1 Summary

The European Breast Cancer Screening Network was initiated by the Europe Against Cancer Programme to support achievement of the long-term aim and commitment of the Cancer Programme, i.e., to reduce the number of cancer deaths. As breast cancer accounts for approximately 25% of all female cancer and since well organised breast cancer screening programmes can substantially reduce breast cancer mortality, improvement and promotion of such programmes has played a key role in Community health policy to date. Due to the substantial success of the network in developing and implementing methodologies promoting best practice in the area of breast care, network achievements have triggered fundamental improvements in health care systems throughout the Community. This has lead to numerous governmental decisions and legislative actions. A prominent example is the recent decision of the Health Committee of the German Parliament which unanimously recommended introduction of a national breast cancer screening programme according to the European Guidelines for the Quality Assurance of Mammography Screening developed in the network. The breast cancer screening network currently involves scientists, managers, health care professionals and dedicated co-workers in over 70 institutions in all of the member states of the European Union as well as in two EFTA countries and three preaccession countries. The present report covers the activities and achievements of the 23 projects supported by the grant agreement SI2.307923 (2000CVG2-031) during the contract period 1 August 2000 to 15. December 2001. These projects have been structured into 5 groups, co-ordinated by group leaders. Each project in the Network may carry out more than one of the activities mentioned below.

1.1 Aims and activities

In the past the main interest of the network has not been to investigate the benefits to be gained from high quality breast screening - this has already been demonstrated in several large scale population screening studies - but to enhance skills, effectiveness, and to provide support and experience for those countries lacking breast screening, explore methods of implementation and evaluation of breast screening in the national health system and to establish contact for exchange of information and experience between member states. During the past 10 years, the network has focused on all aspects in the chain of activities related to breast cancer screening, for example, identifying of target population, performance of high quality mammography screening examinations and film reading, setting quality assurance standards in epidemiology, quality control in physics and pathology, publishing quality assurance guidelines suitable for European use, controlling quality by visiting projects on-site, and encouraging studies on evaluation of the activities, both in terms of quality and in terms of the effect on mortality. In light of the comprehensive scope of network activities bridging disciplines and sectors of health care heretofore unaccustomed to intensive cooperation and in view of the international scope of network activities, coordination of the network projects and financial administration are activities essential to the effective performance of the network and therefore also receive special attention.

1.2 Methods

Numerous methods have been applied in the various projects, particularly: (1) data collection and analysis, (2) specialized training, (3) meetings, seminars, (4) expert consultation; (5) site visits and inspections, (6) equipment testing, development of technical protocols, (7) IT system design and analysis, (8) computer programming, (9) development of applications for internet surveys and (10) review of scientific literature and document search.
1.3 Results

The European Breast Cancer Screening Network of the Europe Against Cancer Programme made a long-term commitment to introduce high quality mammography screening services for women, in all member states of the European Community. A major achievement of the network during the contract period has been the publication of the third, revised edition of the European Guidelines for the Quality Assurance of Mammography Screening in the Fall of 2001. The third revised edition (360 pages) was prepared and edited by the EUREF\(^1\) network project and includes separate chapters on epidemiology, physico-technical aspects, radiography, radiology, histopathology and cytology, surgical management of screen-detected lesions, result monitoring and training. Draft EUREF certification protocols (working documents) and a document on breast centres from EUSOMA\(^2\) illustrate how improvements in quality assurance of breast cancer screening stimulate quality improvement in breast services in general, i.e., in routine non-screening services. The European Guidelines have been central in discussions with the network members to identify the strong and weak points of the screening service, and they have been used as the basis for government-approved policies. A prominent example is the recent decision of the Health Committee of the German Parliament which unanimously recommended introduction of a national breast cancer screening programme according to the European Guidelines. The fact that nearly all screening programmes represented in the network now have political and financial support within their member states is a reflection of a long-term commitment from their respective governments.

In addition to the above achievement, all of the planned objectives of the network have been fully or partially fulfilled during the contract period:

1. Initial results of a network survey show the contribution the network has made to implementation of high quality mammography screening programmes throughout the Community. Further documentation of the network achievements will be forthcoming from current network projects (see section 3.1).

2. Progress has been made toward certification of network projects to become reference centres in their countries allowing a diffusion of expertise from a regional to a nation-wide level. Toward this end certification protocols have been developed. Preliminary testing of the certification process has taken place in Italy, Ireland and Portugal. In Germany the Ministry of Health and the Health Committee of the Parliament have approved plans to develop currently network-supported pilot projects to become reference and training centres (see section 3.4).

3. Various models for evaluation of the quality and the effect of screening have been developed and employed in studies in several member states. These activities have played as essential role in the recent international discussion which has ended with confirmation of the validity of the population-based studies on the effectiveness of mammography screening (see section 3.2).

4. The European Guidelines for Quality Assurance in Mammography Screening have been updated and progress on practical implementation has been achieved in projects in several states (see sections 3.3 - 3.5).

\(^{1}\) EUREF: European Organization for Quality-Assured Breast Screening and Diagnostic Services

\(^{2}\) EUSOMA: European Society of Mastology
1.4 Dissemination and utilisation of results

Dissemination and utilisation of results of the network projects has taken place as planned:

1. within the European Network of Breast Cancer Screening projects at annual meetings in Belgium and Spain
2. in scientific workshops and symposia (in France, Italy and Germany)
3. through publication in peer-reviewed scientific journals (see Annex)
4. through the revision of the European Guidelines for Quality Assurance in Mammography Screening by EUREF and through the distribution of the newly revised third edition by the Commission (second printing in progress).

1.5 Network coordination

At the beginning of the contract period in August 2000 the administrative burdens on the network coordination and the individual projects had increased substantially and at the same time there was a delay in processing reports and claims through the Commission. Thus, funding for planned activities was considerably delayed. Furthermore, the contract of the previous coordinator, Dr. Sven Törnberg of the Swedish Cancer Society had expired with the conclusion of the previous contract period. When the new coordination team lead by Dr. Lawrence von Karsa assumed the task of the network coordination under the contractual umbrella of the National Association of Artisans and Crafts Health Insurance Funds (Bundesverband der Innungskrankenkassen, Germany) a substantial increase in the effort devoted to project and financial management and development of more sophisticated internal network structures was imminent, not least to ensure that in the future the network improve the effectiveness of fund allocation within and between individual network projects. A major improvement in managerial support has been achieved through continuous development of the financial management and coordination by J&AB Associates. This improvement has facilitated the smooth transition of the network structure and objectives and has helped to clear the backlog of applications and claim processing of previous years. The direct financial reporting of individual projects within the various groups to J&AB Associates and the correct and strict follow-up of the financial documentation has permitted more effective use of resources.

The transition in the network coordination at the beginning of the contract period was also used as an opportunity to expand the scope of the network beyond screening to encompass all aspects of quality assurance and best practice in breast health care.

1.6 Conclusions and implications for the future

The activities of the former European Breast Cancer Network have substantially contributed to improvement in and maintenance of high standards in breast health care in Europe. The success of these activities is evident in the widespread implementation in Europe of the quality standards developed and continuously improved in the network. The expansion of the scope of the network to cover all aspects of breast care in the framework of the new European Breast Cancer Network should enable the millions of women in the Community not attending screening programmes to benefit from advances developed to date in screening.

During the contract period, the former European Breast Cancer Screening Network has undergone a profound and fundamental transition affecting not only the essential nature of the public health and scientific activities but also the management structure and democratic processes by which all the member states and a number of applicant and associated countries are involved in the continuous quest for improvement of best practice and the quality of breast
services in Europe. The European Breast Cancer Network is currently in a favourable position to continue highly successful previous activities and to promote related new activities which have the greatest promise of promoting community added value in the future and which will provide essential support toward achieving the goals of Community health policy stipulated in the Treaty of Amsterdam. These achievements would not have been possible without the untiring support of the members of the network, particularly those volunteering to serve as group leaders, project leaders and partners and members of the advisory board.

The current third edition of the European Guidelines shows the necessity for constant revision of quality assurance guidelines. Furthermore, closer cooperation between the EUREF project coordinating guideline updating and certification development, on the one hand, and scientific societies and professional associations involved in breast care, on the other hand, can promote transfer of advancements in the quality assurance of screening to the nonscreening diagnostic and treatment setting.

The sophisticated and effective management structures implemented in the network and the excellent results in an area of health care requiring the highest professional standards and the most sophisticated levels of interdisciplinary and intersectoral cooperation demonstrate the unique and significant contribution the network has made in the past and could make in the future to improving health care in the member states. In light of this unique achievement it is essential that the quality assurance guidelines developed in the past continue to be revised in the future. Furthermore, future priority should be given to continuing and expanding efforts toward certification to identify and assist providers delivering services fulfilling the European standards.

Since quality assurance in similar areas of health care, particularly involving colorectal, cervical and skin cancer are increasingly urgent in the member states, substantial benefits can be expected from integration of these areas into future network activities. The urgency of such efforts is demonstrated by recent decisions to implement endoscopic screening programmes for colorectal cancer in northern Italy and nationwide in Germany as well as a decision to perform a large skin cancer trial in Germany. Providing access of these efforts to the expertise in the European Breast Cancer Network could have a profound positive impact on the results and the quality of services provided in these programmes.

The future priorities of network management should include assistance to the network to finish ongoing projects and to present the achievements of the network in the final phase of the Action Programme on Cancer. Furthermore, the network should develop a strategy which will permit those activities essential to maintenance and improvement of quality and best practice in breast care to continue in the future, to be expanded to related fields in which similar needs are most urgent, and to be transferred to those countries which will become new members of the European Union.
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