Seeking Quality Improvement in Primary Care in Crete, Greece: the First Actions

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Aim. To implement quality improvement programs and assess the clinical effectiveness within the primary care setting.

Methods. The introduction of clinical governance teams, the establishment of a patient-based record system, and the dissemination of practice guidelines were included among the efforts made to improve the quality of care. The clinical effectiveness was measured using EUROPEP (European Task Force on Patient Evaluations of General Practice tool) for evaluating patient’s opinion and contracts between health authorities and primary care physicians and nurses.

Results. Clinical governance teams of 5-6 practitioners were formed in all health centers. Health cards were created for 6,150 individuals, and a high satisfaction rate with the interest in the patient’s personal situation (97.6% of participants assessed it as excellent), physical examination (97.6%), and giving information about symptoms and illness (97.6%) was recorded on the EUROPEP sample. Lack of infrastructure and diagnostic equipment were considered as important barriers in implementing contracts in primary care.

Conclusion. Primary health care in a rural setting in Crete is engaged in setting up systems for implementing clinical governance and quality programs. The Regional Authorities of Health and Welfare should provide further support.

Key words: family practice; health care quality, access, and evaluation; primary health care; quality of health care

In a changing Europe, many governments discuss strategies to improve both quality of care and performance of their health services. In the UK, clinical governance represents a broad strategy for improving quality within the National Health Services (NHS). In a report from the UK’s Department of Health, clinical governance was defined as “a framework through which NHS organizations are accountable for continually improving the quality of their services, and safeguarding high standards by creating an environment in which excellence in clinical care would flourish” (1). Effectiveness implying the degree to which attainable health improvements are realized, according to Donabedian’s (2) definition, was a frequent term in health care reforms.

The general practitioners’ contract has been recently introduced in the UK and it defines the nature of the relationship between the family doctors and the government (3). Good medical practice is an important concept in several countries.

Over the past few years, Greece has made several attempts to modernize and improve national health care services. A Health Care Reform Act, seeking quality improvement and coordination of outpatient and hospital services on a regional level through the enhancement of primary care, was recently approved (4). This latest health act seeks to improve the quality of care through the introduction of Regional Health and Welfare Systems (RHS). The RHS of Crete is one of 17 RHSs bearing the duty of implementing strategies for improving the quality of health services provided to the population of this Mediterranean island. Among the first priorities that the executive council of the regional authorities set was the strengthening of primary care. This would be achieved through the development of specific health promotion and disease prevention activities, together with the creation of networks within organizations and institutes in the region of Crete. Crete is an island with a Medical School strongly orientated towards primary care and general practice, having developed research which is focused on population health needs (5).

Thus, it was interesting to explore a common methodology in measuring clinical effectiveness within the field of primary care in the RHS of Crete. This paper reports the first endeavors undertaken by the Regional Health Authorities of Crete to implement quality improvement programs and assess the clinical effectiveness.

Methods

Setting

The quality improvement program was implemented in primary care in rural Crete, where 14 health care centers are serving approximately 283,000 inhabitants.
Efforts Made to Change the Process

The development program included actions on three levels: the first on the administration of primary care centers, the second on disease management through the establishment of patient records-based system and dissemination of written material and guidelines, and the last on methods in measuring clinical effectiveness. An assessment of available infrastructure measures was not included in this study.

Introducing clinical governance. The first action of the process that took place at the beginning of 2004 was recognizing accountability. The directors of the 14 health centers have been delegated the responsibility for administrative issues and clinical governance from the deputy general director, who was ultimately responsible on behalf of the Regional Health and Welfare Authorities. Clear instructions were also given to all medical directors on how to form groups for quality improvement. A list of tasks and guidance how these groups would implement some actions towards clinical governance were given. Visits to the health centers to encourage people for participation were put into practice.

Establishing a patient-based records system and disseminating guidelines. A health card system was established with the information registered at the primary care physicians' practice. Specific written instructions to the physicians and local staff were given on how to complete the patients' health card. This card consists of two pages, which take only 2-3 minutes to be filled in. The RHS developed this health card because of the reluctance of the primary care physicians to systematically record patients' medical histories in the electronic patient-records-based systems available in many Cretan health centers.

In addition to the Primary Health Care Information System (6), which already existed in the majority of health centers, an Electronic Records System (EPR), based on The International Classification of Primary Care Version 2 (ICPC-2 classification, ref. 7), was piloted-tested in Crete and other regions of Greece, consists of more than one program: the main program, users' and setting administration program, form editor, and statistics program. In the encounter screen, the ICPC-2 classification was used for directly coding symptoms, other reasons for encounter, interventions, diagnosis, and treatment.

Developing and implementing protocols and practice guidelines were another approach in improving the quality of care in several priority areas. These areas included chronic diseases such as diabetes, hypertension, coronary artery disease, bronchial asthma, chronic obstructive pulmonary disease, as well as preventative and modifiable health conditions such as risks, like smoking, alcohol consumption, and hyperlipidemia. The website of the Cretan Guidelines Review Group (www.cgrg.gr), that was initially commenced by a group of general practitioners and researchers in the Clinic of Social and Family Medicine at the University of Crete, was used to disseminate practical guidelines about coronary artery disease, chronic obstructive pulmonary disease, and Helicobacter pylori infection management and other information to junior physicians and to all primary health care physicians serving in the rural areas of Crete. A manual with practical guidelines and recommendations on how the directors of health centers can organize the primary care services and how physicians can work effectively in managing common diseases and health problems was recently edited by the RHS of Crete and is available to all practices (9).

Developing methods for measuring clinical effectiveness. To assess the level of quality of care, a European questionnaire named EUROPEP (European Task Force on Patient Evaluations of General Practice) was used, allowing patients themselves to evaluate the quality of care they have received (10,11). This tool has been translated and adapted into Greek by the Clinic of Social and Family Medicine, University of Crete, with the aim of collecting and evaluating information from the patients' point of view regarding general practice care. Selected staff at the RHS of Crete, in conjunction with the Directors of 14 primary health centers, agreed to start collecting relevant data since mid-September, 2003.

To measure clinical effectiveness and practice performance, the development of a contract based on a sample number of primary care physicians and nurses was decided upon, and several selected practitioners in rural Cretan were invited to participate. This contract was designed to make a more direct link between patients' needs and the level of performance. This would encourage physicians to achieve pre-defined goals with both their patients and population groups, thereby exploring areas of potential interventions. Seventeen practitioners from 5 health centers agreed to participate in this project. These health centers serve approximately 50,000 rural and semi-urban inhabitants. Doctors and other primary care staff who are involved on a voluntary basis were invited to sign a contract of effectiveness. The contract of effectiveness has also been counter-signed by the Regional Authorities and the director of the health center. One or more persons from each health center can sign a contract. Each contract includes an overall description of the population health status in each health center, identification of target-groups, goals that were set, a detailed description of the procedures that will be followed, and evaluation indicators of processes and outcomes.

Assessing the Process

The progress of the new process and development program was assessed in March 2004. We examined whether and to what extent the clinical governance teams were formed, the degree to which the individual health cards have been completed by the primary care physicians, whether the practice guidelines and instructions for quality improvement were disseminated to the primary care staff, and whether the two pilot methods in measuring clinical effectiveness were feasible and acceptable to both those being assessed and those undertaking the assessment. Data on EUROPEP were analyzed and the percentage rates on its different items were calculated. An evaluation of the project aiming at the development of the contract was made based on a semi-structured questionnaire (4 questions) and documents' review. Through this questionnaire we identified the barriers in implementation and revealed its prospects. All the collected data were analyzed and categorized by the first two authors.

Results

Introducing Clinical Governance

All medical doctors responded to the invitation of the RHS and the clinical governance teams were formed at the time of assessment, with the participation of 5-6 primary care practitioners, including physicians, dentists, nurses, midwives, social workers, and administrators. The new organizational structure of RHS of Crete is illustrated in Figure 1.

Establishing Patient Records-Base System and Disseminating Guidelines

During the study period, the health centers started to collect patients' information and both systems, health cards, and electronic patient records system are now available. Approximately, 6,150 new health cards have been created during 2003. The manual was delivered to all qualified physicians, while all unspecialized physicians were contacted individually by the staff of the Regional Health and Welfare Authorities. They were informed about the guidelines' website.

Developing Methods in Measuring Clinical Effectiveness

There was some reluctance towards EUROPEP by the physicians assessed in some health centers and
Diabetes mellitus type 2, hypertension, and vaccinations were included among the frequent diseases and health problems that were selected for intervention by the participants in the contract program. While participants found the program feasible within the local setting and accepted its procedures, they identified several barriers in its implementation (Table 2). Lack of infrastructure and especially of diagnostic equipment, as well as human workforce and high workload patient care and limited access to the proper electronic data-bases most frequently recorded barriers.

Discussion

Our paper gives a description of the background for the quality improvement process in primary care in Crete and the interventions undertaken. Based on the results of this pilot study there is some evidence that this collaborative and developmental effort was successful in its first implementation in Greece. Certainly, the findings of this pilot study on clinical effectiveness should be treated with caution because it evaluated process data. Clinical governance can be viewed as a whole system of cultural change and our pilot study does not claim that it attempted to implement clinical governance in the region of Crete. Voluntary involvement of participants in the contracts program may bias the results, and the EUROPEP study is limited only to the analysis of data from 82 patients, while the extent to which the interventions are effective remains a challenge. The external validity of this experiment should also be measured in order to apply the results to a wider setting. However, the results of this study should be discussed within the existing conditions of this Mediterranean setting. It is known that the successful implementation of clinical governance requires cultural and organizational changes and important support to practices (12).

Figure 1. Part of strategic plan of the Regional Health and Welfare System of Crete.

Table 1. EUROPEP* pilot study – frequency distribution (n=82)

<table>
<thead>
<tr>
<th>Questions</th>
<th>No. (%) of answers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Making you feel you had time during consultation?</td>
<td>78 (95.1) 3 (3.7) 1 (1.2) 0 0 0</td>
</tr>
<tr>
<td>Interest in your personal situation?</td>
<td>80 (97.6) 2 (2.4) 0 0 0 0</td>
</tr>
<tr>
<td>Making it easy for you to tell him or her about your problems?</td>
<td>82 (100.0) 0 0 0 0 0</td>
</tr>
<tr>
<td>Involving you in decisions about your medical care?</td>
<td>75 (91.5) 5 (6.1) 0 0 0 2 (2.4)</td>
</tr>
<tr>
<td>Listening to you?</td>
<td>82 (100.0) 0 0 0 0 0</td>
</tr>
<tr>
<td>Keeping your records and data confidential?</td>
<td>78 (95.1) 2 (2.4) 0 0 0 2 (2.4)</td>
</tr>
<tr>
<td>Quick relief of your symptoms?</td>
<td>69 (84.1) 7 (8.5) 0 0 0 6 (7.3)</td>
</tr>
<tr>
<td>Helping you to feel well so that you can perform your normal daily activities!</td>
<td>70 (85.4) 6 (7.3) 1 (1.2) 0 0 5 (6.1)</td>
</tr>
<tr>
<td>Thoroughness?</td>
<td>82 (100.0) 0 0 0 0 0</td>
</tr>
<tr>
<td>Your physical examination?</td>
<td>80 (97.6) 1 (1.2) 0 0 0 1 (1.2)</td>
</tr>
<tr>
<td>Offering you services for preventing diseases?</td>
<td>77 (91.9) 2 (2.4) 0 0 0 3 (3.7)</td>
</tr>
<tr>
<td>Explaining the purpose of tests and treatments?</td>
<td>78 (95.1) 0 0 0 0 4 (4.9)</td>
</tr>
<tr>
<td>Telling you what you wanted to know about your symptoms and/or illness?</td>
<td>80 (97.6) 1 (1.2) 1 (1.2) 0 0 0</td>
</tr>
<tr>
<td>Helping you deal with emotional problems related to your health status?</td>
<td>80 (97.6) 0 0 0 0 2 (2.4)</td>
</tr>
<tr>
<td>Helping you understand the importance of following his or her advice?</td>
<td>80 (97.6) 2 (2.4) 0 0 0 0</td>
</tr>
<tr>
<td>Knowing what she or he had done or told you during contacts?</td>
<td>81 (98.8) 0 0 1 (1.2) 0 0</td>
</tr>
<tr>
<td>Preparing you for what to expect from specialist or hospital care?</td>
<td>63 (76.8) 1 (1.2) 0 0 0 18 (22.0)</td>
</tr>
<tr>
<td>The helpfulness of the staff (other than the doctor)?</td>
<td>72 (87.8) 8 (9.8) 1 (1.2) 0 0 1 (1.2)</td>
</tr>
<tr>
<td>Getting an appointment to suit you?</td>
<td>48 (58.5) 1 (1.2) 1 (1.2) 0 0 32 (39.0)</td>
</tr>
<tr>
<td>Getting through to the practice on the phone?</td>
<td>19 (23.2) 1 (1.2) 0 1 (1.2) 0 61 (74.4)</td>
</tr>
<tr>
<td>Being able to speak to the general practitioner on the telephone?</td>
<td>60 (73.2) 7 (8.5) 1 (1.2) 0 0 14 (17.1)</td>
</tr>
<tr>
<td>Waiting time in the waiting room?</td>
<td>26 (31.7) 48 (58.5) 4 (4.9) 1 (1.2) 0 3 (3.7)</td>
</tr>
<tr>
<td>Providing quick services for urgent health problems?</td>
<td>77 (93.9) 2 (2.4) 0 0 0 3 (3.7)</td>
</tr>
</tbody>
</table>

*The EUROPEP tool by Richard Grol and Michel Wensing (10). Translated and culturally adapted into Greek after permission.
Strategies for improving primary care and general practice on a larger scale than that of the Crete project, have been developed in the UK, USA, and Australia (13-14). Although we would avoid any comparison with these large scale projects the Greek Primary Care Bodies seem to have some reference to the British Management Executive Committees (13-15) and the Cretan contract shares some ideas with the new General Medical Services (GMS) contract document (3). The Greek teamwork also provided an excellent means of identifying barriers and exploring solutions and ways of improving the quality of services provided in primary care. Our pilot program has some common characteristics with the Future and Family Medicine Project in the USA, which identified a new model of practice introducing a process for development, advanced information system and unified communications strategy (14). Thus, our study results, despite their limitations, may be useful for health planners and researchers from European countries which are experiencing the same conditions as Greece and attempting to implement similar quality improvement programs in primary health care.

Our study also has some important implications on a local level. Primary health care directors have now at their disposal a management committee, several specific clinical tools, including registration and medical audit forms, and patients’ opinion questionnaires for exploring clinical effectiveness in the priority areas that the RHS of Crete has put forward.

This development program seems to have been undertaken at the right time, when the new government initiates a dialogue about the health reform in primary care looking for some indication of success. It could also give the primary care physicians and staff a sense of the importance of organizational culture, relationships, teamwork, leadership, administration, and health care providers, and encourage both general practitioners and primary health care staff to identify their patients’ needs and set priorities. Cretan health centers anticipate using the quality improvement programs to obtain some feedback on the success of services.

In conclusion, primary health care in rural setting in Crete is engaged in setting up systems for implementing clinical governance and quality improvement programs, and the Regional Health and Welfare Authorities of Crete should provide further support to this developmental process.

Acknowledgements

The authors are grateful to all primary care workers and staff at the Regional Health and Welfare System of Crete, for their contribution to the implementation of all actions of clinical governance in Crete.

References

Organisation of Family Doctors (WONCA)/European Association for Quality in Family Practice; 2000.


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