



Nursing Informatics Bulletin

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Foreword from Dr. Wasmiya Dalhem



Dr. Wasmiya Dalhem

Nursing Informatics professionals work across a variety of roles, from developers of communication and information technologies, to educators, to researchers, to policy developers, all working towards the common goal of advancing healthcare. In the spirit of equipping staff here at HMC with knowledge and information on the latest trends in nursing informatics, I am pleased to introduce the second edition of the Nursing Informatics Bulletin (NIB).

It is our hope that this issue, and each subsequent edition of this publication, will enrich your knowledge, reflecting in your daily practice. This edition of the NIB includes a feature on beneficial mobile applications, spotlights ZynxCare plans, chronicles the role Nursing Informatics played in CIS go-live at NCCCR and Heart and Women's Hospitals as well as a number of other articles of relevance to those with an interest in the field of nursing informatics.

In addition to welcoming you to this edition of the NIB, I am delighted to use this publication as a platform to announce the launch of the Nursing Informatics International Computer Driving License (ICDL) Preparatory Courses here at HMC. The ICDL program is recognized as the international standard for end-user computing skills and is endorsed by a number of world renowned universities, colleges and schools. The program offered here at HMC will also prepare staff to write the final exam. I strongly urge all nurses and midwives to consider enrolling.

Finally, I encourage all nursing and midwifery staff working across HMC to contribute to the NIB through offering suggestions on topics you would like us to write about in future editions, or even through writing articles related to the nursing informatics practice yourself. This is your newsletter, so share your thoughts, ideas and articles via our email address nursinginformatics@hamad.qa

Dr. Wasmiya Dalhem

Executive Director of Nursing Informatics

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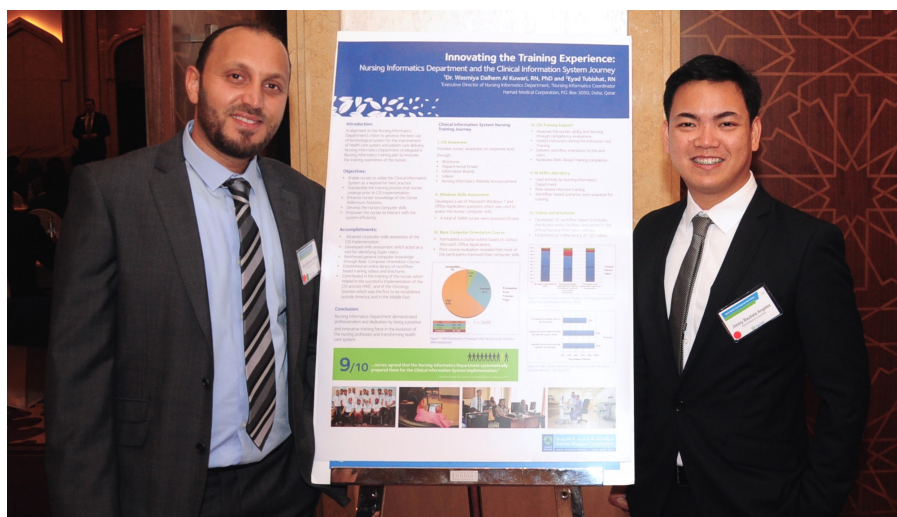
Nursing Informatics Values

The dynamics of the healthcare environment are rapidly changing. In order to provide patients with the safest, most effective and most compassionate care, nurses and midwives must integrate information and information technology into routine practice and embrace opportunities to manage care in new ways. In order to achieve this goal, the Nursing Informatics Department is committed to the following values:

- **Accessibility:** Promoting and facilitating access to resources and references on applied informatics.
- **Achievable:** Achieving adoption and information exchange through meaningful use of informatics practice.
- **Confidence:** Inspiring confidence and trust in the health information technology field.
- **Creative:** Being resourceful and re-engineering clinical workflow to facilitate change management.
- **Dedicated:** Committing to improve care and reducing healthcare costs through the use of informatics practice.
- **Excellence:** Achieving excellence in the delivery of high quality and evidence-based services.
- **Informative:** Sharing knowledge and spreading nursing informatics concepts.
- **Knowledgeable:** Empowering nurses and midwives with current and relevant informatics knowledge to improve the healthcare system at HMC.
- **Professionalism:** Advancing healthcare informatics practices, education and research through the effective use of health information and information technology.
- **Supportive:** Promoting a supportive work process for nurses and midwives using informatics principles and practice.

Nursing Informatics Department Receives Award from Cerner Middle East Regional User Group

Presented by: Jimmy Angeles, Informatics Nurse



Mr. Eyad Tubishat and Mr. Jimmy during RUG Conference / Dubai

HMC was recently honored with five healthcare innovation awards during the sixth annual Cerner Middle East Regional User Group 2015 Conference, held in Dubai, UAE. The annual event attracts clinicians,

technicians, IT professionals and healthcare executives who use Cerner systems as part of their daily work and is an opportunity for regionally-based healthcare professionals to share their

knowledge and best practice and to provide input to Cerner on their user experience and future needs. Qatar was represented at the Conference by HMC and the PHCC.

HMC's Nursing Informatics Department was recognized during the event for outstanding performance as represented through a poster submission entitled "Innovating the Training Experience: Nursing Informatics Department and the Clinical Information System Journey." The poster presented an innovative approach to enhancing patient healthcare delivery through standardizing nursing and midwifery training. The Nursing Informatics Department spotlighted the training experience of nurses and midwives

during the Clinical Information System (CIS) implementation journey, which included formal training and education sessions as well as activities designed to raise awareness.

The role of utilizing health information and technological systems to improve nursing and midwifery practice and patient

healthcare delivery at HMC is a primary focus for the Nursing Informatics Department and this award reflects the discipline, devotion and hard work of the Nursing Informatics team in making the CIS implementation journey a success.

Cerner, a global leader in healthcare information technology systems,

has been providing clients in the middle east region with IT solutions that help reduce medical errors, improve outcomes and increase quality of care for over twenty-five years; today Cerner systems are used in over 18,000 healthcare facilities around the world, including over 200 client sites in the Middle East.

Nursing Informatics Support CIS Implementation at Heart Hospital and the National Center for Cancer Care (NCCCR)

Presented by: Elizabeth Varughese, Nursing Informatics Coordinator



Linda Peters presenting certificates of appreciation for outstanding staff.

To ensure the successful implementation of the Clinical Information System (CIS), the Nursing Informatics Department assigned a dedicated NI team to each hospital across HMC. These teams were responsible for providing proactive support to the nursing and midwifery end users and for bridging any identified training gaps.

CIS implementation at both Heart

Hospital and the NCCCR began with a period of staff training prior to the go-live date, followed by support and training during the go-live period. Providing training at both facilities was a major challenge due to the differing workflows. A modular training model consisting of web-based training (WBT), Cerner instructor led training (ILT) and workflow practice skill labs was implemented. In addition, the NI team developed brochures

and video tutorials which were made available through the HICT application. Along with the HICT team, the NI representatives conducted hands-on training sessions designed to familiarize nurses with the new devices, which also helped alleviate anxiety and calm the doubts of staff.

Nursing Informatics staff provided around-the-clock floor support for two weeks after the go-live date and implemented a NI hotline which offered remote support to nurses experiencing difficulties using the system.

The active participation of NI staff resulted in recognition for the Department, with Mr. Mohammed Elmoghazi, Informatics Nurse assigned to Heart Hospital for the implementation period, receiving recognition from the EDON at Heart Hospital, Ms. Linda Peters, during the International Nurse's Day celebrations held at that hospital. Ms. Peters stated, "While we appreciate every nurse for their dedication and commitment to providing the best possible patient care, this day is set aside to give more prominent recognition to

nurses who have taken extra time and effort working towards a goal and producing positive outcomes.”

Following CIS implementation, Nursing Informatics issued a survey to Heart Hospital and NCCCR staff as part of the Department’s ongoing effort to improve its services. The

survey revealed that most staff were satisfied with the level of support provided by the NI team during and after the go-live event. The success of the go-live events at HH and NCCCR has once again proven that the Nursing Informatics Department is poised to face any challenge and will leave no stone

untuned in its efforts to “advance (the) best use of clinical information to improve (the) healthcare system.” Our CIS success story is the result of the dynamic guidance and leadership of Dr. Wasmiya Dalhem, Executive Director of Nursing Informatics.

Smart Phones and the Future of Healthcare Research

Presented by: Mohamed Elmoghazi, Informatics Nurse



During the last decade the use of smart phones has grown rapidly, making it difficult to even imagine life without these devices. According to market research company e-Marketer, the number of active smart phones in the world is expected to exceed two billion by 2016. Smart phones have revolutionized many aspects of today’s world, including healthcare, with some arguing that the devices elevate the quality of healthcare research.

The process of conducting research involves many steps. Often the researcher encounters difficulties in engaging participants or experiences challenges in the frequency and rate of data collection (many times data collection is dependent on patients visiting the hospital). There may also be challenges associated with

communicating the results to participants after completion of the research. Using smart phones in healthcare research assists in eliminating many of these obstacles.

Recently two of the world’s largest smart phone makers, Google and Apple, announced that their research platforms, Google Fit and Apple ResearchKit, will allow researchers to create their own smart phone applications, known as apps, for healthcare research. For example, Apple has launched an app for patients with Parkinson’s disease to track their symptoms in real time and to then share this information with researchers. The app is allowing patients to engage with their caregivers and receive prompt feedback on their condition. Other apps are available for patients with asthma, breast cancer, diabetes and cardio-vascular diseases, with many having been developed by major research centers, including Stanford Medicine, Sage Bionetworks and the University of Rochester.

These platforms are transforming smart phones from communication devices into powerful diagnostic tools and have the potential to significantly improve healthcare research. The devices are also mitigating many of the limitations of research participation by better engaging patients; patients are able to easily ‘opt-in’ to any study they want to participate in. They are also resulting in increased data entries as patients/participants can easily enter data as and when required, instead of having to visit a hospital or clinic. Smart phones are also improving the reliability of data by setting limits on the range of data to be entered and they are increasingly being used to track and record participant activities as well as perform basic tests.

References:

- <http://www.kevinmd.com/blog/2015/03/apples-researchkit-problems-can-fixed.html>
- <http://www.ibtimes.com/google-takes-second-stab-health-data-apples-researchkit-takes-hold-1855172>
- <http://www.todaysiphone.com/2015/03/apple-announces-researchkit-medical-research/>
- <http://www.meddeviceonline.com/doc/apple-s-researchkit-aims-to-catalyze-medical-research-through-apps-0001>

Managing Your Personal Email Box Effectively

Presented by: Jimmy Angeles, Informatics Nurse



Managing email is an important part of daily work for many professionals. While email has been part of our daily life for many years, most people still find it challenging to manage their email account and often complain that email is one of their largest sources of distraction.

Microsoft Outlook has numerous basic functions designed to help organize your mailbox, with tools that do everything from arrange task lists to categorize the urgency of messages. Yet, many of us are still overwhelmed by the number of email messages we receive each day.

Folders are an effective way to manage your inbox and one quick tool that will help you manage your inbox is the creation of a folder that separates emails sent directly to you from those that you are copied on. This simple step will help you prioritize your time by allowing you to quickly see which emails have been sent directly to you, and likely require a response from you, as compared to those which may be sent to you only for information. To create a folder to help manage your inbox, follow the below simple steps and apply this 'rule':

1. Open Microsoft Outlook 2010.
2. Create a new folder by right-

clicking you Inbox and selecting New Folder. Name this folder **Inbox – CC**.

3. Click **Rules** in the Home tab and then **Create Rule**.
4. Click **Advanced Options**.
5. Tick **Where my name is in the CC box** and click Next.
6. Tick **moves it to the specified folder** and then in the Step 2 box below, click **Specified** and select **Inbox – CC** (the folder you have just created).
7. Click **Finish**.

Through these simple steps you have created a 'rule' that will distribute all new emails into a more manageable system. All emails that are directed to you will appear in your inbox, while all emails that you have been copied on will appear in the folder entitled Inbox – CC.

For more tips to help manage your email account, check out the following links.

References:

<http://www.dailyblogtips.com/10-tips-for-managing-email-effectively/>

<https://runbox.com/email-school/how-to-manage-your-inbox-and-more/>

<http://www.quepublishing.com/articles/article.aspx?p=2130298>

Reflection: A Head Nurse's View on Cerner Implementation at Women Hospital

Presented by: Ms. Sheela Paul, HN – WH East 3

*"Change is the only constant in life."
– Heraclitus, a Philosopher.*

I am proud and blessed to have been a part of HMC for the last

twenty-one years. During my career I've seen the implementation of world class facilities, attainment of prestigious accreditations and technological advancements, and

most recently I was fortunate to witness the implementation of CIS; this remarkable program is an important milestone in HMC's clinical practice.

Women's Hospital went live on 24 October 2014 and the occasion was marked by apprehension and excitement. Our hospital leadership team left no stone unturned in the process of implementing this change across the length and breadth of Women's Hospital. Moreover, the Nursing Informatics team worked tirelessly and provided timely guidance and inspiration to the nurses and midwives at Women's Hospital. They supported us all the way from training to the go-live event.

One of the main highlights of CIS is enhanced communication between physicians and nurses and midwives, lessening time spent in preparing patient files, ordering files from the Medical Records Department and reducing the number of medical errors. The biggest advantage I observed is that nurses and midwives can spend more quality time with their patients.

However, like any new system, CIS will require continuous improvements and adaptations. I am

confident that identified gaps can be filled with the mutual support of the team here at Women's Hospital, and with the coordination and support of Nursing Informatics. The advantages of this change heavily outweigh the disadvantages.

If I could offer one piece of advice to the staff at the next facility where CIS will be implemented, I would encourage them to be optimistic and to embrace the change with 'child-like enthusiasm' – and I would remind them to enjoy this part of the journey.

ZynxCare: Evidence-based Clinical Decision-making Support for Nurses and other Members of the Interdisciplinary Care Team

Presented by: Hussam Sabbah, Nursing Informatics Specialist

"A major challenge today for nurses is incorporating the best available evidence into the nurse's workflow and care processes" –ZynxCare website.

Regardless of the established fact that nursing care is a systematic and evidence-based practice, the application of knowledge generated through nursing research, nursing care theories and rules of practice has always been a challenge.

The plan of care integrates years of research-generated knowledge and proven practices into clear, condition-based instructions designed to provide patients with optimum levels of care for particular conditions.

With recent major developments in Electronic Medical Records (EMR) and Clinical Information Systems (CIS), plans of care have found their natural home and systematic

documentation is now just a few clicks away.

ZynxCare is an advanced evidence-based clinical decision support system designed exclusively for nurses and other members of the interdisciplinary care team and assists in the development of proper nursing care plans.

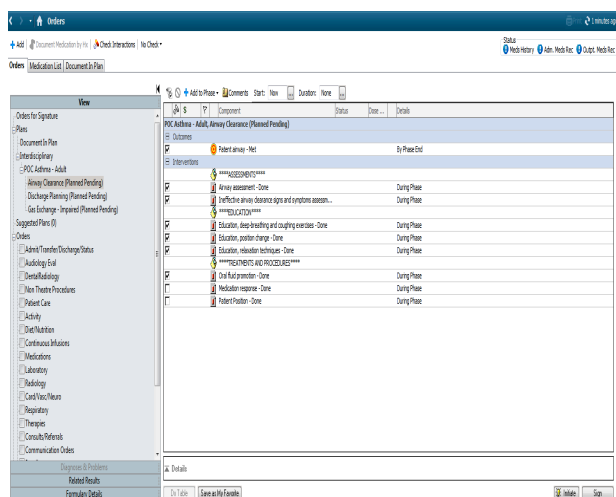
The knowledge contained in ZynxCare provides the basis for assessing, planning and evaluating the care of patients with the most common conditions managed by members of a particular interdisciplinary care team.

Nursing plan of care templates are designed to reduce care disparities, minimize errors and save staff time. Problem-based plans of care include interventions, goals and expected outcomes and link evidence and quality measures.

The use of ZynxCare has demonstrated measurable gains in key quality indicators. Additionally, it has proven to save time and improve the quality of care. The system has also provided measures to quantify and demonstrate improvements that comply with accrediting bodies and regulatory authorities, such as Joint Commission International (JCI) and Magnet®.

The Nursing Informatics Department first launched the ZynxCare project back in January 2014. The goal was to design, review and approve 300-plus plans of care that needed to be integrated with CIS. Currently 52 plans of care have been built, reviewed and integrated with CIS. The go-live of the POCs will be announced once the final testing phase concludes.

The use of ZynxCare plans of care is very simple. Through a few steps



Screen shot of ZynxCare plan

and clicks, nurses and midwives are able to access several care plans that address specific patient conditions and needs. ZynxCare is

part of the power plan functionality of CIS that has already been implemented at NCCCR as well as Al Khor, Women's, Heart, The Cuban and Al Wakra Hospitals.

We are confident that this project will have a very positive impact on the quality of care provided to our patients.

Reference:
<http://www.zynxhealth.com/Solutions/ZynxCare>

AccuVein Facilitates Rapid Access to Veins in Emergency Situations: Vein Visualization Technology Assists in Reducing the Frequency of Failed Attempts to Access a Vein

Presented by: Eyad Tubishat, Nursing Informatics Coordinator

AccuVein is a revolutionary tool that can help in decreasing the frequency of failed venipuncture attempts by providing the location of underlying veins. AccuVein stands apart from other vein-illuminating devices because it:

- Is small enough to fit in your hand and weighs only 10 ounces (280 grams).
- Is designed not to come into contact with the patient and therefore may not require sterilization between uses.
- Highlights vein location in real time.

HMC recently started using this device for vein viewing and today



the technology is available at Heart Hospital, NCCCR and Al Wakra Hospital and is allowing clinicians to verify vein locations more efficiently.

Although vein visualization technology can be very helpful in reducing the number of sticks needed to find a vein, its adoption as part of the standard of care has not been widespread. The Infusion Nurse Standards of Practice, which define and develop organizational infusion-based policies and procedures for use in medical facilities, stated in 2011 that "the nurse should consider using visualization technologies that aid in vein identification and selection."

The University of Florida's Shands Hospital conducted a study in April 2014 which showed a 45% decline in escalation calls following the deployment of AccuVein devices. Furthermore, 81% of clinicians

reported an improved ability to insert a cannula using AccuVein. Other studies have demonstrated the impact of vein visualization technology on patients' perception of a healthcare facility. In one study where 348 patients were asked to share their thoughts on vein visualization, the results showed

that 93% of participants stated they would give a higher satisfaction score if vein illumination technology was used.

More effective venipuncture procedures with less patient discomfort result in higher patient satisfaction, making it clear why

many facilities have chosen to incorporate AccuVein into their standard of care.

Reference:

<http://www.accuvein.com/vein-visualization-technology/>
<http://www.accuvein.com/evidence/>

Call for Contributions in Nursing Informatics Bulletin (NIB)

The Nursing Informatics Bulletin (NIB) is pleased to publish articles written by nurses and midwives at HMC. If you are interested in providing an article, which is related to the field of nursing informatics and its applications, please review the following guidelines for further information on our submission and review process:

1. All articles submitted should adhere to the NI Department's mission and vision.
2. The editorial team reserves the right to accept or reject any article submitted.
3. Articles should be no more than 450 words. The editorial team reserves the right to edit articles for length, clarity and compliance with NIB standards.
4. Articles should contain a clear and concise title and list the full name and job title of author(s).
5. A photo and brief biography of the author should be submitted with the article.
6. Write short sentences and provide one idea per paragraph.
7. Articles should be submitted in Word format and emailed to: nursinginformatics@hamad.qa stating 'NIB Contribution' in the subject line.
8. Final approval of articles will be given by the Executive Director of the Nursing Informatics Department.
9. Deadline for submissions for the next edition of the NIB is 29 October 2015. Successful contributors will be notified in December 2015.

Nursing Informatics Monthly Quiz

Enter for your chance to win a prize! Send your answers to nursinginformatics@hamad.qa before the end of September 2015.

When was the Nursing Informatics Department established?

☐ 2006 ☐ 2010 ☐ 2012

In the next edition of the Nursing Informatics Bulletin, read about:

- Nursing Informatics Model
- Nursing Informatics ICDL Preparatory Courses
- NI Hotline Experience Supporting CIS Go-live in HMC Hospitals
- Time Management: Strategies for cutting your to-do list in half