NATIONAL GUARD HEALTH AFFAIRS

# Quality & Patient Safety Newsletter

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IN THIS ISSUE



## ABOUT THE NEWSLETTER

"By providing important and relevant information to healthcare providers, this Newsletter aims to enhance communication of quality and patient safety information, raise awareness of reported adverse events and maintain ongoing link to all the medical departments of the Ministry of National Guard Health Affairs (NGHA) facilities. "

**BUILDING SAFER CARE:**
Leadership & Organizational Priority

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# Assessing Healthcare Quality Using Indicators: an Overview

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## Why quality and how to measure it?

Although many of the methods employed in the quest for quality were developed in industries other than healthcare, the following quotation, attributed to Florence Nightingale, is still relevant 'The ultimate goal is to manage quality. But you cannot manage it until you have a way to measure it, and you cannot measure it until you are able to monitor it'.

That quotation emphasizing that any system requires management also requires some method for measurement. However, before embarking on measuring quality, we need to know why -globally- quality has become an essential component of healthcare systems.

**First,** the healthcare industry is becoming more complex, and cannot be carried out without errors (Naylor, 2002). There is substantial evidence from developed countries that health care is unsafe and is a leading cause of patient injury and death. According to the Institute of Medicine's Report (1999) "To Err is Human: Building a Safer Health System", around 44,000-98,000 Americans were dying in the US hospitals annually because of medical errors. Medication errors result in more than 7,000 lost lives per year.

**Second,** care must also be delivered in a context of cost constraints, increasing patient expectations, and greater focus on accountability (IOM, 1999).

**Third,** there is increasing pressure from the public, policy-makers and professionals to redesign healthcare processes and systems to become much safer (Berwick, 1999). In other words, improve quality and patient safety and provide evidence of improving performance by utilizing data.

**Fourth,** in most countries there is no mandatory national system to track the quality of care delivered to patients (Mainz, 2003).

**Fifth,** there is a lack of documentation about how major illnesses are treated in most healthcare systems (Schuster et al 1998, Chassin & Galvin, 1998, Mainz et al 2001).

**Sixth,** there is a lack of systematic outcome assessment for the provided care (Schuster et al 1998, Chassin & Galvin, 1998, Mainz et al 2001).

**Seventh,** there are persisting variations among providers who care for similar patients (Schuster et al 1998, Chassin & Galvin, 1998, Mainz et al 2001).

**Eighth,** few formal monitoring systems are in place by health care providers or regulators. For most diseases, potential quality problems and their prevalence and incidence are unknown in many countries (Schuster et al 1998, Chassin & Galvin, 1998, Mainz et al 2001).

Against this context, assessing healthcare quality has become extremely important to the patients, service providers, and governers. A number of approaches have been applied to healthcare in an attempt to assess and improve quality. This paper focuses on indicators as an approach to measure and assess healthcare quality.

## How to Measure Quality?

An indicator is a quality tool that provides quantitative measurement, and can be used as a guide to monitor and evaluate the quality of a product or service. A set of quality indicators is used to objectively measure performance during processes that include events, occurrence and aspects of treatment. These measures may offer specific information about the quality of a particular kind of care and service. These measures can be related to either the processes or outcomes of care.

Joint Commission on Accrediation of Healthcare Organizations (JCAHO) (1993) defined quality indicators as "a valid and reliable quantitative process or outcome measure related to one or more dimensions of performance such as effectiveness and appropriateness and a statistical value that provides an indication of the condition or direction over time of an organisation's performance of a specific outcome". It is important to mention that The Joint Commission (TJC) (previously JCAHO) has incorporated clinical indicators into the accreditation process to increase the clinical component of the accreditation process (i.e. Joint Commission Interantional (JCI) Clinical Measures).

## Process vs. Outcome Indicators

**Process:** is a series of inter-related steps/activities undertaken to achieve a certain goal. Process indicators measure the activities and tasks in patient episodes of care. Process measures usually reflect the care that health providers are delivering, healthcare providers feel accountable for them (Rubin et al, 2001). Therefore, process indicators provide information that is actionable (i.e. what is being done well and what needs improvement).

Palmer (1998) demonstrates that process indicators are extremely valuable when: quality improvement is the goal of the measurement process; an explanation is required for why specific healthcare providers achieve particular outcomes; short time frames are necessary; and when performance of low volume providers is of interest. Examples of process indicators include (but are not limited to); proportion of patients with diabetes given regular foot care, proportion of patients with myocardial infarction who received thrombolyses, and proportion of patients assessed by a doctor within 24 hours of referral.

**Outcome:** refers to the result of care. Outcome measures describe the effects of care on the health status of patients and populations.

Palmer (1998) indicates that outcome measures are helpful if: outcomes can be measured that are affected by healthcare; long time frames are possible; performance of whole systems should be studied; if a high volume of cases is available' Outcomes data are most useful for tracking care given by high-volume providers over long periods of time; and for detecting problems in implementation of processes of care.

Outcome measures include short-term outcome measures such as; HbA1c results for diabetics, and lipid profile results for patients with hyperlipidemia or end-result measures such as mortality, morbidity, and quality of life.

It is essential to mention that there is considerable debate whether quality measures should evaluate process or outcome measures of care. Both measures have advantages and also disadvantages that should be considered by healthcare providers who attempt to use those measures. Also, for process indicators to be valid, they must previously have been demonstrated to produce a better outcome. Further explanation on the relative advantages and disadvantages of process and outcome indicators is listed in the following two tables.

## Table 1: Comparison of the relative advantages and disadvantages of PROCESS indicators

| Advantages | Disadvantages |
|---|---|
| 1. **Readily measured:** utilization of health technologies is often relatively easily measured without major bias or error.<br>2. **Easily interpreted:** utilization rates of different technologies can often be interpreted by reference to the evidence base rather than necessarily needing inter-unit comparisons.<br>3. **Smaller sample size:** compared to outcome indicators, process indicators can identify significant quality deficiencies with much smaller sample sizes.<br>4. **Unobtrusive:** care processes can frequently be assessed unobtrusively (e.g. data stored in administrative or medical records).<br>5. **Indicators for action:** failures identified in the processes of care provide clear guidance on what must be remedied to improve health care quality. They are also more quickly acted upon than outcome indicators, which often only become available after a long time has elapsed.<br>6. **Coverage:** process measures can capture aspects of care (such as speed of access and patient experience) that are often valued by patients apart from health outcomes. | 1. **Salience:** processes of care may have little meaning to patients unless the link to outcomes can be explained.<br>2. **Specificity:** care processes are often quite specific to a single disease or single type of medical care so that process measures across several clinical areas or aspects of service delivery may be required to represent quality for a particular group of patients.<br>3. **Ossification:** a focus on process may stifle innovation and the development of new modes of care.<br>4. **Obsolescence:** the usefulness of process measures may dissipate as technology and modes of care change.<br>5. **Adverse behaviour:** process indicators are relatively easily manipulated and may give rise to gaming and other adverse behaviours. |

Table derived and expanded from: McGlynn [1998], Davies & Crombie [1999], and Mannion and Davies [2002a].

## Table 2: Comparison of the relative advantages and disadvantages of OUTCOME indicators

| Advantages | Disadvantages |
|---|---|
| 1. **Focus:** a focus on outcomes directs attention towards the patient (rather than the service) and helps nurture a 'whole system' perspective.<br>2. **Goals:** health outcomes more clearly represent the goals of care.<br>3. **Meaningful:** outcomes tend to be more meaningful to some of the potential users of clinical indicators (patients, purchasers).<br>4. **Innovation:** a focus on outcomes means providers are encouraged to experiment with new modes of delivery to improve patient care and experience.<br>5. **Far sighted:** an outcomes focus encourages providers to adopt long-term strategies such as health promotion, which may realise longer-term benefits.<br>6. **Manipulation:** outcomes are less able to be manipulated than process indicators - although providers can influence risk adjusted outcome by exaggerating the severity of patients (upstaging). | 1. **Measurement definition:** while some aspects of outcome are relatively easily measured validly and reliably (e.g. death) others are notoriously difficult (e.g. wound infection).<br>2. **Attribution:** outcomes may be influenced by many factors that are outside the control of a healthcare organisation.<br>3. **Sample size:** outcome assessment requires large sample sizes to detect a statistically significant effect even when there are manifest problems with the processes of care.<br>4. **Timing:** outcomes may take a long period of time to observe.<br>5. **Interpretation:** observed outcomes may be difficult to interpret if the processes that produced the outcome are complex or occurred distant to the observed outcome.<br>6. **Ambiguity:** good outcomes can often be achieved despite poor processes of care (and indeed vice versa). |

Table derived and expanded from: McGlynn [1998], Davies & Crombie [1999], and Mannion and Davies [2002a].

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# Using Improvement Science (IS) to Increase Patient Satisfaction & Reduce Readmission Rates Through a Patient Call Back System (PCBS) at PMBAH, Al Madinah

**By Loreto Ali Biete – PSQS Staff**

Improvement science is an emerging concept and gaining momentum which focuses on exploring how to undertake quality improvement well (1).

**Definition.** IS is the scientific study of methods to promote the integration of research findings and evidence-based interventions into healthcare policy and practice (2).

**Founder.** Dr. W. Edwards Deming (1900-1993) is credited as the founder of IS because there was a focus on systematically exploring the factors needed to improve quality and efficiency (3). Deming introduced the P-D-S-A cycle for quality improvement in 1993.

**Goals.** There are five basic goals of IS, such as: (a) to ensure that quality improvement efforts are based as much on evidence as the best practices to implement in patient care (4); (b) to improve the quality and effectiveness of health services and care (5); (c) to encourage healthcare managers and clinicians to make better use of scientific evidence when they make decisions (6); (d) to improve decisions about how healthcare is organized and delivered (7); and, (e) to guide researchers/investigators on the usefulness of their work (8).

**Concepts.** The concepts of IS was originally drawn on concepts from (a) operation research ("maximum performance, minimum loss"), (b) industrial engineering ("optimization, eliminate wastes of time, money, and materials"), and, (c) management science ("systematic, rational").

Today, IS is not only predominant in healthcare, but also in manufacturing industries (carmakers like Ford, Toyota), aviation companies ( like Boeing, Lockheed Martin), software development (Microsoft, Java, Oracle), the military (drones, unmanned aerial vehicles), and other sectors of the society, who have systematically explored the

most effective ways to improve quality and efficiency (9).

**Application of IS.** The Patient Call Back System (PCBS) can be applied to our hospital when it opens, and will benefit all the stakeholders – patient, staff, and leadership. The PCBS is an example of a safety pathway and an innovative way to deal with discharged patients (10). The Emergency Medicine Department implemented the PCBS in the early 1980s. Nurses, physicians and social workers telephoned patients at home within 24 hours after the patient had been seen in the Emergency Room (11).

According to Studer Group, a Florida-based firm that focuses on healthcare outcomes and performance improvement, various healthcare organizations had recently achieved outstanding healthcare results because of PCBS, such as:

(a) improved employee engagement; (b) enhanced physician integration; (c) reduce patient readmissions; (d) increased patient safety; (d) improved quality of care; and, (e) improved patient satisfaction (12, 13).

**Use of a Run Chart in PCBS.** It is a simple analytical tool used by safety and quality improvement staff that graphically display data in the horizontal and vertical axis. The variables in the horizontal axis could be days, weeks, months, quarters, visits, or procedures; while the vertical axis represents the quality indicator variables that are being studied, like infection rate, number of patient falls, readmission rate, employee turnover rate, employee satisfaction rate, patient satisfaction rate, etc. The median is calculated and used as the chart's centerline (14).

**Studies about PCBS.** These are some lists of studies that validated the successful implementation of this quality improvement tool:

- Velez, V. (n.d.) Medicine Institute Unit-Based Discharge Call-Back Program is Associated with Improved Health Consumer Assessment of Healthcare Provider and Systems (HCAHPS). Cleveland Clinic, Hospital Medicine, Cleveland, OH.
- Recognized for Patient Call-Back Results. Cheyenne Regional Medical Center (2012). Retrieved April 23, 2013 from a website: http://cheyenneregional.org/cheyenne-regional-medical-center-recognized-at-national-conferece
- Scaletta, T. (2010). Does a Patient Callback System Prevent ED Suits? Retrieved April 23, 2013 from a website http://insurancenewsnet.com/article.aspx?id
- Riley, J. (n.d.) Telephone Call-Backs: Final Patient Care Evaluation. Nursing Management, 20(9). Retrieved April 23, 2013 from a website http://journals.1ww.com/nursing.

**References:**

*1. The Health Foundation. Inspiring Improvement. (2011). Report: Improvement Science: Research Scan.*

*2. Schackman, BR. (2010). "Implementation science for the prevention and treatment of HIV/AIDS." Journal of Acquired Immune Deficiency Syndrome 55 Supplement 1:S27-31.*

*3. Peden, CJ and Rooney, KD. (2009). "The science of improvement as it relates to quality and safety in the ICU." JICS, 10(4): 260-265*

*4. The Health Foundation, op. cit., p.3*

*5. Ibid, p. 5.*

*6. Marshall, M. (n.d.). What is improvement science? Lead, Improvement Science London. Retrieved April 20 2013 from a website http://islondon.org/*

*7. Ibid, p.1*

*8. Ibid, p.1*

*9. The Health Foundation, op. cit., p. 6*

*10. Velez,V. (n.d.). Medicine Insitute Unit-Based Discharge Call Back Program is Associated with Improved Health Consumer Assessment of Healthcare Provider And Systems (HCAHPS), Cleveland Clinic, Hospital Medicine, Cleveland, OH.*

*11. Riley, J. (n.d.). Telephone Call-Backs: Final Patient Care Evaluation. Nursing Management, 20(9). Retrieved April 23, 2013 from a website http://journals.1ww.com/nursing/.*

*12. Recognized for Patient Call-Back Results. Cheyenne Regional Medical Center (2012). Retrieved April, 20, 2013 from a website.*

*13. Velez, op. cit., page 1.*

*14. Tamer, F. (2013). Run Chart: A Simple Quality Improvement Tool. Quality & Patient Safety Newsletter, 5; 1. Issue March 2013, p. 4.*

*Writer was a participant to the Patient Safety Forum 2013 held at King Saud Bin Abdulaziz University—Health Sciences Convention Center, Riyadh, KSA from April 9 – 11, 2013.

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# Saudi Medication Safety Center: Proper Use of Dosage Forms / Devices (Part1)

**Dr. Gregory Poff,** Chairman, Saudi Medication Safety Center, Ministry of National Guard-Health Affairs

Medications are available in multiple or special dose "formulations" for a number of different reasons related to improving the utility of the agent. However, the resulting availability of multiple dosage formulations and dosage forms, lack of caregiver appreciation for the uses and properties of various preparations, as well as high potential for adverse event if dosage forms are used improperly, create a significant risk of adverse patient events. Thus patients are at significant and increasing risk for adverse events from errors involving medication dose formulations and dosage forms.

Considering the available evidence, it appears that the risk to patients from errors involving medication dosage forms is under-appreciated, under-reported, and poorly understood.

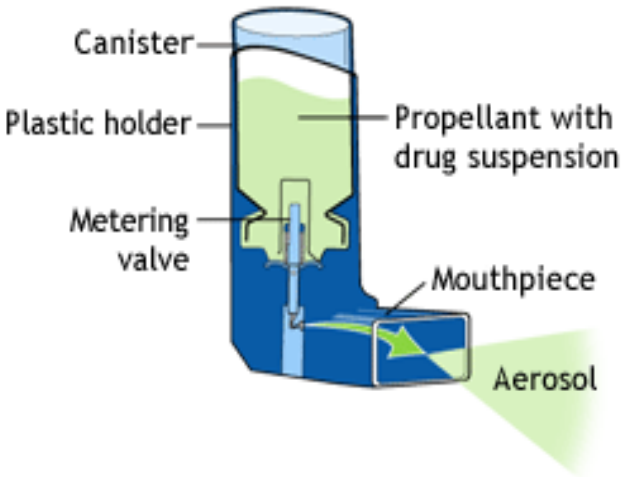
Most commonly, an adverse event from inappropriate use of a dosage form is a result of the delivery of excess or inadequate amounts of drug to the site of action, delivery to the wrong site, or toxicity from the dosage form itself. For most of the errors reported, only mild to modest adverse events are likely, although serious events may occur in some patients. Serious adverse outcomes may be expected when errors involve highly toxic drugs or medications used in serious illnesses. The characteristics of a specific dose formulation may further complicate events when other types of errors occur simultaneously.

The purpose of this article is to provide information for proper use of specific dosage forms, which the healthcare provider can share with the patient/care giver to improve medication use outcomes.

## Guidelines for Using Metered Dose Inhalers (MDIs)

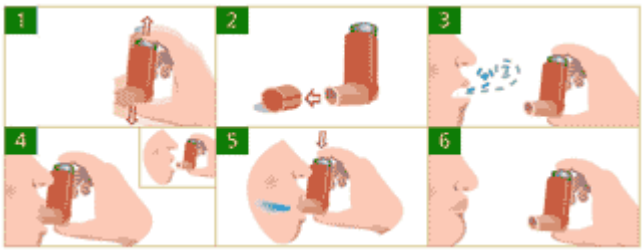
### How to Use a Metered-Dose Inhaler "Puffer"

A metered-dose inhaler, called an MDI for short, is a pressurized inhaler that delivers medication by using a propellant spray.



### To use an MDI:

1. Shake the inhaler well before use (3 or 4 shakes).
2. Remove the cap.
3. Breathe out, away from your inhaler.
4. Bring the inhaler to your mouth. Place it in your mouth between your teeth and close you mouth around it.
5. Start to breathe in **slowly**. Press the top of you inhaler once and keep breathing in slowly until you have taken a full breath.
6. Remove the inhaler from your mouth, and hold your breath for about 10 seconds, then breathe out.




If you need a second puff, wait 30 seconds, shake your inhaler again, and repeat steps 3-6. After you have used your MDI, rinse out your mouth and record the number of doses taken.

Store all puffers at room temperature.

### Cleaning Your MDI

To clean your MDI, follow the instructions that came with it. In most cases, they will advise you to:

1. Remove the metal canister by pulling it out.
2. Clean the plastic parts of the device using mild soap and water. (Never wash the metal canister or put it in water.)
3. Let the plastic parts air dry (for example, leave them out overnight).
4. Put the MDI back together.
5. Test the MDI by releasing a puff into the air.

### Important Reminders About MDIs

Always follow the instructions that come with your MDI.

As well:

- Keep your reliever MDI somewhere where you can get it quickly if you need it, but out of children's reach.
- Show your doctor, pharmacist or asthma educator how you're using your metered-dose inhaler.
- Store your MDI at room temperature. If it gets cold, warm it using only your hands.
- Never puncture or break the canister, or try to warm it using anything except your hands.
- When you begin using an MDI, write the start date on the canister.
- Check the expiry date on the MDI before you use it.
- If you're having trouble using your MDI, ask your doctor for tips or to recommend another device.
- Many doctors recommend the use of a spacer, or a holding device to be used with the MDI.
- **Do not** float the canister in water.

### About Spacers

Also known as aerosol-holding chambers, add-on devices and spacing devices, spacers are long tubes that slow the delivery of medication from pressurized MDIs.

Spacers should always be used with MDIs that deliver inhaled corticosteroids. Spacers can make it easier for medication to reach the lungs,

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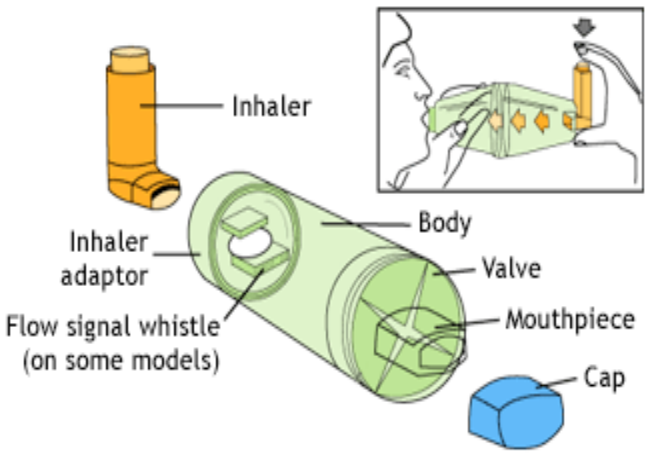
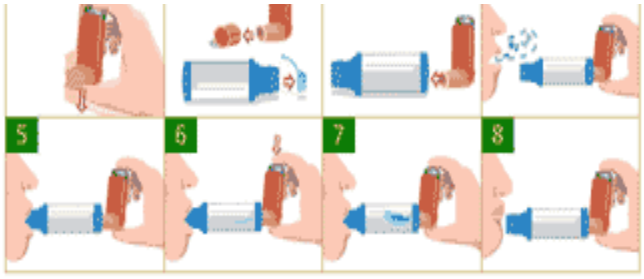



and also mean less medication gets deposited in the mouth and throat, where it can lead to irritation and mild infections. The Asthma Society of Canada recommends that anyone, of any age, using a puffer, consider using a spacer.

While a spacer can make it easier to coordinate breathing in and activating an MDI, it can also make the MDI less portable because a spacer takes up extra space in a purse or a bag. However, inhaled corticosteroids are usually prescribed to be taken twice a day, so the spacer can be left at home for morning and evening use.

### To Use a Spacer:

1. Shake the inhaler well before use (3-4 shakes).
2. Remove the cap from your inhaler, and from your spacer, if it has one.
3. Put the inhaler into the spacer.
4. Breathe out, away from the spacer.
5. Bring the spacer to your mouth, put the mouthpiece between your teeth and close your lips around it.
6. Press the top of your inhaler once.
7. Breathe in **very slowly** until you have taken a full breath. If you hear a whistle sound, you are breathing in too fast. **Slowly** breathe in.
8. Hold your breath for about ten seconds, and then breathe out.




### Cleaning Your Spacer

To clean your spacer, follow the instructions that come with it. In most cases, they will advise you to:

1. Take the spacer apart.
2. Gently move the parts back and forth in warm water using a mild soap. Never use high-pressure or boiling hot water, rubbing alcohol or disinfectant.
3. Rinse the parts well in clean water.
4. Do **not** dry inside of the spacer with a towel as it will cause static. Instead, let the parts air dry (for example, leave them out overnight).
5. Put the spacer back together.

### Important Reminders About Spacers

Always follow the instructions that come with your spacer. As well:

- Only use your spacer with a pressurized inhaler, not with a dry-powder inhaler.
- Spray only one puff into a spacer at a time.
- Use your spacer as soon as you have sprayed a puff into it.
- Never let anyone else use your spacer.
- Keep your spacer away from heat sources.
- If your spacer has a valve that is damaged, or if any other part of the

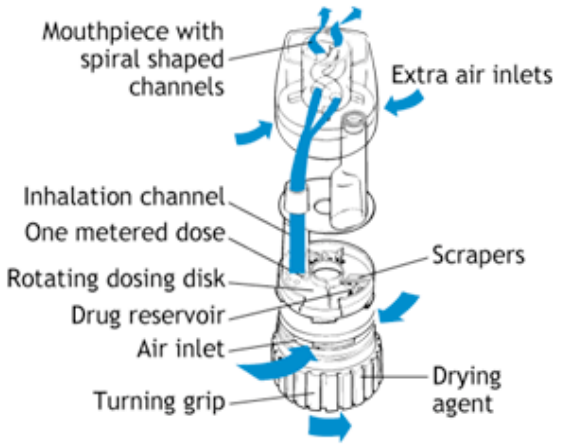
spacer is damaged, do not use it. The spacer will have to be replaced.

- Some spacers have a whistle. Your technique is fine if you do not hear the whistle. However, if you hear the whistle, this means you should slow your breath down.
- It is very important that you consult your doctor, asthma educator or other healthcare provider to review proper inhaler technique.

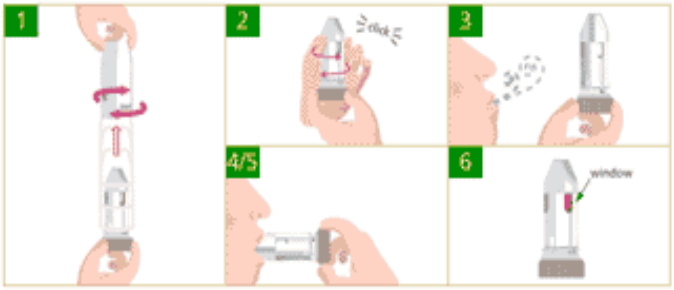
### How to use a Turbuhaler®:

A Turbuhaler® is a dry-powder inhaler available in an easy-to-use format.

Some Turbuhalers® feature a dose counter that shows the exact amount of medication left. If your Turbuhaler® doesn't have a dose counter, then check for a red indicator in the windows on the side of the device. When you see red in the window, there are approximately 20 doses left and it's time to order a refill.




1. Unscrew the cap and take it off. Hold the inhaler upright.
2. Twist the colored grip of your Turbuhaler® as far as it will go. Then twist it all the way back. You have done it right when you hear a "click."
3. Breathe out away from the device.
4. Put the mouthpiece between your teeth, and close your lips around it. Breathe in forcefully and deeply through your mouth.
5. Remove the Turbuhaler® from your mouth before breathing out.
6. Always check the number in the side counter window under the mouthpiece to see how many doses are left. For the Turbuhalers® that do not have a dose counter window, check the window for a red mark, which means your medication is running out. When finished, replace the cap.




If you drop your Turbuhaler® or breathe into it after its dose has been loaded, you may cause the dose to be lost. If either of these things happens, reload the device before using it.

Clean your Turbuhaler® as needed. To do this, first wipe the mouthpiece with a dry tissue or cloth. Never wash the mouthpiece or any other part of the Turbuhaler® - if it gets wet, it won't work properly.

**Pease look forward for the release of the next issue of the QPS Newsletter (Vol. 6 Issue No. 1 2014) which will be released early next year. This topic continues the information you need for using DISKUS, Rotahalers, Administration guidelines for eye drops, ointments, eardrops and nasal drops.**

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# At-Risk Behaviors: A Persistent Threat to Medication Safety

**Karen Ting Hie Hee,** Assistant Director, Quality Management Department, KAMC-Jeddah

**A**t-risk behavior is increasingly becoming a major concern in healthcare. This is in part due to the growing focus on the human behavior as a contributing factor in medical errors. Majority of the healthcare organizations have devoted tremendous efforts in patient safety to training and to redesigning clinical processes. Despite these efforts, there is no evidence that error rates have decreased.

Today, the healthcare industry has begun to realize that the most important source of error is from the risky behaviors of the healthcare providers. As such, healthcare industry begins to formulate strategies in tackling such behavior.

## What is an at-risk behavior?


At-risk behaviors are behaviors that healthcare providers sometimes engage in, knowing on some level that it could risk patient safety. An at-risk behavior is knowingly taking a chance or ignoring an established policy and procedure. Healthcare providers working with at-risk behaviors are most likely to be involved in the medical errors that cause harm to a patient.


Related to medication management and use process, common at-risk behaviors include:

- *Engaging in "grab and go" without fully reading the label of a medication before it is dispensed, administered or restocked.*
- *Intimidation or reluctance to ask for help or clarification.*
- *Failure to educate patients.*
- *Using medications without complete knowledge of the medication.*
- *Failure to double check high-alert medications before dispensing or administering.*
- *Not communicating important information such as patient allergies, diagnosis/co-morbid conditions, weight, etc.*

## What drives at-risk behavior?

Risky behaviors often emerge from system-based problems and organizational culture that is tolerant of at-risk behaviors. Production pressure, environment and shortage of staff are the most common contributing factors that push healthcare providers to take "shortcuts" that compromise patient safety. The reward for risk taking is immediate and obvious as it saves time. Comparing to the potential of patient harm, healthcare providers always view it as remote and unlikely. Therefore, the perceived rewards create a fertile atmosphere for at-risk behavior to take hold and flourish. In the long run, the healthcare providers usually develop poor safety habits.

## How to reduce at-risk behavior?

The National Coordinating Council on Medication Error Reporting and Prevention makes the following recommendations to reduce medication errors associated with at-risk behaviors:

- *Eliminate organizational tolerance of risk.*

- *Increase awareness of at-risk behaviors.*
- *Determine systems-based reasons for risk-taking behavior.*
- *Eliminate system-wide incentives for at-risk behaviors.*
- *Motivate through feedback and rewards.*

Eliminating organizational tolerance of risk is a key element to reduce at-risk behavior. With this, it reduces the probability of adverse event, consequently improving patient safety. In order to eliminate the risk tolerance, the healthcare organization must first determine whether unknowingly reinforce or reward employees who routinely practice risky behavior. In a just culture, the healthcare organization uncovers and remedies the system-based reasons for their behavior; and decrease staff tolerance for taking these risks through coaching.

All healthcare providers need to be stakeholders in the organization's efforts to reduce at-risk behavior. As such, the organization needs to step up efforts to increase awareness of at-risk behaviors that compromise patient safety. To effectively impact patient safety, all healthcare providers must be trained in at-risk behaviors. Training should be incorporated into the organization patient safety training program.

As mentioned earlier, risky behaviors often emerge from system-based problems. A central tenet of determining system-based problems is to identify the reasons for healthcare providers to engage in at-risk behavior. Once identified, the organization must try to solve the problems. By focusing correction on system-based problems, the likelihood of recurrence can be prevented. The organizations also need to examine if shortcuts are built into the policies and procedures; monitor systems and processes; design and redesign the system to improve safety.

One of the ways that deters at-risk behaviors is removing incentives for at-risk behaviors; and creating incentives for safe behaviors. With the right goals and outcomes, safe behavior incentive programs do work as one part of the overall effort. Therefore, it is essential to develop an effective safe behavior incentive program that includes both components of incentives.

Feedback and rewards provide an effective way to encourage and motivate staff toward desired behaviors. Feedback is utilized to direct and redirect an employee's behavior. It is also an important form of recognition. One of the best and most valued forms of feedback is the occasional "pat on the back." for their safe behaviors. It feeds the employee's sense of value and quickly reinforces the desired behaviors. Carefully designed reward systems can be a very useful and necessary part of motivation strategy.

## References:

*Institute for Safe Medication Practices. (2004). ISMP medication safety alert! Retrieved August 2, 2013, from http://www.ismp.org*

*Institute for Safe Medication Practices. (2004). Reducing "at-risk" behaviors. Retrieved August 2, 2013, from http://www.ismp.org*

*Institute for Safe Medication Practices. (2004). Why we engage in "at-risk behaviors". Retrieved August 2, 2013, from http://www.ismp.org*

*Institute for Safe Medication Practices. (2012). Just Culture and its critical link to patient safety (Part I). Retrieved August 2, 2013, from http://www.ismp.org*

*National Coordinating Council for Medication Error Reporting and Prevention. (2007). Reducing Medication Errors Associated with At-risk Behaviors by Healthcare Professionals. Retrieved August 2, 2013 from http://www.nccmerp.org*

*Smetzer JL. Reducing At-Risk Behaviors. Joint Commission Journal on Quality and Patient Safety. 31 (5). 294-299*

This is your Newsletter and we value your comments. Please recommend Quality Improvement Projects in your area. We strongly encourage you to share patient safety information.
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