NATIONAL GUARD HEALTH AFFAIRS

Quality & Patient Safety Newsletter

A QUARTERLY PUBLICATION OF THE QUALITY & PATIENT SAFETY COUNCIL VOLUME 4 / ISSUE 3 / Dec 2012

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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 National Guard Health Affairs (NGHA) facilities. "

BUILDING SAFER CARE:
Leadership & Organizational Priority

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JCI Accreditation in Focus

JCI is knocking: are you in?

Dr. Tamer Farahat
Manager, Quality Management Department
KAH-Al Ahsa

Joint Commission International is an accrediting body that evaluates a health care organization's performance in areas that most affect patient health and safety. These areas are defined in Joint Commission International Comprehensive Accreditation Manual for Hospitals. By achieving accreditation, a health care organization has demonstrated its commitment to provide safe, quality care to its patients.

As we strive to be perpetually ready for our coming triennial accreditation survey by Joint Commission International, we have many activities to support our preparedness. Examples of these activities are: on-going patient tracer's activity, various hospital rounds, our quality improvement and patient safety program, international patient safety goals implementation and monitoring, Joint Commission International Clinical and Managerial measures collection and analysis and Quality Improvement and Patient Safety Council.

So, was your hard work recognized by Joint Commission International? The short answer is - absolutely! We underwent our mock survey in November, 2011. The 3 surveyors (nurse, physician and administrator), took an in-depth look at our processes, practices and environment across all of our services and locations. They recognized many of our practices as best practice and complimented us on the strong leadership of our organization, staff professionalism, competence, thorough implementation of administrative policies and procedures (APP's), cleanliness and well organized environment.

As with any survey, we have several opportunities to improve upon our practices to further enhance the quality and safe care we provide our patients. These include:

1. Documentation is not always reflecting the performance.

It was noted that staff are more intent on the completion of the paperwork than ensuring the performance in safe act. Their significant repetition of the activities and documentation were identified, thus making the process more complex. Also it was identified that the measure of performance was the completion of the documentation, not observation of the actual performance. Using documentation as the only form of assessment puts emphasis on the documentation and not the performance.

2. Data are not always used efficiently.

The organization has a very large body of data available, and all are identified as not meeting the expectation and all the same priority to address in improvement program. This leads to an organization overwhelmed with data, completing tasks, many committees and workgroups working on the same project, but not collaboratively, and a very slow success rate in actual improvement or ability to sustain the gain.

3. Near misses or close calls.

Several near miss issues were identified. Staff was not clear that these "almost" failures were considered near misses and they required reporting. There has been no analysis of the near misses data and thus no activity implemented to decrease the possibilities that may proceed to actual adverse events.

4. Integrated Plan of Care.

It is a new requirement for Joint Commission International accreditation, 4th edition. The plan of care should be integrated to include all those that assess and provide care to the patient. It is mandatory to ensure the plan of care is stated in measurable statements (goal oriented), includes all responsible parties' assessments and updated as the needs and condition change.

We are all essential to the success of our organization. It is important that each of us, as a member of our team, to be aware of the importance of complying with current regulations, APP's and standards. We all are sure that staff at all levels will continue efforts to improve delivery of safety and quality of patient care and utmost support to meet NGHA organization objectives.

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Modification of WHO Check List

Dr. Sami Boghdadly
Director, OR and Day Surgery Services
Consultant Surgery Department, KAMCR

Modification of WHO Check List Safety in surgery has become a central issue with all health care providers around the world. We now recognize that there are three issues related to failure of improvement of safety in surgery. These issues are:

1. Failures to recognize that safety in surgery is a public health issue.
2. There is a considerable lack of data on surgery and outcome.
3. Failure of health care organizations and providers to utilize the existing safety "Know How".

It is estimated that there are 234 Million operations performed globally every year. The estimated complications are 3-16%, which yield 7 million disability complications globally. With mortality estimated to be between 0.4-0.8%, this yields 1 million dead globally every year. Now we can imagine the magnitude of the problem as a serious public health issue around the globe (Figure 1).

The experience we gained from our basic check list which was in introduced since 2008 enabled us to evolve the modification of the WHO check list. The need for modification of our checklist was apparent back in 2010. The evidence for change and adaptation of the modification of the check list came from a land mark paper of multicentre trial in different countries has produced data which suggested that the introduction of WHO check list produced a reduction of operative mortality from 1.5% to 0.8% and reduction of morbidity from 11% to 7%. This landmark finding has produced a major change in the way healthcare professional conduct their activities, not only in our organization, but also in all health care organizations around the world.

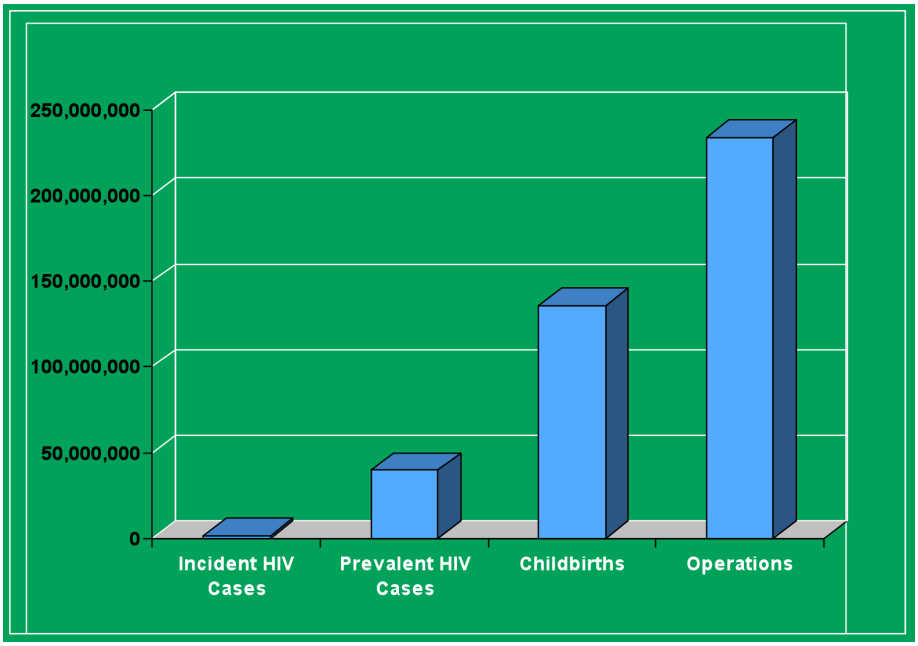


Figure 1: Compartive mortality showing that surgical post operative mortality exceeds those of other major public health issues (Lancet : weise 2008' WHO had recognized the importance of safety issues related to surgery and has created with a WHO safety check list. The check list is shown in Figure 2

Figure 2 Original WHO checklist

With this new evidence and our previous basic check list, a multidisciplinary team was formed in order to develop new modifications to the checklist. The effort to generate the modified list was enormous and strongly supported by Medical Services. There were 13 drafts tested before the team finalized the

existing list. The existing modification took into account our local needs and circumstances while keeping the important components of the WHO check list ,i.e. Sign In, Time Out and Sign out,. Figure 4

We felt that certain aspects of care should be added to the WHO checklist to enhance its efficacy. These criteria include diabetic control, prophylactic antibiotics and DVT preventive measures. The original WHO checklist has 19 points to check and our existing list has 25 points. For accountability purpose we decided that each segment of the checklist must be counter signed.

One of the most important changes to our list is getting the patient involved in the process even before the administration of anesthesia. This enhances the safety feature of the list and reduces to minimum the risks of the wrong site or even the wrong operation to be performed, to the last minute prior to induction of anesthesia

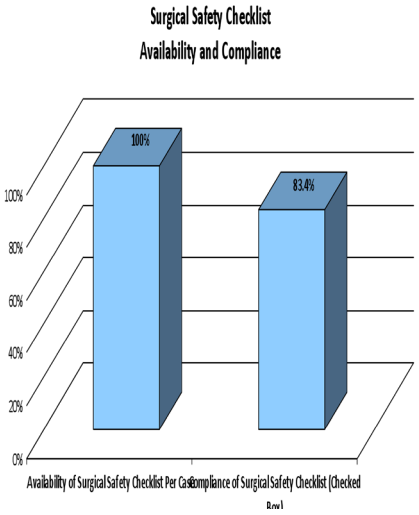
The WHO list represents a decision that healthcare will be focused on patient care and to enhance teamwork. Various difficulties were encountered as these changes in the list represent a major shift in the culture of the OR. Resistances to change, hierarchy in health care and cultural issues were the major forces for implementation. Resistance to change is not unique to our hospital but well recognized in all hospitals where implementation of the checklist took place.

The new modified WHO check list was officially introduced on 1 January 2011. Several monitoring processes took place to improve its utilization. Together with the monitoring processes there was a major educational campaign in order to make everyone aware of the significance of this check list.

At the beginning of January 2012 we conducted a prospective chart review for 1000 (One thousand) consecutive cases, all elective, all age groups and all done in the main OR. The data were collected by an independent reviewer at the PACU (Post Anesthetic Care Unit) immediately after surgery. The data was internally validated for its accuracy. The review looked at 25000 items and the following are the major findings of this review:

1. Compliance rate (That a check list is present in the chart) was1000 (100%)
2. Completion rate (All 25 items are completed) was 834 (83.4%)
3. Items completion rate (out of 25000 items checked) 24732 with only 268 items not filled (1.08%)

Though the above numbers show a considerable improvement towards implementation of the checklist from qualitative point of view yet we need to have another trial of observational checks on the list. Currently this trial is being undertaken with the support of the QI department.



The question which may be raised is, what is the impact of all these efforts in relation to patient safety?

Though we do not have exact date at the moment (we are trying to collect it), if we take the data from a multicentre trial and apply it to our hospital we will have the following results (assuming we perform around 15000 operations per year):

1) Reduction of mortality from 1.5% to 0.8% which will save 105 patients life in our hospital.

2) Reduction of morbidity from11% to 7% which will prevent 600 complications in our hospital.

The above mathematical figures if proven with hard data will mean that the Modified WHO checklist would be proven an excellent tool for saving lives.

National Guard Health Affairs
King Abdulaziz Medical City in Riyadh

SURGICAL SAFETY CHECKLIST

Adapted from WHO Surgical Safety Checklist

DRAFT # 10

Place patient's label here

PROCEDURE TO BE PERFORMED:

I. SIGN IN : ☐HOLDING AREA ☐ ENDOSCOPY ☐ IVF ☐ OTHER_____

1. Verification by the registered nurse

- Correct patient identified ☐ Yes
- Consent correct ☐ Yes
- Patient /Parent/Guardian confirm procedure ☐ Yes
- Site marked ☐ Yes ☐ NA

Signature/Badge#/Date/Time

2. Verification by Anesthesia Technician.(If applicable)

- Correct patient identified ☐Yes
- Intravenous access insitu ☐ Yes ☐No
- Anesthesia machine checked ☐ Yes ☐No

Signature/Badge#/Date/Time

II. TIME-OUT in ☐ OR ☐ ENDOSCOPY ☐ IVF ☐ OTHER_____

1. All TEAM MEMBERS verify: (prior to giving sedation/anesthesia to patient)

- Correct Patient ☐ Yes
- Correct Consent ☐ Yes
- Correct Procedure ☐ Yes
- Correct site/ side ☐ Yes ☐NA
- Any known allergy ☐ Yes ☐No

2. SURGICAL/PROCEDURAL TEAM

- Any unexpected steps/critical issues ☐ Yes ☐No ☐NA
- Surgical site infection bundle:
  - -Prophylactic antibiotic ☐ Yes ☐No ☐NA
  - -Diabetic Protocol ☐ Yes ☐No ☐NA
- Venous Stasis (DVT) Prophylaxis ☐ Yes ☐No ☐NA
- Estimated blood Loss : Adult > 500ml ☐ Yes ☐No ☐NA
  Child > 7 ml/ kg ☐ Yes ☐No ☐NA
- Correct X-Ray displayed ☐ Yes ☐No ☐NA

Signature/Name/Badge#

3. ANESTHESIA TEAM

- Any airway difficulty expected ☐ Yes ☐ No
- Any specific equipment needed ☐ Yes ☐ No

Signature/Name/Badge#

4. Nursing team

- Instruments available and sterile ☐ Yes
- Implants, special equipment and supplies ☐ Yes ☐NA
- Announce ' Time Out is Over" ☐ Yes

Signature/Badge#/Date/Time

III. SIGN OUT: ☐OR - Before patient leaves the Operating Room ☐ NA

Nurses verbally confirm with the team

- The Procedure done ☐ Yes
- Count correct ☐ Yes ☐NA
- Specimen labeled correctly ☐ Yes ☐NA
- Review concerns for PACU and management of patient ☐ Yes ☐No

Signature/Badge#/Date/Time

* Refer overleaf for notes

SS July 2010 OR6300

Figure 4: The Modified Checklist in our Hospital

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IMPLEMENTATION OF MEDICATION RECONCILIATION STRATEGY AT IABFH-DAMMAM

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Manager, Quality Managment. IABFH-Dammam

MEDICATION RECONCILIATION – Defined as a formal process of obtaining a complete and accurate list of each Patient's Current Home Medications and then comparing the Physician's Admission, Transfer, and/or Discharge Orders to that list. Discrepancies are brought to the attention of the Prescriber and, if appropriate, changes are made to the orders. Any resulting changes in orders are documented.

Overview:

The Reconciling Process has been demonstrated as a powerful strategy:
research showed that a series of interventions introduced over a seven (7) month period successfully decreased the rate of medication errors by 70% and reduced Adverse Drug Events by over 15%. A successful Reconciling Process also reduces time associated with the management of Medication Orders. Rozich, Resar 2004.2001

Why We Select This Project:

- Medication Errors are one of the leading causes of injury to hospital patients, and chart reviews reveal that over half of all hospital medication errors occur at the interfaces of care.
- Discrepancies of patient medication orders have been documented by many hospitals. A multidisciplinary check of medication orders revealed that 42% of the orders being reviewed needed to be changed.
- A home medication omitted from admission orders was the most common error and incorrect dosages ordered in admission orders also exceeded errors attributable to errors in information obtained from the patient/ family.
- Rozich, Resar2001
- Branowicki 2002
- Billman 2002

Objectives:

- To describe the process of Medication Reconciliation at IABFH-Dammam for all Patients throughout the continuum of care, i.e. visiting ED, attending OPD, upon admission, while being transferred from one clinical setting to another and upon discharge.
- To ensure that medications are being accurately and completely reconciled across the continuum of care (ED visits, OPD visits, upon admission and while being transferred from one clinical setting to another and on discharge).

Policies:

- Establish a context of shared responsibility and accountability among the Ordering Physician, the Attending Nurse and the Pharmacist to ensure thorough compliance with the Medication Reconciliation Process at IABFH-Dammam.
- A Medication List of Active Medications must be created upon the Patient's visit to IABFH-Dammam i.e. visit in ED/OPD, upon admission, transfer to a different level of care and upon discharge.
- Medication List of all active medications will be reviewed by the Admitting Physician who will continue, discontinue or modify the medications according to the current needs of the patient.
- Medications will be reconciled within four (4) hours of admission for In-Patients, prior to discharge for OPD & ED and within thirty (30) minutes of Patient transfer to/from one setting to another.
- Under no circumstances, will orders be honored which applies a blanket reinstatement of Pre-Hospitalization Medications, i.e. "Resume Home Medications".

Methods:

- Adopt standardized forms for reconciling medications.
- Place reconciling form in consistent, highly- visible location in the patient chart.
- Provide access to drug information and pharmacist advice at reconciling.
- Improve access to complete medication lists at admission

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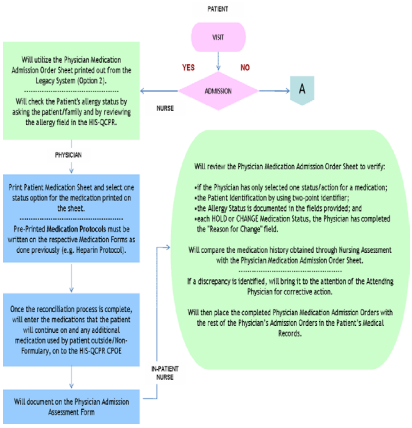
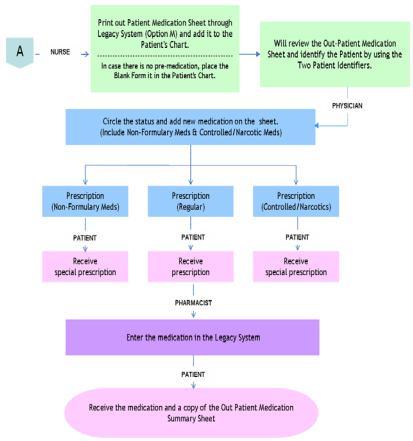
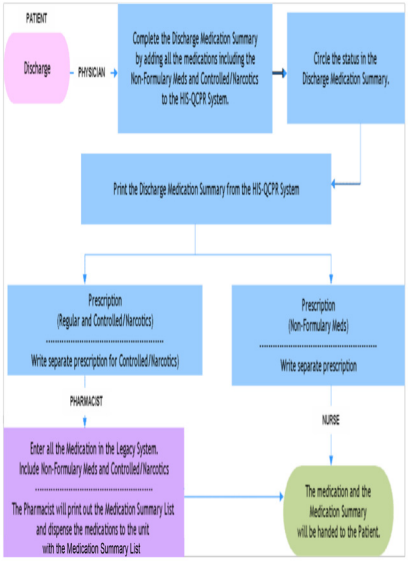
MEDICATION RECONCILIATION PROCESS IN OPD



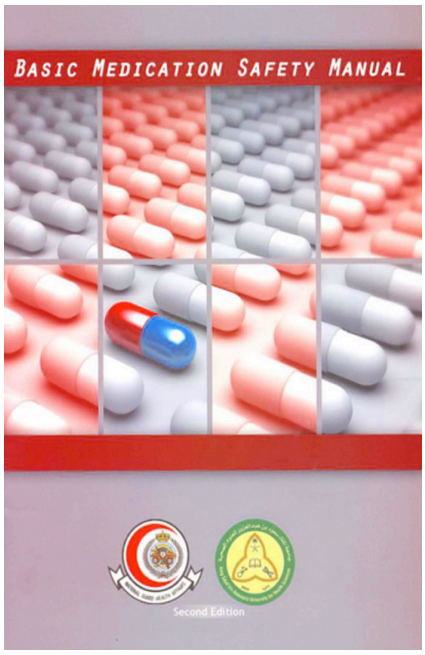


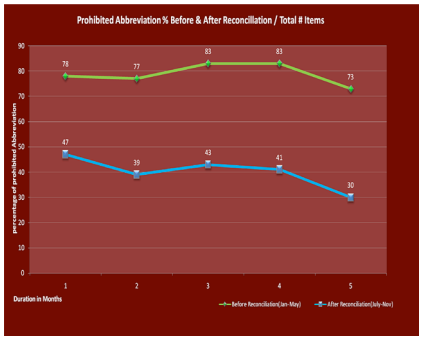
MEDICATION RECONCILIATION PROCESS FOR IN-PATIENTS

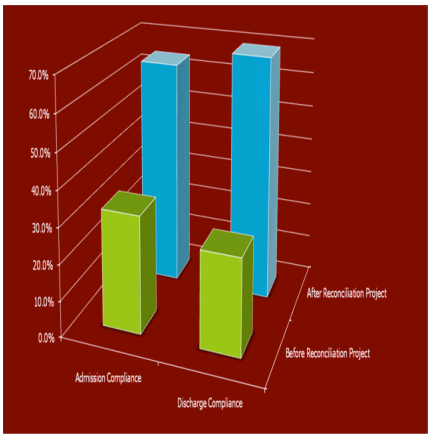


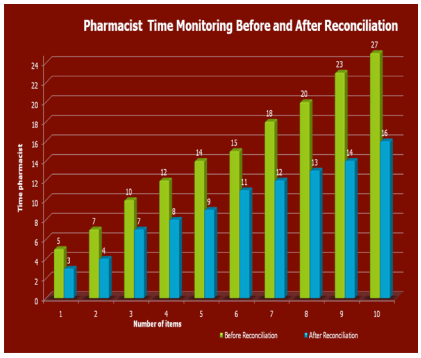
Results:

- An increase in Admission Compliance towards reconciliation after the project from 32.5% to 64% and in Discharge Compliance from 26.6% to 69%
- Prohibited Abbreviation decreased by 50% after the reconciliation project
- Pharmacist and Nursing time Monitoring also improved after the reconciliation (saved time by 20 - 30 mins) Prescription Completion Monitoring increased by almost 95% after the reconciliation

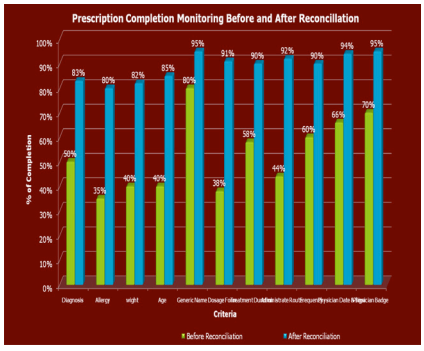








	Admission Compliance	Discharge Compliance
Before Reconciliation Project	32.5%	26.6%
After Reconciliation Project	64.0%	69.0%



Conclusions:

A full implementation at IABFH-Dammam which has shown improvement to describe the process of Medication Reconciliation for all patients throughout the continuum of care, i.e. visiting ED, attending OPD, upon admission, while being transferred from one clinical setting to another and upon discharge.

IABFH-Dammam continuously adheres and effectively complies with the Medication Reconciliation process as our commitment is to keep all the patients as safe as they should be.

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Improving Performance and Quality is Everyone`s Job

Susan Al Owaise RPh, CPHQ
Quality Management Specialist
Quality Management, KAMC-R

Under the auspices of His Excellency, Dr. Saad Al Mohrij, the Chief Medical Officer for NGHA, King Abdulaziz Medical City hosted the ***NGHA-Improvement Science Forum*** on September 8th 2012, and with the theme **"Sharing Our Success"**. To shed light on this forum, we will share with you in this issue the story of success that emerged from eight (8) improvement projects, instead of stories from reported incidents that we used to report under this column of *QPS Newsletter*.

The *Forum* was great opportunity to celebrate and acknowledge the success of the improvement projects that have been achieved over the past 9 months to improve Quality of Care and Patient Safety in our institution. Today's Healthcare is faced with many challenges, increased demands, securing access and ensuring that patients receive effective and safe care. However, over the past couple of months, our staff have evidenced that the solutions to those problems must start from us and the power to change begins from within. We must all be unified, clear, responsive and accountable when it comes to patient safety.

Our primary goal of organizing this forum was to bring everybody together, so we can learn from each other and share success stories in order to promote patient safety culture among all staff. Eight projects from different departments were presented by each project team leader, and three projects were selected by anonymous judges to win the first, second and third place prizes **(See Table 1)**

Quality and patient safety is everyone's responsibility and this responsibility starts with the leadership of this organization, who continues to support and provide resources for the creation, spread, and sustainability of effective systems; remove obstacles to improvement for clinicians, nurses, and all staff.

Today, the floor is open with many opportunities to improve patient safety. We can make this transformation happen, and we hope the ideas and information that have been shared during this forum lead to collaborative efforts that move us closer to our common goal**: to improve the quality, safety, efficiency and effectiveness of health care for all patients and their families**. Thus, if you have creative ideas and you would like to shape them in scientific way to improve the performance or patient safety in your clinical area, it is the time to change, and it is the time to contact Quality Management Department to help you in translate those ideas into actions. Together, and with much passion and enthusiasm in patient safety, we can lead the improvement journey at all levels.

Table 1: The Winning Projects in the NGHA-Improvement Science Forum, 2012

	Project Tile	Team Leader
First Place	Reliable care, planning, communication & collaboration of interdisciplinary team in Stroke Patient	Dr. Ali Al Khathami, Consultant Medicine Department
Second Place	Reduce complications from Ventilators (VAP)	Dr. Raymond Khan, Consultant ICU Department
Third Place	Proper Sepsis Recognition & Treatment	Dr. Yaseen Arabi, Chairman ICU Department

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Saudi Medication Safety Center:

One Stop Resource

Dr. Gregory Poff
Chairman, Saudi Medication Safety Center

The Saudi Medication Safety Center (SMSC) is embarking on a One Stop Resource Campaign in order to highlight the SMSC Home Page where up-to-date medication information is easily accessible.

Relevant information may be accessed under the following headings: Related Links, APPs and Reference Material. The goal of the Campaign is to provide end-users with one central location on the NGHA Intranet Home Page to go to for any information related to medications, such as;

- Approved Abbreviations under APP 1430-10
- APPs regarding medications (e.g., Look-Alike, Sound-Alike; High Alert)
- Do Not Crush List of medications
- Drug – Food Interactions
- Error - Prone Abbreviations
- Micromedex
- NGHA Formulary
- NGHA Parenteral Therapy Manual
- Standardized Medication Labels
- Websites for ISMP Canada, Saudi FDA
- Adverse Drug Reaction Reporting Form (SFDA)
- Etc., etc., etc.

To locate the One Stop Resource, follow the guide below:

NGHA Intranet Home Page
Med eServices
Saudi Medication Safety Center
One Stop Resource

I would like to request that all of you be aware of the Campaign and to include the information in your respective: BMS Courses, MSP Meetings, General Nursing Orientations, Pharmacy Orientations, and Physician Orientations. Media Services is already working on screens shots for the digital signage system (i.e., flat screen TVs in the hallways), and ISID will be requested to add information about the One Stop Resource in the 'banner' on the NGHA Intranet screen.

I would also encourage any other method you deem appropriate for dissemination of the information in your institutions [e.g., discussion at Department Meetings, emailing staff (NMs, CRNs, Pharmacists, Pharmacy Technicians, Physicians, etc), discussion during Tracer activity, etc]

Thank you for your efforts to this regard.