



Kingdom of Bahrain
Ministry of Health

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A word to say

Implementing the MHIS Strategy

The implementation of the Kingdom of Bahrain national health-care strategy aims to modernize the health services and change how healthcare services are provided to patients with a major focus on proper planning to meet the public need and at the same time making major improvement to quality.

To do so all Health staff will face challenges that should not be underestimated, healthcare staff will need information and Information Technology tools to enable them to do their jobs more efficiently and effectively.

In order to share information between various sectors of health-care, the flow of information between primary care and secondary care will need to flow seamlessly. This will enable doctors, nurses, allied health staff, and administration staff to have the right patient information at the right time.

The Ministry will soon embark on the implementation of the Ministry of Health Information Systems Project (MHIS). The MHIS project aims to provide good quality information and empower the health-care staff by providing access to vital information. This project will take several years to complete and will require commitment from all of us to see it as a reality and I am confident that with team work we will be able to make it happen.



H.E. Dr. Khalil Bin Ebrahim Hassan
Minister of Health

Health Information Technology Steering Committee

Dr. Ahmed Abdulla Ahmed

Back in 1997 the Ministry of Health has recognized the importance of establishing a Governmental high level steering committee that will be responsible for steering the Health Information Technology plans of the Ministry. As an immediate action, His Excellency the former Minister of Health issued decree number 5/1997 to establish such a vital committee which was named the Health Information Technology Steering Committee (HITS). The formed committee comprised of members from Ministry of Health, Ministry of Finance and National Economy, and the Central



Statistics Organization. HITS main objective was to steer the development and implementation of a Health Information Strategy that will lead to improve efficiency in healthcare services.

During the last five years HITS had major achievements that involved preparation of National Healthcare Plan for the Y2K problem, development of a Y2K contingency plan, development of an Information Technology strategy, and initiating of a comprehensive IT Strategy Implementation project (MHIS) that is planned to start by early next year. HITS members have had major contribution to Health Information strategy and they

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Undersecretary of Health, HITS Chairman

Mr. Aref Khamis,
AUA, MOFNE

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Mr. Ali Alnoor,
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Mr. Fawaz Matter,
Acting Director Projects, MOFNE

Mr. Mohammed ALAmer,
Director of Computer Services, CSO

Mr. Ahmed ALHujairy,
Director, HID, MoH. HITS Secretary

HITS members

have a very challenging responsibility with MHIS Implementation project.

2002 IT Health Conference

By Ebrahim Al-Nawakda*

The 2002 IT Health Conference (Organized by Cerner Co-operation - USA) brought together health professionals representing 10 countries and USA to explore Health Care Transformed.



The Conference was held in Kansas City, USA, October 19 - 27, 2002, with the main theme of the conference "Rely on IT, Gain from IT and Believe in IT".

The opinions, achievements and experiences of more than 2,200 participants sparked collaborative dialog and support to apply new knowledge within their health organizations worldwide.

Throughout this IT Health Conference, participants shared how their organiza-



tions have taken steps to transform health care. These organizations rely on health care IT solution, to streamline clinical and financial processes, and to improve the quality of their care. They gain from a system that helps eliminate waste of resources and funds, and they believe in IT that is designed to grow with them.

Main sessions of the conference throughout the nine days, to mention but few, were:

- Access Management
- E-Health
- Health Information Management
- Medical Management and Reporting
- Supply Chain Management
- System Management/ Information Technology

Due to this wide coverage area, more than 300 Presentations, 50 pre and post conference workshops and more than 100 exhibitors were held over the nine days.

This year's conference offered many opportunities to uncover insight that directly addressed health organization needs. From industry ailments such as workforce shortage and patient safety to specific solutions like computerized physician order entry and evidence-based knowledge, this conference delivered the most current approaches to creating dramatic improvements in health care organizations.

Indeed, this conference has been an excellent opportunity to share knowledge and experience with different health and IT professionals from all over the world. Furthermore, it was an opportunity to discuss the Bahrain's Ministry Of Health "IT Strategy" and find how Health organizations around the globe used IT to Transform Health care provision, use it as a tool for change and improve health care.

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CONGRATULATIONS

On behalf of the Health Information Directorate management and staff we would like to congratulate H.E. Dr. Khalil Bin Ebrahim Hassan



for his appointment by Royal decree as the Minister of Health. We are confident that with H. E. expertise the Ministry will continue in its efforts for providing quality healthcare services. On this occasion we wish him every success in executing his national duty and responsibility for the advancement of the country, and HID team is committed in supporting the Ministry plans and objectives.

We would like also to congratulate H.E. Dr. Faisal Al-Mousawi, Chairman of Shoura Council (former Minister of Health) and express our deep thanks for his continuous support and for his significant role in the development of the delivery of healthcare service in the Kingdom.

The importance of Information Security

By Ebrahim Adam*



With the number of stories of successful hacking and stories of computer viruses

published daily in newspapers, there is no doubt that some actions need to be taken to protect the critical information. As we depend more and more on information in all aspects of life, to treat patients or finance or approve a project, the need to protect this information increases more and more.

To protect the information, there has to be protective measures along with security technologies. These technologies include

Be our guest...!

By Fakhriya Hashim*

The Health Information Directorate has the pleasure in this edition to welcome Dr. Awatif Sharaf, Chief of Medical Staff at Directorate of Health Centers, who will brief us on the process of the data entry of the Health Centers Statistics that went through a number of various stages since it started in 1986.



Dr. Awatif Sharaf

From 1986 until August 1993 all Health Centers used to send their messengers to Bahrain Health Information Center - BHIC (former name of Health Information Directorate - HID) on a daily basis with all the collected patient information for that particular day. Data Entry Clerks at BHIC used to enter those data using IBM Mainframe. The collected data at that period was minimal, and other data were collected by Health Centers.

During 1993 - 1996 new data collection sheets were designed by Health Centers, and adopted by BHIC to serve the purpose of publishing the Primary Health Care Annual Report. These sheets were to be completed by all Health Centers, and sent to BHIC on a monthly basis via heads of sections at Directorate of Health Centers (DHC). Even though, collecting one set of data for each section was a major positive point, the process was very lengthy due to the long chain of communication.

From 1996 to 1997, an Excel Application on Disk was designed by HID for the data entry and it used to be sent to HID at the

anti virus software, firewalls and intrusion detection system. These technologies are useless if no security policy is in place.

The security policy requires support and enforcement from higher management and understanding and execution from the users. Without users' awareness of the importance of security, any policy is ineffective and has no mean.

A simple example of how users can help in strengthen the security is the passwords.

end of each month. Also reports were generated at the end of the year using Statistical Analysis Software (SAS). The advantage here was that the cycle was shorter. However there was a fear that virus could easily corrupt the data.

Due to the need to speed publishing the Health Statistics Annual Report, a Network connection was implemented in H.C. using MDIS to record all the Health Centers statistics on a monthly basis. This was the result of a decision taken at the end of 1997 by the Assistant Under-Secretary for Training and Planning, Dr. Ahmed A. Ahmed to form a Task Force team. Beside that, as a major component of the said report is derived from Health Centers data, Primary Care personnel were proportionally represented in the task force and in the two sub-teams which were created to enable more entries to be processed at a shorter time :-
1) Validation team to handle the quality of the entered data.
2) Monitoring team to handle the follow up.

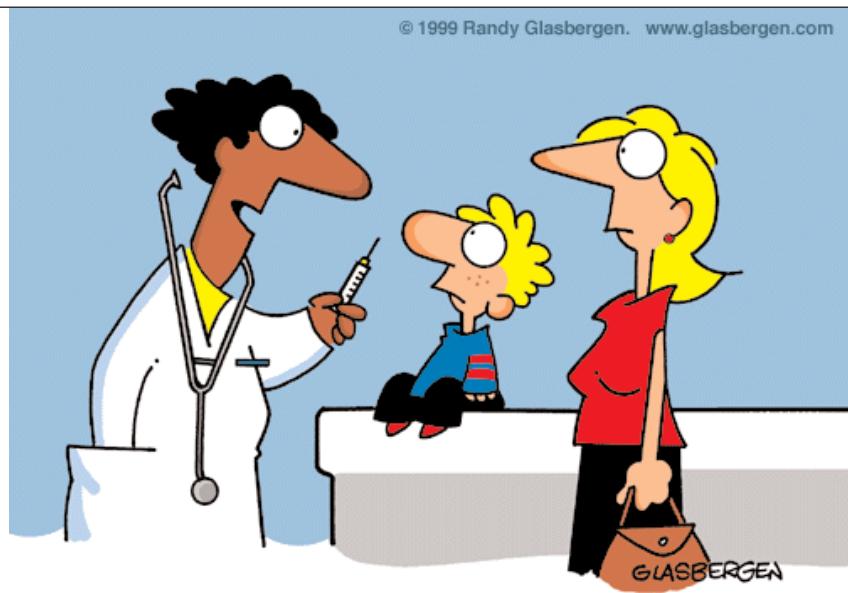
Finally, since 1997 until today the improvement is continues. Also getting an accurate data is not an easy task, and it could only be achieved by joint efforts of both Directorates (HID & DHC) with facility to provide the access to Primary Health Care Personnel and Heads of Sections. Also to justify all these efforts it is essential to continuously work on converting data into information and then to knowledge.

*Fakhriya: Administrative Analyst

Users are required not to disclose their passwords. Users should not tell their password to any one including their managers or IT people. They should change their password periodically and choose password that are hard to guess by others.

To conclude, we say for any IT security to be successful there has to be a security policy with security technologies and users' awareness of the importance of IT security.

*Ebrahim: Senior Computer Software Specialist



**"Don't think of it as getting a flu shot.
Think of it as installing virus protection software."**



Healthy Update: is a weekly e-newsletter of Health World Online (www.healthy.net), this e. newsletter provides the latest news and resources from the world of healthy living, alternative medicine and Self-Managed Care. To view HTML version and Healthy Update archives, please visit the following site: www.healthyupdate.com

KEEP IN MIND

THE DISTANCE IS
NOTHING;
IT IS ONLY THE
FIRST STEP THAT
IS DIFFICULT.

A chance to win!!!!

Which number goes in the empty box:

| | | |
|----|----|--|
| 2 | 5 | |
| 29 | 34 | |

The solution is available online at <http://intranet.health.gov.bh/hid/hid.html#challenge>

Send the answer no later than 25/12/2002 addressed to HID Editorial as shown below, either by post or email, and get the chance to win a prize.



HID Socials

HID Social Committee organized Iftar buffet in one of the hotels for HID staff and their families.



STUDENT IMMUNISATION REGISTRATION SYSTEM

By B. Radburn and Sharifa S. Haider*

Each year, Public Health Directorate (PHD), along with the community nurses at the Health Centres, undertake a program of immunising students in Bahrain against disease. There are 64 Government and 23 Private schools in Bahrain targeted for immunisation. For each school, the following annual immunisations are required:

| School Level | Age Group | Immunisation Type |
|------------------|-----------|--|
| 1st Intermediate | 12+ | MMR (Measles/Mumps/Rubella) |
| 2nd Intermediate | 13+ | Tetanus/Diphtheria |
| 3rd Intermediate | 14+ | Hepatitis B Hepatitis B (first follow-up) Hepatitis B (second follow-up) |

At each school level, throughout the kingdom, there are approximately 14,000 students to be immunised, resulting in a total of 70,000 immunisations annually. Currently, there is no means of formally recording whether a student has received the appropriate vaccination, and therefore no easy way of following up those that do not.

Two Extended Program on Immunisation (EPI) teams, each consisting of four nurses, have therefore been set up within PHD to undertake all School immunisations. They will have available to them a newly developed Student Immunisation Registration System (SIRS).



At the beginning of each school year, a program of immunisations will be sent to the Ministry of Education. Each program will indicate the school, the date that an EPI team will visit the School and the type of immunisation to be done by the team. The Ministry of Education will then distribute the programs to the appropriate Schools.

On the day of the visit, the School will provide for the team a list of students to be vaccinated, accompanied by a consent form for each student, signed by a parent.



Using the lists provided by the School, the team can also determine which students have not been immunised. The school will be notified of the "defaulters" and they will be given a card that will show his CPR, his School and the type of immunisation that he missed. The student should then visit his Health Centre as soon as possible and present the card; the community nurse will carry out the immunisation and record it in SIRS using a PC connected to HID via the normal Health Centre link.

An interview with the EPI members has taken place considering their opinion:

The team members said that MOH used to immunise students against diseases for all intermediate (public and private) schools all over Bahrain according to the table shown above. But since the information wasn't accurately registered about each student, MOH was able to obtain a numerical statistics only that means having total number of immunised and non-immunised students. And there was no way to know the student's identity.

From that point, and from MOH desirous to immunise all students in the age of 12-14 years with the right immunisation and at the right time, and after that to get the right statistics & the distinct charts, SIRS idea has been brought up.

2 hours of training on the system was given to EPI members, and after a week of using the system they said it is really a user-friendly system although they are still slow in entering data because of their unfamiliarity with computers. But still we are so happy using the system, one of the members said, we can now find all students information, and to have full information of the defaulters to be immunised at a later time at the health centers to be sure that all students are immunised. We ended our interview with the nurses by a recommendation from them for more reports and charts in SIRS stage 2.