## Quality Management in Hospitals

## 'Life-giving God, who alone hast

power over life and death,
over health and sickness:
Give power, wisdom and gentleness
to those who follow the example of
thy servant Florence Nightingale,
that they, bearing with them thy Presence,
may not only heal but bless, and shine
as lanterns of hope
in the darkest hours of pain and fear

Florence Nightingale<sup>1</sup>

# Quality Management in Hospitals

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To
My parents, for their blessings
My wife Meena and
My sons Sharad and Saurabh
for all their support



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## Message

Quality of health care services has been a subject of concern and criticism of late because of increasing public awareness and expectations and inability of the health care providers to improve the services and measure up to the expectations. One of the reasons, perhaps, is inadequate knowledge among health care professionals about the concept and techniques of quality management.

"Quality Management in Hospitals" authored by Col. S K Joshi deals with quality and its application in hospitals in a very comprehensive manner. It includes the evolution of concept of quality in health care, various approaches to quality improvement and the systems of certification/accreditation. It has applied the basic "structure, process and outcome" approach to each & every department/service in a hospital in a manner that is simple, practical and easy to understand. Especially well written are the chapters on various programs for quality improvement as well as the important issues such as Patients' Rights, Patients' Safety, and Statutory Compliance in hospitals.

Col. Joshi, with all his professional training and experience as a hospital administrator in public/private sector, has done full justice to the subject. This book can be very useful to health care professionals—administrators, clinicians and nurses, interested in improvement of quality of medical services.

I compliment Col. Joshi on his efforts and wish him well

[Surg Rear Admiral V K Singh]

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## **Foreword**

"Quality Management in Hospitals" authored by Dr SK Joshi is a comprehensive document written on the subject of quality of healthcare services that has generated a lot of concern of late. This is largerly on account of increasing awareness among the consumers and supported by market forces including corporatisation, insurance and medical tourism. The book covering a vast canvas of quality management in hospitals is going to facilitate healthcare



organisations in understanding and applying the quality management tools in all their functions.

Besides covering important subject of accreditation, Dr Joshi has elaborated the concept of quality and how it applies in various departments of the hospital. This will help clinicians, administrators and nursing staff to take ownership of quality processes. Similarly, the chapter on "Important Programmes for Hospital" covering statutory compliance, Patients' Safety, Patients' Rights and Clinical Safety programs can be a valuable support to hospitals.

I compliment Dr SK Joshi, who has used all his past hands-on experience to help hospitals to adopt the quality management concept incorporating patient safety in quality of healthcare.

(Girdhar J Gyani)

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## **Preface**

"The priceless ingredient of every product is the Honor and Integrity of its maker"

Slogan of one of the major drug firms<sup>2</sup>

And that would mean honorable intentions and honest and sincere efforts on the part of the maker because the quality of his product is a matter of honor to him. It means he has a commitment to ensure that the quality of product or the service delivered is of a standard acceptable to and meeting the requirements of his clientele. More than that, as per the modern thinking, it means the efforts not just to satisfy but delight the customer.

The concept is specially important in the field of medical practice where awakening to the call of quality has just begun and is still in the early stage. Most of the staff, be it the doctors, the nurses, the technicians, the class IV staff or for that matter the management itself, are not well informed about the quality aspects of the services that they are providing to their patients. Knowledge of quality management in hospitals can go a long way in improving the quality of health care services. As the old saying goes—"knowledge, without practice, is sterile, but practice, without knowledge, is blind". A doctor may be excellent in his own professional field. However, management, especially quality management in health care, is a different and specialized field requiring knowledge and skills in the practice of quality for delivery of high quality services. The practice of management needs to be guided and perfected through the knowledge of quality.

This book is a humble effort in clarifying the basic concept of quality as it relates to a hospital and its various departments/services. It is a practical approach to improving the quality of services in hospitals. Since quality cannot be implemented in a piecemeal or patchwork fashion, an effort has been made to look at every department of the hospital from quality angle keeping in mind the satisfaction of patients, the end users of service.

I have tried to put across, in a simple form, the application of basic concept of quality (structure, process and outcome approach) in a hospital. Any comments/suggestions from the readers will be gratefully welcome (at skjoshi1948@yahoo.com) as there is always a scope for improvement. After all quality is a continuous process and, as oft-repeated, "a journey and not a destination".

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## **Abbreviations**

AC Air conditioning

ACHS Australian council of healthcare standards
A and E Department Accident and emergency department
Atomic energy regulatory board

AHA Academy of hospital administration (India)
AIDS Acquired immuno-deficiency syndrome

ALS Advanced life support
ALS Average length of stay

ANS Assistant nursing superintendent

ANAES National agency for accreditation and evaluation

of health care (France)

ASSOCHAM Associated chamber of commerce and industry

AST Antibiotic sensitivity test

Autologus Transfusion Transfusion of own blood (collected earlier) to

a patient

BARC Bhaba atomic research center

BLS Basic life support
BMW Bio-medical waste
BTR Bed turnover rate

CCHSA Canadian council on health services accreditation

CCTV Close circuit television

CII Confederation of Indian industries

CPA Consumer protection act

C-PAP Continuous positive airway pressure

COHSASA Council on health services accreditation for South

Africa

CRISIL Credit rating information service of India limited

CSSD Central sterile supply department
CT scan Computerised tomography scan
CQI Continuous quality improvement

DCI Dental Council of India
DG set Diesel generator set

DHS Director health services or Directorate of Health

Services

DMS Deputy medical superintendent

DNS	Deputy nursing superintendent
DPCC	Delhi pollution control committee

**ECG** Electrocardiography

**EDP** Electronic data processing EEG Electroencephalography

EOQ Economic order quantity (system of placing

orders)

**EPF** Employees provident fund

**ESIC** Employees state Insurance corporation

**ETP** Effluent treatment plant

EU European union

FAC French accreditation college

**FICCI** Federation of Indian chamber of commerce and

industry

FIR First information report HAI Hospital acquired infection

**HBsAg** Surface antigen detected in Hepatitis B viral

infection

**HFMEA** Healthcare failure mode effect analysis

HCO Health care organization HDU High dependency unit

HIV Human immunodeficiency virus

High efficiency particulate air filters (filters used **HEPA** 

in air conditioning

HIS Hospital information system

HK House keeping

Health maintenance organization HMO

Head of department HOD

HQS Health quality services (UK) HRD Human resource department **ICCU** Intensive coronary care unit

International classification of diseases ICD

**ICU** Intensive care unit **IPD** In patient department

ISO International organization for standardization **ISQua** International society for quality in health care

IT Information technology

IV Intravenous

**JCAH** Joint commission on accreditation of hospitals JCAHO Joint commission for accreditation of health care

Organizations (USA)

JCI Joint commission international (USA)

LAMA Left against medical advice

LIC Life insurance corporation of India

MCB Miniature circuit breaker
MCI / IMC Medical Council of India

MD Medical director

MICU Medical intensive care unit

MIS Management information system
MLT Medical laboratory technology
MRD Medical records department
MRC Medical records committee
MRI Magnetic resonance imaging
MRO Medical Records officer

MS Medical superintendent (Head of the

Organisation)

MSW Medical Social Worker

MSQH Malaysian society for quality in health MTP Medical termination of pregnancy

NABL National accreditation board for laboratories NACO National AIDS Control organization, Govt. of

India

NICU Neonatal Intensive care unit
NOC No objection certificate
NS Nursing superintendent
OPD Out patient department
OT Operation Theatre

PDSA Improvement cycle (Plan, do, study, act)

PFP Priority focus process

PET scanner Positron Emission Tomography

PFT Pulmonary function tests
PNDT Pre natal diagnostic techniques

PRISMA Prevention and Recovery information system for

monitoring and analysis

PSMP Patient safety management program

QCI Quality Council of India QMS Quality management system

RO Reverse osmosis—a technique of water

purification

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STD Sexually transmitted diseases

PCB Public call booth

SIRE Systematic incident reconstruction and analysis

SOP Standard operating procedure SQC Statistical quality control

SWOT Strengths, weaknesses, opportunities and threats

TDS Tax deducted at source

TLD Thermo luminescent dosimeters

TMT Treadmill test

TSSU Theatre sterile supply unit TQM Total quality management

UNICEF United nations international children education

fund

UPS Uninterruped power supply

USAID United states agency for international

development

USG Ultrasonography

USP Unique selling proposition

VAT Value added tax (in place of Sales Tax)
VDRL Venereal disease research laboratory

WHO World health organisation