

HOSTED BY



ELSEVIER

Available online at [www.sciencedirect.com](http://www.sciencedirect.com)

ScienceDirect

journal homepage: <http://www.elsevier.com/journals/international-journal-of-nursing-sciences/2352-0132>

## Original Article

# Implementation of a risk management plan in a hospital operating room



Li Guo

Peking University Third Hospital, Beijing, China

## ARTICLE INFO

## Article history:

Received 22 December 2014

Received in revised form

30 October 2015

Accepted 30 October 2015

Available online 15 December 2015

## Keywords:

Risk management

Operating room

Nursing

## ABSTRACT

A risk management program based on AS–NZS4360 risk management standards was developed and implemented in the operating room of Peking University Third Hospital. To accomplish this task, we developed a risk quantification matrix and a risk register form to identify potential risks in the operating room, and then implemented operating room policies designed to reduce or eliminate those risks. We also established a consultation mechanism and risk monitoring system designed to minimize risks to operation room nurses. Finally, we continuously seek to improve our operating room risk management capabilities, so we can continue to improve the quality of service provided and guarantee the safety of surgical patients.

Copyright © 2015, Chinese Nursing Association. Production and hosting by Elsevier (Singapore) Pte Ltd. This is an open access article under the CC BY-NC-ND license (<http://creativecommons.org/licenses/by-nc-nd/4.0/>).

## 1. Introduction

In a medical marketplace with fierce competition, the implementation of risk management strategies has received increased attention by health care managers. Risk management refers to the management of emergencies which cannot always be anticipated in advance, but will cause serious consequences if they occur. The operating room is a key area of any hospital, and any negligence by operating room staff members can endanger a patient's life. Possible errors that can be made by operating room staff members include the failure to properly transport patients, faulty identification of a surgical site, an incorrect blood transfusion, the poor intra-operative management of surgical tools, placement of the patient in an incorrect operative position, inadequate anti-infective procedures, poor surgical record keep, and the

improper use of surgical equipment, such as a microtome. Due to the above risk factors, it is very important to strengthen the management of staff in an operating room by using risk management theory to analyze and deal with potential risks, and establish mechanisms for risk prevention and resolution [1]. This report describes using the AS–NZS4360 risk management standard to develop a risk management plan for the operating room in Peking University Third Hospital (hereinafter referred to “the operating room”).

## 2. The organizational environment

Peking University Third Hospital (PU3H) was founded in 1958 under the supervision of the Ministry of Health. Since that time, it has become a modern comprehensive upper first-class

E-mail address: [guoli126@126.com](mailto:guoli126@126.com).

Peer review under responsibility of Chinese Nursing Association.

<http://dx.doi.org/10.1016/j.ijnss.2015.10.007>

2352-0132/Copyright © 2015, Chinese Nursing Association. Production and hosting by Elsevier (Singapore) Pte Ltd. This is an open access article under the CC BY-NC-ND license (<http://creativecommons.org/licenses/by-nc-nd/4.0/>).

hospital which integrates medical services with medical education/teaching functions, and conducts research and prevention studies in addition to providing health care. The hospital currently has a staff of 2447 individuals, and contains 1463 clinic beds, 34 clinical departments, and 10 medical technique departments. In 2012, the hospital admitted >3.500 million outpatients and emergency visits, discharged >70,000 patients, and was the site of >44,000 operations. The average length of patient stay was 6.62 days. The overall quality of hospital management has reached an advanced level, as evidenced by the fact that the “Collaborative Optimization and Efficient Management of Key Resources in the Operating Room” project sponsored by the China Hospital Association awarded Peking University Third Hospital third prize for technological innovation.

PTUH has 42 operating rooms and employs 130 operating room nurses; however, during the last 10 years, the number of surgical patients at our hospital has increased on a yearly basis. Additionally, >33% of our hospitalized patients have an incurable disease. With the rapid development of new surgical techniques and use of high-tech equipment, the traditional methods used for managing operating room personnel no longer meet the needs of modern surgery and the increasing demand for medical services. Greater attention must be given to reducing operation table turnaround times, shortening the average patient stay, and increasing the quantity of surgery. Achieving these goals represents a challenge to operating room nursing management, but also presents opportunities for professional development. While operating room nurses have been traditionally managed based on their experience, they should now be managed using more modern methods. This change makes risk management an important tool for use in the operating room. Our hospital has established a specific committee (“Safe Operation Management Committee of the Operating Room”) that is mainly responsible for the safe operation of the operating room. Two types of risks (external and internal) currently threaten our hospital's operating room. One external risk is the constant yearly increase in the number of surgical patients. From 2005 to the end of 2012, the number of patients who underwent surgery at our hospital increased by 90%. Furthermore, 88% of the cases involved common surgery. Our hospital has 3 emergency operation tables and 39 common operation tables. If a major incident (e.g. an accident involving >5 people) were to occur during normal working hours when all of the common operation tables are occupied, it would be extremely difficult to schedule the needed operations. An example of an internal risk can be found by examining changes in operation table handover times. The handover time for an operation table has been shortened from 60 min in 2005 to 30 min in 2012. If proper operating room management is not in place, there is a greater chance that the enhanced efficiency demonstrated in the operating room will at the same time affect the safety of surgical patients. For example, a surgery may be performed incorrectly, the identity of a patient or patient specimen may be mistaking, or some type of medical accident may occur which will injure a patient, damage the hospital's reputation, and result in economic losses to the hospital.

The AS/NZS 4360 risk management standard is the first national risk management standard in the world, and was

jointly developed by Australia and New Zealand to satisfy both country's standards. It has currently been adopted by the Australian government, as well as several other countries. The AS/NZS 4360 standardizes the procedures followed and processes used in risk management, and thus effectively guarantees their ultimate effect. Furthermore, AS/NZS 4360 has become the benchmark for imitation throughout the world [2,3]. We applied the risk management process described in AS/NZS 4360 (Fig. 1) to functions performed in the operating room, and after consulting with operating room management concerning its individual components, we developed an operating room risk management plan (Fig. 2).

### 3. Risk management

#### 3.1. Establish the environment

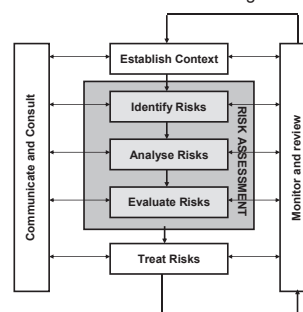
A risk management system should be implemented using a strategy suitable for the environment of the targeted institution. The establishment of the environment set the range for the rest of the risk management process [4]. An operating room risk management system must first be supported by both the internal and external management of a hospital, and be perceived as supporting the hospital's functions.

##### 3.1.1. Establish the strategic environment

The operating room is a resource-intensive and key department of any hospital, and should provide service to patients under the unified leadership of numerous departments. As described by the original “Operating Room Safe Operation Management Committee,” which has the Medical Treatment President as its Director, the hospital was charged with establishing an “Operating Room Risk Management Committee” which included the Department Heads of Anesthesiology, Medicine, the Information and Equipment Center, Infection Management, the Operating Room, Nursing Department, and Logistics Service Center. These individuals are responsible for organizational leadership and making important decisions. The risk management committee consists of several “risk groups” derived from the above departments. Each Department Head is responsible for the risk management tasks associated with their own department in the operating room,

### Risk management process

AS/NZS 4360:2004 - Risk management



**Fig. 1 – Risk management process. AS/NZS 4360:2004 – risk management.**

Download English Version:

<https://daneshyari.com/en/article/2653109>

Download Persian Version:

<https://daneshyari.com/article/2653109>

[Daneshyari.com](https://daneshyari.com)