession in the development of quality initiatives is of major importance. The Belgian scientific GP bodies and academic departments have the knowledge, the link with the practitioners and sometimes also an experience in managing large scale projects. They are key partners for setting the quality agenda and to develop tools and indicators in collaboration with other stakeholders.

4.3.9 Importance of an independent trustworthy body

The heart of the system is the link between an independent body and the GP practices. An IT platform collects the data from the practices and an independent body provides feedback and support to the practices for the implementation of quality initiatives. This independent body has to be perceived as legitimate by the GPs.

Independent bodies facilitate the handling of GP data in Australia, the Netherlands, Germany and the UK. Furthermore they are an interface between practices and the Health authorities.

The GPs trust those parties and that trust is crucial to ensure the validity of the data collected. In Australia, the professional bodies initiated third parties that receive financial means from the government: they are responsible for creating the IT platforms and coaching practices. In the Netherlands, a national organisation run by the GP's association is the dedicated third party.

The independent trustworthy body can address many tasks.

- They implement the procedures to collect and analyse the data using IT platforms: repetitive measurements are necessary to assess and further improve the level of quality;
- They provide data handling and feedback reports to the practices;
- They offer coaching and support for the practices: feedbacks and coaching of the practices are crucial for a successful quality cycle: they support the formative processes and reinforce learning activities.
- They may issue accreditation certificates when targets for indicators are reached (and eventually calculate the 'fee for performance');

They communicate aggregated and anonymous data to the Health Authorities, anonymous data for research purposes and aggregated data to the Glems/LOKs in order to promote quality activities in the peer review groups.

In Belgium, a trustworthy independent body could be initiated in collaboration with the scientific professional bodies and/or with regional organisations of GPs. As an illustration, some regions have successfully built partnerships and IT platforms to organise large scale after-hours services¹⁴⁵. They have an expertise in the management of information technology and feedback. They could for example play a role in the data collection and feedback to the practices.

The composition of this independent body is a major point of discussion that should be handled by the stakeholders mentioned in the point 4.3.1.

4.3.10 Financial support

The Belgian Health Authorities have an interest in initiatives for improving quality of care. In general practice, the Authorities invested in the initiatives described above i.e., 'accreditation', feedback and GLEMs/LOKs (see chapter 4.1). The sum invested in the accreditation procedure is estimated to be at least 73 791 271 euros with few evaluation of the impact on the quality of care. There is still a lot of work to be done for quality improvement in Belgian general practice and that needs financial support. The Authorities also recently provided a lump sum of 6 800 000 euros specifically for quality development initiatives in hospitals, showing ongoing interest for quality¹⁴⁶.

New quality initiatives need preliminary pilot tests before any further investment. As a comparison, pilot experiences also preceded the implementation of large scale after-hours care services.¹⁴⁵

The financial support of the GP practice should consider the investment for participating in quality initiatives and the results of the assessment. First, the work relating to the process should be rewarded (e.g., introduction to quality concepts and quality work, data entering, working on the quality cycle with a tutor). Secondly, complementary fees could be an incentive for reaching targets for quality indicators. As stated above, the development of a balanced set of indicators that mirrors the scope of general practice is important (e.g., preventive tasks, patient satisfaction and clinical indicators for chronic diseases). The UK experience shows that risks are linked with target payment including a less holistic approach, a possible patient selection and a focus on well-paid activities to the detriment of less measurable quality items. The interpretation of the measurement has to take into account specific contextual factors like working in deprived areas.

10 elements to consider in the development of a quality framework

- The need for a professional GP culture oriented towards quality;
- The major role of the health authorities in particular for the development of a quality policy, the definition of health objectives, the legislation, the creation and support of an independent trustworthy body, the standardisation of the IT system and the necessary funding;
- The involvement of all stakeholders;
- The scientific input from GP scientific bodies and GP academic departments e.g. for defining quality initiatives and developing sets of indicators;
- The development of valid clinical and non clinical indicators covering the broad scope of general practice;
- The definition of an optimal balance between internal and external drivers for GPs to develop quality initiatives in their practice;
- An emphasis on the practice of the GPs;
- The improvement of the organisation of the GP practice in terms of personnel and IT infrastructure;
- The importance of an independent trustworthy body that will be the major interface for the analysis and feedback of data to the GPs and other stakeholders;
- The availability of financial support that takes into account the structure needed for the collection of data, the production of the tools selected for developing quality and the incentives for the GPs.

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6 APPENDICES

APPENDIX I: SEARCH STRATEGY AND DATA SOURCES

DATABASES

- Pubmed: is a service of the U.S. National Library of Medicine that includes over 16 million citations from MEDLINE and other life science journals for biomedical articles back to the 1950s. It includes 4500 journals. Access by www.pubmed.gov
- Embase: is a European database that includes over 18 million citations: 7 million unique Medline records and 11 million Embase records. It includes more than 7000 pharmacological and biomedical journals. Access by www.embase.com
- Cochrane database: is a database of systematic reviews. Cochrane Reviews are systematic assessments of evidence of the effects of healthcare interventions and are published in full text in The Cochrane Database of Systematic Reviews, one of the databases in The Cochrane Library. Access by www.thecochranelibrary.com
- Centre for Reviews and Dissemination (CRD) databases includes mainly:
 - DARE (Database of Abstracts of Reviews of Effects) which contains over 4000 abstracts of quality assessed and critically appraised systematic reviews. This database focuses on the effects of interventions used in health and social care.
 - NHS Economic Evaluation Database (NHS EED) contains over 6000 abstracts of quality assessed economic evaluations.
 - The HTA database which brings together details of completed and ongoing health technology assessments from around the world.
- *The European Observatory on Health Systems and Policies* supports and promotes evidence-based health policy-making through comprehensive and rigorous analysis of the dynamics of health care systems in Europe. The Observatory is a partnership between the World Health Organization Regional Office for Europe, the Governments of Belgium, Finland, Greece, Norway, Slovenia, Spain and Sweden, the Veneto Region of Italy, the European Investment Bank, the Open Society Institute, the World Bank, the London School of Economics and Political Science, and the London School of Hygiene & Tropical Medicine. Published country-based reports provide a detailed description of health care systems and of reforms and policy initiatives in progress or under development. Access by <http://www.euro.who.int/observatory>

SEARCH STRATEGY

MEDLINE

MESH terms

The following MESH terms were selected:

- "Quality Assurance, Health Care"[MeSH]
- "Quality Indicators, Health Care"[MeSH]
- "Program Evaluation"[MeSH]
- "Primary Health Care"[MeSH]
- "Family Practice"[MeSH]
- "Physicians, Family"[MeSH]

Query

The MESH terms were combined as follows: ("Quality Assurance, Health Care"[MeSH] OR "Quality Indicators, Health Care"[MeSH]) OR "Program Evaluation"[MeSH] AND ("Primary Health Care"[MeSH] OR "Family Practice"[MeSH]) OR "Physicians, Family"[MeSH].

The initial list of 10586 articles was further restricted to 727 references, using date limits (1996 onwards) and limited to systematic reviews.

Title/abstract screening

The final list of 727 references was independently reviewed by two researchers (PL and RR). References were excluded (code "N") using the following criteria:

- Major topic not related to family practice (code N1);
- Major topic not related to quality of care (code N2);
- Focus on specific pathology(ies) (code N3);
- Focus on a specific country, non West European (code N4);
- Methodology for developing clinical quality indicators (see KCE report 41).

Code "D" meant that a possible in- or exclusion had to be discussed with the other researcher.

Code "Y" meant that the publication was selected by the title/abstract screening because it was related to family practice and quality of care. Code "Y1" meant that the main focus was on practice evaluation systems. If not, the code was "Y2".

Finally 5 reviews were selected.

EMBASE

Emtree terms

The following EMTREE-terms were selected:

- general practice [EMTREE]
- primary medical care [EMTREE]
- clinical effectiveness [EMTREE]
- clinical indicator [EMTREE]
- performance measurement [EMTREE]
- accreditation [EMTREE]
- medical audit [EMTREE]
- peer review [EMTREE]

- professional standards review organisation [EMTREE]
- quality circle [EMTREE]
- total quality management [EMTREE]

Query

The Emtree terms were combined as follows:

#1 'general practice'/exp OR 'primary medical care'/exp AND [review]/lim AND [humans]/lim AND [embase]/lim AND [1996-2007]/py

N=3678

#2 'clinical effectiveness'/exp OR 'clinical indicator'/exp OR 'performance measurement system'/exp OR 'accreditation'/exp OR 'medical audit'/exp OR 'peer review'/exp OR 'professional standards review organisation' OR 'quality circle'/exp OR 'total quality management'/exp AND [review]/lim AND [humans]/lim AND [1996-2007]/py

N=2905

#1 AND #2

N = 87

Finally one review was selected

COCHRANE database

MESH descriptors

Physicians, Family [MeSH]

- Family Practice [MeSH]
- Primary Health Care [MeSH]
- Health Care Quality, Access, and Evaluation [MeSH]
- Quality of Health Care_[MeSH]
- Credentialing [MeSH]
- Total Quality Management [MeSH]

Query

#1 Physicians, Family [explode all trees] OR Family Practice [explode all trees] OR Primary Health Care [explode all trees], from 1996 to 2007

N=22

#2 Health Care Quality, Access, and Evaluation [explode all trees] OR Quality of Health Care [explode all trees] OR Credentialing [explode all trees] OR Total Quality Management [explode all trees], from 1996 to 2007

N=2087

1 AND #2

N=20

Title/abstract screening

The initial list of 20 references was independently reviewed by two researchers (PL, RR). The same method as the Medline search were used.

Finally, two articles were included{Gosden, 2000 #15; Giuffrida, 2000 #14}.

None of these was withheld in our review

CENTRE FOR REVIEWS AND DISSEMINATION (CRD) database

MESH terms

- Family Practice [MeSH]
- Physicians, Family [MeSH]
- Quality Assurance, Health Care [MeSH]
- Quality Indicators, Healthcare [MeSH]
- Quality of Healthcare [MeSH]
- Total Quality Management [MeSH]
- Medical Audit [MeSH]
- Outcome and Process Assessment (Health Care) [MeSH]
- Professional Review Organizations [MeSH]
- Program Evaluation [MeSH]

Query

- #1 MeSH Outcome and Process Assessment (Health Care) EXPLODE I 2
- #2 MeSH Professional Review Organizations EXPLODE I 2
- #3 MeSH Program Evaluation EXPLODE I 2 3
- #4 MeSH Quality Indicators, Health Care EXPLODE I
- #5 MeSH Quality Assurance, Health Care EXPLODE I 2
- #6 MeSH Family Practice EXPLODE I
- #7 MeSH Physicians, Family EXPLODE I 2
- #8 MeSH Management Quality Circles EXPLODE I
- #9 MeSH Quality Control EXPLODE I
- #10 MeSH Total Quality Management EXPLODE I 2 3
- #11 MeSH Quality of Health Care
- #12 MeSH Medical Audit EXPLODE I 2
- #13 #1 OR #2 OR #3 OR #4 OR #5 OR #8 OR #9 OR #10 OR #11 OR #12
RESTRICT YR 1996 2007
- #14 #6 OR #7 RESTRICT YR 1996 2007
- #15 #13 AND #14

Title/abstract screening

The initial list of 103 references was independently reviewed by two researchers (PL, RR). The same method as the Medline search were used.

Finally, two articles were included{Johnston, 2000 #61; Hearnshaw, 1996 #62}. None of these was withheld in our review

APPENDIX 2: OVERVIEW OF THE MAIN INTERNET SOURCES PER COUNTRY

Country	institution	Website	Remarks
Belgium	The European Observatory on Health Systems and Policies	http://www.euro.who.int/document/e90059.pdf	Review of the health care system of Belgium (2007)
Australia	Royal Australian College of General Practitioners	http://www.racgp.org.au/standards	Details the list of quality standards for Australian primary care
	Royal Australian College of General Practitioners	http://www.racgp.org.au/qualityframework	Describes a global framework and various levels for quality initiatives in Australia and gap analysis
	Royal Australian College of General Practitioners	http://www.racgp.org.au/fellowship	How to become a fellow. Fellowship is granted to those who demonstrate that they have reached the standard required for unsupervised general practice in Australia.
	Apgal	https://www.qip.com.au/	Is a third party non-profit processing the accreditation process of Australian GPs
	GPA Accreditation plus	https://www.gpa.net.au	Is a third party for-profit processing the accreditation process of Australian GPs
	The European Observatory on Health Systems and Policies	http://www.euro.who.int/Document/E89731.pdf	A platform for data on health care systems of European and other Western countries
	Department of Health and ageing, Medicare	http://www.medicareaustralia.gov.au/providers/incentives_allowances/pip.htm	Details the Practice Incentives Program
	Department of Health and ageing	http://www.health.gov.au/internet/wcms/Publishing.nsf/Content/pcd-publications-gpinoz2004	A well documented source providing evidence of and directions for general practice in Australia
	Australian General Practice Network	http://www.adgp.com.au/site/index.cfm	The Network is the umbrella for the Australian regions
	Australian General Practice Network	http://www.gpconnections.com.au/content/Document/21.2.07%20Urgent%20General%20Practice%20funding%20models.pdf	Details new directions for Multidisciplinary teams and funding
United Kingdom	National Health Service	http://www.nhsemployers.org/primary/primary-890.cfm	Details the Quality Outcome Framework (QOF)
	National Health Service	http://www.nhsemployers.org/primary/primary-886.cfm	Details the General Medical Services contract
	The European Observatory on Health Systems and Policies	http://www.euro.who.int/document/e68283.pdf	Review of the health care system of Australia (1999)
	Royal College of General Practitioners	http://www.rcgp.org.uk/PDF/Corp_future_of_general_practice.p	Position statement encompassing statements on quality development

Country	institution	Website	Remarks
		df.	
	Royal College of General Practitioners	http://www.rcgp.org.uk/membership_support/membership_home/fellowship.aspx	How to become a fellow
	British medical association	http://www.bma.org.uk/ap.nsf/Content/focusqoffeb06#Background	Gives details on the Focus on Quality and Outcomes framework
	NICE	http://www.nice.org.uk/aboutNICE	Guideline development
	Healthcare Commission	http://www.healthcarecommission.org.uk/homepage.cfm	UKs watch dog, supervises and controls especially quality
	Royal College of General Practitioners, Scotland	http://www.rcgp.org.uk/pdf%2Fpublications%2FRCGPScot%20Introduction.pdf	Details the revalidation toolkit, which is the fraim of a practice visit
Netherlands	Nederlands Huisarts Genootschap	http://nhg.artsenet.nl/content/resources/AMGATE_6059_104_TICH_L748094857/AMGATE_6059_104_TICH_R162994659667666/	Details information about the Quality kit and Practice accrediting programme
	Ministerie van Volksgezondheid, Welzijn en sport	http://www.minvws.nl/dossiers/zorgverzekering/	Outlines the insurance system from 2006
	Dutch Association of GPs	http://lhv.nl	Details competencies and information on staff. Also best practice information on collaboration with other care providers.
	Nederlands instituut voor onderzoek van de gezondheidszorg	http://www.nivel.nl/	Research institute for health care
	Rijksinstituut voor Volksgezondheid en Milieu	http://www.rivm.nl/	Research institute for health care
	Ministerie van Volksgezondheid, Welzijn en sport	http://www.minvws.nl/dossiers/erstelijnszorg/	Outlines the actors in primary health care in the Netherlands
	Rijksinstituut voor Volksgezondheid en Milieu (RIVM).	http://www.kiesbeter.nl/algemeen/	Is for all citizens that have question on regulations and health care providers
	The European	http://www.euro.who.int/Docum	Review of the health care system of the Netherlands (2004)

Country	institution	Website	Remarks
	Observatory on Health Systems and Policies	ent/E84949.pdf	
	WOK	http://www.wokresearch.nl/wok/default.asp	The site of the evaluating organisation, not only on quality in primary care
France	The European Observatory on Health Systems and Policies	http://www.euro.who.int/document/e83126.pdf http://www.euro.who.int/document/e83126sum.pdf	Review of the health care system of France
	French National Authority for Health	http://www.has-sante.fr/portail/display.jsp?id=c_5443&pcid=c_5443	HAS activities are diverse and deal with publication of guidelines to accreditation of healthcare organisations and certification of doctors
	French National Authority for Health	http://www.has-sante.fr/portail/display.jsp?id=c_539669	Outlines a methodology for peer review and quality development
	French National Authority for Health	http://www.has-sante.fr/portail/display.jsp?id=c_443256	Outlines the legislation framework
Germany	The European Observatory on Health Systems and Policies	http://www.euro.who.int/Document/E85472.pdf	Review of the health care system of Germany
	Deutschen Gesellschaft für Allgemeinmedizin und Familienmedizin (DEGAM)	http://www.degam.de/	The German college of General Practitioners
	Deutschen Gesellschaft für Allgemeinmedizin und Familienmedizin (DEGAM)	http://www.degam.de/leitlinien.html	The German guidelines
	Ärztliches Zentrum für Qualität in der Medizin	http://www.aezq.de/	National organisation Kompetenzzentrum von BÄK und KBV für Leitlinien, Patienteninformation, Patientensicherheit und ärztliches Qualitätsmanagement.
	Information Centre for Quality management in ambulant medical care	http://www.q-m-a.de/6qmsysteme/0index/view	Lists all regulations for practice quality systems
	QEP – Qualität und Entwicklung in Praxen®	http://www.kbv.de/themen/qualitaetsmanagement.html	One of the three instruments for practice accreditation in Germany
	Stiftung Praxissiegel e. V.	http://www.praxissiegel.de/1.0.html	One of the three instruments for practice accreditation in Germany

Country	institution	Website	Remarks
	AQUA - Institut für angewandte Qualitätsförderung und Forschung im Gesundheitswesen GmbH	http://www.aqua-institut.de/stellenangebote.html	One of the three instruments for practice accreditation in Germany
Belgium	The European Observatory on Health Systems and Policies	http://www.euro.who.int/Document/E90059.pdf	Review of the health care system of Belgium
All countries	The European Observatory on Health Systems and Policies	http://www.euro.who.int/document/e87303.pdf	Provides quick end up to date information of European countries
	Organisation for Economic Co-operation and Development	http://www.oecd.org/document/31/0,2340,en_2649_201185_2484127_1_1_1_1,00.html	Describes the OECD Health Care Quality Indicators Project.
	Organisation for Economic Co-operation and Development	http://www.oecd.org/statistics/data/0,3381,en_2649_33929_1_119656_1_1_1,00.html	Statistical data on expenditure of health per country
	European Council	http://www.coe.int/t/e/social_cohesion/health/documentation/QUALITY%20IMPROVEMENT-%20EXP.REPORT%20&%20%20RECOM%2097)%2017%20PUB%20eng.asp	In 1997 the European Council outline a framework for Quality Development in health care
	WONCA	http://www.woncaeurope.org/	Academic and scientific society for general practitioners in Europe
	EQuIP	http://www.equip.ch/	EQuIP is a working party of WONCA Europe
	ISQua, The International Society for Quality in Health Care Inc.,	http://www.isqua.org	for individuals and institutions with a common interest to share expertise via an international multidisciplinary forum

APPENDIX 3: LIST OF EXPERTS FOR THE INTERNATIONAL REVIEW

FRANCE

Dr Jean Bami, Haute Autorité en Santé.

Prof Dr Hector Falcoff. Département de Médecine Générale, Faculté de Médecine Paris V.

GERMANY

Prof Dr Ferdinand M. Gerlach, MPH. Director des Instituts für Allgemeinmedizin, Klinikum der Johann Wolfgang Goethe-Universität Frankfurt am Main.

Johannes Stock, AOK-Bundesverband, Stabsbereich Medizin, Kortrijker Str. 1, D-53177 Bonn.

NETHERLANDS

Dr van den Hombergh Pieter, PhD. Landelijke Huisarts Vereniging.

Prof Dr Theo Voorn, PhD, Afdeling huisartsgeneeskunde, Radboud Universiteit Nijmegen.

UNITED KINGDOM

Prof Dr Glyn Elwyn, PhD, Research Chair at Cardiff University. Associate Editor of Quality and Safety in Healthcare and a visiting professor at the Centre for Quality of Care Research, Nijmegen, Netherlands

Prof Dr Martin Roland, PhD Director of the National Primary Care Research and Development Centre (NPCRDC) and Professor of General Practice at Manchester University

AUSTRALIA

Dr Peter Delfante, General Practitioner, Medical Director, Adelaide Western Division of General Practice.

Ms Teri Snowdon, National Manager – Quality Care and Research, Royal Australian College of General Practitioners.

APPENDIX 4: SELECTED REVIEWS

Author	Research question	Method	Results	Information/country	Remarks for Belgium
Grimshaw JM 2004{Grimshaw, 2004 #108}	To undertake a systematic review of effectiveness and costs of different guideline development, dissemination and implementation strategies	Systematic review 1966-1998 All clinical guidelines including general practice and hospital settings	Studies on cost-effectiveness are scarce. Multifaceted interventions, i.e. encompassing practice visits or written materials do not seem to be more effective than simple interventions	Dominated by studies in the USA and UK	Guideline development and implementation does not seem to be very efficient. Simple dissemination may be most cost-effective
Rhydderch M 2005{Rhydderch, 2005 #53}	To inform the debate by reviewing the international peer-reviewed literature on organizational assessments used in general practice settings	Systematic review 1996-2003	Thirteen papers including 5 assessment instruments were included for appraisal	Generic. USA (3), Netherlands (1), Australia (1)	The authors differentiate between external led approach (professional led, external assessment, benchmarked) versus internal development. They suggest an incremental level (Australia); Minimal standards, demonstrate excellence on these minimal standard (VIP, Netherlands), growing towards higher standards hence growing towards an organisational culture along philosophies of the primary care system (i.e. community focus, continuity of care)
Contencin P 2006{Contencin, 2006 #63}	To review performance assessment methods used in general practice	Systematic review up to 2004. Key informants were used per country.	The focus is on Europe - which countries use which methods - and on the following aspects: which authorities or bodies are responsible for setting up and running the systems, are the systems mandatory or voluntary, who takes part in assessments and what is their motivation, are patients views taken into account.	UK: negotiated a GMS contract for provision of care under the NHS whereby up to a third of a practice's income can depend on performance as judged by score points for quality indicators. France: The ANAES was commissioned to design a national system for voluntary performance assessment of	A potentially successful assessment method in any country has to be in line with: <ul style="list-style-type: none"> • Prevailing healthcare management and regulation • Cultural factors • Patients' expectations A key factor seems to be

Author	Research question	Method	Results	Information/country	Remarks for Belgium
			Which performance assessment methods are the most cost-effective is not known because there are no validated indicators yet for estimating their efficiency with regard to patients' health. Three types of methods of quality assessment were identified: audits/audit groups, peer-review groups and practice visits.	<p>GP's and specialists in the ambulatory sector. The system is based on the application of standards derived by the agency from its own database of clinical practice guidelines</p> <p>The Netherlands: audits, peer-review, practice visits</p> <p>UK: audits, peer-review, practice visits</p> <p>Norway: peer-review,</p> <p>Belgium: peer-review,</p> <p>New Zealand: peer-review,</p> <p>Australia: practice visits,</p> <p>Switzerland: practice visits</p> <p>Sweden: practice visits</p> <p>Canada: inspections</p>	<p>'marketing', i.e. creating the right ethos that will encourage participation. In practice, this often means that:</p> <ul style="list-style-type: none"> • Participation is organised by professional institutions or at least with their support. Self-regulation guarantees freedom of action, such freedom being a prerequisite for change in some countries • Participation is mostly voluntary • Participation is handled by moderators with a gently persuasive rather than an overpowering or inquisitorial touch. <p>Patients want to be involved in performance assessment. Patient satisfaction with an efficient service is a laudable objective but it should not override the issues of medical effectiveness, managerial efficiency, and payers' policies.</p>
Holden{Holden, 2004 #554}	Systematic review of published multi-practice audits from	Systematic review of peer-reviewed literature of audit	Audit can be moderately effective. Precise evaluation is difficult as it is often part of	UK	Audit is mostly part of multiple intervention strategies

Author	Research question	Method	Results	Information/country	Remarks for Belgium
	British general practice	carried out in UK general practice	multi-targeted interventions Organizers usually choose subjects of which data are straightforward, mostly on prescribing and chronic disease management. No complete failures were described		
King J 2001 {King, 2001 #83}	<p>What health system approaches, strategies and interventions have been shown to improve: health outcomes for individuals, health system efficiency and rewards and recognition of the role and quality of GP in primary clinical care</p> <p>If 'good governance' in the health sector includes the initiatives above, to what extent is 'clinical governance' in the international literature the central plank of 'good governance'?</p> <p>What are the necessary precursors and enablers to the successful implementation of these interventions?</p> <p>What indicators or</p>	Systematic review (1995-2000)	<p>There is a lack of research-based evidence relating to outcomes for patients and GPs from system approaches aimed at improving quality</p> <p>The lack of outcomes-based evidence on these themes in the published literature may reflect the fact that primary care clinical governance is at an early stage in its evolution.</p> <p>Evidence was available on the extent to which the following approaches, strategies and initiatives have improved health outcomes, system efficiency and/or outcomes for general practice:</p> <ul style="list-style-type: none"> • Performance indicators within primary and acute care • Fundholding in the UK and budget holding in New Zealand • Patient care guidelines • Peer feedback as part of clinical audit 	<p>UK and Australia: There is little doubt that the development of primary care groups and trusts as cohesive organisations, with clear corporate goals and objectives directed towards quality improvement and the development of their staff, will be the keys to success of clinical governance in primary care.</p> <p>The bulk of the available evidence came from the UK and New Zealand. Main findings were:</p> <p>Peer feedback, particularly in relation to prescribing and test ordering. Development of peer accountabilities Significant event audit Patient care guidelines with feedback Collaborating GPs rather than separately competing Ambiguous effects of incentive payments Working in teams</p>	Creation of the right climate towards quality seems vital. The use of indicators seems to be crucial. Peer review, no-blame culture are important. The role of incentives may be ambiguous.

Author	Research question	Method	Results	Information/country	Remarks for Belgium
	<p>measures can be used to evaluate the impact of these interventions on quality of patient care, outcomes for GP's, system efficiency and/or relevant intermediate outcomes?</p>		<p>processes</p> <ul style="list-style-type: none"> • Peer accountabilities in prescribing through the auspices of voluntary clinical audit, pharmaceutical advisers and total purchasing pilots; and • Significant event audit <p>Definitions of 'clinical governance' and 'good governance' provide a useful macro-level framework for improving quality in primary clinical care, but they lack specificity. 'Clinical governance' should apply broadly and comprehensively across a multitude of areas including clinical processes, financial arrangements and information systems.</p> <p>Precursors and enablers:</p> <ul style="list-style-type: none"> • A shared culture which values change • Leadership which encourages and facilitates change • Effective communication and good relationships within and between practices, with local providers and with the 	<p>Major cultural change is required</p> <p>Generating, gathering and disseminating research studies that contribute to the development of clinical quality indicators</p> <p>Performance indicators have the greatest potential to deliver improvement</p> <p>What constitutes the 'right' culture for clinical governance?</p> <ul style="list-style-type: none"> Continuous quality improvement No-blame culture and system awareness Teamwork Communication Ownership: collective responsibility Leadership Continuous learning Patient focus 	

Author	Research question	Method	Results	Information/country	Remarks for Belgium
			<p data-bbox="1061 225 1285 253">purchasing authority</p> <ul style="list-style-type: none"> <li data-bbox="1014 264 1317 352">• Committed staff, including an enthusiastic lead GP <li data-bbox="1014 368 1294 456">• Effective organisation of strategies and initiatives <li data-bbox="1014 472 1323 715">• Adequate IT systems to manage patient records; data collection, exchange and reporting; and assist in clinical decision making and practice management <li data-bbox="1014 730 1301 818">• Professional and financial incentives for quality <li data-bbox="1014 834 1308 1077">• Investment in capacity of individuals and organisations involved, including resources, continuity of staffing, appropriate skills, information, culture and policy <li data-bbox="1014 1093 1301 1366">• Informal and formal relationships between those involved, including mutual understanding, the quality of communication, and any competition that exists between them 		

Author	Research question	Method	Results	Information/country	Remarks for Belgium
			<ul style="list-style-type: none"> Attitudes and approaches, including adaptability, inclusive decision making and planning 		
Seddon 2001 {Seddon, 2001 #25}	<p>To summarize published evaluations of the quality of clinical care provided in general practice in the UK, Australia and New Zealand.</p> <p>The Purpose of this study was to evaluate just one of these components of quality – that of clinical or technical effectiveness</p>	<p>Systematic review of published studies assessing the quality of clinical care in general practice for the period of 1995-9.</p>	<p>Most of the studies were from the UK (80), with six from Australia and four from New Zealand.</p> <p>In almost all studies the processes of care did not attain the standards set out in national guidelines or those set by the researchers themselves.</p> <p>Most of the studies reported on quality of care for chronic conditions, and only a small number attempted to assess the management of acute conditions or preventive care.</p> <p>This is a significant gap, given that these modalities represent a major part of the work undertaken by GPs.</p>	<p>Mainly UK.</p> <p>No differentiation between countries was made.</p>	<p>We need more and better information on the quality of care in general practice. This is particularly true for acute conditions and preventative care.</p> <p>For a more valid representation of quality, the evaluations should focus on randomly selected samples of records drawn from populations rather than from self-selected practices. There is a need to focus on non-technical aspects of care, particularly interpersonal care which is a fundamental component of general practice.</p>

APPENDIX 5: SELECTION OF ARTICLES FROM THE COMPLEMENTARY SEARCHES

Author	Title	Country	Type of article	Summary
Beacham 2003{Beacham, 2003 #221}	Priorities for research in the area of primary health care. How relevant are recently completed General Practice Evaluation Program projects?	Australia	Semi quantitative analysis of reports of 52 projects on quality of care in Australia.	Completed GPEP projects have relevance to the identified priority areas. They provide information to support research applications in the primary health care area funded through the National Health and Medical Research Council, and identify areas for further research.
Hearnshaw 2003{Hearnshaw, 2003 #550}	Are audits wasting resources by measuring the wrong things? A survey of methods used to select audit review criteria	UK	Using a questionnaire study, this study measured the extent to which a systematic approach was used to select criteria for audit, and identified problems in using such an approach with potential solutions.	The agreement on indicators used in audit was low. Authors conclude that methods and review criteria were often less systematic than desirable.
Crampton 2004{Crampton, 2004 #248}	What makes a good performance indicator? Devising primary care performance indicators for New Zealand	New Zealand	Reflective paper	NZ currently lacks a national approach to primary care performance indicators. Discussion of papers of Campbell and McColl. A Delphi like technique is suggested to start the consensus process.
Elwyn 2004{Elwyn, 2004 #524}	Assessing organisational development in primary medical care using a group based assessment: the Maturity Matrix	UK	Multifaceted analysis. Responses to a evaluation questionnaire, qualitative feedback and psychometric testing	Validation studies of the maturity matrix. This instrument assesses the degree of organizational development achieved in primary medical care organizations.

Houghton 2004{Houghton, 2004 #319}	Are NHS primary care performance indicator scores acceptable as markers of general practitioner quality?	UK	A group of 24 senior GPs collaborate in a Delphi procedure. Mathematical modeling showed validity.	The method shows how numerous Department of Health performance indicators can be merged into a single composite performance score. We show that this composite performance score is easy to derive, simple to interpret, is acceptable to GPs, and has face validity.
Miller 2004{Miller, 2004 #363}	Relationship between general practitioner certification and characteristics of care	Australia	1975 GPs provided details on 100 consecutive patient encounters. Data were linked to national aggregated data that were available because GPs claim to the Government.	Certification of general practitioners has a significant association with consultation behavior and patient management. Indicators were test ordering (i.e. prostate antigen), referral for diabetes, cardiovascular risks, prescription rates. 5 Items proved discriminative.
Smith 2004{Smith, 2004 #414}	Quality incentives: the case of U.K. general practitioners	UK	Reflective	Explains the way forward to the new incentive scheme from historical facts. The paper describes the incentive scheme, discusses its potential benefits and risks, and draws out the implications for evaluation. For instance, from the 1050 points eligible only 40 are concerned with mental health.
Engels 2005{Engels, 2005 #268}	Developing a framework of, and quality indicators for, general practice management in Europe	Europe	A two round Delphi procedure among GPs of 6 European countries (including Belgium)	It proved possible to develop a European set on indicators for practice management and organization of general practices. Precursor of EPA.

Foy 2005{Foy, 2005 #534}	What do we know about how to do audit and feedback? Pitfalls in applying evidence from a systematic review	UK	Critical appraisal of reviews of the value of audits and criteria as set by NICE (UK body for audit)	For one example (diabetes in primary care) it is argued that audit is possible because it is common with important consequences, effective interventions are available, measurable outcomes were defined and there is potential for improvement. Audit and feedback will continue to be an unreliable approach to quality improvement. A theoretical framework offers a way forward.
Van den Homberg 2005{van den Hombergh, 2005 #436}	Saying 'goodbye' to single-handed practices; what do patients and staff lose or gain?	Netherlands	Secondary analysis of the practice visit project in the Netherlands using the independent variables single-handed versus group-practice, urban-rural and male-female	The quality of the practice infrastructure and the team scored better in group practices, but patients appreciated the single-handed practice better.
Wakley 2005{Wakley, 2005 #445}	Evaluating service performance for clinical governance	UK	Reflective paper	Describes aspects and domains what a good quality practice would look like.
Ashworth 2006{Ashworth, 2006 #215}	The relationship between general practice characteristics and quality of care: a national survey of quality indicators used in the UK Quality and Outcomes Framework, 2004-5	UK	Secondary data of the use of indicators of 8480 practices in the QOF were linked to demographic data.	Socially deprived areas experience a lower quality of primary care, as judged by QOF scores. Social deprivation itself is an independent predictor of lower quality.

Brown 2006 { Brown, 2006 #236 }	Cross sectional study of performance indicators for English Primary Care Trusts: testing construct validity and identifying explanatory variables	UK	Secondary analysis of the aggregated QOF scores of GPs with 6 Performance Indicators in 303 English primary Care Trusts.	In the UK Primary Care Trusts are the umbrella of GPs in a region. Within the QOF it shows that there is some correlation between the QOF scores and patient satisfaction but not with other measures. The results of this analysis provide little evidence that the current indicators have sufficient construct validity to measure the underlying concept of quality, except when the specific area of screening is considered.
Doran 2006 { Doran, 2006 #71 }	Pay-for-performance programs in family practices in the United Kingdom	UK	Secondary analysis of the QOF scores and exception rates per condition. QOF scores were correlated with socio demographic data of GPs and practices.	The median reported and claims achievement was 83,4 percent. Socio-demographic effects of both practices and patients had moderate but significant effects. Exception reporting was high in a about 1 percent of practices. These practices should be monitored.
Engels 2006 { Engels, 2006 #527 }	Testing a European set of indicators for the evaluation of the management of primary care practices	Europe	Validation and feasibility study in 9 countries of a European instrument of practice management and organization.	57 indicators were found to be valid in all countries. In some countries resistance was reported among practice staff but could be overcome. Procedures were sometimes slowly implemented.
Fraser 2006 { Fraser, 2006 #535 }	Evaluation of an inter-practice visit peer review program for rural Australian general practice registrars	Australia	Qualitative analysis of a project where consultations of GPs were observed by peers in 18 practices.	The visitor learns. No data on the observed GP.

Lester 2006 {Lester, 2006 #346}	The quality and outcomes framework of the GMS contract: a quiet evolution for 2006	UK	Reflective paper	There is uncertainty if the QOF has made a difference to patient care. Authors plead for more incorporation of skillful communication as part of the QOF.
Marshall 2006 {Marshall, 2006 #352}	OECD Health Care Quality Indicator Project. The expert panel on primary care prevention and health promotion	Europe and USA and Canada	Selection from lists of existing indicators by a modified Delphi technique among experts to arrive at a European set of indicators for primary care (which encompasses GP)	Indicators were drawn from the USA, UK and Canada. After first appreciation 270 indicators were identified out of more than 1000. Authors report high time constraints. The paper helps understanding international trends and policies towards quality care
Morgan 2006 {Morgan, 2006 #366}	Primary care funding, contract status, and outcomes: an observational study	UK	Secondary analysis of the QOF related to contract status of GPs	QOF scores tend to be lower among practices that have a larger part of fixed payments for services <i>not</i> in the QOF
Rhydderch 2006 {Rhydderch, 2006 #95}	Assessing organisational development in family practice. The Maturity Matrix	Europe	Qualitative study to develop a facilitating model for quality development.	The Maturity Matrix{Elwyn, 2004 #524} is a facilitation model designed to assess organizational development in general practice settings and stimulate quality development. Lessons are drawn for visitors and the process of the visits
Wang 2006 {Wang, 2006 #447}	Practice size and quality attainment under the new GMS contract: a cross-sectional analysis	UK	Secondary analysis of QOF and routinely available data	Small practices were more likely to be in underprivileged areas. They contain as many clinical indicators but have lower achievement on organizational indicators

<p>Perera 2007{Perera, 2007 #598}</p>	<p>Panning for gold: An evidence-based tool for assessment of performance indicators in primary health care</p>	<p>New Zealand</p>	<p>Details the way the NZ strategy of identifying indicators for primary health care</p>	<p>From a definition and literature, a framework is proposed to select valid indicators for primary care. Using the framework experts may now review the indicators that will be used in the future. Performance indicators however, an not reflect all aspects of primary care.</p>
<p>Roland 2004{Roland, 2004 #72}</p>	<p>Linking physicians' pay to the quality of care—a major experiment in the United kingdom</p>	<p>UK</p>	<p>Position paper. Describes the new Quality Outcome Framework which essentially is an incentive system using indicators.</p>	<p>Describes the new contract in the NHS. Using clinical and organizational indicators and experiences from patients, GPs will have financial rewards. Claims will be centrally collected. Inspection will include an annual visit by representatives of the Primary Care Trust. The author suggests a number of consequences like Rapid expansion of computer systems, expansion of the role of nurses in general practice, increase in clinics on specific chronic diseases, increase of bio-medical orientation of GPs, improvement of health outcomes, less holistic approach, reduction of care for conditions not included in the incentive system, increase of administrative cost and burden</p>

Holden{Holden, 2004 #554}	Systematic review of published multi-practice audits from British general practice	UK	Systematic review of peer-reviewed literature of audit carried out in UK general practice	Audit can be moderately effective. Precise evaluation is difficult as it is often part of multi-targeted interventions Organizers usually choose subjects of which data are straightforward, mostly on prescribing and chronic disease management. No complete failures were described
Fraser{Fraser, 2006 #535}	Evaluation of an interpractice visit peer review program for rural Australian general practice registrars.	AU	Qualitative survey among the 18 GPs that enrolled in an interpractice visit peer review program	Qualitative description mostly positive findings, and only of the visiting doctors, not on the receiving GPs
Jelly{Jelley, 2003 #179}	Practice-based peer appraisal in general practice: an idea whose time has come?	UK	Purposive Questionnaire study aimed to get informed about progress of the concept of in practice peer review	18 percent of practices had set up practice based peer appraisal systems
McKay{McKay, 2006 #190}	Variations in the ability of general medical practitioners to apply two methods of clinical audit: A five-year study of assessment by peer review	UK, Scotland	Two GPs reviewed 1002 audits in Scotland between 199-2004. Audits and event analysis were delivered in standard formats and scored by peers	Using standard protocols that were used for accreditation points, 55 percent were scored as satisfactory. A significant proportion of GPs may be unable to adequately apply audit methods.
Sheaff 2004{Sheaff, 2004 #920} (*)	Soft governance and attitudes to clinical quality in English general practice	UK	Survey (2001) of 437 GPs attitudes, opinions and self reported activity in Primary Care Trusts and six Primary Care Trusts	Most GPs reported that their clinical practice had changes as because of clinical governance although 40 percent reported little difference in the care that is being provided. It seems to be hard to extend beyond clinical domains.
McKinstry{McKinstry, 2005 #192} (*)	GP experiences of partner and external peer appraisal: a qualitative study	UK	Semi-structured interview of 62 GPs that undertook a external peer appraisal, which is a structured practice visit in Scotland	There is unclerness of the aspect of revalidation. This may lead to superficial engagement. Protected time is necessary

McKay 2007{McKay, 2007 #356} (*)	Development and testing of an assessment instrument for the formative peer review of significant event analysis	UK, Scotland	A voluntary educational model that was available since 1998, was evaluated. Content validity and reliability was tested.	The appraisal instrument is valid and reliable. This method is part of the GP appraisal in Scotland.
Elwyn 2005{Elwyn, 2006 #922} (*)	Using a 'peer assessment questionnaire' in primary medical care	UK	Among GPs that were appraised, an optional questionnaire study was held among chosen colleagues to fill out a questionnaire with judgements about clinical skills and other characteristics such as compassion, integrity and responsibility	This volunteer sample found no objections to peer assessment questionnaire
Williams 2006{Williams, 2006 #454} (*)	Does a higher 'quality points' score mean better care in stroke? An audit of general practice medical records	UK	To investigate whether a high stroke quality score is associated with adherence to RCP guidelines. DESIGN: Examination of computer and written medical records of all patients with a diagnosis of stroke. SETTING: Two general practices, one in southwest London, one in Surrey, with a combined practice population of over 20 000.	Higher quality points did not reflect better adherence to RCP guidance. This audit highlights a gap between relatively simplistic measures of quality in the QOF, dependent on the recording of a narrow range of computer codes, and the actual standard of care being delivered.

APPENDIX 6: INDICATORS FOR PRACTICE ACCREDITATION IN THE NETHERLANDS

PRAKTIJKORGANISATIE, BEDRIJFSVOERING EN FINANCIËN

Infrastructuur

Indicator	Afgemeten aan	Meetmethode
1. Beschikbare menskracht	- aantal fte huisarts per 1.000 patiënten - aantal fte praktijkassistente per 1.000 patiënten - aantal fte praktijkondersteuner per 1.000 patiënten	Inventarisatie
2. Adequate ruimtes	- soort ruimtes - beschikbaarheid privacy - inrichting	Observatie
2a. Praktijkvoorzieningen	Aanwezigheid van: - behandelkamer assistente - spreekkamer met afgescheiden onderzoeksruimte - vergader- en/of koffiekamer	Observatie
2b. Privacymaatregelen	de mate waarin: - gesprekken aan de balie niet hoorbaar zijn voor anderen - gesprekken in de spreekkamer niet hoorbaar zijn voor anderen - vertrouwelijke informatie vertrouwelijk blijft	Patiëntenenquête
2c. Wachtkamervoorzieningen	de aanwezigheid van: - prettige stoelen - speelgelegenheid - leesmateriaal	Patiëntenenquête
3. Toegankelijkheid en beschikbaarheid	- mate van toegankelijkheid voor mensen die minder goed ter been zijn - wachttijd bij maken afspraak en voor consult - beschikbaarheid huisarts - beschikbaarheid herhalingsreceptuur - kwaliteit van de waarneming	Observatie
3a. toegankelijkheid voor mensen die minder goed ter been zijn		Observatie
3b. wachttijd bij maken afspraak en voor consult	- aantal minuten wachttijd voor aanvang van het consult - aantal minuten wachttijd bij telefonisch contact praktijk	Patiëntenenquête
3c. Beschikbaarheid huisarts	- Patiënten die buiten spreekuurtijden bellen, krijgen duidelijke informatie over praktijktijden en dienstdoende arts. - Patiënten kunnen voor een routineafspraak binnen twee werkdagen terecht (indien geen sprake is van spoed). - Huisvisites worden afgelegd als patiënten om fysieke redenen niet naar de praktijk kunnen komen. - Patiënten hebben de mogelijkheid voor een langer consult. - Patiënten kunnen huisarts gemakkelijk telefonisch raadplegen.	Patiëntenenquête
3d. Beschikbaarheid herhalingsreceptuur	Herhalingsreceptuur is op de dag van aanvragen beschikbaar	Patiëntenenquête

3e. Waarneming	Afgemeten aan de aanwezigheid van: - afspraken over avond-, nacht- en weekenddienst (ANW) - afspraken over vakantie - afspraken bij spoed - afspraken vastgelegd in protocollen	Inventarisatie
4. Instrumenten en materiaal	- aanwezigheid van basisinstrumentarium - aanwezigheid van EHBO-voorzieningen - inhoud van de spoedkoffer - mate waarin medisch materiaal wordt aangevuld en bijgehouden	Observatie
4a. Aanwezigheid basisinstrumentarium	- lijst instrumentarium voor diagnose en behandeling - lijst instrumentarium voor laboratoriaanbod	Observatie
4b. Aanwezigheid EHBO-voorziening		observatie
4c. Inhoud spoedkoffer	- lijst adequate vulling spoedkoffer	Observatie
4d. Aanvullen en bijhouden medisch materiaal	- beschikbaarheid van afspraken en regelingen voor het aanvullen van medicijnen, tests en verband - beschikbaarheid van afspraken en regelingen voor het bijhouden van alle materialen die een uiterste gebruiksdatum hebben	Inventarisatie
5. Hygiënisch werken	Afgemeten aan de aanwezigheid van: Materialen Benodigde vaccinaties protocollen	Inventarisatie

Indicatoren bij team

Indicator	Afgemeten aan	Meetmethode
<i>Takenpakket</i>	- een omschrijving van takenpakket, bevoegdheden en verantwoordelijkheden voor elke medewerker voor: - medisch/technische taken - diagnostische taken - organisatorische taken - taken met betrekking tot chronisch zieken - preventietaken	Inventarisatie
<i>Structurele interne werkafspraken</i>	- overleg met de huisarts - overleg met de praktijkassistente - overleg met de praktijkondersteuner	Inventarisatie
<i>Structureel overleg</i>	- overleg binnen hagro: - omvang in minuten - aantal malen in laatste jaar - overleg met apotheker	Inventarisatie
<i>Personeelsbeleid</i>	Functioneringsgesprekken	Inventarisatie

Indicatoren bij informatie

Indicator	Afgemeten aan	Meetmethode
<i>Verslaglegging/ dossiervorming</i>	<p>De praktijk heeft een medische verslaglegging waartoe de mate waarin wordt dienstdoende arts toegang heeft.</p> <p>voldaan aan de</p> <ul style="list-style-type: none"> - De praktijk maakt gebruik van een elektronisch medisch volgende regels: dossier (EMD). - In de medische verslaglegging wordt gebruik gemaakt van (SOE)P- codering. - In de medische verslaglegging wordt gebruikgemaakt van ICPC-codering. - Uitslagen, specialistenbrieven, et cetera worden gedocumenteerd (in het medisch dossier opgenomen). - Bij de medische verslaglegging wordt de privacy van patiënten bewaakt. Bijvoorbeeld: onbevoegden hebben geen toegang tot het medisch dossier. - Van consulten door waarnemende huisartsen vindt schriftelijke terugkoppeling naar de eigen huisarts plaats. 	Inventarisatie
<i>Patiëntenvoorlichting</i>	<ul style="list-style-type: none"> - In de praktijk is een praktijkfolder voorhanden. - In de praktijk is informatie over andere zorginstellingen, zoals een ziekenhuis, voorhanden. - De huisarts kan aan patiënten informatie verschaffen over medische aandoeningen. - Patiënten hebben de mogelijkheid voor telefonische advisering door praktijkmedewerkers. 	Inventarisatie
<i>Sociale kaart</i>	<ul style="list-style-type: none"> - een actuele sociale kaart. Een sociale kaart bevat informatie over de aanwezigheid hulpverleners in de regio. 	Inventarisatie
<i>Follow-up</i>	<ul style="list-style-type: none"> - een systeem/protocol voor het doorgeven van uitslagen aan patiënten 	Inventarisatie

Indicatoren bij kwaliteit en toetsing

Indicator	Afgemeten aan	Meetmethode
<i>Kwaliteitssysteem</i>	deelname aan farmacotherapeutisch overleg (fto)	Inventarisatie
<i>Werken volgens richtlijnen en protocollen</i>	- NHG-Standaarden - de mogelijkheid van advisering door de praktijkassistentes volgens de NHG-Telefoonwijzer	Inventarisatie
<i>Kwaliteitsbeleid</i>	- Apparatuur wordt geregeld geïkt. - Er zijn onderlinge afspraken en zorgplannen en er is protocollering wordt voldaan over het beleid met: - diabetes mellitus - astma /COPD - hart- en vaatziekten	Inventarisatie
<i>Scholing</i>	- voldoende (formeel en feitelijk) gekwalificeerd personeel - nascholing van de huisarts (waarbij het gaat om het aantal accreditatiepunten in een jaar, uitgedrukt in uren) - nascholing van praktijkassistente(s) en praktijkondersteuning (waaronder EHBO), uitgedrukt in uren.	Inventarisatie

Indicatoren bij patiëntenraadpleging

Indicator	Afgemeten aan	Meetmethode
<i>Enquête</i>	- een patiëntenenquête over communicatie, bejegening et cetera (EUROPEP)	Inventarisatie
<i>Klachtenprocedure</i>	- een toegankelijke klachtenprocedure (bijvoorbeeld een klachtenbus)	Inventarisatie

Indicatoren bij financiën

Indicator	Afgemeten aan	Meetmethode
<i>Financiële verantwoording</i>	- een systeem voor financiële verantwoording	Inventarisatie

MEDISCH HANDELEN

Indicatoren bij diabetes mellitus

Registratie en omvang doelgroep

De praktijk kan een lijst maken van diabetespatiënten

- a. Aantal patiënten met diabetes per 1.000 patiënten (jaarprevalentie)
- b. Aantal patiënten met diabetes onder behandeling in de praktijk per 1.000 patiënten

Behandeling, Controle, Uitkomst

voor DM-patiënten onder behandeling in de huisartsenpraktijk

% DM-patiënten met een gecontroleerde bloedglucose door middel van glucosemeting (in ieder geval drie keer per jaar)#

% DM-patiënten met een gecontroleerde bloedglucose door middel van HbA1c-meting*

c. % DM patiënten met HbA1c onder de 7,0

d. % DM patiënten met HbA1c boven de 8,5

% DM-patiënten met een gecontroleerde bloeddruk*

% DM patiënten met een bloeddruk binnen de streefwaarden

2. (systolisch onder de 150 mmHg en diastolisch onder de 85 mmHg)

% DM-patiënten met een cholesterolbepaling*

% DM patiënten met een cholesterolwaarde lager dan 5,0 mmol/l

% DM-patiënten met een creatininebepaling*

% DM-patiënten met een voetonderzoek*

% DM-patiënten met één keer per twee jaar een verwijzing voor fundusfoto of oogarts

% DM-patiënten met een volledig ingevuld risicoprofiel (rookstatus, BMI, bloeddruk, cholesterol of cholesterol/HDL-ratio,(familie)anamnese HVZ)

Met tussenperiode van minimaal twee maanden

* In ieder geval één keer per jaar

Als de praktijk (nog) niet in staat blijkt om lijsten met diabetespatiënten te maken, is het niet

mogelijk om de indicatoren 3 tot en met 13 in te vullen, tenzij deze gegevens uit een andere

databron dan het HIS verkregen kunnen worden.

Astma en COPD

Indicatoren bij COPD

Registratie en omvang doelgroep

1. De praktijk kan een lijst maken met COPD-patiënten
2. De praktijk kan een lijst maken met COPD-patiënten onder behandeling in de huisartsenpraktijk

Diagnose, Behandeling, Controle, Uitkomst voor COPD-patiënten onder behandeling in de huisartsenpraktijk

3. % COPD-patiënten met bevestiging van de diagnose door middel van spirometrie
4. % COPD-patiënten waarvan de rookstatus bekend is
5. % rokende COPD-patiënten met een stoppen-met-rokenadvies
6. % COPD-patiënten met een spirometrie in het afgelopen jaar
7. % COPD-patiënten zonder exacerbaties#

Exacerbaties zijn te tellen aan de hand van het aantal prednisonstootkuren

Indicatoren bij astma

Registratie en omvang doelgroep

8. De praktijk kan een lijst maken van astmapatiënten
9. De praktijk kan een lijst maken met astmapatiënten onder behandeling in de huisartsenpraktijk

Diagnose, Behandeling, Uitkomst voor astmapatiënten onder behandeling in de huisartsenpraktijk

10. % astmapatiënten met bevestiging van de diagnose door middel van piekstroommeting of spirometrie
11. % astmapatiënten waarvan de rookstatus bekend is
12. % rokende astmapatiënten met stoppen-met-rokenadvies
13. % astma patiënten zonder exacerbaties#

Exacerbaties zijn te tellen aan de hand van het aantal prednisonstootkuren

Als de praktijk (nog) niet in staat blijkt om lijsten met astma- en COPD- patiënten te maken, is het niet mogelijk om de indicatoren 3 tot en met 7 en 10 tot en met 13 in te vullen, tenzij deze gegevens uit een andere databron dan het HIS verkregen kunnen worden.

Risicomanagement hart- en vaatziekten

Risicomanagement bij HVZ- hoogrisicopatiënten

Registratie en omvang doelgroep

1.
 - a. De praktijk kan een lijst maken van HVZ- hoogrisicopatiënten: te weten patiënten met hypercholesterolemie, hypertensie, hartfalen, angina pectoris, CVA, TIA, PAV of myocardinfarct
 - b. 1b. Aantal patiënten met verhoogd risico op HVZ per 1.000 patiënten (jaarprevalentie)
2. Aantal patiënten met hypercholesterolemie per 1.000 patiënten (jaarprevalentie)
3. Aantal patiënten met hypertensie per 1.000 patiënten (jaarprevalentie)

Risicoprofiel

4. % HVZ- hoogrisicopatiënten met een risicoprofiel
5. % HVZ- hoogrisicopatiënten met een volledig ingevuld risicoprofiel (dus bekende glucosewaarde, bloeddruk, rookstatus, BMI/Quetelet-index, cholesterol of cholesterol/HDL ratio, HVZ- anamnese van patiënt en zijn of haar familie)

Uitkomsten

6. % HVZ-hoogrisicopatiënten met een bloeddruk binnen de normaalwaarden (systolisch onder de 160 mmHg en diastolisch onder de 90 mmHg)
7. % HVZ-hoogrisicopatiënten met een cholesterolwaarde lager dan 5,0 mmol/l

Preventief beleid

8. 8. % rokende HVZ-hoogrisicopatiënten met een stoppen-met-rokenadvies
9. 9. % HVZ-hoogrisicopatiënten met statines
10.
 - a. % angina- pectorispatiënten met antistollingsmiddelen (acetylsalicylzuur, carbasalaatcalcium en dergelijke)
 - b. % PAV-patiënten met antistollingsmiddelen (acetylsalicylzuur, carbasalaatcalcium en dergelijke)

N.B. Als het definiëren van de HVZ-hoogrisicopatiënten nog niet mogelijk blijkt, kunnen de indicatoren 9 en 10 globaler bestudeerd worden door het totaal aantal voorgeschreven statines of antistollingsmiddelen per 1.000 patiënten aan te geven.

Als de praktijk nog niet in staat blijkt om lijsten met HVZ-hoogrisicopatiënten te maken, is het

niet mogelijk om de indicatoren 1b tot en met 10b in te vullen, tenzij deze gegevens uit een andere databron dan het HIS verkregen kunnen worden.

Griepvaccinatie

Indicatoren bij griepvaccinatie

1. % gevaccineerde patiënten van 65 jaar en ouder
2. % gevaccineerde hoogrisicopatiënten* in de praktijk

* Conform de definitie in de NHG-Standaard (zie de tabel Randvoorwaarden nodig voor

de toepassing van indicatoren boven aan deze pagina).

Deze set van indicatoren kan vermoedelijk eenvoudig worden uitgebreid met de volgende gegevens:

Griepvaccinatie (optioneel)

3. % tegen influenza gevaccineerde DM-patiënten, type 1 en 2
4. % tegen influenza gevaccineerde patiënten met pulmonale aandoeningen
5. % tegen influenza gevaccineerde patiënten met cardiale aandoeningen

Cervixscreening

Indicator bij cervixscreening

BEVOLKINGSONDERZOEK BAARMOEDERHALSKANKER

- % vrouwen uit doelcohort voor het bevolkingsonderzoek 'uitstrijk' van dit jaar

Voorschrijven van geneesmiddelen

Indicatoren bij antibioticabeleid

1. 1. Aantal patiënten met antibioticavoorschriften per 1.000 patiënten
2. 2. Verhouding tussen de diverse voorgeschreven antibioticamiddelen

Indicatoren bij maagmiddelen

(Chronisch) gebruik* maagmiddelen

1. Aantal patiënten met chronisch gebruik van zuurremmers per 1.000 patiënten.
2. % eerste uitgifte van antacida of H2-receptorantagonisten ten opzichte van % eerste uitgifte van alle zuurremmers (antacida, H2-receptorantagonisten en protonpompremmers)
3. % protonpompremmers ten opzichte van alle voorgeschreven zuurremmers onderchronische gebruikers

* De chronische gebruikers worden gedefinieerd als gebruikers van meer dan 90 tabletten in het laatste half jaar.

MODULE PATIËNTENOORDEEL

Indicatoren bij patiëntenoordeel

Indicator	Afgemeten aan	meetmethode
<i>Praktijkgebouw</i>	<ul style="list-style-type: none"> - %patiënten dat vindt dat netheid en hygiëne in de praktijk beter kan - % patiënten dat vindt dat het klimaat in de wachtkamer aangenaam is - % patiënten dat vindt dat de stoelen in de wachtkamer prettig zitten 	
<i>Tijdigheid</i>	<ul style="list-style-type: none"> - gemiddelde wachttijd voor het telefonisch bereiken van de praktijk (aantal minuten)# - % patiënten dat vindt dat de praktijk bij spoed overdag gemakkelijk telefonisch bereikbaar is - % patiënten dat tevreden is over de telefonische bereikbaarheid van de praktijk - gemiddelde wachttijd voor het consult (aantal minuten)# - % patiënten dat tevreden is over de wachttijd in de wachtkamer - % patiënten dat tevreden is over het kunnen maken 	

Dit onderdeel is ook opgenomen in de module Praktijkorganisatie, bedrijfsvoering en financiën.

Indicator	Afgemeten aan	meetmethode
<i>Informatievoorziening</i>	<ul style="list-style-type: none"> - % patiënten dat vindt dat ze duidelijke informatie hebben gekregen over de praktijkregels - % patiënten dat vindt dat de informatie over ziekte goed is - % patiënten dat aangeeft altijd uitleg te krijgen over de reden van medicatie - % patiënten dat aangeeft voorlichting over medicatiegebruik te krijgen tijdens het consult - % patiënten dat tevreden is over de uitleg van de huisarts over wat de bedoeling is van onderzoeken en behandelingen - % patiënten dat aangeeft uitleg te krijgen over mogelijke bijwerkingen van medicatie - % patiënten dat vindt dat de huisarts hun vertelt wat ze wilden weten over de klacht - % patiënten dat vindt dat de huisarts hun duidelijk maakt waarom het belangrijk is zijn/haar advies op te volgen - % patiënten dat vindt dat de huisarts ze voorbereidt op wat te verwachten is van de specialist of het ziekenhuis 	
<i>Privacy</i>	<ul style="list-style-type: none"> - % patiënten dat kan horen wat aan de balie besproken wordt# - % patiënten dat gespreksflarden uit de spreekkamer opvangt# - % patiënten dat vertrouwelijke informatie vernam# - % patiënten dat vindt dat de huisarts de aantekeningen en gegevens over hen vertrouwelijk houdt 	

Dit onderdeel is ook opgenomen in de module Praktijkorganisatie, bedrijfsvoering en financiën.

Indicator	Afgemeten aan	meetmethode
Bejegening	<ul style="list-style-type: none"> - % patiënten dat vindt dat de huisarts hen het gevoel gaf tijd te hebben tijdens het consult - % patiënten dat vindt dat de huisarts belangstelling toont voor hun persoonlijke situatie - % patiënten dat vindt dat de huisarts ervoor zorgt dat ze gemakkelijk over hun problemen kunnen vertellen - % patiënten dat vindt dat de huisarts hen betreft bij beslissingen over hun medische behandeling - % patiënten dat vindt dat de huisarts naar hen luistert - % patiënten dat vindt dat medewerkers (anderen dan de huisarts) behulpzaam zijn - % patiënten dat weet waar ze terecht kunnen met een klacht over de medische behandeling - % patiënten dat aangeeft voldoende mogelijkheid te hebben de eigen patiëntgegevens in te zien. 	
Zorgaanbod	<ul style="list-style-type: none"> - % patiënten dat vindt dat de praktijk de gewenste hulp biedt bij spoed overdag - % patiënten dat tevreden is over het verlenen van hulp bij gezondheidsproblemen die onmiddellijke aandacht vragen - % patiënten dat tevreden is over het extra aanbod van de praktijk (bijvoorbeeld kleine chirurgische ingrepen, verloskunde) 	
Vakbekwaamheid	<ul style="list-style-type: none"> - % patiënten dat vindt dat de huisarts op de hoogte is van hun medische achtergrond - % patiënten dat vindt dat de aanpak van de huisarts zorgvuldig en degelijk is - % patiënten dat tevreden is over het bij hen uitvoeren van lichamelijk onderzoek 	
Mantelzorg	<ul style="list-style-type: none"> - % patiënten dat vindt dat de huisarts oog heeft voor de gevolgen van de ziekte voor de partner of directe naasten 	
Continuïteit/samenwerking hulpverleners	<ul style="list-style-type: none"> - % patiënten dat vindt dat de huisarts juist en op tijd geïnformeerd is vanuit de tweede lijn - % patiënten dat vindt dat de huisarts weet wat hij/zij heeft gedaan of hun heeft verteld tijdens voorgaande bezoeken - % patiënten dat aangeeft dat de waarnemer op de hoogte is van hun medische problemen - % patiënten dat aangeeft dat de huisarts geïnformeerd is over de behandeling door de waarnemer - % patiënten dat vindt dat andere hulpverleners (bijvoorbeeld fysiotherapeut, maatschappelijk werker) op de hoogte zijn van elkaars behandeling 	
Gezamenlijk opstellen behandelingsplan	<ul style="list-style-type: none"> - % patiënten dat vindt dat in gezamenlijkheid (huisarts en patiënt) is besloten tot het behandelingsplan. 	

MODULE PRAKTIJK- EN PATIËNTKENMERKEN

Indicatoren bij praktijkpopulatie

Indicator	Afgemeten aan	meetmethode
Omvang	Het aantal praktijkpatiënten.	Uit HIS
Demografische samenstelling	Leeftijd Geslacht Verzekeringsvorm Etniciteit Opleidingsniveau Sociale laag	Uit HIS
Speciale kenmerken	Het aantal passanten Het aantal patiënten in verzorgingshuis Het aantal patiënten in asielzoekerscentrum Het aantal patiënten met indicatie AGGZ	Uit HIS
Omvang zorg voor chronische ziekten	Het aantal patiënten met diabetes Het aantal patiënten met astma of COPD Het aantal patiënten met hart- en vaatziekten	Uit HIS

Indicatoren bij praktijk

Indicator	Afgemeten aan	meetmethode
Praktijkvorm	Type praktijk (solo, duo, groep, gezondheidscentrum) Ligging van de praktijk (aan huis, niet aan huis) Juridische vorm van de praktijk (solo, maatschap, HOED, HOES, coöperatie) Bijzondere taken van de praktijk (apothekhoudend, verloskundig actief, reizigersvaccinatiecentrum?) Opleidingspraktijk of niet	Inventarisatie
Ligging (urbanisatiegraad, al dan niet in achterstandgebied)	aantal inwoners per vierkante kilometer in de 5 CBS- categorieën al dan niet in achterstandswijk (postcode) Meetmethode: •	Via de huisartsenregistratie van het NIVEL Via de postcode-indeling van de LHV

Indicatoren bij personeel

Indicator	Afgemeten aan	Meetmethode
Beschikbare menskracht	- aantal fte huisarts per 1.000 patiënten - aantal fte praktijkassistente per 1.000 patiënten - aantal fte praktijkondersteuning per 1.000 patiënten - aantal fte overig ondersteunend personeel (administratief, schoonmaak et cetera) per 1.000 patiënten	Inventarisatie
Scholing staf	huisarts(en) met herregistratie gediplomeerde praktijkassistente(s) praktijkondersteuner(s) op MBO-niveau praktijkondersteuner(s) op HBO-niveau	Inventarisatie

Indicatoren bij productie

Indicator	Afgemeten aan	Meetmethode
Aantal contacten	aantal malen dat administratief het EMD is aangevuld - aantal spreekuurconsulten (enkele en dubbele) - aantal visites - aantal malen telefonisch overleg	Uit HIS Uit HIS

Eventueel kan deze paragraaf worden uitgebreid met informatie over:

- aantal voorschriften;
- aantal eerste- en tweedelijnsverwijzingen;
- aantal laboratoriumverrichtingen per 1.000 patiënten.

Er zal echter softwarematige ondersteuning nodig zijn om dit gegeven uit het HIS te kunnen verkrijgen.

APPENDIX 7: INDICATORS USED IN THE QUALITY AND OUTCOMES FRAMEWORK - UK

CLINICAL DOMAIN

Secondary prevention of coronary heart disease

Indicator	Points	Payment stages
The practice can produce a register of patients with coronary heart disease.	4	
The percentage of patients with newly diagnosed angina (diagnosed after 1 April 2003) who are referred for exercise testing and/or specialist assessment.	7	40-90%
The percentage of patients with coronary heart disease whose notes have a record of blood pressure in the previous 15 months.	7	10-90%
The percentage of patients with coronary heart disease in whom the last blood pressure reading (measured in the previous 15 months) is 150/90 or less.	19	40-70%
The percentage of patients with coronary heart disease whose notes have a record of total cholesterol in the previous 15 months.	7	40-90%
The percentage of patients with coronary heart disease whose last measured total cholesterol (measured in the previous 15 months) is 5 mmol/l or less.	17	40-70%
The percentage of patients with coronary heart disease with a record in the previous 15 months that aspirin, an alternative anti-platelet therapy, or an anti-coagulant is being taken (unless a contraindication or side-effects are recorded).	7	40-90%
The percentage of patients with coronary heart disease who are currently treated with a beta blocker (unless a contraindication or side-effects are recorded).	7	40-60%
The percentage of patients with a history of myocardial infarction (diagnosed after 1 April 2003) who are currently treated with an ACE inhibitor or Angiotensin II antagonist.	7	40-80%
The percentage of patients with coronary heart disease who have a record of influenza immunisation in the preceding 1 September to 31 March.	7	40-90%

Heart failure

Indicator	Points	Payment stages
The practice can produce a register of patients with heart failure.	4	
The percentage of patients with a diagnosis of heart failure (diagnosed after 1 April 2006) which has been confirmed by an echocardiogram or by specialist assessment.	6	40-90%
The percentage of patients with a current diagnosis of heart failure due to LVD who are currently treated with an ACE inhibitor or Angiotensin Receptor Blocker, who can tolerate therapy and for whom there is no contraindication.	10	40-80%

Stroke and TIA

Indicator	Points	Payment stages
The practice can produce a register of patients with Stroke or TIA.	2	
The percentage of new patients with a stroke who have been referred for further investigation.	2	40-80%
The percentage of patients with TIA or stroke who have a record of blood pressure in the notes in the preceding 15 months.	2	40-90%
The percentage of patients with a history of TIA or stroke in whom the last blood pressure reading (measured in the previous 15 months) is 150/90 or less.	5	40-70%
The percentage of patients with TIA or stroke who have a record of total cholesterol in the last 15 months.	2	40-90%
The percentage of patients with TIA or stroke whose last measured total cholesterol (measured in the previous 15 months) is 5 mmol/l or less.	5	40-60%
The percentage of patients with a stroke shown to be non-haemorrhagic, or a history of TIA, who have a record that an anti-platelet agent (aspirin, clopidogrel, dipyridamole or a combination), or an anti-coagulant is being taken (unless a contraindication or side-effects are recorded).	4	40-90%
The percentage of patients with TIA or stroke who have had influenza immunisation in the preceding 1 September to 31 March.	2	40-85%

Hypertension

Indicator	Points	Payment stages
The practice can produce a register of patients with established hypertension.	6	
The percentage of patients with hypertension in whom there is a record of the blood pressure in the previous nine months.	20	40-90%
The percentage of patients with hypertension in whom the last blood pressure (measured in the previous nine months) is 150/90 or less.	57	40-70%

Diabetes Mellitus

Indicator	Points	Payment stages
The practice can produce a register of all patients aged 17 years and over with diabetes mellitus, which specifies whether the patient has Type 1 or Type 2 diabetes.	6	
The percentage of patients with diabetes whose notes record BMI in the previous 15 months.	3	40-90%
The percentage of diabetic patients who have a record of HbA1c or equivalent in the previous 15 months.	3	40-90%
The percentage of patients with diabetes in whom the last HbA1c is 7.5 or less (or equivalent test/reference range depending on local laboratory) in the previous 15 months.	17	40-50%
The percentage of patients with diabetes who have a record of retinal screening in the previous 15 months.	5	40-90%
The percentage of patients with diabetes with a record of the presence or absence of peripheral pulses in the previous 15 months.	3	40-90%
The percentage of patients with diabetes with a record of neuropathy testing in the previous 15 months.	3	40-90%
The percentage of patients with diabetes in whom the last blood pressure is 145/85 or less.	18	40-60%
The percentage of patients with diabetes who have a record of micro-albuminuria testing in the previous 15 months (exception reporting for patients with proteinuria).	3	40-90%
The percentage of patients with diabetes who have a record of estimated glomerular filtration rate (eGFR) or serum creatinine testing in the previous 15 months.	3	40-90%
The percentage of patients with diabetes with a diagnosis of proteinuria or micro-albuminuria who are treated with ACE inhibitors (or A2 antagonists).	3	40-80%
The percentage of patients with diabetes who have a record of total cholesterol in the previous 15 months.	3	40-90%
The percentage of patients with diabetes whose last measured total cholesterol within previous 15 months is 5 mmol/l or less.	6	40-70%
The percentage of patients with diabetes who have had influenza immunisation in the preceding 1 September to 31 March.	3	40-85%

Chronic obstructive pulmonary disease

Indicator	Points	Payment stages
The practice can produce a register of patients with COPD.	3	
The percentage of all patients with COPD in 10 whom diagnosis has been confirmed by spirometry including reversibility testing.	10	40-80%
The percentage of patients with COPD with a record of FeV1 in the previous 15 months.	7	40-70%
The percentage of patients with COPD receiving inhaled treatment in whom there is a record that inhaler technique has been checked in the previous 15 months.	7	40-90%
The percentage of patients with COPD who have had influenza immunisation in the preceding 1 September to 31 March.	6	40-85%

Epilepsy

Indicator	Points	Payment stages
The practice can produce a register of 1 patients aged 18 and over receiving drug treatment for epilepsy.	1	
The percentage of patients age 18 and over on drug treatment for epilepsy who have a record of seizure frequency in the previous 15 months.	4	40-90%
The percentage of patients age 18 and over on drug treatment for epilepsy who have a record of medication review involving the patient and/or carer in the previous 15 months.	4	40-90%
The percentage of patients age 18 and over on drug treatment for epilepsy who have been seizure free for the last 12 months recorded in the previous 15 months.	6	40-70%

Hypothyroid

Indicator	Points	Payment stages
The practice can produce a register of patients with hypothyroidism.	1	
The percentage of patients with hypothyroidism with thyroid function tests recorded in the previous 15 months.	6	40-90%

Cancer

Indicator	Points	Payment stages
The practice can produce a register of all cancer patients defined as a 'register of patients with a diagnosis of cancer excluding non-melanotic skin cancers from 1 April 2003'.	5	
The percentage of patients with cancer, diagnosed within the last 18 months who have a patient review recorded as occurring within six months of the practice receiving confirmation of the diagnosis.	6	40-90%

Palliative care

Indicator	Points	Payment stages
The practice has a complete register available of all patients in need of palliative care/support.	3	
The practice has regular (at least three monthly) multidisciplinary case review meetings where all patients on the palliative care register are discussed.	3	

Mental Health

Indicator	Points	Payment stages
The practice can produce a register of people with schizophrenia, bipolar disorder and other psychoses.	4	
The percentage of patients with schizophrenia bipolar affective disorder and other psychoses with a review recorded in the preceding 15 months. In the review there should be evidence that the patient has been offered routine health promotion and prevention advice appropriate to their age, gender and health status.	23	40-90
The percentage of patients on lithium therapy with a record of serum creatinine and TSH in the preceding 15 months.	1	40-90%
The percentage of patients on lithium therapy with a record of lithium levels in the therapeutic range within the previous six months.	2	40-90%
The percentage of patients on the register who have a comprehensive care plan documented in the records agreed between individuals, their family and/or carers as appropriate.	6	25-50%
The percentage of patients with schizophrenia, bipolar affective disorder and other psychoses who do not attend the practice for their annual review who are identified and followed up by the practice team within 14 days of non-attendance.	3	40-90%

Asthma

Indicator	Points	Payment stages
The practice can produce a register of patients with asthma, excluding patients with asthma who have been prescribed no asthma-related drugs in the previous twelve months.	4	
The percentage of patients aged eight and over diagnosed as having asthma from 1 April 2006 with measures of variability or reversibility.	15	40-80%
The percentage of patients with asthma between the ages of 14 and 19 in whom there is a record of smoking status in the previous 15 months.	6	40-80%
The percentage of patients with asthma who have had an asthma review in the previous 15 months.	20	40-70%

Dementia

Indicator	Points	Payment stages
The practice can produce a register of patients diagnosed with dementia.	5	
The percentage of patients diagnosed with dementia whose care has been reviewed in the previous 15 months.	15	25-60%

Depression

Indicator	Points	Payment stages
The percentage of patients on the diabetes register and/or the CHD register for whom case finding for depression has been undertaken on one occasion during the previous 15 months using two standard screening questions.	8	40-90%
In those patients with a new diagnosis of depression, recorded between the preceeding 1 April to 31 March, the percentage of patients who have had an assessment of severity at the outset of treatment using an assessment tool validated for use in primary care.	25	40-90%

Chronic Kidney disease

Indicator	Points	Payment stages
The practice can produce a register of patients aged 18 years and over with CKD (US National Kidney Foundation: Stage 3 to 5 CKD).	6	
The percentage of patients on the CKD register whose notes have a record of blood pressure in the previous 15 months.	6	40-90%
The percentage of patients on the CKD register in whom the last blood pressure reading, measured in the previous 15 months, is 140/85 or less.	11	40-70%
The percentage of patients on the CKD register with hypertension who are treated with an angiotensin converting enzyme inhibitor (ACE-I) or angiotensin receptor blocker (ARB) (unless a contraindication or side effects are recorded).	4	40-80%

Atrial fibrillation

Indicator	Points	Payment stages
The practice can produce a register of patients with atrial fibrillation.	5	
The percentage of patients with atrial fibrillation diagnosed after 1 April 2006 with ECG or specialist confirmed diagnosis.	10	40-90%
The percentage of patients with atrial fibrillation who are currently treated with anti-coagulation drug therapy or an anti-platelet therapy.	15	40-90%

Obesity

Indicator	Points	Payment stages
The practice can produce a register of patients aged 16 and over with a BMI greater than or equal to 30 in the previous 15 months.	8	

Learning disabilities

Indicator	Points	Payment stages
The practice can produce a register of patients with learning disabilities.	4	

Smoking indicators

Indicator	Points	Payment stages
The percentage of patients with any or any combination of the following conditions: coronary heart disease, stroke or TIA, hypertension, diabetes, COPD or asthma whose notes record smoking status in the previous 15 months. Except those who have never smoked where smoking status need only be recorded once since diagnosis.	33	40-90%
The percentage of patients with any or any combination of the following conditions: coronary heart disease, stroke or TIA, hypertension, diabetes, COPD or asthma who smoke whose notes contain a record that smoking cessation advice or referral to a specialist service, where available, has been offered within the previous 15 months.	35	40-90%

ORGANISATIONAL DOMAIN

Records and information

	Indicator
Records 3 1 point	The practice has a system for transferring and acting on information about patients seen by other doctors out of hours.
Records 8 1 point	There is a designated place for the recording of drug allergies and adverse reactions in the notes and these are clearly recorded.
Records 9 4 points	For repeat medicines, an indication for the drug can be identified in the records (for drugs added to the repeat prescription with effect from 1 April 2004). Minimum Standard 80%.
Records 11 10 points	The blood pressure of patients aged 45 and over is recorded in the preceding five years for at least 65% of patients.
Records 13 2 points	There is a system to alert the out-of-hours service or duty doctor to patients dying at home.
Records 15 25 points	The practice has up-to-date clinical summaries in at least 60% of patient records
Records 17 5 points	The blood pressure of patients aged 45 and over is recorded in the preceding five years for at least 80% of patients.
Records 18 8 points	The practice has up-to-date clinical summaries in at least 80% of patient records.
Records 19 7 points	80% of newly registered patients have had their notes summarised within eight weeks of receipt by the practice.
Records 20 12 points	The practice has up-to-date clinical summaries in at least 70% of patient records.
Records 21 1 point	Ethnic origin is recorded for 100% of new registrations.
Records 22 11 points	The percentage of patients aged over 15 years whose notes record smoking status in the past 27 months, except those who have never smoked where smoking status need be recorded only once (Payment stages 40–90%).

Information for patients

	Indicator
Information 3 1 point	The practice has arrangements for patients to speak to GPs and nurses on the telephone during the working day.
Information 4 1 point	If a patient is removed from a practice's list, the practice provides an explanation of the reasons in writing to the patient and information on how to find a new practice, unless it is perceived that such an action would result in a violent response by the patient.
Information 5 2 points	The practice supports smokers in stopping smoking by a strategy which includes providing literature and offering appropriate therapy.
Information 7 1.5 points	Patients are able to access a receptionist via telephone and face to face in the practice, for at least 45 hours over five days, Monday to Friday, except where agreed with the PCO.

Education and training

	Indicator
Education 1 4 points	There is a record of all practice-employed clinical staff having attended training/updating in basic life support skills in the preceding 18 months.
Education 4 3 points	All new staff receive induction training.
Education 5 3 points	There is a record of all practice-employed staff having attended training/updating in basic life support skills in the preceding 36 months.
Education 6 3 points	The practice conducts an annual review of patient complaints and suggestions to ascertain general learning points which are shared with the team.
Education 7 4 points	The practice has undertaken a minimum of 12 significant event reviews in the past three years which could include: <ul style="list-style-type: none"> • any death occurring in the practice premises • new cancer diagnoses • deaths where terminal care has taken place at home • any suicides • admissions under the Mental Health Act • child protection cases • medication errors. A significant event occurring when a patient may have been subjected to harm, had the circumstance/ outcome been different.
Education 8 5 points	All practice-employed nurses have personal learning plans which have been reviewed at annual appraisal.
Education 9 3 points	All practice-employed non-clinical team members have an annual appraisal.
Education 10 6 points	The practice has undertaken a minimum of three significant event reviews within the last year.

Practice management

	Indicator
Management 1 1 point	Individual healthcare professionals have access to information on local procedures relating to child protection.
Management 2 1 point	There are clearly defined arrangements for backing up computer data, back-up verification, safe storage of back-up tapes and authorisation for loading programmes where a computer is used.
Management 3 0.5 points	The Hepatitis B status of all doctors and relevant practice employed staff is recorded and immunisation recommended if required in accordance with national guidance.
Management 4 1 point	The arrangements for instrument sterilisation comply with national guidelines as applicable to primary care.
Management 5 3 points	The practice offers a range of appointment times to patients, which as a minimum should include morning and afternoon appointments five mornings and four afternoons per week, except where agreed with the PCO.
Management 6 2 points	Person specifications and job descriptions are produced for all advertised vacancies.
Management 7 3 points	The practice has systems in place to ensure regular and appropriate inspection, calibration, maintenance and replacement of equipment, including: <ul style="list-style-type: none"> • a defined responsible person • clear recording • systematic pre-planned schedules • reporting of faults
Management 8 1 point	The practice has a policy to ensure the prevention of fraud and has defined levels of financial responsibility and accountability for staff undertaking financial transactions (accounts, payroll, drawings, payment of invoices, signing cheques, petty cash, pensions, superannuation etc.)
Management 9 3 points	The practice has a protocol for the identification of carers and a mechanism for the referral of carers for social services assessment.
Management 10 2 points	There is a written procedures manual that includes staff employment policies including equal opportunities, bullying and harassment and sickness absence (including illegal drugs, alcohol and stress), to which staff have access.

Medicines management

	Indicator
Medicines 2 2 points	The practice possesses the equipment and in-date emergency drugs to treat anaphylaxis.
Medicines 3 2 points	There is a system for checking the expiry dates of emergency drugs on at least an annual basis.
Medicines 4 3 points	The number of hours from requesting a prescription to availability for collection by the patient is 72 hours or less (excluding weekends and bank/local holidays).
Medicines 6 4 points	The practice meets the PCO prescribing adviser at least annually and agrees up to three actions related to prescribing.
Medicines 7 4 points	Where the practice has responsibility for administering regular injectable neuroleptic medication, there is a system to identify and follow up patients who do not attend.
Medicines 8 6 points	The number of hours from requesting a prescription to availability for collection by the patient is 48 hours or less (excluding weekends and bank/local holidays).
Medicines 10 4 points	The practice meets the PCO prescribing adviser at least annually, has agreed up to three actions related to prescribing and subsequently provided evidence of change.
Medicines 11 7 points	A medication review is recorded in the notes in the preceding 15 months for all patients being prescribed four or more repeat medicines. Standard 80%.
Medicines 12 8 points	A medication review is recorded in the notes in the preceding 15 months for all patients being prescribed repeat medicines. Standard 80%.

PATIENT EXPERIENCE DOMAIN

Patient experience

PE 1 Length of consultations

33 points

The length of routine booked appointments with the doctors in the practice is not less than ten minutes. (If the practice routinely sees extras during booked surgeries, then the average booked consultation length should allow for the average number of extras seen in a surgery session. If the extras are seen at the end, then it is not necessary to make this adjustment).

For practices with only an open surgery system, the average face-to-face time spent by the GP with the patient is at least eight minutes.

Practices that routinely operate a mixed economy of booked and open surgeries should report on both criteria.

PE 2 Patient surveys (1)

25 points

The practice will have undertaken an approved patient survey each year.

PE 5 Patient surveys (2)

20 points

The practice will have undertaken a patient survey each year and, having reflected on the results, will produce an action plan that:

1. summarises the findings of the survey
2. summarises the findings of the previous year's survey
3. reports on the activities undertaken in the past year to address patient experience issues.

PE 6 Patient surveys (3)

30 points

The practice will have undertaken a patient survey each year and, having reflected on the results, will produce an action plan that:

1. sets priorities for the next two years
2. describes how the practice will report the findings to patients (for example, posters in the practice, a meeting with a patient practice group or a PCO approved patient representative)
3. describes the plans for achieving the priorities, including indicating the lead person in the practice
4. considers the case for collecting additional information on patient experience, for example through surveys of patients with specific illnesses, or consultation with a patient group.

ADDITIONAL SERVICES

For practices providing additional services, the following organisational markers will apply.

Cervical screening

	Indicator
CS 1 11 points	The percentage of patients aged from 25 to 64 (in Scotland from 21 to 60) whose notes record that a cervical smear has been performed in the last five years. Standard 40–80%.
CS 5 2 points	The practice has a system for informing all women of the results of cervical smears.
CS 6 2 points	The practice has a policy for auditing its cervical screening service, and performs an audit of inadequate cervical smears in relation to individual smear-takers at least every two years.
CS 7 7 points	The practice has a protocol that is in line with national guidance and practice for the management of cervical screening, which includes staff training, management of patient call/recall, exception reporting and the regular monitoring of inadequate smear rates.

Child health surveillance (CHS)

	Indicator
CHS 1 6 points	Child development checks are offered at intervals that are consistent with national guidelines and policy.

Maternity services (MAT)

	Indicator
MAT 1 6 points	Ante-natal care and screening are offered according to current local guidelines.

Contraceptive services (CON)

	Indicator
CON 1 1 point	The team has a written policy for responding to requests for emergency contraception.
CON 2 1 point	The team has a policy for providing pre-conceptual advice

APPENDIX 8: INDICATORS FOR PRACTICE ACCREDITATION IN AUSTRALIA

Standard I.1 - Access to care

CRITERION I.1.1 SCHEDULING CARE IN OPENING HOURS

1. There is evidence that our practice has a flexible system to accommodate patients with urgent, non-urgent, complex and planned chronic care, and preventive health needs (document review)
2. our practice informs patients that longer consultations are available on request (document review)
3. our practice staff can describe the way in which they identify urgent medical matters and their procedures for obtaining urgent medical attention (interview)
4. our practice has a written policy for dealing with urgent medical matters (document review)
5. our practice has used patient feedback to establish whether patients of our practice are aware of the availability of longer consultations (patient feedback)
6. our practice has used patient feedback to establish whether patients telephoning our practice have the urgency of their needs determined promptly (patient feedback).

CRITERION I.1.2 TELEPHONE AND ELECTRONIC ADVICE

1. our GP(s) and staff can describe our practice's policy on how they receive and return telephone calls and if applicable, electronic messages from patients (interview)
2. for important communications, there is evidence of practice/patient telephone or electronic advice and information in our patient health records (health records review)
3. our practice has used patient feedback to establish whether patients are able to obtain advice or information related to their clinical care by telephone or if it is used – electronic means (patient feedback)
4. our practice information sheet describes our practice's policy on receiving and returning telephone calls and, if applicable, electronic communication (document review).

CRITERION I.1.3 HOME AND OTHER VISITS

1. there is evidence that patients of our practice access home and other visits both within and outside normal opening hours (health records review, document review)
2. our GP(s) and staff can describe our practice's policy on home and other visits both within and outside normal opening hours, and the situations in which a visit is appropriate (interview)
3. our practice has a written policy on home and other visits both within and outside normal opening hours (document review)
4. our practice has used patient feedback to establish whether patients of our practice are aware of our arrangements for home and other visits both within and outside our normal opening hours (patient feedback).

CRITERION I.1.4 CARE OUTSIDE NORMAL OPENING HOURS

- There is evidence of one (or a combination) of the following for our patients:
 - our practice's GP(s) provide(s) their own care for patients outside normal opening hours of the practice either individually or through a roster, or
 - formal arrangements for cooperative care outside the normal opening hours of our practice exist through a cooperative of one or more local practices, or
 - formal arrangements exist with an accredited medical deputising service, or
 - formal arrangements exist with an appropriately accredited local hospital or an after hours facility, in the circumstances where we do not use an accredited medical deputising service or cooperative.

Where a practice is providing care as indicated by A ii, A iii, or A iv, then the documentation of the arrangement must include:

- reference to the timely reporting of the care provided back to the patient's nominated practice, and
- a defined means of access for the deputising practitioner to patient health information and to our practice GP(s) in exceptional circumstances, and
- assessment by our practice that the care outside normal opening hours will be provided by appropriately qualified health professionals (document review).
- Patient health records contain reports or notes of consultations occurring outside normal opening hours by or on behalf of our practice (health records review)
- A message on our practice's telephone answering machine, call diversion system or paging system, and a sign visible from outside our practice, provide information to patients on how to obtain care outside our practice's normal opening hours (direct observation)
- our practice has a written policy for the provision of medical care outside its normal opening hours (document review)
- our practice has used patient feedback to establish whether patients of our practice are aware of our arrangements for medical care outside our practice's normal opening hours (patient feedback).

Standard 1.2 - Information about the practice

CRITERION 1.2.1 PRACTICE INFORMATION

1. our practice information sheet is available to patients and contains at a minimum:
 - names of the GP(s) working in our practice
 - names of staff providing clinical care to patients (subject to their consent)
 - our practice address and telephone numbers
 - our consulting hours and arrangements for care outside our practice's normal opening hours including a contact telephone number (document review).
2. our staff can describe how essential practice information is provided to patients who are unable to read or understand our written practice information sheet (interview)
3. our practice can demonstrate how it makes patients aware of our practice's policy for the management of patient health information (document review)
4. if our practice has a website, the information is accurate and meets standards of the AMA's current Code of ethics (document review).

CRITERION 1.2.2 INFORMED PATIENT DECISIONS

1. our GP(s) can describe how they inform patients about the purpose, importance, benefits and risks of proposed investigations, referrals or treatments (interview)
2. our GP(s) can describe how they use leaflets, brochures or written information to support their explanation of the diagnosis and management of conditions when appropriate (interview)
3. our practice has used patient feedback to establish whether patients of our practice receive sufficient information about the purpose, importance, benefits and risks of proposed investigations, referrals or treatments proposed by their GP to enable them to make informed decisions about their health (patient feedback)
4. our GP(s) can describe how they provide information (printed or otherwise) about medicines and medicine safety to patients (interview).

CRITERION 1.2.3 INTERPRETER SERVICES

1. our GP(s) and staff who provide clinical care can describe how they communicate with patients who do not speak the primary language of our practice's GPs (interview)
2. our practice has a list of contact numbers for interpreter services (document review).

CRITERION 1.2.4 COSTS WITHIN OUR PRACTICE

1. our practice information sheet or a sign in our practice includes information about fees in our practice (document review or direct observation)
2. our GP(s) can describe how patients are informed of potential additional costs before treatments, investigations or procedures are performed by our practice in addition to the consultation (interview)
3. our practice has used patient feedback to establish whether patients of our practice are informed of costs before treatments, investigations, or procedures are performed by our practice in addition to the consultation (patient feedback).

CRITERION I.2.5 COSTS FOR REFERRED SERVICES

1. our GP(s) can describe how patients are advised of the potential for costs when they are referred for investigation, or for initial consultation with a medical specialist or allied health professional (interview)
2. our practice has used patient feedback to establish whether patients are advised of the potential for costs when they are referred for investigation or for initial consultation with a medical specialist or allied health professional (patient feedback).

Standard I.3 - Health promotion and prevention of disease**CRITERION I.3.1 HEALTH PROMOTION AND PREVENTIVE CARE**

1. There is evidence that our practice provides information about health promotion and illness prevention to patients (health records review, document review)
2. There is a range of posters, leaflets, and brochures about health issues relevant to the community available or on display in the waiting area or consulting areas (direct observation)
3. our GP(s) and staff who provide clinical care can describe how they provide information to patients on issues relating to health promotion and illness prevention, including issues relevant to common patient presentations (interview)
4. our practice uses one or more of the following:
 - flagging of patient health records for opportunistic preventive activities
 - paper or electronic system showing due dates for preventive activities (subject to informed patient consent)
 - paper or electronic reminder system with appropriate informed patient consent (health records review, document review).
5. our practice participates in national/state or territory reminder systems/registers (subject to informed patient consent) (document review)
6. our practice has used patient feedback to establish whether our GP(s) discuss health promotion and illness prevention with patients (patient feedback).

Standard I.4 - Diagnosis and management of specific health problems**CRITERION I.4.1 EVIDENCE BASED PRACTICE**

1. our practice can demonstrate that we have ready access to a range of current references relevant to general practice (direct observation)
2. There is evidence in our patient health records that our practice provides care of common and serious conditions that is consistent with clinical practice based on best available evidence (health records review)
3. our GP(s) can describe how they ensure that their approaches to common and serious conditions are broadly consistent with clinical practice based on best available evidence (interview)
4. our GP(s) can describe and have access to the clinical practice guidelines used to assist in the management of serious and common conditions (interview)
5. our GP(s) can explain how they can access guidelines for specific clinical care of patients who self identify as Aboriginal or Torres Strait islander (interview).

CRITERION I.4.2 CLINICAL AUTONOMY FOR GPs

1. our GP(s) are free to determine:
 - the specialists and other health professionals to whom they refer
 - the pathology, diagnostic imaging or other investigations they order, and the provider they use
 - how and when to schedule follow up appointments with individual patients
 - whether to accept new patients (subject to criterion 2.1.1) (interview).
2. our GP(s) are consulted about:
 - the scheduling of appointments
 - the equipment and supplies that our practice uses (interview).
3. our practice has a written policy that confirms that our GP(s) can exercise autonomy in decisions that affect clinical care, within the parameters of evidence based medicine (document review).

Standard I.5 - Continuity of care**CRITERION I.5.1 CONTINUITY OF COMPREHENSIVE CARE**

1. over 25% of our active patient health records include entries extending back over more than 2 years (health records review).
2. our practice has strategies or policies that encourage continuity of comprehensive care (interview, document review).

CRITERION I.5.2 CONTINUITY OF THE THERAPEUTIC RELATIONSHIP

1. our staff can describe how patients can request their preferred GP when making an appointment or attending our practice (interview)
2. A sample of patient health records indicates that patients generally see the same GP (health records review)
3. our practice has used patient feedback to establish whether patients of our practice are able to see the GP of their choice, if available (patient feedback).

CRITERION I.5.3 CONSISTENT APPROACH

1. our GP(s) and staff who provide clinical care can describe how they ensure consistency of diagnosis and management of common and serious conditions (within the parameters of evidence based care) within our practice (interview)
2. our practice has regular meetings to discuss clinical care (interview, document review).

CRITERION I.5.4 SYSTEM FOR FOLLOW UP OF TESTS AND RESULTS

1. our patient health records contain evidence that pathology results, imaging reports, investigation reports and clinical correspondence received by our practice have been:
 - reviewed by a GP
 - initialled, and
 - where appropriate, acted upon in a timely manner (health records review).
2. our GP(s) and staff can describe the system by which pathology results, imaging reports, investigation reports, and clinical correspondence received by our practice are:
 - reviewed

- signed or initialled (or the electronic equivalent)
 - acted on in a timely manner, and
 - incorporated into the patient health record (interview).
3. our practice has a written policy describing the review and management of pathology results, imaging reports, investigation reports and clinical correspondence received by our practice (document review).
 4. our GP(s) and staff can describe how patients are advised of the process for the follow up of results (interview).
 5. our GP(s) and staff can describe the procedure for follow up and recall of patients with clinically significant tests and results (interview).
 6. our practice has a system to recall patients with clinically significant tests and results (document review).
 7. our practice has a written policy to follow up and recall patients with clinically significant tests and results (document review).

Standard I.6 - Coordination of care

CRITERION I.6.1 ENGAGING WITH OTHER SERVICES

1. our practice demonstrates how it engages with the following:
 - medical services such as diagnostic services, hospitals and specialist consultant services
 - allied health services
 - disability and community services, and
 - health promotion and public health services and programs (document review, interview).
2. There is evidence our practice refers patients to health, community or disability services (health records review).

CRITERION I.6.2 REFERRAL DOCUMENTS

1. our practice can demonstrate that referral letters are legible and where appropriate:
 - include the purpose of the referral
 - include relevant history, examination findings and current management
 - include a list of allergies and current medicines
 - are on appropriate practice stationery
 - are documented in patients' health records (health records review).

Standard 1.7 - Content of patient health records

CRITERION 1.7.1 PATIENT HEALTH RECORDS

1. There is evidence that each patient has an individual patient health record containing all clinical information held by our practice relating to that patient (health records review).
2. our patient health records are legible (health records review)
3. our active patient health records include contact and demographic information (where appropriate) including:
 - the patient's full name
 - date of birth
 - gender
 - contact details (health records review).
4. our practice can demonstrate that we are working toward recording the following information in our active patient health records:
 - self identified cultural background (eg. Aboriginal and Torres Strait islander self identification)
 - the person that the patient wishes to be contacted in an emergency (interview or health records review).

CRITERION 1.7.2 HEALTH SUMMARIES

1. At least 90% of our active patient health records contain a record of allergies in the health summary (health records review).
2. At least 50% of our active patient health records contain a health summary. A satisfactory summary includes, where appropriate:
 - adverse medicines events
 - current medicines list
 - current health problems
 - past health history
 - risk factors
 - immunisations
 - relevant family history
 - relevant social history (health records review).
3. our patient health records show evidence that health summaries are updated to reflect recent important events (health records review).
4. if our practice uses both an electronic and paper based system for recording a patient's health summary, our practice can demonstrate how the patient's health information is made accessible (interview).

CRITERION 1.7.3 CONSULTATION NOTES

1. our patient health records document consultations - including consultations outside normal opening hours, home or other visits, telephone or electronic consultations where clinically significant - comprising:
 - date of consultation
 - patient reason for consultation
 - relevant clinical findings
 - diagnosis
 - recommended management plan and where appropriate expected process of review

- any prescribed medicine (including medicine name, strength, directions for use/ dose frequency, number of repeats, and date medicine started/ceased/changed)
 - any relevant preventive care undertaken
 - documentation of any referral to other health care providers or health services
 - any special advice or other instructions
 - identification of who conducted the consultation, eg. by initial in the notes, or audit trail in electronic record (health records review).
2. our patient health records show evidence that problems raised in previous consultations are followed up (health records review).

Standard 2.1 - Collaborating with patients

CRITERION 2.1.1 RESPECTFUL AND CULTURALLY APPROPRIATE CARE

1. our practice does not discriminate against patients on the basis of their gender, race, disability, Aboriginality, age, sexual preference, beliefs or medical condition (interview).
2. our GP(s) and staff who provide clinical care can describe how they provide care for a patient who refuses a specific treatment, advice or procedure (interview).
3. our GP(s) can describe what they do when a patient informs them that they intend to seek a further clinical opinion (interview).
4. our GP(s) can describe what they do to transfer care to another GP in our practice or in another practice when a patient wants to leave the GP's care (interview).
5. our GP(s) can describe arrangements for managing the transfer of care of a patient whom a GP within our practice no longer wishes to treat (interview).
6. our GP(s) and staff can describe how our practice provides privacy for patients and others in distress (interview).
7. our practice has used patient feedback to establish whether patients of our practice are treated respectfully by our GP(s) and staff (patient feedback).
8. our GP(s) and staff can identify important/significant cultural groups within our practice, and outline the strategies we have to meet their needs (interview).

CRITERION 2.1.2 PATIENT FEEDBACK

1. our practice has a process for receiving and responding to feedback and complaints from patients and other people (document review).
2. our GP(s) and staff can describe the processes for receiving and responding to feedback and complaints from patients and other people (interview).
3. our practice makes contact information for the state/territory health complaints agency readily available to patients on request (interview, document review).
4. our practice has used patient feedback to establish whether patients of our practice are confident that any feedback and complaints they make to our practice would be handled appropriately (patient feedback).
5. our practice can describe an improvement we have made in response to patient feedback or complaints (interview).

CRITERION 2.1.3 PRESENCE OF A THIRD PARTY

1. our GP(s) and staff can describe how and when they inform patients and obtain their prior permission for the presence of a third party during consultations (interview).
2. our practice has used patient feedback to establish whether patients of our practice who have a third person present at a consultation were asked prior to the consultation (patient feedback).
3. our practice has a policy about the presence of a third person present at a consultation (documents review).

Standard 3.1 - Safety and quality**CRITERION 3.1.1 QUALITY IMPROVEMENT ACTIVITIES**

1. our GP(s) and staff can describe an aspect(s) of our practice we have improved in the past 3 years (interview).
2. our practice uses data about our practice population for quality improvement (interview or document review).

CRITERION 3.1.2 CLINICAL RISK MANAGEMENT SYSTEM

1. our GP(s) and clinical staff can describe the process for identifying and reporting a slip, lapse or mistake in clinical care (interview).
2. our GP(s) and clinical staff can describe an improvement we have made to prevent slips, lapses and mistakes in clinical care from reoccurring (interview).

Standard 3.2 - Education and training**CRITERION 3.2.1 GENERAL PRACTITIONER QUALIFICATIONS**

1. All of our doctors can provide evidence of current state or territory based medical registration (document review).
2. our practice demonstrates that all our doctors are recognised GPs, with the exception of other specialists practising within their specialty or trainees undertaking a placement to gain experience in general practice as part of some other specialist training program, OR Where recruitment of recognised GPs has been unsuccessful, our practice demonstrates that doctors have the qualifications and training necessary to meet the needs of patients (interview, document review).
3. our practice can provide evidence of satisfactory participation in the RACGP QA&CPD Program by all our GPs, OR our practice can provide evidence that our doctors participate in quality improvement and continuing professional development to at least the same standard as the RACGP QA&CPD Program (document review).
4. our GP(s) have undertaken training in CPR within the past 3 years (document review).

CRITERION 3.2.2 CLINICAL STAFF QUALIFICATIONS

1. our general practice nurses and allied health professionals have appropriate training, qualifications and current registration, and participate in continuing education relevant to their role (interview, document review).
2. our staff members who are involved in clinical care have appropriate training and qualifications, and participate in continuing education relevant to their role (interview, document review).
3. our staff involved in clinical care have undertaken training in CPR in the past 3 years (document review).

CRITERION 3.2.3 TRAINING OF STAFF WHO HAVE NON-CLINICAL ROLES

1. our administrative staff can describe training undertaken within the past 3 years that is relevant to their role in our practice (interview).
2. There is evidence that our administrative staff have undertaken training within the past 3 years that is relevant to their role in our practice (document review).
3. our administrative staff have undertaken training in CPR in the past 3 years (interview, document review).

Standard 4.1 - Practice systems**CRITERION 4.1.1 HUMAN RESOURCE SYSTEM**

1. our GP(s) and staff can describe their roles within our practice (interview).
2. our practice can identify the person/people who coordinate the seeking of feedback, and the investigation and resolution of complaints (interview).
3. our practice can identify the person/people leading its clinical improvement (interview).
4. our staff are able to discuss administrative matters with the GP(s), practice directors and/or owner(s) when necessary (interview).
5. our practice has an induction program for new GPs and new staff (document review).
6. our employed GP(s) and staff have position statements/job descriptions (document review).
7. We have a regular staff meeting (interview or document review).

CRITERION 4.1.2 OCCUPATIONAL HEALTH AND SAFETY

1. our practice and office equipment is appropriate for its purpose (direct observation).
2. At least one staff member, in addition to the GP(s), is present when our practice is open for routine consulting (interview).
3. our GP(s) and staff can explain how our practice supports their health and wellbeing (interview).
4. our practice has a documented occupational health and safety policy (document review).

Standard 4.2 - Management of health information

CRITERION 4.2.1 CONFIDENTIALITY AND PRIVACY OF HEALTH INFORMATION

1. our GP(s) and staff can describe how they ensure confidentiality and security of patient health records (interview).
2. our staff can demonstrate that patient health records can be accessed by authorised staff at the time of consultation (interview, direct observation).
3. our GP(s) and staff can describe the processes we use to provide patients with access to their health information (interview).
4. if our practice participates in research, we can show evidence that this research has been approved by a HReC, constituted according to NHMRC guidelines (document review).
5. our practice has a written policy for the management of patient health information (document review).

CRITERION 4.2.2 INFORMATION SECURITY

1. Patient health information in our practice is neither stored nor left visible in areas where members of the public have unrestricted access, or where constant staff supervision is not easily provided (interview, direct observation).
2. our facsimile machines, printers and other communication devices are only accessible to authorised staff (direct observation).
3. our GP(s) and staff can describe how they ensure security of patient health records (interview).
4. if our practice uses computers to store patient health information, our practice ensures that:
 - our GP(s) and staff have personal passwords to authorise appropriate levels of access to health information
 - screensavers or other automated privacy protection devices are enabled
 - backups of electronic information are performed at a frequency consistent with a documented information disaster recovery plan
 - backups of electronic information are stored in a secure offsite environment
 - antivirus software is installed and updated
 - all internet connected computers have hardware/software firewalls installed (document review).
5. if our practice uses computers to store personal health information, our practice has an information disaster recovery plan that has been developed, tested and is documented (document review).

CRITERION 4.2.3 TRANSFER OF PATIENT HEALTH INFORMATION

1. our GP(s) and staff can describe the procedures for transferring patient health information to another service provider or health service (interview).
2. We record the request by the patient to transfer patient health information on the file. This note includes details of where the information was sent and who authorised the transfer (health records review).
3. When we collect identifiable patient health information for QA&CPD activities, we only transfer it to a third party if the patient provides their consent (document review).

4. When we collect de-identifiable patient health information for QA&CPD activities, we only transfer it to a third party if we have approval to do so from a recognised medical college's QA&CPD process (document review).
5. our electronic data transmission of patient health information over a public network is encrypted (document review).

CRITERION 4.2.4 RETENTION AND DESTRUCTION OF PATIENT HEALTH INFORMATION

1. our practice keeps individual patient health information until the patient has reached the age of 25 years or for a minimum of 7 years from the time of our last contact with the patient, whichever is the greater (interview).
2. our practice has a process for identifying, storing, retrieving and culling inactive patient health information (interview, direct observation).
3. our practice has an appropriate method of destruction prior to disposal (eg. shredding) of material containing patient health information (interview, direct observation).

Standard 5.1 - Facilities and access

CRITERION 5.1.1 PRACTICE FACILITIES

1. our practice has at least one dedicated consulting/examination room for every GP working in our practice at any time (interview, direct observation).
2. each of our consultation rooms (which may include an attached examination room/ area):
 - is free from excessive extraneous noise
 - has adequate lighting
 - has an examination couch
 - is maintained at a comfortable ambient temperature
 - has facilities to protect patient privacy when patients need to undress for a clinical examination (provision of an adequate curtain or screen, and gown or sheet) (direct observation).
3. our practice has a waiting area sufficient to accommodate the usual number of patients and other people who would be waiting at any time (direct observation).
4. our practice waiting area caters for the specific needs of children (direct observation).
5. our practice has toilets and hand cleaning facilities readily available for use by patients and staff (direct observation).
6. Where appropriate, our practice has heating and/or air conditioning (direct observation).
7. our practice has a telephone system with sufficient inward and outward call capacity (staff interview, direct observation).
8. our practice has the capability for electronic communication by facsimile or email
9. Prescription pads, letterhead, administrative records and other official documents stored in our practice are accessible only to authorised persons (direct observation).
10. our practice can demonstrate that we ensure there is no smoking in our practice (interview, document review, direct observation).

11. our practice has used patient feedback to establish whether patients of our practice find it is easy to contact our practice by telephone (patient feedback).
12. our practice has used patient feedback to establish whether patients of our practice are satisfied with facilities in our consultation area(s) (patient feedback).

CRITERION 5.1.2 PHYSICAL CONDITIONS CONDUCIVE TO CONFIDENTIALITY AND PRIVACY

1. The physical facilities of our practice encourage patient confidentiality and privacy (direct observation).
2. Visual and auditory privacy of consultations and treatments is ensured (direct observation).
3. our practice has used patient feedback to establish whether patients of our practice think our practice makes adequate provisions for their privacy (patient feedback).

CRITERION 5.1.3 PHYSICAL ACCESS

1. There is wheelchair access to our practice and its facilities (direct observation), OR if physical access is limited, our practice provides home or other visits to patients with disabilities (interview).
2. There is adequate parking within a reasonable distance from our practice (direct observation).
3. our GP(s) and staff can describe how they facilitate access to our practice for patients with disabilities (interview).

Standard 5.2 - Equipment for comprehensive care

CRITERION 5.2.1 PRACTICE EQUIPMENT

1. equipment for comprehensive primary care and resuscitation is available within our practice, including:
 - auriscope
 - blood glucose monitoring equipment
 - disposable syringes and needles
 - equipment for resuscitation, equipment for maintaining an airway (including airways for children and adults), equipment to assist ventilation (including bag and mask), iV access, and emergency medicines
 - examination light
 - eye examination equipment (eg. fluorescein staining)
 - gloves (sterile and non-sterile)
 - height measurement device
 - measuring tape
 - monofilament for sensation testing
 - ophthalmoscope
 - oxygen
 - patella hammer
 - peak flow meter or spirometer
 - scales
 - spacer for inhaler

- specimen collection equipment
 - sphygmomanometer (with small, medium and large cuffs)
 - stethoscope
 - thermometer
 - torch
 - tourniquet
 - urine testing strips
 - vaginal speculae
 - visual acuity charts
 - X-ray viewing facilities (direct observation).
 - our practice has timely access to the following equipment:
 - spirometer
 - electrocardiograph (direct observation, interview).
2. Our GP(s) can list procedures commonly performed within our practice and can demonstrate that available equipment is sufficient for these procedures (interview).
 3. our practice has a schedule for the maintenance of our key clinical equipment (document review).

CRITERION 5.2.2 DOCTOR'S BAG

1. each of our GP(s) has access to a doctor's bag (interview, direct observation).
2. When in use, our doctor's bag(s) contains:
 - auriscope
 - disposable gloves
 - equipment for maintaining an airway in both adults and children
 - in-date medicines for medical emergencies
 - ophthalmoscope
 - practice stationery (including prescription pads and letterhead)
 - sharps container
 - sphygmomanometer
 - stethoscope
 - syringes and needles in a range of sizes
 - thermometer
 - torch (direct observation).

Standard 5.3 - Clinical support processes

CRITERION 5.3.1 SCHEDULE 8 MEDICINES

1. Schedule medicines stored in our practice are securely stored (direct observation).
2. The acquisition, storage, use, transfer and disposal of Schedule medicines in our practice is appropriately documented (document review).

CRITERION 5.3.2 VACCINE POTENCY

1. our practice can demonstrate how our practice's cold chain management processes meet the current published edition of the NHMRC guidelines (direct observation).
2. our GP(s) and staff can describe how the process used for cold chain management meets the current published edition of the NHMRC guidelines (interview).
3. our practice has a documented policy for cold chain management procedures in accordance with the current published edition of the NHMRC guidelines (document review).

CRITERION 5.3.3 PERISHABLE MATERIALS

1. our practice does not use or have medicines, vaccines or medical consumables beyond their expiry date in our practice or doctor's bag(s) (direct observation).
2. our relevant staff can describe the procedure for checking expiry dates of perishable materials and for disposing of such materials where necessary (interview).
3. our practice has a written procedure for checking expiry dates of perishable materials and for disposing of such materials where necessary (document review).

CRITERION 5.3.4 INFECTION CONTROL

1. our GP(s) and staff can describe how our practice ensures that, where necessary, sterile equipment is used in clinical procedures (interview).
2. our GP(s) or staff members with designated responsibility can describe in detail how the use of sterile equipment is assured, including where relevant:
 - provision of an adequate range of disposable equipment
 - procedures for having instruments sterilised off-site
 - procedures for on-site sterilisation of equipment
 - monitoring the integrity and validation of the whole sterilisation process and steriliser maintenance
 - procedures for safe storage and stock rotation, and
 - education and training of staff involved (interview).
3. our GP(s) and staff can describe how risks of potential cross infection are managed within our practice, including procedures for:
 - hand hygiene
 - managing a sharps injury
 - safe storage and disposal of clinical waste including sharps
 - managing blood and body fluid spills
 - monitoring ongoing adherence to these processes (interview).

4. our GP(s) and staff can describe:
 - the routine used by our practice for cleaning, disinfecting and decontaminating the clinical and non-clinical areas of our practice
 - standard precautions
 - additional precautions (interview).
5. our practice has a written policy that outlines our practice's infection control procedures (document review).
6. Subject to their informed consent, the immunisation status of our staff is known and staff members are offered immunisation appropriate to their duties (document review, interview).

The induction of new staff to our practice ensures they are familiar with standard precautions against infection and other issues appropriate to their duties (document review, interview).

APPENDIX 9: GP WORKFORCE IN BELGIUM

These data come from the RIZIV/INAMI upon request in June 2007.

The 002 and 003 are GPs without accreditation. The 003 and 004 are GPs with accreditation.

The 002 and 004 hold a certificate for reimbursement of electrocardiography.

		Sexe Competence																		Tot M	Eindtotaal	
		F									Tot F	M										
		0	1	2	3	4	5	6	9	0		1	2	3	4	5	6	8	9			
Gegevens																						
24	Aantal van Sexe	1						1	1	3	1							1	2	5		
	Som van Nombre	12						2	1	15	7							3	10	25		
35-34	Aantal van Sexe	13	14	4	21	27	15	12	30	136	14	7	1	15	24	12	11	26	110	246		
	Som van Nombre	202	27	5	235	1021	140	231	425	2286	159	14	1	96	548	85	134	278	1315	3601		
35-44	Aantal van Sexe	8	44	14	31	40	11	8	30	186	7	41	13	30	37	10	14	35	187	373		
	Som van Nombre	14	338	24	329	1301	21	13	188	2228	15	295	15	272	1346	24	25	189	2181	4409		
45-54	Aantal van Sexe	4	42	1	28	31	4		17	127	8	45	6	40	45	9	7	24	184	311		
	Som van Nombre	4	427	1	438	1082	6		39	1997	13	509	7	658	3369	9	7	72	4644	6641		
55-64	Aantal van Sexe		25		17	20		1	11	74		39	4	33	41	1	2	2	17	139	213	
	Som van Nombre		138		126	144		1	12	421		259	4	600	1743	1	2	2	28	2639	3060	
65-74	Aantal van Sexe		16		14	10			3	43		32	3	37	42		1	11	126	169		
	Som van Nombre		39		28	23			3	93		210	3	404	760		1	14	1392	1485		
>75	Aantal van Sexe		19		10	3			4	36		47		50	45			2	144	180		
	Som van Nombre		37		12	4			4	57		216		330	306			2	854	911		
Inconnu	Aantal van Sexe	1	2		1	2	1		2	9	1	2	1	1	1	1		1	8	17		
	Som van Nombre	4	3		1	4	3		3	18	1	2	1	1	5	2		1	13	31		
Eindtotaal Aantal van Sexe		27	162	19	122	133	32	22	97	614	31	213	28	206	235	33	36	2	116	900	1514	
Eindtotaal Som van Nombre		236	1009	30	1169	3579	172	246	674	7115	195	1505	31	2361	8077	121	172	2	584	13048	20163	

APPENDIX 10: DETAILS OF EPA PROJECT

EPA INSTRUMENT: QUESTIONNAIRES AND TOPICS

Instrument	Number of items	Topics addressed
1. Questionnaire for practice manager or main GPs	60	Accessibility of practice Availability of doctors Non-Medical Equipment Management of personnel Degree of patient involvement
2. Questionnaire for individual GPs	21	Contains Team Climate inventory-(TCI)-Scale
3. Staff Questionnaire	29	Work Satisfaction Scale Education and training offered at practice
4. Patient Questionnaire	32	Europep Social-demographic questions
5. Interview with for practice manager or main GP	102	Medical record-keeping Organization of preventive activities Staff policy Team-Meetings Handling of Medical Equipment Quality and Safety procedures
6. Observation Checklist	132	Availability of practice Accessibility of premises Patient leaflets Privacy in consultation and examination rooms Content of doctor's bag Storage of drugs Handling of disposals

EPA INSTRUMENT: CHARACTERISTICS OF PARTICIPANTS

	Participants' practice characteristics		
	<i>Flanders (18+1)</i>	<i>The Walloon region (17)</i>	<i>Total (36)</i>
Organisation			
solo	11 (58%)	11 (69%)	22
duo	3 (16%)	2 (13%)	5
group	5 (26%)	4 (25%)	9
Gender			
female	6 (32%)	2 (11%)	8
man	13 (68%)	16 (89%)	29
Localisation			
urban	4 (21%)	1 (6%)	5
suburban	10 (53%)	8 (47%)	18
rural	5 (26%)	7 (41%)	12

EPA: TASKS AND RESPONSIBILITIES

(If organised differently in Belgium as in Germany, this is indicated by (x))

Ti	Process	Responsibility	
		Institute	Visitor
	Dispatch of Registration Forms, Information, Information on certification	x	
Preparation	Registration for EPA	x	
	Input of data from registration form	x	
	Selection of Visitor, input in Visotool	x	
	Dispatch of Visitor Contact (VC)	x	
	Making an appointment for visitation day with practice	x	(x)
	Confirmation of visitation day to institute	x	(x)
	Input of visitation day in Visotool	x	
	If necessary: reservation of laptop/beamer/UMTS-card for visitation	x	
	Confirmation of visitation day to practice (via fax)	x	
Data enquiry and analysis	Dispatch of material and questionnaires for patient and team questioning, self assessment	x	
	Input/import of data of patient questioning, team questioning and self assessment in Visotool	x	
	Activating feedback (click on the first answers in OC/OI online-questionnaires)	(x)	x
	Check of data return	x	
	Dispatch of technique and/or visitation material (incl. evaluation form and certification criteria) to visitor	x	
Visitation	Performance of visitation		x
	Data input (OC / OI) in Visotool		X
	Controlling process of visitation	x	
	Support of visitors during visitation, i.e. technical problems	x	
	Evaluation of EPA and visitation of participants (field notes)		X
Post processing	Dispatch of visitation material		X
	Return of visitation material and technique, looking and checking	x	
	- Documentation of visitor report - If necessary: modification of data - Prove of fulfilment of certification criteria		
	Dispatch of paper based feedback-report and accreditation attest	x	

BASELINE DATA OF PARTICIPATING PRACTICES PART I

	Questionnaires' respons rates, (ratio, %)		
	Flanders (19*)	Walloon Region (17)	Total (36)
patient questionnaires (40/practice)	703/760 (93%)	530/680 (78%)	1233/1440 (86%)
general practice manager questionnaires (1/practice)	19/19 (100%)	16/17 (94%)	35/36 (97%)
general practitioners' questionnaires	54/56 (96%)	34/47 (72%)	88/103 (85%)
staff (non-GPs) questionnaires	34/41 (92%)	26/26 (100%)	60/67 (90%)

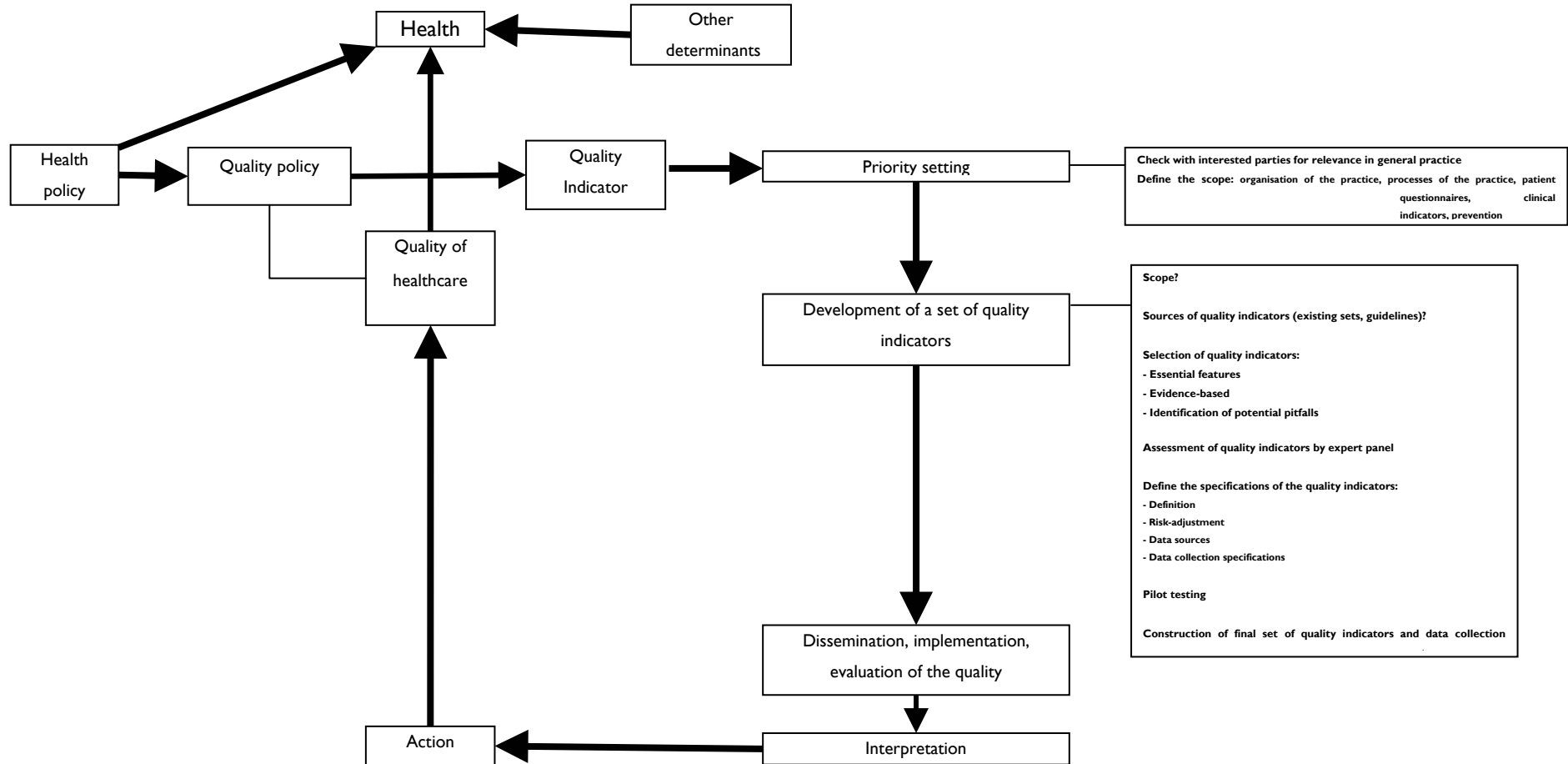
BASELINE DATA OF PARTICIPATING PRACTICES PART 2

Participating baseline data	generals	practices'	Belgium (N=36) Flanders (N=19) Walloon region (N=17)
mean practice size (m ²)			94
urban localisation (%)			32 %
rural localisation (%)			68 %
N° practices			36
mean N° doctors (y)			2,9
mean age doctors (y)			43
male doctors (%)			55 %
mean N° non-GPs / assistance staff			1,9
mean age non-GP's (y)			43
male non-GPs (%)			15 %
mean age patients (y)			52
male patients (%)			38 %
average N° of consultations in the past 12 months			6,9
rate of patients with a self reported serious disease, that has lasted more than three months (%)			31 %
overall achievement of all indicators (%)			84 %

RESULTS OF THE EPA PROCEDURE

	Belgium (N=36; Flanders:19 ; Wallonia:17)		
	N° questions	N° indicators	Mean score (%)
Domain People			
Dimensions			
Patient's satisfaction	25	25	87
Non-GP's job satisfaction	14	14	80
GP's job satisfaction	10	10	76
Personnel management	10	9	47
Education	9	9	41
Total	68	67	75
Domain Infrastructure			
Dimensions			
Accessibility / continuity of care	12	9	62
Accessibility invalid p.	5	4	50
Practice building	8	8	64
Non medical material	9	7	54
Computer safety	9	6	89
Medical materials and medication	66	7	44
Total	109	41	62
Domain Information			
Dimensions			
Patient's practice information	9	9	74
Patient's Medical Care information	19	6	47
Information for personnel	4	4	90
Prevention	15	4	46
Clinical data, patient medical record	17	13	84
Communication with other caregivers	7	7	68
Use of computers	4	4	80
Privacy	6	2	74
Total	81	49	73
Domain Quality and Safety			
Dimensions			
Quality Care	22	8	27
Quality and Safety	6	6	39
Complaint management	7	6	19
Fault management	5	5	56
Safety and prevention of infectious diseases	28	12	63
Total	68	37	41
Domain Financial management			
Dimensions			
Financial responsibility	2	2	44
Financial planning	1	1	30
Retrospective year report	5	3	81
Total	8	6	58

APPENDIX II: CONCEPTUAL FRAMEWORK FOR A QUALITY SYSTEM IN BELGIUM



(KCE – report 41)

APPENDIX 12: ILLUSTRATION OF A POSSIBLE COMPREHENSIVE STRATEGY FOR IMPLEMENTING A QUALITY INITIATIVE: FLU VACCINATION

	National	Regional	Practice	Individual GP
Professionalism	Priority on national coverage with major role of GP	Defining the role of regional and local levels	Defining the role of practices	Define the role of the individual GP
Patient focus	National public campaigns	Regional campaigns	Practice information system for ex by leaflets or patient listing	Reminders, notes on record, individual information
Competence	National guidelines and indicators	Regional consensus building activities	Practice procedures	Individual CME, Credit points
Capacity	Central Dispensing vaccination, collaboration with nurses associations	Involving regional support centers for selection and mailing	Involving practice partners and assistants	Dedicated time for management activities
Knowledge and information management	Immunization procedures and focusing the high risk group	Regional support by IT educational activities	Annual report on outcomes	Feedback data used by GPs
Financing	Target payments	Regional support centers are set up and paid	Practices are reimbursed by coverage (outcome)	GPs get money for value

APPENDIX 13: LIST OF ABBREVIATIONS

Aqua Institute	Commercial independent body offering EPA practice accreditation
ANAES	Agence Nationale de l'Accréditation et de l'Evaluation en Santé
BNP	Bruto Nationaal Product
CEBAM	Belgian centre for evidence based medicine
CME	Continuing Medical Education
CNPQ	Le Conseil national de promotion de la qualité
CPD	Continuing professional development
CRAQ	Cellule de Réflexion à l'Amélioration de la Qualité
DM	Domus Medica vzw
EFQM	European Foundation for Quality Management
EKWA	Evaluation of Quality, a project of the scientific org
EPA	European Practice Assessment
EUROPEP	European instrument for patient evaluation of general practice care
EQuiP	European Association for Quality in General Practice/Family Medicine
GLEM	Groupements Locaux d'Evaluation Médicale
GP	General Practitioner
HAS	Haute Autorité de la Santé
ICHO	Interuniversitair Centrum of Huisartsenopleiding
INAMI	Institut national d'assurance maladie invalidité
KCE	Kenniscentrum
LOK	Lokaal Kwaliteitsoverleg (peer review)
NHG	Nederlands Huisarts Genootschap
NHS	National Health Service (UK)
NICE	National Institute of Clinical Excellence(UK)
NRKP	Nationale Raad voor Kwaliteitspromotie
OECD	Organisation for Economic Co-operation and Development
PDSA cycle	Plan Do Study Act cycle
PDCA cycle	Plan Do Check Act cycle
QA	Quality Assurance
QEP	Qualität und Entwicklung in Praxen
QD	Quality Development
QI	Quality Improvement
QOF	Quality Outcomes Framework (UK)
RIZIV/INAMI	Rijksinstituut voor ziekte en invaliditeitsverzekering/ Institut National d'Assurance Maladie-Invalidité
RMO	Références Médicales Opposables
SSMG	Société Scientifique de Médecine Générale
UA	University of Antwerp
UCL	Université Catholique de Louvain
URCAM	Union Régionale des Caisses d'Assurance-Maladie
URML	Union régionale des Médecins Libéraux
WONCA	World Organisation of Family Doctors
WOK	Centre of Quality Care Research (Nijmegen, the Netherlands)

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- 33 Effects and costs of pneumococcal conjugate vaccination of Belgian children. D/2006/10.273/54.
- 34 Trastuzumab in Early Stage Breast Cancer. D/2006/10.273/25.
- 36 Pharmacological and surgical treatment of obesity. Residential care for severely obese children in Belgium. D/2006/10.273/30.
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