



## Towards Informed Health Care

Organizations around the globe have put Information Technology as one of their main strategic goals, this is more so with the Health Industry. Accurate, timely, and reliable Information is, indeed, essential for any decision making process, and in the Health care business this can be a life saver. Physicians can not isolate themselves from advancement in medical fields, which is only a "Click" away. Information is available through integrated systems not only within the boundaries of the Ministry but internationally, through the World Wide Web. Terms as Telemedicine, e-Health, Business Intelligence, Knowledge Management are no more buzz word that are used in the Information Technology field, but are tools which enable better means to facilitate an effective and an efficient management of such an important Healthcare Service Ministry.

The Ministry has been working in the past few years with important government bodies such as Ministry of Finance and National Economy (MoFNE) and the Central Informatics Organization (CIO) and, of course, with all Business areas within the Ministry in developing the Information and Communication Strategy (ICT). We have succeeded together in defining what I believe a clear vision for the future, that is ;

**"To provide the right information to the right people at the right time that will facilitate improvements to MoH Staff and Services to produce the best health results at reasonable cost."**

Now, with the support of all, we will ensure that we can move forward with implementing this strategy. We have clear goals in front of us, such as improving the Health care provision for all, cost containment, introducing Health Insurance and making the Kingdom a Center of Excellence for Health care services in the region. Challenges lie ahead of us, but I trust that with the capabilities of our Human Resources and the tools provided by the Information Technology it will be essential to make this possible. Through staff training, proper Change Management, Process Re-Engineering where required, we will be able to implement this Strategy effectively.

We need to ensure that we move to electronic patient records where access to secure, critical Information is needed. The ministry will work hand-in-hand with government initiative such as the e-Government, Smart Card, Human Resources (Horizon), e-Investor project, Finance Management Information System (FMIS) projects etc. to achieve the government goals and objective.

The Health Information Directorate (HID) has a major responsibility to work with internal, local, regional and international health bodies to ensure that requirements are addressed and best international practices are implemented. With all this we trust that we can improve the way health services are provided to all the citizen of the Kingdom.



H.E. Dr. Nada Haffadh  
Minister of Health

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# INTERNET Launching

By: Maban mansoori

Under the patronage of the Minister of Health H.E. Dr. Nada Haffadh, the Ministry of Health held its Web Site launching ceremony at the Gulf Hotel on 11th of May 2004. The attendees included directors and senior officials at the ministry as well as guests from other organizations.

Mr. Ahmed Al Hujairy, Director of Health Information Directorate, gave a short speech to the audience at the beginning of the ceremony in which he welcomed them and explained that the aim of the new website is to launch a new look and some new features like displaying patients medical appointments and booking appointments for Limited Private Practice at Salmaniya Medical Complex. He said that this site will be part of Bahrain's e-government preparations and is going to take us a few steps into the new tech era. This web site will act as a live link between the people and ministry's officials.

Then, Ms. Heyam Hazeem (Project Manager) conducted a short demo on the web site explaining its objectives, features and services which includes:

1. Displaying patients Medical Appointments at the ministry's hospitals and health centers.
2. Booking appointments for Limited Private practice at Salmaniya Medical Complex
3. Primary health care services (working hours of Health Centers, Guidelines for its services ...etc)
4. Hospitals (the services in Ministry of Health hospitals like Salmaniya Medical Complex, Psychiatric Hospital, Geriatric Hospital and the Maternity Hospital)
5. Public Health (Immunizations, Environmental Health, Birth & Death Registration...etc)



- |                           |                       |
|---------------------------|-----------------------|
| 6. Emergency Services     | 7. Latest Health News |
| 8. Tenders                | 9. Health statistics  |
| 10. Ministry Publications | 11. Researches        |
| 12. Health Legislations   | 13. Online Forms      |

and many other subjects that will be published on the web site very soon.

Ms. Heyam encouraged everybody to visit the web site [www.health.gov.bh](http://www.health.gov.bh) and to give their feedback for enhancing the services.

H.E. Minister then launched the web site and invited the citizens to visit it and have an overview of its services. Finally, H.E. the minister thanked all the staff that participated in the success of this web site specially Mr. Ahmed Al Hujairy for his direction and guidance on this project and all project members and other participant directorates.

To visit the website, please go to the following link: [www.moh.gov.bh](http://www.moh.gov.bh)

Maban: Computer System Analyst

## FutureIT 2004

By: Hussain Saeed

Health Information Directorate (HID) represented Ministry of Health in the FutureIT 2004 Conference & Exhibition from 9th~11th May, 2003. A paper about the Ministry of Health IT startegy were presented in the confrence by Mr. Ebrahim Al Nawakdah, and a stand been locat-ed in the exhibition area.

The stand was presented in new look and displayed with King Hamad e-Health Govern orates Project (KHare) posters. Two video clips were illustrated using Virtual Reality Glasses. The two clips talked about the future IT strategies and plans for Ministry of Health.

During the exhibition days, several events and activities have been accomplished.

- Under the patronage of H.E Dr. Nada Haffad, the second versions of Ministry of Health internet web site was launched.
- Free publications were distributed
- Free giveaways were distributed among stand visitors.
- Free preliminary health tests were done for each visitor to the stand.

The number of stand visitors exceeded hundred visitors per day, which made the stand the most busiest stand in the exhibition.

Most of visitors thank Ministry of Health for its valuable services and they especially were amazed of the products and services quality presented by HID.



Hussain: Computer System Analyst

## Congratulations



Dr. Fawzi Amen  
Assistant Undersecretary for Training and Planning



Dr. AbdulHai Al Awadi  
Assistant Undersecretary for Hospitals



Mr. Ebrahim Shehabi  
Assistant Undersecretary for Administrative and Financial Affairs

On behalf of the Health Information Directorate (HID) management and staff, we would like to congratulate Dr. Fawzi Amen, Dr. AbdulHai Al Awadi and Mr. Ebrahim Shehab for their appointment by Royal decree as Assistant Undersecretary for Training and Planning, Assistant Undersecretary for Hospitals, Assistant Undersecretary for Administrative and Financial Affairs respectively.

The HID management and staff would like to congratulate the newly appointed Assistance Undersecretaries and wish them all the best in the future.

## HEALTH STATISTICS 2003

**By: Elham Al-Baharna**

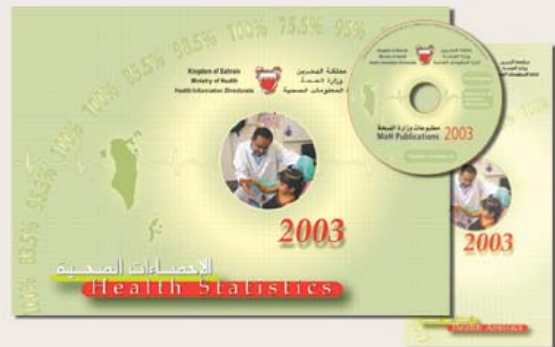
The Ministry of Health devotes a special attention for updating health statistics on annual basis because it realizes very well the importance of availability of accurate and updated data which is necessary for decision makers and program managers to develop their plans and policies.

The Health Information Directorate at the Ministry of Health has released the 23rd edition of the Health Statistics Report - 2003, which includes statistics about financial and human resources, primary and secondary care and private hospitals. The major changes in this edition are the implementation of the International Classification of Diseases (10th Revision) for the morbidity and mortality data, and a comprehensive change was made in the Bahrain Defence Force Hospital chapter in terms of contents and layout. Also, a new chapter is added to the report to cover the Bahrain Specialist Hospital statistics.

The report includes major health indicators which reflect the developed health status in the Kingdom, such as, the percentage coverage of health services is 100%, the coverage of safe water in the home is 100%, life expectancy rate birth 73.8, the infant mortality rate is 7.3 per 1000 live births, crude death rate 3.1 per 1000 population, under five years mortality rate is 9.5 per 1000 live births. Furthermore, the immunization coverage continued to improve, poliomyelitis reached 97.3%, DPT 97.3%, Measles Mumps Rubella (MMR) 99.5%.

The updating of health indicators is one of the main priorities of the World Health Organization, as it assists the organization in evaluating the health system performance for each country. Therefore, continuous efforts are made on holding official meetings and workshops for the member countries in order to introduce any new indicators and related modifications. This includes, highlighting the correct means of collecting and implementing these indicators.

The 2003 edition includes a CD copy that is attached to the report, also the report is available on the Ministry of Health Website [www.moh.gov.bh](http://www.moh.gov.bh) for easy electronic access to the updated health statistics.



For those who are interested to get their own copy, contact the following address:

Health information Directorate  
Ministry of Health  
Tel: (+973) 17289823,  
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Elham: Senior Administrator

# EVIDENCE-BASED HEALTHCARE

By: Elham Al-Baharna

Decisions about groups of patients or populations are made by combining three factors:

- 1.evidence;
- 2.values;
- 3.resources



At present, many healthcare decisions are based principally on values and resources-opinion-based decision making; little attention has been given or is paid to evidence derived from research-the scientific factor. This will change: as the pressure on resources increases, decisions will have to be made explicitly and publicly; those who take decisions will need to be able to produce and describe the evidence on which each decision was based. Even in cases for which evidence is difficult to find or poor in quality, the decision maker must search for it, appraise and present it, even if the decision taken may ultimately be dominated by values and resources. Thus, as the pressure on resources increases, there will be a transition from opinion-based decision making to evidence-based decision making.

In the 21st century, the healthcare decision maker, that is anyone who makes decisions about groups of patients or populations, will have to practice evidence-based decision making. Every decision will have to be based on a systematic appraisal of the best evidence available.

In the past, healthcare managers have tended to focus on cost and quality, that is, with 'doing things right', and to leave 'doing the right things' to other forces and chance. The situation can no longer continue. Everyone involved in decision making must have the skills to enable them to make decisions about 'doing the right things'. All chief executives should be able to discriminate between a good and a bad systematic review; directors of finance should be able to find and appraise studies on health service cost-effectiveness; any medical director should be able to determine whether a randomized controlled trial in a specialty other than their own is biased. These are the management skills necessary for the provision of healthcare in the 21st century.

## The growing Need for Evidence-Based Healthcare

The need and the demand for healthcare are increasing. In almost every country, the rate of growth of both need and demand for healthcare is faster than the rate of increase in resources available for providing it. There are four main reasons for this:

- 1.Population ageing: population ageing is the single most important factor increasing the need for healthcare. As the number of older people increases, so does the need for healthcare. In addition, the interaction of an ageing population and rising patient expectations is significant.
- 2.New technology and knowledge: new technologies will continue to be developed by industry and research workers within health services and related disciplines.
- 3.Patient expectations: patient expectations of healthcare are rising, reflecting societal changes in attitude towards the provision of goods and services.
- 4.Professional expectations: professional expectations and attitudes are influenced by patient expectations. Professional expectations are influenced by developments in technology in that any new developments serve as a stimulus to increase expectations. An important managerial challenge for the future will be to help professionals be more critical in their appraisal of new technology and to change the paradigm of healthcare such that a large proportion of the interventions offered to the population are those that have been shown the performance of good-quality research to be effective.

\* Source:Evidence-based HealthCare 'How to make Health Policy and Management Decisions' by J.A.Gray.

Elham: Senior Administrator

# STANDARDS IN HEALTHCARE

By: Amal Al-arrayed



In the healthcare industry, the word standards are frequently heard. There are different types of standards. Some define quality of patient care and competent care givers while other standards provide for communication between computer systems.

Computer communication standards, often identified as messaging standards are easily understood in the following example: The reason that all light bulbs of a specific size made by any company fit into the same socket is that the threads on the light bulb meet a specific standard.

Messaging standards allow any computer system from any company to communicate. As the world moves toward paperless computerized information systems, software also must communicate. In healthcare, communication between all information systems is an absolute necessity for safe quality patient care.

The healthcare standards world is a specialized one of standard development organizations, those who use standards to develop new equipment or software, government agencies, professional associations and care providers.

\* Source: Health Situation and Trend Assessment World Health Organization Geneva, September 1995

Amal: Senior Technical Writer

# A TOOL FOR FUTURE DEVELOPMENT

By: Mohammed Al-Shehabe

In this issue we are pleased to invite our guest Ms. Layla Murad the Registrar for Nursing Profession at the Office of Licensure & Registration to give us a brief information about the Licensure and Registration system (LRS) at the Ministry of Health.

Ms Murad recalls that before the year 1992, the whole process of registration in Bahrain used to be carried out manually by registering details of Licensees in bulky registers containing basic information's, the tracing of which used to be time consuming and inadequate in terms of vital data about the registrants.

In April of 1992 and in collaboration with the HID (BHIC at the time) Ms. Cheiko Sakamoto, a WHO short Term Consultant on Information Technology was invited to visit Bahrain to evaluate the process of Licensure and Registration in order to develop an automated system for licensing and registering health professions in the country.

In June of the same year the first stage of LRS was initiated by entering 3000 records of nurses and midwives following a comprehensive registration system for nursing workforce in Bahrain was designed by the WHO STC in collaboration with HID.

In 1995 Ms. Sakamoto revisited Bahrain after being sponsored by WHO in order to evaluate the progress of the LRS system and to expand its scope to include entry of details of physicians and dentists, as well as other allied health professionals beside nurses, such as Physiotherapists, Optometrists, Dental hygienists etc.

In June of 2001, the system of licensure and registration was ready for entering details of all doctors and allied health professionals in Bahrain.

Despite numerous difficulties experienced by the licensure and registration office, there has been a tremendous progress in the development of a comprehensive registration system including a database which contains information on all health human resource in the Kingdom of Bahrain.

At this point, Ms. Murad has emphasized that in accordance with the law governing the practice of Physicians, Dentists and Allied Health Professionals in Bahrain, no health care provider identified in these laws is authorized to practice his/her profession within the government health care facilities or the private sector, unless he or she is licensed for practice by the Ministry of Health.

The future objectives of licensure and registration system are the followings:

1. Establish a registration system of all health institutions in Bahrain (Hospitals, clinics and other health facilities)
2. Provide facility for online registration and licensure
3. Use the licensure and registration system as a tool for strategic health care planning and human resource development.
4. Provide the public an access to information about the qualified health professionals who are licensed for practice in the Kingdom of Bahrain through Ministry of Health Web Site.

Finally, Ms. Murad added that Bahrain is the first country in the region to establish a system for Licensure and Registration, as a result the WHO Eastern Mediterranean Region has chosen Bahrain to be the regional database for nursing information system.

In terms of its functionality, the LRS comprises of the following processes:

1. Issuing of new application and supporting documents
2. Tracking of new application and its progress
3. Generation of list of completed files for licensure committee's assessment
4. Registration of applicants approved by the Committee for practice
5. Issue of Annual license on receipt of result of exam/evaluation
6. Renewal of expired licenses
7. Processing of withdrawn licenses
8. Generation of statistical reports

Mohamed: Programmer

الحلقة البلدانية حول تعزيز نظم المعلومات الصحية والمسح الصحي العالمي في دول مجلس التعاون

كتبت: أمل العريض

انطلاقاً من مبدأ التنمية البشرية لتعزيز ومواصلة العمل الموحد لدول مجلس التعاون. فقد شارك كل من الدكتور أحمد عمران، السيد عبد الحميد فتحي والسيدة أمل العريض ممثلون عن وزارة الصحة والدكتور قاسم الشبول من جامعة الخليج والسيدة هدى الشروقي من الجهاز المركزي للمعلومات في الحلقة البلدانية حول تعزيز نظم المعلومات الصحية والمسح الصحي العالمي في دول مجلس التعاون والتي تستضيفها سلطنة عمان ممثلة بوزارة الصحة وينظمها المكتب الإقليمي لمنظمة الصحة العالمية لشرق المتوسط بالتعاون مع المكتب التنفيذي لمجلس وزراء الصحة بدول مجلس التعاون بحضور ممثل منظمة الصحة بالسلطنة وعدد من المشاركين من دول المنطقة في الفترة من 15 لغاية 17 يونيو 2004م.

تتمثل الأهداف الرئيسية لحلقة العمل في ما يلي:

- 1) تطوير نظم المعلومات الإحصائية والتركيز على تفعيل اللامركزية وتحسين التبليغ عن المراضة والوفيات والاستفادة من تقنيات المعلومات لهذا الغرض.
- 2) دعم وظيفة الرصد والتقويم في نظم المعلومات الصحية، بما في ذلك متابعة الأهداف التنموية للألفية الثالثة.
- 3) لإعداد لإنجاز المسح الصحي العالمي (الأسري) بعد مراجعة محتواه والاستفادة من الدروس المستخلصة من التجارب السابقة.

وفد خرجت حلقة العمل البلدانية بعدة توصيات خاصة بنظم المعلومات الصحية وأخرى خاصة بالمسح الصحي العالمي والتي من شأنها الارتقاء بالمعلومة الصحية كما قد تم اتفاق دول الأعضاء على تنفيذ المسح في دول المجلس عامي 2004 و 2005.

أمل: مؤثقة برمجيات أول

# HEALTH MESSAGING SERVICES (HMS)

By: Maban Mansoori

Short messaging services (SMS) is a web-based tool that facilitates the communication easily with customers of any organization. It offers the ability to send and receive text messages between mobile telephones over cellular networks. One of the most recent developments in this area is the emergence of multimedia messaging service (MMS). Unlike SMS, MMS allows mobile phone users to enhance their messages by incorporating sound, images and other rich content.

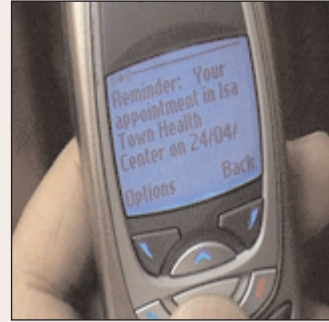
Ministry of Health (MoH) has initiated Health Messaging Services Project (HMS) to utilize SMS to send short messages to patients/staff of Ministry of Health. This service will enable MoH to easily broadcast SMS messages to SMS capable devices of its patients/staff.

With HMS the patients/staff of MoH will be able to receive SMS messages on their mobile for certain services such as:

1. Outpatient and Radiology Appointments.
2. Calling doctors/nurses for emergency.
3. Informing patients about the readiness of their lab results.
4. Informing patients/staff of new services launched on MoH website.
5. Looking for Blood donation.
6. Informing mothers of their child vaccinations.

7. Informing patients of latest vaccinations available in Health Centers.
8. and others.

The HMS has many benefits to the patients/staff and the Ministry. It will improve the services of MoH provided to patients, and will ease the communication between patients/staff and Ministry of Health.



Maban: Computer System Analyst

## Application Development Unit

Ms. Heyam Hazeem was appointed as Head of Application Development Unit in Health Information Directorate. Ms. Hazeem joined HID on 12/09/1995 as a Systems Analyst. Recently, Ms. Hazeem successfully completed her Diploma in Healthcare Management with an honor in association with the Royal College of Surgeons.

Ms Hazeem has led several important projects at the Ministry of Health such as Ministry of Health Intranet and Business Intelligence Projects.

All hid employees wishes Ms Hezeem all the best and success in her new position.



Ms. Heyam Hazeem

## من مناسبات شهر أكتوبر

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## FAREWELL PARTY AVIS PINCOOK

HID held a farewell party for Ms Avis Pincook, who worked at the directorate as an Advisor since July 2000. Aside to HID staff, the party was attended by other MoH officials. Mr. Ahmed Al Hujairi, Director of HID, gave a short speech about her valuable contributions to HID. He thanked her on behalf of all staff and wished her good luck.



## حفل تكريم المساهمين في تطوير نظم المعلومات الصحية

كتب: عهد أصبعي

تحت رعاية وزير الصحة السابق سعادة الدكتور خليل حسن ، أقامت إدارة المعلومات الصحية حفل تكريم المساهمين في تطوير نظم المعلومات الصحية لعام 2003، وذلك يوم الأربعاء 13 مارس 2004 في "قاعة دائرة المعارف" بكلية العلوم الصحية. وتم خلال الحفل توزيع شهادات تقديرية وجوائز على جميع المكرمين من موظفين وإدارات و وزارات. وقد بلغ إجمالي عدد المكرمين 40 مكرم

بدأ الحفل بكلمة ترحيبية من السيد إبراهيم النواخذة - رئيس وحدة المساندة الفنية والتي شكر فيها جميع من ساهموا وبشكل فعال في دعم نظم المعلومات الصحية، وتقدمت بعد ذلك، السيدة منال أحمد - محلل قاعدة بيانات أول في إدارة المعلومات الصحية بكلمة شكر أنابت فيها جميع المكرمين، حيث أشادت بأهمية هذا التكريم لتحفيز الموظفين نحو مزيد من العطاء والتميز.

وتم خلال الحفل عرض شريط فيديو حول أهم إنجازات الإدارة في مجال توظيف تكنولوجيا المعلومات في المجال الصحي خلال العام 2003.

وقام الوزير بعد ذلك بتوزيع الشهادات على المكرمين من العاملين في الإدارة ، بالإضافة إلى المساهمين في تطوير نظم المعلومات الصحية من داخل و خارج وزارة الصحة.

وفي ختام الحفل قام موظفي الإدارة بتكريم كل من السيد أحمد الحجيري-مدير الادارة والسيد إبراهيم النواخذة - رئيس وحدة المساندة الفنية تقديرا لجودهم ودعمهم المستمر.

عهد: محلل نظم حاسوب



عهد أصبعي - عريف الحفل



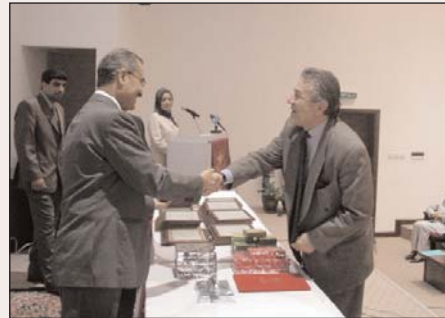
جانب من الحضور



حسين جاسم  
من مكرمي الإدارة



عبد الجليل الماحوزي - إدارة السجلات  
أحد مكرمي وزارة الصحة



ممتاز فوق العادة - وزارة الدولة  
أحد المكرمين من خارج الوزارة



موظفي الإدارة يكرمونه  
إبراهيم النواخذة



منال أحمد  
موظف العام - 2003



صورة جماعية للمكرمين



### What is CREATIVITY ?

- The result of using the imagination rather than routine skills
- The capacity which each of us has to imagine new and useful solutions to problems
- A drive to see things other than they seem
- Lateral thinking (Edward de Bono) : " When a low probability line of thought leads to an effective idea, there is a 'Eureka' moment and at once the low-probability approach acquires the highest probability"

Source: Creative manager's pocketbook

## Social Activity

The Health Information Directorate (HID) of the Ministry of Health held its annual family day at Gulf Air Club on Friday, August the 27th. The event was sponsored by Gulf Air, AIG, Al Amal, Computer World, High Tech plus others. Many HID families and guests attended the event organized by the Social Committee. The event had plenty of games for all ages. At the end of the day, prizes were distributed among winners. The prizes included air tickets to Cairo and Dubai, printers, scanners, CD writers, dinner and gift vouchers.



### KEEP IN MIND

THE HISTORY OF PROGRESS IS PEOPLE CHALLENGING ASSUMPTIONS.

ORVILLE & WILBUR WRIGHT

