Chapter 8.10
Introducing E–Procurement in a Local Healthcare Agency

Tommaso Federici
University of Tuscia, Italy

ABSTRACT

This chapter deals with the introduction of electronic procurement in the public healthcare domain. After a brief discussion on the healthcare spending characteristics and on the suitability of e-procurement tools in the public sector, the long-lasting experience of e-procurement implementation promoted by an Italian Local Healthcare Public Agency is described. This initiative included some pilot projects and applied many different solutions, always involving both a new ICT tool and a thorough process redesign. The development of the innovation introductions is discussed, together with their organizational and managerial background, the description of the new processes, and the analysis of the most relevant results. The chapter provides a fairly comprehensive illustration of available solutions, opportunities, and challenges in this still neglected topic.

BACKGROUND

The spending for goods and services on public healthcare, significant for many years, is still growing at a fast rate, both in absolute terms and in percent of total spending, worrying many European governments that are engaged in identifying rationalization initiatives. In parallel, e-procurement solutions widened their range of application from business-to-business (B2B) transactions among companies to business-to-government (B2G) ones, introducing innovative processes in public administrations (PAs), based on information and communication technologies (ICTs). According to the i2010 eGovernment Action Plan, two recent European directives (2004/18/EC and 2004/17/EC) committed member states to give the *capability* of carrying out 100% of procurement electronically to all their PAs with the *obligation* of managing electronically at least 50% of spending.

E-procurement should enable significant efficiency improvements in the public healthcare sector, with the reduction of purchasing and administrative costs. Until now, however, most e-procurement initiatives at the country, regional, and local levels met difficulties and did not fully deliver the expected benefits. This is mainly due to the healthcare procurement complexity in terms of variety of goods and number of suppliers and to the resistances of public institutions to technology-based process innovation. Moreover, a different approach to the e-procurement opportunities is required in healthcare to take into account the specific characteristics and peculiar needs of particular supplies.

Following the initial statements, and according to many scholars (Berardi, Calvanese, De Giacomo, Lenzerini, & Mecella, 2003; De Meo, Quattrone, Terracina, & Ursino, 2006) and definitions (e.g., listen to the voice on A.dict.it, 2007) e-procurement should be included in the e-services domain, since:

- it is entirely based on the use of computers and electronic information exchanges (Internet/extranet);
- it involves the cooperation of various organizations, which integrate their services (functionalities) through these means.

It must be noticed, however, that the semantics of many "e" terms is still not universally shared and their meaning is continuously shifting and often incoherent; for instance, the term "e-service" is also applied to the public sector in the narrower sense of a service provided on the Web by an administration to their citizens.

E-procurement-related innovations in technology and organization have been considered mostly for private operators (Kim & Shunk, 2004), particularly marketplaces (Rossignoli, 2004). Fewer works deal with the public sector (Anderson, Juul, & Pedersen, 2003; Devadoss, Pan, & Huang, 2002; Zulfiqar, Pan, Lee, & Huang, 2001); they mainly discuss policies and behaviour of central PAs and central procurement authorities (Hardy & Williams, 2005; Panayioutou, Gayialis, & Tatsiopoulos, 2004; Somasundaram & Damsgaard, 2005). Even fewer are the studies on the public healthcare sector, particularly at the local operating level, where e-procurement solutions must be actually implemented, giving rise to changes on structures and knowledge already acting within each organization, thereby requesting different approaches.

Here, a case is presented that deals with an experience of e-procurement implementation promoted by the Italian Local Healthcare Public Agency (LHA) of Viterbo. This case is particularly interesting for the comprehensive design of the e-procurement system, the differentiation of the adopted tools, the long-lasting experimentations (since 2000), and the multiple solutions implemented or in progress. The decision to examine this case is also due to the following facts: the use of e-procurement tools is seen just as one aspect of a deep reorganization of the entire supply process; most performed initiatives were followed by a detailed assessment of their outcomes.

The history and key features of this experience will be examined in detail up to the ongoing project aimed at a wide e-procurement implementation. A framework of healthcare spending characteristics is also introduced in the beginning, together with a taxonomy of e-procurement tools in public healthcare sector.

HEALTH CARE SPENDING AND E-PROCUREMENT

Health Care Spending

About 27% of the public healthcare spending in Italy is for the "purchasing of goods and services," frequently named "intermediate healthcare consumptions" (Regional Healthcare Services Agency, 2005). When referring to the whole Ital-

17 more pages are available in the full version of this document, which may be purchased using the "Add to Cart" button on the publisher's webpage: www.igi-global.com/chapter/introducing-procurement-local-healthcare-agency/49987

Related Content

A User Driven Learning Environment in Botany
J. M. Garg, Dinesh Valkeand Max Overton (2011). *User-Driven Healthcare and Narrative Medicine: Utilizing Collaborative Social Networks and Technologies (pp. 255-275).*
www.irma-international.org/chapter/user-driven-learning-environment-botany/49258

Prediction of Environmental Pollution Using Hybrid PSO-K-Means Approach
Manish Mahajan, Santosh Kumarand Bhasker Pant (2021). *International Journal of E-Health and Medical Communications (pp. 65-76).*
www.irma-international.org/article/prediction-of-environmental-pollution-using-hybrid-pso-k-means-approach/267955

Agent-Based Wellness Indicator
Chitsutha Soomlekand Luigi Benedicenti (2013). *Telehealth Networks for Hospital Services: New Methodologies (pp. 300-330).*
www.irma-international.org/chapter/agent-based-wellness-indicator/74657

Using Interaction Design to Improve Usability of a PHR User Interface Based on Visual Elements
Stefano Forti, Barbara Purinand Claudio Eccher (2009). *Patient-Centered E-Health (pp. 127-142).*
www.irma-international.org/chapter/using-interaction-design-improve-usability/28006

Support Vector Machine Classification applied on Weaning Trials Patients
B.F. Giraldo, A. Garde, C. Arizmendi, R. Jané, I. Diazand S. Benito (2008). *Encyclopedia of Healthcare Information Systems (pp. 1277-1282).*
www.irma-international.org/chapter/support-vector-machine-classification-applied/13074