Establishing a Regional Contact & Service Centre for Public Health Care: The Case in Central Macedonia, Greece

Dimitrios Vartzopoulos, Stergiani Spyrou, Eirini Minaoglou, Viktoria Karolidou, Panagiotis D Bamidis

2nd Regional Healthcare System Authority of Central Macedonia, Greece

Lab of Medical Informatics, Medical School, Aristotle University of Thessaloniki, Thessaloniki, Greece

Abstract

Regional Healthcare System Authorities (RHSAs) run under the Ministry of Health and Welfare in Greece, aim is to improve the level of quality that health care organizations offer as well as to control the expenditure of health care services provided by the health care organizations. In this article we present the considerations taken during the establishment of the first Regional Contact & Service Center for Public Health in Greece in two of the RHSAs. In this respect, the current piece of work provides an up-to-date experience in establishing and setting the RCSC in its organizational context, an outline of its conceptual model and design, an outlook of the first quarterly results of its use, and a discussion of its potential impact.

Keywords:
Regional Contact Centre; Regional Service Centre; Health Information System, Regional Health Authority

1. Introduction

During the past couple of decades, public trust in western governments has continued to diminish due to various administrative, political, socio-cultural, and economic causes. The health care sector is unambiguously indicated as one of the primary dissatisfaction points in the public opinion. One of the contributing factors to the decline of public trust is associated with the gap between public expectation and perceived governmental performance. Information and Communication Technology (ICT) can be used to improve services and enhance some of the primary administrative values like efficiency, effectiveness, and responsiveness, so as to improve public trust in health care government by direct or indirect manners [1].

Moreover, information exchange and communication are intricate concepts in health care that have been given much attention over the last decade. In medical informatics, communication is seen as the exchange of messages, with an explicit or implicit intention, between actors, in a specific situation or a given certain task [2]. Furthermore, the capacity of countries, and organisations to develop and manage knowledge assets is a major determinant of effectiveness, competitiveness and economic growth. In this context, it has become common knowledge that the use of ICT may serve as an important influence and
catalyst in facilitating the approach of the Greek Health Care System (GHCS) to EU health policies and the bridging of gaps in the development of an information based society with social cohesion [3]. To draw threads towards these direction lines, the 1st and 2nd Regional Healthcare System Authorities (RHSAs) of Central Macedonia, Greece, have established their Regional Contact & Service Centre (RCSC) for Public Health Care. The goal is to eliminate the need for citizens to visit the Centre by exploiting the ICT infrastructure of the Centre and obtaining persistent information from anywhere (e.g. home based) about procedures they should follow in the Health System.

The aim of this paper is, therefore, to share the up-to-date experience in establishing and setting the RCSC in its organizational context, to outline its conceptual model and design, to provide the first quarterly results of its use, and discuss the potential impact it may have for the RHSAs and the GHCS as a whole.

2. Background

Literature search shows that similar attempts in the health care arena can be found in most of the developed countries, where a number of Private Companies offer resembling services to the Health Organisations. The provided services are often offered through insurance companies, telephone centres or via Internet. In this way, citizens can obtain information, advice and guidance in relation to health procedures. They arrange and handle appointments in various health units or gain awareness about specific health professionals or special clinical treatment provided in hospitals [4].

One of the most common technologies used in Public Health Care Contact & Service Centres is the Voice Portal that permits citizens to obtain information and services via a telephone number that acts as an access portal [5]. In addition, there exist Health Care Systems that encompass regional integrated hospital-territory networks that allow the placement of family doctors and specialists on-line. Offered e-services include: 1) Referrals to specialists, 2) Prescriptions for medicines, 3) Consultation of lab and radiology reports, 4) Continued assistance for recovering patients and for patients with supplementary home-care assistance, 5) Regional indexing of clinical events [6].

3. The Greek Context

The 1st and 2nd RHSAs of Central Macedonia are two of the seventeen public RHSAs founded in Greece back in 2001. Each of them aims to improve the level of health care quality offered by their corresponding comprising organizations, as well as, to control the expenditure of health care services provided by the health care organizations. The two RHSAs cover a population of about 1,872,000 in Central Macedonia in total and manage twenty one (21) hospitals, thirty two (32) primary health units, a substantial number of rural health units and several welfare units, as well.

The concept of the Regional Contact & Service Centre is not new in Greece. The Greek government, after the success of the Citizen Service Centres (KEP in Greek) of the Ministry of Internal Affairs, decided to push the idea forward under the auspices of other Ministries and establish new Citizen Contact and Service Centres. Such examples are the Services Centre in the District Office in Athens, the Town-Planning office in Athens and others. All these are designed to operate in an internally oriented manner and have no reconciliation with other Offices [8].

However, the idea for the establishment of RCSC is new for the Greek Regional Public Health Care. In this case, the RCSC can be defined as “an intra-organizational regional

Section 12: Organization Change, Information Needs
centre hosted at the Regional Health Care Authorities, that is supported by organizational arrangements in order to manage and integrate the flow of information for health services for all health care customers, with the ultimate aim of improving customer services and organizational efficiency in health-related issues. They are meant to integrate personal visits to the Centre and electronic communication by means of telephone or Internet”. The first pilot RCSC was established in the city of Thessaloniki by the two RHSAs of Central Macedonia, under the directions of the Greek Ministry of Health and Welfare.

The RCSC provides services posterior to those of the Citizen Service Centres (KEP), and complementary to those offered by smaller citizen service Offices founded in each hospital since 2001. The main aim of the latter is threefold: a) to inform citizens about their rights and obligations inside the Hospital; b) to inform them about relative legislation concerning the patient service during admission sessions; and c) to manage various complaints as reported by patients. These Offices, though, provide services regarding each hospital only and demand the physical visit of the health care customer to the Hospital. RCSC, on the contrary, may be thought of as a centralized, at regional level office, that can serve citizens/patients before their actual visits to health units. RCSCs, as official units, will be organised in all Health Regions of the Country, with the intention of limiting beaurocracy and avoiding unnecessary citizen and document shifting from one unit office to another. The services, offered by the RCSC, are given via collaboration of all Public Services and are briefly: 1) Formal - Administrative operations like ratification of copies etc, 2) Electronic Services providing information, concerning appointments or clinical services, via a web portal, and 3) additional Services associated with the retrieval of information via the telephone centre, the ability to mediate with other Public Services, the recording of citizens’ complaints and their subsequent transmission to the suitable services or Ministries [7].

4. Materials and Methods

As it is the case in the development of every information system, during RCSC’s project life cycle emphasis had to be placed in each of the three constituent pillars, namely, technology, humans, and organisational structures. The focal point of this new service is the citizen; technology is engaged to assist citizen-health care system interactions; the project is constrained by the RHSAs organisational structures and should be seen in the light of their actual engagement and support they can provide. With this in mind, the centre was divided in five sections according to the services provided, which are:

1. Information section (internet based; concerning services provided by regional hospitals and welfare institutes)
2. Section of Structural elements’ system (procedures that the citizen has to follow in order to be served faster in health and welfare matters)
3. Complaints section (admission of citizen’s opinion/complaints about the effectiveness of the provided health and welfare services)
4. Section for Suggestions for improvements
5. Volunteer network

To organize these sections, the two RHSAs had to constitute four work groups. Their work was first to create a process map by collecting information about the procedures followed in the various health units and welfare services (through the use of a structured questionnaire), and then to design applications that would support the electronic provision of information for all health services. After a six-month period of analysis, the pilot operation of the Health Service Centre began a few months ago, while work groups still elaborate on
research work regarding the effective design of the centre’s information workflow.

The following list of actions was taken to assure achievement of the goals set:

Implementation of an electronic protocol aiming to improve document management and request handling.

1. Implementation of a “Human Resources” Information System capable of informing citizens about vacancies in health units and welfare services, but also to handling requests for intra-regional exchanges of personnel.

2. Implementation of a software suite enabling the display of “Day of duty or emergencies/ Appointments at Outpatients' department”, which will help patients in finding faster the hospitals on call, but also allow them to schedule appointments at the Outpatients’ department.

3. Installation of an info Kiosk for the citizens from which they could gain information for almost all the previously mentioned points.

4. Creation of a web portal that will represent the main locus of searching and retrieving citizen information.

A simplistic conceptual model of services request may be seen in Figure 1, while in figure 2, the ICT infrastructure for the RCSC is presented. Health units have access to the central administration system of RHSA via leased lines. The information system of the RCSC has all the infrastructure prerequisites for a secure access of citizen information by the health and welfare services (i.e. Application, Database, Mail, Web Server, and Firewall). Citizens can receive the health services by using the portal or the Info Kiosk without having to visit the Regional Contact & Service Centre for Public Health Care. Nevertheless, for those who are not keen on new technologies or are technology illiterate, there is still the option of visiting in person and being served by the agents.

![Figure 1: The conceptual model of the RCSC](image-url)
5. Results

After the first seven-month period of pilot operation of the RCSC, citizen requests may be split into four main categories as illustrated in Figure 3. The results are examined to improve the services provided by the Centre and to determine the basic set of requirements for the implementation of the Centres in other health regions of the country. Extended periods are of course required to make conclusions.

![Statistics of 7-month period of operation, 2004-2005](image)

**Figure 3: Three month pilot run of RCSC: relative distribution of main categories of requests**

6. Discussion - Conclusions

It is vital to think about the impact of systems and technologies on the people that use them, as some of the worst mistakes made happen if this is neglected. In addition, if one wants to influence the way society is shaped, then factors affecting it need to be identified and studied. The RCSC has involved changes in the Public Administration but also in the society. Improvement in existing health infrastructures will be considered as procedures of the health services may be redesigned under the scope of decentralization of the services, resulting in the improvement of the State - Citizen relationship. In this new effort of the
RCSC establishment, there were reactions and reflections, due to the:

- lack of knowledge of new practices of change,
- lack of collaboration between institutions,
- limited education capacity of employees, affecting the way they respond to citizen needs,
- incorrect and invalid briefing of the RCSC by the Services of non-health related sectors.

However, the operation of the RCSCs for Citizens constitutes an innovative effort for the Greek Public Health Care Administration. The locomotive force for the successful completion of this attempt lies with the import of new information technologies that creates the conditions for the envisaged decentralization. Clearly, management and organizational factors, as well as effective technological mechanisms, affect the ability to maintain service quality. Much is dependent on the ICT infrastructure of a country of course, but the case for Greece looks promising [11]. Moreover, RCSC should be extensively evaluated given special evaluation frameworks [9]. However, there is also a need for regional studies and projects on information seekers behaviours, internet health content evaluation strategies, and analysis of the social supply of health information to citizens and their ability to use the information they receive [10]. To conclude, access and use of internet may be seen as a facilitator of social inclusion, democracy and liberalisation as a number of services become, through internet, more open to the wide public. ICT may be the catalyst for improving social relations as it enables easy social interaction among people without excluding those with special needs or living in deprived neighbourhoods. However, ICT policy makers should make sure that the digital divide is properly resolved in order to fully exploit the benefits [3].

7. References


Address for correspondence
Stergiani Spyrou, IT Manager of 2nd Regional Health Care Authority of Central Macedonia, Greece,. Tel: +302310368822, Fax:+302310368808, e-mail: spirou@med.auth.gr