



## **Background Notes on the Series**

**By**

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### **The Question**

If asked what they fear most, healthcare professionals usually cite some kind of catastrophic human failure. *Delivering Patient Safety* addresses questions of change in practice, culture, management and systems which are fundamental to this concern. Improved patient safety also brings co-lateral benefits. In parts of the USA, where annual turnover of nursing staff may exceed one fifth of the workforce, 60% of those leaving gave fear of harming the patient as their main reason.

### **How Big Is The Problem?**

The concern of healthcare professionals is well founded. For example, at a low estimate, deaths in hospitals due to preventable adverse events are the 7<sup>th</sup> leading cause of death in the USA. They exceed those attributable to motor vehicle accidents (43,458), breast cancer (42,297) or AIDS (16,516).

### **Medication**

Patient safety is as big an issue as worker safety. In 1993 fatalities due to medication errors (7,000) exceeded those due to workplace accidents (6,000). Medication errors account for one out of 131 outpatient deaths and one out of 854 inpatient deaths.

### **Patient's Perspective**

Errors by healthcare workers affect approximately 3-4 per cent of patients.

### **ICU - Comparisons**

The average intensive care unit patient (ICU) patient experiences almost two errors per day. If this same performance level were applied to aviation it would equate to two dangerous landings a day at O'Hare International Airport and, in banking, it would equate to 32,000 cheques deducted from the wrong account per hour.

### **Costs**

The cost associated with these medical errors in lost income, disability, and additional health care run into billions both in the UK and USA.

### **A Global Issue**

Medical error is a global issue — the Americans simply did the research first.

### **Australia – Four Times Greater**

A recent Australian study carried out in New South Wales, found fatalities due to medical errors to be proportionately four times greater than in the USA.

## **UK**

Prompted by concerns regarding patient safety in the National Health Service, the Chief Medical Officer commissioned a group of experts to review the problem. This is what they found:

### **Devices**

Each year, 400 people die or are seriously injured in adverse events involving medical devices.

### **Adverse Reactions**

Nearly 10,000 people were reported to have experienced serious adverse reactions to drugs.

### **Suicides**

Around 1,150 people who have been in recent contact with mental health services have committed suicide.

### **28,000 Written Complaints**

Annually, there are nearly 28,000 written complaints made about aspects of clinical treatment in hospitals.

### **£400 Million In Settlements - Potential liability: £2.4 billion**

The National Health Service pays out around £400 million a year in settlement of clinical negligence claims and has a potential liability of around £2.4 billion for existing and expected claims.

### **Hospital Acquired Infections - £1 Billion**

Hospital acquired infections, around 15 per cent of which may be avoidable, are estimated to cost the NHS nearly £1 billion.

### **850,000 Adverse Events**

The best research-based evidence suggests that harm to patients arising from adverse events occurs in around 10 per cent of admissions—or at a rate in excess of 850,000 a year.

### **Additional Hospital Stays - £2 Billion**

Adverse events cost the NHS an estimated £2 billion a year in additional hospital stays alone, without regard to the human or wider economic costs.

## **Why Now?**

We've seen enough numbers to know that there is a problem; a huge problem. But why is it that we are only now beginning to grasp the size of it?

## **One By One**

The answer is simple. Health care casualties die one by one, scattered in time and place. This is in stark contrast to highly visible disasters such as air crashes. Try to imagine how many wide-bodied jet accidents would be needed to kill up to 98,000 people in one year.

### **Underestimate?**

Numbers so far obtained are likely to underestimate the true incidence since they are derived from studying samples of patients' notes.

### **We Are Not Alone**

Similar error patterns are repeated in other activities managing major hazards. As a percentage of all failures, those attributed to human error look like this: In jet transportation the estimate is between 65 & 85%. In Air Traffic Control, 90%. In Shipping, some 80-85%. In the chemical industry, 80-90%. In the US nuclear power industry, 70% and in Road Transport 85%.

### **The Truth**

Truth is that error is built into us all – whoever we are. Yet we act – and even more importantly – are expected to act as if it's not.

### **Global Initiatives**

All over the world a great deal is being done to address these realities - in every kind of high hazard industry and in medicine.

### **Understanding**

Error reduction begins, not with exhortations to take greater care, but with understanding what human error really is, and above all, the conditions which provoke it. This awareness is the only sound foundation for the long term organisational, cultural and personal changes essential to reducing our own vulnerability, and its potential consequences.

### **What Program Research Suggests**

Discussions with and hospitals and other healthcare institutions reveal a wide diversity of patient safety initiatives. Most of those encountered had their genesis in bad events of the recent past. Though this approach provides a measure of protection against the same thing recurring, it may offer little defence against other kinds of hazard to patient safety. To achieve that, a comprehensive pro-active approach to error management is needed.

**Error Can Be Managed**

At differing speeds of take-up, medical professionals and institutions have begun to engage with the character and scale of human error in the context of patient safety. In some instances, this has resulted in major new initiatives, in others the sheer universality of the problem has made it seem almost inaccessible to change. The issues get put into the 'too hard tray' and are starved of time, money and attention. Yet error can be managed as demonstrated in other high hazard activities: aviation, oil production, nuclear power and space exploration. Closer to home, systematic error management in the cause of patient safety, is well proven by individuals, departments and institutions globally, across the profession. A central aim of ***Delivering Patient Safety*** is to capture the imagination with what is being done and even more importantly, what could be done.