**Course:** Knowledge is the Enemy of Unsafe Care

**Topic:** Understanding and managing clinical risk

**Summary**

Health-care providers are responsible for the treatment, care and clinical outcomes of patients. Personal accountability is important, as any person in the chain might expose a patient to risk. One way for professionals to help prevent adverse events is to identify areas prone to errors. The proactive intervention of a systems approach for minimizing the opportunities for errors can prevent adverse events. Individuals can maintain a safe clinical working environment by looking after their own health and responding appropriately to concerns from patients and colleagues.

Risk management is routine in most industries and associated with limiting litigation cost. In health care, it is usually associated with patients taking legal action against a health professional or institution, alleging harm as a result of their care and treatment. Many health care facilities have systems in place for reporting patient falls, medication errors, retained swabs and misidentification of patients. However, most health facilities are only beginning to focus on all of these.

**Clinical risk management is relevant to patient safety**

Effective risk management involves every level of the health system. It is essential that all health-care providers understand risk management, and its relevance in the workplace. Health-care providers have a responsibility to take corrective action when they observe unsafe situations.

Some important considerations include:

- Clinical risk management is relevant because it recognizes that clinical care and treatment are risky and negative incidents do occur.
- Health care itself is inherently risky and although it is impossible to eradicate all risk, there are many activities and actions that can be introduced to minimize opportunities for errors.
- Many health facilities have policies for reporting incidents, but the reporting of these incidents is often sporadic.
- Inadequate reporting may be due to the blame culture in health care being a strong deterrent to reporting.
- Today, most risk-management programmes aim to improve safety and quality, in addition to minimizing the risk of litigation and other losses to health-care providers.

**Clinical risk management** deals mostly with **improving the quality and safety of health-care** by identifying the circumstances and situations that put patients at risk and then acting to prevent or control those risks. The following process is used to manage clinical risks:

- identify the risk;
- assess the frequency and severity of the risk;
- reduce or eliminate the risk;
- assess the costs saved by reducing the risk or the costs of not managing the risk.

**Gathering information about clinical risk**

Health-care facilities in most developed and transitional countries use a range of mechanisms to measure harm caused to patients and staff, as well as avoid known problems. Some activities commonly used to manage clinical risk are described below.
Incident monitoring

- WHO defines an incident as an event or circumstance that could have or did lead to unintended and/or unnecessary harm to a person and/or a complaint, loss or damage.

- The main benefit of incident monitoring lies in the collection of information useful for the prevention of similar incidents in the future.

- The key to an effective reporting system is for staff to routinely report incidents and near misses. Unless staff members trust that the organization will use the information for improvement and not to blame individuals, they will be reluctant to report incidents.

- Facilitated monitoring identifies and analyses a greater proportion of incidents with a view to making improvements to care. This continuous activity of health-care teams involves:
  - discussion about incidents as a routine item at the weekly staff meetings;
  - a weekly review of areas where errors are known to occur;
  - a detailed discussion about the facts of an incident and follow-up action required—this discussion should be educational rather than focusing on attributing blame;
  - identification of system-related issues and problems to be addressed and made known.

Near miss

A near miss is an incident that did not cause harm. Some people call near misses “near hits”, because the actions may have caused an adverse event, but corrective action was taken just in time or the patient had no adverse reaction to the incorrect treatment.

<table>
<thead>
<tr>
<th>Type of incident</th>
<th>% of reports $^a$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Falls</td>
<td>29</td>
</tr>
<tr>
<td>Injuries other than falls (e.g. burns, pressure injuries, physical assault, self-harm)</td>
<td>13</td>
</tr>
<tr>
<td>Medication errors (e.g. omission, overdose, undertose, wrong route, wrong medication)</td>
<td>12</td>
</tr>
<tr>
<td>Clinical process problems (e.g. wrong diagnosis, inappropriate treatment, poor care)</td>
<td>10</td>
</tr>
<tr>
<td>Equipment problems (e.g. unavailable, inappropriate, poor design, misuse, failure, malfunction)</td>
<td>8</td>
</tr>
<tr>
<td>Documentation problems (e.g. inadequate, incorrect, incomplete, out-of-date, unclear)</td>
<td>8</td>
</tr>
<tr>
<td>Hazardous environment (e.g. contamination, inadequate sterilization)</td>
<td>7</td>
</tr>
<tr>
<td>Inadequate resources (e.g. staff absent, unavailable, inexperienced, poor orientation)</td>
<td>5</td>
</tr>
<tr>
<td>Logistical problems (e.g. problems with admission, treatment, transport, response to an emergency)</td>
<td>4</td>
</tr>
<tr>
<td>Administrative problems (e.g. inadequate supervision, lack of resource, poor management decisions)</td>
<td>2</td>
</tr>
<tr>
<td>Infusion problems (e.g. omission, wrong rate)</td>
<td>1</td>
</tr>
<tr>
<td>Infrastructure problems (e.g. power failure, insufficient beds)</td>
<td>1</td>
</tr>
<tr>
<td>Nutrition problems (e.g. fed when fasting, wrong food, food contaminated, problems when ordering)</td>
<td>1</td>
</tr>
<tr>
<td>Colloid or blood product problems (e.g. omission, undertose, overdose, storage problems)</td>
<td>1</td>
</tr>
<tr>
<td>Oxygen problems (e.g. omission, overdose, undertose, premature cessation, failure of supply)</td>
<td>1</td>
</tr>
</tbody>
</table>

$^a$ An incident may be assigned to more than one category

Sentinel events
- An adverse event that is usually unexpected and involving a patient’s death or serious physical or psychological injury to a patient. The term sentinel event is the designation reserved for the most serious ones.
- Many health-care facilities have mandated the reporting of sentinel events because of the significant risks associated with their repetition. These events are classified into categories (e.g. surgery on the wrong patient or body site, incompatible blood transfusion, medication error leading to death, newborn being given to the wrong mother, etc.).
- Events that do not fit into these categories are referred to as "other catastrophic events".

The role of complaints in improving care
- A complaint is defined as an expression of dissatisfaction by a patient, family member or carer with the care provided. It helps to identify areas that can be improved.
- Complaints highlight problems that need addressing, such as poor communication or suboptimal decision-making. Communication problems are common causes of complaints, as are problems with treatment and diagnosis.
- Complaints also:
  - help maintain high standards;
  - reduce the frequency of litigation;
  - help maintain trust in the profession;
  - encourage self-assessment;
  - protect the public.
- Most health-care providers will receive complaints during their careers and this is not an indication of incompetence. Even the most conscientious and skilful health-care providers make mistakes. Health-care error is a subset of human error; all humans make mistakes.

Coronial investigations
Specifically appointed people, called coroners in many countries, are responsible for investigating deaths in situations where the cause of death is uncertain or thought to be due to unethical or illegal activity. Coroners often have broader powers than a court of law and, after reporting the facts, will make recommendations for addressing any system-wide problems.

Fitness to practise is an important component of patient safety.

- Health-care providers must have attributes, such as compassion, empathy and a vocational aspiration to provide benefit to society. These are necessary for safe and ethical practice.
- However, many mistakes leading to adverse events are associated with the fitness of health-care providers to practise.
- Health-care providers are accountable for their actions and conduct when caring for patients. Related to accountability is the concept of fitness to practise, eg the competence of health-care providers.
- Health-care organizations are required to check that health-care providers have the appropriate qualifications and are competent to practise. The processes are as follows:
  - **Credentialing**
    The Australian Council on Healthcare Standards defines credentialing as the process of assessing and conferring approval on a person’s suitability to provide specific consumer/patient care and treatment services, within defined limits, based on an individual’s licence, education, training, experience, and competence.
Accreditation

Accreditation is a formal process to ensure the delivery of safe, high-quality health care, based on standards and processes devised and developed by health-care professionals for health-care services. It can also refer to public recognition of achievement by a health-care organization of requirements of national health-care standards.

Registration (licensure)

Most countries require health-care providers to be registered with a government authority to help protect the health and safety of the public through mechanisms designed to ensure that health-care providers are fit to practise. This ensures that only properly trained professionals are registered and that registered professionals maintain standards of conduct and competence.

Personal accountability for managing risk

The role of fatigue and fitness to practise

There is strong scientific evidence linking sleep deprivation and fatigue to poor clinical performance. Studies have shown that sleep deprivation can have symptoms similar to those of alcohol intoxication. Fatigue will lead to being less alert and unable to perform as normal in a variety of psychomotor tasks. Fatigue has been linked to increased risk of errors.

Stress and mental health problems

Performance is affected by stress. There is strong evidence that inadequate sleep contributes to stress and depression, rather than the number of hours worked. Other stressors identified include financial status, educational debt, term allocation, emotional pressures caused by demands from patients, time pressures and interference with one’s social life.

Work environment and organization

Certain factors and time periods, such as shift work, overtime, shift changes, nights and weekends, are associated with increased numbers of errors. The factors underpinning these errors can range from lack of oversight and instruction or supervision to tiredness. Health-care providers should be extra vigilant during these times.

Instruction and supervision

The failure of health professionals to provide adequate instruction or supervision to junior staff makes them more vulnerable to making mistakes either by omission (failing to do something) or commission (doing the wrong thing).

Communication issues

Multiple health professionals—nurses, midwives, doctors, dentists, pharmacists, radiologists, and others—must record their communications in health-care records. The role of good communication in the provision of quality health care, and the role poor communication plays in substandard care are both well documented. For example, treatment errors caused by miscommunication and absent or inadequate communication occurs daily in all health-care settings. Checklists, protocols and care plans are ways of better communicating patient-care orders.

How to understand and manage clinical risks

- Know how to report known risks or hazards in the workplace
- Keep accurate and complete health-care records
- Know when and how to ask for help from a supervisor or senior health-care professional
- Participate in meetings that discuss risk management and patient safety
- Respond appropriately to patients and families after an adverse event
- Respond appropriately to complaints.