ABSTRACT

OZTURK, ALI OSMAN. The Experience of Turkish Public Hospitals in Enhancing Performance through New Public Management: The Role of ISO 9001 Certification (Under the direction of James E. Swiss)

Since the 1990’s, Turkish public sector organizations, like their counterparts around the world, have been in search of better ways to improve their effectiveness, efficiency, and quality of services. In pursuit of improved management, a number of Turkish public hospitals have secured ISO 9001 certification. This study attempts to answer four main research questions: (1) to what extend have ISO certified government hospitals actually implemented new management measures? (2) Do the quality and performance improvement initiatives in Turkish government hospitals via ISO 9001 certification lead to improved performance? (3) What are the impacts of national and organizational culture on Turkish results-based improvement initiatives? (4) How have political forces -- both external and internal-- affected the implementation and success of the management reforms?

The qualitative analysis of 46 semistructured interviews indicates that customer feedback, employee participation in decision-making, and employee training were used more widely at certified hospitals than at non-certified hospitals. However, certified hospitals were not more likely to implement performance (outcome) measurement or reward and recognition systems.

The implemented management reforms did not lead to major improvements in measured performance. Increasing bed occupancy rate was the only performance category in which certified hospitals outperformed those non-certified hospitals, while there was no significant difference between performances of both groups in following categories: the bed occupancy rate, the number of outpatients per physician, the number of surgical operations per specialist, and crude death rate.

The inconsistent record of improvement may be explained in part by obstacles of organizational culture. Further qualitative analyses indicate that Turkish national and organizational cultures have had positive impacts on employee participation in decision-making, but also lead to negative impacts, such as low power sharing practices among hospital employees, weak
performance measurement practices and reward mechanisms, and the lack of long term strategic plans at Turkish hospitals.

The study indicates that the reforms produced important shifts in the internal political alignments including decreasing doctors’ power within the Turkish hospitals. Also, it suggests that the reforms’ future will depend on critical external political battles between the bureaucratic elites defending centralized public administration and the reformist government promoting decentralized public administration. One aspect of this political battle, unique to Turkey, is that the bureaucratic elites have used charges of Islamic religious domination to fight the decentralization reforms.
The Experience of Turkish Public Hospitals in Enhancing Performance Through New Public Management: The Role of ISO 9001 Certification

by

Ali Osman Ozturk

A Dissertation submitted to the Graduate Faculty of North Carolina State University in partial fulfillment of the requirements for the Degree of Doctor of Philosophy

Public Administration

Raleigh

APPROVED BY

-------------------------------------

James E. Swiss
(Chair of Advisory Committee)

-------------------------------------

Michael L. Vasu

Dennis M. Daley

-------------------------------------

J. Oliver Williams

Omer Gokcekus
BIOGRAPHY

Ali Osman Ozturk received his B.A. in Public Management from School of Political Science and his M.A. in Social Politics and Industrial Relations of European Union from School of Economics at Istanbul University (Istanbul, Turkey). He worked as Teaching Assistant in the Department of Political Science and Public Administration at the North Carolina State University from 2002 to 2005. His research interests include new public management, results-based management, organizational culture, organizational behavior and politics, cross-cultural applications of results-based management, and European Union administration.
DEDICATION

This dissertation is dedicated to my wife NILGUN and my son AHMET BABA OZTURK. Without their unconditional love and enormous endurance throughout my Ph.D. studies, it would have been impossible to finish this marathon in a foreign land. I also dedicate this study to my family members: my father Sevket, my mother Gulhizar, my brother Fevzi and my sister Vasfiye Ozturk for their constant prayers and encouragements.

Last but not least, I want to dedicate this work to my mentors who inspired me to fulfill my ultimate dream; Dr. Numan and Sevgi KURTULMUS. I am truly humbled and empowered by their support and guidance throughout my studies.
## TABLE OF CONTENTS

### LIST OF TABLES................................................................................................. xi

### LIST OF FIGURES............................................................................................. xiii

### LIST OF GRAPHICS.......................................................................................... xiv

### CHAPTER 1: INTRODUCTION TO THE STUDY ................................................. 1

**INTRODUCTION** ........................................................................................................ 1

*Overview of the Chapter* ............................................................................................ 2

**OBJECTIVES OF THE STUDY** ............................................................................... 2

**RATIONALE OF THE STUDY** ............................................................................... 3

**RECENT MANAGEMENT REFORMS IN TURKEY** ............................................... 4

**TRENDS IN TURKISH HEALTH CARE SYSTEM** ................................................ 6

**THE TURKISH PUBLIC HEALTH CARE SYSTEM** .................................................. 10

**MANAGEMENT AND FINANCE OF MOH HOSPITALS** ....................................... 12

  - Revolving Funds Applications at Hospitals .................................................. 14

**INTERNATIONAL ORGANIZATION FOR STANDARDIZATION STANDARDS** ..... 15

**THE COMPONENTS OF ISO 9001: 2000 IN GREATER DETAIL** ......................... 16

  - *Management responsibility (Clause 5)* .................................................. 17

  - Management Commitment (Clause 5.1) .................................................. 17

  - Customer focus (Clause 5.2) .............................................................................. 18

  - Quality policy (Clause 5.3) .............................................................................. 18

  - Planning (Clause 5.4) ...................................................................................... 18

  - Responsibility, authority and communication (Clause 5.5) ......................... 19

  - Management review (Clause 5.6) .................................................................. 20

  - *Resource management (Clause 6)* .......................................................... 20

  - Provision of resources (Clause 6.1) .......................................................... 21

  - Human resources (Clause 6.2) ..................................................................... 21

  - Infrastructure (Clause 6.3) ............................................................................ 21

  - Work Environment (Clause 6.4) ................................................................... 22

  - *Product realization (Clause 7)* .............................................................. 22
**Measurement, analysis, and improvement (Clause 8)** ................................................................. 22

**CHAPTER 2: REVIEW OF THE LITERATURE** ................................................................. 24

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>INTRODUCTION</td>
<td>24</td>
</tr>
<tr>
<td>BENEFITS AND DETRIMENTS OF ISO 9001 CERTIFICATION</td>
<td>24</td>
</tr>
<tr>
<td>HOSPITAL QUALITY IMPROVEMENT EFFORTS IN DEVELOPED COUNTRIES</td>
<td>27</td>
</tr>
<tr>
<td>Health Care Quality Efforts: North America and Australia</td>
<td>28</td>
</tr>
<tr>
<td>Quality Management in European Health care</td>
<td>29</td>
</tr>
<tr>
<td>ISO 9001 AS A BRIDGE TO IMPROVED MANAGEMENT IN TURKISH PUBLIC HOSPITALS</td>
<td>30</td>
</tr>
<tr>
<td>TENETS OF NEW PUBLIC MANAGEMENT</td>
<td>32</td>
</tr>
<tr>
<td>NPM IN DEVELOPED COUNTRIES</td>
<td>34</td>
</tr>
<tr>
<td>New Public Management Lessons from Australia and New Zealand</td>
<td>35</td>
</tr>
<tr>
<td>National Performance Review Initiatives in the American Public Sector</td>
<td>35</td>
</tr>
<tr>
<td>ORGANIZATIONAL CULTURE, NATIONAL CULTURE AND NEW MANAGEMENT APPLICATIONS</td>
<td>38</td>
</tr>
<tr>
<td>What is Organizational Culture and Why is It Important?</td>
<td>38</td>
</tr>
<tr>
<td>Organizational Culture and New Public Management Practices</td>
<td>41</td>
</tr>
<tr>
<td>ORGANIZATIONAL CULTURE IN THE PUBLIC ORGANIZATIONS</td>
<td>43</td>
</tr>
<tr>
<td>Some Empirical Studies of Organizational Culture in the Public Sector</td>
<td>44</td>
</tr>
<tr>
<td>What is National Culture?</td>
<td>45</td>
</tr>
<tr>
<td>THE TURKISH CONTEXT: NATIONAL AND ORGANIZATIONAL CULTURE</td>
<td>48</td>
</tr>
<tr>
<td>THE LINK BETWEEN NATIONAL AND ORGANIZATIONAL CULTURE</td>
<td>51</td>
</tr>
<tr>
<td>EXTERNAL AND INTERNAL POLITICS OF MANAGEMENT REFORMS</td>
<td>52</td>
</tr>
<tr>
<td>External Politics of Management Reforms: Changing Power Relations</td>
<td>53</td>
</tr>
<tr>
<td>Organizational Politics: Winning or Losing Influence</td>
<td>55</td>
</tr>
<tr>
<td>Rational Choice and Principal Agent Theory</td>
<td>57</td>
</tr>
</tbody>
</table>

**CHAPTER 3: RESEARCH DESIGN** ........................................................................ 59

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>INTRODUCTION</td>
<td>59</td>
</tr>
<tr>
<td>RESEARCH QUESTIONS AND HYPOTHESES OF THE STUDY</td>
<td>60</td>
</tr>
<tr>
<td>Hypotheses about management implementation tools</td>
<td>60</td>
</tr>
<tr>
<td>Hypotheses about process improvement</td>
<td>61</td>
</tr>
<tr>
<td>Hypothesis about results improvement</td>
<td>61</td>
</tr>
</tbody>
</table>
CHAPTER 4: QUANTITATIVE FINDINGS: THE IMPACT OF ISO CERTIFICATION ON PERFORMANCE OF MOH HOSPITALS

PERFORMANCE OF CERTIFIED AND NON-CERTIFIED HOSPITALS IN REDUCING THE AVERAGE LENGTH OF STAY ................................................................. 77

Changes in the ALS Values from 1993 to 2003 ..................................................................................................................... 78

Testing Statistical Differences in the ALS Group Means ........................................................................................................... 80

PERFORMANCE OF CERTIFIED AND NON-CERTIFIED HOSPITALS IN INCREASING THE BED OCCUPANCY RATE ................................................................. 81

Changes in the BOR Values from 1993 to 2003 ..................................................................................................................... 81

Testing Statistical Differences in the BOR Group Means ........................................................................................................... 84

PERFORMANCE OF CERTIFIED AND NON-CERTIFIED HOSPITALS IN INCREASING THE NUMBER OF OUTPATIENTS PER PHYSICIAN ................................................................. 86

Changes in the OpP Values from 1993 to 2003 ..................................................................................................................... 87

Testing Statistical Differences in the OpP Group Means ........................................................................................................... 89

PERFORMANCE OF CERTIFIED AND NON-CERTIFIED HOSPITALS IN INCREASING THE NUMBER OF SURGICAL OPERATIONS PER PHYSICIAN ................................................................. 90

Changes in the SOpS Values from 1993 to 2003 ..................................................................................................................... 90
CHAPTER 6: EXTERNAL AND INTERNAL DETERMINANTS OF TURKISH HEALTH CARE REFORM .................................................................................................................................161

THE PATH OF CURRENT NPM INITIATIVES IN TURKEY .................................................. 162
Lack of “Market” Forces and “Exit” Options in Stimulating NPM Initiatives in the Turkish Health Care Sector ................................................................................................................. 163

CURRENT IMPLEMENTATIONS AND FUTURE BATTLES IN TURKISH HEALTH CARE166
NPM in Turkish Health Care Context: Transformation in Health Program.................. 166
Impacts of NPM Practices at the Central and Local Health Care Organizations ...... 167
Clarifying Responsibilities of Central and Local Health Care Administration.............. 168
Enhancing Performance of Hospitals via Decentralization........................................... 169

LOOKING AT THE MOTIVES OF EACH IMPORTANT ACTOR: WHO GETS WHAT? ...... 169
A Top-down Reform Approach with an Insignificant Internal Resistance in MoH ...... 169
Intercepting Physicians’ Double Dipping Practices ..................................................... 171
The President’s Stand on NPM Initiatives of the Government ................................... 173
Objections of Secularist Bureaucratic Elite and the Current Opposition Party........... 175
The Electorate and The Parties.................................................................................. 177
Labor Unions’ and Interest Groups’ Critiques on Reforming Health Sector................. 177

CONCLUSION....................................................................................................................179

CHAPTER 7: SUMMARY OF FINDINGS, IMPLICATION OF RESEARCH RESULTS AND FUTURE RESEARCH DIRECTIONS ..........................................................180

SUMMARY OF FINDINGS ................................................................................................. 180
Management Improvement Tools Implementation Measures at MoH Hospitals......... 180
Performance Differences between ISO Certified and Non-certified Hospitals ........... 181
Reciprocal Relations of Organizational Culture and Management Implementation Measures at Certified MoH Hospitals.............................................................. 182
Identifying Supporters and Resisters of the Turkish Public Sector Reform............... 183

PRACTICAL IMPLICATIONS OF RESEARCH RESULTS ..................................................185
Centralization versus Decentralization of Health Care System............................... 185
Specific Suggestions for Further Improvements at Certified Hospitals.................... 186
Contribution of The Study to the Literature................................................................. 189

FUTURE RESEARCH DIRECTIONS .................................................................................190
# LIST OF TABLES

Table 1.1: Demographic indicators of Turkey in 2003 .......................................................... 7

Table 1.2: Selected Health Indicators of Turkey in 2003 ........................................................ 7

Table 1.3: Distribution of Public Hospitals in Turkey in 2003 ............................................. 11

Table 3.1: The Nine MoH Hospitals with ISO 9001 Certification ....................................... 72

Table 3.2: The Nine MoH Hospitals without ISO 9001 Certification .................................. 72

Table 3-3: The Four MoH Hospitals ISO 9001 Certification .............................................. 73

Table 4.1: The Average Length of Stay Changes in the ISO Certified and Non-certified Hospitals from 1993 to 2003 .............................................................................. 79

Table 4.2: Group Statistics of the Average Length of Stay (Day) for the ISO Certified and Non-certified MoH Hospitals from 1993 to 2003. ..................................................... 80

Table 4.3: The Bed Occupancy Rate (%) Changes in the ISO Certified and Non-certified Hospitals from 1993 to 2003 ................................................................. 83

Table 4.4: Group Statistics of the Bed Occupancy Rate (%) for the ISO Certified and Non-certified MoH Hospitals from 1993 to 2003. ......................................................... 84

Table 4.5: Independent T-test for Equity of BOR Group Means between the ISO Certified and Non-certified Hospitals .................................................................................. 85

Table 4.6: The number of Outpatients per Physician Changes in the ISO Certified and Non-certified Hospitals from 1993 to 2003 ................................................................. 88

Table 4.7: Group Statistics for the OpP of the ISO Certified and Non-certified MoH Hospitals from 1993 to 2003. ...................................................................................... 89
Table 4.8: The number of Surgical Operations per Specialist Changes in the ISO Certified and Non-certified Hospitals from 1993 to 2003 .................................................................92

Table 4.9: Group Statistics for the SOpS of the ISO Certified and Non-certified MoH Hospitals from 1993 to 2003. ...........................................................................................................93

Table 4.10: Independent T-test for Equity of SOpS Group Means between the ISO Certified and Non-certified Hospitals .................................................................................................94

Table 4.11: The Crude Death Rates (%) Changes in the ISO Certified and Non-certified Hospitals from 1993 to 2003 ...........................................................................................................97

Table 4.12: Group Statistics of Crude Death Rate (%) for the ISO Certified and Non-certified MoH Hospitals from 1993 to 2003. .................................................................................................98

Table 5.1: Summary of Implemented Management Measurements at MoH Hospitals .......130

Table 5.2: Turkish Societal Culture Practices and Inter-Country Rankings Including 62 Societies Worldwide* .......................................................................................................................153
LIST OF FIGURES

Figure 1.1: Organizational model for public hospitals in Turkey.............................12
LIST OF GRAPHICS

Graph 4.1: Changes in the Average Length of Stay (day) Means of the ISO certified and Non-Certified MoH Hospitals from 1993 to 2003..................................................78

Graph 4.2: Changes in the Bed Occupancy Rate (%) Means of the ISO certified and Non-Certified MoH Hospitals from 1993 to 2003 .................................................................82

Graph 4.3: Changes in the number of Outpatients per Physicians Means of the ISO Certified and Non-Certified MoH Hospitals from 1993 to 2003 .............................................87

Graph 4.5: the Crude Death Rates (%) Changes in the ISO Certified and Non-certified Hospitals from 1993 to 2003. ...............................................................96
CHAPTER 1: INTRODUCTION TO THE STUDY

INTRODUCTION

Governments and societies all over the world have faced fundamental changes during the last two decades because of information technology’s rapid progress, more demanding citizens, and the challenges of globalization. In response, many states have reorganized their executive branches, emphasizing elements of New Public Management (NPM).

NPM is an umbrella concept of neomanagerialism that includes various managerial reforms including market-like competition, decentralization, worker empowerment, customer satisfaction, and quality improvement in the public sector. NPM allows reformers in the public sector to choose from a variety of strategies and concepts primarily used in the private sector to enhance public agencies’ effectiveness and efficiency. Like their counterparts around the world, Turkish public sector managers have been influenced by the experiences of private sector management. They have watched as businesses enhanced their productivity and, at the same time, improved the quality of private goods and services.

In Turkey, pressures from international organizations (IMF, the World Bank, and EU) have been responsible for NPM ideas being spread and adopted. Today, a number of public agencies in Turkey have begun to apply new managerial approaches, while many others have still remained neutral towards improvement practices. These new developments in the Turkish public sector have not yet been analyzed to assess the potential effects of different
public management approaches. Accordingly, little information on public sector quality improvement initiatives and their interactions with current organizational culture in Turkish public organizations has accumulated. Hence, this study can serve as a base-line for determining the current path of Turkish public management.

Overview of the Chapter

The study’s primary focus is the effectiveness of ISO 9000 certification in the Turkish public health sector. In this chapter, I begin by setting out the objectives of study. The focus is shift to recent history of management reforms in Turkey in order to establish a base for further discussion in the later chapters. Then I briefly look at the Turkish public health system by reviewing institutional structure of the public hospitals. Finally, I look at fundamental components of ISO 9001 certification in the last section of this chapter.

OBJECTIVES OF THE STUDY

Focusing on management implementation measures at Ministry of Health (MoH) hospitals, the main objective of this study is to examine the effectiveness of ISO 9001 certification and quality improvement initiatives in Turkish public sector organizations. The study also intends to examine current organizational culture of certified hospitals, as well as Turkish national culture, in order to enrich our understanding of the experiences of performance and quality management practices in Turkey today.

Moreover, this study analyzes external and internal determinant of NPM initiatives in the Turkish public sector, particularly in the health care sector, by focusing on the battle among political, institutional, and organizational actors. The findings be useful to elected and appointed Ministry of Health officials for coordinating and guiding new management efforts
in governmental hospitals and may help public sector managers to identify crucial factors that have impacts on the success of quality improvement efforts in public organizations in Turkey.

**RATIONALE OF THE STUDY**

The introduction of effective and efficient management techniques into the Turkish public sector was identified as a priority by the governments elected during 1990s. Attempts to change bureaucratic structures and mechanisms in governmental organizations have been subjected to considerable delays and shortfalls in Turkey, due in part to political and economical crises following two major earthquakes in 1998. Nonetheless, individual public organizations have tried to establish a new management philosophy via ISO 9001 certification.

Although new management ideas in the Turkish public sector have been discussed on the theoretical level by many public sector scholars and managers, empirical studies primarily focusing on the experience of public organizations’ ISO 9001 certification and quality management efforts are few and limited. Available literature about new management techniques used in the Turkish public sector such as ISO certification, total quality management, and performance measurement consists mainly of case studies of single organizations. Moreover, there is no study that examines the culture of public health care organizations and their reciprocal relations with Turkish national culture considering their joint impacts on results-based management initiatives. Also, there is no empirical study on the external and internal politics of Turkish management reform.
ISO 9000 standards are a family of standards aimed at assisting organizations in implementing and operating effective quality management systems for meeting customer expectations and providing consistent delivery. The International Organization for Standardization (ISO), based in Geneva, Switzerland, promotes standardization and other related activities to encourage the international exchange of goods and services. The ISO series were first issued in 1987. Each member country has its own standardization body to issue ISO certifications by independent auditors.

ISO 9000 is currently composed one contractual standard, ISO 9001, and two guidance documents, ISO 9000 and ISO 9004. When an organization wishes to have ISO 9001 certification, it has to complete all requirements listed in the ISO 9001 standard. The other two components of ISO series cannot be used for certification purposes. ISO 9000 only details the vocabulary and terminology used in ISO standards, whereas ISO 9004 offers additional guidelines for performance improvement to organizations that have already certified with ISO 9001.

The ISO 9001 certification model was originally intended for use only in business before the 2000 revision. Now it specifies requirements for a quality management system in all kinds of organizations. In Turkey, both public and private sector managers that intend to introduce the Total Quality Management philosophy into their organizations use ISO standards.

**RECENT MANAGEMENT REFORMS IN TURKEY**

The Turkish private sector’s experience implementing ISO standards and moving through new management applications does not seem to differ from the experience of foreign
counterparts. However, the Turkish public sector has its own unique way of undertaking quality initiatives. This is in part to the fact that political, financial, and administrative aspects of the Turkish public sector have been greatly affected by two major economic crises and by public mistrust of politicians who have failed to deliver promised administrative reforms. In chapter six, this study examined external and internal determinants of NPM initiatives in Turkish public sector and possible impacts of results-based management approach, if the reform be successful, on the MoH and on hospital employees’ practices.

During the second half of the 1990s, many developed countries had already made successful implementations, while Turkish efforts were still in the discussion stage. A wide range of Turkish public sector institutions began to discuss better ways of improving their effectiveness, efficiency, and quality of services by focusing on quality management systems and Total Quality Management. These positive efforts, however, have not reached their ultimate goal: providing successful examples of implemented management techniques at use in the public sector. The main obstacles to implementation were two major financial crises in 2000 and 2001 along with the chronic political instability caused by coalition party governments between 1997 and 2002. The result of November 2002 general elections provided a window of opportunity to public sector reformist in Turkish government. The newly elected one party government showed its concerns for public sector management reform and has paid considerable attention to already implemented techniques in public sector agencies (The Prime Ministry of Turkey, 2003).

Even before the election in 2002, a few Turkish public sector institutions had already employed ISO 9001 requirements, and some of them had been awarded with ISO 9001 certification. There are very few empirical studies analyzing the accomplishments or failures
of public organizations using quality management systems in Turkish public sector. Previous empirical studies have been mainly interested in the experience of a single public organization, but the unique findings of case studies for an individual organization cannot provide comprehensive and plausible conclusions regarding broad ISO 9001 certification efforts. This study examines a number of similar public sector organizations (hospitals), which are structured under the same governmental institution (The Ministry of Health), in order to learn more about the results of quality and performance improvement efforts in Turkey.

TRENDS IN TURKISH HEALTH CARE SYSTEM

This section discusses the Turkish public sector’s recent economical, social, and health indicators. According to the World Bank Turkey country report for 2002, Turkey achieved real economic growth of 4-5 percent in the face of chronically high inflation until the late 1990s. Beginning in 1999, Turkey suffered with lower growth rates (6.3 percent in 2000 and -9.5 percent in 2001) and increased unemployment rates (officially from 6.6 percent to 8.5) when authorities tightened macroeconomic policies. With positive atmosphere and strong sense of reform created by the new Government, GNP growth reached 7.8 percent although the unemployment rate increased to 10.6 percent (World Bank country report, 2003).

The sense of economic crisis accelerated needed reforms and brought an unprecedented sense of urgency since 2000 to authorities and citizens of Turkey. As a result, as highlighted by OECD experts, “there [has been] a growing realization in the country that Turkey must modernize its public institutions and regulatory framework in order to provide favorable
conditions for the growing private sector, deliver better services and to improve its prospects for EU entry (OECD, 2004).”

**Table 1.1: Demographic indicators of Turkey in 2003**

<table>
<thead>
<tr>
<th>Indicator</th>
<th>2003</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total population (millions)</td>
<td>69.3</td>
</tr>
<tr>
<td>Annual population growth rate (%)</td>
<td>1.2</td>
</tr>
<tr>
<td>Urban population (as % of total)</td>
<td>66.2</td>
</tr>
<tr>
<td>Population under age 15 (as % of total)</td>
<td>31.2</td>
</tr>
<tr>
<td>Population aged 65 and above (as % of total)</td>
<td>5.6</td>
</tr>
<tr>
<td>Total fertility rate (per woman)</td>
<td>2.4</td>
</tr>
</tbody>
</table>


**Table 1.2: Selected Health Indicators of Turkey in 2003**

<table>
<thead>
<tr>
<th>Indicator</th>
<th>2003</th>
</tr>
</thead>
<tbody>
<tr>
<td>Population with access to improved sanitation (%)</td>
<td>90</td>
</tr>
<tr>
<td>Population with sustainable access to an improved water source</td>
<td>82</td>
</tr>
<tr>
<td>Population with sustainable access to affordable essential drugs</td>
<td>95-100</td>
</tr>
<tr>
<td>One-year-olds fully immunized (%)</td>
<td></td>
</tr>
<tr>
<td>Against tuberculosis</td>
<td>89</td>
</tr>
<tr>
<td>Against measles</td>
<td>90</td>
</tr>
<tr>
<td>Births attended by skilled health personnel (%)</td>
<td>81</td>
</tr>
<tr>
<td>Physicians (per 100,000 people)</td>
<td>127</td>
</tr>
<tr>
<td>Health expenditure</td>
<td></td>
</tr>
<tr>
<td>Public (% of GDP)</td>
<td>3.6</td>
</tr>
<tr>
<td>Private (% of GDP)</td>
<td>1.4</td>
</tr>
</tbody>
</table>


The above tables, table 1.1 and 1.2, present selected demographic and health indicators for 2003. While Turkey’s population has almost reached seventy million with a 1.2 growth rate,
total health expenditures in both public and private sector has not exceed 5% of GDP. It can be detected that Turkey is also struggling with insufficient numbers of available skilled health professionals with about 745 Turkish citizens for per physician, which is almost two times higher than the EU member country average (http://who.dk/document/EHR/E7690).

While there is an established network of primary care infrastructure throughout the country, the quality of services provided is questionable. The geographical distribution of secondary and tertiary health services and personnel is uneven, and secondary and tertiary centers in urban areas tend to be used for primary care purposes. One third of hospital beds and almost half of all doctors are concentrated in the three largest cities, and there are fewer personnel per capita in less developed regions of the country.

The European Union (EU) has unique and specific requirements in health services, which do not consider whether provision of that care is in the public or private sphere. Although Turkey applied to EU for a full membership in 1988, it took more than a decade to be recognized as a candidate state destined to join EU. The EU offers an Accession Partnership to its candidate states in order to assist them towards EU membership. Revised in 2003 by the EU Commission, it provides the basis for a number of policy instruments which will be used to help Turkey to pursue its reform process and take further steps in the implementation process. One of the medium term priorities in social policy area mentioned in the 2003 Accession Partnership report for Turkey is to “take measures to promote access to and quality of health care and to improve the health status of the population” (http://www.mfa.gov.tr/grupa/ad/).
The European Commission, Employment and Social Affairs published “Turkey Country Study” as a part of “Study of the Social Protection Systems in the 13 Applicant Countries” in 2003. In this study, it is suggested that Turkey, due to several interconnected issues, has a long way to go in enhancing the delivery of (health care) services by using strategies to improve quality and efficiency. Inequitable access to health care, insufficient preventive measures, inefficient use of actual resources in the health care sector, and ineffective public governance on health related issues are determined as problematic areas in the Turkish health care system. The same study concludes that although there have been reforms programs, their impacts seem to remain marginal (http://europea.eu.int/comm/....) Hence, Turkey also has to develop new policies and use new management techniques to achieve requested health care status with current EU member countries.

The style of political governance in Turkey has dramatically changed over the last decade due to the impact of the democratization movement, the development of relationships with the European Union, and the content and frequency of conflicts linked to natural disasters and economic instability. Turkish voters have, for first time in a decade, elected a single-party government that seems to be very concerned with administrative reforms. The Turkish government has declared the Public Management Reform initiative, the biggest reform movement in the history of Turkish public sector, in accord with European Union membership requirements for candidate countries. This reform initiative in the Turkish public sector is comparable to the National Performance Review and reinventing government movement in the U.S. These reform efforts are attempts by public sector practitioners and researchers to bridge the democratic, economic, social, and strategic gaps between the Turkish public its European and American counterparts (Prime Ministry of Turkey, 2003).
Although some individual hospitals’ attempts to follow ISO standards to get quality assurance certification before 1998, since that date public hospitals have been directed by central government to coordinate and support quality assurance and quality management efforts. As a result, the Ministry of Health has launched regional training activities to introduce quality management philosophies and methods for its health care personnel.

**THE TURKISH PUBLIC HEALTH CARE SYSTEM**

Turkish public health care organizations have a mixed and complex organizational structure. The central government in Turkey has strong legislative and executive power to coordinate and allocate all kinds of resources and to provide health care services by public hospitals. The Ministry of Health (MoH) is responsible for public health policy and services at the central level in Turkey, while provincial health directorates, accountable to MoH via provincial governors, administer health services at the local level.

Although this study focuses on ISO 9001 certified Ministry of Health hospitals, public sector hospitals are not exclusively administered by the MoH. The MoH runs general hospitals that provides acute care services by accepting in-patients and out-patients, some specialist hospitals (such as maternity, chest disease, children’s, cardiovascular, and physiotherapy, etc.), rehabilitation centers, and few education and research hospitals. But the Social Insurance Institution hospitals, the Military hospitals, the medical schools, and the few hospitals administered by different Ministries also provide health care services for out-patients and in-patients in Turkey.

Table 1.3 summarizes the distribution of public hospitals in 2003 according to their institutional arrangements in the central government. The MoH is the major provider of
primary and secondary health care and the only provider of preventive health services in Turkey\textsuperscript{1}. MoH hospitals consist of 74\% of public hospital, and therefore, this study focuses on the biggest public health care provider in Turkey.

**Table 1.3: Distribution of Public Hospitals in Turkey in 2003**

<table>
<thead>
<tr>
<th>Organization</th>
<th>Number of Hospital</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ministry of Health</td>
<td>668</td>
</tr>
<tr>
<td>Social Insurance Institutions</td>
<td>121</td>
</tr>
<tr>
<td>University Hospitals</td>
<td>50</td>
</tr>
<tr>
<td>Ministry of Defense</td>
<td>42</td>
</tr>
<tr>
<td>Other</td>
<td>19</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>900</strong></td>
</tr>
</tbody>
</table>


In the case of private providers of health care in Turkey, there were a few private hospitals established by ethnic minorities before the economic liberalization of the late 1980s. Since then, the government has provided substantial incentives for investment in private hospitals. As a result of rapid increase, Turkey had 83 private hospitals in 1981 and 272 in 2003 (MoH, 2003 health statistics, p. 55).\textsuperscript{2}

---

\textsuperscript{1} The current Turkish Government combined SII hospitals with MoH hospitals as of January 2005 with a legislation (Legislation No.5283). This was a predetermined step towards the latest health care reform movement: Transformation in Health aiming to establish less complex, but more accessible health care system in Turkey.

\textsuperscript{2} A number of well-established private hospitals offer integrated diagnostic and outpatient services and comfortable inpatient hotel facilities to attract fee-for-service patients. Most private hospitals established after the late 1990s are located in cities with large populations as Istanbul, Izmir and Ankara. Some of them prefer to build their facilities in less developed areas of these cities and provide an inexpensive and poor quality services in order to attract low income patients. However, growth of private sector hospitals has slowed since the economic crisis of 2001 (Savas et al., 2002: HiT Summary: Turkey, 2004).
MANAGEMENT AND FINANCE OF MOH HOSPITALS

Turkish public sector health care organizations are characterized by a hierarchical organizational structure with limited managerial, financial, and organizational autonomy. A chief doctor assisted by a chief nurse and a hospital manager heads a MoH hospital. Since the main criteria for selection of the head physician are generally length of service and reputation as doctor, rather than managerial capacity, many head physicians lack management skills. The manager of the hospital is in charge of financial, technical and some personnel matters on a daily basis. All health personnel are recruited and assigned to specific hospitals centrally by MoH (World Bank, 2003a; World Bank, 2003b).

Figure 1.4 shows the organizational structure of general public hospitals. Dominant characteristics of such an organizational model dictate span-of-control and top-down communication style with limited lower level participation in decision-making processes.

**Figure 1.1: Organizational model for public hospitals in Turkey**

![Organizational Model Diagram]

**Source:** Sarp et al., (2002).

As a component of highly centralized public health care system, the organizational mission and purpose of MoH hospitals are essentially established through legislation with limited or
no consideration of health care personnel at organizational level. Legislation appears to be more prescriptive than enabling, and the focus of organizational thinking is more on service delivery and managing within the system rather than developing vision and mission statements, and strategic plans (World Bank, 2003b).

A Personnel Directorate within the Ministry of Health carries out recruitment and placement of staff for all these facilities. Remuneration is done in accordance with the Law of Civil Servants, which establishes a pay scale based mainly on education, duration of public service and job title. Public employees are granted lifetime employment. Individual hospitals or provincial health managers have little autonomy to recruit, fire, or administer their own staff under the current centralized decision-making scheme of MoH (Giray, 2003).

In terms of training activities, top management of each hospital can design and conduct necessary training activities. Hospital personnel including nurses, assistant medical personnel, and contractual hospital personnel are subject periodic training about nursing, management-personnel relationships, and personnel-patient relationships (The Circular of Inpatient Medical Institutions of MoH, 2001/3).

Public sector salaries in Turkey at all levels of employment are set by the central government. There are no pay negotiations; the government determines salaries unilaterally. Pay increases are subject to budgetary constraints and predicted inflation rates for the year (World Bank, 2003a).

The Ministry of Health operates within an annual budget, with accountability to the Ministry of Finance. Hospital managers do not have any flexibility to shift resources between and across expenditures categories. If resources are under-spent in a particular category of expenditure, lengthy procedures must be followed to amend formally the MoH budget before
additional expenditures can be authorized. One example of this occurred when international funding was allocated to the sector after the 1999 earthquake. Expenditures could not take place in the absence of amendments to MoH’s budget, which took several months to process after the emergency (World Bank, 2003b).

**Revolving Funds Applications at Hospitals**

In principle, treatment at MOH primary care facilities provided by the health posts is currently free of charge and open to everybody, regardless of whether they are affiliated with one of the insurance schemes or not. Patients do, however, have to pay for medicines to the extent that these are provided by the facility (World Bank, 2003a). Revolving fund revenues are basically fees paid for the secondary care services (including general and specialty hospitals) by individuals or third party insurers. Fees paid for the health services are determined by a commission consisting of Ministry of Health and Ministry of Finance representatives without considering the actual cost of the services (Giray, 2003).

While revolving funds are collected and kept in the facilities, MoH hospitals managers are bound by guidelines from the Ministry of Health Directorate of Curative Services. MoH hospitals that can generate revenue out of their medical and hospital services have been eligible to apportion up to 50% of their revolving funds out among hospital personnel according to related legislation passed in 2001 (World Bank, 2003b). The distribution of revolving found bonuses among hospital personnel is calculated based on a “prescribed” formula that is arranged by the MoH considering individual member's rank in the hospital, working time and conditions and several process based indicators, such as number of examined patients, number of surgical operations, or number of cesareans.
INTERNATIONAL ORGANIZATION FOR STANDARDIZATION STANDARDS

I end this chapter by focusing on the International Standard Organization Standards and particularly to the four main components of ISO 9001. The International Organization for Standardization (ISO) was formed by the United Nations in 1947. However, ISO is a nongovernmental organization and is not an arm of the United Nations. It is a worldwide federation of standards organizations from 135 countries that has no formal authority to impose its standards. Standardization remains a governmental function in most member countries. Therefore, almost all of member bodies, except American National Standards Institute in the US, are government organizations that have also administered and coordinated ISO certification. Its first international quality standard, ISO 9000:1987 was updated to become ISO 9000:1994 in 1994. The current revision of ISO standards occurred in December 2000. Today the family of ISO standards contains three components: ISO 9000, ISO 9001, and ISO 9004. In the family of ISO standards only ISO 9001 can be used for certification purposes while ISO 9000 and ISO 9004 provide guidelines only.


The second component of ISO standards, ISO 9001:2000, details the requirements for a quality management system that can be used for certification. ISO 9001 is designed to facilitate assessment, it is the standard to which organizations must demonstrate compliance if they are to be certified by an accredited assessment body. ISO 9001 recommends the essential elements of quality management systems, without offering particular ways to apply...
them. Each organization must develop its own system according to its special needs and the requirements of ISO 9001 standard. I further examined its components in the following section.

ISO 9004:2000 is the third component of ISO standards. It has been developed to complement ISO 9001:2000 in order to guide organizations that are eager to continually improve their performance. ISO 9004 give guidance on a wider range of objectives of a quality management system and contains helpful information for exceeding ISO 9001 requirements (ISO 9000 Quality Management, 2001).

**THE COMPONENTS OF ISO 9001: 2000**

ISO 9001:2000 identifies the requirements for a quality management system that can be used for certification, contractual or internal audit purposes. Organizations willing to be certified by an accredited assessment body must demonstrate compliance to the ISO 9001:2000 standard. ISO believes that if organizations manage a system of interlinked processes, they be more effective. In other words, ISO offers a process-focused approach to organizations by looking at the system as a whole. ISO 9001:2000 paragraph (0.2) defines a ‘process-focused’ approach as follows: “For an organization to function effectively, it has to identify and manage numerous linked activities.” An activity using resources is managed in order to enable the transformation of inputs from one process into an output that may be the direct input of the next process (ISO Standards Compendium, 2001). Moreover, customers play a significant role in determining requirements as inputs with a process-based quality system. According to ISO 9001: 2000, a process-focused approach in the quality management system can be established by: (a) understanding and fulfilling requirements; (b) considering
processes in terms of added value; (c) obtaining performance and effectiveness level of the processes; (d) continually improving the processes based on objective measurement.

ISO 9001:1994 has four main sections: management responsibility, resource management, product realization, and measurement, analysis and improvement (ISO Standards Compendium, 2001). I consider each of these four main components of ISO 9001 below.

**Management responsibility (Clause 5)**

This requirement of ISO 9001 includes six related issues in connection with the quality management system. These are (5.1) management commitment, (5.2) customer focus, (5.3) quality policy, (5.4) planning, (5.5) responsibility, authority and communication, and (5.6) management review.

**Management Commitment (Clause 5.1)**

The management responsibility requirement of ISO 9001 emphasizes the importance of leadership, commitment, and the active involvement of the top management for developing and maintaining an effective and efficient quality management system. In this regard, managers should consider actions to establish, sustain, and increase customer satisfaction in order to reach desired benefits from a quality management system via ISO 9001 certification. Other responsibilities of managers include: describing the quality policy in vision and mission statements, planning actions and activities to achieve quality policy goals by communicating with interested parties in an organization, and reviewing periodically what has been reached.

Top management of hospitals must develop a mission and vision statement in order to convey a clear definition and understanding of what is needed to attain their quality
management system. For instance, a mission statement of a hospital may be “to enhance excellence of our hospital health care services with the highest ethical principles.” A vision statement may also be “to maintain our custom of pursuing the confidence and esteem of our patients.”

**Customer focus (Clause 5.2)**

Top managers should ensure that requirements of internal and external customers are determined, understood, and met with the aim of enhancing customer satisfaction by using surveys, focus groups, and formal and informal gatherings. Internally, hospitals’ top management must identify the needs and expectations of medical staff, administrators, and other personnel for recognition, work satisfaction, and personal development.

**Quality policy (Clause 5.3)**

Top management of hospital ought to create a quality policy as a means of leading the hospital toward the continual improvement and performance of the quality system. An example of such a quality policy for a given hospital would be: “In accordance with our mission and vision statement, our management philosophy and quality policy are: (1) to guarantee continuous improvement of patient care and hospital management standards, (2) to ensure the safest and the most reliable medical treatment in the country to all our patients, (3) to create and maintain a desirable working environment for physicians and other medical staff, (4) …”

**Planning (Clause 5.4)**

Senior management of the hospital should also determine the quality objectives of the hospital, specify the necessary processes, and identify the resources necessary to operate and
support the process. Quality planning must be linked to and supportive of the hospitals’ strategic plan that defines the strategies to be employed over a one to five year period in order to lead the hospital toward its long range goals. For instance; a hospital may focus on following measurable quality objectives; “(1) to achieve 85 percent customer satisfaction rate as determined via our customer surveys over a one-year period ending next January 31, (2) to reduce the average length of stay per patient from 12 days to 8 days by June 2005, (3) to diminish outpatient readmission rate from 65 per cent to 50 per cent by June 2005, (4) ….”

**Responsibility, authority and communication (Clause 5.5)**

Additionally, senior management of the hospital needs to provide ample medical, technical, educational, financial, and human resources to pursue goals mentioned in the hospital strategic plan. The roles, tasks, obligations, and authority to act of all physicians, the medical staff and employees of in all departments involved with the QMS should be clearly conveyed. Furthermore, the ISO 9001 standard specifically requires senior management to appoint a management representative, usually called a Quality Assurance Coordinator (QAC), with specific duties. The QAC must ensure that there is adequate awareness of customer requirements throughout the hospital via an effective communication system established by the hospital management. The most important task of a QAC is to report periodically the quality management system’s effectiveness and status to senior management and decide possible remedial actions toward quality objectives.

Internal communication in the hospital may be provided by using different methods such as meetings of entire hospital staff, or of smaller groups, briefing teams, employee surveys and open discussions held by senior management. During meetings, senior managements may review quality objective progress, recognize achievements, and obtain feedbacks related to
the quality management system of the hospital from physicians, medical staff, administrative personnel, and other co-workers.

Management review (Clause 5.6)

Finally, senior management of the hospital is required to review the quality management system at least once per year. According to the ISO 9001 standard, senior management must obtain data for the seven mandatory input items which are about current and available performance and improvement opportunities. For a given hospital, senior management reviews the results of internal and external audits, customer feedback, process performance and service conformance, status of preventive and corrective actions, follow-up actions of earlier management reviews, changes that could affect the quality management system of the hospital, and recommendations for improvement provided via internal and external communication opportunities. Using the input data, senior management must make decisions and take actions to alter the quality management system and its medical and hospital processes, procedures, and policies related to the desire and needs of the hospital patients.

Resource management (Clause 6)

The essential resources of the quality management system are determined in this second section of ISO 9001. Accordingly, top management of organizations must provide adequate resources for operation and improvement of the quality management system and the satisfaction of customers and other interested parties. Resources may be people, infrastructure, work environment, information, suppliers and partners, natural resources and financial resources. In Clause 6 of ISO 9001, resource management is identified in four
Subtitles: (6.1) provision of resources, (6.2) human resources, (6.3) infrastructure, and (6.4) work environment.

**Provision of resources (Clause 6.1)**

Provision of resources within the hospital is the responsibility of top management and department heads. Senior management must allocate available resources in order to implement, maintain, and continually improve a functional and effective quality management system in a timely manner.

**Human resources (Clause 6.2)**

Hospital management must ensure that human resources of the hospital are competent as shown by appropriate medical education, training, skills and experience. If training of current medical staffs is found to be necessary, the hospital management should organize and conduct training sessions to support them with adequate information and skills in accordance with quality objectives of the hospital.

**Infrastructure (Clause 6.3)**

According to the ISO 9001 standard, hospital management must determine exiting resources should be replaced or upgraded to maintain the quality management system of the hospital. For instance, when the hospital wants to improve on-time treatments processes, it may need to establish an electronic information system by which physicians and specialists can easily access medical history of patients and laboratory results for individual patients. Maintenance services of hospital equipment may be very critical since the preventive maintenance techniques to keep very valuable and expensive medical equipment in shape will impact on accurate medical treatments and cost-effective services in the hospital.
Work Environment (Clause 6.4)

Creating a pleasant work environment for personnel of the hospital is another critical step for the hospital that wants to enhance the satisfaction of its personnel. For instance, ergonomic design of the hospital units, operating theatres, and patient rooms, availability of library facilities and computer infrastructure which is connected intranet and internet, social interaction areas (such as cafeteria, canteens, and TV, rooms etc.), and sufficient and nearby parking areas are all important.

Product realization (Clause 7)

This section of ISO 9001 is mostly about a realization of new product and less likely to be applicable for service provider organizations; it is the only clause within which organizations may obtain exclusions when it is not suitable to the organization’s activities (Goetsch and Davis, p. 115). As hospitals provide health care services and medical treatments, this clause of ISO 9001 seems much less important to apply for hospital services. Therefore, I am not discuss clause any further.

Measurement, analysis, and improvement (Clause 8)

This fourth clause is concerned with demonstrating conformity of the product, the quality management system, and continual improvement by planning, implementing, and monitoring. This section of ISO 9001 is designed to reveal which external customer inputs and internal product and service measurement and analysis should be used by top management for making-fact-based decisions. Although ISO 9001 does not mention the methods and tools for obtaining customer perception and internal measurement and analysis, ISO 9004:2000 suggests the following methods for improving the quality management
system performance: a) satisfaction surveys for customers and other interested parties, b) internal audits, c) financial measurements, and d) self-assessment.

Top management of the hospital should also determine methods best suited to evaluate overall performance in health care services and learn preferences of hospital patients in order to ensure that patients are received desirable health care services and treatments. Although there are a number of statistical-based methods (Goetsch and Davis, 2002) that can be used for evaluating processes and reviewing performance, Appendix I summarizes four of them by considering hospital settings.
CHAPTER 2: REVIEW OF THE LITERATURE

INTRODUCTION

This chapter presents the literature review in order to establish a foundation for this study. It begins with a discussion of benefits and detriments of ISO 9001 certification as a mean of improving quality and performance organizations, and an overview of hospital performance improvement efforts in several developed countries and Turkey. The subsequent sections examine tenets of New Public Management (NPM) and lessons learned in developed countries’ experiences in order to ground our discussions about the concept of NPM in the Turkish public sector as a driving element of reform attempts. The focus shifts in the next section to explore studies that have investigated impacts of organizational and national culture on results-based management initiatives. Finally, this chapter ends with a discussion about external and internal political battles over public sector management reforms in order to determine their impacts on the implementation or success of the reforms.

Benefits and Detriments of ISO 9001 Certification

Since this study attempts to answer the two research questions related to performance of ISO 9001 certified government hospitals, I first want to review the results from recent empirical studies. ISO certification has been widely used by different sectors in different countries for over seventeen years. Like many other quality management approaches, the pros and cons of ISO standardization have been highlighted in the literature. While some researchers and
quality practitioners believe that ISO certification is suitable for only industry-based organizations and too technical for service providing organizations, others believe that it encourages all kinds of organizations to be well-organized, consistent, and effective.

Singles et al. (2001) point out that ISO certification offers both internal benefits which are related to the internal functioning of an organization (such as its processes and structure), and external benefits which are related to an organization’s environment (such as customers and competitors of the organization). Singles et al. argues that an organization with ISO certification may expect the following internal benefits: increased productivity, improved efficiency, reduced costs and waste, improved management control, more clearly-defined organizational task structure and responsibilities, improved co-ordination structure, support in decision making, and increased in personnel motivation. Furthermore, they believe that an ISO certified organization will enjoy the following external benefits: competitive advantage, increased sales and market share, access to new markets, better maintained customer relations, increased customer satisfaction, increased organization reliability, and improved reputation which can result in better possibilities for establishing partnerships, co-makerships, and mergers.

Meanwhile researchers have been warning organizations about possible disadvantages that result from ISO certification. These include extra costs for achieving ISO certification, increase in the record keeping workload, lack of attention for development of personnel, and discouraging creative and critical thinking in organization (Biazzo and Bernardi 2003; Dick, 2000; Martinez-Lorente and Martinez-Costa, 2004; Staines; Seddon, 2000).

Wiele and Williams (2000) argue that there is a wide gap between the requirements of the ISO 9000 series and the actual level of TQM maturity. According to them, the ISO 9000
series organizations are, in general, only aiming at becoming certified to that standard and can simply fulfill ISO 9000 requirements by just describing their key processes. Moreover, they imply that the ISO 9000 series does not demand enough understanding of the way in which the processes relates to the organization’s overall strategy and goals and does not focus on understanding their variation and control. They do state, however, that the ISO 9000 series may help managers understand the language of TQM.

Because of the ISO standards’ great emphasis on procedures and less concentration on meaningful improvements resulting from those procedures, some researchers have seen the ISO certification as no more than a minimum requirement of quality improvement efforts for organizations. In fact, a number of researchers believe that the ISO standards cannot help an organization to improve its quality of services sufficiently unless it is followed by greater quality improvement efforts, such as TQM, strategic planning and performance management. Gotzamani and Tsiotras (2001) focused on true value of ISO 9000 standards to certified companies by conducting an empirical examination of the Greek industry. They conclude that the ISO certification boosts quality culture and quality commitment and offers a number of operational and other benefits to the certified organizations. In fact, they believe that ISO certification can offer a good first step towards TQM.

Biazzo and Bernardi (2003) discussed that the ISO 9000 standards could be considered a possible foundation for TQM because pursuing a strategy of continuous improvement and “competitive quality” makes sense after a minimum level of maturity in controlling processes has been reached.
HOSPITAL QUALITY IMPROVEMENT EFFORTS IN DEVELOPED COUNTRIES

Access and cost of health care services were the two major concerns of governments around the world until health care receivers began to question the quality of health care services during the late twentieth century. Since then, contemporary health care researchers and practitioners have focused more on quality, believing that quality also has a strong impact on health care access and cost. Al-Assaf (2001) emphasizes the key role of quality of health care in providing accessible services in an efficient, cost-effective and acceptable manner. He also adds that a quality service is to be customer-oriented which is achieved when the needs and expectations of the customer are met.

Various managerial reforms have been undertaken to improve the performance of service health care service providers in hospital sector in developed countries (Preker, 2001). Recent surveys of consumers reporting on their most recent hospitalizations as well as quality, availability and affordability of health care in five developed countries found substantial public dissatisfaction with health care (Aiken et al. 2002). In response to research highlighting poor quality and increasing patient expectations, developed and developing countries alike have been in search of ensuring the safety of patients and personnel and improving quality (Ovretveit, 2003). Nowadays, many countries have voluntary and statutory mechanisms for periodic external assessment of health care organizations to assure or improve elements of quality (Shaw, 2001). In this section, I offer a brief examination of developed countries' quality improvement mechanisms and efforts during past two decades.

---

3 Australia, Canada, New Zealand, the United Kingdom, and the United States
Health Care Quality Efforts: North America and Australia

In addition to accreditation efforts, the US hospitals sought better outcomes with limited resources. The health care industry was interested in the new ideas outside its field for solutions. Therefore, continuous quality management and total quality management concepts entered into this industry in the late 1980s. The creation of the Malcolm Baldrige National Quality Award in 1987 accelerated quality movements in the US hospitals. Baldrige is a competitive award with up to a maximum of two winners per year. The set of award criteria is results-oriented and Baldrige supports a systematic approach to maintain goal alignment throughout the organization and goal-based diagnosis of the organization (Kay and Soon, 2000). Recently Health Care Criteria for Performance Excellence has been developed and used several health care organizations in the USA. Shortly, many hospitals and other health care organizations started to implement the principles of TQM and this trend continued

Accreditation is an external activity that evaluates the overall ability of the hospital to provide quality care and looks at facilities, staff, equipment, process and sometimes outcomes. It involves an independent body evaluating the degree of compliance by a hospital with previously determined standards and, if the hospital is adequate, awarding a certificate. Accordingly, accreditation has two different but related goals. The first is to provide a guarantee that a hospital meets a defined minimum standard; the second is a developmental process in which best practice can be exchanged and promoted (McKee and Healy, 2002).

In the United States, accountability for quality has been the responsibility of the voluntary nongovernmental sector, and placed at state and local level for the most part. For instance, hospital eligibility to receive payment for Medicare patients depends on accreditation of hospitals, which is done not by the federal government but, rather through the voluntary Joint Commission on Accreditation of Health care Organizations (JCAHO) (Ferlie and Shortell, 2001). During late 1980, JCAHO begun a gradual refocus of its process-oriented standards towards outcomes. Currently, JCAHO accredits more than 80 per cent of US hospitals. In Canada, accreditation is also voluntary under the Canadian Council n Health Facilities Accreditation, but 95 per cent of hospitals are accredited. The Australian Council on Health care Standards is an independent body that stresses that its role is “evaluative and educative rather than inspectorial or judgmental”. It has already awarded 40 per cent of public hospitals with accreditation for 1, 3 or 5 years after an on-site survey (McKee and Healy, 2002).
throughout the late 1990s. For the first time, the Malcolm Baldrige National Quality Award was given to a health sector organization, the SSSMHC n St Louis, Missouri, in 2003 (Al-Assaf, 2001; Ruiz and Simon 2004).

Nonetheless, empirical studies show that there are few organization-wide TQM programs and no strong evidence about successful implementation in American hospitals. An American study of 67 hospitals using TQM found that patient outcomes were not significantly different compared to hospitals just starting TQM/CQI programs, while another study of 61 hospitals found that TQM programs had largely failed to address professional quality issues (Ovretveit, 2003).

**Quality Management in European Healthcare**

The TQM approach is used by the European Foundation for Quality Management. EFQM was officially founded in 1988 in order to support, encourage and recognize the development of effective total quality management by European companies. The essence of the approach is that the performance has to meet the expectations, needs and demand of the stakeholders (Nabitz, Klazinga, and Walburg, 2000).

In almost all European countries the EFQM Approach is used by health care organizations for self-assessment. However, only in the UK and The Netherlands is a national institute formally supporting the practical work. The British Quality Foundation has published and adapted the EFQM criteria for health care and the Dutch quality institute has developed specific Guidelines for Health care are supported by the minister of health. Other European countries also have quality awards but in most cases they are not directly related to the EFQM Approach (Nabitz, Klazinga, and Walburg, 2000).
In addition to EFQM approach, ISO 9001 certification of health care organizations is another common quality management activity throughout Europe. However, not all European countries (e.g. Germany) welcomed ISO certification of health care organization because of concerns about its applicability in health care organizations during early 1990s, but later they embraced it as a way to prove their service quality to potential customers (Klazinga, 2000).

Although different approaches have been used to ensure and improve quality, not all have been successful. Many hospitals adopted TQM principles in Europe, and even after ten years there is still no clear evidence about successful TQM adaptations. Unanticipated cost of investment for TQM tools, management and professional resistance towards empowering employees and teams, and poor quality measurements have all been indicated major problems in introducing and using TQM in Europe (Ovretveit, 2000; Adinolfi, 2003).

This overview of developed countries’ quality improvement efforts in hospital services suggest that even though developed countries have encouraged health care organizations to undertake a variety of quality strategies via established organizations and awards, empirical studies do not show that all initiatives accomplished their mission.

ISO 9001 AS A BRIDGE TO IMPROVED MANAGEMENT IN TURKISH PUBLIC HOSPITALS

Total Quality Management (TQM) and ISO 9000 standardization are not the same thing; ISO 9000 is a narrower approach than TQM. TQM principles involve all aspects of an organization by requiring the transformation of the entire organization, while ISO focuses mainly on the systems used to design, produce, and deploy an organization’s products and services (Goetsch and Davis, 2002). TQM emphasizes leadership, continuous improvement,
employee empowerment, teamwork, and individual responsibility throughout a cultural transformation. Hence, TQM is a broader outcome-focused management philosophy than ISO 9000.

The Turkish government, however, has clearly seen ISO standards as a step toward TQM. After failing to reform the Turkish health sector during the first half of 1990s, in its eighth five-year plan covering 2001-2005 the State Planning Agency suggested that public sector organizations follow a Total Quality Management approach in order to introduce the concepts of customer satisfaction, service quality, and outcome focus. Accordingly, public health organizations have begun to implement ISO 9000 standards to reach a quality level required to assure a consistent quality of services and processes. (The Ministry of Labor and Security, 2003). Turkish Standards Institution (TSI) was established in 1960 to prepare standards and inspect them for every kind of product, procedure, and services in Turkey. It issues the ISO 9001 certification to all kinds of organizations, regardless of their sectoral origin in Turkey since 1960. As a full member of ISO, TSI has determined health care organizations’ conformation to ISO 9001 and issues certification.

The MoH Dr. Zekai Tahir Woman Health Training and Research Hospital in Ankara was the first public hospital in Turkey issued ISO certification in 1999. The Turkish Society for Quality (KalDer), which has been an active member of European Foundation of Quality Management since 1998, awarded the same hospital the National Quality Award in the public sector category in 2001. Public sector health care officials believe that the success of MoH Dr. Zekai Tahir Woman Health Training and Research hospital can encourage other Turkish public hospitals to pursue TQM principles after fulfilling ISO 9001 certification requirements (http://www.kalder.org/).
TENETS OF NEW PUBLIC MANAGEMENT

Developed mainly in the European context, the new public management is considered to be an umbrella concept of neomanagerialism that includes various managerial reforms for market efficiency, decentralization, devolution, customer satisfaction, and quality improvement. The ideas of the NPM and associated administrative reforms have spread around the world since 1980s. New Public Management (NPM) is defined as follows: “A new paradigm for public management...aimed at fostering a performance-oriented culture in a less centralized public sector” (Liegl, 2001).

The restructuring and reengineering of internal administrative structures and the establishing of mechanisms for guaranteeing customer satisfaction are the common focal areas of NPM. Often, NPM is taken to include market-based reforms such as outsourcing, competition and vouchers (Sandford, 2002). However, ISO 9000 standardization focuses on only one element of NPM, customer satisfaction via process-oriented management system approach. Therefore, NPM can be described a broad administrative and managerial phenomenon that challenge traditional public sector management, and ISO 9000 can be viewed just one managerial aspect of NPM.

As an umbrella term, Hood’s (1991 and 1995) seven doctrines covering the guiding principles of NPM have basically been agreed among scholars (Yamamoto, 2003). These seven principles are:

1. Hands-on professional management: Creating active, visible, discretionary control of organizations for freedom to manage.
2. Explicit standards and measures of performance: Defining goals, targets, and indicators of success, preferably expressed in quantitative terms.

3. Greater emphasis on output controls: Resource allocation and rewards linked to measured performance; breakup of centralized bureaucracy-wide personnel management.

4. Shift to disaggregation of units: Break up of formerly ‘monolithic’ units, unbundling of u-form management systems into corporatized units around products, operating on decentralized ‘one-line’ budgets and dealing with one another on an ‘arms-length’ basis.

5. Greater competition in the public sector: Lowering costs and better standards via term contracts.

6. Stress on private-sector styles of management practice: Moving away from military-style ‘public service ethic’ greater flexibility in hiring and rewards; greater use of private sector techniques.

7. Stress on greater discipline and parsimony in resource use: Cutting direct costs, raising labour discipline, resisting union demands, limiting ‘compliance costs’ to business.

In his examination of NPM movements in different countries, Hood (1991) argues that NPM originated from a marriage of two different theoretical approaches: the new institutional economics and managerialism.

---

NPM IN DEVELOPED COUNTRIES

Since the 1980s, a number of public organizations in the US, Europe, and other developed countries (Canada, New Zealand, and Australia) have undertaken new public management efforts. Recently, empirical studies have been conducted examining the overall adoption and implementation of various managerial innovations in these countries. So far, studies have reported mixed results, identifying both the success and failure of these new management applications. Especially in developing countries, the effect of NPM reforms has been mixed, at best, with some improvements in efficiency and mixed effects on equity (Manning, 2000). In this regard, Manning (2000) concludes that, although the transaction costs of radical reforms to decentralized service delivery agencies tend to outweigh the efficiency gains via NPM, there have been significant reforms in health sectors which have been drawn from NPM.

There are two main types of NPM practices: the more institutionally-oriented continental European ‘governance’ systems and the more utilitarian approach within Anglo-American ‘managerial’ systems. Toonen (2001) points out that difference between institutional traditions and administrative cultures has an influence on the NPM experiences of each country. Sandford (2002) indicates that three factors have tended to drive the adoption NPM by operating together: economic pressures, high-level political commitment to change, and a set of ideas to shape change. Recent financial and political developments in Turkey could be read as strong economic pressure to change and a relatively strong political desire to

high discretionary power to achieve results, and to better organizational performance through the development of appropriate cultures (Peters and Waterman, 1982).
enhance the quality of public goods and services, which is one of the main arguments of this study.

**New Public Management Lessons from Australia and New Zealand**

English and Guthrie (2001) found that the reforms in Australia promised more than they delivered. In particular, the speed and massive scale of contracting out and privatization proved difficult to implement. Moreover, Hughes and O'Neill (2001) argue that the public management reforms introduced in Victoria during the last decade led to somewhat contradictory consequences. While the government implemented arguably successful reforms, particularly in sale of government assets and privatization of services and balanced the budget after serious deficits, cuts in social services also appear to have contributed to the latest administration's electoral defeat. Hence, the new public management may have some payoffs for the Victorian public sector, but the political consequences can be significant and unanticipated (Jones and Kettl, 2003).

In New Zealand, Jonathan Boston (2001) examined overall NPM initiatives and argued that most assessments focused upon specific changes in management practice, including the introduction of performance pay, the move to accrual accounting, the growth of contracting-out, the separation of policy and operations or the devolution of human resource responsibilities.

**National Performance Review Initiatives in the American Public Sector**

Empirical studies have been indicated that the reinvention initiative of the US federal government has been much less dramatic than the reforms in the UK and New Zealand

There was no impetus for privatization, because the US has had relatively little public ownership since World War II. In addition, the responsibility for oversight of the bureaucracy is shared between the administration and Congress, and Congress has generally been unwilling to relinquish its power.

The National Performance Review (NPR) project has drawn considerable attention of public sector researchers in the U.S. The Clinton Administration started to implement the NPR to change traditional culture of government agencies using a process-oriented approach in 1992.

In the first phase (from 1992 to 1995), the administration sought to reinvigorate the entire national government by moving federal bureaucracies from a culture of “complacency” to one of empowerment (Gore, 1993). Starting in 1995, the second phase of NPR focused on the following four new management improvement themes within the federal cabinet agencies: (1) consolidating federal categorical programs, (2) devolving more program authority to state and local governments, (3) privatizing federal activities, and (4) terminating numerous federal programs and agencies (Executive Office of the President, 1995: Nufrio, 2001).

According to the Clinton Administration report (Gore, 1996) and York’s study (1996) findings, NPR eliminated more than 150,000 federal positions producing a savings of $118.9 billion since 1993. Siegel (1996) evaluated the NPR programs and found that agencies were encouraged to establish hundreds of reinvention laboratories to experiment with new ways of management which resulted with impressive service delivery improvements. Moreover, Kettl (1994) supports Siegel’s findings on the results of the NPR by concluding that the NPR
awarded agency employees and managers more autonomy and decision-making. Likewise, Kettl (1994) found that by eliminating the Federal Personnel Manual, the Standard Form 171, and granting the Office of Management official greater decision-making powers.

**New Public Management Reforms in Spain**

Torres and Pina (2004) examined why similar concepts and initiatives could provide such different results in the U.K. and Spain, and how the cultural and institutional features produce differences in the way in which NPM postulates are defined, implemented, monitored and evaluated has implemented many of the ingredients of the NPM recipe although there are few visible changes.

One of the most outstanding challenges to integrate NPM reforms successfully in Spanish public administration is the transformation of its labor organization whose patterns makes all policies of administrative reforms difficult and discourages any attempt to impose competition, individual performance evaluation and systems of payments related to performance. Also, it is indicated that bureaucratic structures are maintained in the recruitment and education of civil servants, which produces professionals with a legal background with a reluctance to make managerial decisions. In Spain, although some NPM postulates have been implemented, they have not brought about sufficient strategic and visible changes in public sector structures and behaviors.
ORGANIZATIONAL CULTURE, NATIONAL CULTURE AND NEW
MANAGEMENT APPLICATIONS

The successful adaptation of new management techniques depends on variety of factors in the organizational environment, including the organizational culture.

What is Organizational Culture and Why is It Important?

With American corporations losing their global competitive edge in the early 1980s, organizational culture has received a great deal of consideration. The work of T.E. Deal and A. Kennedy (1982) and others indicate that organizational culture is communicated indirectly and is part of the socialization process that individuals experience in organizations (Silverthorne, 2005). There has been a wide range of organizational culture definitions since 1980s.

Organizational culture is defined by Edgar Schein (1985 and 1992) as “a pattern of shared basic assumptions that the organization learned as it solves the problems of external adaptation and internal integration, that has worked well enough to be considered valid and therefore to be thought to new members as the correct way to perceive, think, and feel in relation to those problems.” Schein also adds that norms in the organization become a fairly visible manifestation of these (above) assumptions, although most members of a culture never question or examine these taken-for-granted set of assumptions lied behind the norms. Moreover, Schein believes that organizational cultures are created by leaders and that one of the most decisive functions of leadership well may be the creation and management of culture. Hence, he argues that managers must learn to analyze organizational cultures accurately in order to understand why organizations act as they do (Schein, 1985 and 1992).
The influence of culture on behavior was studied by Adler (1986) with an emphasis on cyclical relationship between values, attitudes, behavior, and culture. According to him, the behavior of people in any given group, organization, and nation is affected by the values and attitudes that they hold, and culture form a background that values and attitudes are developed. However, other social scientists (Czinkota and Ronkainen, 1993; Hofstede, 1991; and Trompenaars, 1993) believe that not only values and attitudes, but also language, economics, religion, politics, social institutions, social classes and family structure, customs, aesthetics, education, and manners have reflections and effects on culture in the society (Darlington, 1996).

Organizational culture is also accepted as a formidable force that shapes behavior and value systems of the working people, and therefore could have positive or negative impacts on managerial practices in organizations. One of the early organizational culture studies is William Ouchi’s Theory Z. After examining the decline of Pacific Rim’s competitive strength, William Ouchi (1981) focused on a key practical question: Could Japanese management methods - as introduces by Deming (1986) and Juran (1992) - be utilized in the United States? In his Theory Z, Ouchi describes the style and substance of companies that achieved a high state of consistency in their organizational cultures. Ouchi believes that organizations are social entities, and like other social creations, are profoundly shaped by the social environment in which they exist. Theory Z organizations which keep their competitive advantages could only succeed under supportive social conditions. According to him, these conditions can be developed throughout timely organizational innovations in a long run.

Strong cultures tend to be less flexible than weak cultures, making it difficult for organizations with strong cultures to be responsive to external pressures. However, like
Peters and Waterman (1982), Charles O’Rilley (1989) believes that excellent companies have strong cultures, and therefore a strong culture is critical to organizations for the fit of culture and strategy, and the increased commitment by employees to their organization. Also, he points out four common mechanisms to create strong culture that focus people’s attention, provide clear guidance about what is important, and provide for group reinforcement of appropriate attitudes and behavior. These four mechanisms are:

1. “Participation: Participation systems encourage employees to be involved and send signals to the individual that he or she is valued. These may range from formal efforts such as quality circles and advisory boards to less formal efforts such as suggestion systems and opportunities to meet with top managers and informal social gatherings. Throughout these processes, people are encouraged to make incremental choices and develop a sense of responsibility for their actions. Also, choice is often associated with commitment. When I choose of our own volition to do something, I often feel responsible (O’Reilly, 1989).”

2. “Management as Symbolic Action: The second mechanism commonly seen in strong culture organizations is that of clear, visible actions on the part of management in support of the cultural values. When the top management not only says that something important but also consistently behaves in ways that support the message, I begin to believe what is said. Also, an important function of management is to provide interpretations of events for the organization’s members. Without a shared meaning, confusion and conflict can result. In strong culture organizations, managers frequently and consistently send signals to employees in words and actions what the superordinate goals are and whey their jobs are important (O’Reilley, 1989).”
3. “Information from Others: During period of crisis or when people are new to the situation, they often look to others for explanations of what to do and how to interpret events in organizations. In these settings there are often attempts made to insure a consistency of understanding and to minimize any us-them attitudes between parts of the organization. The goal in strong organizational cultures is to create a strong social construction of reality by minimizing contradictory interpretations (O’Reilly, 1989).”

4. “Comprehensive Reward Systems: The reward systems are to be a final mechanism for promoting and shaping culture. These systems focus on monetary and non-monetary rewards such as recognition and approval which can be given more frequently than money. Moreover, these rewards also focus on the intrinsic aspects of the job and a sense of belonging to the organization (O’Reilly, 1989).”

Organizational Culture and New Public Management Practices

The application of culture and its consequences in a managerial and organizational setting are indicated in the literature as divergency theory and convergency theory (Joynt and Warner, 1996). While divergency theory assumes that elements such as differing values and behaviors, differing stages of economic development and unevenly distributed global resources will guarantee global diversity in cross-cultural management, convergency theory suggests that because of technology structure and a global orientation by many firms (and organizations), it is not necessary to practice cross-cultural management. In other words,
convergency theory focuses on pragmatic issues that can make it possible to adopt a “one best way” approach to the management of organizations world-wide.  

With regard to new public management, cultural differences are potentially important variables concerning perspectives about cultural change. Developing countries have faced more challenges in successful introduction of NPM approaches than developed countries. As stated by Mendonca and Kanunga (1996) “management techniques and practices which have evolved in the context of Western (developed) cultural values cannot be expected to take roots in the fundamentally different socio-cultural environment of the developing countries.”

However, cultural changes have been considered one of the most challenging processes in the literature, since introducing new management elements by replacing existing customs, beliefs, and expectations is often subject to enormous resistance (Trice and Beyer, 1993).  

In adopting new management approaches to organizations in developing countries, Mendance and Kanungo (1996) raise the cultural-fit issue. According to them, programs that are highly successful in the developed countries of the West can fail in the developing countries, not because of any deficiency in or unsuitability of the programs, but because these

---

6 The existing literature in understanding the link between culture and change can be represented in the integration and differentiation perspectives (Parker and Bradley, 2000). The integration perspective accepts cultural change as process set of previously held organization-wide values. Accordingly, this approach believes that culture can be managed to achieve organization-wide consensus and shared values. In contrast, the differentiation perspective does not accept the concept of an organization-wide value framework by focusing to demographies or professional occupational categories. For the latter perspective, cultural change in organizations cannot be managed or manipulated.

7 Trice and Beyer (1993) list common sources of resistance to change at the individual level including fear of the unknown, self-interest, selective attention and retention, habit, dependence, and need for security; and the organization level including threats to power and influence, lack of trust, different perceptions and goals, social disruption, resource limitations, fixed investments, and interorganizational agreements.
programs were uncritically adopted without any regard to their suitability to the internal work culture. The success of new management techniques pressure an internal work culture whose norms, beliefs, and values are supportive of the attitudes and behaviors of managers and subordinates. For instance, one illustration for this point should be the job autonomy perspective in developed and developing countries. Job autonomy is highly valued non-economic reward in North America whereas this is not the case in developing countries where rewards are usually about satisfying the social and security needs.

Organizational Culture in the Public Organizations

According to Shafritz and Ott (2001), the most important of the organizational culture reform studies followed the early work of Deming, Juran, and Feigenbaum. Most of them advocate the empowerment of individual employees and work groups that are granted autonomy and discretion to make decisions. Policies, procedures, and layers of hierarchy are eliminated. Accountability to the hierarchical supervisor is replaced by accountability to customers. Also, data-based information systems provide the information needed for fact-based, nimble, and proactive management (Shafritz and Ott, 2001).

---

Some Empirical Studies of Organizational Culture in the Public Sector

After examining the U.S. General Accounting Office (GAO), Wallace Walker (1986) points out a major shift within the GAO from a culture of control at the time of its creation in 1921 to its present-day culture of oversight (Jreisat, 1997). According to him, an organization’s culture consists of its ideology, rituals, myths, and knowledge. To successfully implement a strategy to change these cultural elements, one must consider the organization’s historical experiences, including the traditional demands of the task environment, the character and latitude of the leaders appointed in the past, the organization’s career elite, and the statutory mandates under which it functions.

Another example of the application of organizational culture in public organizations is Parker and Bradley (2000) examined organizational culture of Queensland public organizations and their NPM practices as a part of Australian public sector's process of change. The Queensland public sector has undergone a massive process of restructuring since 1980s. Although NPM reforms can reasonably be expected to lessen the bureaucratic nature of the organizational culture, they conclude that the organizational culture in the Queensland public sector continues to reflect traditional approaches to public administration.

Philip M. Nufrio (2001) examines the National Performance Review (NPR) project implementations in the U.S. in terms of organizational culture change. The NPR was both programmatic and process-oriented, seeking to change the culture of the federal government and the cabinet executive agencies in order to improve productivity, quality of services, and “customer” satisfaction. Employing a combined quantitative/qualitative analysis, Nufrio
(2001) found that there was no evidence to suggest that the organizational culture of the federal cabinet agencies were changed.

**What is National Culture?**

I have discussed organizational culture, but national culture, too, is an important factor. A wide range of social sciences use the concept of culture (e.g. anthropology, sociology, psychology), so there are over 160 different definitions of ‘culture’ in the literature (Groeschl and Doherty, 2000). As Heidrich (2002) implies, almost all studies in the related fields of social sciences tried to define culture in one way or another. One of the best known and probably the most used is the study by Kluckhohn (1951) whose definition of culture refers to the distinctive way of life of a group of people, their complete design for a living. However, a more comprehensive definition of culture is Kroeber and Kluckhohn's:

> “Culture consists of patterns, explicit and implicit of and for behaviour acquired and transmitted by symbols, constituting the distinctive achievement of human groups, including their embodiment in artefacts: the essential core of culture consists of traditional (i.e., historically derived and selected) ideas and especially their attached values; culture systems may, on the one hand, be considered as products of action, on the other, as conditioning elements in a future action.” (Kroeber and Kluckhohn, 1952)

Sociologists and anthropologists have indicated that cultures change, but they also stay the same. Hatch (2004) indicates that Herskovits (1964) was one of the early anthropologists who attempted to theorize cultural dynamics by categorizing cultural change studies as being one of two types: change from within and change from outside. Early anthropologists found
much evidence that groups in close proximity share more cultural traits and complexes than do those that are geographically distant.

There is ample evidence that national culture influence managers’ and employees’ behaviors. In the literature, the national culture is a geographical distinction between societal cultures around the world based on the physical boundaries of the nation state. Based on cross-cultural studies, organizational culture researchers have discussed some descriptive management cultural definitions based on east, west, north, or south distinction: Western management is action oriented; Northern management is thought oriented; Southern management is family oriented; and Eastern management is group oriented (Gatley and Lessem, 1995). Researchers have been pointing out that there is a benefit in being able to see patterns of behavior within cultures (Silverthorne, 2005).

Cross-cultural researchers have placed a great deal of emphasis on value orientation studies by describing culture in terms of value dimensions (Hofstede 1980; Triandis, 1989). Value orientation researchers believe that values are capable of broad influences on emotions, thinking, and behavior as well as standards that guide and determine action, attitudes toward objects and situations, and ideology (Pasa, Kabasakal, and Bodur, 2001).

By identifying and confirming cultural dimensions of values, several research projects have examined differences between national cultures. Hofstede (1980, 1983, and 1991) is widely cited in the literature with his model of four dimensions among cultures of the 53 independent nations. The following list presents these four cultural dimensions and their definitions:
*Power distance* defines “the extend to which the less powerful person in a society accepts inequality in power and considers it as normal (Hofstede, 1984).”

*Individualism* assumes that “individuals look primarily after their own interest and the interest of their immediate family (Hofstede, 1984).” In other words, it is the relative importance of individual goals compared with group or collective goals.

*Masculinity* is “the extend to which the dominant values in society are masculine that the goals of men dominate those of women. Masculine cultures expect men to be assertive, ambitious, and competitive to strive for material success and to respect whatever is big, strong, and fast (Hofstede, 1984).”

*Uncertainty avoidance* defines “the extend to which people within a culture are made nervous by situations that they consider to be unstructured unclear, or unpredictable, and the extend to which they try to avoid such situations by adopting street codes of behavior, and a belief in absolute truths.”

Another differentiation in the literature about national cultures has been made between developed and developing countries in terms of geographical location, economy, demography, and sociocultural environments. (Hofstede and Bend, 1988; Mendonca and Kanungo, 1994) Developing countries tend to be located in specific parts of the world. (i.e. East and West Africa, Central and Latin America, the Middle East and some parts of Eastern Europe), can be characterized by weak infrastructure, abundance of unskilled labor, low technological developments, political instability, rigid social structures, distinct gender roles, and strong religious influences (Pasa et al., 2001). Furthermore, Mendonca and Kanungo (1994) indicate that although developing countries vary on the cultural dimensions, these
countries can be identified as showing low individualist, high power distance, and high associative thinking.

THE TURKISH CONTEXT: NATIONAL AND ORGANIZATIONAL CULTURE

Hofstede (1980) described Turkish culture as being high on collectivism and power distance while being strong on uncertainty avoidance. Similarly, Schwartz (1994) found in his study on 34 cultures that Turkey ranked above the average in values of conservatism, hierarchy, egalitarian commitment, and harmony. Additionally, Kanungo and Aycan (1997) examined seven countries’ paternalism values, and found that Turkey shared more paternalistic values alongside China, India, and Pakistan (Pasa et.al., 2001)

Kabasakal and Bodur conducted an extensive study on Turkish culture more recently as a part of the GLOBE study, which is “a multi-phase, multi-method project in which investigators spanning the world are examining the interrelationships between societal culture, organizational culture, and organizational leadership (Karasakal and Bodur, 1998; House et.al, 2001).” This study examined in 62 cultures representing all major regions of the world by aggregating responses of samples of typical middle managers in three industries: food processing, financial services, and telecommunication services.

Globe study used the nine cultural dimensions at both societal and the organizational levels. The following are their definitions of the nine core GLOBE cultural dimensions (House et al., 2001):

*Power distance:* The degree to which members of a collective expect power to be distributed unequally.
**Uncertainty avoidance:** The extent to which a society, organization, or group relies on social norms, rules and procedures to alleviate unpredictability of future events.

**Humane orientation:** The degree to which a collective encourages & rewards individuals for being fair, altruistic, generous, caring and kind to others

**Collectivism I (Institutional Collectivism):** The degree to which organizational and societal institutional practices encourage and reward collective distribution of resources and collective action

**Collectivism II (In-Group Collectivism):** The degree to which individuals express pride, loyalty and cohesiveness in their organizations or families.

**Assertiveness:** The degree to which individuals are assertive, dominant and demanding in their relationships with others.

**Gender egalitarianism:** The degree to which a collective minimizes gender inequality.

**Future orientation:** The extent to which a collective encourages future-oriented behaviors such as delaying gratification, planning and investing in the future.

**Performance orientation:** The degree to which a collective encourages & reward group members for performance improvement and excellence.

Kabasakal and Bodur (1998) reported the results of survey of 323 high and middle level managers with respect to “how are” the current norms, values and practices and “how they should be in [Turkish] society.” According to the inter country societal “as is” [the current norms, values, and practices] rankings, Turkey is below the world average on gender egalitarianism (55th), uncertainty avoidance (49th), performance orientation (45th), humane orientation (40th), and future orientation (35th), while it is higher in collectivism (4th), power distance (10th), and assertiveness (11th). When inter country societal “should be” ratings are
reviewed, they found that Turkey is below the world average in performance orientation (57th), assertiveness (54th), power distance (51th), and gender egalitarianism (37th), whereas it is higher in future orientation (25th), and uncertainty avoidance (33rd) (Kabasakal and Bodur, 1998).

These results show that Turkish managers in national level would likely be reluctant to support performance oriented, participative, and non-hierarchical management reform efforts. Although there is a consensus on the influence of national culture on organizational culture in the literature, some researchers in the literature believe that there is a possibility of contradiction between characteristics of subcultures in the same society (Groeschl and Doherty, 2000). For instance, Hofstede (1991) argues that religious values may conflict with generation values; gender values with organizational values in modern society.

Organizational level descriptions of GLOBE dimension were also reported by Kabasakal and Bodur’s study with the respect to “how are” the current norms, values and practices and “how they should be” in their work organizations. Accordingly, the highest mean response is attributed to collectivism. Tendency towards power distance, future orientation, gender egalitarianism, and performance orientation is also found. Furthermore, lower humane orientation, assertiveness, and uncertainty avoidance are observed in the Turkish organizations. When it is asked to the managers “how their work organizations should be” respondents indicated that they would like their organizations to be much more performance oriented, future oriented, more collectivist, more humane oriented, and more avoiding uncertainty. The managers also prefer to have less power distance (Kabsakal and Bodur, 1998). In sum, these results shows that managers would be willing to support the new
management efforts in their organizations if their organizations offered performance-oriented, participative, and non-hierarchical management initiatives.

After comparing and contrasting their findings in societal and organizational level, Kabasakal and Bodur (1998) indicate that Turkish society is more collectivist, more masculine, and less future oriented than its organizations. As it is mentioned previously, the GLOBE study used sample of middle managers from three industries in private sector, and therefore it is expected that private sector managers in Turkey, like their counterparts around the World, are open new management styles and new work culture more than those of public sector, due to competitive nature of business sector. Therefore, I can argue that professional Turkish middle managers’ cultural perspective in the private sector would present some dissimilarity from Turkish Culture.

**The Link between National and Organizational Culture**

The link between national culture and organizational culture has been found very important in terms of cultural continuity and coherence between organizations and society within which they live (Hofstede, 1980, 1991; Medanca and Kangu, 1994; Harvey, 1997; House et al., 2001; Silverthorne, 2005). Findings in the literature indicate that national values influence organizational practices, thought, the shared values, and the shared perceptions of organizational members. Accordingly, Hofstede et.al (1990) used twenty organizations in Holland and Denmark to examine the influence of national culture on organizational cultures, and members’ beliefs were found to differ according to their nationality.

The opinions differ when it comes to a conclusion or decision about the degree of influence which national culture exerts on organizational cultures. Groeschl and Doherty (2000)
indicate that early writers, such as Evan (1975) argue that the impact of culture on organizational systems will decline, whereas more recent writers emphasize the critical role to national characteristics in the explanation and prescription of events inside and surrounding organizations (Clark and Mueller, 1996). For instance, Pizzam et al (1997) compared nationality and industry cultures and their impact on managerial behavior in the hospitality industry and concluded that nationality cultures have a stronger effect on managerial behavior than the culture of the hotel industry.

In a similar vein, Kangu and his associates studied different national cultural values and their effects on organizational cultures in developed and developing countries (Mangence and Kanungo, 1994; Kanungo and Jeager, 1990). They point out that managers from developing countries are more likely to assume that their employees have an external locus of control; have limited and fixed potential; operate from a time perspective that is past and present oriented; and have a short time focus (Pasa et.al, 2001). In addition, encouraging a passive or reactive stance to task performance; judging success on moralism derived from tradition and religion; favoring an authoritarian or paternalistic orientation; and accepting that consideration of the context overrides principles and rules are attitudes and beliefs of managers in developing countries.

EXTERNAL AND INTERNAL POLITICS OF MANAGEMENT REFORMS

In the literature, one of the dominant reasons for reforming public administration has been indicated as political at both governmental (i.e. party level) and organizational level. Since the process of reform in public sector cannot be determined without understanding the
political pressures that surround the process, this paper also attempts to analyze the current external and internal politics surrounding NPM efforts in Turkey.

**External Politics of Management Reforms: Changing Power Relations**

In *The Reforming Organization*, Brunson and Olsen (1993) have examined real life public sector reforms, and characterized reform as a rationalistic effort at organizational change after examining major administrative reforms mainly in developed countries (Armstrong, 1997). Brunson and Olsen pointed out the following political effects of the public sector reforms:

1. Reforms take one of three directions: (a) rationalization (i.e. streamlining or downsizing), (b) power shifts (i.e. changes in leaders, political parties, and ideologies), and (c) democratization (i.e. empowerment, decentralization, and deregulation).

2. Reforms have four main effects: (a) reshuffle power, (b) re-legitimatize, (c) educate, and (d) benefit certain actors while threatening others.

Looking at the extensive changes introduced in the period after 1980, Merilee S. Grindle (2000) also states that the success or failure of reform is profoundly influenced by power relationships among affected interest, executives and legislatures, leaders and party elites, and national governments and international institutions. She argues that executive –based “change teams” steered reforms from definition through political turmoil to adoption and implementation in many developed countries. Moreover, focusing on recent Latin American style public sector reforms, she emphasizes the fact that executives dominate legislatures and enjoy long traditions of leadership in policy development.
Guy Peters also (2001) believes that the administrative reforms introduced during the past several decades have altered the relative power distributions of organizations within government, to some extent reducing the power of central control agencies, and enhancing the power of autonomous organizations. Peters believes that these politics may be vested with a partisan element, especially when the opposition can use these issues to embarrass an incumbent government, but many of these manifestations are purely organizational.

Moreover, Peters (2001) examined the previous reforms in Europe and found out several political reasons at organizational and party levels to initiate administrative reforms such as change in parties and ideologies (i.e. the Rocard and Jupe governments in France; the Major and Blair governments in the U.K.), continuing to run for office (i.e. the Lubbers I Dutch governments since the mid-1980s), and organizational politics (i.e. potential conflicts among organizations in government during the 1980s and 1990s in Sweden).

Armstrong (1997) is also one of the scholars who believe that comprehensive reform comes only from political involvement and leadership. He also argues that change processes and strategy are formulated, often forcefully, by political leaders experienced with reform and government failures. The evidence indicates that reform ideas are generally developed by politicians with the help of private sector and other advisors, as was the case in the United Kingdom, Australia, New Zealand, the United States, Japan and France. For instance, both the United Kingdom and Japan were subjected to major and extensive reforms on the biased and intuitive belief that the private sector held many of the answers when it came to public sector organizational effectiveness. In both countries, a high level of distrust of the public service on the part of politicians, the public and big business (Japan, for instance, cast the bureaucracy not as a guardian of national interest, but as a special interest group—they
became the villain), fostered the impulse to apply private sector practices to the public service. Business leaders and entrepreneurs were called upon to help open the system to new ideas. Both countries had experienced and knowledgeable politicians in positions of power with lessons learned from previous reform failures fresh in their minds.

In their effort to assess public management reform in an international context, Jones and Ketll (2003) suggest a series of propositions. One of the propositions they suggest is that political reality drives management reform more than management concerns in many countries. Different nations have taken different reform paths because their high-level officials have been trying to solve different problems and cope with different realities. In large part, top officials launched the management reforms for fundamentally political reasons: to cope with budget crises, to sustain public services without increasing taxes, and to signal concern about citizens’ dissatisfaction with government. However, they point out that the political clout of the new public management has often been negligible. After the new public management’s first twenty years, there is no significant evidence that management reforms have translated into electoral victories or even into modest political gains. In the US, for instance, Vice President Al Gore (the U.S.) barely mentioned his reinventing government effort in the presidential campaign trail in 2000 and got no political credit for having led it. Likewise, Prime Minister Tony Blair (the U.K.) made little of his own management reforms in the 2001 elections.

Organizational Politics: Winning or Losing Influence

For some researchers, management is a political (power-centered) activity (Fairholm, 1993). Definitions of organizational politics include several factors: (a) actions taken by individuals
throughout the organization, (b) any influence of one actor toward another, (c) effort by one party to promote self-interest over that of another and, therefore, threaten the second party’s self-interest. In short, organizational politics includes actions taken to gain and use power to control organizational resources to achieve particular goals and interests (Fairholm, 1993). French and Raven (1959) distinguished five types of power:

1. Reward Power: It is based on our ability to provide benefits to target.
2. Coercive Power: It is based on our ability to provide punishing effects to the target for noncompliance.
3. Expert Power: It is based on the special ability and knowledge that we have that the target would like to have or use.
4. Referent Power: It is based on desires others have to identify favorably with us or with what we symbolize to them.
5. Legitimate Power: It is based on the feeling other have those we have the right and authority to exert influence over their activities.

During a management reform, members of government agencies usually tend to use their available power to maintain their gains by resisting change efforts in their organization. Kelman (2005) argues that the structure of government make it easier for employees who wish to resist change efforts. Particularly such resistance is easier in government because top leadership turns over more quickly than business firms. Kelman reports that in their empirical study Jerald Hage and Michael Aiken (1967) found out that organizational innovativeness is negatively related to job codification and hierarchy of authority. Moreover, Fariborz Damanpour’s (1991) meta-analysis finds that hierarchy was negatively related to generation of innovative ideas, and rules were negatively related to innovativeness for government organizations.
Rational Choice and Principal Agent Theory

NPM reforms are often discussed based on public choice theories, principle-agent and transaction cost models (Christensen and Laegreid, 1999). Through these models relations between actors in the political-administrative system are seen as strategic games between rational actors, who intend to make the political-administrative system more efficient, streamlined, and consistent.

William Niskanen (1973) assumes that public administrators are motivated by self-serving concerns and act calculatingly to maximize payoffs for themselves. These are increased salary, reputation, power, patronage, and ease of management.

Another public choice theorist, Oliver Williamson (1981) believes that bureaucratic managers will create ever-larger staff in order to elevate their own rank in the hierarchy. Also, larger staffs help to guarantee organizational survival by making dismantlement even more unthinkable. James Benett and Manuel Johnson (1980) carry the criticism against the bureaucrats one more step, by stating they deliberately manipulate crises in order to justify greater budgets. They then do not solve them in order to perpetuate reasons for funding their programs.

As a part of the rational choice framework, principal-agent theory argues that every organization consists of parties entering into contractual arrangements. This theory primarily focuses on the agency relationship in organizations in which the principal (one party) assigns work to the agent (another) according to a contractual arrangement (Eisenhardt, 1989). The unit of analysis of principal agent theory is “the contract”. In this contractual arrangement,
the goal of the principal is to determine the most efficient design of the contract given the imperfections of people and the environment.

However, there can be some problems in doing so: (a) The difficulty of selecting and using ample incentives which are supposed to prevent goal conflict between the principal and the agent; and (b) the difficulty of monitoring the agent in order to keep the agent in the course of organization’s (the principal) goal. Then, these two difficulties cause two major dangers when contracting with an agent: (a) Moral hazard means that the agent will take an action that is in her best interest as opposed to that of the principal; and (b) adverse selection is about making an improper hiring decision (a given agent) by the principal.

Theories and models mentioned in the last section of this chapter is referred in our Chapter six when I discussed political battles around the Turkish NPM initiatives and who gets what from resulting administrative reform in Turkey.
CHAPTER 3: RESEARCH DESIGN

INTRODUCTION

In order to assess whether ISO 9001 certification has had impact on the performance and quality of Turkish government hospitals, this study evaluates the performance of nine certified MoH hospitals and compare it to the performance of nine non-certified MoH hospitals. In addition to our quantitative examination of performance of ISO certified hospitals, the study employs semistructured interviews as a qualitative research technique to determine impacts of organizational culture, including internal politics, on MoH hospitals’ performance.

The researcher intends to use a mixed method by employing quantitative and qualitative analyses to examine the research questions. There are two reasons for using mixed method: the small sample size due to small number of ISO 9001 certified MoH hospitals which have hold their certification for at least two years, and difficulties in obtaining a sufficient number of performance indicators for each hospital in the study. To overcome the small sample size problem and reach more valid, reliable, and richer findings, the researcher aims to use a qualitative method as an integrated approach with the quantitative methods.

This chapter presents hypotheses of the study and describes how quantitative and qualitative analyses carried out. After presenting the hypotheses of the study, this chapter focuses on the methodology used by defining independent and dependent variables of quantitative analyses.
and explaining how to assess them. In the same vein, the subsequent section of this chapter explains how I employ semistructured interview technique as a qualitative analysis method. After describing the research population and sample, it is explained how quantitative and qualitative data is assessed in the last section. Finally, this chapter is ended with a description of research design limitations.

**RESEARCH QUESTIONS AND HYPOTHESES OF THE STUDY**

As already mentioned, this study attempts to answer four research questions to examine the performance improvement initiatives of Turkish government hospitals that have successfully preserved their ISO certification for at least three years. Hypotheses of the study are grouped into three categories: hypotheses about management tools for improve quality and performance, about process improvements, and about results improvements.

**Hypotheses about management implementation tools**

This study articulated the following five hypotheses in order to answer our first research question: “to what extend have ISO certified government hospitals actually implemented new management measures?”

\(Hb_1\): Hospitals with ISO certification seek input from patients more widely than non-certified hospitals.

\(Hb_2\): Hospitals with ISO certification use quantifiable measures to track their performance more widely than non-certified hospitals.

\(Hb_3\): Hospitals with ISO certification seek input from their staff in developing long-term goals and objectives more widely than non-certified hospitals.
Hb₄: Hospitals with ISO certification conduct training activities for their staff more.

Hb₅: Hospitals with ISO certification reward their personnel more widely to encourage them for performing well than non-certified hospitals.

**Hypotheses about process improvement**

The four hypotheses about process improvements and a hypothesis about results improvements at MoH hospitals to answer the first second research question of study: “do the quality and performance improvement initiatives in Turkish government hospitals via ISO 9001 certification lead to improved performance?”

Ha₁: MoH Hospitals with ISO certification have better performance in reducing the average length of stay than non-certified hospitals.

Ha₂: MoH Hospitals with ISO certification have better performance in enhancing the bed occupancy rate than non-certified hospitals.

Ha₃: MoH Hospitals with ISO certification have better performance in enhancing the outpatient rate per physician than non-certified hospitals.

Ha₄: MoH Hospitals with ISO certification have better performance in enhancing the number of surgical operations per specialist than non-certified hospitals.

**Hypothesis about results improvement**

Ha₅: Hospitals with ISO certification have better performance in reducing the crude death rate than non-certified hospitals.
As already mentioned, this study also attempts to examine Turkish organizational and national culture with their relations with results-based management initiatives in government hospitals, as well as external and internal political battles related to NPM efforts in Turkish public sector. Therefore, semistructured interview results were also used to answer our third research question: “what are the impacts of national and organizational culture on Turkish results-based improvement initiatives?” Also, this study employs qualitative measures and judgments in answering our last research question: “How have political forces -- both external and internal-- affected the implementation and success of the management reforms?” We do not here state these aspects of the study as formal hypotheses, however.

**RESEARCH METHODOLOGY**

**Quantitative Analysis**

In the first step of our qualitative analysis, time series graphics and the data of individual hospitals for each dependent variable is offered to compare and contrast changes in performance of two groups of MoH hospitals from 1993 to 2003. Afterward, the Independent-Sample t-test statistic was employed to examine the differences between the means of MoH hospitals with and without ISO certification. In addition to these two groups of MoH hospitals, another group of MoH hospitals that received their ISO certification after 2002 is added to quantitative analysis section. The justification behind adding this new group to our analysis is to understand whether already outstanding MoH hospitals tended to apply for ISO certification, and continue to provide high quality hospital services with adequate performance level during post-certification period or not. By doing so, the researcher hopes
to distinguish the real impact of ISO certification on MoH hospitals’ quality and performance.

The independent group t-test statistics is used to compare means between two groups where there are different subjects in each group. Ideally, these subjects are selected randomly from a larger population of subjects and assigned to one of two treatments. As an interval statistic, the T-test can test hypotheses that two groups have different means or one group’s mean is higher than the other’s (O’Sullivan and Rassel, 1995). Each group should contain independent observations, and the test is a two-sample t-test. Moreover, using the Independent-Sample T-test method requires approximately normally distributed sample data and roughly similar variances between two groups (Statnotes: An online Textbook).

The selection of the Independent-Sample T-test was based on two factors depending on its theoretical and methodological appropriateness of the study. The first factor is related to the objective of the study which is the examination of ISO certification effect on MoH hospitals in Turkey by using two groups of hospitals. The second factor is to have small sample sizes for both groups with mostly non-normally distributed data. Since the Independent-Samples T test offers Levene’s test which is fairly robust statistical test when its normality assumption is violated due to small sample size, the study employs T test for quantitative analyses (Deners and Dames & Moore Inc., 1997; Garson, Statnotes: An Online Textbook). Miller (1986) summarizes the extent to which the assumptions of normality and equal population variances

9 In addition to Independent T-test, chi-square statistical test was intended to use for analyzing performance differences between ISO certified and non-certified hospitals. Due to having non-random sampled hospitals and two dependent variables (bed occupancy rate and crude death rate) which are in form of percentages, the data set used in this study were found to violate two important requirements of the Chi-square test. (“Research Methods for Public Administration.” 1995, NY: White Plains)
can be violated without affecting the validity of t-test statistic as far as sample sizes are equal. Furthermore, T statistic is found applicable for small-sample inference for comparing means in the literature (Agresti and Finlay, 1997).

The aforementioned hypotheses require a one-tailed test since the null hypothesis includes a finding in the one direction. In other words, the study employs directional hypotheses since it is expected that MoH hospitals with ISO certification have better results than MoH hospitals without ISO certification. For instance, if the data showed that the change in Bed Occupancy Rate for hospitals with ISO certification from 1993 to 2003 was less than that of hospitals without ISO certification, the study would not reject the null hypothesis.

**Independent Variable**

Independent variables are antecedent conditions that are presumed to affect a dependent variable (Jaeger, 1990). While the independent variable is often manipulated by the researcher, it can also be a classification where subjects are assigned to groups. In a study where groups are being compared, the independent variable is the group classification.

In this study, MoH hospitals with ISO certification and without certification are being compared. The independent variable is the group classification, that is, the certification of ISO 9001. Thus, the dichotomous independent variable of the study is ISO 9001 certification or non-certification of MoH hospitals.

**Dependent variables**

It is the consequent variable that is presumably affected by one or more independent variables that may be observed by the researcher and regarded as antecedent conditions that
determine the value of the dependent variable (Jaeger, 1990, p. 370). In a comparison of
groups, it is what independent variables differ on (Siegle).

Dependent variables of the study and their descriptions are listed below.

**Change in the average length of stay (Day)**

This indicator represents that how many days an inpatient stays in hospitals. Average Length
of Stay (ALS) is used to indicate that how many days a person dismissed or dead stays in
hospital. When a hospital is able to reduce its ALS during a specific period, its performance
and health service quality toward their inpatients during that period are expected be higher.
(Sarp et al., 2002) Van Peursem et al. (1995) also indicates that ALS type discharge rates is
to be used in determining effectiveness and efficiency of health care services by hospitals
whose number one priority is to provide adequate medical treatments to their patients in
timely manner. Therefore, the lower the average length of stay (ALS), the higher the
productivity and quality of health services.

The formula used by Department of Documentation and Statistics of MoH to measure ALS
for each hospital is as following:

\[
\text{ALS} = \frac{\text{Days in bed for dead or discharged inpatients}}{\text{Number of dead or discharged inpatients}}
\]

**Change in the bed occupancy rate (percentage)**

Bed occupancy rate (BOR) indicates that how often the beds are used. This indicator is used
to find out that how profitably the beds are used. Since using existing beds efficiently is one
of the important aspects of resource management for hospitals, Van Peursem et al. (1995)
consider that BOR reflects the efficient use of hotel services by hospitals. Therefore, the higher the percentage of bed occupancy, the greater efficiency and effectiveness in using hospital bed resources is. The formula of BOR used by Department of Documentation and Statistics of MoH is as following:

$$\text{BOR} = \left( \frac{\text{Days in bed for inpatients}}{(\text{Number of beds} \times 365)} \right) \times 100$$

**Change in the number of outpatient per physician (Patient)**

Outpatient Rate per Physician (OpP) in per year is an important indicator that used for evaluation of physician performance. By measuring relative number of outpatients per physician, this variable can be used for determining availability of sufficient number of physicians who responds outpatients’ medical needs in a given hospitals. Therefore, the higher the number of outpatients per physician, the greater the physician performance in any given hospital is. The formula for OpP used in this study is as following:

$$\text{OpP} = \left( \frac{\text{Total number of outpatients}}{\text{Number of physician}} \right)$$

**Change in the Surgical Operations Rate per Specialist (Surgery)**

Surgical Operations per specialist (SOpS) per year procedures is used for the evaluation of physician performance. This indicator focuses on specialists’ productivity and efficiency by measuring the number of surgical operations completed in a one-year period. Although this indicator has limitations in reflecting quality of service delivered by specialists in hospitals, it is used to allocate resource efficiently. The higher the number of surgical operation per specialist, the greater performance specialists in a given hospital is. The formula for SOpS employed in this study is as following:
SOpS = [Total number of surgical operations ÷ Number of specialist]

**Change in the Crude Death Rate (Percentage)**

Crude death rate (CDR) indicates that how many inpatients died per 100 inpatients per year in a given hospital. It is used for evaluation of quality of hospital services as an outcome indicator. For instance, if a hospital allocates its medical, hospital, and personnel resources appropriately to increase timely practices, and provides better work environment in order to prevent inappropriate practices, gives training and educational opportunities to increase the abilities and motivation of hospital personnel, there is high possibility that the hospital will decrease CDR because of the increased quality and performance of hospital. The lower the crude death rate, the greater the quality of given hospital is. The formula for CDR is as following:

CDR = [Total number of inpatient deaths ÷ Number of dead and discharged inpatients] × 100

**Qualitative Analysis**

In the literature, the integrated approach is called mixed method. Bamberger (2000) explains the benefits of employing mixed method in evaluating the impact of programs or initiatives as testing the validity of results (triangulation), improving data collection instruments, and explaining findings. Also, Baker (2000) believes that mixed methodology is an appropriate approach for impact evaluations to determine more broadly whether a program or initiative had the desired impacts on interested parties. In this vein, this study employs a semistructured interview method in addition to aforementioned quantitative method (Independent group T-test statistic) in order to determine impacts of ISO certification and current organizational culture of MoH hospitals on their service quality and performance.
The semistructured interview method has its own disadvantages such as being time consuming during both data collection and data analysis stages, having interviewer effect, and requiring highly skilled interviewer (Adler, 1999). Nevertheless, some major benefits of semi-structured interview methods include (Fraenkel and Wallen, 2003):

1. This method confirms what is already known but also provides the opportunity for learning.
2. When individuals are interviewed they may more easily discuss sensitive issues.
3. This method encourages two-way communication between subjects and the interviewer that allows in-depth discussions and information exchange on specific topics.

The semistructured interviews approach involves the preparation of an interview guide that includes a pre-determined list of questions or issues which are to be examined during an interview. Although there is a great deal of flexibility, an interview guide serves as a checklist and ensures that the same information is obtained from a number of individuals. Moreover, semistructured interviews appear more natural and more resemble a conversation between equal participants (Wilson, 1996). Therefore, a semistructured interview method is usually employed as a tool of qualitative research method in order to support and validate quantitative findings of the study.

In this study, interview questions are to be open-ended and respondents are encouraged to express their own perceptions about ongoing quality and performance improvement efforts in each hospital. Additionally, the researcher assured interviewees that their identity was not going to be revealed when the study was completed and that all information obtained from interviews was handled confidentially.
A common type of individual respondent interviews is the key informant interview. A key informant is an individual who can assist in understanding context of a program or project, or clarifying a particular issues or problems. Data for qualitative analysis was provided by employing semistructured interviews with four key informants from seven hospitals with ISO certification and four hospitals without ISO certification. The chief doctor, chief nurse, two quality management steering committee representatives, and two lower level hospital staff were contacted to conduct semistructured interviews. Appendix II includes interview questions for each hospital. Furthermore, the researcher grouped some questions according to their relevance to the position of interviewee in the same hospital setting. The total number of individuals interviewed was approximately 46 from seven ISO certified and four non-certified MoH hospitals. The interviewer took continuous and contemporaneous notes during the approximately twenty minutes long interviews.

**Reliability of semistructured interview method**

A test or statistical method is said to be reliable if it yields consistent results. Semistructured interview methods have lower reliability than objective survey methods since the ability of another researcher to obtain the same results using the same methods is not very strong. However, the study attempts to use quantitative and qualitative data in order to compare and contrast findings to be able make objective interpretations.

**Validity of semistructured interview method**

An instrument in statistics is believed to be valid when it measures what it is supposed to measure and performs the functions that it claims to perform. There have been general validity concerns about semistructured interviews in the literature because of the tool’s
qualitative nature. One of the validity concerns is about the interviewer whose questions, responses, and acts can affect the way a participant responds. Another that inaccurate memories, misunderstandings, and miscommunications can have impact on the information obtained (Adler, 1999).

The interviewer can overcome these concerns by standardizing the interview questions and rewording or restating questions in order to present them in a way that is more understandable by each participant (Kvale, 1996). These strategies were followed by this study.

RESEARCH POPULATION AND SAMPLE

The target population of the study is governmental hospitals organized by Ministry of Health in Turkey. The Ministry of Health (MoH) provides preventive services and curative care to inpatient and outpatient via a nation-wide network of hospitals and health centers with a total number of 668 in 2003. ¹⁰

The study used a nonprobability sampling method. In the literature, this type of sampling method is used when the target population is rare or widely dispersed among a larger population. Nonprobability sampling methods are ones for which it is not possible to specify the probabilities of the possible samples. Inferences using such samples are of unknown reliability. Although the major weakness of non-probability designs is that in using them one

¹⁰ This study conducted its quantitative and qualitative analysis based on the latest available hospital data provided by MoH for the year of 2003. As mentioned in the chapter one, approximately 120 hospitals previously run by the Social Insurance Institution were transferred to the MoH as a part of Government’s “Transformation in Health” program in April 2005. Therefore, MoH has been running around 88 % of public sector hospitals currently.
cannot estimate population parameters from sample statistics, the limited number of MoH hospitals with ISO 9001 certification was the main reason for employing nonprobability sampling method for the study. Therefore, nine MoH hospitals with and nine without ISO certification were selected by using “availability sampling” technique.

Availability sampling is a sampling technique where the researcher selects subjects on the basis of availability. Since this study is interested in MoH hospitals that have had ISO certification for more than two years and preserved the certification hitherto, only ten MoH hospitals out of 668 could be included in this study. Therefore, this study focused on nine out of ten ISO certified MoH hospitals in order to evaluate impacts of certification and organizational culture on hospital performance.

The selection of the nine MoH hospitals without ISO 9001 certification used as a comparison group was based on two factors. The first factor was the location of ISO 9001 certified hospitals by province. Since the nine ISO 9001 certified MoH hospitals were scattered throughout Turkey, the study intended to use the nine non-certified MoH hospitals located in the same provinces as the ISO certified hospitals. The second factor was type of MoH hospitals with 9001 ISO certification. As can be noted in the above table, three types of hospitals had ISO certification: six general service hospitals; two education and research hospitals; and one maternity and childcare hospital. Accordingly, the researcher included seven general service, two education and research, and one maternity and childcare MoH hospitals in the comparison group.
Table 3.1: The Nine MoH Hospitals with ISO 9001 Certification

<table>
<thead>
<tr>
<th>Hospital Name</th>
<th>Province</th>
<th>Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dr. Z. T. Kadın Sağlığı Eğitim ve Araştırma Hastanesi</td>
<td>Ankara</td>
<td>Education &amp; Research</td>
</tr>
<tr>
<td>Balıkesir Devlet Hastanesi</td>
<td>Balıkesir</td>
<td>General</td>
</tr>
<tr>
<td>Eskişehir Doğum ve Çocuk Bakimevi</td>
<td>Eskişehir</td>
<td>Maternity &amp; Childcare</td>
</tr>
<tr>
<td>Pendik Devlet Hastanesi</td>
<td>İstanbul</td>
<td>General</td>
</tr>
<tr>
<td>Bakırköy Dr. S. K. Eğitim ve Araştırma Hastanesi</td>
<td>İstanbul</td>
<td>Education &amp; Research</td>
</tr>
<tr>
<td>Kayseri V. A. O. Devlet Hastanesi</td>
<td>Kayseri</td>
<td>General</td>
</tr>
<tr>
<td>Bor Devlet Hastanesi</td>
<td>Nigde</td>
<td>General</td>
</tr>
<tr>
<td>Samsun Devlet Hastanesi</td>
<td>Samsun</td>
<td>General</td>
</tr>
<tr>
<td>Diyarbakır Government Hastanesi</td>
<td>Diyarbakır</td>
<td>General</td>
</tr>
</tbody>
</table>

Table 3.2: The Nine MoH Hospitals without ISO 9001 Certification

<table>
<thead>
<tr>
<th>Hospital Name</th>
<th>Province</th>
<th>Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bandırma Dr. M. G. K. Devlet Hastanesi</td>
<td>Balıkesir</td>
<td>General</td>
</tr>
<tr>
<td>Sarıyer Devlet Hastanesi</td>
<td>İstanbul</td>
<td>General</td>
</tr>
<tr>
<td>Burdur Devlet Hastanesi</td>
<td>Burdur</td>
<td>General</td>
</tr>
<tr>
<td>Taksim Eğitim ve Araştırma Hastanesi</td>
<td>İstanbul</td>
<td>Education &amp; Research</td>
</tr>
<tr>
<td>Prof Dr. Ferhan Özmen Doğum ve Çocuk Bakimevi</td>
<td>Kayseri</td>
<td>Maternity &amp; Childcare</td>
</tr>
<tr>
<td>Siirt Devlet Hastanesi</td>
<td>Siirt</td>
<td>General</td>
</tr>
<tr>
<td>Van Devlet Hastanesi</td>
<td>Van</td>
<td>General</td>
</tr>
<tr>
<td>Nigde Devlet Hastanesi</td>
<td>Nigde</td>
<td>General</td>
</tr>
<tr>
<td>Bafra Nafiz Kurt Devlet Hastanesi</td>
<td>Samsun</td>
<td>General</td>
</tr>
</tbody>
</table>

In addition to our main group (ISO certified hospitals) and comparison group (non-certified hospitals), the following four MoH hospitals awarded with ISO certification for less than two years are added to quantitative analysis. As mentioned earlier, this new group helped us to distinguish whether generally outperforming MoH hospitals tended to apply for ISO
certification, and continue to provide high quality hospital services with adequate performance level during post-certification period or not.

**Table 3-3: The Four MoH Hospitals ISO 9001 Certification**

<table>
<thead>
<tr>
<th>Hospital Name</th>
<th>Province</th>
<th>Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kutahya Devlet Hastanesi</td>
<td>Kutahya</td>
<td>General</td>
</tr>
<tr>
<td>Tavsanli Devlet Hastanesi</td>
<td>Kutahya</td>
<td>General</td>
</tr>
<tr>
<td>Izmir Dr. Ustundag Devlet Hastanesi</td>
<td>Izmir</td>
<td>Women Health and Birth</td>
</tr>
<tr>
<td>Kastamonu Devlet Hastanesi</td>
<td>Kastamonu</td>
<td>General</td>
</tr>
<tr>
<td>Eskisehir Devlet Hastanesi</td>
<td>Eskisehir</td>
<td>General</td>
</tr>
</tbody>
</table>

**DATA COLLECTION**

In this study, it is intended that logical gaps in the data collection can be anticipated and closed by integrating independent-samples T-test method and semistructured interview method. Secondary data for quantitative analysis were provided from the annual reports of MoH which are published to inform Turkish citizens about activities of all MoH organizations, including hospitals. As stated earlier, the researcher conducted semistructured interviews with approximately 46 individuals from seven ISO certified and four non-certified MoH hospitals.

**LIMITATIONS OF THE RESEARCH DESIGN**

As the objective of the study is to investigate the impact of ISO 9001 certification and respective organizational culture of MoH hospitals on their performance, the research compares and contrasts performance of two groups of hospitals during pre and post certification periods. Although it is found that a number of MoH hospitals received ISO 9001
certification since 1998, only ten MoH hospitals have been able to preserve their ISO 9001 certification hitherto. In this vein, this research has two-fold limitations that hinder generalization of our findings about public sector hospitals quality and performance improvement initiatives.

The first limitation is the small sample size of the study, including only nine certified and nine non-certified hospitals out of 668 MoH hospitals. As noted, our sample size represents less than 3% of population. Therefore, the findings of our quantitative analysis cannot be generalized for other hospitals run by MoH.

The second limitation is related to longitudinal impacts of ISO certification on hospital performance and quality. As mentioned, hospitals awarded ISO 9001 certification between 1998 and 2003 and preserved their certification for at least three years were included in our analysis. In general, the three year involvement of these seven hospitals in quality management and performance improvement via ISO 9001 can be argued to be an inadequate time period to examine changes statistically. Therefore, having small sample size with relatively short time period to measure the affect of ISO certification on hospital performances does create generalizability limitations for this study.

In addition to small sample size and insufficient longitudinal research design limitations, the lack of adequate number of process and outcome hospital indicators are also limits. The secondary data used in this study included four process-based performance indicators and one outcome indicator. As discussed in the following chapter, health services have multiple dimensions that need to be measured in different angles. Having obtained four process-based and one outcome-based hospital performance indicators, our quantitative analysis fell short of providing a complete picture of what difference ISO certification make on MoH hospitals.
One example of this limitation is the lack of patients’ satisfaction rates for different hospital services of MoH hospitals.
CHAPTER 4: QUANTITATIVE FINDINGS: THE IMPACT OF ISO CERTIFICATION ON PERFORMANCE OF MOH HOSPITALS

The manager of ISO certified hospitals are expected to focus on organizational processes in their hospital to prevent deficiencies and to use systematic problem-solving approaches (based on statistical analysis) and cross-functional teams to identify problems and opportunities for improved care. Quality management tools introduced via ISO certification to MoH hospitals should help to create appropriate work procedures and environments in order to provide efficient and effective medical and hospital services continuously. Hence, ISO certified hospitals are expected to provide better quality health care services.

In this section, the study tests a series of hypotheses about performance differences between MoH hospitals with ISO certification and without ISO certification. Four process-based dependent variables, namely the average length of stay (in days), the bed occupancy rate (%), the number of outpatient per physicians, and the number of surgical operations per specialist, and an outcome-based dependent variable, crude death rate (%) were used to test whether ISO certified hospitals outperformed non-certified hospitals before and after receiving their ISO certifications.

Accordingly, T-test statistics were run by using SPSS 12.0 statistical software in order to scrutinize performance differences between ISO certified and non-certified hospitals statistically.\(^\text{11}\) Before discussing the T-test statistics results for each dependent variable, a

\(^{11}\) Initially, the chi-square test was intended for analyzing performance differences between ISO certified and non-certified hospitals. Due to having non-random sampled hospitals and two dependent variables (bed
time series graphic and the data of individual hospitals for each dependent variable are offered to compare and contrast changes in performance of two groups of MoH hospitals from 1993 to 2003. Since the first MoH hospital received ISO certification in 1998, 1998 can be accepted as a milestone year in order to rigorously examine the impact of quality management initiatives on hospitals and medical services. Indeed, years between 1993 and 1997 is termed the pre-certification period, while years between 1998 and 2003 is called the post-certification period for the sake of this analysis.

This chapter also analyzes another group of MoH hospitals that received their ISO certification in or after 2002 in order to provide detailed understanding of pre-certification period performance and its impacts. Finally, this chapter ends with a discussion on research caveats regarding current data availability in the MoH hospitals.

PERFORMANCE OF CERTIFIED AND NON-CERTIFIED HOSPITALS IN REDUCING THE AVERAGE LENGTH OF STAY

The Average Length of Stay (ALS) is used to indicate that how many days a person stays in a hospital until he or she is dismissed or dies in a hospital. When a hospital is able to reduce its ALS during a period of time, its performance toward their inpatients during that period is expected be higher (Sarp et al., 2002). Van Peursem et al. (1995) also indicates that the ALS type discharge rates is to be used in determining effectiveness and efficiency of health care services by hospitals whose number one priority is to provide medical treatments

occupancy rate and crude death rate) in the form of percentages, the data set used in this study were found to violate two important requirements of the Chi-square test. Further information about requirements of the chi square test can be obtained from O’Sullivan and Rassel’s book (“Research Methods for Public Administration.” 1995, NY: White Plains; p. 359.)
to their patients in a timely manner while using available medical and hospital resources efficiently. Modern hospitals aim to reduce their ALS minimum of six days or less (Jangaiah, 2000).

**Changes in the ALS Values from 1993 to 2003**

The following time-series graph offers a visual scrutiny of the mean ALS change of certified and non-certified hospitals from 1993 to 2003. The time series graph 4.1 shows that the ISO certified hospitals had a half day longer ALS group means than those of non-certified hospitals from 1993 to 1997. However, the ISO certified hospitals began to experience a downward trend of slightly lower mean ALS values after 1997 whereas non-certified hospitals experienced a slight increase in their mean ALS values from 1998 to 2003. In short, the below time series graph shows that the nine ISO certified MoH hospitals tended to lower their mean ALS values during post certification period.

**Graph 4.1: Changes in the Average Length of Stay (day) Means of the ISO certified and Non-Certified MoH Hospitals from 1993 to 2003**
The ALS values of individual ISO certified and non-certified MoH hospitals are provided in Table 4.1 in order to examine the individual performance of hospitals with and without ISO certification. When we look at Table 4.1, we can see that the nine ISO certified hospital did not have lower ALS scores than the nine non-certified hospitals during the pre-certification period (1993-1997). In the same period, only three out of nine ISO certified hospitals had an ALS score lower than five days, whereas five out of nine non-certified hospitals had ALS scores lower than five days. Three out of five ISO certified hospitals were able to lower their ALS scores slightly during the post-certification period (1999-2003) while all of non-
certified hospitals experienced an increase in their ALS values. Therefore, there was no hospital with ISO certification that had a substantially low level of ALS scores compared with non-certified hospitals before and after ISO certification practices started in 1998.

**Testing Statistical Differences in the ALS Group Means**

After examining time series graph for the ALS means, Independent Samples T-test was run to test the following hypothesis:

**Ha**: Hospitals with ISO certification have better performance in reducing the average length of stay (ALS) than non-certified hospitals.

**Table 4.2: Group Statistics of the Average Length of Stay (Day) for the ISO Certified and Non-certified MoH Hospitals from 1993 to 2003.**

<table>
<thead>
<tr>
<th>Year</th>
<th>Certification</th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Std. Error Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>1993</td>
<td>Yes</td>
<td>9</td>
<td>5.33</td>
<td>1.51</td>
<td>.506</td>
</tr>
<tr>
<td></td>
<td>No</td>
<td>9</td>
<td>4.84</td>
<td>1.65</td>
<td>.550</td>
</tr>
<tr>
<td>1995</td>
<td>Yes</td>
<td>9</td>
<td>5.24</td>
<td>1.46</td>
<td>.489</td>
</tr>
<tr>
<td></td>
<td>No</td>
<td>9</td>
<td>4.71</td>
<td>1.67</td>
<td>.558</td>
</tr>
<tr>
<td>1997</td>
<td>Yes</td>
<td>9</td>
<td>5.47</td>
<td>1.77</td>
<td>.590</td>
</tr>
<tr>
<td></td>
<td>No</td>
<td>9</td>
<td>4.91</td>
<td>1.60</td>
<td>.535</td>
</tr>
<tr>
<td>1999</td>
<td>Yes</td>
<td>9</td>
<td>5.41</td>
<td>1.54</td>
<td>.513</td>
</tr>
<tr>
<td></td>
<td>No</td>
<td>9</td>
<td>4.77</td>
<td>1.52</td>
<td>.509</td>
</tr>
<tr>
<td>2001</td>
<td>Yes</td>
<td>9</td>
<td>5.26</td>
<td>1.64</td>
<td>.546</td>
</tr>
<tr>
<td></td>
<td>No</td>
<td>9</td>
<td>4.95</td>
<td>1.66</td>
<td>.555</td>
</tr>
<tr>
<td>2003</td>
<td>Yes</td>
<td>9</td>
<td>5.26</td>
<td>1.36</td>
<td>.454</td>
</tr>
<tr>
<td></td>
<td>No</td>
<td>9</td>
<td>5.10</td>
<td>1.64</td>
<td>.549</td>
</tr>
</tbody>
</table>

Group statistics for the ALS means were provided for two year intervals from 1993 to 2003 for the certified and non-certified hospital groups. Group statistics indicate that the nine ISO certified MoH hospitals had longer ALS (days) means than the nine non-certified MoH.

While the nine MoH hospitals with ISO certification slightly diminished their mean ALS values from 5.41 days to 5.26 days after receiving ISO certification, the nine MoH hospitals
without ISO certification experienced a slight increase from 4.77 days to 5.1 days from 1997 to 2003. However, group statistics show that there is no substantial difference between ALS group means of the certified and non-certified hospitals since 1998.

Based on the group of above statistical findings, we reject the hypothesis (Ha₁) of the study that the nine MoH hospitals with ISO certification have better performance in reducing the average length of stay than non-certified hospitals. Since the aforementioned hypothesis (Ha₁) is already rejected, independent T-test results of the ALS dependent variables are not discussed further in this section. In conclusion, ISO certification did not seem to lead to substantially lower ALS than non-certified hospitals.

PERFORMANCE OF CERTIFIED AND NON-CERTIFIED HOSPITALS IN INCREASING THE BED OCCUPANCY RATE

Bed Occupancy Rate (BOR) is used to indicate how often hospital beds are used in a given period. The higher the percentage of bed occupancy, the greater the efficiency and effectiveness in using hospital bed resources. This study assumes that ISO certified hospitals should have increased their BOR values after they were rewarded with ISO certification more than non-certified hospitals.

Changes in the BOR Values from 1993 to 2003

The time-series graph of mean BOR changes from 1993 to 2003 shows that hospitals with ISO certification had greater BOR during the ten-year period than non-certified hospitals. Graph 4.2 also shows that both groups of hospitals experienced a decrease in their mean BOR between 1997 and 1999. Although the mean BOR values of the nine ISO certified and
non-certified hospitals started to increase continuously during the post-certification period, this increase was greater for the ISO certified hospital than non-certified hospitals. In summary, ISO certified hospitals had higher mean BOR than non-certified hospitals, and the former group of hospitals experienced a substantial increase in their mean BOR during the post-certification period.

**Graph 4.2: Changes in the Bed Occupancy Rate (%) Means of the ISO certified and Non-Certified MoH Hospitals from 1993 to 2003**

Table 4.3 provides the annual BOR of individual ISO certified and non-certified hospitals between 1993 and 2003. Generally speaking, ISO certified hospitals showed greater performance in increasing BOR than non-certified hospitals during the ten-year period. While four out of nine ISO certified MoH hospitals kept their BOR above 65% during the pre-certification period (1993-1997), only two out of nine non-certified MoH hospitals had BOR over 65% during the same period. After ISO certification initiatives took place in 1998, certified hospitals maintained a higher BOR than non-certified hospitals. In fact, Bor Government Hospital was the only ISO certified hospital that never exceeded 60% BOR after receiving its ISO certification. Also, six out of nine ISO certified hospitals reached over 70%
BOR during the post-certification period. The BOR values of individual ISO certified and non-certified hospitals between 1993 and 2003 indicates that currently ISO certified hospitals tend to have higher BOR than non-certified hospitals before and after quality management practices took place in 1998.

Table 4.3: The Bed Occupancy Rate (%) Changes in the ISO Certified and Non-certified Hospitals from 1993 to 2003

<table>
<thead>
<tr>
<th>ISO Certified Hospitals</th>
<th>1993</th>
<th>1995</th>
<th>1997</th>
<th>1999</th>
<th>2001</th>
<th>2003</th>
<th>Individual Means</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Ankara Dr. Z.T. Wom. E&amp;R.</td>
<td>70.2</td>
<td>63.4</td>
<td>61.4</td>
<td>76.8</td>
<td>71.2</td>
<td>68.5</td>
<td>67.27</td>
</tr>
<tr>
<td>2 Balikesir Government</td>
<td>60</td>
<td>61.2</td>
<td>62.9</td>
<td>66.4</td>
<td>69.1</td>
<td>70.9</td>
<td>65.37</td>
</tr>
<tr>
<td>3 Eskisehir Matern. &amp; Child.</td>
<td>66.4</td>
<td>69.9</td>
<td>72.1</td>
<td>68</td>
<td>74.6</td>
<td>83.5</td>
<td>71.75</td>
</tr>
<tr>
<td>4 Pendik Government</td>
<td>54.7</td>
<td>61.6</td>
<td>79.5</td>
<td>44.5</td>
<td>80.8</td>
<td>92.9</td>
<td>67.98</td>
</tr>
<tr>
<td>5 Bakirkoy Dr. S.K. E&amp;R.</td>
<td>61.5</td>
<td>53.4</td>
<td>56</td>
<td>59.1</td>
<td>51.3</td>
<td>73.5</td>
<td>59.74</td>
</tr>
<tr>
<td>6 Kayseri Dr. VAO Govern.</td>
<td>61.8</td>
<td>63.9</td>
<td>60.7</td>
<td>61.1</td>
<td>56.8</td>
<td>63.7</td>
<td>62.61</td>
</tr>
<tr>
<td>7 Samsun Government</td>
<td>68.7</td>
<td>77.6</td>
<td>77.8</td>
<td>67.9</td>
<td>67.6</td>
<td>77.1</td>
<td>75.51</td>
</tr>
<tr>
<td>8 Bor Government</td>
<td>44.1</td>
<td>49.3</td>
<td>41.5</td>
<td>36.1</td>
<td>43.9</td>
<td>41.1</td>
<td>44.42</td>
</tr>
<tr>
<td>9 Diyarbakir Government</td>
<td>39.7</td>
<td>42.7</td>
<td>51.5</td>
<td>58.2</td>
<td>64.8</td>
<td>75.3</td>
<td>54.55</td>
</tr>
<tr>
<td><strong>BOR Mean</strong></td>
<td>58.57</td>
<td>60.33</td>
<td>62.60</td>
<td>59.79</td>
<td>64.46</td>
<td>71.83</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Non-Certified Hospitals</th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Bandirma Dr. MGK Govern.</td>
<td>50.2</td>
<td>54.8</td>
<td>50</td>
<td>44.8</td>
<td>46.5</td>
<td>52.3</td>
<td>50.31</td>
</tr>
<tr>
<td>2 Sariyer Government</td>
<td>42.5</td>
<td>44.8</td>
<td>48.6</td>
<td>44.2</td>
<td>44</td>
<td>48.4</td>
<td>44.14</td>
</tr>
<tr>
<td>3 Taksim Educ. &amp; Research</td>
<td>62.3</td>
<td>64.2</td>
<td>63.2</td>
<td>66.9</td>
<td>57.9</td>
<td>67.5</td>
<td>63.7</td>
</tr>
<tr>
<td>4 Nigde Government</td>
<td>50</td>
<td>69.7</td>
<td>65.4</td>
<td>34.9</td>
<td>41.2</td>
<td>54.5</td>
<td>53.59</td>
</tr>
<tr>
<td>5 Kayseri FO Matern. &amp; Child.</td>
<td>43.7</td>
<td>47.4</td>
<td>52.9</td>
<td>53.5</td>
<td>55.3</td>
<td>56.7</td>
<td>51.04</td>
</tr>
<tr>
<td>6 Malatya Government</td>
<td>61.3</td>
<td>59.3</td>
<td>54.4</td>
<td>56</td>
<td>56.9</td>
<td>61.1</td>
<td>57.33</td>
</tr>
<tr>
<td>7 Bafra Dr. NK Government</td>
<td>55.1</td>
<td>55.1</td>
<td>58.4</td>
<td>58.2</td>
<td>64</td>
<td>75.2</td>
<td>61.33</td>
</tr>
<tr>
<td>8 Siirt Government</td>
<td>34.1</td>
<td>32.2</td>
<td>43.9</td>
<td>49.9</td>
<td>51.8</td>
<td>56.1</td>
<td>44.42</td>
</tr>
<tr>
<td>9 Van Government</td>
<td>65.2</td>
<td>58</td>
<td>75.4</td>
<td>68.9</td>
<td>72.7</td>
<td>72.8</td>
<td>68.12</td>
</tr>
<tr>
<td><strong>BOR Mean</strong></td>
<td>51.60</td>
<td>53.94</td>
<td>56.91</td>
<td>53.03</td>
<td>54.48</td>
<td>60.51</td>
<td></td>
</tr>
</tbody>
</table>
Testing Statistical Differences in the BOR Group Means

We test the following hypothesis in order to examine the effects of ISO certification on change in the Bed Occupancy Rate:

\( H_a_2: \text{Hospitals with ISO certification have better performance in enhancing Bed Occupancy Rate than non-certified hospitals.} \)

The BOR group statistics of certified and non-certified hospitals’ BOR values show that ISO certified hospitals did have higher BOR means than non-certified hospitals before and after the certification initiatives began. Before receiving their ISO certifications, ISO certified hospitals increased their BOR values around four percent, and the same hospitals increased their BOR values more than eleven percent after receiving their ISO certification. Since these results support the hypothesis of the study (\( H_a_2 \)), we need to continue our statistical analysis by running an independent T-test.

Table 4.4: Group Statistics of the Bed Occupancy Rate (%) for the ISO Certified and Non-certified MoH Hospitals from 1993 to 2003.

<table>
<thead>
<tr>
<th>Year</th>
<th>Certification</th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Std. Error Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>1993</td>
<td>Yes</td>
<td>9</td>
<td>58.56</td>
<td>10.61</td>
<td>3.53</td>
</tr>
<tr>
<td></td>
<td>No</td>
<td>9</td>
<td>51.60</td>
<td>10.37</td>
<td>3.45</td>
</tr>
<tr>
<td>1995</td>
<td>Yes</td>
<td>9</td>
<td>60.33</td>
<td>10.57</td>
<td>3.52</td>
</tr>
<tr>
<td></td>
<td>No</td>
<td>9</td>
<td>53.94</td>
<td>11.17</td>
<td>3.72</td>
</tr>
<tr>
<td>1997</td>
<td>Yes</td>
<td>9</td>
<td>62.60</td>
<td>12.36</td>
<td>4.12</td>
</tr>
<tr>
<td></td>
<td>No</td>
<td>9</td>
<td>56.91</td>
<td>9.77</td>
<td>3.25</td>
</tr>
<tr>
<td>1999</td>
<td>Yes</td>
<td>9</td>
<td>59.78</td>
<td>12.57</td>
<td>4.19</td>
</tr>
<tr>
<td></td>
<td>No</td>
<td>9</td>
<td>53.03</td>
<td>10.97</td>
<td>3.65</td>
</tr>
<tr>
<td>2001</td>
<td>Yes</td>
<td>9</td>
<td>64.45</td>
<td>11.73</td>
<td>3.91</td>
</tr>
<tr>
<td></td>
<td>No</td>
<td>9</td>
<td>54.47</td>
<td>9.98</td>
<td>3.32</td>
</tr>
<tr>
<td>2003</td>
<td>Yes</td>
<td>9</td>
<td>71.83</td>
<td>14.34</td>
<td>4.78</td>
</tr>
<tr>
<td></td>
<td>No</td>
<td>9</td>
<td>60.51</td>
<td>9.35</td>
<td>3.11</td>
</tr>
</tbody>
</table>
Table 4-5: Independent T-test for Equity of BOR Group Means between the ISO Certified and Non-certified Hospitals

<table>
<thead>
<tr>
<th></th>
<th>Levene's Test for Equality of Variances</th>
<th>t-test for Equality of Means</th>
<th>90% Confidence Interval of the Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>F</td>
<td>Sig.</td>
<td>T</td>
</tr>
<tr>
<td>1993 Equal variances assumed</td>
<td>.001</td>
<td>.981</td>
<td>1.4</td>
</tr>
<tr>
<td>Equal variances not assumed</td>
<td>1.4</td>
<td>15.9</td>
<td>.178</td>
</tr>
<tr>
<td>1995 Equal variances assumed</td>
<td>.017</td>
<td>.898</td>
<td>1.24</td>
</tr>
<tr>
<td>Equal variances not assumed</td>
<td>1.24</td>
<td>15.9</td>
<td>.231</td>
</tr>
<tr>
<td>1997 Equal variances assumed</td>
<td>.270</td>
<td>.610</td>
<td>1.08</td>
</tr>
<tr>
<td>Equal variances not assumed</td>
<td>1.08</td>
<td>15.1</td>
<td>.296</td>
</tr>
<tr>
<td>1999 Equal variances assumed</td>
<td>.037</td>
<td>.850</td>
<td>1.21</td>
</tr>
<tr>
<td>Equal variances not assumed</td>
<td>1.21</td>
<td>15.7</td>
<td>.243</td>
</tr>
<tr>
<td>2001 Equal variances assumed</td>
<td>.281</td>
<td>.603</td>
<td>1.94</td>
</tr>
<tr>
<td>Equal variances not assumed</td>
<td>1.94</td>
<td>15.6</td>
<td>.070</td>
</tr>
<tr>
<td>2003 Equal variances assumed</td>
<td>.265</td>
<td>.614</td>
<td>1.98</td>
</tr>
<tr>
<td>Equal variances not assumed</td>
<td>1.98</td>
<td>13.7</td>
<td>.068</td>
</tr>
</tbody>
</table>

Independent Samples: T-test results were obtained and presented in Table 4.5. One of the assumptions for comparing sample means is that the population variances of the dependent variable is the same for both groups. If the results of independent samples test support this assumption, we can use the first row statistics of the above table, “equal variances assumed.” When we look at the significance value of Levene’s test for BOR, we can detect that this value is greater than the critical value of .05. Therefore, we continue our analysis by using the first row and assuming equal variances in the BOR mean scores of the certified and non-certified hospital groups for selected years.
T-test statistics for the pre-certification period (from 1993 to 1997) have relatively high significance levels that are greater than .025 for the one-tailed test. On the other hand, the significant values of T-tests after 2001 are relatively smaller than those of the pre-certification term (.07/2 = .035 for 2001 and .065/2 = .032 for 2003.) Furthermore, the 90 percent confidence interval of the difference between two sets of hospital does not contain “0,” which indicates that the means of the two groups of hospitals do differ statistically. Hence, we do not reject the hypothesis of the study (Ha2) that hospitals with ISO certification have greater performance in enhancing their bed occupancy rates than hospitals without ISO certification. In conclusion, ISO certification seemed to lead to substantially higher BOR than non-certified hospitals.

**PERFORMANCE OF CERTIFIED AND NON-CERTIFIED HOSPITALS IN INCREASING THE NUMBER OF OUTPATIENTS PER PHYSICIAN**

The number of outpatients per physician (OpP) is used to evaluate performance of physicians in a given period. The higher the number of outpatients per physician, the greater the physician efficiency in any given hospital is. This study assumes that ISO certification should create appropriate work processes for physicians to examine as many outpatients as possible. In other words, physicians of ISO certified hospitals should be able to examine greater number of patients than those of non-certified hospitals since the ISO certified hospitals are expected to prevent delays in patient admissions while setting proper incentive systems to encourage their physicians to work hard.
Changes in the OpP Values from 1993 to 2003

Time-series graph 4.3 shows that the non-certified hospitals had considerably greater number of OpP than the ISO certified hospitals during the pre-certification period (1993-1997). Although currently ISO certified hospitals’ mean number of OpP value reached the highest point with 4000 outpatients per physician in 1995, the hospitals experienced a dramatic decrease in their mean OpP values in the following years. ISO certified hospitals seemed to slightly increase their mean number of OpP after receiving their ISO certifications, but this increase lasted until 2001. Finally, Graph 4.3 clearly indicates that the number of outpatients per physician mean of certified hospitals were not greater than those of non-certified hospitals during the ten-year period from 1993-2003.

Graph 4.3: Changes in the number of Outpatients per Physicians Means of the ISO Certified and Non-Certified MoH Hospitals from 1993 to 2003
Table 4.6: The number of Outpatients per Physician Changes in the ISO Certified and Non-certified Hospitals from 1993 to 2003

<table>
<thead>
<tr>
<th>ISO Certified Hospitals</th>
<th>1993</th>
<th>1995</th>
<th>1997</th>
<th>1999</th>
<th>2001</th>
<th>2003</th>
<th>Individual Means</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Ankara Dr. Z.T. W E&amp;R.</td>
<td>660</td>
<td>730</td>
<td>868</td>
<td>827</td>
<td>684</td>
<td>834</td>
<td>773</td>
</tr>
<tr>
<td>2 Balikesir Government</td>
<td>3439</td>
<td>3801</td>
<td>4086</td>
<td>3951</td>
<td>4683</td>
<td>4982</td>
<td>3810</td>
</tr>
<tr>
<td>3 Eskisehir Matern. &amp;Child.</td>
<td>1762</td>
<td>1812</td>
<td>1304</td>
<td>1330</td>
<td>2709</td>
<td>2432</td>
<td>1844</td>
</tr>
<tr>
<td>4 Pendik Government</td>
<td>1652</td>
<td>4706</td>
<td>1986</td>
<td>3162</td>
<td>3384</td>
<td>2931</td>
<td>3027</td>
</tr>
<tr>
<td>5 Bakirkoy Dr. S.K. E.&amp;R.</td>
<td>3900</td>
<td>11929</td>
<td>3992</td>
<td>2308</td>
<td>2099</td>
<td>1785</td>
<td>4074</td>
</tr>
<tr>
<td>6 Kayseri Dr. VAO Govern.</td>
<td>2895</td>
<td>3390</td>
<td>4639</td>
<td>4602</td>
<td>4443</td>
<td>3414</td>
<td>3836</td>
</tr>
<tr>
<td>7 Samsun Government</td>
<td>1955</td>
<td>1754</td>
<td>1766</td>
<td>2416</td>
<td>2561</td>
<td>1468</td>
<td>2055</td>
</tr>
<tr>
<td>8 Bor Government</td>
<td>3102</td>
<td>3581</td>
<td>3937</td>
<td>4899</td>
<td>3685</td>
<td>4659</td>
<td>3954</td>
</tr>
<tr>
<td>9 Diyarbakir Government</td>
<td>4098</td>
<td>4255</td>
<td>5217</td>
<td>6139</td>
<td>6099</td>
<td>4768</td>
<td>5043</td>
</tr>
</tbody>
</table>

| OpP Mean | 2607 | 3995 | 3088 | 3292 | 3372 | 3030 |

<table>
<thead>
<tr>
<th>Non-Certified Hospitals</th>
<th>1993</th>
<th>1995</th>
<th>1997</th>
<th>1999</th>
<th>2001</th>
<th>2003</th>
<th>Individual Means</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Bandirma Dr.MGK Govern.</td>
<td>2902</td>
<td>3054.4</td>
<td>4749.6</td>
<td>3656.8</td>
<td>4022</td>
<td>3771</td>
<td>3630</td>
</tr>
<tr>
<td>2 Sariyer Government</td>
<td>3090</td>
<td>3536.8</td>
<td>3095.9</td>
<td>2830.9</td>
<td>3058</td>
<td>3854</td>
<td>3331</td>
</tr>
<tr>
<td>3 Taksim Educ. &amp; Research</td>
<td>1241</td>
<td>1025.1</td>
<td>1185.4</td>
<td>599.7</td>
<td>1416</td>
<td>1047</td>
<td>1034</td>
</tr>
<tr>
<td>4 Nigde Government</td>
<td>5112</td>
<td>5472.2</td>
<td>6251.8</td>
<td>5780.6</td>
<td>5173</td>
<td>4261</td>
<td>5305</td>
</tr>
<tr>
<td>5 Kayseri FO Matern.&amp;Child.</td>
<td>2514</td>
<td>2673.8</td>
<td>1996.4</td>
<td>2308.7</td>
<td>2424</td>
<td>1807</td>
<td>2073</td>
</tr>
<tr>
<td>6 Malatya Government</td>
<td>4822</td>
<td>5472.3</td>
<td>4486</td>
<td>4687.8</td>
<td>4047</td>
<td>3448</td>
<td>4260</td>
</tr>
<tr>
<td>7 Bafra Dr.NK Government</td>
<td>3452</td>
<td>3809.4</td>
<td>4411.3</td>
<td>4823.1</td>
<td>4766</td>
<td>4221</td>
<td>4628</td>
</tr>
<tr>
<td>8 Siirt Government</td>
<td>4415</td>
<td>6683.5</td>
<td>6411.6</td>
<td>6356.3</td>
<td>5728</td>
<td>4840</td>
<td>6037</td>
</tr>
<tr>
<td>9 Van Government</td>
<td>4544</td>
<td>4910.5</td>
<td>4473.8</td>
<td>4841.2</td>
<td>5323</td>
<td>5530</td>
<td>5427</td>
</tr>
</tbody>
</table>

| OpP Mean | 3565 | 4071 | 4118 | 3987 | 3995 | 3642 |

When we look at the OpP values of individual hospitals in both groups of MoH hospitals, it can be determined from the table that non-certified hospitals had higher OpP values than non-certified hospitals before and after ISO certification practices started to take place in MoH hospitals in 1998. For instance, during the five year period between 1993 and 1997, three out of nine ISO certified hospitals were able to exceed 4000 average number of
outpatients per physician, whereas six out of nine non-certified hospitals had more than 4000 outpatients per physician. Furthermore, although ISO certified hospitals tended to increase their OpP values after receiving their certification, non-certified hospitals managed to maintain their OpP values higher than certified hospitals.

**Testing Statistical Differences in the OpP Group Means**

The following hypothesis is tested to detect the effect of ISO certification on change in the number of Outpatients per Physician:

\[ H_{a3}: \text{Hospitals with ISO certification will have better performance in enhancing number of outpatients per physician than non-certified hospitals.} \]

**Table 4.7: Group Statistics for the OpP of the ISO Certified and Non-certified MoH Hospitals from 1993 to 2003.**

<table>
<thead>
<tr>
<th>Year</th>
<th>Certification</th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Std. Error Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>1993</td>
<td>Yes</td>
<td>9</td>
<td>2607.46</td>
<td>1159.65</td>
<td>386.55</td>
</tr>
<tr>
<td></td>
<td>No</td>
<td>9</td>
<td>3565.77</td>
<td>1266.77</td>
<td>422.25</td>
</tr>
<tr>
<td>1995</td>
<td>Yes</td>
<td>9</td>
<td>3995.33</td>
<td>3250.85</td>
<td>1083.61</td>
</tr>
<tr>
<td></td>
<td>No</td>
<td>9</td>
<td>4070.92</td>
<td>1734.71</td>
<td>578.23</td>
</tr>
<tr>
<td>1997</td>
<td>Yes</td>
<td>9</td>
<td>3088.33</td>
<td>1602.55</td>
<td>534.18</td>
</tr>
<tr>
<td></td>
<td>No</td>
<td>9</td>
<td>4118.03</td>
<td>1757.36</td>
<td>585.78</td>
</tr>
<tr>
<td>1999</td>
<td>Yes</td>
<td>9</td>
<td>3292.66</td>
<td>1750.58</td>
<td>583.52</td>
</tr>
<tr>
<td></td>
<td>No</td>
<td>9</td>
<td>3987.28</td>
<td>1819.55</td>
<td>606.51</td>
</tr>
<tr>
<td>2001</td>
<td>Yes</td>
<td>9</td>
<td>3371.88</td>
<td>1594.66</td>
<td>531.55</td>
</tr>
<tr>
<td></td>
<td>No</td>
<td>9</td>
<td>3995.22</td>
<td>1446.96</td>
<td>482.32</td>
</tr>
<tr>
<td>2003</td>
<td>Yes</td>
<td>9</td>
<td>3030.33</td>
<td>1533.44</td>
<td>511.14</td>
</tr>
<tr>
<td></td>
<td>No</td>
<td>9</td>
<td>3642.11</td>
<td>1410.61</td>
<td>470.20</td>
</tr>
</tbody>
</table>

Group statistics of OpP shows that hospitals had significantly greater means of the number of outpatients per physician than certified hospitals throughout the ten year period from 1993 to
2003. Therefore, there is not sufficient evidence to conclude that physicians of the certified hospitals out performed their counterparts in non-certified hospitals during the pre-certification and post-certification periods. In sum, there is no substantial evidence to conclude that ISO certification leaded higher OpP than non-certified hospitals.

PERFORMANCE OF CERTIFIED AND NON-CERTIFIED HOSPITALS IN INCREASING THE NUMBER OF SURGICAL OPERATIONS PER PHYSICIAN

The number of Surgical Operations per specialist (SOpS) per year is used for the evaluation of physician performance. The higher the number of surgical operation per specialist, the greater efficiency of specialists in a given hospital is. This study assumes that specialists of ISO certified hospitals should have improved medical and hospital processes as a result of quality management practices which should lead them to perform more efficiently than specialists in non-certified hospitals.

Changes in the SOpS Values from 1993 to 2003

Time-series graph 4.4 shows that although the number of SOpS mean of ISO certified hospitals decreased constantly, the mean SOpS value of non-certified hospitals moved up and down throughout a ten-year period from 1993 to 2003. In the same vein, while ISO certified hospitals experienced diminishing in the mean SOpS during the pre-certification period (1993-1997), their mean SOpS continued to decrease after obtaining ISO certification during the post-certification period (1999-2003) as well. However, non-certified hospitals were able to increase their mean SOpS from 1998 to 2001, and experienced a decrease during the subsequent two years. Graph 4.4 indicates that ISO certified and non-certified hospital
groups experienced an overall decrease in their SOpS means throughout the ten-year period (1993-2003).

**Graph 4.4: Changes in the number of Surgical Operations per Specialist Means of the ISO certified and Non-Certified MoH Hospitals from 1993 to 2003**

When we consider the SOpS values of individual hospitals, it can be noticed from table 4.8 that the both groups of MoH hospitals showed very mixed SOpS trends. For instance, although five out of nine ISO certified hospitals had lower than 70 SOpS values during the pre-certification period, three out of nine non-certified hospitals had lower than 70 SOpS values during the same time period. In fact, Ankara Dr. Zekai Tahir Burak Woman Education and Research Hospitals, in the ISO certified hospital group, and Kayseri F.O. Maternity and Children Hospital, in the non-certified hospital group, were the outliers, with more than 250 SOpS during the pre-certification period (1993-1997). Excluding these two outliers from both groups of hospitals, it can be concluded that ISO certified hospitals did not have
substantially higher SOpS values than non-certified hospitals during the pre-certification and the post-certification periods.

**Table 4.8: The number of Surgical Operations per Specialist Changes in the ISO Certified and Non-certified Hospitals from 1993 to 2003**

<table>
<thead>
<tr>
<th>ISO Certified Hospitals</th>
<th>1993</th>
<th>1995</th>
<th>1997</th>
<th>1999</th>
<th>2001</th>
<th>2003</th>
<th>Individual Means</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Ankara Dr. Z.T. W E&amp;R.</td>
<td>304.4</td>
<td>272</td>
<td>296</td>
<td>265</td>
<td>210</td>
<td>156</td>
<td>252.3</td>
</tr>
<tr>
<td>2 Balikesir Government</td>
<td>63.9</td>
<td>46</td>
<td>42</td>
<td>44</td>
<td>48</td>
<td>61</td>
<td>48.7</td>
</tr>
<tr>
<td>3 Eskisehir Matern. &amp; Child.</td>
<td>180.4</td>
<td>189</td>
<td>101</td>
<td>86</td>
<td>85</td>
<td>83</td>
<td>120.7</td>
</tr>
<tr>
<td>4 Pendik Government</td>
<td>18.8</td>
<td>33</td>
<td>15</td>
<td>12</td>
<td>26</td>
<td>56</td>
<td>27.01</td>
</tr>
<tr>
<td>5 Bakirkoy Dr. S.K. E.&amp;R.</td>
<td>28.3</td>
<td>36</td>
<td>39</td>
<td>25</td>
<td>36</td>
<td>40</td>
<td>34.3</td>
</tr>
<tr>
<td>6 Kayseri Dr. VAO Government</td>
<td>54.36</td>
<td>51</td>
<td>54</td>
<td>43</td>
<td>56</td>
<td>57</td>
<td>53.1</td>
</tr>
<tr>
<td>7 Samsun Government</td>
<td>73.5</td>
<td>87</td>
<td>85</td>
<td>73</td>
<td>60</td>
<td>70</td>
<td>77.5</td>
</tr>
<tr>
<td>8 Bor Government</td>
<td>48.7</td>
<td>30</td>
<td>72</td>
<td>112</td>
<td>40</td>
<td>82</td>
<td>61.7</td>
</tr>
<tr>
<td>9 Diyarbakir Government</td>
<td>56</td>
<td>50</td>
<td>67</td>
<td>49</td>
<td>56</td>
<td>61</td>
<td>56.4</td>
</tr>
<tr>
<td><strong>SOpS Mean</strong></td>
<td>92.0</td>
<td>88.2</td>
<td>85.7</td>
<td>78.8</td>
<td>68.6</td>
<td>74.0</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Non-Certified Hospitals</th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Bandirma Dr.MGK Govern.</td>
<td>54.7</td>
<td>61.78</td>
<td>70.79</td>
<td>54.88</td>
<td>54.72</td>
<td>50.81</td>
<td>57.5</td>
</tr>
<tr>
<td>2 Sariyer Government</td>
<td>61.3</td>
<td>78.05</td>
<td>51.61</td>
<td>19.74</td>
<td>23.58</td>
<td>29.06</td>
<td>45.9</td>
</tr>
<tr>
<td>3 Taksim Educ. &amp; Research</td>
<td>44</td>
<td>44.28</td>
<td>36.06</td>
<td>31.64</td>
<td>22.01</td>
<td>35.57</td>
<td>37.1</td>
</tr>
<tr>
<td>4 Nigde Government</td>
<td>70</td>
<td>76.83</td>
<td>70.87</td>
<td>51.44</td>
<td>63.77</td>
<td>62.8</td>
<td>65</td>
</tr>
<tr>
<td>5 Kayseri FO Matern.&amp;Child.</td>
<td>145.2</td>
<td>227.36</td>
<td>178.73</td>
<td>188.06</td>
<td>250.47</td>
<td>77.73</td>
<td>196</td>
</tr>
<tr>
<td>6 Malatya Government</td>
<td>74.2</td>
<td>82.57</td>
<td>58.83</td>
<td>58.52</td>
<td>67.01</td>
<td>53.2</td>
<td>62.2</td>
</tr>
<tr>
<td>7 Bafra Dr.NK Government</td>
<td>80.4</td>
<td>85.72</td>
<td>82.63</td>
<td>80.24</td>
<td>87.53</td>
<td>83.7</td>
<td>95.9</td>
</tr>
<tr>
<td>8 Siirt Government</td>
<td>78.3</td>
<td>112.23</td>
<td>103.71</td>
<td>75.16</td>
<td>71.5</td>
<td>89.71</td>
<td>91.2</td>
</tr>
<tr>
<td>9 Van Government</td>
<td>87.5</td>
<td>96.17</td>
<td>110.8</td>
<td>82.14</td>
<td>90.83</td>
<td>90.64</td>
<td>97.9</td>
</tr>
<tr>
<td><strong>SOpS Mean</strong></td>
<td>77.3</td>
<td>96.1</td>
<td>84.9</td>
<td>71.3</td>
<td>81.3</td>
<td>63.7</td>
<td></td>
</tr>
</tbody>
</table>
Testing Statistical Differences in the SOpS Group Means

The following hypothesis of the study is tested in order to detect the effect of ISO certification for each hospital:

$H_{a4}$: Hospitals with ISO certification have better performance in enhancing the number of Surgical Operations per Specialist than non-certified hospitals.

Group statistics of SOpS show a mixed trend during pre-certification and post-certification periods. There is no substantial indication that ISO certified hospitals had a greater number of surgical operations per specialist than non-certified hospitals. Moreover, both groups of hospitals experienced a decrease in their SOpS mean values from 1993 to 2003. Also, ISO certification hospitals had slightly bigger SOpS means than non-certified hospitals during post-certification period. Since group statistics presents ambiguous results, an independent T-test was run and is presented below.

**Table 4.9: Group Statistics for the SOpS of the ISO Certified and Non-certified MoH Hospitals from 1993 to 2003.**

<table>
<thead>
<tr>
<th>Year</th>
<th>Certification</th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Std. Error Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>1993</td>
<td>Yes</td>
<td>9</td>
<td>92.04</td>
<td>92.23</td>
<td>30.74</td>
</tr>
<tr>
<td></td>
<td>No</td>
<td>9</td>
<td>77.28</td>
<td>28.86</td>
<td>9.62</td>
</tr>
<tr>
<td>1995</td>
<td>Yes</td>
<td>9</td>
<td>88.22</td>
<td>84.94</td>
<td>28.31</td>
</tr>
<tr>
<td></td>
<td>No</td>
<td>9</td>
<td>96.11</td>
<td>52.84</td>
<td>17.61</td>
</tr>
<tr>
<td>1997</td>
<td>Yes</td>
<td>9</td>
<td>85.66</td>
<td>82.98</td>
<td>27.66</td>
</tr>
<tr>
<td></td>
<td>No</td>
<td>9</td>
<td>84.89</td>
<td>42.43</td>
<td>14.14</td>
</tr>
<tr>
<td>1999</td>
<td>Yes</td>
<td>9</td>
<td>78.77</td>
<td>76.31</td>
<td>25.43</td>
</tr>
<tr>
<td></td>
<td>No</td>
<td>9</td>
<td>71.31</td>
<td>48.61</td>
<td>16.20</td>
</tr>
<tr>
<td>2001</td>
<td>Yes</td>
<td>9</td>
<td>68.55</td>
<td>55.64</td>
<td>18.54</td>
</tr>
<tr>
<td></td>
<td>No</td>
<td>9</td>
<td>81.26</td>
<td>67.92</td>
<td>22.64</td>
</tr>
<tr>
<td>2003</td>
<td>Yes</td>
<td>9</td>
<td>74</td>
<td>33.52</td>
<td>11.17</td>
</tr>
<tr>
<td></td>
<td>No</td>
<td>9</td>
<td>63.69</td>
<td>23.09</td>
<td>7.69</td>
</tr>
</tbody>
</table>
Table 4.10: Independent T-test for Equity of SOpS Group Means between the ISO Certified and Non-certified Hospitals

<table>
<thead>
<tr>
<th>Year</th>
<th>Levene’s Test for Equality of Variances</th>
<th>t-test for Equality of Means</th>
<th>90% Confidence Interval of the Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>F</td>
<td>Sig.</td>
<td>t</td>
</tr>
<tr>
<td>1993</td>
<td>Equal variances assumed</td>
<td>5.383</td>
<td>.034</td>
</tr>
<tr>
<td></td>
<td>Equal variances not assumed</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1995</td>
<td>Equal variances assumed</td>
<td>1.942</td>
<td>.182</td>
</tr>
<tr>
<td></td>
<td>Equal variances not assumed</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1997</td>
<td>Equal variances assumed</td>
<td>.704</td>
<td>.414</td>
</tr>
<tr>
<td></td>
<td>Equal variances not assumed</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Equal variances not assumed</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2001</td>
<td>Equal variances assumed</td>
<td>.074</td>
<td>.789</td>
</tr>
<tr>
<td></td>
<td>Equal variances not assumed</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Equal variances not assumed</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Since the significance value of Levene’s Test for equality of variance for all years, except 1993, is greater than .05, we can assume equal variance in SOpS data for both groups of hospitals in our analysis. The significant values of t-tests for equality of means for each year from 1993 to 2003 are greatly higher than .025 for the one-tailed test. In addition, the 90 percent confidence interval of the difference between two sets of hospital for all years contains 0, which indicates that the means of two groups of hospital do not differ statistically. Hence, these results do not support the hypothesis of the study (Ha4) that hospitals with ISO
certification have greater performance in enhancing the number of surgical operations per specialist than hospitals without ISO certification. In conclusion, there is no significant evidence to conclude that ISO certification leaded to higher SOpS than non-certified hospitals.

**PERFORMANCE OF CERTIFIED AND NON-CERTIFIED HOSPITALS IN REDUCING THE CRUDE DEATH RATE**

The crude death rate (CDR) indicates how many patients die per 100 inpatients during a given period. This is used for evaluation of the quality of hospital services as an outcome indicator. The lower the crude death rate, the greater the quality of given hospital is.

**Changes in CDR Values from 1993 to 2003**

Changes in the mean Crude Death Rate of both groups of hospitals between 1993 and 2003 can be examined from Graph 4.5. The time-series graph shows that the certified MoH hospitals kept their mean CDR value between 1.3 percent and 1.5 percent during the course of ten-year period; the non-certified hospitals experienced a dramatic decrease in their mean CDR values, from 1.95 to .9 percent. This graph clearly shows that while currently ISO certified hospitals had lower mean CDR values during the pre-certification period than non-certified hospitals, the non-certified hospitals were able to drop their mean CDR values more than the certified hospitals during the post-certification period. In other words, the mean CDR values of the certified hospitals could not decrease their mean CDR values more than non-certified hospitals during the pre- and post-certification periods.
Graph 4.5: the Crude Death Rates (%) Changes in the ISO Certified and Non-certified Hospitals from 1993 to 2003.

The annual CDR values of individual hospitals from both groups of hospitals are offered in Table 4.11. It shows that currently ISO certified hospitals had slightly lower CDR values than non-certified hospitals during the pre-certification period (1993-1997). In this vein, whereas three ISO certified hospitals had CDR values lower than one percent, there was only one non-certified hospital with a CDR value lower than one percent during the pre-certification period. During the post-certification period (1999-2003), however, non-certified hospitals decreased their CDR values more than certified hospitals. Among ISO certified hospitals, only Kayseri Dr. V.A.O. Government Hospital was able to decrease its CDR value after receiving its ISO certification during the post-certification period. Therefore, it can be concluded that currently ISO certified hospitals did have low level of CDR values before receiving their ISO certification, but they were not successful in decreasing their CDR values more than non-certified hospitals during the post-certification period (1999-2003).
Table 4.11: The Crude Death Rates (%) Changes in the ISO Certified and Non-certified Hospitals from 1993 to 2003

Testing Statistical Differences in the CDR Group Means

The following hypothesis of the study is tested to determine the effect of ISO certification on change in the Crude Death Rate of hospitals:

\[ H_{a5}: \text{Hospitals with ISO certification have better performance in reducing the crude death rate than non-certified hospitals.} \]

Group statistics of CDR points out that certified hospitals had lower CDR mean values than non-certified hospitals during the pre-certification period (1993-1997), but they could not
decrease their CDR means significantly during post-certification period (1999-2003). On the other hand, non-certified hospitals were able to decrease their CDR mean values slightly from 1.3 percent to .92 percent during the post-certification period. Therefore, group statistics findings do not support the above hypothesis (Ha₅). Hence, there is no substantial evidence to conclude that ISO certified hospitals did not have better performance than non-certified hospitals in reducing their crude death rates during the post-certification period.

**Table 4.12: Group Statistics of Crude Death Rate (%) for the ISO Certified and Non-certified MoH Hospitals from 1993 to 2003.**

<table>
<thead>
<tr>
<th>Certification</th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Std. Error Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1993</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>9</td>
<td>1.37</td>
<td>1.14</td>
<td>.382</td>
</tr>
<tr>
<td>No</td>
<td>9</td>
<td>1.95</td>
<td>.991</td>
<td>.330</td>
</tr>
<tr>
<td><strong>1995</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>9</td>
<td>1.32</td>
<td>.943</td>
<td>.314</td>
</tr>
<tr>
<td>No</td>
<td>9</td>
<td>1.90</td>
<td>1.103</td>
<td>.367</td>
</tr>
<tr>
<td><strong>1997</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>9</td>
<td>1.466</td>
<td>1.224</td>
<td>.408</td>
</tr>
<tr>
<td>No</td>
<td>9</td>
<td>1.522</td>
<td>.927</td>
<td>.309</td>
</tr>
<tr>
<td><strong>1999</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>9</td>
<td>1.448</td>
<td>1.147</td>
<td>.382</td>
</tr>
<tr>
<td>No</td>
<td>9</td>
<td>1.341</td>
<td>.873</td>
<td>.291</td>
</tr>
<tr>
<td><strong>2001</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>9</td>
<td>1.373</td>
<td>1.256</td>
<td>.418</td>
</tr>
<tr>
<td>No</td>
<td>9</td>
<td>1.043</td>
<td>.684</td>
<td>.228</td>
</tr>
<tr>
<td><strong>2003</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>9</td>
<td>1.337</td>
<td>1.179</td>
<td>.393</td>
</tr>
<tr>
<td>No</td>
<td>9</td>
<td>.927</td>
<td>.832</td>
<td>.277</td>
</tr>
</tbody>
</table>

Careful examinations of crude death rates of the certified and non-certified hospitals at the individual and group levels revealed that, although currently certified hospitals had lower CDR than non-certified hospitals during the pre-certification period (1993-1997), this was not the case during the post-certification period (1999-2003). Furthermore, statistical scrutiny confirmed the aforementioned result by rejecting the hypothesis of the study (Ha₅), so that ISO certified hospitals did not have better performance in reducing CDR than non-certified hospitals.
THE EXAMINATION OF PERFORMANCE OF THE LATEST CERTIFIED HOSPITALS

In order to examine the impacts of pre-certification performance level of MoH hospitals on the ISO certification preferences of MoH hospitals, five more ISO certified hospitals that received their ISO certification after 2002 were added into this study. We created and examined time series graphic of each dependent variable of the study. Time series graphics and the data of individual hospitals, including the five latest ISO certified hospitals, can be found in the Appendix II. In this section, the performance of the five latest certified hospitals was compared with other two groups of hospitals; ISO certified and non-certified hospitals at the individual and group levels.

The following points were determined after examining the above-mentioned time series graphics and related data about the latest ISO certified MoH hospitals:

1. The time series graphic and annual ALS means of individual hospitals show a mixed trend in the latest certified hospital group. The latest certified hospitals were able to decrease their ALS means from 5.2 days to 4.5 days between 1993 and 1999, and experienced an increase in their ALS means after 1999 more than the other two groups of hospitals. Indeed, the latest ISO certified hospitals also tended to have higher ALS mean values than non-certified hospitals, before and after starting their quality management initiatives.

---

12 The five latest ISO certified MoH hospitals are Kutahya Government Hospital, Tavsanli Government Hospital, Izmir Dr.U. Woman Health and Birth Hospital, Kastamonu Government Hospital, and Eskisehir Government Hospital.
2. Although BOR means of the latest certified hospitals were greater than those of non-certified hospitals and certified hospital groups between 1993 and 2001, the latest certified hospitals did experience a decrease after 2001.

3. Physicians working in the latest certified hospitals between 1993 and 2003 did not outperform their counterparts who worked in the non-certified hospitals. This means that the latest ISO certified hospitals did not have higher OpP values than non-certified hospitals during pre-certification and post-certification periods.

4. The most recently certified hospitals had a steady SOpS means throughout the ten-year period with around 100 surgical operations per specialist, which is much higher than non-certified and certified hospital SOpS means. However, when individual SOpS mean values of the latest certified hospitals were examined, Izmir Dr. E.H. U. Woman Diseases and Birth Hospital was found to be the outlier, with more than 230 surgical operations per specialist. The other four latest certified hospitals did not have substantially higher SOpS values than those of non-certified hospitals.

5. Crude death rate (CDR) group means of the latest certified hospitals were higher than those of the nine non-certified and the nine certified hospitals between 1995 and 2003. Also, four out of the five most recently certified hospitals had more than 1.2 percent CDR mean values before starting their ISO certification practices in 2001. These relatively high CDR mean values of the latest certified hospitals indicate that the latest certified hospitals did not have a low level of CDR base when they decided to apply for ISO certification.
Based on the above findings, there is no substantial evidence to conclude that the most recently ISO certified had better performance levels than non-certified hospitals during the pre-certification period. Accordingly, there was not adequate evidence to conclude that the MoH hospitals that had already had high level performance in producing hospital and medical services opted to apply for ISO certification.

**INQURIES ABOUT CURRENT PERFORMANCE MEASURES AT TURKISH HOSPITALS**

In the case of measuring hospital performance, the improper use of measurement indicators to evaluate medical and hospital practices has been revisited in the health care literature recently (Bij and Vissers, 1999; Institute of Medicine, 2001; Report on WHO Barcelona Workshop, 2003.) The difficulty of collecting data on every aspect of hospital performance has been discussed by health care researchers and practitioners, since some variables are expensive to collect because of their requirements for large samples and lengthy patient monitoring after a hospital visit. On the other hand, the stakeholders of public hospitals ought to have adequately designed measurement systems that provide a means to define what hospitals actually do and to compare that with defined targets (HEN, 2003).

Six key dimensions of contemporary hospital performance assessment models used in developed countries (such as Canada, Denmark, France, and the USA) were clinical effectiveness, patient centeredness, production efficiency, safety, staff orientation, and responsive governance (Report on WHO Barcelona Workshop, 2003). While regulatory inspections, patient and staff surveys, third-party assessments, statistical indicators, and internal assessments have been accepted as modern measurement methods, there is no perfect
measurement method which could be used to measure the abovementioned hospital key performance dimensions.

In the Turkish context, the majority of government hospitals seem to rely on statistical indicators which were identified centrally by MoH to measure hospital performances. The MoH gathered mainly input (such as the number of beds, staff, physicians, specialists, surgeries, etc.) and process-based hospital data (such as average length of stay, bed occupancy rate, bed turn-over rate, etc.) rather than outcome-based data (such as patient satisfaction level, staff turn-over level, re-admission rate in a given period, mortality rate for specific diseases, etc.) As WHO’s HEN report (2003) points out, input and process indicators provide relative rather than absolute messages about a given hospital’s quality and performance unless statistical indicators are designed to measure predetermined objectives.

In the same vein, Over and Watanabe (2003) argue that the most useful measures of hospital quality should include measures of outcome from the final stage of production process such as mortality rates adjusted by severity, rate of adverse outcome for selected severity-adjusted conditions, rate of hospital-caused infection, rate of emergency readmission within two weeks of discharge, rate of return to operating theater for same condition, and patient satisfaction. The lack of referred outcome indicators for MoH hospitals limits rigorous quality and performance evaluations in Turkey. This was the main obstacle for this study, as well as for measuring the impact of ISO certification on MoH hospitals.

In the case of the technical efficiency measurement of hospitals, current input and process indicators used by MoH hospitals are not sufficient to measure the core dimensions of hospitals’ performance accurately. The available process-based hospital indicators, such as the average length of stay, bed occupancy rate, bed turnover rate, the number of surgical
operations, and the number of patients per physicians, can be used to measure some level of clinical effectiveness, but these indicators cannot be used to evaluate the technical efficiency of hospitals in providing patient-centered, effective clinical services. Considering that each treatment of hospitals will vary according to the illness of the patient, different treatments will employ different proficiencies and technologies and require different quantities and type of inputs. Therefore, MoH hospitals should categorize their clinical data based on similar hospital treatments in order to measure clinical effectiveness based on profile of their patients.

Hospitals in developed countries employ a case-mix methodology in measuring their performance at medical and financial levels. In the health care management literature, the term “case-mix” has evolved to acknowledge that all treatments cannot be considered as belonging to the same class of output or outcome. It refers to the mix of cases treated by a hospital, classified on the basis of those criteria which are significant in explaining the differences in resource usage between the various cases treated (Butler, 1995.)

Case-mix may be measured by factors such as diagnosis, severity of illness, utilization of services, and provider characteristics. As one of the case mix schemes, Diagnosis Related Groupings (DRGs) has evolved in many developed countries after its introduction in 1967 in the USA. The DRG system has been used as an effective cost-containment tool for public sector health care organizations’ experiences in employing case-mix schemes with examples from the USA, Canada, Australia, New Zealand, and European countries, see Hospital Funding and Casemix (1999), The Danish Ministry of Health. TL Offset, Copenhagen, Denmark; Langenbrunner, J.C.; and M. M. Wiley (2002). “Hospital Payment Mechanisms: Theory and Practice inTransition Countries,” in Hospitals in a Changing Europe edit.; McKee, M. and Judith Healy, (European Observatory on Health Care Systems Series), Open University Press: Buckingham, England.

---

hospital and health care entities. Furthermore, its ability to provide relevant patient-centered information enhanced effective management of hospitals and enabled health care organizations to better plan for future resource utilization (Sahadevan et al., 2004.) Accordingly, MoH hospitals should employ case-mix methodology in order to categorize and adjust the average length of stay, the number of surgical operations per specialist, the number of outpatients per physicians and mortality type indicators based on diagnosis or severity of illness in order to measure patient-centered clinical effectiveness and quality of hospital services. As a case-mix scheme is employed, the managers of MoH hospitals will be able to have comprehensive and rigorous clinical data that will allow them to evaluate their current activities and improve the functions of the hospitals in the long term.

CONCLUSION AND DISCUSSION ON FINDINGS

The findings from quantitative analysis of process measurements indicate that the nine ISO certified hospitals were more successful than non-certified hospitals in enhancing their efficiency in increasing hospital bed occupancy rate (BOR) during the post-certification period. On the other hand, the study found that there is no statistically significant difference between two hospital groups in increasing the average number of outpatients per physicians (OpP) and the average number of surgical operations per specialist (SOpS), and decreasing the number of days a patient stays (ALS). Finally, our findings indicate that non-certified hospitals were able to decrease crude death rate (CDR) more than ISO certified hospitals.

The above results of our statistical analysis indicate questionable impacts of the ISO certification on MoH hospitals in enhancing their efficiency and performance. During our hospital visitations in Turkey, we asked about this questionable performance when
interweaving the quality management representatives of seven ISO certified MoH hospitals. Majority of them mentioned that ISO certified hospitals experienced increased numbers of inpatient admissions during the post-certification period. Furthermore, they indicated that ISO certified hospitals began to have greater numbers of patients who were in critical conditions or severally ill after their reputation was well-known among customers. Meanwhile, interviewees pointed out that ISO certified hospitals attracted great number of physicians who were in search of satisfactory work environments.

After having identified those factors mentioned by interviewed personnel of ISO hospitals, we believed that comparisons of the number of inpatient admissions and the number of physicians could be useful to draw more rigorous conclusions about the experience of ISO certified hospitals in the Turkish public sector. Hence, we created and examined the following time series graphics (4.6 and 4.7) which show the number of inpatients and physicians of the ISO certified and non-certified hospitals between 1995 and 2003.

Graph 4.6: Changes in the mean number of inpatients of the ISO certified and Non-Certified MoH Hospitals from 1995 to 2003
Graph 4.6 shows that while ISO certified hospitals had a larger number of inpatients than non-certified hospitals, both groups of hospitals increased their number of inpatient means slightly during the pre-certification period (1995-1997). During the post-certification period (1999-2003), the number of inpatient means of ISO certified MoH hospitals increased dramatically, from about 13,600 to 16,600, whereas non-certified hospitals experienced an increase from about 10,300 to 11,500. This means that ISO certified hospitals tended to attract a greater number of inpatients than non-certified hospitals during the post-certification period. Therefore, these results support the abovementioned statements by interviewed personnel of ISO certified hospitals.

We were able to test and confirm the statements of interviewees that ISO certified hospitals have had greater number of inpatients during the post certification period. Meanwhile, this study found that ISO certified hospitals had longer average length of stay (ALS) values and higher crude death rates (CDR) than non-certified hospitals. However, we could not determine that the majority of inpatients who preferred ISO certified hospitals were in critical conditions or severely ill, due to the unavailability of case-mix inpatient data which would let us adequately distinguish the performance differences between certified and non-certified hospitals in reducing ALS and CDR values.

Graph 4.7 points out that while the number of physicians who worked in the nine ISO certified hospitals was larger than those in non-certified hospitals during the pre- and post-certification periods (1995-2003), the difference between both hospital groups increased noticeably during the post-certification period (1999-2003). In other words, ISO certified hospitals experienced an increase in their numbers of physicians mean from 103 to 150,
while non-certified hospitals experienced an increase from 74 to 89 during the post-certification period.

**Graph 4.7: Changes in the number of physicians of the ISO certified and Non-Certified MoH Hospitals from 1995 to 2003**

These results also support the statements by interviewed personnel of ISO certified hospitals that physicians opted to work within the certified hospitals more than non-certified hospitals.

In the same vein, it can be argued that the reason ISO certified hospitals tended to have smaller numbers of outpatients per physician than did non-certified hospitals was because certified of hospitals were able to attract a larger number of physicians. Therefore, the attempt to measure physicians’ productivity in ISO certified and non-certified hospitals could provide the level of technical efficiency in using hospital human resources, but not the quality of the work environment in the hospital and the quality of medical services offered to hospital patients. For instance, there may be a negative relationship between an average consultation time and the number of patients examined by physicians of a given hospital, since the shorter the average consultation time the greater number of patients per physicians.
However, patients’ profiles would be another factor in determining the average length of consultation, since complicated cases and severely ill patients need to have longer consultation times than temporarily ill patients. If severely ill patients tend to prefer ISO certified hospital’s medical services, physicians of those hospitals may tend to spend a long time examining their patients to be able to diagnose the illness accurately. Thus, while the quality of medical services provided by physicians who worked in ISO certified hospitals could be greater than that of non-certified hospitals, since the patients of ISO certified hospitals might be satisfied with the accuracy of diagnosis and the length of consultation.

Lastly, another process-based indicator used to evaluate the labor productivity of hospital personnel was the number of surgical operations per specialist. As revealed previously, specialists of ISO certified hospitals were found to be less productive than those of non-certified hospitals, since the former group had smaller numbers of SOpS means than the later group. The number of surgical operations of each MoH hospital’s data were classified as small, middle, and big surgical operations by the General Directorate of Curative Services in MoH. However, this classification does not seem to reflect the complication levels of surgical operations undertaken by specialists of MoH hospitals that provide special care or acute care.

For instance, caesarian sections are very common practices in Turkish hospitals due to affordable cost of caesarian sections (Koc, 2003). Likewise, we found that three outlier hospitals having greater numbers of SOpS were specialty hospitals focusing on woman and
maternity. Meanwhile, we can argue that a cesarean section conducted in a specialty hospital may have more complications than a cesarean section conducted in a general hospital. Due to the current classification system in Turkish government hospitals, all cesarean sections are recorded within the same group of surgical operation without reflecting the complication level.

14 Those MoH hospitals are Ankara Dr. Zekai Tahir Burak Woman Health Education & Research Hospital, Eskisehir Maternity & Childcare Hospital, and Kayseri FO Maternity & Childcare Hospital.
CHAPTER 5: QUALITATIVE ANALYSIS OF MANAGEMENT IMPLEMENTATION MEASURES AND ORGANIZATIONAL CULTURES OF MOH HOSPITALS

In an attempt to identify how widely management improvement tools are offered by ISO certified MoH hospitals, as well as examine their current organizational culture, a series of semi-structured interviews were conducted. The interviews were conducted with 33 employee of seven ISO certified MoH hospitals, and 13 employee of four non-certified hospitals. For each of the ISO certified hospitals, the researcher contacted a minimum of four and a maximum seven of employee, including senior management, quality management representatives, and other employees. For the comparison group of four non-certified hospitals, three hospital employees (usually a senior manager, a clinic doctor or nurse, and a lab technician) were selected. The questionnaire used in this study can be found in Appendix III for review.

In addition to this, documents and management materials that would be useful in understanding quality and performance improvement efforts of hospitals were collected. In the first section of this chapter, qualitative findings from semi-structured interviews are offered to examine six hypotheses of the study on management implementation measures in MoH hospitals. The second section includes qualitative findings about current hospital organizational culture in selected MoH hospitals. In the final section of this chapter, we examine how the Turkish national culture may influence hospitals’ quality management and performance improvement activities different their counterparts’ in other national cultures.
ANALYSIS OF MANAGEMENT IMPLEMENTATION MEASURES IN THE MOH HOSPITALS

CUSTOMER FOCUS: INPUTS SEEKING FROM PATIENTS

To provide better customer services, the management of hospitals needs to solicit feedback from their patients. As mentioned in chapter two, ISO 9001 certification requires top managers to ensure that demands of customers and visitors are determined, understood, and met with the aim of enhancing satisfaction (Clause 5.2). Requirements of patients can be understood and met by the use of surveys, focus groups, and formal and informal gatherings.

Overall Findings on Customer Focus in MoH Hospitals

Since ISO 9001 certification requires that organizations identify and understand their patients’ (customers’) demands and expectations, the following hypothesis was developed and examined:

$H_{b1}$: MoH hospitals with ISO certification seek input from patients more widely than do non-certified hospitals.

During our hospital visitations, we asked the following two questions, and also obtained related materials, including previously used complaint forms, surveys, and their findings.

“Does your hospital routinely seek input (e.g. surveys, focus groups, advisory groups) from patients about the services they receive? If so, please elaborate in what way you have sought input from your patients.”
“Does your hospital take the complaints of patients and others who receive service seriously and act to resolve them in a timely manner? If so, please explain with examples the different ways that your hospital handles customer complaints.”

Results of our interviews with employees of ISO certified MoH hospitals show that certified hospitals employed three management tools to obtain feedback from their patients. Each certified hospital employed satisfaction surveys along with patient suggestion and complaint forms, although only Kayseri V.A.O. Government Hospital also used the phone survey method. Two out of four non-certified hospitals\textsuperscript{15} have started pilot projects recently to obtain feedback from their patients. Therefore, findings seem to be in the expected direction of the hypothesis (H\textsubscript{b1}) of the study: ISO certified hospitals seek input from patients more than non-certified hospitals.

**Patient Input Seeking Examples from Certified Hospitals**

**Satisfaction Surveys and Complaint Forms**

The results of an outpatient satisfaction survey conducted with 100 outpatients during the first three months of 2004 (January, February, and March) were obtained from quality management representatives of Ankara Dr. Z. T. B. Woman Health and Education Hospital. The questionnaire included a total of 17 questions about official documentation services, waiting time for registration, waiting time for physical examinations, medical services provided by nurses and doctors, general polyclinic services, and sanitation of the hospital. Results showed that 63\% of outpatients found that administrative employees were polite and

\textsuperscript{15} Taksim Education and Research Hospital started to conduct plot patient satisfaction surveys and Bafra N.K. Government Hospital began to use patient suggestion and complaint forms.
helpful in dealing with clients. However, 49% of outpatients thought that time spent for completion of formal processes were too long, and 52% indicated that waiting time for a medical examination was unnecessarily long. Overall, 69% of outpatients were satisfied with policlinic services.

Quality representatives of the same hospital also shared their findings from patient complaint and suggestion forms collected during the first three months of 2004. The Infertility clinic outpatients made no particular suggestions, but had complaints about: the waiting time for medical examination (20 complaints); the sanitation of restrooms (20 complaints); receiving laboratory examine results late (13 complaints); and doctors’ habit of rebuking their patients (10 complaints).

The complaint forms and the customer surveys methods were serving the same purpose from different angles. Hospitals often use suggestion and complaint forms to acquire customers’ feedback about defective areas in hospital services, while inpatient and outpatient satisfaction surveys were used to identify customers’ expectations from the hospital. However, complaint forms and satisfaction surveys used by certified hospitals were designed poorly, and they were carried out in a sporadic rather than a systematic way.

**Phone Survey Method**

After it was awarded with ISO certification, Kayseri V. A. O. Education and Research Hospital developed a different customer input gathering system. A random sample of released patients was called for a short version of the survey via phone. The survey was a single page with seven short questions in a yes or no format. The purpose of the phone survey was to determine whether individual patients did in fact get well after treatment
provided by the hospital, and also to learn their perception of the behavior of doctors, nurses, and other hospital employees. The interviewees indicated that top management of the hospital had taken the results of phone surveys seriously and tended to solve raised issues with available hospital resources.

**PARTICIPATION IN DECISION-MAKING: INPUT SEEKING FROM EMPLOYEE**

Results-based management and ISO 9001 principles imply that top management of certified hospitals ought to create vision and mission statements supported by measurable long term and short term goals which will lead hospital employees toward desired ends. Hospitals ought to determine ways for their employees to participate in the creation of goals by encouraging their employees to share suggestions, ideas and problems. Subsequently, top management of these hospitals are expected to use this employee input in diagnosing deficiencies in organizational processes and finding solutions that will increase the quality of hospital services. In addition, hospital employees whose feedback is welcomed and valued by hospital management may have higher productivity and job satisfaction.

**Overall Findings on Employee Participation in Decision-Making at MoH Hospitals**

*Hb2: MoH hospitals with ISO certification seek input from their staff in developing long-term goals and objectives more widely than non-certified hospitals.*

To examine the above hypothesis, the following question was asked to employee of MoH hospitals:
“Do employees of your hospital participate in developing their department’s long term goals and objectives? If so, could you explain to me in what ways you ensure that your employees participate in goal setting?”

These interviews indicate that the top management of ISO certified hospitals employed four types of input gathering methods in addition to formal-hierarchical procedures: employee satisfaction surveys, employee suggestion forms, quality teams (which are also called quality circles), and periodic meetings with hospital employees. Periodic meetings were crucial in serving as brainstorming activities with direct involvement of top management and hospital staff. Non-certified MoH hospitals, however, relied on employee input obtained through hierarchical chain of command and formal meetings held in each hospital unit or department. Nonetheless, there was no substantial evidence that either group of hospitals created long term goals and strategies that reflect expectations and concerns of hospital staff. These mixed results, therefore, seem to be partially support the hypothesis (Hb2). On one hand, certified hospitals seek input form their staff more widely than non-certified hospitals. On the other hand, none of them made use of their staff feedback in creating strategic plans.

**Participation to Decision-Making: Some Examples from Certified Hospitals**

**Employee Satisfaction Surveys and Quality Steering Committee Meetings**

Pendik government hospital used several employee satisfaction surveys as a means of securing staff input, along with periodic meetings with the Quality Steering Committee since 2001. Interviewees indicated that survey questionnaire were designed and updated each year by top management to investigate the perception of hospital employees about organizational structure, processes, and interactions in the hospital. Findings from a survey conducted in
2003 revealed that majority of hospital employee were not satisfied with the devolution of decision-making rights. In addition to this, hospital employee identified deficiency in top-down communication as one of the obstacles to participation decision-making process in their hospital.

Balikesir government hospital used a survey questionnaire that included 34 statements about the hospital management, infrastructure, team work, organizational communications, and motivational aspects. The first employee satisfaction survey was completed in 2003 with 311 hospital employee. One of the findings from the survey was that 55 % of hospital members believed that they could rarely reach their hierarchical supervisor when they needed to convey a problem or suggestion.

Ankara Dr. Z.T. Woman Health and Education hospital, the oldest ISO certified hospital in Turkey for seven years, relied heavily on employee suggestion forms collected monthly via boxes scattered throughout the hospital in gathering input from hospital employees. Also, interviewees indicated that hospital senior management met every month with representatives from different units of the hospital to exchange ideas and concerns about current and future hospital services. For instance, a consensus was reached during a Management Review Meeting in 2004 about opening several new polyclinics in different neighborhoods in Ankara to prevent outpatient flows to the hospital.

Non-certified hospitals gathered input from their employees primarily to keep up current level of hospital services. For instance, employees often inform their superiors about obstacles that prevent completing routine practices related to simple maintenance and daily work arrangement such as reporting a broken door, or a malfunctioning medical device. The
study also found that employees in small size non-certified hospitals often used informal communication methods (e.g. phone calls, dinner gatherings, or personal contacts) to convey their input to upper levels, while employees in bigger non-certified hospitals usually depended on formal-hierarchical communication methods, including written statements, and requests delivered to upper levels, and annual department activity reports.

**Quality Management Teams**

Individuals who work in a team-based environment may tend to behave more cooperatively, have less conflict, and use fewer competitive tactics than teams in individualistic cultures (Oetzel, 1998). Hospitals are often organized by occupations which form occupational subcultures, in the sense that different occupational groups share in common a distinctive ideology and identifiable cultural forms or practices (Zabata et al., 1998). For instance, physicians’ subculture is accepted as one of the most powerful subcultures in health care organizations because of their vital role in delivering medical services.

Only two out of seven ISO certified MoH hospitals actively used teams to encourage subordinates to participate in systematic process improvement. Balikesir Government Hospital established and actively maintained four teams in coordinating quality and performance initiatives: quality commission, infection, civil defense, and training. Kayseri Dr. V.A.O. Government Hospital established and maintained 15 teams that included at least four members from each department. For example, the internal diseases department had a quality team which was established by a doctor, four nurses and a health officer, and the external diseases department had a similar five member team.
A number of interviewees from other ISO certified hospitals\textsuperscript{16} indicated that although hospital top management encouraged departments to create teams during ISO certification process, those teams were not actively used and maintained after certification was received. The lack of physicians’ participation in quality improvement efforts was seen as a major obstacle in keeping quality teams alive and active in ISO certified hospitals. As an assistant chief doctor pointed out this obstacle:

\begin{quote}
\textit{``I believe quality management efforts require some level of sacrifice without expecting direct personal gains or benefits. As a physician with 23 years experience in public health sector, I must regretfully admit that, generally speaking, physicians are not willing to devote their time and energy unless there is some level of benefit, especially a monetary one. Unfortunately, the Turkish health care system is physician-centered. Without their (physicians) commitment, top management’s efforts for quality improvements eventually falter.’’}
\end{quote}

**MEASURING HOSPITAL PERFORMANCE BY USING QUANTIFIABLE MEASURES**

As discussed in the last section of the chapter four, performance measurement with appropriate indicators and tools plays a critical role in quality assessment efforts in the hospitals. In the same vein, ISO 9001 certification requires that senior management obtain data for the seven mandatory input items which are about current and available performance

\textsuperscript{16} Ankara Dr. Z.T. B. Woman Health Education and Research Hospital, Eskisehir Maternity and Childcare Hospital, Pendik Government Hospital, Bakirkoy Dr. S.K. Education and Research Hospital, and Eskisehir Government Hospital.
and improvement opportunities. For a given hospital, senior management should obtain data: (1) the results of internal and external audits; (2) customer feedback; (3) process performance and service conformance; (4) status of preventive and corrective actions; (5) follow-up actions of earlier management reviews; (6) changes that could affect the quality management system of the hospital; (7) and recommendations for improvement provided via internal and external communication opportunities.

In Turkish health care system, MoH hospitals are required to keep performance data and report it to the MoH for a given period, usually for a year. Accordingly, MoH hospitals must keep three types of performance data. The first is input data about the amount of resources used to produce hospital services, including as the number of hospital beds, physicians, nurses, hospital employee, and pharmaceutical material. The second type data is process data about workload or activities such as inpatient average length of stay, average number of inpatients per physician, and bed occupation rates. The third type of data is output data about the amount of products or services delivered during the reporting period such as total number of inpatients and outpatients, total number of surgical operations, total number of deliveries, and the total number of prescriptions. Output type of performance data are, also, used to calculate the share of revolving funds among hospital employee via different formulas specified by MoH.

**Overall Findings on Performance Measurement at MoH Hospitals**

Due to standard ISO 9001 emphasis on measurement, analysis, and continual improvement, MoH hospitals with ISO certification are required to employ management tools for making fact-based-management decisions and taking remedial actions towards hospitals’ long term
plans and quality objectives. In this regard, hospitals may track their long term goals and quality objectives by studying a specific time period and taking measures accordingly. In this section, we examined the following hypothesis in order to determine whether ISO certified MoH hospitals use quantifiable measures to track their performance more widely than non-certified hospitals:

\[ Hb_3: \text{MoH hospitals with ISO certification use quantifiable measures to track their performance more widely than non-certified hospitals.} \]

The below question was directed to employees of certified and non-certified hospitals:

“Does your hospital use quantifiable measures to routinely track its performance? If so, could you please give some examples of quantifiable measures used by your hospital?”

As mentioned previously, MoH hospitals must employ some level of quantifiable measures to track their performance regardless of having ISO certification due to central government requirements and revolving fund practices. Likewise, findings from semi-structured interviews disclosed that non-certified hospitals did gather mainly input and process based data to fulfill data collection requirement of the MoH. However, all ISO certified hospitals developed extensive activity documentation along with clear job descriptions that allowed top managers to collect and record quantifiable data from hospital units and departments effectively. Therefore, our third hypothesis (Hb3), that ISO certified MoH hospitals use quantifiable measures to track their performance more widely than non-certified hospitals, seems to be in the same direction with our findings.
Measurement Activities at Certified Hospitals: Some Examples and Limitations

Both collected materials and the interviews indicate that MoH hospitals employed mainly process based performance indicators determined by MoH rather than the outcome based indicators that results-based management requires. However, we observed that MoH hospitals began to employ additional process and output data gathering methods after receiving ISO certification. The following paragraphs provide specific examples of data gathering practices in ISO certified MoH hospitals.

Employed Performance Measurement Methods

Balikesir Government Hospital established a coding system to track performance of the individual members in delivering medical and hospital services. After assigning a code according to the position and the department of the individual member, the hospital kept activity records of medical and support employee. By using activity records of hospital employee, the top management of the hospital could identify high and low performing hospital members. Additionally, the hospital was the only certified hospital that utilized run charts to monitor the progress after managerial interventions were completed.\textsuperscript{17} The hospital aimed to decrease the average time spent by outpatients in bureaucratic procedures (such as registration processes, waiting time for a medical examination, and confirmation of medical records and official papers), while increasing the average time spent by a physician in examining each outpatient. For example, the hospital management recently made a managerial intervention to decrease the average waiting times in outpatient admissions across

\textsuperscript{17} A run chart is often used to display patterns or unusual occurrence in data via the x-axis while the y-axis represents the interval (e.g. hour, month, or year) (Kelly, 2003).
the hospital departments. After the rearrangement of outpatient admission and registration processes were completed, top management wanted to determine whether the average time spending for outpatient admissions was shortened or not. Using run charts from an internal diseases policlinic, the intervention decreased the average waiting time of an outpatient dramatically from 27 minutes to 10 minutes.

Ankara Dr. Z.T. Woman Health and Education Hospital employs process-based indicators in measuring performance of individual hospital departments. A laboratory performance chart, for example, was used to measure performance of the Hormone Laboratory. All measurement items in the chart were quantifiable and process-based measures such as how many examines were made, how many repeated tests were done, how many tests were sent to laboratories out of the hospital, and how many blood samples were received.

Bakirkoy Dr. S. K. Education and Research Hospital employed a chart to record and measure performance of nurses in each department. The chart included 18 indicators about medical and hospital services provided by nurses. By using a three point scale which consisted of the following: “A: good,” “B: acceptable,” and “C: poor” senior nurses of each department and policlinic were responsible for measuring the performance of each nurse in their department. Although the hospital use this form as performance chart for nurses, the form seems to be a personnel form used to keep records on following the official dress code, keeping patient treatment cards, documenting adequately, following official procedures in accepting inpatients to clinics, and following patient releasing procedures.
Reasons for Poor Monitoring Activities

A properly designed and implemented measurement system plays a critical role in quality assessment and management (Ovretveit, 2000). There is a need for effective monitoring systems to measure performance of a hospital, and it requires skilled people, information and resources. McKee and Healy (2002) argues that those undertaking monitoring should: understand how health care is delivered; have evaluation skills that encompass both quantitative and qualitative approaches; understand methodological limitations; be familiar with how health care organizations respond to different incentives; and have access to relevant and accurate information.

The first limitation about monitoring the performance of MoH hospitals and their staff is that many of the usual statistics, such as the numbers of inpatients discharged are useless without meaningful medical and service classifications (based on specialties or illness). Although there was some evidence that ISO certified hospitals adopted new methods to measure their clinical, laboratory and employee performances, current measurement activities are mainly limited to input and process based indicators that do not appropriately capture clinical effectiveness, production efficiency, and patient-centeredness. For instance, the hormone laboratory, discussed in the previous page, used the process-based measures that focused only on how efficiently lab resources were used, rather than the outcome-based measures to

\[\text{\footnotesize{Clinical effectiveness includes technical quality, evidence-based practice and organization, health gain, patient outcome; production efficiency includes effective usage of resources, adequate staff ratios and efficient technology; and patient centeredness includes client orientation via prompt attention, waiting time for elective services, patient satisfaction, and patient rights (WHO Workshop Report, 2003).}}\]
determine how satisfied the hospital customers were with the lab services in terms of accuracy, timing, and quality of tests.\textsuperscript{19}

**REWARDING AND RECOGNIZING HIGH PERFORMANCE OF HOSPITAL EMPLOYEE**

ISO 9001 certification does not explicitly emphasize the issue of reward and recognition systems. However, as a process-focused approach, ISO certified hospitals are required to establish a quality management system based on objective measurements for continually improving hospital services. One can implicitly expect ISO certified hospitals to use employee reward and recognition system as a mean of creating goal congruence between the quality objectives of the hospital and the interest of subordinates.

**Overall Findings on Reward Mechanisms at MoH Hospitals**

We look at the following hypothesis to identify incentive systems in MoH hospitals:

\( \textit{Hb}_4: \text{Hospitals with ISO certification reward their employee more widely than non-certified hospitals in order to encourage them to perform well.} \)

Two questions were asked to senior managers and subordinates of MoH hospitals:

“Do you reward your hospital employees when they perform exceptionally well? If so, in what way does your hospital reward its employee?”

“Do you receive any reward when you perform exceptionally well? If so, in what way does your hospital reward its employee?”

\textsuperscript{19} This laboratory is operated by Ankara Dr. Z.T. B. Woman Health Education and Research Hospital, the first ISO certified health care organization in Turkey since 1998.
Our findings indicate that the revolving funds were used by both ISO certified and non-certified MoH hospitals as supplementary compensation, and accepted as a sort of monetary reward mechanism to reward good performances. Although there is an implicit emphasis on rewarding and recognition in the ISO 9001 certification requirements, only three out of seven certified MoH hospitals established a recognition system\(^{20}\). These hospitals all use the same type of recognition system for recognizing outstanding performance of hospital employees: senior management delivered plaques to high performing hospital employee either monthly or quarterly. Examining a few certified hospitals’ performance recognition practices, our findings do not support the hypothesis (H\(_b_4\)) that ISO certified MoH hospitals reward their employee more widely than non-certified hospitals.

**The Impact of Existing Hospital Revolving Fund Practices - Goal Displacement**

As already discussed in the previous chapters, MoH hospitals that can generate revenue out of their medical and hospital services have been eligible to share up to 50 % of their revolving funds among hospital employee according to legislation passed in 2001. The distribution of revolving found bonuses among hospital employee is calculated with a “prescribed” formula based on the individual member's position and rank in the hospital, working time and conditions, and process and output based performance. Performance evaluations are done by using process-based (such as number of patient examinations and the number of conducted surgeries) rather than outcome based indicators (such as readmission

\(^{20}\) Pendik Government Hospital, Eskisehir Woman Diseases and Maternity Hospital, and Eskisehir Government Hospital.
within three weeks with the same illness and rate of return to operating theater for same condition).

In principle this regulation seems to grant hospitals financial autonomy that aims to encourage and motivate their employees’ to increase their performance. However, in practice, the study found that the monetary reward system is often used to reward the high performance of physicians, but not that of nurses, technician, administrative staff, and others at the hospitals. Moreover, since the monetary reward system is extensively based on process-based measurements that emphasize the quantity of services more than the quality of them, we found that the reward mechanism caused goal displacement in certified hospitals. For instance, a hospital can determine the share of a surgeon based on how many surgical operations he conducted. Such a practice has potential to harm the quality of hospital services if the determination of surgical operations is not purely based on medical requirements, but financial reasons.

**TRAINING ACTIVITIES AT MOH HOSPITALS**

The importance of appropriately preparing the workforce for the changes and developments in health care delivery has constantly been emphasized by health care practitioners and scholars (Crossing the Quality Chasm, 2001). A number of recent empirical studies have shown great deal of association between effective staff training and successful quality and performance improvements in health care organizations (Shorthell et al., 1995; Ovretveit, 2000; Ewan and Shorthell, 2001; Franco et al., 2002). Furthermore, some researchers suggests that empowerment of lower level employees is useless unless adequate training is provided; problem-solving tools are ineffective unless employees understand the overall
purpose of quality management initiative in the hospitals (Huq and Martin, 2000). Since ISO standards advocate continual improvement in providing quality medical services, hospitals ought to arrange training activities to ensure that employees are equipped with required knowledge and skills.

**Training Activities at MoH Hospitals**

This study examines the below hypothesis to determine whether ISO certified hospitals included in this study conduct training activities more widely than non-certified hospitals:

*Hb₅: MoH hospitals with ISO certification conduct training activities for their staff more widely than non-certified hospitals do.*

We asked the following question in order to determine training activities conducted at MoH hospitals:

“Does your hospital conduct training activities to improve employee abilities and skills? If so, could you please provide examples of training activities conducted by your hospital?”

All ISO certified hospitals conducted more training activities than non-certified hospitals. Training activities conducted by certified hospitals were for the purpose of not only improving clinical skills, but also for enhancing managerial and organizational abilities of employees. However, both hospital groups were similar in having more training opportunities for doctors and nurses than for other hospital employees. Therefore, these results seem to be in the same direction with the sixth hypothesis of the study (Hb₅) that hospitals with ISO certification conduct training activities for their staff more widely than non-certified hospitals.
Training Activities: Examples from Certified Hospitals

The level of participation in training activities varied widely. For instance, ISO certified education and research hospitals maintained training workshops for their employees more frequently than other certified hospitals in general since they recruit medical students and support health care employees during the last years of medical studies. Some examples of training and education series conducted by ISO certified hospitals are: improving effective interaction between medical employee and patients; empathy and its importance in health care service; ISO certification and quality management systems; documentation; computer basics; and particular training sessions for medical practices such as the effective medical approach to emergency patients with head trauma.

Another finding related to ISO certified hospitals’ training activities is the positive correlation between the determination of training issues and the level of participation in trainings activities. After ISO certification, senior management of four ISO certified hospitals started to pay attention to employees’ demands in training.21 A number of interviewees in these hospitals stated that participation in training tended to be greater when the subject of training was suggested by subordinates.

Kayseri Dr. V.A.O. Government Hospital senior managers established monthly training activities with high participation of hospital employees. These training activities were found to be very helpful by physicians, nurses, supporting medical employees, and administrative staff in carrying out medical and organizational duties. On the opposite side, senior managers

\[\text{21 Balikesir Government Hospital, Ankara Dr. Z.T. Woman Health Education and Research Hospital, Eskisehir Woman Diseases and Maternity Hospital, and Pendik Government Hospital.}\]
of Bakirkoy Dr. S. K. Government Hospital did not seem to pay considerable attention to staff training and education according to interviewees that participated in this study; they indicated that the hospitals tended to arrange training activities only when a problem occurred.

Interviews with subordinates of other ISO certified hospitals also revealed that hospitals tended to give more priority to training of physicians and nurses than technical and administrative employee. A subordinate of ISO certified MoH hospital pointed out this issue:

“Because of the physician-dominated hospital management, training of other hospital employee (except doctors and nurses) will never be a priority for this hospital.... For instance, I do not think that I have learned enough about ISO certification and its benefits to our hospital. I did attend two or three workshops which introduce ISO certification generally, but these workshops were too general.”

This result shows that although both hospitals have ISO certification, the intensity of staff training depended on top managers’ emphasis on employee development.
SUMMARY OF FINDINGS AND SOME EMERGING MANAGERIAL ISSUES AT CERTIFIED HOSPITALS

Our findings indicate that customer feedback, employee participation in decision-making, employee training, and systematic improvements tools were four out of six new management tools used more widely at certified hospitals than at non-certified hospitals. However, our findings revealed that both hospital groups were weak on implementing performance measurement system with quantifiable data and reward high employee performance.

Table 5.1: Summary of Implemented Management Measurements at MoH Hospitals

<table>
<thead>
<tr>
<th>Management Tools</th>
<th>Certified Hospitals (7)</th>
<th>Non-certified Hospitals (4)</th>
</tr>
</thead>
</table>
| Customer Feedback         | - All hospitals employed customer satisfaction surveys, and suggestion and complaint forms.  
                          | - 1 out of seven used the phone-survey method.                                           | - 2 out of 4 started pilot projects including a customer complaint form and a satisfaction survey project. |
| Participation in Decision-Making | - All hospitals had employee satisfaction surveys and management review meetings.  
                          | - 2 out of 7 had active quality management teams.                                        | - No direct mechanisms.                                                                    |
| Employee Training         | All hospitals arranged training to improve employees’ clinical, organizational, and managerial skills, in addition to “required” training by the MoH. | - No additional training, other than “required” training activities by the MoH.            |
| Measurement with Quantifiable Data | - Process and output data required by the MoH.  
                          | - 1 out of 7 used a coding system to track individual performance, and statistical run charts to monitor departmental performance. | - Process and output data required by the MoH.                                             |
| Reward and Recognition   | - 3 out of 7 hospitals established a recognition system by delivering plaques to high performing employees.  
                          | - Revolving Fund payments as a monetary reward mechanism.                               | - Revolving Fund payments as a monetary reward mechanism.                                  |
Moreover, findings of the study disclose that government hospitals which have undertaken quality and performance improvement efforts have often faced similar obstacles in implementing new management techniques in the Turkish public sector. In this section, we also highlight major obstacles and ISO certified hospitals’ attempts to overcome such obstacles.

**High Expectations with Low Financial and Managerial Autonomy**

Available research on health care organizations have stated that senior management is usually expected to take on a stronger management role in hospital quality initiatives (Shorthell et al., 1995; Ovretveit, 1996 and 1999; Ferlie and Shortell, 2001; Warden, 2002). This study revealed that although Turkish senior management of hospitals have limited managerial and financial autonomy at organizational level, they are held responsible for outcomes of quality improvement efforts by central government agencies.

In Turkey, public hospitals are integrated into a centralized structure that shapes the internal structure of organizations and their processes, as well as controls and regulates financial and human resources. The centralized structure of the Turkish health care system hurts the quality and performance improvement efforts of individual MoH hospitals.

At the central administration level, the Ministry of Finance and the Ministry of Health hold decision rights over spending, investments, and the utilization of human and technical resources. The legislature, The Grand National Assembly of Turkey, primarily sets the priorities and mission of health care organizations along with national health care policies and budget allocations. At the organizational level, centrally appointed top managers (chief
doctors) coordinate and manage daily organizational activities using hierarchical and formal rules imposed by related laws, regulations, and codes.

Fully successful quality and performance improvement programs are hardly possible under highly centralized health care systems, like in Turkey. That is why a few certified hospitals are best judged to be somewhat successful in their quality and performance improvement efforts. However, the certified hospitals’ senior managements should be given credit for their willingness to change the status-quo by sharing authority and power.

**Present and Desired Leadership Attributes at MoH Hospitals**

In health care organizations, leaders are expected to share their technical expertise by showing people how to do things and exercising relatively close supervision in some situations. Also, they should be capable of delegation and empowerment while still ensuring accountability for results. Leadership in quality begins with a vision that can be created only when one has an in-depth understanding of the organization, the challenges of clinical quality and patient satisfaction, and the ability to create a culture that ensures excellence in health care (Warden, 2002; Ferlie and Shortell, 2001). Since hospitals are highly professional and interactive organizations, senior leaders are expected to have abilities to embrace and spark different staff interests toward short term and long term strategic goals of their organizations.

After observing the discomfort of hospital employee about physician-led organizational structure, the following question was added to previously determined interview questions of the study during hospital visitations in order to find out the perspective of the employees of MoH hospitals about the selection of their top managers:
Do you think that a physician-manager or a professional-manager should be the top manager of your hospital?"

Almost all interviewed senior managers and subordinates of the eleven MoH hospitals emphasized that the lack of managerial capacity of physician-oriented top managers slowed down improvement initiatives. A small majority of contacted hospital employee asserted that their hospital performance and quality would be boosted up if a professional manager leads their hospital instead of a physician manager. The below list summarizes the reactions of numerous MoH hospital employees about the current physician manager system:

i. “Unfortunately, there is a physician-centered health care system in Turkey. Because of this domination, hospitals cannot develop meaningful long term strategic plans and implement them when doctors are not willing to do anything.”

ii. “The critical decisions are made only by doctors, not all subordinates.”

iii. “Physician managers are usually biased towards doctors and not adequately objective in their managerial decisions.”

iv. “Today hospitals desperately need professional managers who can lead and manage hospitals during the turbulence of high competition among private and university hospitals, patients who demand quality. Since many MoH hospitals depend on the revolving funds, they are trying to attract new patients, especially out-of-pocket payers to create new financial resources. I believe that an entrepreneurial manager can develop new strategies for a successful transformation….”
New Meanings of Resource Management and Training at Certified Hospitals

Recent studies on quality and performance improvement initiatives undertaken in health care organizations have indicated that three basic areas of training should be provided in order to employ effective problem-solving approaches: (a) instruction in the philosophy and principles of quality management; (b) specific skills training such as in the use of statistical process control; and (c) interpersonal skill training to improve problem-solving abilities (Lin and Clousing;\textsuperscript{22} 1995; Huq and Martin, 2000; Franco et al., 2002).

Due to the fact that planning (by State Planning Organization), training (by universities) and utilization of human resources have been carried out by different central and local organizations, ineffective coordination between these institutions has caused ineffective human resource management in the health sector, including imbalances in the expansion of personnel throughout the country (Transformation in Health, 2003). At the organizational level, there is an urgent need for an effective human resource management approach allows hospitals to allocate their own resources to train and educate their own personnel according to local and organizational demands.

The lack of trained employees who have adequate skills in performance monitoring practices weakens the enthusiasm of the senior management of certified hospitals. Senior managers of

\textsuperscript{22} Lin and Clousing (1995) reported that the following quality measurement techniques were found to be used by hospitals: ten-step Quality Assurance process, patient questionnaire, quality and appropriateness reviews, performance appraisals, patient monitoring report, CQI teams, run charts, infection rates, quarterly reports, proactive review, statistical reporting, pilot team, continuous monitoring by indicators, quality assurance monitors, extensive quality assessment program, patient surveys, monitoring forms, set compliance and threshold and monthly meetings.
these hospitals often felt disappointment due to their limited decision rights that prevent them from hiring skilled personnel in monitoring, data gathering, and evaluating performances.

Interviewed senior managers of certified hospitals mentioned that they were inclined to spend their own revolving fund revenues to hire contractual employees in order to overcome personnel shortages in crucial health care services. After the central government published a regulation about hiring contractual medical, technical, and administrative personnel in July 2003, certified hospitals tried to contract out some part of hospital services. Similarly, a number of certified hospitals contracted out their cleaning and catering services, as well as their security services. Informally, senior management of certified hospitals make contracted private companies supply a specific number of support personnel who will be used in quality and performance improvement projects. An example of this procedure, observed during our hospital visitation, was a quality management department staff with contractual employees whose employment was made possible via the catering company’s personnel quota. Although their organizational positions were described as “contractual caterers,” they were informally transferred to work in the quality management department due to personnel shortages in that unit. This informal hiring mechanism would not be used by certified hospitals, if they were granted greater managerial autonomy, and hence, employment flexibility.

Moreover, these hospitals may achieve greater quality and performance improvements when they are able to adequately train their empowered lower level employees how to use problem-solving tools in achieving specified organizational objectives and strategies. It

---

23 Legislation no. 4929.
seems that many senior managers have commitment to breaking the status quo, and these strengths should be supported externally by the central administration.

**Emphasis on Revenue Increasing Practices in Resource Planning and Allocation**

Certified MoH hospitals often used marketing approaches to enhance their revenues, which allow them greater financial autonomy in spending and resource allocation at organizational level. In this vein, many hospitals have begun to allocate scarce hospital resources to more revenue generating medical and hospital services for which patients often make out-of-pocket payments.²⁴

At the organizational level, senior management’s overwhelming emphasis on revenue generating medical and hospital practices create goal displacement among hospital staff. Some of our interviewees argued that little attention was paid to quality of their practices because of top management’s pressures to create more revenue. For instance, according to the current revolving funds mechanism, the share of a surgeon is dependent on how many surgical operations he conducted during a certain period of time, instead of quality of his operations. These process-based reward mechanisms and overwhelming emphasis on revenue generation do not encourage hospital staff to pursue quality and performance enhancement efforts.

²⁴ Out of pocket payments accounts for more than 30% of total health-care expenditure in Turkey (HiT, 2004). Therefore, this portion of health care expenditure are attracted by certified hospitals in order to generate increase their revolving fund amounts, and hence, financial flexibility in resource allocation at hospital level.
ANALYSIS OF CULTURAL ASPECTS OF MoH HOSPITALS

When an organization tries to change its management approach, the proposed management approach should be analyzed in relation to its suitability to the organization’s present culture. In literature, a supportive organizational culture is often cited as a key component of successful quality improvement initiatives in health care organizations (Bond and Funderburk, 2003; Macleod and Baxter 2001; Bennett and Franko, 1999). Conversely, nonsupportive organizational cultures are often a barrier to change in health care organizations. These negative cultural factors include resistance to employee empowerment, insufficient commitment of senior management, ingrained attitudes, lack of understanding, the lack of physician involvement, and poor communication (Shorthell et al., 1995; Ovretveit, 2000; Franco et al., 2002; Boan and Funderburk, 2003).

As discussed in the chapter two, organizational culture studies have often employed a set of dimensions (Hofstede, 1980; House, 2001) that focus on unique components of shared values, beliefs, and habits in the similar organizational environment. Hence, in this study, Hofstede’s (1980) power distance dimension; and GLOBE study’s (House et al., 2001) ingroup collectivism, performance orientation, and future orientation dimensions were used to examine MoH hospitals’ organizational culture.

POWER SHARING AND PARTICIPATION TO DECISION-MAKING PRACTICES

As an organizational cultural dimension, power distance is described as the degree to which members of an organization expect and agree that power should be stratified and concentrated at higher levels of an organization. Accordingly, large power distance in a hospital is reflected in a highly hierarchical and centralized organizational structure where
subordinates expect to be told what to do, while small power distance is reflected in
decentralized organizational structure along with modest hierarchy where subordinates
expect to be consulted (Hofstede, 1997). Based on the highly hierarchical and centralized
organizational structure of current MoH hospitals, members of the hospitals are expected to
be respectful to the hierarchical authority structures and rigid role prescriptions. These
expectations are a result of high level of power distance. However, ISO 9001 standards
implicitly require lowering of the power distance in organizations via effective internal
communication and active participation in the decision making process to achieve quality
goals of the hospital.

**Senior Post Reflections on Power Sharing and Participation**

During semi-structured interviews, the following two questions were posed to senior post
members of ISO certified and non-certified MoH hospitals to find out how power is shared
by members of the hospitals:

“Do employees of your hospital participate in developing their department’s long term goals
and objectives? If so, could you explain to me in what ways you ensure that employees
participate in goal setting?”

“Do hospital staffs freely raise their concerns in regards to particular top management
decisions when they think that it is crucial for improving hospital performance and quality? If
so, could you give me examples of approaches used by staff in conveying their concerns to
top management in their department?”

As earlier discussed, ISO certified hospitals revealed that they tended to create
communication and participation channels to increase subordinate involvement in decision-
making processes, including teams, employee satisfaction surveys, suggestion and complaint
forms, and quality management review meetings. These mechanisms introduced by senior management of ISO hospitals were not available in any of the studied non-certified hospitals except through formal communication channels. However, a number of interviewed senior managers from ISO certified hospitals pointed out that the level of employee participation in planning and decision-making processes of organizations is not at the desired level. In particular senior employees from ISO certified MoH hospitals were not satisfied with the level of participation of physicians in quality and performance improvement efforts.

However, the majority of interviewed chief nurses from ISO certified hospitals were satisfied with the level of communication practice and participation in decision-making among nurses. They indicated that nurses tend to take part in quality and performance improvement efforts voluntarily because of their collectivist character. Almost all interviewed chief nurses stated that since they had been working in the same hospital for a long time, and they were able to build good personal relationships with hospital senior management and subordinates. Many chief nurses described themselves as a bridge between top management of the hospitals and nurses rather than a superior of their colleagues. According to them, this was also a positive factor in better communication among nurses.

**Middle and Lower Level Staff Reflections on Power Sharing and Participation**

To scrutinize the power distance dimension of ISO hospitals, the following two questions were asked to lower level hospital employees, including quality management representatives of hospitals that participated:
“Does your hospital establish teams for the purpose of encouraging its employees to participate in process improvement? If so, could you please inform me of the current number of teams your hospital has?”

“While leading the hospital, does top management pay attention to considerations of hospital staff? If so, could you please characterize the management style of your hospital by giving examples of ways lower level hospital staff convey their concerns to higher level hospital staff?”

Interviewed quality management representatives of seven ISO certified hospitals confirmed that communication among the members increased during the post-certification period. With ISO certification, hospitals began to document clear job descriptions, and introduce quality teams (circles) to establish preventive and corrective activities as new means of managing and coordinating hospitals services. They realized what upper management expected from them at individual and group level via the meetings that allowed members to interact with senior managers more than they did before. However, a number of interviewed quality management representatives pointed out that lack of sufficient human resources and infrastructure, along with the centralized health care system in Turkey limited participation in decision making. A quality management representative of an ISO certified hospital touched on this issue:

“To get ISO certification and maintain it, the senior management of the hospital realized that they had to change their attitude towards hospital members in order to receive their support. On the one hand, they encouraged them to be involved in quality management efforts. On the other hand, they found it very difficult to respond to the suggestions and demands of hospital employees because of their limited resources. This hurts the participation level of hospital employees in decision-making
and quality management efforts because employees started to think “top management just creates excuses and does not really pay attention to our suggestions and demands.” After a while, the participation level of employees in decision-making decreases...

Similarly, quality management representatives of another ISO certified hospital described the same situation as follows;

“There is no visible problem in communication between top hospital management and subordinates when both groups recognize an issue and focus on its solution. However, our hospital suffers from shortage of personnel and technical equipment. To overcome this problem, the hospital hires contractual employee, namely nurses and maintenance staff, by using its revolving fund. These contractual subordinates are ignored by top management and never allowed to participate in the decision making process since they are viewed as a temporary work force rather than ‘regular’ members of our hospital.”

Many interviewed subordinates from seven ISO certified MoH hospitals stated that they witnessed improvements in services that increased the satisfaction level of their patients. At the same time, they believed that senior managements were able to eliminate unnecessary procedures and processes via effective documentation as well as increased dialog after quality initiatives began. Nonetheless, many interviewed subordinates believed that senior management ought to pay more attention to subordinates’ concerns about the performance of hospital services. The following statement of a senior lab technician of an ISO certified hospital reflects this perspective:
“Yes. Usually, we can deliver our demands and concerns directly to the related senior manager in our hospital. Top management is willing to communicate and support us whenever we come across an obstacle in providing sufficient technical services. However, there are still some issues related to the quality of our services that top management does not pay enough attention to. For instance, we do not have a waiting room for our patients who must come to our lab and check out their test results individually. However, our lab is not appropriate for the patients since toxic chemicals are used to complete tests. Therefore, we have demanded many times a waiting room where our patients can pick up their test results. This problem has not been solved yet although I personally know that there is currently an available space in this floor of the hospital which can be designed as a waiting room.”

In four non-certified MoH hospitals, interviews with senior managers and subordinates revealed that communication within the organization flows top down, while allowing very limited involvement of middle and lower level staff in organizational decision-making processes. A number of subordinates from non-certified hospitals denoted that their inputs were not adequately reflected in decisions of the senior management. They believed that the senior management tends to follow suggestions of ‘favored’ physicians and individuals who have strong personal ties with the top management. A subordinate in a non-certified hospital who had private sector experience pointed out this issue as follows:

“The top management of our hospital is not eager to hear complaints and suggestions of subordinates, but only those of physicians. For instance, I informed the top management of our hospital that the toxic waste of lab devices must be handled safely, but the top management has ignored my warnings. Poisoned waste
has been discharged into the hospital yard where patients, visitors, and employees of
the hospital usually hang out. As a lab technician with private sector experience, I
can definitely say that decisions of public hospital managers are highly political and
less fact-based than those of private sector.”

Reasons Why Empowerment Efforts Lag in ISO Certified MoH Hospitals

As Carl et al. (2004) discuss, power sharing and empowerment are the prescribed norms of
contemporary learning and knowledge-driven organizations in Western cultures. The use of
teams that allow some informal power sharing has been found to be one of the most effective
approaches to power sharing in an organization. In addition to teams, empowerment, which is
often defined as a voluntary transfer of ownership of a task or situation to an individual or a
group, has been identified as another critical aspect of total quality management in the U.S.
and European health care organizations (Shortell et al., 1995; Ovretveit, 1996; Huq and
Martin, 2000). Quality is not only management’s responsibility, because without the
involvement of physicians, nurses, and all other hospital employee, quality improvement
efforts will not even get off the ground. In this vein, health care organizations in developed
countries often establish employees suggestion systems and self-managing teams to perform
the regular work in the patient care process (Huq and Martin, 2000).

Our findings indicate that there is a trend of lessening power distance in ISO certified
hospitals during the post-certification period. While the certified hospitals established teams
and employed systematic surveys, forms, and meetings to involve their subordinates in
decision-making processes, the non-certified hospitals relied on formal and sporadic
communication mechanisms in gathering employee inputs.
Major Pitfalls for Effective Participation: Limited Autonomy and Managerial Capacity

This study found that senior hospital employees and lower level hospital employee had different perceptions the role of staff input in creating the hospitals’ long term plans and objectives. On the one hand, emphasizing their limited financial and management autonomy, interviewed senior managers argued that they do not have sufficient capability to respond to employee suggestions and demands within a short time period. This argument was echoed by one of the interviewees from an ISO certified hospital who had more than twenty years experience in senior management posts in government hospitals when he said:

“I believe that there is no MoH hospital that has the luxury of having long term plans –that reflects employee suggestions and demands-, say for more than five years, because of the insufficient infrastructure and limited support of central government at both the human resource and financial level.”

On the other hand, lower level interviewees from the same hospitals believed that the low level of employee participation in decision-making is the consequence of the inadequate managerial capacity of hospital top management. As indicated in the first chapter, all MoH hospital employees, including top managers, were appointed by MoH centrally and the selection criteria for management positions were not based on managerial education, capacity, and background, but based on seniority and reputation as doctor. Moreover, the system has traditionally been dominated by physicians. These facts support the argument of subordinates that hospital top managers do not have adequate expertise and experience in order to understand the importance of employee feedback and participation, in improving quality.
Empowerment and Fear of Losing Control

Ovretveit (1996) points out that doctors often tend to suspect that quality methods are being used more to control doctors than improve quality, and are a management-driven initiative which reduce doctors' independence; and that therefore quality method are a management "Trojan horse". This point was also confirmed by interviewed quality management representatives and nurses who believe that the current physician dominated hospital structure provides great autonomy to physicians of MoH hospitals. Hence, doctors’ fear of losing control and independence in hospital services can be related to their attitudes towards quality management activities at MoH hospitals.

Furthermore, Turkish doctors' lack of belief in current quality management initiatives is caused by their experience of two incomplete or failed Turkish health care reforms during the last decade is another factor related to lack physician involvement in the improvement initiatives. One doctor said: "I do not think that ISO certification (efforts) will be the solution to hospital quality problems. Things will remain the same as before unless fundamental health care issues such as general health insurance and an adequate number of medical employees are addressed. There also must be hospital autonomy to immunize hospitals from the political interests of central and local government."

---

25 As indicated in the chapter two, two recent health care reform projects were initiated first between 1988 and 1993 and second in 1994 and 2000.
PERFORMANCE MEASUREMENT AND REWARDING PRACTICES

Performance orientation is defined as the degree to which a collective encourages and reward group members for performance improvement and excellence. At the organizational level, high performance orientation means that the organization focuses on ambitious and challenging goals and results (Javidan, 2004). At the individual level, high performance orientation means an emphasis on training and development, on demanding individual targets, and on results-oriented appraisal instruments.

The following questions were asked to the employee of seven ISO certified MoH hospitals and four non-certified hospitals:

“Do you reward your hospital employees when they perform exceptionally well? If so, in what way does your hospital reward its employee?”

“Does your hospital conduct training activities to improve employee abilities and skills? If so, could you please provide examples of training activities conducted by your hospital?”

“Does your hospital use quantifiable measures to routinely track its performance? If so, could you please give some examples of quantifiable measures used by your hospital?”

Performance Rewards and Recognition

The successful quality and performance improvement initiatives in health care organizations often contain reward and recognition systems. Lin and Clousing (1995) report that recognition and reward mechanisms used by American hospitals to support their quality and performance initiatives include publishing success stories in a newsletter, using posters of
successful projects, and praising people publicly. However, Huq and Martin (2000) point out that many hospitals in the U.S. opt for activity-oriented (process-oriented) performance appraisal systems instead of outcome oriented ones, partly due to interpretations of the Joint Commission on Accreditation of Healthcare Organizations and partly because activities are easier to measure.

Although revolving fund bonuses were given by eleven MoH hospitals included in this study, only three out of seven MoH hospitals which were ISO 9001 certified established a recognition system. As already noted, these hospitals provided monthly and quarterly plaques. Interviewed senior management said that these plaques had been awarded by selection committee headed by the chief doctor, and based on the criteria of high performance, dialog with team members, and positive interactions with hospital patients.

Interviewed nurses, laboratory technicians, administrative employee, and other hospital employee from ISO certified and non-certified hospitals stated that they found the current application of revolving funds regulations neither fair nor useful in encouraging them to increase their performance. Many argued that this reward mechanism works only for senior managers and physicians due to the fact that the “prescribed” formula used to compute the coefficient of net performance of each member provides more bonuses to higher ranking physicians than for other hospital employees.

A majority of lower level interviewees believed that while the current application of this incentive could be a financial-motivation for physicians to continue to work in MoH hospitals, at the same time it damages the relationship between physician-dominated hospital
management and subordinates by ignoring the efforts of non-physician hospital employees. One of the interviewed nurses from MoH hospitals point out this issue as follows:

“We demand fair and equal treatment in rewards. Nurses spend time and effort to provide medical and hospital service just as much as doctors do. However, we do not get any bonus at all while doctors get rewarded for whatever they do with help of nurses.”

PARTICIPATION IN DECISION-MAKING AND TEAM-BASED MANAGEMENT

In the organizations that have strong collectivism, members assume that they are highly interdependent with the organization and believe that it is important to make personal sacrifices to fulfill their organizational obligations. Also, important decisions tend to be made by groups in a strongly collectivist organization. In return for their personal sacrifices and collaboration in the organization, employees expect that the organization will compensate them for their sacrifice and reward, or recognize their collaborative successes. On the other hand, organizations that have individualistic culture would have members who consider themselves as largely independent of the organization. In such cultures, members would expect the organization to offer them something they need, and would be willing to leave the organization if their needs or goals were better served elsewhere (Gelfand et al., 2004).

Different Staff Attributes towards Quality Management

Findings from interviews indicate that doctors were very reluctant to take part in organizational development activities and quality management efforts, but subordinates and especially nurses were very responsible in participating in organizational development
efforts. Although the organizational culture of ISO certified MoH hospitals showed a tendency of collectivism through team-based management applications and periodic meetings with subordinates, physician-dominated top managements of these hospitals let doctors’ individualistic behaviors damage collaborative efforts of the hospital employee.

**Is there a Link between Individualistic Behavior of Physicians and their Reluctance in Involving Quality Management Practices?**

Physician participation in quality improvement efforts is both of critical importance and cause for concern in health care organizations. In the literature, physicians in most health care organizations believe that they are already doing quality work and do not have extra time for quality improvement activities. They are even against patients' participation in the health care delivery process (Zabada et al., 1998). Moreover, empirical studies point out that physician involvement appeared to be the most important single factor to successful quality programs but also one of the most difficult challenges (Ovretveit, 1997, 1999 and 2000; Ennis and Harrington, 1999). In the Turkish context, certified hospitals have found difficulties in involving physicians in quality improvement activities. This is partly because physicians of MoH hospitals exercise enormous influence over hospital resource allocation within the current centralized and physician-dominated health care system.

Some of this physician reluctance to participate seems related to the fact that physicians have chance to run their own private clinics beside their regular public hospital position in Turkey. A number of specialists, who have a position at public hospitals, also compete with their colleagues to attract more patients from the local health market. In such a competitive environment at local levels, they often tend to use their organizational power to gain
competitive advantages against their colloquies at the same hospital. This individualistic behavior of doctors often resulted with double-dipping practices.\(^\text{26}\)

The majority of interviewed chief nurses and their subordinates from ISO certified hospitals also show that nurses of these hospitals were eager and ready for collaboration with upper level management and other hospital staff in improving quality and performance of hospitals more than physicians of these hospitals. Interviewed nurses indicated that they tended to take part in quality and performance improvement efforts voluntarily as a nature of their occupations. The following statement of an assistant chief nurse from an ISO certified hospital reflects this point:

“All nurses can freely come to me [Chief Nurse] and raise her concerns or suggestions about every single aspect of the hospital services. Why? Because, my nurses interact with our patients (more than physicians) to deliver not only medical, but also hospital services as a part of their job descriptions. They recognize our patients’ needs and expectations at the first hand. They feel responsible to do their best in any circumstance, even though our physician-dominated system does not recognize their efforts adequately.”

\(^\text{26}\) Specialized physicians who also work part-time illicitly refer their public hospital patients to their private practices where they offer further rigorous medical examinations (Top, 2003). Double dipping occurs when a doctor is rewarded bonuses based on the number of patients he or she treated at a government hospital, and receiving out-of-pocket payment from the same patients who are referred to get rigorous consultation in the doctor’s private clinic.
Is There a Link between Collectivist Behavior of Nurses and Their Eagerness in Involving Quality Management?

Another subculture formed within Turkish hospitals is nurses’ subculture. At the organizational level, nurses have been dominated by the organizational and professional power of physicians due to the fact that their formal job description is determined as “medical support personnel” who help doctors in delivering medical services. The existing health care system in Turkey does not offer the same professional career opportunities for nurses that it does for physicians. Because of their oppressed organizational status and static career options, nurses do not have individualistic motivations to compete with each other. Conversely, they seem to be significantly open to collaboration that will provide them more prestige and power in the hospitals.

Our findings in this study indicate that nurses are ready to support reorganization and quality and performance improvement activities at hospitals as a result of their collectivist orientation and also their desire for gaining more structural power to overcome doctors’ dominance at the organizational level. Indeed, it was observed during our hospital visitations that nurses found quality management activities as windows of opportunities to take more responsibilities in the functioning of the hospital.

FUTURE ORIENTATION DIMENSIONS OF THE MOH HOSPITALS

Future orientation of an organization is measured by the extent to which individuals engage in future-oriented behaviors such as delaying gratification, as well as planning and investing in the future. Future orientation in an organizational setting involves preparing the organization to meet future environmental changes and is, therefore, an essential leadership
attribute. Future orientation is a fundamental decision variable for all organizations since it represents the problem of allocation of resources over time (Ashkanasy et al., 2004).

This study found that while the top management of ISO certified hospitals tended to create more opportunities for employee participation in decision making, and engaged with more training activities than those of non-certified MoH hospitals, top managements of both groups of MoH hospitals were not able to develop long term goals and strategic plans due to their lack of managerial capacity. In other words, neither ISO certified, nor non-certified MoH hospitals have a future-oriented organizational culture.

ASSESSMENT OF NATIONAL CULTURE’S IMPACTS ON MANAGEMENT
CHANGE PRACTICES

As previously discussed in the chapter two, there has been a great deal of research about the influence of national culture on organizational practices through the shared values and the shared perceptions of organizational members (Hofstede, 1980, 1991; Medanca and Kangu, 1994; Harvey, 1997; House et al., 2001). Also, several studies have shown that there can be considerable differences between seemingly similar organizations operating different societies in Europe (Silverthorne, 2005). Likewise, the cultural aspects of Turkish hospitals should be influenced by the broader Turkish societal culture. In this section, we examine how Turkish hospitals’ quality management and performance improvement activities may differ from their counterparts’ practices in other national cultures, with special reference to developed countries’ experience.
This study focuses on four Turkish national culture dimensions. To do so, some findings of the most recent cross cultural study -GLOBE- are used to highlight major cultural difference between Turkish society and a few developed countries, including two Mediterranean countries, Spain and Italy, whose French-oriented administrative systems share some similarities with Turkish public administration.

Table 5.2: Turkish Societal Culture Practices and Inter-Country Rankings Including 62 Societies Worldwide*

<table>
<thead>
<tr>
<th></th>
<th>Turkey (Rank)</th>
<th>U.S</th>
<th>U.K.</th>
<th>Italy</th>
<th>Spain</th>
<th>World Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Performance Orientation</strong></td>
<td>3.83 (45)</td>
<td>4.49</td>
<td>4.08</td>
<td>3.58</td>
<td>4.01</td>
<td>4.07</td>
</tr>
<tr>
<td><strong>Future Orientation</strong></td>
<td>3.74 (36)</td>
<td>4.15</td>
<td>4.28</td>
<td>3.25</td>
<td>3.51</td>
<td>3.83</td>
</tr>
<tr>
<td><strong>In-Group Collectivism</strong></td>
<td>5.88 (4)</td>
<td>4.25</td>
<td>4.08</td>
<td>4.94</td>
<td>5.45</td>
<td>5.08</td>
</tr>
<tr>
<td><strong>Power Distance</strong></td>
<td>5.57 (10)</td>
<td>4.88</td>
<td>5.15</td>
<td>5.43</td>
<td>5.52</td>
<td>5.10</td>
</tr>
</tbody>
</table>

* Means range from 1 to 7 where 1=Low and 7=High

**Source:** House et al., 2004.

The following four cultural dimensions will have significant effects on the NPM implementation in Turkish public sector: (1) performance orientation, (2) future orientation, (3) collectivism, and (4) power distance dimensions. In principle, there should be an adequate mix of performance orientation and future orientation in order to put a greater emphasis on

---

27 GLOBE study is “a multi-phase, multi-method project in which investigators spanning the world are examining the interrelationships between societal culture, organizational culture, and organizational leadership (Karasakal and Bodur, 1998; House et.al, 2001).” This study examined on in 62 cultures representing all major regions of the world.
outcomes and explicit measures of performance in turn leading to group or individual incentives. Moreover, there should be also a low level of power distance, while having sufficient in-group collectivism in order to have ‘hands-on professionals’ who can use private sector styles of management practices efficiently.

However, as it is indicated in Table 6.2, high levels of collectivism, and power distance, and relatively lower levels of performance orientation and future orientation characterize Turkish culture. In the following section, this study tries to assess such possible impacts by briefly canvassing available cross-cultural studies.

**Power Distance Practices in Turkish Society and Its Impacts on Organizations**

The GLOBE study defines power distance as “the degree to which members of an organization or society expect and agree that power should be unequally shared (House et al., 2004).” Table 6.1 shows that Turkish national culture’s power distance value (5.57) is above the US (4.88), the UK (5.15), and the world average (5.10), and close to Spain’s (5.52) and Italy’s (5.43) values. In this picture, Turkish national culture, like that of Spain and Italy, does not seem too conducive to NPM implementations since devolving power and authority in the organization is one of the prominent features of results-based management.

Likewise, Tores and Pina (2004) discuss that Spain’s public administration has a lot of common characteristics with Italy, such as having a public administration culture that is grounded in administrative law and influenced by structures from the French legal model. They argue that in Spain, the recruitment and education of civil servants produces professionals with a legal background and reluctance to take managerial decisions.
On the other hand, the US national culture seems the most conducive culture for results-based management systems. In fact, NPM has been accepted as the Anglo-American administrative culture model, including the governments of UK, the USA, Canada, Australia and New Zealand. As Carl et al. (2004) argued, in the UK and the US societies, the flexible distribution of power often facilitates entrepreneurial managerial practices by allowing upward mobility in the society and the sharing of information. Although both the UK and the US implemented market-oriented reforms (Tores and Pina, 2004), the pressures for change is primarily top-down in the UK – from the national ministerial and governmental systems, rather than market forces, a relatively strong consumer movement, or empowered local managers or clinicians, like in the USA (Ferlie and Shortell, 2001).

**Performance Orientation Practices in Turkish Society and Its Impacts on Organizations**

Performance orientation is defined as “the degree to which a collective encourages and reward group members for performance improvement and excellence” by the GLOBE (House et al., 2004). Performance orientation is one of the weakest dimensions of Turkish culture (3.83). It is below the World average (4.07), although somewhat interestingly higher than Italian score (3.58). However, the US (4.49), the UK (4.08) and Spain (4.01) have higher societal level performance orientation than Turkish culture. Javidan et al. (2004) point out that low performance oriented societies tend to value social and family relations, loyalty, tradition, and seniority, and use subtle and indirect language. This fits with our findings on certified MoH hospitals’ weak performance oriented practices, such as emphasizing seniority and process indicators for rewards rather than using results.
On the contrary, Javidan et al. (2004) indicate that high performance oriented societies tend to value education and learning, emphasize results, set high performance targets, value taking initiative, and prefer explicit and direct communications. Also, available research confirms that recognition and reward mechanisms are used by many American hospitals to support their quality and performance initiatives including publishing success stories in a newsletter, using posters of successful projects, and praising people publicly (Clousing, 1995; Huq and Martin, 2000).

In-group Collectivism Practices in Turkish Society and Its Impacts on Organizations

In-group collectivism is the degree to which individuals express pride, loyalty and cohesiveness in their organizations or families (House et al., 2004). Reviewing Table 6.1, It can be noticed that Turkish national culture has one of the highest “in-group collectivism” values among 62 national cultures with 5.88. Again, Spain’s (5.45) and Italy’s (4.94) in-group collectivism values are similarly higher than those of the UK (4.08) and the US (4.25). Such a high level of in-group collectivism at societal level could encourage the establishment of team-based management approach. In this vein, a group reward system could also be more beneficial in the hospitals since the national culture plays a supportive role in group base appraisal systems. This assumption is supported with one of the findings of this study that nurses eagerly support quality and performance improvement activities at hospitals as a result of their collectivist nature (as well as their gaining more structural power to overcome doctors’ dominance at the organizational level.

In the similar direction, low in-group collectivism value in the UK could be related to mixed results of the team-based management in the UK hospitals. Scally and Donaldson (1998)
report that majority of UK hospitals could not develop management teams partly due to incomplete participation on the part of physicians, and a lack of information sharing or communication with service managers (Ferlie and Shortell, 2001).

**Future Orientation in Turkish Society and Its Impacts on Organizations**

The extent to which a collective encourages future-oriented behaviors such as delaying gratification, planning, and investing in the future is defined as future orientation cultural dimension (House et al., 2004). GLOBE study reports, as shown in Table 6.1, future orientation dimension of Turkish national culture (3.74) is again lower than the World average (3.83). However, it is higher than the Spanish (3.51) and Italian (3.25) national cultures’ future orientation values.

Ashkanasy et al. (2004) indicate that future orientation practices, in such developed countries as the US and the UK, are positively correlated with the practice of uncertainty avoidance, institutional collectivism, and performance orientation, but negatively correlated with the practices of power distance and in-group collectivism. Such a mind-set allows the members to look far into the future to assess the effects of their current actions because the future uncertainties and risks are lowered. Performance criteria can be specified more clearly and rewards can be given on the basis of these criteria.

**SUMMARY OF QUALITATIVE FINDINGS**

Qualitative findings presented and analyzed in this chapter show that certified public hospitals in Turkey began to employ new managerial tools in order to improve their quality and performance. Among other new managerial tools, almost all certified hospitals included
in this study often engaged in feedback gathering activities from their external and internal customers to set up organizational quality and performance priorities; introduced effective activity documentation methods with clear job descriptions; established cross-functional and departmental management teams to introduce participation in decision-making processes, and conducted more trainings and workshops to equip hospital staff with appropriate level technical and behavioral skills. Also, findings indicate that a few certified hospitals were able to collect quantifiable data and use appropriate measurement tools in monitoring, diagnosing, and analyzing hospitals activities, but also using monetary and nonmonetary motivators to reward high employee performances periodically.

In the second and third parts of this chapter, four aspects of organizational culture and national culture were found to be associated with quality and performance improvement efforts in certified MoH hospitals. Power sharing and empowerment are the prescribed norms of contemporary knowledge-driven organizations in Western cultures. The use of teams that allow some informal power sharing has been found to be one of the most effective approaches to power sharing in an organization. In addition to teams, empowerment, which is often defined as a voluntary transfer of ownership of a task or situation to an individual or a group, has been identified as another critical aspect of total quality management in the U.S. and European health care organizations (Shortell et al., 1995; Ovretveit, 1996; Huq and Martin, 2000; Carl et al., 2004). Our findings indicate that there is a trend of lessening power distance in ISO certified hospitals. However, the Turkish national culture's high power distance seems to feed serious challenges the application of results-based management at government hospitals, including the lack of empowerment fostered by formal-hierarchical structure of Turkish hospitals.
At the organizational level, high performance orientation means that the organization focuses on ambitious and challenging goals and results, while it means an emphasis on training and development, on demanding individual targets, and on results-oriented appraisal instruments at the individual level (Javidan, 2004). High performance oriented societies, like the U.S. and the U.K., tend to value education and learning, emphasize results, set high performance targets, value taking initiative, and prefer explicit and direct communications. For instance, recognition and reward mechanisms are used by many American hospitals to support their quality and performance initiatives including publishing success stories in a newsletter, using posters of successful projects, and praising people publicly (Lin and Clousing, 1995; Huq and Martin, 2000). This study indicates that low performance orientation of Turkish national culture seems to lead a weak organizational performance orientation such as emphasizing seniority and process indicators for rewards rather than using results at Turkish government hospitals. Moreover, the revolving funds employed as supplementary compensation was found to be a reason for goal displacement since it is a monetary reward mechanism to reward the high performance of physicians, but not that of other employees at the hospitals.

Empirical studies from Western countries point out that physician involvement appeared to be the most important single factor to successful quality programs but also one of the most difficult challenges (Ovretveit, 1997, 1999 and 2000; Zabada et al., 1998; Ennis and Harrington, 1999). These studies indicate that physicians in most health care organizations of believe that they are already doing quality work and do not have extra time for quality improvement activities. They are even against patients’ participation in the health care delivery process On the one hand, this study found that certified hospitals struggled to involve physicians in quality improvement activities. This was found partly because
physicians of MoH hospitals do not want to share their enormous influence over hospital resource allocation within the current centralized and physician-dominated health care system. On the other hand, high level of in-group collectivism in Turkish national culture seems to play a supportive role in the establishment of team-based management approach at government hospitals. For instance, nurses were found to be eagerly support quality and performance improvement activities that significantly open to collaboration that will provide them more prestige and power in the hospitals.

High future orientation practices, in such developed countries as the US and the UK, are positively correlated with the practice of uncertainty avoidance, institutional collectivism, and performance orientation, but negatively correlated with the practices of power distance and in-group collectivism. Majority of Western employees tend to look far into the future to assess the effects of their current actions because the future uncertainties and risks are lowered (Ashkanasy et al. (2004). However, in the Turkish context, low level of future orientation dimension of national culture seems to cause weak future orientation at Turkish hospitals, including the lack of leadership to change by developing long term goals and strategic plans under current highly centralized and physician-dominated health care administration in Turkish public sector. Hence, it seems plausible to conclude that Turkish government hospitals have very low level future-oriented organizational culture.
CHAPTER 6: EXTERNAL AND INTERNAL DETERMINANTS OF TURKISH HEALTH CARE REFORM

The process of reform in public sector cannot be determined without understanding the political pressures that surround the process. In the literature, the success or failure of reform is profoundly influenced by power relationships among affected interests, including executives and legislatures, leaders and party elites, and national governments and international institutions (Grindle, 2000). Moreover, public sector reforms have altered the relative power distributions of organizations within government (Peters, 2001). Because of its structural changes and possible political transformation aspects, the current health care reform project has drawn a great deal of attention from different sections of Turkish society. Especially, health workers’ labor unions and medical associations have reacted with strong opposition to those structural changes by arguing that the structural changes will create more inequalities among health care recipients and a trend toward privatizing health care system, consequently creating a very vulnerable health care system that could be easily dominated by political interests at local level (Beris and Dicle, 2004; Turk Saglik-Sen, 2004; Yeldan, 2005).

Identifying the supporters and the resisters of public sector reform in Turkey is important in order to understand the future directions in the Turkish public sector reform initiatives. Therefore, in this chapter we examined external and internal determinant of NPM initiatives in Turkish public sector, particularly in the health care sector. We looked at external actors such as political parties, state institutions, labor unions, and interests groups; and internal actors in the MoH and hospitals particularly physicians and nurses. This study employs a
combination of qualitative techniques to examine political determinants of health care reform in Turkey, such as analyses of semistructured interviews with a few high rank MoH officials involved in current health care reform in Ankara, and conducting a survey of current Turkish literature on NPM initiatives (including newspapers, and reports available in the Turkish political parties’ websites and those of interest groups, and government agencies).

**THE PATH OF CURRENT NPM INITIATIVES IN TURKEY**

After experiencing a devastating earthquake in 1998 and the most drastic economic crisis since the establishment of republic in 1923, the public provision of social services, and particularly the role of government in the health care system, was one of the main issues in the Turkish election campaign in November 2002. The election resulted in the landslide victory of the Justice and Development Party (JDP) whose agenda included a major transformation of governments’ involvement in the health care service delivery and public education system.

After taking the office in 2002, the newly elected government declared its program (called the Urgent Action Plan) to restructure the provision of public services. The first element of the reform initiatives, the Public Administration Basic Law was passed by Parliament in July 2004, but the President – in opposition to the Prime Minister -- did not approve it and returned it to the Parliament for further considerations in August 2004. However, the

---

28 This plan was announced by the Prime Minister to outline his administration’s one-year reform plan by January 2004.

29 The basic law, like other NPM initiatives around the world, aims to uncouple the central government agencies’ policy setting, planning and coordinating efforts from their service delivery at local levels.
executive branch of the government has continued to support its provisions since 2004. The
government (i.e. the Prime Minister and his appointees) announced that the public
administration reforms will be implemented piecemeal until the next general elections in
November 2007.

During their election campaign, the JDP party described themselves as a “reform
government” determined to carry out the necessary reforms that have been on the political
agenda for many years (Agartan, 2005). Consequently, the ruling party, the JDP, has been
well aware of the fact that its reelection depends on its ability implement promised reform in
the provision of public services by the end of 2007, particularly in the health care delivery
system. Moreover, the JDP government seems to give more priority to the Transformation in
Health program than their other reform programs.

**Lack of “Market” Forces and “Exit” Options in Stimulating NPM Initiatives in the
Turkish Health Care Sector**

According to 1998 data, more than 85 % of population had public health coverage while only
0.5 % of population had private health insurance in Turkey (SPO, 2001). With 62.9 percent
of total health care spending paid from public sources, the public sector is the main source of
health funding, as in all OECD countries, except the United States, Mexico, and Korea.
Private financing in Turkey is mainly in the form of out-of-pocket payments which account
for 74.6 % of all private expenditures. This contrasts with the United States, where private
health insurance arrangements account for 66% of total private health financing, and out-of-
pocket payments accounting for only 14.1% of total health financing (OECD, 2005). Moreover, non-public hospitals only account for about eight percent of Turkey's hospital capacity.\(^{30}\)

In general, the lack of adequate level private sector involvement in the hospital sector in Turkey gives the public hospitals a closed market which immunized them from market competition. Competition in the market promotes managerial efficiency by forcing the adaptation of the most efficient service arrangements to stay competitive and hold their market share (Osborne and Plastrik, 1997; Harding and Preker, 2003). Moreover, a competitive market allows public managers to use benchmarking that provides more opportunities for performance improvements and resource allocations by comparing their organizations’ processes, mechanisms, and outcomes with other successful ones.

Considering the absence of health care market in Turkey, one can argue that NPM initiatives in Turkish health care cannot be derived from the competition between government and private health care organizations. Especially, comparing Turkish private sector’s share in health financing and hospital sectors with their European and North American counterparts, demands for adaptation of new management principles in Turkish health care system could only stem from the central government institutions rather than health care market forces available in many developed countries (e.g. private health organizations as competitors and strong civil organizations that advocate customer choices). In other words, as Osborne and Plastrik (1997) stated about government monopolies, Turkish public hospitals have had no real reason to improve their performance at organizational level because there is no reward

\(^{30}\) Non-public hospitals are grouped into four categories in Turkey: private hospitals (i.e. hospitals owned by Turkish citizens and established as a corporation), foundation hospitals, hospitals owned by ethnic minorities and hospitals owned by foreigners.
for getting better, no political, or public appreciation for their increased performance, and no strong competition.

Hirschman (1972) argues that in competitive markets “exit” is a possible solution for the customers who experience low quality and high costs in purchasing products and services. In Turkish health care context, exit seems very limited option to the customers since they have to buy services from public hospitals no matter how their low quality due to the insignificant number of private hospitals, and their high cost.

Moreover, there is no direct mechanism in Turkish public hospital system that allows customers to convey their discontent to the hospital management at organizational level. Using Hirschman’s (1972) expression, Turkish public health care customers do not have a direct “voice” option to catch the attention of MoH officials and hospital managers at the central and local level. Therefore, the general election, as a democratic political process, seems the only tool by which the customers could show their concerns about low quality health care services. Indeed, the Turkish electorate did raise their “voice” during general elections in the 1990s, and four coalition governments during the same period promised a comprehensive health care reform to Turkish electorate. However, none of them had enough political support to reform the health care system, and as a result Turkey had nine Ministers of Health between 1991 and 1999. However, as discussed already, the JDP’s single-party-government seems to have adequate political power with strong public support for implementing results-based management in public hospitals.
CURRENT IMPLEMENTATIONS AND FUTURE BATTLES IN TURKISH HEALTH CARE

NPM in Turkish Health Care Context: Transformation in Health Program

The Restructuring Public Administration movement envisages delegating some of the powers of the central government to regional and local administrative entities. The JDP government argues that when the draft law becomes the public administration basic law in the following year (beginning in 2006, or 2007), Turkish public sector will experience enhanced transparency and accountability, strong administrative capacity and productivity, and a participatory and results-oriented management practices. Accordingly, it introduces through these draft laws concepts such as “city councils,” “voluntary participation in local government services,” and “right to information” (Dincer and Yilmaz, 2004; Beris and Dicle, 2004).

In accordance with its Restructuring Public Administration movement, the JDP government has published its plans for a “Health Transformation Program” to be implemented by 2007. This program covers deep-rooted and long-lasting health care delivery and organizational problems in Turkish public sector. The main objectives of the project are announced as extending health insurance coverage to all the Turkish population and reduce inequalities in access to health care.

The objectives of Health Transformation Program also promise an unprecedented change in Turkish health care system by offering a comprehensive health care reform. It should reduce the central government’s direct control of health care finance and delivery, and also establish
entrepreneurial management approaches via autonomous health care organizations.\textsuperscript{31} In fact, several principles of the Transformation in Health program including human centrism, sustainability, continuous quality improvement, and participation have been begun at organizational level by encouraging government hospitals to apply ISO 9001 standards since 1998.

More recently, the MoH published new circular to change the official code of hospital management as of May, 16 in 2005.\textsuperscript{32} One of the components of new changes includes instructions about arranging quality improvement and performance measurement activities at the organizational level. The new directives about hospital management will require establishing effective customer feedback mechanisms at departmental level, hospital level, and provincial level fully beginning in 2006.

**Impacts of NPM Practices at the Central and Local Health Care Organizations**

Considering the principles of Transformation in Health program and the current stage of its implementations, we can argue that the MoH will likely gain credibility in the eye of Turkish citizens when results-based management models are implemented successfully. Also, the Turkish electorate will give the credit to the JDP government which introduced itself as a

\textsuperscript{31} None of the goals of the program have yet been implemented fully because the Turkish government currently is busy with legislative and structural arrangements similar to other NPM initiatives awaiting legislative approval. For instance, the group hospitals previously run by the Ministry of Labor and Social Security has been transferred to the Ministry of Health as of January 2005 in order to follow “division of power” principle of the reform program. By doing this arrangement, each ministry will focus on specific health care services: while Social Insurance Institution will mainly coordinate financial issues related with health care and pension system, the Ministry of Health will be responsible for planning, coordinating, and delivering health care services.

\textsuperscript{32} MoH, Code: B100THG10002/3120
reform government. To produce short term results and secure political credit, MoH needs to show progress in two areas – clarifying responsibilities and decentralizing decisions. I discussed each in turn.

**Clarifying Responsibilities of Central and Local Health Care Administration**

According to the traditional system, the MoH has technical responsibilities such as primary health care, mother and child services, and curative services. It also has support services such as personnel, information processing, press and public relations, legal, and administration and financial affairs. To execute such complex responsibilities, the MoH relies on a vertical organizational structure based on functional divisions at the central level -including an under-secretary of health five deputy undersecretaries, seven director-generals, and a number of departmental heads-. At the local level, the provincial health directorates administer the health services in the 81 provinces (World Bank, 2003b). According to Mr. Saran, the deputy undersecretary of MoH, these overloaded functions aggregated within multiple divisions of MoH often prevent the Ministry from creating and pursuing long-term health care strategic plans, as well as minimize hospitals’ and health posts’ ability to provide nimble health services at the local level.³³

These reforms will come into effect in two ways. First, the policy making function of MoH will concentrate on developing policies, defining standards, and specifying its vision of desired health care outcomes, rather than a more traditional emphasis on processes and inputs. Second, local health care organizations – e.g. health posts and hospitals- will concentrate on how best to fulfill the compliance and health care delivery functions.

---

³³ The author conducted an interview with Dr. Ulvi Saran, the deputy undersecretary of MoH on September, 14th, 2004.
Enhancing Performance of Hospitals via Decentralization

After the decentralization of health care system is completed via Transformation in Health program, autonomous hospitals will be responsible for their financial and managerial functions. For the first time, individual hospitals will have to face the consequences of their own decisions. As a result of such transformation, one can argue that hospitals will attempt to employ more efficient ways to allocate their financial and technical resources to maintain, or enhance their quality, competitiveness, and to achieve customer satisfaction goals.

LOOKING AT THE MOTIVES OF EACH IMPORTANT ACTOR: WHO GETS WHAT?

Up to now, we have talked about results of current reform initiatives in Turkish health care by highlighting its unique reform path. In this section, we want to shift our attention to the external and internal political battles surrounding the NPM initiatives. As already discussed, several organizational behavior theories (such as rational choice and principle-agent theories) have argued that because of the self-interest of the members of the organizations, employees of public organizations support or oppose changes, using their control over organizational resources, in order to achieve personal goals and interests:

A Top-down Reform Approach with an Insignificant Internal Resistance in MoH

So far, the JDP government has also used a “top-down approach” in establishing internal components of the public sector reform program.\(^{34}\) It is being implemented by a team of

---

\(^{34}\) To embark on NPM reforms in Turkey, two high-post leading teams were established in the Office of Prime Minister; Restructuring Public Administration Coordination Committee and Counsel of Restructuring Public Administration in January 2004 in order to coordinate and guide reform initiatives. Accordingly, these
experts led by the Minister of Health and supported by the Prime Minister and the Cabinet. In particular, considering the development and timing of the Transformation in Health program and political commitment behind it, the current administration seems to have made significant progress in their transformation project without having major internal resistance within the MoH (Agartan, 2005).

Such insignificant internal resistance within the MoH might be explained by several factors. First, due to the current merit-based personnel administration system, career bureaucrats, who enjoy a life-time employment provided by the current public personnel system and protected by the basic law, are well aware of the fact that their “earned” employment rights cannot be canceled when decentralization happens. In this vein, these career civil servants may expect to be relocated from their current posts to decentralized institutions’ posts whose status and payment level is not lower than their previous posts.

Second, career civil servants may even see some long term benefits over the proposed reform initiatives. Unlike in many developed countries, Turkish career civil servants have traditionally moved to top posts in the private sector after being offered better financial and social benefits due to their government experience and established networks in the central government (Sozen and Shaw, 2002). In this vein, the Transformation in Health program aims to transfer the health services from a monopoly to a competitive market among public committees were responsible to gather feedback from restructuring teams created in each ministry and local administration, steer government agencies for smooth NPM transformation, and prepare legal grounds for further NPM initiatives at the central level (No:2004/2 Circular of Prime Minister).
and private hospitals. If this endeavor is achieved, the options will be significantly better for career civil servants who may consider pursuing their career in the private sector.

**Intercepting Physicians’ Double Dipping Practices**

The MoH estimates that there are about 11,200 doctors (15 percent) who work on a private basis only, while somewhat below sixty percent of all public sector physicians also work part-time in private practice. Dentists who work full time in private practice are significantly more common and essentially all dentists who work in public facilities also practice in private (World Bank, 2003a). However, a majority of specialized physicians who also work part-time illicitly refer their public hospital patients for better consultation and medical care. This has been a common practice in Turkish health care system for long time period (Top, 2003).

As discussed earlier, doctors at public hospitals have been awarded with monthly bonuses based on their rank in the hospital and the number of patients that they have treated in a month. To increase the amount of their monthly bonuses, they tend to treat as many patients as possible by providing only very short consultation times for patients. At the same time, these doctors often refer hospital patients to their private practices where they offer rigorous medical examinations for their patients who often make out-of-pocket payments per clinic visitation.

Double dipping occurs when a doctor is rewarded bonuses based on the number of patients he or she treated at a government hospital, and then receive out-of-pocket payment from the same patients who are referred to get a rigorous consultation in the doctor’s private clinic. This is clearly unethical. However, it is very difficult to uncover and correct as principle-
agent theory suggests, because the principle (hospitals) face difficulties in monitoring the agents (doctors) to keep the agent in the course of organization’s goals. In fact, such double dipping practices of doctors could not be tracked within the traditional centralized health care system of MoH, because individual physicians have enjoyed enormous organizational power at the local level.

If NPM initiatives achieve their desired ends in Turkey, public hospitals will be autonomous organizations that are responsible for their own quality and performance. Establishing results-based management system with great emphasis on customer satisfaction, hospitals are expected to be significantly more conscious of the double dipping practices of doctors, and to discourage doctors from such practices by using the tools of performance management. For instance, hospitals may closely monitor activities of their employees, including doctors’ work loads, and gather customer feedback about patient-doctor interactions in the hospitals. Moreover, the hospital management can hire doctors’ based on annual contracts which may include specific goals and results, and financial rewards (e.g. paid time off, one-time cash awards) along with their merit-based payments when they accomplish such goals.

One of the biggest consequences of this reform is that physicians will lose some of their power, while providing opportunities to other hospital employees in gaining control at government hospitals, including nurses and administrative employees. However, this study argues that doctors will often use most available power (i.e. expert power or reward power) to maintain their power and gains by resisting change efforts in their organization.
The President’s Stand on NPM Initiatives of the Government

The governmental system in Turkey is parliamentary because the executive branch has a dual structure: a president who is not popularly elected and a council of ministers headed by a prime minister who is responsible to the legislature. The president is often elected by the parliament from among its own members, and then the president-elect terminates relations with his or her political party (Heper and Cinar, 1996). Under the 1982 constitution prepared and promulgated under the tutelage of military leaders who continued to uphold the elitist tradition, the Turkish president’s powers are quite numerous as the head of state, and often bring him in conflict with the prime minister who is head of government.35

According to the current President, although there is a need for a modernization, such modifications should not provide extensive managerial and financial autonomy for local authorities in order to keep them accountable to the central government whose responsibility is to ensure integrity of administration.36 The President returned the basic law to the Parliament in August 2004 by requesting further “considerations”, meaning that the draft should be incorporated with the Constitutional (e.g. articles 126 and 127) norms ensuring

35 His legislative powers include returning bills to the parliament for reconsideration; submitting constitutional amendments to referendum; appealing the Constitutional Court for the annulment of laws; and dissolving the parliament in cases specified by the constitution. Among his executive powers, the most critical one is the president’s preparation of the agenda and chairing the meetings of the National Security Council (NSC) comprised of high command military and several ministers. The government, particularly the Council of Ministers has to give priority to the measure the NSC deems necessary for the preservation of the existence and independence of the state, the integrity and indivisibility of the country, and the peace and security of society (Heper and Cinar, 1996). For some researchers, the NSC is the most important institutional channel through which the military can exert its political authority (Candar, 1999). They even believe that this is the institution that really runs the country.

36 Ahmet Necdet Sezer was elected as the tenth president by the Parliament in May 2000. His term will be ended in May 2007.
integrity of public administration. In the case of Transformation in Health, the President does not support the notion of granting local administrations and local hospitals more financial and organizational autonomy, since this will be clear violation of the Constitution’s integrity of public administration requirement (Office of Turkish President, 2004).

In addition to above criticism, he also argues that the basic law overstates the public administration’s role in promoting individual rights and freedoms in the public sphere. Moreover, the President warns the government about the basic law’s such promises cannot be tolerated under any condition due to Turkish Republic’s fundamental and unchangeable secularism principle (Office of Turkish President, 2004; Milliyet Daily Newspaper, 8/4/2004).

In sum, the President’s stand on defending the integrity of centralized public administration clearly contrasts with the government’s aim of decentralization. We can argue that the President seems to be the winner of current battles in NPM initiatives in Turkey, since he has emphasized the Constitutional requirements related to the traditionalist-centralist form of public administration. Unless related amendments in the Constitution that allow the government to pursue its NPM initiatives are passed by the Parliament, the President will be still pointing out such conflicts between the Constitution and the proposed basic law until finishing his term in May 2007.

According to the President, restructuring public administration initiatives drafted within the basic law entail that there is no limitations on individual rights and freedoms, and the public administration is responsible and entitled to promote all kinds of human rights and freedoms. However, Mr. Sezer argues that the Constitution’s articles 5, 12, and 14 clearly enforce a certain level of limitation on individual rights and freedoms (Office of Turkish President, 2004).
Objections of Secularist Bureaucratic Elite and the Current Opposition Party

The secularist bureaucratic elite who often happen to occupy high-level state institutions may trigger a political battle in order to impede the government’s attempts to restructure public administration. One can argue that secularist bureaucratic elites’ objections to NPM initiatives in Turkey could be summed up with their two interrelated concerns: (a) losing authority of strong central institutions in the executive branch of government; (b) suspicions over the current government’s Islamist-minded sentiments (Rosen, 2005).38

They argue that devolving authority to local administrations, and demolishing and downsizing central government institutions will create vulnerable public administration that would be used by non-secular political movements. Their utmost fear is to be Islamist fundamentalists who may occupy top administrative positions and establish a theocratic state in Turkey. So far, the JDP government has repeatedly denied these religious based allegations, but have also stated their strong commitment to transform public administration. Because of bureaucratic elites’ suspicions about the role of NPM initiatives in Turkey and great emphasis on secularism, it seems that during upcoming years there will be strife between the secularist bureaucratic elites defending centralized public administration and the reformist government aiming decentralized public administration.

The major opposition party in the Parliament, the Republican People’s Party (RPP) has been harshly criticizing the JDP government’s agenda and practices for restructuring public administration.

---

38 Hurriyet Daily Newspaper, 7/26/2005. Another interesting anecdote about the secularist bureaucratic elite’s cooperation to impede the government’s reform initiatives happened in 2003 when the higher education board (YOK) representatives visited Org. General Aytac Yalman to ask his (the military’s) cooperation to deal with “islamists hidden agenda” in the restructuring Higher Education reform initiatives (Milliyet Daily Newspaper, 9/11/2003).
administration. Describing the number one priority of the party as being the safeguarding of the Turkish Republic, the RPP has centered its opposition to the JDP government’s restructuring public administration initiatives on the argument that the current administration and its reform projects have hidden agenda of establishing non-secular state structures by demolishing the unity of public administration and placing anti-secularists into critical positions of the central institutions. Somewhat interestingly, the party has targeted personalities, rather than the content of the reform proposals. These critiques have focused on the Undersecretary of Prime Ministry, Omer Dincer; the mastermind of NPM initiatives and the draft laws. He is alleged to be pushing for a more decentralized state structure through these reforms in order to prepare a fertile ground for an Islamic agenda (Beris and Dicle, 2004; Oyan, 2005).

Opposing the notion of empowerment of local public organizations via managerial and financial autonomy, the RPP argues that the conception of unitary state ought to be maintained in public administration. Moreover, the RPP argues that shifting nine Ministries’ role of supervision at the central level and minimizing administrative tutelage over local administration will cause further complications in keeping local governments accountable.\(^\text{39}\) Also, the RPP criticizes NPM initiatives of the government for allowing local administrations and organizations to contract-out their basic social services, which would eventually affect the most vulnerable population of poor or unemployed citizens. According to the opposition

\(^\text{39}\) The draft basic law proposed to abolish or transfer the following Ministries’ local authorities to local administrations –including the special provincial administrations and municipalities–: Ministry of Foreign Affairs, Ministry of Internal Affairs, Ministry of Public Works and Settlement, Ministry of Health, the Ministry of Transport, Ministry of Agriculture and Village Affairs, Ministry of the Environment, Ministry of Energy and Natural Resources, and Ministry of Culture and Tourism.
party, all of these developments will erode the social responsibilities of state, and eventually weaken the state’s role in the economy by “privatizing” all public sector organizations (Oyan, 2005).

**The Electorate and The Parties**

Looking at the profile of Turkish electorates, we can also cast some lights on the future developments related to the Turkish NPM initiatives. As one of the important political actors in the Turkish politics, the opposition party (RPP) is often supported by voters who are well-educated and secularist urban population, while a majority of the JDP government’s electorates are from middle and low income level population who look for new opportunities including employment, health care, and education. Since the ruling party’s (the JDP) reelection depends on their ability to implement promised reform for its electorates, secularist bureaucratic elites and the RPP will continue to oppose these from different political and governmental platforms, including the President, the Parliament, and the judicial institutions. If these groups and the JDP government cannot find a common ground to pursue NPM implementations in the next couple years, the government may take the basic law to the referendum whose results cannot be vetoed even by the President.  

**Labor Unions’ and Interest Groups’ Critiques on Reforming Health Sector**

In Turkish health care context, although it has been argued that the institutional arrangements and the balance of political forces in Turkey have traditionally managed to limit the involvement of interest groups and labor unions in the policy process, the Turkish Medical

---

40 Mr. Erdogan (the Prime Minister) mentions using the referendum when it is necessary (Milliyet Daily Newspaper, July 5, 2005.)
Association -TMA; mainly representing doctors- and a number of unions representing health workers often attempt to influence health care policy making and reform efforts (Agartan, 2005). Recently, they collectively organized demonstrations in several provinces to protest the MoH’s health care reform program. Moreover, they indicate that until the government ends its NPM initiatives, they will continue to raise their voice against the government’s transformation efforts (Milliyet, 2005; Hurriyetim, 2005).

Defending the welfare state policies, the unions and TMA have centered their major criticisms on the government’s notion of liberalizing the health care system and privatizing health care services. Likewise, they argued that in the next couple years the reform will transform public hospitals (and health posts) into private enterprises; contribute to the introduction of privatization via family medicine practices by shifting focus from public health care to individual health care; and replace the notion of public health service with a harmful competition among health organizations and physicians (TMA, 2003; Turk Saglik-Sen, 2004).

In sum, the unions and TMA harshly criticize the JDP government for following global forces’ orders (e.g. World Bank, European Union, and IMF) which aim to minimize the state’s involvement into service markets. However, their opposition has usually been discredited by the government for being too much ideologically-oriented and representing only those professional who were simply afraid to lose their benefits and thus were depicted as the defenders of the status quo (Agartan, 2005). Considering the political commitment of the JDP government, we can argue that oppositions of the unions and TMA could have marginal impacts on the implementation of health care reform initiatives in the next few years.
CONCLUSION

After the NPM’s first twenty years in developed countries, some researcher argues that there is no significant evidence that management reforms have translated into electoral victories or into modest political gains. In the US, for instance, Vice President Al Gore (the U.S.) barely mentioned his reinventing government effort in the presidential campaign trail in 2000 and got no political credit for having led it. Likewise, Prime Minister Tony Blair (the U.K.) made little of his own management reforms in the 2001 elections (Jones and Ketll, 2003).

However, this may not be the case for their Turkish counterpart, Recep Tayyip Erdogan, who defines his government as a reform government. The Turkish government’s enthusiasm could be also partly because the European Union wants to have serious changes done by Turkey, and encourages the current government by promising to start the active membership negotiations on October 3, 2005. Consequently, the ruling party’s reelection depends on their ability to implement promised reform in the provision of public services by the end of 2007, particularly in the health care delivery system.

So far, the JDP government has also used a “top-down approach” in establishing the public sector reform program. The current administration seems to make significant progress on their transformation project without having major internal resistance within the MoH. This might be explained by the fact that, if the Transformation in Health program is achieved to transfer the health services from a monopoly to a competitive market among, the options will be significantly better for career civil servants who may consider pursuing their career in the private sector.
CHAPTER 7: SUMMARY of FINDINGS, IMPLICATION of RESEARCH RESULTS and FUTURE RESEARCH DIRECTIONS

SUMMARY OF FINDINGS

This study explored four research questions to examine the effectiveness of ISO 9001 certification and quality improvement initiatives at government hospitals with an emphasis of their current organizational culture. These four research questions were:

(1) To what extend have ISO certified government hospitals actually implemented new management measures?

(2) Do the quality and performance improvement initiatives in Turkish government hospitals via ISO 9001 certification lead to improved performance?

(3) What are the impacts of national and organizational culture on Turkish results-based improvement initiatives?

(4) How have political forces -- both external and internal-- affected the implementation and success of the management reforms?

Management Improvement Tools Implementation Measures at MoH Hospitals

The five hypotheses articulated for the qualitative analyses suggesting that ISO certified hospitals employed management improvement tools more widely than non-certified hospitals. Our findings indicate that customer feedback, employee participation in decision-making, and employee training were three out of five new management measures used more
widely at certified hospitals than at non-certified hospitals. However, this study rejected two hypotheses indicating that there was no significant evidence to conclude that ISO certified hospitals employed performance measurement and reward or recognition management measurements more widely than non-certified hospitals.

**Performance Differences between ISO Certified and Non-certified Hospitals**

The study articulated a series of hypotheses to test whether ISO certified hospitals (9) outperformed non-certified hospitals (9) before and after receiving their ISO certifications about performance differences between certified and non-certified hospitals. Regarding the impacts of pre-certification period performance level on hospital certification tendencies, the study found no substantial evidence to conclude that the MoH hospitals that had already had high performance opted to apply for ISO certification.

The findings also indicated that the nine ISO certified hospitals were more successful than non-certified hospitals in enhancing their efficiency in increasing hospital bed occupancy rate during the post-certification period. On the other hand, the study found that there was no statistically significant difference between two hospital groups in increasing the average number of outpatients per physicians and the average number of surgical operations per specialist, or decreasing the number of days a patient stays. Finally, our findings indicate that surprisingly non-certified hospitals were able to decrease crude death rate more than ISO certified hospitals.

---

41 For quantitative analysis, this study obtained performance data from total of eighteen MoH hospitals with and without ISO certification. For qualitative analysis, we visited seven ISO certified MoH hospitals and four non-certified hospitals to conduct interviews with hospital employees.
Reciprocal Relations of Organizational Culture and Management Implementation

Measures at Certified MoH Hospitals

In addition to the above findings, this study attempted to answer our third research question: “what are the impacts of national and organizational culture on Turkish results-based improvement initiatives?” By using qualitative analyses techniques of semistructured interviews and literature review, this study found four aspects of organizational culture and national culture have critical impacts on results-based management efforts in certified MoH hospitals. Our findings indicate that power sharing among hospital employees is still weak, although there is a trend of lessening power distance in ISO certified hospitals. In addition to this, the Turkish national culture's high power distance seems to present serious challenges to the application of results-based management at government hospitals.

This study indicates that low performance orientation of Turkish national culture seems to lead a weak organizational performance orientation such as emphasizing seniority and process indicators for rewards rather than using results at Turkish government hospitals. Moreover, the revolving funds employed as supplementary compensation was found to be a reason for goal displacement since it is a monetary reward mechanism to reward the high performance of physicians, but not that of other employees at the hospitals.

On the one hand, this study found that the Turkish certified hospitals, like their Western counterparts, experienced difficulties involving physicians in quality improvement activities. This was in part because physicians of MoH hospitals did not want to lose their prestige and enormous control over hospital resource allocation within the current centralized and physician-dominated health care system. On the other hand, the study found that high level of
in-group collectivism in Turkish national culture seemed to play a supportive role in the establishment of team-based management approach at government hospitals. For instance, nurses were found to eagerly support quality and performance improvement activities that may foster collaboration and provide them more prestige and power in the hospitals.

Finally, in the Turkish context, the low level future orientation dimension of national culture seems to cause weak future orientation at Turkish hospitals, including the long term goals and strategic plans under the current highly centralized and physician-dominated health care administration in Turkish public sector.

**Identifying Supporters and Resisters of the Turkish Public Sector Reform**

To examine political determinants of NPM initiatives in the Turkish public sector, particularly in the health care sector, this study tried to answer our fourth research question: "how have political forces -- both external and internal-- affected the implementation and success of the management reforms?" The position of various groups within the Turkish public sector on results-based management and decentralization efforts could be best explained by power (i.e. political) gains or loses that the new techniques and the reforms might produce. The study finds that the reforms have produced important shifts in the internal political alignments within the Turkish hospitals. Also, findings of the study indicate that the reforms’ future will depend on critical external political battles between the bureaucratic elites defending centralized public administration and the reformist government aiming decentralized public administration.

This study employed a survey of secondary qualitative data including analyses of semistructured interviews with a few high ranked MoH officials involved in current health
care reform in Ankara, and conducting a survey of current Turkish literature on NPM initiatives such as magazine, journal, and newspaper articles, and online reports and circulations published by interest groups, political parties, and government agencies.

If NPM initiatives achieve their desired ends in Turkey, public hospitals will be autonomous organizations that are responsible for their own quality and performance. This development will provide opportunities to public hospitals (the principles) to employ effective monitoring and performance measurement tools in controlling doctors (the agents) unethical and ineffective work practices, including their double dipping practices. Moreover, one of the biggest consequences of this reform is that physicians will lose their power and prestige, while providing opportunities to other hospital employees in gaining prestige and control at government hospitals, including nurses and administrative employees. However, this study argues that doctors will most likely attempt to use most available power (i.e. expert power or reward power) to maintain their prestige and gains by resisting change efforts in their organization.

The secularist bureaucratic elite who often happen to occupy high-level state institutions object to NPM initiatives in Turkey, because of fears of losing authority of strong central institutions in the executive branch of government; and suspicions over the current government’s Islamist-minded sentiments. It seems that during upcoming years there will be strife between the secularist bureaucratic elites defending centralized public administration and the reformist government aiming decentralized public administration. However, due to the strong public support to the reforms and the political tradition in Turkey, the opposition of the unions and the Turkish Medical Association seem to have insignificant impacts on the implementation of health care reform initiatives in the following years.
The opposition party (RPP) is often supported by voters who are well-educated and secularist urban population, while a majority of the JDP government’s electorates are from middle and low income level population who look for new opportunities including employment, health care, education, and etc.. Because of the JDP government's strong public support and steady steps towards a full membership of European Union, secularist bureaucratic elites and the RPP will most likely to center their opposition by raising similar objections from different political and governmental platforms. For now, the JDP government seems to reserve its referendum option whose results cannot be vetoed even by the President, if it is needed.

PRACTICAL IMPLICATIONS OF RESEARCH RESULTS

Centralization versus Decentralization of Health Care System

Turkish public hospitals are integrated into a centralized structure that strictly regulates and controls the internal managerial processes and hospital resources. This creates two limitations on hospitals’ results-based management implementation.

First, senior management of government hospitals can not take a strong management role in hospital quality initiatives. Hence, this study suggests that hospitals should be granted an appropriate level of decentralization. Autonomous hospitals would be able to use their own managerial, financial, and human resource potentials in setting strategic plans according to local customers’ expectations, needs, and demands.

Second, although top managers’ role has been indicated in the available research as the key element in quality management and performance improvement in health care organizations (Kanji and Sa, 2003; Ovretveit, 1996), the majority of chief doctors do not have sufficient
management training and leadership skills to pursue quality objectives and strategic goals of their organization. Hence, this study suggests that top managers of hospitals should be hired from among physicians who received an adequate level of managerial education and gained experience in the local health care organizations. This would be possible if the central institutions (e.g. State Planning Organization, the MoH, and etc.), health care authorities (e.g. Turkish Medical Association), and medical school faculties’ established such an education system to provide fundamental management knowledge for today’s medical students, tomorrow’s hospital leaders.

**Specific Suggestions for Further Improvements at Certified Hospitals**

This study also offers a series of specific suggestions which will enhance results of quality and performance improvement initiatives at ISO certified Turkish hospitals, and other health care organizations:

1. The first issue about monitoring the performance of MoH hospitals and their staff is that many of the usual statistics, such as the numbers of inpatients discharged, are useless without meaningful medical and service classifications (based on specialties or illness). Although there was some evidence that ISO certified hospitals adopted new methods, current measurement activities are mainly limited with input and process based indicators which do not appropriately capture customer satisfaction level and clinical outcomes. This study suggests that a case-mix scheme should be employed in order to have comprehensive and
rigorous clinical data that will allow senior management to evaluate their subordinates’ performance within the frameworks of short and long term organization objectives.\footnote{Case-mix refers to the mix of cases treated by a hospital, classified on the basis of those criteria which are significant in explaining the differences in resource usage between the various cases treated (Butler, 1995).}

The creation of standardized patient satisfaction surveys designed by a team of experts for each type of MoH hospital (such as general, specialty, education, and research hospitals) would be very beneficial in enhancing customer-oriented services by allowing comparative analyses based on patients’ feedback. Over time, a combination of effectively designed case-mix schemes and standardized satisfaction survey practices will guide health care officials and practitioners to benchmark individual hospitals’ performances against the best MoH hospitals.

2. This study also has demonstrated that there is need for subordinates who have adequate quantitative and qualitative evaluation skills in performance monitoring and measurement practices at certified hospitals. Certified hospitals should be allowed by the central government to recruit such skilled employees. Also, hospitals should prepare current employees by training them how to use problem-solving and systematic improvement tools in achieving quality and performance objectives.

3. Our findings point out that existing revolving fund practices at MoH hospitals creates obstacles for continuous quality improvement efforts. First, this monetary reward system is often used to reward the performance of physicians rather than nurses, technician, and administrative staff. Moreover, because the compensation system uses process-based performance measures, physicians tend to pay less attention to quality of their practices. This
causes goal displacement for hospital physicians whose supplemental payment level is measured based on the quantity, not the quality of their services.

Second, as majority of subordinates of hospitals indicated during our interviews, this reward mechanism is neither fair nor useful in encouraging them to increase their performances; it damages the relationships between physician-dominated senior management and subordinates by ignoring the efforts of non-physician hospital employees. Hence, a new monetary reward system should be established, and a major revision in revolving fund regulation and practices are needed to motivate all hospital employees to produce desired outcomes. Although this is difficult within the current highly centralized health care system, the creation of a result-oriented monetary reward system could be possible when the aforementioned financial and managerial autonomy of hospitals is granted.

4. We argue that physicians’ reluctance to take active roles in quality improvement at certified hospitals could be related to their worry about losing their superior positions in the current hierarchical organizational structures which tolerate their double dipping practices. Given the fact that physician subculture is both the most critical and powerful of all hospital subcultures, this study suggests that autonomous hospitals should establish periodical (three or five years) contracting arrangements in hiring physicians based on merit pay systems that can meet with their salary expectations. In addition to merit-based payment, it is critically important to establish a group reward system at hospitals in order to encourage physicians to work with other hospital staff. Considering Turkish national culture’s great emphasis on ingroup collectivism, hospitals should easily establish group reward systems at organizational level. Group level rewards can orient physicians towards team-based management that promotes quality management.
On the other hand, it was observed during our hospital visitations that nurses found quality management activities as an opportunity to take more responsibility in the functioning of the hospital because of their collectivist nature and their desire for gaining more structural power to overcome doctors’ dominance. Nurses, therefore, are potential champions and implementers of management reforms.

**Contribution of This Study to the Literature**

As mentioned in Chapter 1, there are few empirical studies about the consequences and politics of new management ideas in the Turkish public sector. Previous empirical studies have been mainly interested in the experience of a single public organization, but the unique findings of case studies for an individual organization cannot provide comprehensive and plausible conclusions regarding broad results-based management efforts in the Turkish public sector. This study examines a number of similar public sector organizations (hospitals) in different locations in Turkey, which are structured under the same governmental institution (The Ministry of Health), in order to rigorously examine the results of quality and performance improvement efforts in the Turkish health care sector.

Moreover, this study is one of the first studies that examines the culture of public health care organizations and their reciprocal relations with Turkish national culture, considering their joint impacts on results-based management initiatives in the Turkish public sector. Our findings in this study seem to be in the same direction with other empirical studies done in developed countries, since the link between national culture and organizational culture has been found very important in terms of cultural continuity and coherence between organizations and the society within which they operate (Hofstede, 1980, 1991; Medanca and Kangu, 1994; Harvey, 1997; House et al., 2001; Silverthorne, 2005). Also, there is no
empirical study of the politics of Turkish management reform, both external and internal politics. This study fills this gap in the literature by providing evidence from the contemporary experience of the public sector reform movement within Turkey, a non-western country with a unique Islamic society.

**FUTURE RESEARCH DIRECTIONS**

This study makes an important contribution to existing literature on quality management initiatives and management improvement efforts in the Turkish public sector by rigorously examining the public hospitals’ ISO certification experience. Findings of this study also may be useful for researchers interested in examining and comparing the applicability of quality management and results-based management techniques within a cross-cultural perspective.

This study’s limitations must be recognized as well. Generalizability is limited by the small sample size with relatively short time period. Moreover, the quality of secondary data used to compare and contrast certified and non-certified hospitals’ performance hindered comprehensive conclusions about the impact of quality management initiatives on hospital performances. In this vein, there is a need for future research with a bigger sample size that could employ sufficient number of process indicators, and especially outcome indicators, to measure the core dimensions of hospital performance such as mortality rates adjusted by severity, rate of adverse outcome for selected severity-adjusted conditions, rate of hospital-

---

43 As mentioned in the chapter two, only two hospitals were awarded with ISO 9001 certification and preserve their certification since 1998, while other seven since 2000. In general, three year involvement of these seven hospitals in quality management and performance improvement via ISO 9001 can be argued as an inadequate time period to examine changes statistically.
caused infection, rate of emergency readmission within two weeks of discharge, rate of return to operating theater for same condition, and patient satisfaction.

Qualitative findings of this dissertation should be treated as the preliminary attempt to examine how the cultural aspects of Turkish hospitals interact with results-based management tools at the organizational level. As management change initiatives reach maturity, future research should be conducted to identify how such systems interact with Turkish organizational culture, as reflected in a wide variety of organizations.

The Turkish health care system continues its ongoing transformation as part of comprehensive public administration restructuring movement. Future research is needed to expand the findings of this study when current financial, organizational, and managerial barriers, which impede full scale results-based management practices, are dismantled.
References


Christensen and Laegreid (1999) "New Public Management are politicians losing contro?"


Griffith, John R. “Campaigning Management for Health care Organizations.” *Journal of Health care Management*, Jan 2000 v45 i1 p. 17


Hurriyet Daily Newspaper, “Health Workers Give a one-day Break” (Saglik calisanlari is birakti) April 21, 2005.


Office of the President of Turkish Republic, 08.03.2004, http://www.tccb.gov.tr/tr_html/ACIKLAMALAR/03.08.2004-2819.html


Preker, Alexander S. (2001). “Global Development Challenges and Health Care Reform,” in World Hospital and Health Services, 2001; 37 (3); pp. 2-8, 40, 42.


Rosen, Seth; “Reforms curb Turkey’s armed forces” in the Washington Times. Published: June 26, 2005.


The Prime Ministry of Turkey (October, 2003). Re-structuring in Public Management: Renovating the management to manage the renovation. Ankara: Turkey.( available at www.basbakanlik.gov.tr)


Turkish Society for Quality at http://www.kalder.org/


Yazicioglu, R. (1995). *Bu Sistem Degismeli (This System Has to Change).* Istanbul: Birey Yayincilik

Yeldan, Erinc (2005). *Saglikta Donusum Programi ve Gercekler (Transformation in Health Program and the Truths).* Cumhuriyet Gazetesi ; January 12, 2005


APPENDICES

Appendix I: Several Systematic Process Measurement Tools

Statistical Process Control (SPC)

This method is usually used to detect undesirable results and variations from established quality objectives as hospital personnel deliver medical services. If the hospital experiences high death rates in inpatients that have surgical operations, SPC will instantly show non-normal variation of the death rates, and alerts departmental personnel to the fact that something has gone wrong. After reviewing processes and treatments of inpatients who have surgical operations, hospital management may decide to pay additional attention to the intensive care units and buy new medical equipment and retrain medicine staff.

Pareto Charts

These charts may be useful to separate the essential factors from unnecessary factors that contribute almost nothing to the hospital quality management system. An example of pareto charts usage for the hospital may be an attempt to understand the real cause of patients’ dissatisfaction about appointment scheduling. If the appointment scheduling process is too slow due to inadequacy of technical equipment such as phone lines, internet connections, and computers, control charts may show that administrative unit of the hospital must be supported with new technical equipment to alter the capability of the unit. On the other hand, if the appointment scheduling process takes long time due to difficulties in obtaining medical insurance information for each patient, the hospital management should consider this external
but controllable factor and may decide to establish a broader network system for reaching insurance information.

**Histograms**

Histograms can be used to chart the frequency of occurrence when experiencing process variability. When the hospital wants to promote its emergency service department with a new radiology unit, top management of the hospital may want to know how many times during the last six months emergency patients had to have x-ray examination by using x-ray request histograms of emergency service.

**Flow Charts**

A flow chart visually conveys the information about sequence of the whole process of a single unit or an organization. By looking at a flow chart, managers try to understand delays in the process that should be examined. If they find out any delay in the process, they may begin to plan an elimination plan for that delay.

Outpatient and inpatient services of a hospital must have a plan for a medical service realization process consistent with any other requirements of the hospital’s quality management system. The quality objectives of outpatient clinics must be consistent with the hospital quality policy and objectives. For instance, the outpatient clinic of a hospital may have following objectives related with hospital quality policy: “(a) to increase the average number of outpatient per physician 10 percent within twelve months, (b) to increase outpatient satisfaction from the clinical services 25 percent by January 2006, (c) to reduce waiting time for x-ray examination from an hour to 30 minutes by August 2005, (d) to diminish the average waiting time for patient registration from 45 minutes to 25 minutes by
February 2006.” When the hospital is able to increase the average number of outpatients per
physician only five percent during the first six months of quality policy, the hospitals top
management may want to identify what it should be done in order to reach ten percent
increasing goal in the next six months. They can use a flow chart method for identifying
problematic areas that cause delays in the patient registration process.

The flow chart, illustrated figure 1 in the following page, describes the sequence and
interaction of the process of outpatient and inpatient services of the hospital. For instance, if
the hospital top management notice that there is a delay in the appointment arrangement
sequence of outpatient medical treatment process, they might eliminate the delay by using
new scheduling method or providing additional personnel in that area in order. Hence,
physicians can examine more outpatients after eliminating delays in the appointment
arrangement process.

Other than process-based measurement tools, hospital must determine the methods to be
employed in obtaining feedback. Direct telephone surveys, mail surveys, patient satisfaction
surveys, and focus groups can be used to acquire customer satisfaction feedback for
hospitals. After monitoring and measuring the processes, medical services, and patient
satisfaction feedback, senior management of hospitals can indicate whether or not the quality
management system of the hospital is performing effectively and efficiently in terms of its
plans, objectives, and other defined targets. Furthermore, the hospital must develop an ability
to use available data and analyze it to facilitate a continual improvement in hospital services
via corrective and preventive actions. The quality assurance coordinators of hospitals are
supposed to initiate corrective action requests and review preventive action requests in a
timely manner.
Appendix II: Time Series Graphics and Data of The Latest Certified Hospitals

1a. Time Series Graphic of the Mean ALS (day) changes from 1993 to 2003 in the Nine ISO certified and Non-Certified MoH Hospitals, and the Five Latest Certified MoH Hospitals

![Time Series Graphic](image)

1b. The five latest certified hospitals with individual ALS means from 1993 to 2003

<table>
<thead>
<tr>
<th>Latest Certified Hospitals</th>
<th>1993</th>
<th>1995</th>
<th>1997</th>
<th>1999</th>
<th>2001</th>
<th>2003</th>
</tr>
</thead>
<tbody>
<tr>
<td>Eskisehir Government Hospital</td>
<td>7.2</td>
<td>6.8</td>
<td>6.5</td>
<td>5.9</td>
<td>8.5</td>
<td>8.7</td>
</tr>
<tr>
<td>Izmir Dr. E.U. Woman Diseases &amp; Birth Hospital</td>
<td>2.8</td>
<td>2.8</td>
<td>2.9</td>
<td>2.4</td>
<td>2.4</td>
<td>2.8</td>
</tr>
<tr>
<td>Kastamonu Government Hospital</td>
<td>5.2</td>
<td>5.3</td>
<td>4.7</td>
<td>4.3</td>
<td>4.3</td>
<td>4.9</td>
</tr>
<tr>
<td>Kutahya Government Hospital</td>
<td>6.6</td>
<td>6.4</td>
<td>6.1</td>
<td>5.5</td>
<td>6.3</td>
<td>6.2</td>
</tr>
<tr>
<td>Tavsanli Government Hospital</td>
<td>4.4</td>
<td>4.6</td>
<td>4.4</td>
<td>4.5</td>
<td>4.5</td>
<td>4.9</td>
</tr>
<tr>
<td><strong>ALS Group Means</strong></td>
<td>5.24</td>
<td>5.18</td>
<td>4.92</td>
<td>4.52</td>
<td>5.2</td>
<td>5.5</td>
</tr>
<tr>
<td><strong>ISO Certified Hospitals ALS Group Means</strong></td>
<td>5.33</td>
<td>5.24</td>
<td>5.48</td>
<td>5.41</td>
<td>5.27</td>
<td>5.27</td>
</tr>
<tr>
<td><strong>Non-certified Hospital ALS Means</strong></td>
<td>4.84</td>
<td>4.71</td>
<td>4.91</td>
<td>4.78</td>
<td>4.96</td>
<td>5.10</td>
</tr>
</tbody>
</table>
2a. Time Series Graphic of the Mean BOR (%) changes from 1993 to 2003 in the Nine ISO certified and Non-Certified MoH Hospitals, and the Five Latest Certified MoH Hospitals

![Time Series Graphic](image)

2b. The five latest certified hospitals with individual BOR means from 1993 to 2003

<table>
<thead>
<tr>
<th>Latest Certified Hospitals</th>
<th>1993</th>
<th>1995</th>
<th>1997</th>
<th>1999</th>
<th>2001</th>
<th>2003</th>
</tr>
</thead>
<tbody>
<tr>
<td>Eskisehir Government Hospital</td>
<td>73</td>
<td>75.1</td>
<td>75.3</td>
<td>67.4</td>
<td>79.6</td>
<td>75.1</td>
</tr>
<tr>
<td>Izmir Dr. E.U. Woman Diseases &amp; Birth Hospital</td>
<td>71.2</td>
<td>59.2</td>
<td>62.7</td>
<td>49.7</td>
<td>42.8</td>
<td>49.9</td>
</tr>
<tr>
<td>Kastamonu Government Hospital</td>
<td>82.5</td>
<td>80</td>
<td>79.7</td>
<td>80.2</td>
<td>81.5</td>
<td>69.1</td>
</tr>
<tr>
<td>Kutahya Government Hospital</td>
<td>58.9</td>
<td>62</td>
<td>57.7</td>
<td>51.8</td>
<td>57.7</td>
<td>56.4</td>
</tr>
<tr>
<td>Tavsanli Government Hospital</td>
<td>43.7</td>
<td>62.3</td>
<td>56.3</td>
<td>66.1</td>
<td>73.4</td>
<td>68.2</td>
</tr>
</tbody>
</table>

BOR Mean  

ISO Certified Hospitals  BOR Means  58.57  60.33  62.60  59.79  64.46  71.83  
Non-certified Hospital  BOR Means  51.60  48.39  56.91  53.03  54.48  60.51
3a. Time Series Graphic of the Mean OpP (patient) changes from 1993 to 2003 in the Nine ISO certified and Non-Certified MoH Hospitals, and the Five Latest Certified MoH Hospitals

![Graph showing time series of number of outpatients for ISO certified, non-ISO certified, and latest ISO certified hospitals from 1993 to 2003.]

3b. The five latest certified hospitals with individual OpP means from 1993 to 2003

<table>
<thead>
<tr>
<th>Latest Certified Hospitals</th>
<th>1993</th>
<th>1995</th>
<th>1997</th>
<th>1999</th>
<th>2001</th>
<th>2003</th>
</tr>
</thead>
<tbody>
<tr>
<td>Eskisehir Government Hospital</td>
<td>2626</td>
<td>2777.55</td>
<td>2700.7</td>
<td>2741.63</td>
<td>2554</td>
<td>2171</td>
</tr>
<tr>
<td>Izmir Dr. E.U. Woman Diseases &amp; Birth Hos.</td>
<td>1519</td>
<td>1295.98</td>
<td>1482.3</td>
<td>1335.04</td>
<td>1289</td>
<td>1391</td>
</tr>
<tr>
<td>Kastamonu Government Hospital</td>
<td>4538</td>
<td>4886.32</td>
<td>4118.15</td>
<td>4576.02</td>
<td>4465</td>
<td>4541</td>
</tr>
<tr>
<td>Kutahya Government Hospital</td>
<td>3918</td>
<td>4229.05</td>
<td>4733.55</td>
<td>4397.29</td>
<td>4355</td>
<td>4199</td>
</tr>
<tr>
<td>Tavsanli Government Hospital</td>
<td>3042</td>
<td>4748.73</td>
<td>5063.08</td>
<td>5529.86</td>
<td>5420</td>
<td>3871</td>
</tr>
<tr>
<td><strong>OpP Mean</strong></td>
<td>3345</td>
<td>3828</td>
<td>3895</td>
<td>3710</td>
<td>3723</td>
<td>3409</td>
</tr>
<tr>
<td>ISO Certified Hospitals <strong>OpP Mean</strong></td>
<td>2607</td>
<td>3995</td>
<td>3088</td>
<td>3292</td>
<td>3372</td>
<td>3030</td>
</tr>
<tr>
<td>Non-Certified Hospitals <strong>OpP Mean</strong></td>
<td>3565</td>
<td>4071</td>
<td>4118</td>
<td>3987</td>
<td>3995</td>
<td>3642</td>
</tr>
</tbody>
</table>

219
4a. Time Series Graphic of the Mean SOpS (surgery) changes from 1993 to 2003 in the Nine ISO certified and Non-Certified MoH Hospitals, and the Five Latest Certified MoH Hospitals

4b. The five latest certified hospitals with individual SopS means from 1993 to 2003

<table>
<thead>
<tr>
<th>Latest Certified Hospitals</th>
<th>1993</th>
<th>1995</th>
<th>1997</th>
<th>1999</th>
<th>2001</th>
<th>2003</th>
</tr>
</thead>
<tbody>
<tr>
<td>Eskisehir Government Hospital</td>
<td>44.6</td>
<td>78.05</td>
<td>62.55</td>
<td>52.1</td>
<td>73.65</td>
<td>66.49</td>
</tr>
<tr>
<td>Izmir Dr. E.U. Woman Diseases &amp; Birth Hos.</td>
<td>318.4</td>
<td>223.27</td>
<td>254.97</td>
<td>223.4</td>
<td>238.26</td>
<td>230.02</td>
</tr>
<tr>
<td>Kastamonu Government Hospital</td>
<td>62.7</td>
<td>72.76</td>
<td>55.98</td>
<td>63.41</td>
<td>58.49</td>
<td>69.31</td>
</tr>
<tr>
<td>Kutahya Government Hospital</td>
<td>78.4</td>
<td>44.94</td>
<td>59.92</td>
<td>47.08</td>
<td>51.8</td>
<td>56.11</td>
</tr>
<tr>
<td>Tavsanli Government Hospital</td>
<td>54.25</td>
<td>58.63</td>
<td>65.67</td>
<td>117.8</td>
<td>87.42</td>
<td>78.43</td>
</tr>
<tr>
<td><strong>SopS Mean</strong></td>
<td><strong>111.7</strong></td>
<td><strong>95.5</strong></td>
<td><strong>99.8</strong></td>
<td><strong>100.8</strong></td>
<td><strong>101.9</strong></td>
<td><strong>100.1</strong></td>
</tr>
<tr>
<td>ISO Certified Hospitals</td>
<td><strong>SopS Mean</strong></td>
<td><strong>92.0</strong></td>
<td><strong>88.2</strong></td>
<td><strong>85.7</strong></td>
<td><strong>78.8</strong></td>
<td><strong>68.6</strong></td>
</tr>
<tr>
<td>Non-Certified Hospitals</td>
<td><strong>SopS Mean</strong></td>
<td><strong>77.3</strong></td>
<td><strong>96.1</strong></td>
<td><strong>84.9</strong></td>
<td><strong>71.3</strong></td>
<td><strong>81.3</strong></td>
</tr>
</tbody>
</table>

220
5a. Time Series Graphic of the Mean CDR (death) changes from 1993 to 2003 in the Nine ISO certified and Non-Certified MoH Hospitals, and the Five Latest Certified MoH Hospitals

5b. The five latest certified hospitals with individual SopS means from 1993 to 2003

<table>
<thead>
<tr>
<th>Latest Certified Hospitals</th>
<th>1993</th>
<th>1995</th>
<th>1997</th>
<th>1999</th>
<th>2001</th>
<th>2003</th>
</tr>
</thead>
<tbody>
<tr>
<td>Eskisehir Government Hospital</td>
<td>2.90</td>
<td>2.60</td>
<td>2.20</td>
<td>2.10</td>
<td>2.25</td>
<td>2.32</td>
</tr>
<tr>
<td>Izmir Dr. E.U. Woman Diseases &amp; Birth Hosp.</td>
<td>0.00</td>
<td>0.00</td>
<td>0.60</td>
<td>0.67</td>
<td>0.38</td>
<td>0.01</td>
</tr>
<tr>
<td>Kastamonu Government Hospital</td>
<td>1.90</td>
<td>2.20</td>
<td>2.30</td>
<td>2.14</td>
<td>2.47</td>
<td>2.63</td>
</tr>
<tr>
<td>Kutahya Government Hospital</td>
<td>2.10</td>
<td>1.90</td>
<td>1.40</td>
<td>1.47</td>
<td>1.23</td>
<td>0.96</td>
</tr>
<tr>
<td>Tavsanli Government Hospital</td>
<td>1.80</td>
<td>1.30</td>
<td>1.70</td>
<td>1.69</td>
<td>1.27</td>
<td>1.14</td>
</tr>
<tr>
<td><strong>CDR Mean</strong></td>
<td><strong>1.74</strong></td>
<td><strong>1.60</strong></td>
<td><strong>1.64</strong></td>
<td><strong>1.61</strong></td>
<td><strong>1.52</strong></td>
<td><strong>1.41</strong></td>
</tr>
<tr>
<td>ISO Certified Hospitals <strong>CDR Mean</strong></td>
<td><strong>1.38</strong></td>
<td><strong>1.32</strong></td>
<td><strong>1.47</strong></td>
<td><strong>1.45</strong></td>
<td><strong>1.37</strong></td>
<td><strong>1.34</strong></td>
</tr>
<tr>
<td>Non-Certified Hospitals <strong>CDR Mean</strong></td>
<td><strong>1.96</strong></td>
<td><strong>1.90</strong></td>
<td><strong>1.52</strong></td>
<td><strong>1.34</strong></td>
<td><strong>1.04</strong></td>
<td><strong>0.93</strong></td>
</tr>
</tbody>
</table>
Appendix III: Semistructured Interview Questions

I. Interview Questions used for ISO certified hospitals

A) Questions directed to the Chief Doctor of the hospital:

1. Does your hospital routinely seek input (e.g. surveys, focus groups, advisory groups) from patients about your services? If so, could you please tell me in what ways you have been seeking inputs from your patients?

2. Do employees of your hospital participate in developing their department’s long term goals and objectives? If so, could you explain it to me in what ways you assure that your employees can participate in goal setting?

3. Do you reward your hospital personnel when any of them perform exceptionally well? If so, in what ways does your hospital reward its personnel?

4. Could you tell me about advantages of ISO certification for your hospital?

5. Could you tell me about disadvantages of ISO certification for your hospital?

6. As a member of top management in your hospital, could you please tell me about the major obstacles that you have been dealing with to increase quality and performance of your hospital?

7. Do you think that your hospital is more or less likely to get involved in another quality and performance improvement effort after ISO certification experience? If so, could you please tell me about the new management efforts that your hospital should initiate?

B) Questions directed to the Chief Nurse of the hospital:
1. Does your hospital conduct training activities to improve abilities and skills of employees? If so, could you please give me some examples of training activities conducted by your hospital?

2. Does your hospital take patients’ and other service receivers’ complaints very seriously and act to resolve them in a timely manner? If so, could you please give me some examples in what ways your hospital handle customer complaints?

3. Does hospital staff freely raise their concerns about particular top management decisions when they think that it is crucial for improving your hospital performance and quality? If so, could you give me some examples about approaches used by staff in conveying their concerns to top management in their department? (Power distance and Masculinity)

4. Could you tell me about advantages of ISO certification for your hospital?

5. Could you tell me about disadvantages of ISO certification for your hospital?

6. As a member of top management in your hospital, could you please tell me about the major obstacles that you have been dealing with to increase quality and performance of your hospital?

7. Do you think that your hospital is more or less likely to get involved another quality and performance improvement effort after ISO certification experience?

C) Quality Management Steering Committee Representatives:

1. Does your hospital establish teams to encourage its employees to participate in process improvement? If so, could you please tell me how many teams your hospital have currently?
2. Does your hospital use any tools associated with systemic improvements? If so, could you please name what kind of systematic tools your hospital employs?

3. Does your hospital use quantifiable measures to routinely track its performance? If so, could you please give some example of quantifiable measures that your hospital uses?

4. Do employees of your hospital participate in developing their department’s long term goals and objectives? If so, could you please tell me in what ways your hospital encourage employee participation in goal setting?

5. Does the top management of your hospital pay attention to the considerations of hospital staff while leading the hospital? If so, could you please characterize management style of your hospital by giving examples in what ways lower level hospital staff convey their concerns to higher level hospital staff? (Power distance)

6. Could you tell me about advantages of ISO certification for your hospital?

7. Could you tell me about disadvantages of ISO certification for your hospital?

8. Do you think that your hospital is more or less likely to get involved another quality and performance improvement effort after ISO certification experience?

D. Middle level hospital staff

1. Do employees of your hospital participate in developing their department’s long term goals and objectives? If so, could you please tell me in what ways your hospital encourage employee participation in goal setting?

2. Does your hospital establish teams to encourage its employees to participate in process improvement? If so, could you please tell me how many teams your hospital have currently?
3. Does your hospital conduct training activities to improve abilities and skills of employees? If so, could you please give me some examples of training activities conducted by your hospital?

4. Do you receive any reward when you perform exceptionally well? If so, in what ways does your hospital rewards its personnel?

5. Does the top management of your hospital pay attention to the considerations of hospital staff while leading the hospital? If so, could you please characterize management style of your hospital by giving examples in what ways lower level hospital staff convey their concerns to higher level hospital staff? (Power distance)

6. Could you tell me about advantages of ISO certification for your hospital?

7. Could you tell me about disadvantages of ISO certification for your hospital?

8. Do you think that your hospital is more or less likely to get involved another quality and performance improvement effort after ISO certification experience?

II. Interview Questions for hospitals without ISO certification

A) Questions directed to the Chief Doctor of the hospital:

1. Does you hospital routinely seek input (e.g. surveys, focus groups, advisory groups) from patients about your services? If so, could you please tell me in what ways you have been seeking inputs from your patients?

2. Do employees of your hospital participate in developing their department’s long term goals and objectives? If so, could you explain it to me in what ways you assure that your employees can participate in goal setting?
3. Do you reward your hospital personnel when any of them perform exceptionally well? If so, in what ways does your hospital reward its personnel?

4. As a member of top management in your hospital, could you please tell me about the major obstacles that you have been dealing with to increase quality and performance of your hospital?

5. Do you think that your hospital should initiate new management efforts in order to increase quality and performance? If so, could you please tell me about the new management efforts that your hospital should involve in near future?

   B) Questions directed to the Chief Nurse of the hospital:

   1. Does your hospital conduct training activities to improve abilities and skills of employees? If so, could you please give me some examples of training activities conducted by your hospital?

   2. Does your hospital take patients’ and other service receivers’ complaints very seriously and act to resolve them in a timely manner? If so, could you please give me some examples in what ways your hospital handle customer complaints?

   3. As a member of top management in your hospital, could you please tell me about the major obstacles that you have been dealing with to increase quality and performance of your hospital?

   4. Do you think that your hospital should initiate new management efforts in order to increase quality and performance? If so, could you please tell me about the new management efforts that your hospital should involve in near future?
C) *Quality Management Steering Committee Representatives:*

1. Does your hospital establish teams to encourage its employees to participate in process improvement? If so, could you please tell me how many teams your hospital have currently?

2. Does your hospital use any tools associated with systemic improvements? If so, could you please name what kind of systematic tools your hospital employs?

3. Does your hospital use quantifiable measures to routinely track its performance? If so, could you please give some example of quantifiable measures that your hospital uses?

4. Do you think that your hospital should initiate new management efforts in order to increase quality and performance? If so, could you please tell me about the new management efforts that your hospital should involve in near future?

*D. Middle level hospital staff*

1. Do employees of your hospital participate in developing their department’s long term goals and objectives? If so, could you please tell me in what ways your hospital encourage employee participation in goal setting?

2. Does your hospital establish teams to encourage its employees to participate in process improvement? If so, could you please tell me how many teams your hospital have currently?

3. Does your hospital conduct training activities to improve abilities and skills of employees? If so, could you please give me some examples of training activities conducted by your hospital?

4. Do you receive any reward when you perform exceptionally well? If so, in what ways does your hospital rewards its personnel?
e) Hospital Specific Interview questions for MoH hospitals without ISO certification

Interview questions in this section will be asked to quality management steering committee representatives in the following hospitals with ISO certification in order to enrich our findings from quantitative analysis.

1. Eskisehir Government Hospital

   a. The average number of days that a patient stays in your hospital (ALS) increased more than 12 percent from 1993 to 2002. Could you please tell me about why ALS did increase during the nine year period?

   b. Quantitative data for your hospital indicate that your hospital did successfully drop crude death rate (CDR) about 0.77 percent from 1993 to 2003. Could you please tell me about how your hospital was able to dropped CDR during this nine year period?

2. Taksim Education and Research Hospital

   a. Quantitative data for your hospital indicate that the number of surgical operations per specialist (SOpS) decreased more than twenty five per cent from 1993 to 2002. Could you please tell me about why SOpS did decrease during the nine year period?

   b. Quantitative data for your hospital indicate that your hospital did successfully dropped crude death rate (CDR) about 0.4 percent from 1993 to 2003. Could you please tell me about how your hospital was able to drop CDR during this nine year period?

3. Sariyer Government Hospital
a. The average number of days that a patient stays in your hospital (ALS) increased more than 13 percent from 1993 to 2002. Could you please tell me about why ALS did increase during the nine year period?

b. Quantitative data for your hospital indicate that your hospital did successfully dropped crude death rate (CDR) about 0.4 percent from 1993 to 2002. Could you please tell me about how your hospital was able to drop CDR during this nine-year period?