

Towards quality, comprehensiveness and excellence. The accreditation project of the Organisation of European Cancer Institutes (OEI)

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ABSTRACT

There are important gaps in the health status of citizens across Europe, as measured by life expectancy, mortality or morbidity data (Report for the European Commission on the health status of the European Union, 2003). Among the main determinants of the major causes of mortality and morbidity, stated in this report, stands recurrently access to quality healthcare. There is a fundamental need to define quality indicators and set minimal levels of performance quality criteria for healthcare. There is a need to integrate research into healthcare and to provide patients with equity of access to such high quality care. Oncology is a speciality particularly suited to experimenting a first application of accreditation at European level. The Organisation of European Cancer Institutes is a growing network of cancer Centres in Europe. The focus of the OEI is to work with professionals and organisations with regard to prevention, care, research, development, patient's role and education. In order to fulfil its mission, the OEI initiated in 2002 an accreditation project with three objectives:

- to develop a comprehensive accreditation system for oncology care, taking into account prevention, care, research, education and networking.
- to set an updated database of cancer centres in Europe, with exhaustive information on their resources and activities (in care, research, education and management)
- to develop a global labelling tool dedicated to comprehensive cancer centres in Europe, designating the various types of cancer structures, and the comprehensive cancer centres of reference and Excellence.

An accreditation tool has been established, defining standards and criteria for prevention, care, research, education and follow-up activities. A quantitative database of cancer centres is integrated in the tool, with a questionnaire, that provides an overall view of the oncological landscape in OEI cancer centres in Europe. Data on infrastructures, resources and activities have been collected. This OEI accreditation tool will be launched in autumn 2008 for all cancer centres in Europe. It serves as a basis for the development of the labelling tool for cancer structures in Europe, with a focus on Comprehensiveness and Excellence labels. Quality assessment and improvement is a critical need in Europe and is addressed by the OEI for cancer care in Europe. Accreditation is a well accepted process and is feasible. Standards and criteria as well as an accreditation tool have been developed. The OEI questionnaire gives an accurate vision of cancer institutions throughout Europe, helping assessing the needs and providing standards. The accreditation project is a long-term complete and voluntary process with external and internal added value, an active process of sharing information and experience that should help the whole cancer community reach comprehensiveness and excellence.

Key words: cancer centre, quality of care, assessment, labelling, accreditation, organisation of care, integration, comprehensiveness.

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For more information please visit www.oeci.org

For a demonstration of the e-Tool: www.oeci.selfassessment.nu (username and password oeci)

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The context

Development of Health plans

Resources, financial and otherwise, vary greatly from country to country and systems for providing medical care are similarly varied, however research on health care plans should help develop systems allowing to meet certain common goals such as access to, and continuity of, quality care.

Consensual standards and criteria for quality of care are sought by health care professionals, especially for emerging health care systems, as well as incentives and processes for quality improvement.

Those criteria should cover clinical guidelines, but also encompass the area of organisation and management of the institution and of health care processes¹.

Especially when interactions among various professionals are needed, for multidisciplinary care, or for integration and translation of research into care, a strong framework for quality must be established, including processes for team work or for interaction, in order to allow all healthcare institutions take part in a global quality improvement process.

Cancer is a worldwide health burden affecting both the survival and quality of life of human beings. At European level, huge efforts are being made for better coordination and overall improvement of the research and care in the cancer field. However, healthcare planning in the cancer field is crucially and urgently needed in order to better integrate these efforts and foster existing initiatives². Important funds are dedicated to research and actions are taken to promote the translation of the knowledge and innovation into care. Still, information on quality of care standards and criteria, and access to knowledge and information are unequally shared throughout Europe. A common initiative of consensual definition of quality criteria and standards, their dissemination and the evaluation of the adequacy of the practices with the standards, should help harmonise and improve care standards, both at the clinical level and at the organisational and management level. This would help ensure not only minimal safety conditions of cancer care, but also improve access to high quality health care and potentially stimulate optimal provision of care integrating the best of knowledge (Figure 1).

In this context, a system establishing consensual and common standards and criteria allowing both self evaluation of these criteria and external evaluation through peer review should be tested for its ability to answer the quality issue.

Access to information

Patients should receive adequate information about their illness, possible interventions, and the known benefits and risks of specific treatment options. These matters should be discussed with qualified healthcare per-

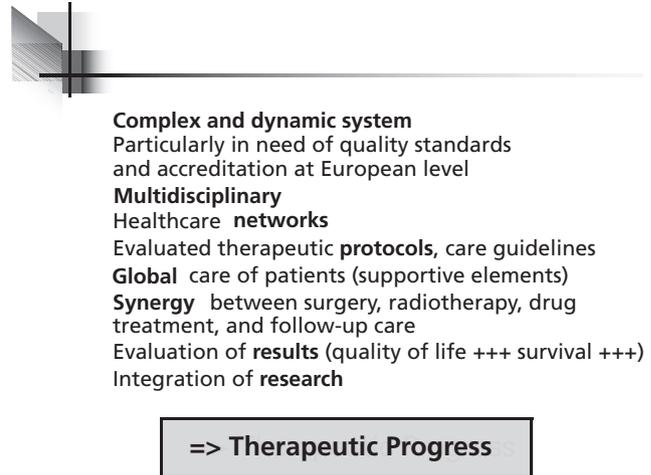


Figure 1 - Oncology specificities.

sonnel who are committed to responding forthrightly to patient inquiries. Patients should have the ability to ascertain names, roles and qualifications of those who are treating them.

Most of all, considering the potential mobility of patients in the European Community, patients should receive adequate information on the standards of care and where they can receive adequate quality care, or information about care centres of reference and centres of excellence. Therefore, a system providing updated peer-reviewed mapping and sound information on recognised centres of high quality care should be developed.

Innovative cancer care

Research progresses achieved in the fight against cancer should be translated into care, in order to improve survival and quality of life of cancer patients. Patients should be offered the opportunity to participate in relevant clinical trials and should have access to innovative therapies that might improve their disease outcome.

Common vision

There is a need to work towards a common vision of European cancer activities: prevention, care, research, development and education. It is important to create a network sharing a consensual view of cancer activities and with an integration of care and research.

Quality and the cancer world

Quality issues in the cancer community (Figure 2) vary from the different points of view of the cancer world.

- *What do cancer centres / professionals need to improve in terms of quality?*
 - Consensual objective standards and criteria on how high-quality cancer prevention / care / follow-up / research / education should be performed

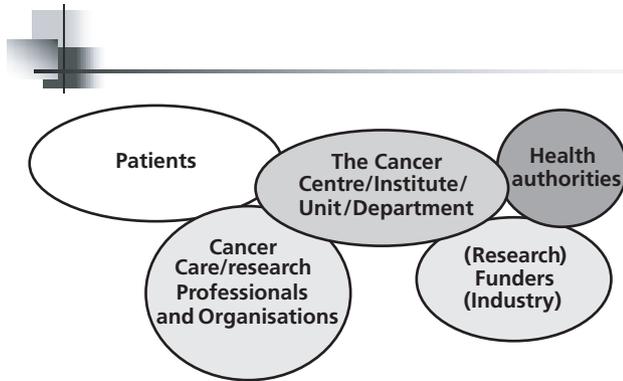


Figure 2 - The cancer world.

- A process of self evaluation of this quality
- A process of peer review of the quality
- Recognition of the quality (accreditation / labels)
- Measurements to compare: References for benchmarking
- *What should we give to our patients?*
 - Best of prevention / care / follow-up
 - Proven interventions at minimum risk
 - Benefits from research
 - Information on where to get the best
- *What are health authorities lacking?*
 - A regulation system to ensure that we offer the public better survival and quality of life
 - A regulation system to allow efficient funding (especially of care and research)
- *What are research funders seeking?*
 - Reference centres for fast and efficient research development
 - Safety assurance

The OECI accreditation project. A cancer quality project

Principles

The mission of the Organisation of European Cancer Institutes (OECI) is to serve as a linking organisation, coordinating interdisciplinary cancer treatment and improving the quality of cancer care. This can be achieved by integrating cancer prevention, research and development and cancer education³.

Consequently, the OECI launched the Accreditation Project in September 2005, and gave mandate to the Accreditation Working Group (AWG) to lead this project.

The OECI AWG involved scientists, forming a diverse, coordinated and integrated network with the following relevant characteristics:

- Ability to address different disciplinary aspects. Partners are scientific experts who are involved in everyday specialised patient care and are participating in medical care and research, in healthcare institutions management, and researchers from national agencies involved in healthcare assessment or health insurance.
- Integration of activities and research through the involvement of a common steering committee at every decision-making step.
- Evidence-based design after evaluation of the currently used performance assessment system after in-depth inventory and comparison.
- Demand-driven through the involvement of patient groups and professionals providing care.
- Comprehensive, by taking into account various types of procedures aimed at improving quality (accreditation systems, clinical guidelines implementation systems, regulation and legislations); and by considering systems in both Member States and third countries; and by using results from ongoing research performed by other organisations.
- Informative, by ensuring systematic analysis and reporting of data with web-based dissemination and stakeholders' involvement.
- Innovative, with the systematic research on implementation through information technologies.

The Creation of a European accreditation programme for Cancer Structures within the OECI is focused on the key issues for quality comprehensive cancer care structures: i.e. the rapid translation of results from research into daily practice and the total and global quality management of the cancer patient during his lifetime.

The OECI Accreditation tool

The AWG's preliminary work was to review existing options in order to complete the creation of a European accreditation programme and consensually choose the quality credentials and criteria relevant to improving cancer care throughout Europe.

The AWG discussed the numerous challenges for Europe regarding the creation of a consensus on the definition of quality care. In this respect, European OECI member countries share many of the same differences such as population, technology, national regulations, cultural habits and language. The OECI wishes to link European countries, define their qualities, improve their research and construct quality comprehensive cancer care centres.

Special focus was made on specific oncology key aspects such as multidisciplinary, global care, integration of research, networking and patients involvement.

Considering these prerequisites, the AWG established:

- standards and criteria for quality multidisciplinary cancer care delivered in cancer centres throughout Europe (Quality Manual),

- a process allowing to survey the cancer centres in order to assess compliance with those standards,
- a quantitative questionnaire measuring the resources and activities in the cancer centres,
- a tool to collect standardised and quality data from approved cancer centres, to measure treatment patterns and outcomes. The tool is translated into an electronic format (OECI accreditation e-Tool, Figure 3).

The Quality Manual is composed of several chapters:

- General standards, strategic plan and general management (19)
- Screening, primary prevention and health education (7)
- Care (9)
- Research, innovation and development (12)
- Teaching and continuing education (4)
- Patient section (7)

Each chapter is divided into sections:

- Policy and organisation
- Process control
- Resources and materials
- Knowledge and skills
- Safeguarding the quality system

The qualitative questionnaire covers data regarding all the resources and activities of the cancer centre as shown in Table 1.

Both the quality manual and the quantitative questionnaire are translated into an e-Tool.

Table 1 - Quantitative Questionnaire (database)

General content
Type of centre/institute
Population base
Infrastructures – care
Human resources
Clinical care
Research
Education
Institutional structures and budgets
Infrastructures for cancer care
Inpatient beds
Outpatient beds
Radiotherapy
Surgery
Haematology
Intensive care
Screening-early detection
Palliative care
Psychosocial oncology
Rehabilitation
Pain treatment
Nuclear medicine
Cytology/histopathology
Tumour bank
Transfusion centre
Bone marrow bank
Central pharmacy
Quality assurance unit

Table 1

Human resources
Number of employees
Specialised doctors
Nurses
Engineers, physics
Technicians
Dieticians
Psychologists
Pharmacists
Physicists
Clinical care activities
Prevention
Screening
Genetic counselling
Multidisciplinary teams
Care programmes
Number of new pts
Outpatient visits
Day care
Inpatients
Duration of stay
Chemotherapy
Radiation therapy
Bone marrow/stem cell transplantations
Surgical procedures
Tumour pathological diagnoses
Patient waiting time
Research activities
Animal host facilities
Biomics
Tumour bank
R&D unit
SME contact
Biostatistics
Epidemiology
Health economy
Ethical review committee
Clinical trial unit
Translational research
Clinical trial activities
University affiliation
Research collaboration
Research staff
Scientific publications
Research funding
Education
Information centre for patients
Medical library
Education courses
Students: basic, specialist, research
Academic positions
Exchange programme
CME
PhD thesis
Educational programmes for patients
Educational activities for decision makers
Institutional structure and budget
Administrative status, academic, public, private etc
Coordination of cancer care
Part of network
International affairs department
Budget health care
Budget research
Budget education

(continued)



Figure 3 - The OECI accreditation e-tool.

Development of this innovative information technology tool has been assigned to a professional SME, Compusense, which closely interacts with the AWG for the translation into an IT tool that would be user-friendly for inexperienced healthcare professionals, while allowing sound reporting and statistical analysis of data.

Compusense is an appropriate partner for its specific expertise in International cooperation and on the European market since it has extensive experience in automating accreditation systems for professionals, e.g., for NIAZ (Netherlands accreditation organization for hospitals) and for the Danish accreditation organization.

The e-tool plays an important role in the questionnaire format for OECI members' participation in the accreditation process. The web-based tool is a secure site for member use only.

The OECI accreditation process

The AWG obtained the commitment of 8 volunteer centres for two pilot phases on the understanding, feasibility and adaptability of the assessment tool.

The first pilot aimed at checking and improving the standards, criteria and the items quantitative questionnaire.

Once the criteria and norms were adjusted, methods through which hospitals and professionals can check what they must improve to reach the required level of care delivery (self-evaluation model) were developed and assessed in a second pilot.

Still in the works, the second pilot of the e-tool is intended to validate the peer-review system and hence create an evaluation tool, which could provide audit recommendations for improvement.

Besides a self-evaluation tool it is necessary to develop an accreditation method. Impartial auditors who will be able to identify those elements within the organization, which should be improved, will look at the care delivery. It will also be possible to compare one's own organization to others accredited organisations. Comparing with others gives the opportunity to learn from each other and in consequence to improve one's care delivery. The goal is to reach such a level of care delivery in Europe that, throughout Europe, patients will have the guarantee that oncological care is in accordance with European standards⁴⁻⁵.

The results of this second pilot will allow finalizing the tool and preparing for dissemination at European level.

The good progress made to date by the AWG should allow starting the OECI accreditation process for all OE-CI members in autumn 2008.

The 2008 Genoa OE-CI General Assembly is thus a unique opportunity for the AWG to present and discuss the Accreditation Programme designed for OE-CI members (Figure 4).

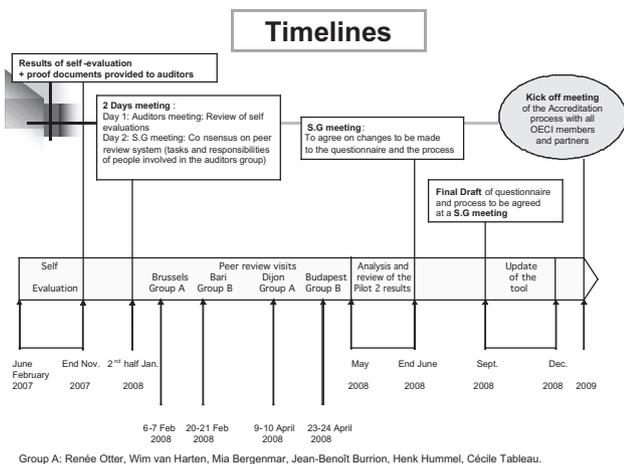


Figure 4 - Next steps.

Further developments

General perspective

Guidelines for diagnosis and care facilitate collaboration in clinical research. Harmonisation strategies for the different cancer centres in combination with improved communication and educational programmes will increase collaboration and sharing of common facilities. An important goal of the programme is increased integration between cancer care and research. Improving overall quality of cancer centres as well as harmonization and quality assurance of the infrastructure for translational research will, with OECI as a frame, increase communication and collaboration between European cancer institutes. The work will start with the linkage of a few cancer centres to establish “good examples or best practices”. More collaboration between cancer centres will increase the possibilities to elaborate interesting research plans with further chances to receive economic support from the funding programmes of the EU.

Eventually, the data could be used to evaluate cancer centres performances and develop effective systems and interventions that will allow us to improve cancer care outcomes at the national and European level⁶.

Integration of research is a global policy issue.

There is an urgent need for bridging the gap between basic research and clinical practice, to allow a fast translation of the outstanding progress achieved in basic research into new diagnostic tools, new treatments and new technologies dedicated to prevention care or rehabilitation. However, such rapid translational process is hampered by various structural elements:

- National health systems, with lack of structural process for the development of innovation
- Financial constraints in the health system: another structural brake regarding innovation

There are major inequalities in Europe and within each member state for access to high quality care updated to the most recent developments. Innovation actually concerns a small minority of patients (less than 5% of European Cancer patients have access to clinical trials).

Efficient transfer of new concepts - new tools - new technologies towards diagnosis and treatment requires the development of specialised skills in Genetics, Genomics, New technologies: Imaging, Physics, Bioinformatics, Social sciences, and Economics.

There is, in this context, a need for the rapid development of new diagnostic markers, new targets for therapy, new methodologies for clinical trials, new endpoints (functional imaging), and new rules of the game with the industry (Figure 5).

The fundamental achievement would be a new deal with informed patients/citizens seen as real partners for research. Quality improvement strategies should integrate this fundamental dimension and allow identifica-

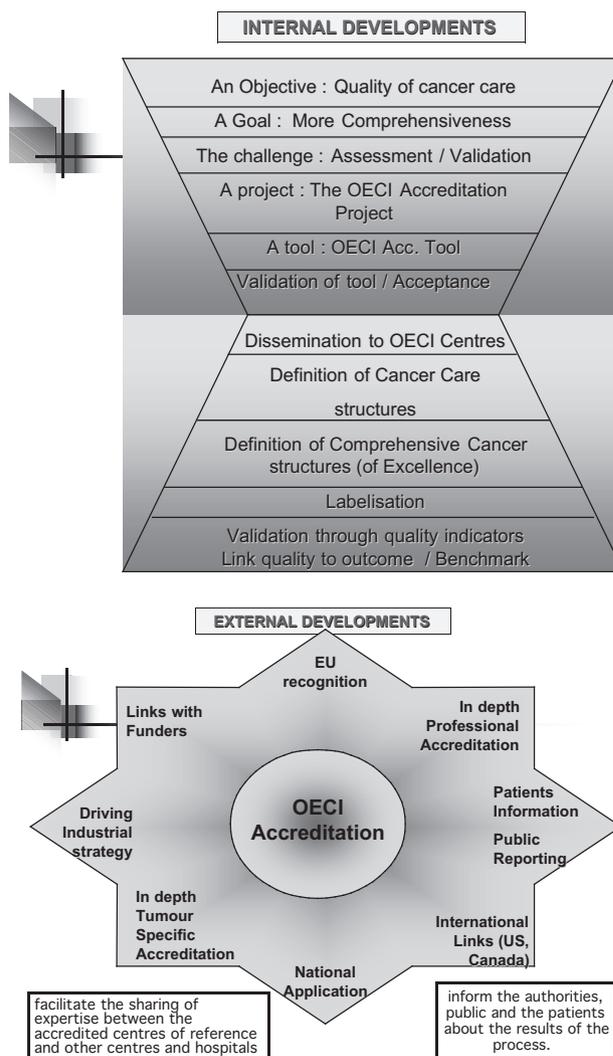


Figure 5 - Developments.

tion and promotion of reference basic research centres and translational reference research centres to make all changes in cure and survival available to patients throughout Europe⁷.

Implementation of the OECI performance tool, particularly in the context of oncology, which is a critical example of these issues, will identify ways of integrating this additional layer of quality care in the overall assessment of institutions.

Labelling of cancer structures

The AWG's plan is to build a long-term complete and voluntary process with external and internal added value. It should become an active process of sharing information and experience.

It is important to define common tools for auto evaluation that are not daunting and have been created with a set of guidelines agreed by peers and colleagues.

The definition and scoring of the various types of cancer structures will help improve the status of all participating Centres.

Within this background, the AWG is also developing a labelling system of the different cancer institutes / centres and for Comprehensive Cancer Centres of Excellence organised centrally or as a network.

At this stage, the following key issues will be addressed: are the centres only focused on treatment? Do they participate in education, basic research and translational research with a continuum of clinical and basic research?

There needs to be agreement on the quality of the research process and its integration into the daily activities of the centres. Clinical research and participation in clinical trials and the evaluation of the quality of the data is also part of the quality process.

Collaborations

With all the topics and areas involved in the AWG programme, collaboration with external partners is needed. Therefore, the AWG has enlisted the help of other organisations in Europe active in good clinical practice such as ESMO (European Society of Medical Oncology), EORTC (European Organisation for Research and Treatment of Cancer), ESTRO (European Society for Therapeutic Radiology and Oncology) ESSO (European Society of Surgical Oncology), EONS (European Oncology Nursing Society), Eusoma Breast Cancer Units, CoCanCPG project and many others, especially patient's organisations which should be at the centre of the project.

To illustrate the OECI's work towards completing its accreditation programme, the AWG is inviting international experts to provide input in the process. The US and Canadian systems and experiences are a great contribution.

Moreover, close interactions with national coordinating structures is key for the implementation and dis-

semination of the process; for instance, the French Federation of Cancer Centres and the Alleanza Contro il Cancro are key partners that support strongly the initiative and ease the process by creating a direct and efficient link with all the cancer centres in France and Italy.

Dissemination, education

As the networking process is very important, the organisation provides constant efforts in order to facilitate the sharing of expertise between the various stakeholders and cancer professionals in Europe.

For accredited centres to maintain their status and in order to give the opportunity to other centres to improve and/or become a partner in the networking process, the AWG organises appropriate educational activities, especially training sessions on the electronic tool for self-evaluation, and auditors training for peer review.

Moreover, a communication strategy will be set up to inform the authorities, the public and the patients about the results of the process.

Conclusion

In the end, among the potential benefits of such a project, the most immediate ones are:

- improved care to individuals
- strengthened community confidence in the quality of continuous care in the hospital
- healthcare professional education
- stimulation of quality improvement efforts if the accreditation recommendations are implemented after the accreditation process
- objective evaluation of the hospital's quality of care
- potential for improved liability insurance coverage
- comparative assessment of care structures
- provision of a more coherent overall vision with a clear evidence base
- reporting to the public
- increased harmonisation and equity for patients⁸

Moreover, the evaluation of cancer structures can serve as a basis for the evaluation and accreditation of different specialities linked to cancer care, such as surgery, radiation therapy, imaging techniques, rehabilitation structures, outcome measurement, and health registries. It covers thus different disciplinary aspects.

Collecting and selecting minimum standards for quality healthcare is aimed at providing transparent and visible information to citizens and evidence-based data for informed access to healthcare institutions, as a right of the citizens of the EU.

It should also provide guidance and help for healthcare institutions located within Member States lacking performance assessment structures in order to reduce inequalities, provide equity and allow mobility of patients.

The OECI accreditation project will be implemented in a way that allows consultation and participation of healthcare providers and consumers in a balanced way, thus enabling a deeper involvement of individuals in the design of policy strategies concerning their health and well-being.

The accreditation tool is designed for internal use by health care organisations to support performance improvement and for external use to demonstrate accountability to the public and other interested stakeholders. Performance measurement benefits health care institutions by providing evidence-based, data-driven mechanisms that generate a continuous stream of performance information. This enables health care institutions to understand how well their organisation is doing over time and have continuous access to objective data to support claims of quality. The institutions can verify the effectiveness of corrective actions; identify areas of excellence within the institution; and compare their performance with that of peer institutions using the same measures. Similarly, performance data can be used by external stakeholders to make value-based decisions on where to seek quality health care⁹. They may provide a basis for defining centres of reference in Europe, especially for rare diseases.

Through its proposed accreditation system the OECI seeks to address concerns of citizens and to promote health protection and improvement, over time. As a result it will promote the following principles:

The focus is on the patient The comments and level of satisfaction of patients and other users of healthcare organisations are taken into account during the elaboration of the Assessment tool and will continue to be taken into account in its future use.

Improvement in safety of care Safety is one of the major dimensions of quality of care, and one of the main expectations of patients. In parallel to the increase in efficacy and complexity of hospital care over the last few decades, there has been a comparable increase in potential risk to the individual. Risk prevention depends on a number of factors, including compliance with safety regulations and good practice, and the establishment of a system of assessment and improvement based on identifying risk areas and taking preventive action.

Continuous quality improvement In order to achieve continuous quality improvement, a recognised quality management system is required, and the AWG will promote a systematic approach to improve processes and reduce errors based on active commitment from individuals.

Involvement of professionals working in the healthcare organisation Quality improvement is the result of inter-

nal initiatives implemented by the healthcare institution. It is essential that everyone participates in such initiatives, so that they will accept changes and adopt appropriate solutions. The various stakeholders must be involved at every stage of the design of the accreditation tool. The OECI AWG will explain, inform and communicate regularly with professionals.

Continuous assessment and improvement of the assessment process The principles of assessment and continuous quality improvement required of health care organisations apply equally to the assessment process itself. The OECI AWG will work on a monitoring system to enable it to measure efficacy, cost and any problems or dysfunction related to the assessment process, in the light of results obtained from pilot testing.

These principles will consequently foster responsibility and involvement of citizens regarding their health, allowing clear, visible and transparent data throughout Europe, thus enhancing community confidence.

The OECI accreditation project could be the foundation of a new alliance between the cancer centres and their partners in the continuous progress and search for excellence of research and care in oncology.

References

1. Grol R, Grimshaw J: From best evidence to best practice: effective implementation of change in patients' care. *Lancet*, 362(9391):1225-1230, 2003.
2. Berrino F, De Angelis R, Sant M, Rosso S, Bielska-Lasota M, Coebergh JW, Santaquilani M, EURO-CARE Working group: Survival for eight major cancers and all cancers combined for European adults diagnosed in 1995-99: results of the EURO-CARE-4 study. *Lancet Oncol*, 8(9): 773-783, 2007.
3. Ringborg U, Pierotti M, Storme G, Tursz T, A European Economic Interest Grouping. Managing cancer in the EU: The Organisation of European Cancer Institutes (OECI). *Eur J Cancer* 2008 Mar 10 (Epub ahead of print)
4. Eccles M, Steen N, Grimshaw J, Thomas L, McNamee P, Soutter J, Wilsdon J, Matowe L, Needham G, Gilbert F, Bond S: Effect of audit and feedback, and reminder messages on primary-care radiology referrals: a randomised trial. *Lancet*, 357 (9266): 1406-1409, 2001.
5. Haward RA: Using service guidance to shape the delivery of cancer services: experience in the UK. *Br J Cancer*, 89 (Suppl 1): S12-14, 2003.
6. Haward RA: The Calman-Hine report: a personal retrospective on the UK's first comprehensive policy on cancer services. *Lancet Oncol*, 7(4): 336-346, 2006.
7. Sinha G: United Kingdom becomes the cancer clinical trials recruitment capital of the world. *J Natl Cancer Inst*, 99(6): 420-422, 2007.
8. Ringborg U: Harmonizing cancer control in Europe. *Adv Exp Med Biol*, 587:87-93, 2006.
9. Saghatchian M, de Pourvoirville G, Tursz T: Cancer funding throughout the world. *Lancet Oncol*, 5(7): 453-457, 2004.