



إدارة معلوماتية التمريض Nursing Informatics Department



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Hamad Medical Corporation (HMC) introduces evidence based nursing Interdisciplinary Plan of Care (EBN IPOC) to prevent if not eliminates the patient acquired hospital events such as fall and pressure injury. This is a part of a wider Lighthouse project that will be evident in the Powerchart Millennium to enhance patient care quality and improve patient safety. By integrating this solution to the current electronic health record, we can streamline a process and standardize the interdisciplinary method with a timely prevention and appropriate management of these occurrences.

Nursing Informatics, as a contributor in achieving HMC strategic goals to improve patient care, provides a significant support in planning, testing, validating the project and training the nursing staff. These vital activities accelerate the process of e-health development within the corporation and accordingly enhance the standard of services provided to patients. The expertise and commitment of Nursing Informatics staff greatly influence in each and every innovation which stimulates the best practice prevention and outcomes.

One of the ways to ensure you take full advantage of the benefits of electronic health record is to further enrich your knowledge in every aspect of information and awareness. This edition offers you valuable ideas on innovative utilization of serious games for healthcare, understanding the difference between technology education and educational technology, how you can protect yourself from ransomware attack along with tips to improve your nursing documentation. We look forward in sharing your thoughts, ideas or any suggestion on topics you would like to address in the future editions or any further enhancement you would like to reflect in our NIB via

mursinginformatics@hamad.qa

# Dr. Wasmiya Dalhem

**Executive Director of Nursing Informatics** 

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The Nursing Informatics Bulletin (NIB) publishes articles written by nurses to support the readers in their clinical areas. The topic should be

related to nursing informatics and its application. These quidelines offer advice on writing and explain our submission and review process. 1. All articles submitted should adhere to the NI department mission and vision.

**INFORMATICS** mission and vision.

2. The editorial team reserves the right to accept or reject any article 6. Write short sentences and provide one idea per paragraph.

3. The article should be no more than 450 words in length. The editorial team reserves the right to edit articles for length, clarity, subject field. and compliance with NIB standards.

**4.** The article should have a title and list the full name and job position or title of the author(s).

5. A photo and brief biography should be submitted with

the article.

7. The article should be submitted in word format and emailed to nursinginformatics@hamad.qa stating "NIB Contribution" in the

**8.** Approval for the article to be included in the bulletin will be given by the Executive Director of the Nursing Informatics Department.

CALL FOR

**NURSING** 

**BULLETIN** 







# **Nursing Informatics**

# launches NID mobile apps

Nursing Informatics (NI) has adopted the mobile technology to leverage its benefits in improving communication and information dissemination among its staff. NI has formed a Smartphone Application Group (SPAG) to take on the challenge of developing the in-house application for Nursing Informatics. Divided into phases:

**Phase 1** - iOS Application completed on Dec 2016 and enhancement was done on Nov 2016.

Followed by **Phase 2** - Android Application was completed in June 2017.

Based on the successful development, the SPAG team plans to proceed with phase 3 in developing an application that aims to expand its target end-users to HMC nursing staff.

# **Qatar Metabolic Institute** ACC Outpatient Clinics

# Cerner Training for Nurses

As a part of the Cerner Millennium preparation for the opening of the National Obesity Treatment Center and HMC Tobacco Center, NI conducted a power Chart Ambulatory Solution Training course for nurses. The training consisted of hands-on learning, simulation activities and a demonstration to help nurses use Cerner Millennium confidently. The new center is located in Building 311 HBKMC and the go live is planned for 16 July 2017 with 11 clinics.



# Welcomes its First Patients

The Ambulatory Care Center (ACC) – welcomed its first patients of Podiatry Clinic on 7 of May, 2017. GI Clinic and Endoscopy procedures have also been relocated to the new facility, started on 18 of June 2017. During the CIS Go Live – the ACC Nursing Informatics' team, Ms. Noha Saleh, Informatics Coordinator and Mr. Rodson Damian Informatics Nurse actively supported ACC nurses - with electronic clinical documentation and other Cerner inquiries.



# **HGH NI team participated in**

# HGH International Nurses Day Celebrations

HGH NI team participated in the development of International Nurses Day held on 10<sup>th</sup> May and the recognition for nursing staff in this special day, Nursing Informatics team was recognized at this year's International Nurses Day celebration.





#### **HOW TO PRINT MULTIPLE EMAILS IN OUTLOOK**

- 1. In the main Outlook window, select the emails you want to save.
- 2. Choose File ... Print.
- **3.** In the Print Dialog that shows up, choose your options then click Ok.

# Winner of the NIB Quiz

Volume No. 6

We are pleased to announce that the winner of our NIB Quiz is: Miss Julie George of NCCCR. Congratulations!-

For all other readers – you can still be a winner. Read our NIB 7<sup>th</sup> edition for your chance to win.







# Women's Wellness and Research Center (WWRC)

Welcomes First outpatients

Women's Wellness and Research Center (WWRC) in Hamad Bin Khalifa Medical City (HBKMC) opened successfully for its first outpatient clinic, Urogynecology on 7 May 2017 followed by Oncology and Colposcopy Clinics on 21 May 2017, with a total of 2 clinics and 2 assessment rooms.

Nursing Informatics Team, led by Mr. Sherman Dumaguin, Nursing Informatics Coordinator, along with the Informatics Nurses: Ms. Jennifer Nepomuceno and Ms. Elizabeth Marfil, are extensively involved in the CIS preparation and ensuring that all nurses are supported during the go live. They proudly reported that the clinic operations are now running smoothly.





# **NI Educational Activities**

**ICDL Preparatory Course (Phase 1)** 

Course Content: Basic Concepts of IT, Windows 7, Word Processing and Spread Sheet

5 days

8.00am - 2.00pm

QCHP Category 1 (Live, face-to-face workshop)

Credit: 27.5 CPD hours

There are seven (7) batches conducted since January 2017 and a total of 86 nursing staff attended the course.



## **Dashboard and Chart Making in Excel Course**

Course Content: Develop Reports and Charts using Advance Microsoft Excel

2 days

8.00am - 2.00pm

QCHP Category 1 (Live, face-to-face workshop)

Credit: 10 CPD hours

There are 18 batches conducted since January 2017 and a total of 229 nursing staff who attended the course.

#### **Visual Basic Application (VBA) Programming in Excel Course**

A three-day course is conducted to Nursing Informatics staff with the aim of learning the event-driven programming language called Visual Basic and understands Excel Macro and its use. There is a total of 18 Nursing Informatics staff who attended the course which brought knowledge and hands-on training in the field of advanced MS Excel and close to Core IT Professional. A programming project was assigned in order to evaluate the learning opportunities of each attendee.

# **Upgraded features in Welch Allyn**

Ms. Christine from Mazaya Company presented the upgraded features in Welch Allyn vital signs monitor to NI team on 11<sup>th</sup> July 2017. New features include QEWS alert and measure etaCO2, Tympanic temperature and others.



# **Nursing Informatics developed New Policy**

Nursing Informatics department has developed new policy entitled "CLINICAL INFORMATION SYSTEM TRAINING FOR NEW NURSES" to ensure training on appropriate Clinical Information System (CIS) solution for new nurses.

The policy explains new hire training process which includes position mapping, Prerequisite to CIS training computer knowledge and skills evaluation and completion of WBTs (Web Based Training), Instructor-led training on specific CIS solution and CIS Competency validation. It is available in HMC

POLICY

Intranet (I Tawasol) > HMC Policies > Corporate Policies > Operation Manuals (OP 4037).

# **Nursing Informatics Calendar of Events**



#### ICDL Preparatory Course (Phase 1) (27 CPD points)

- 13 to 17 August 2017
- 24 to 31 August 2017

#### Dashboard and Chart Making in Excel Course (10 CPD points)

- 20 to 21 August 2017
- 22 to 23 August 2017

#### **NI Skills Fair Workshop**

- 17 August 2017
- WWRC Administration Go Live
- 13 August 2017

#### Oracle Time & Labour integration go live

· AKH, AWH, Mental health, RH,

# | SEPTEMBER | SINGH | NECHESON |

#### ICDL Preparatory Course (Phase 1)( 27 CPD points)

• 17 to 21 September 2017

#### Dashboard and Chart Making in Excel Course ( 10 CPD points)

- 10 to 11 September 2017
- 24 to 25 September 2017

# **Cerner New staff, Clairvia and Cerner Refresher Training** HGH

11 to 27 September 2017

**NCCCR** 

4 September 2017

WH

12, 13, 14 September 2017

#### **Strategic Engagement Group Meeting**

September 2017

#### NI committees of the facilities award:

• Deadline for Video and Poster submission - 27 September 2017



#### ICDL Preparatory Course (Phase 1)( 27 CPD points)

- 8 to 12 October 2017
- · 22 to 26 October 2017

#### Dashboard and Chart Making in Excel Course ( 10 CPD points)

- 1 to 2 October 2017
- 15 to 16 October 2017
- 29 to 30 October 2017

#### NI committees of the facilities award

Finalize the participants entry–1<sup>st</sup> October 2017

# RESEARCH (

# **Big Data and the Future of Nursing**

By Abdulqadir J. Nashwan, Nurse Research Scientist, Cancer Clinical Trials Unit, National Center for Cancer Care & Research

#### What's- big data?

Big data is a term for data sets that are so large or complex that traditional data processing application software is inadequate. It has most frequently been described as the {4Vs -} Volume, Variety, Velocity, and Veracity.

#### Volume

The volume of data being created today is growing exponentially with the increase in EHRs, medical device and monitoring data, genomic data and so on.

#### Variety

The variety of data elements requires standardization and normalization in order for any meaningful comparisons or integration to occur.

#### Velocity

Our ability to use data is challenged by the rapid speed at which data is being created (velocity) and the need for analysis to occur in near to real time.

#### Veracity

The veracity of data is an important factor, in terms of the need for data integrity, accuracy, and trustworthiness.

Is it a priority for nurses to understand and utilize big data? Understanding big data is a priority for nurse leaders as we aim to provide the best possible care to patients. Working in healthcare organizations with complex information technology and networks with multiple clinical, financial, and claims systems that must be integrated, set the stage for the big data challenge. The ability to integrate disparate data and analyze it to better understand outcomes is no small task. Having access to the right information at the right time to

support clinical decisions is essential in planning and providing the right care for patients. All clinicians need real-time information to make timely, critical, clinical decisions. The use of big data technologies can help nurses and other healthcare providers improve care quality, optimize outcomes, and reduce the cost of healthcare.

#### Examples of big data in nursing

- Clinical data
- Insurance and cost data
- Patient behavior and sentiment data
- Research data

#### **Barriers and Challenges**

- 1. Multiplicity of standard nursing terminologies (e.g., nursing diagnosis following NANDA)
- 2. Multiplicity of researchbased assessment scales and instruments (e.g. fall risk assessment tool)
- 3. Lack a universal, agreed upon, the standard definition of the discrete data (e.g., which patient is at risk?)
- 4. Investing more in gathering data than analyzing it!

#### Recommendations

Three main recommendations made by HIMSS Nursing Informatics community:

# 1. Promote Standards and Interoperability:

Nurses should promote the use of standardized and accepted terminologies that address the documentation needs of the entire care team regardless of care setting. Also, minimize use of free text documentation.

#### 2. Advance Quality eMeasures:

Paper measure sets must be evaluated for appropriateness, and expectations set for which data should be collected,



how the data is collected and the required terminologies to be used.

# 3. Leverage Nursing Informatics Experts:

Healthcare organizations should utilize Nurse Informaticists who will provide valuable insight into concept representation, design, implementation, and optimization of health IT to support evidence-based practice, research, and education. Nurse Informaticists should have formal informatics training, education, and certification.

#### Take-Home Message

Understanding the principles, barriers, challenges, and opportunities for big data will help us more rapidly ensure that sharable and comparable nursing information is included in EHRs, and that all aspects of the nursing profession are knowledgeable about the potential of big data to transform practice, research, and education.

#### Reference

- 1. https://en.wikipedia.org/wiki/Big\_data
- 2. Gaffney, B. & Huckabee, M. (2014). Part 1: What is Big Data? Source: HIMSS Data and Analytics Task Force, July 2014, 8. Retrieved from http://www.himss.org/ResourceLibrary/genResourceFAQ.aspx?ltemNumber=30730.
- 3. Roundtable, HIMSS CNO-CNIO Vendor. (2015) «Guiding principles for big data in nursing: Using big data to improve the quality of care and outcomes.» Retrieved from http://www.himss.org/files/FileDownloads/HIMSS\_Nursing\_Big\_Data\_Group\_Principles.pdf
- 4. Healthcare Information and Management Systems Society. Guiding Principles for Big Data in Nursing. Chicago, IL: Healthcare Information and Management Systems Society; in press.

  5. Sensmeier, J., 2015. Big data and the future of nursing knowledge. Nursing management, 4)46), pp. 27, 22



# **Innovative Utilization of Serious Games for Healthcare**



By Aamna Hamid; Nursing Informatics Coordinator

Games and simulative environments have the ability to engage human beings in activities wherein they become focused without outside distractions, and their physical and mental capabilities can be stretched, extended and developed. Serious Games' is a relatively recent concept which originated from the use of video games technology for non-entertainment professional purposes.

Serious games for health provide an opportunity to support learning and health-related behavior change using messages and experiences in an engaging and entertaining format. They are called "serious games" because, while entertaining, they are developed with specific learning and/or behavior change goals.

Recent studies have shown some of the benefits of serious games and its ability for building positive therapeutic relationships. Nevertheless, future research on the benefits of serious game use in therapy is needed.

In this respect, a study conducted about the impact of a serious game for health on chronic disease self-management reported the preliminary efficacy of a serious game for health to enhance blood pressure control among community dwelling adults with hypertension.

A nonprobability sample of 116 community adults with HTN participated in this non-blinded, randomized controlled trial. Participants of the study were randomly assigned to two groups: an intervention arm that con-

sisted of four exposures to a serious game for health known as eSMART-HD; or an attentional control arm that compromised of four exposures to screen-based HTN education.

The primary outcome measure for this trial was blood pressure reduction over a four-month observational period. In that study, baseline characteristics and blood pressure measurements were similar between participants in each study arm.

The study reported no significant between-group difference in blood pressure reduction over time. However, there were significant within-group reductions in systolic and diastolic blood pressures across time among favoring participants exposed to eSMART-HD.

This study has established the preliminary efficacy of eSMART-HD that can be easily administered to community dwelling adults and facilitate clinically significant reductions in systolic and diastolic blood pressures.

Furthermore, several serious games and applications for health have been developed and reported in the literature, hereby is a summary of two of games that contributed and assisted patients with congestive heart disease and neurological development disabilities. CHF tele-management systems home Automated Tele-management (HAT) system for chronic disease management in the patient home.

The system helps patients with congestive heart failure (CHF) monitor

their symptoms, weight changes, and quality of life while teaching the patient, the characteristics of their disease. The system runs on the Nintendo Wii console.

An internet connection is required.
Neurological development presents a
3D game that can analyze the behavior and promote certain social skills
(conversation, negotiation, etc.) of
people with neurological development
disabilities. The treatment has been
planned at three levels.

Each level treats a characteristic related to socialization, integration, and the expression of feelings. In conclusion, the transformation from entertainment games to serious games and the use of it in healthcare setting can have a significant impact on patient disease control and education.

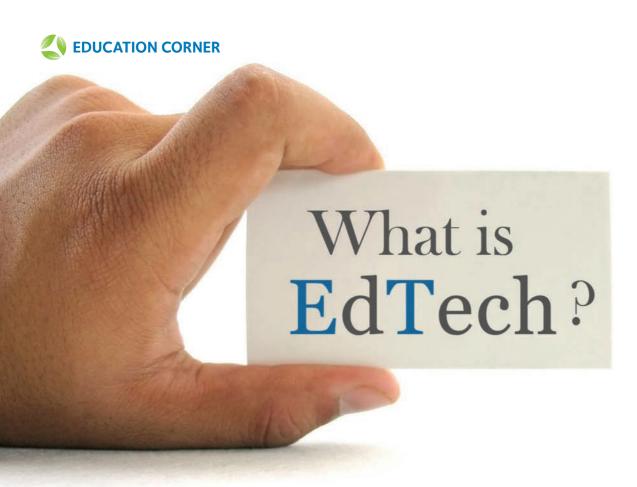
#### References

Bartolome NA, Zorrilla AM, Zapirain BG (2010) A serious game to improve human relationships in patients with neuro-psychological disorders. International IEEE consumer electronics societys games innovations conference (ICE-GIC), pp ,5–1 23–21 Dec. 2010

Finkelstein J, Wood J, Cha E, Orlov A, Dennison C (2010) Feasibility of congestive heart failure telemanagement using a wii-based telecare platform. Annual international conference of the IEEE engineering in medicine and biology society (EMBC), pp 31,2214–2211 Aug.–4 Sept. 2010

Hickman JR., R. L., clochesy, J. M., pinto, M. D., burant, C., pignatiello, G., & hickman, R. J. (2015). Impact of a serious game for health on chronic disease self-management: preliminary efficacy among community dwelling adults with hypertension. Journal Of Health & Human Services Administration, 275–253 ,(2)38.

Wattanasoontorn V., Hernández R.J.G., Sbert M. (2014) Serious Games for e-Health Care. In: Cai Y., Goei S. (eds) Simulations, Serious Games and Their Applications. Gaming Media and Social Effects. Springer, Singapore



## The Contrast between

# **Technology Education and Educational Technology**



By Oscar Andres Reyes: Informatics Nurse

Technology and education have evolved over the years and so the individual's literacy and ability to learn new ideas and concepts.

In line with this, there are two terms particularly Technology Education and Educational Technology that are often misunderstood as they seem similar but actually different.

Educational Technology, also implied as Technology of Education, deals with tunity for students to learn about the the use of computer and information systems in order to acquire knowledge. The use of technology as a tool to enrich the teaching and learning process is the main focus of this perception. This is constantly evolving depending on the current technological advancements and transformations. It is not only limited to the use of computers but also includes the use

of internet and other forms of new communication that strengthen human competencies. Today, education through internet usage is privileged to all who wants to learn and share their knowledge by way of information technology. Also, learning is made easier both for teachers and students in schools.

Educational Technology is a study of technology which provides an opporprocesses and knowledge related to technology that is needed to solve problems and extend human potential - as defined by International Technology Education Association (ITEA).

It is involved with developing technological tools for educational purposes. It is also concerned with the wide range of technology which incorporates areas in design, problem-solving, technological systems, resources and other topics dealing with human innovation.

In summary, technology and education in the future will play a more demanding role as it affects us as an individual and the community as a whole. The study of technology that provides technological literacy through technology education will make a difference. The two concepts may be the same but as we go deep into details, we fully recognize the significance and difference of the two in their own usefulness and effectiveness.

http://www.differencebetween.com/difference-between-technology-of-education-and-vs-technology-in-education/

Dugger, W., & Naik, N. (2001). Clarifying misconceptions between technology education and educational technology. The Technology Teacher, 61(1), 31-35

https://www.iteea.org/51801.aspx



By Eyad Tubishat; Nursing Informatics Coordinator

WannaCry is also known as WannaCrypt, WanaCryptOr 2.0 and Wanna Decryptor. The program is a piece of malware in the form of ransomware that targets Microsoft Windows operating systems by encrypting data and demanding ransom payments in the Bitcoin cryptocurrency. On Friday, 12 May 2017, WannaCry was launched as a large cyber-attack that infected approximately a quarter of a million computers in over 150 countries around the world in just one week.

WannaCry demanded ransom payments by the cryptocurrency, Bitcoin, in 28 languages, indicating this malware was targeting a very large part of the global population. It has been described as one of the largest cyber-attacks in history. Similar to most ransomware outbreaks, the attack spread by users clicking on a loaded hyperlink solicited by phishing emails or drive-by advertisement. Once it has infected a Windows Operating System, it uses a Server Message Block (SMB) exploit that was discovered by the US National Security Agency to spread through a local network, targeting systems that have not had the latest security patches applied.

#### Who is at risk?

WannaCry ransomware is targeting three versions of Windows in particular: Windows 8 / Windows XP / Windows Server 2003. While things may change and users of other Windows versions should

be safe, now may be a great time to open the Windows Update Center and ensure that all of your security updates have been installed.

#### What should I do if I'm at risk?

Your first line of defense is always common sense. This goes for WannaCry and any other malware floating around out there. If you get an email with an attachment from someone you don't know, do not download or open that attachment. If you get an attachment from someone you do know but it looks odd or sketchy, don't download or open it. Once you've reminded yourself how to compute responsibly, it's time to ensure you've downloaded and installed the latest security patches available for Windows 8, Windows XP, or Windows Server 2003.

#### Can hackers really make money doing this?

Oh, yes. Ransomware is big business. Ransoms can range from a few

hundred to thousands of dollars and are usually paid in the «virtual» currency Bitcoin, which is nearly impossible to trace. In some cases, the longer you wait to pay, the higher the ransom becomes.

According to cyber security firm Symantec>s Internet Security Threat Report released in April, the number of new versions of ransomware uncovered during 2016 more than tripled to 101, while the number of ransomware infections the company spotted jumped 36 percent. Verizon's recently released 2017 Data Breach Investigations Report notes that ransomware accounted for 72 percent of the malware incidents involving the healthcare industry last year.

#### References:

https://en.wikipedia.org/wiki/WannaCry\_ ransomware\_attack https://www.trendmicro.com/vinfo/us/security/ definition/ransomware

http://bgr.com/16/05/2017/wannacry-ransomwarehow-to-stop-wanna-cry-windows-patch/



# MS. ENAAM SALEH AL-NAEMI

Director of Nursing for Hamad General Hospital's Emergency Department

Ms. Enaam Saleh Al-Naemi, started as a Staff Nurse in 2003 before moving to Charge Nurse and Head Nurse roles. In 2012, she was appointed Director of Nursing at HGH's Emergency Department. Ms. Al-Naemi completed a Master's of Science degree in Leadership and Management for Healthcare Practice at the University of Salford, UK in 2014. She completed her Bachelor's Degree in Nursing at Qatar University in 2002 and has also been certified Critical Care Nursing by Deakin University, Australia. In addition to this, she has also completed a Health Emergencies in Large Populations (H.E.L.P) course with Qatar Crescent. Ms. Al-Naemi, works with her team of nurses to improve quality, safety, and services within the Emergency Department. Her ideas, thoughts and workflow knowledge help tailor CIS to the needs of the largest Emergency Department in Qatar.



Is this the first time you've used a **Clinical Information System (CIS)** in your nursing practice?

Yes, it is my first experience with Cerner Millennium.

Tell me about your experience working with CIS/Cerner application compared to using paper documentation?

From a nursing management perspective, Cerner has sped up patient care and made things more organized.

It provides us with useful information by tracking the status of the department and patient flow.

We found it easy to use and it lessens the risk of missing important patient information, due to pre-set mandatory fields on the electronic form. The system also provides us with very legible data compared to the paper-based documents.

What challenges or problem did you encounter when using the CIS **Cerner Application?** 

Initially, dealing with a huge volume

of patients and nursing staff meant that it took a long time to get accustomed to the new electronic documentation system.

With the support of the NI team, however, the situation improved very quickly. Within two and a half months, they trained over 430

nurses. Initially, it was difficult to understand how the system related to our nursing workflow but this was all resolved with proper training.

a regular feature in the NIB. Do you think the CIS application in your current practice has helped improve the quality of care you provide to your patients?

The CIS application has helped me track my area day in and out, getting the latest updates on patient care and their condition.

This has helped reduce the duration of my clinical rounds because it became very easy to discuss a patient's condition with the head nurses while reviewing the electronic chart of the

Cerner has helped in developing a more standardized and organized style of documentation among nursing staff, thereby creating a drastic

Corporation (HMC)

successfully implemented the new CIS Černer Millennium

platform across all its facilities. In

about the effectivity of the new

launch the User Corner as

reduction in documentation and medication errors.

> What suggestions can you make to improve the current CIS svstem?

I am satisfied with the

current CIS application and I hope that there will be more opportunities to enhance the system. In the future, I would like to see enhanced reporting tools become available that would help us create reliable and accurate reports. I would also like to see improvements to the speed of the system especially during peak hours and a reduction in unnecessary system downtime.



إدارة معلوماتية التمريض Nursing Informatics Department

# 5th Annual Nursing **Informatics Workshop**

# A Decade of Excellence

Thursday,7 December 2017 **Marriott Marquis Doha** 





# **Tips for a Smooth Barcode Medication Administration System**



By Priya B Samraj; Informatics Nurse

Many facilities across Hamad Medical Corporation have already adopted the Barcode Medication Administration (BCMA) due to its benefits which include safe medication admin- 4. **Encounter:** Choose the correct istration practices and reduction of medication errors.

However, though it is seemingly simple to use, problems with the BCMA technology from a faulty scanner to a wrong barcode on the medication may 5. Caps Lock Button: Make sure create additional frustration for the already busy bedside nurses.

Understanding and troubleshooting these glitches may improve compliance with the Barcode Medication Administration System.

Here are some tips to consider that will lead to a smooth and successful BCMA.

- 1. Training: Nurses should feel comfortable using the BCMA system before using it with patients. Knowing the BCMA steps may not be enough when performing it at a patient's bedside. Nurses therefore should practice using it.
- **2. Connections:** Use the appropriate scanner designed for the device. Make sure the barcode scanner is connected snugly to the port of the work station.
- **3. Barcode:** Ensure the barcodes in the medication as well as the wrist 8. Develop and communicate a

band are intact and not damaged in a way that could prevent scanning.

- encounter from the patient search window when printing the wrist band to have the correct encounter and current location displayed on the wristband
- the Caps Lock Button is "off" while scanning the patient's wrist band as well as the medications. If the Caps Lock button is kept "on" the scanner will not read the barcode when scanned and the medication will not be identified.
- 6. Barcode Scanner: If you feel that the barcode scanner might have a problem. Test it by scanning the barcode on a notepad or Word document. If it does not read the barcode then the scanner might need calibration. Contact your facility's NI team to calibrate the scanner.
- 7. Discrepancies in the dispensing **drug:** Make sure the drug dispensed and the order made is compatible with the route, form, etc. For example, the RN is scanning syrup Amlodipine 10 mg but the order was Tab. Amlodipine. This discrepancy will create a scanning error.

#### BCMA issue reporting process.

No matter how much you prepare for BCMA, there will always be reportable problems. The hospital administration should develop a simple way for the end-users to report issues and make it clear what information is needed to research the problem. Also, make sure the reporting mechanism is feasible for a busy nurse; you may need to have multiple ways of communication.

9. Maintain Compliance. Once the BCMA is implemented, make sure you have appropriate steps in place to monitor progress and enforce compliance. Reports are the best way to keep track of your compliance percentage. Nurses must be kept aware of the BCMA compliance rate for their unit and should be involved in the corrective action plan if any.

Follow the steps above to avoid unnecessary issues when using the barcode system for medication administration. There is a lot more to consider than what is mentioned here, but hopefully, these few tips will help you to use BCMA successfully.

http://www.healthcareitnews.com/news/ bar-code-tech-and-emar-significantly-reduce-med-

http://blog.galenhealthcare.com/2013/05/15/ barcode-medication-administration-10-tips-for-a-smooth-implementation/ https://www.ihs.gov/bcma/includes/themes/newihstheme/display\_objects/documents/resources/ BCMA PharmacistTroublshooting.pdf

#### Clairvia Integration Oracle Time and Labor Presentation in AWH



**NCCCR** Oncology Solution Training



#### **HGH-Nursing informatics team** participation in Nurses 10<sup>th</sup> May 2017





NI Strategic **Engagement Group Meeting** 



#### Women's Wellness and Research Center (WWRC) Welcomes Outpatients





#### TRY AND WIN A PRIZE

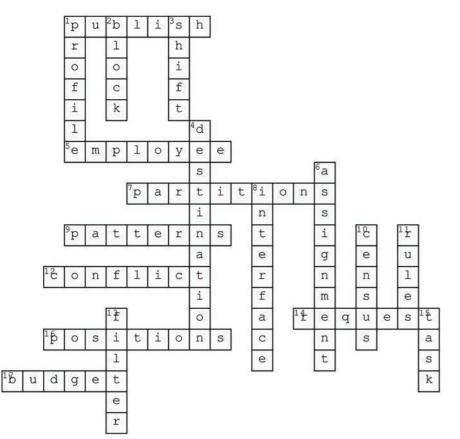
- 1. Which was the first version of Microsoft Windows to support Plug and Play?
- a) Windows 3.0 **b)** Windows 95 c) Windows XP **d)** Windows 3.11
- 2. Which famous computer was used by British codebreakers to read encrypted German messages during World War II?
- a) EDVAC (Electronic Discrete b) Manchester Mark I

Storage Automatic Calculator)

- Variable Automatic Center)
- c) EDSAC (Electronic Delay **d)** Colossus
- 3. What are the necessary elements in barcode scanning medication administration?
- **a)** Patient's ID Wristband with **b)** Patient's ID Sticker with correct encounter

  - correct encounter
- c) Barcoded medication
- d) Correct medication order
- e) A. C. D
- **f)** A, B, D
- **g)** All of the above

# CROSSWORD 7TH EDITION SOLUTION

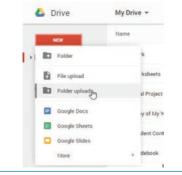


#### SCAN THIS BARCODE TO PARTICIPATE IN NIB OUIZ



#### **HOW TO EMAIL LARGE VIDEO FILES**

Many email clients place limits on the size of attachments you can send via email. This can prevent you from sending large video files. Fortunately, some popular email clients have made changes to their services that allow users to attach and send large files that exceed the standard size limitations. To email large video files, you can use Google Drive in Gmail, SkyDrive in Windows mail or Dropbox in Yahoo mail.

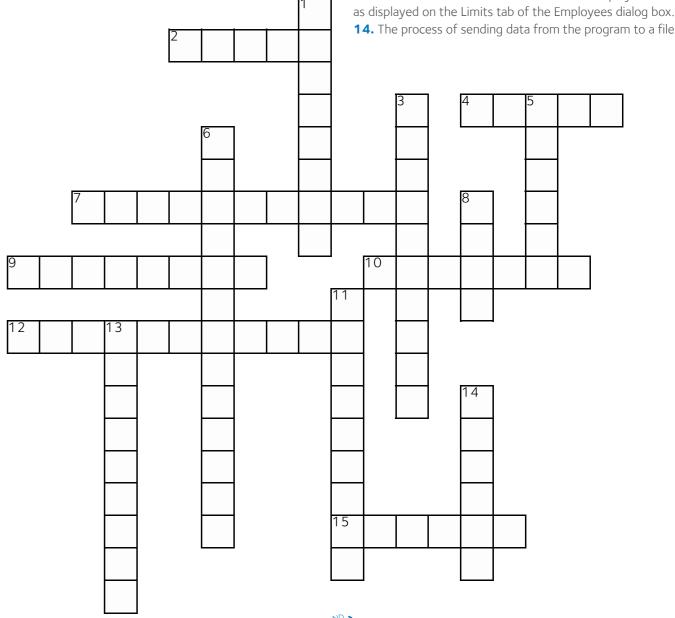


#### COMPLETE THE CROSSWORD BELOW

#### Across

- 2. An unstaffed task in a schedule.
- **4.** To prevent from scheduling as a task.
- **7.** Assignment or task-related information used to automate the scheduling process.
- **9.** Method used to assign employees to a task by ranking.
- **10.** The process of sharing staff lists between two or more
- **12.** A task that, along with the origin, is staffed by rules.
- **15.** The colors used for fill types as displayed in the Schedule Editor and set in the Editor Font Setup dialog box.

- 1. The value that displays on the splash screen when CVM
- 3. Whether the slot column displays in the Editor. It is active when choosing Slot Column from the View menu.
- **5.** A task which, when staffed on a certain day in the AutoStaffing period.
- **6.** 2 words Defined 24-hour staffing day.
- **8.** The intersection of a row (typically tasks) and a column (typically days of the week) on a grid.
- **11.** A sub-program that allows the program to communicate.
- 13. The maximum number of tasks that an employee can work,
- **14.** The process of sending data from the program to a file.



#### HOW TO UPDATE GOOGLE CHROME TO THE LATEST VERSION

- 1. A quick shortcut to the above process is to just type: chrome://chrome/ into the URL
- 2. This will take you to the Chrome About page. If an update is needed, just click Relaunch.



# **Project Valerie**

is the world first automated triple display laptop

- This revolutionary laptop provides easy access to three eye—popping 4k displays.
- The 12k multi-display gives an expansive workspace and the flexibility to tackle any task.
- Three displays can be utilized as one to span creative projects across a large screen.
- Each display can independently run multiple applications simultaneously.







# **Facial Recognition**

Face-detecting systems in China now authorize payments, provide access to facilities, and track down criminals. Will other countries follow?

# **Vocal biomarkers**

# the future of diagnostic medicine

Not long ago, scientists discovered vocal features in every way imperceptible to humans. They also found that the identification of such distinctive characteristics might have a huge impact on setting up a diagnosis. Researchers labeled these features "vocal biomarkers". These can serve as a diagnostic tool for your physician

to indicate signs of illnesses ranging from stress and depression to cardio-vascular diseases. An earlier diagnosis could essentially be the difference between life and death. The Beyond Health Research platform is analyzing such biomarkers. An Israeli company, Beyond Verbal is launching a platform solely committed to analyzing emo-

tions from vocal intonations. Vocal biomarkers will gain ground in 2017. Instead of focusing only on biomarkers measured in blood or genomic markers analyzed by geneticists, vocal biomarkers which are easy to detect, record and analyze will be used more and more for detecting and preventing diseases.





#### Contact us:

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Enhancing outcomes for patients and their caregivers:

# **Mortara**

# Mortara Instrument, Inc. Announces FDA Clearance to Market Its Multi-Modality DICOM Review Toolset for Resting ECG, Stress and Holter

Cardio Confirm, the latest innovation from a leading U.S. medical device manufacturer

MILWAUKEE – Mortara Instrument, Inc. (Mortara), a Milwaukee-based designer, developer and manufacturer of diagnostic cardiology (ECG) and patient monitoring technologies and devices, announced that the newest release of its multi-modality DI-COM® review toolset for resting ECG, cardiac stress exercise and Holter has received 510(k) clearance from the U.S. Food and Drug Administration

Mortara's commitment to standards based integration is the guiding principle behind the innovative, multi-modality, DICOM-based solution Cardio-Confirm. This new offering consists of embeddable software for Electronic Health Records (EHR) and Picture Archiving and Communication Systems (PACS) to add diagnostic cardiology workflow capabilities.

(FDA).

CardioConfirm can readily expand the capabilities within an EHR or PACS offering to incorporate workflow traditionally enabled by standalone ECG Management solutions. The toolset is built upon over thirty years experience in diagnostic ECG workflow and incorporates Mortara's VERITAS™ serial comparison algorithm for automatic comparison of serial

resting ECGs. Mortara DICOM devices and VERITAS algorithm solutions are widely used by hospitals, clinics and physician offices in a variety of applications and care settings.

CardioConfirm now helps to embed the outputs of those devices directly into EHRs and PACS solutions to enable ever more highly integrated clinical information solutions.

"The use of the DICOM ECG standard allows the PACS/EHR to receive and present raw ECG data seconds after it has been acquired," said Joe Austin, Chief Sales Officer of Mortara. "The newly-acquired.

ECG, stress exercise or Holter study, along with prior encounters, critical test results, interpretations and observations, are all now included within the PACS/EHR. This consolidation of



patient health information provides the physician with a more comprehensive view of the patient's medical history, setting the stage for improved clinical decision-making."

CardioConfirm is now broadly available for license in both Standard and Enterprise versions. An easy to integrate, well defined application program interface (API) with full documentation and sample code is available to interested PACS and EHR solution providers.



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World class organization that sets the standard of excellence Providing and delivering the highest quality and the full fledged healthcare equipment services to meet every need.

















