Kingdom of Bahrain
Ministry of Health

HID INFO line

A word to say

Health Policy Network

Ministry of Health, Kingdom of Bahrain, realizes the importance of implementing policies, and has directed that the National Health Plan will be formulated, controlled, communicated and evaluated through a networked system of policies that will promote quality and consistency in the practice guidelines and performance expectations for service providers. This Health Policy Network (HPN) will be administrated by a new office to be established at the Undersecretary level.

Policy is often designed as " *a plan of action, a course or method of action that has been deliberately chosen and that guides or influences future decisions" or "a principle, plan, or course of action, as pursued by a government, organization or individual*".

Policy may be developed, and applied at many levels and may range from formal legislation and regulations to informal rules by which organizations function. Government policy related to health is developed at international, national, regional/district/local/community levels by individuals, officials and professional groups across a number of sectors, including health, education, social services, recreation, finance, justices, labor, transportation and environment. Policies developed and applied in all of these sectors impact, directly or indirectly, upon the health of the population.

The ideal policy is developed based on accurate, up-to-date information about the issue or situation, knowledge of the effectiveness of various possible intervention and initiatives and expertise in assessing the possible impacts and interactions. For policy planning and development process to be truly effective, policy need to be based on knowledge and information gleaned from the evidence base provided by research and evolution and interpreted by knowledgeable people with expertise in the field.

At the Ministry, we realize the importance of documenting all these Policies in a manner that it should be distributed online, hence, accessible to all Staff and all Residents of the Kingdom as its will be distributed on line. The Ministry Intranet and Internet Web sites would play a pivotal role in achieving such a goal. Therefore, the Health Information Directorate has been instructed to take all the necessary steps to achieve this.

Dr. Aziz Hamza
Undersecretary
Ministry of Health

Health statistics and Informatics

By: Amal Al Arrayed*

Health statistics and Health Informatics play a major role in today's world, especially with the great changes that are currently occurring all over the world in telecommunications and information technology.

The concept of the Health Statistical Information has enforced the need of building an integrated system that collects data from every part in the Ministry of Health and all other relevant health institutions, and then transforms it into meaningful and measurable information with administrative, management, financial, process and strategic views. In summary, the statistical or non-statistical information can be considered as a meaningful message transmitted from the source to the user through a process of recording, classification, organization or interpretation of the data in the same context as collection. A statistical indicator is the common venue in the process of transforming statistical data into statistical information. When information is assimilated by its user, it generates knowledge which helps in the decision-making process.

The construction of an indicator is a process with various degrees of complexity, ranging from a direct count (for example of the number of new cases of malaria in a week) to the calculation of proportions, rates, ratios, and more sophisticated indices (for example life expectancy at birth). Accordingly, the quality of an indicator strongly depends on the quality of its components (frequency of cases, size of populations at risk etc.) The quality of the data information, recollection, and registration systems is equally important. More specifically, the quality and usefulness of an indicator are defined by its validity (effectively measures what it attempts to measure) and reliability (repeated measurements in similar conditions produce the same results). Additional attributes to ensure quality are its specificity (measures only the phenomena that it is meant to measure), sensitivity (has the capacity to measure changes in the phenomena that it is meant to measure), measurability (is based on available or easy to obtain data), policy-relevance (is capable of providing clear responses to key policy issues) and cost-effectiveness (results justify the investment in time and other resources). Indicators must also be easy to use and interpret by analysts, as well as understandable by information users, such as managers and decision-makers. [detailed about Health Indicators will be covered in next issues]

Today, the Ministry of Health in the Kingdom of Bahrain has devoted a special attention to National Health Statistics and Health Informatics, which should continue to be among the top priorities of health development policies at country level.

*Amal: Senior Technical Writer

القطاع الصحي يدخل الحكومة الإلكترونية أوائل 2003

إعداد: خلود العسكري*

أكد السيد محمد مبارك النعيمي مدير إدارة نظم العمليات الصحية بمؤسسة حمد الطبية أن القطاع الصحي سينضم إلى خدمات مشروع الحكومة الإلكترونية خلال الربع الأول من عام 2003 وسيشمل الجانب الصحي في المشروع عمليات التسجيل الصحي للمواطنين والمقيمين وبعض العمليات الصحية التي تعنى بها وزارات أخرى في الدولة لتخليص بعض المعاملات عن طريق الكمبيوتر أي التي يتم تبادلها مع الجهات الرسمية لضمان عدم تكرار تسجيل نفس المعلومة مع سهولة استرجاعها مرة أخرى.

السيد محمد مبارك النعيمي
مدير إدارة نظم العمليات الصحية
مؤسسة حمد الطبية

وأوضح النعيمي أنه تم البدء في تنفيذ المرحلة الأولى من المشروعِ الذي يتكلف 10 ملايين ريال لربط المرافق الطبية والعلاجية والإدارية في المستشفيات والمراكز الصحية عن طريق شبكة كمبيوتر موحدة لمنتسبي القطاع الصحيّ، وستغطي المرحلة الأولى التي ينتظر الانتهاء منها بداية العام المقبل كل من أنظمة تسجيل المراجعين، السجلات الطبية، الدخول ومراجعة العيادات الخارجية، حسابات المرضى، صرف الأدوية، مراجعة الحوادث والطوارئ.

وأكد السيد النعيمي أنه بنهاية العام الحالي سيتم صرف الأدوية بالمستشفيات من دون روشتات ورقية حيث سيقوم الأطباء بكتابة الوصفات الطبية على الكمبيوتر ومن ثم ترسل تلقائياً إلى كمبيوتر الصيدلية.

وستنتهي المرحلة الأخيرة من المشروع والذي يضم 32 برنامجاً تعليمياً للقطاع الصحي عام 2005 حيث تعد دولة قطر من الدول الرائدة للعمل بهذا النظام المعلوماتي.

وأشار السيد النعيمي أنه سيتم خلال السنوات المقبلة إصدار (بطاقة ذكية) لكل مراجع للمستشفى يسجل عليها التاريخ المرضي له وذلك بهدف الاستغناء عن الملفات الورقية التي تكتظ بها أقسام الملفات والدخول بالمستشفيات.

*خلود: منسقة المواضيع الخارجية

زيارة الوفد التونسي

تلبية لدعوة من وزارة الصحة قام وفد من وزارة الصحة بالجمهورية العربية التونسية الشقيقة بزيارة مملكة البحرين بتاريخ 2002/12/22 ولغاية 2002/12/25 للإطلاع على تجربته الرائدة في ميدان التصرف في المعلومات الصحية وفي استخدام الرقم الشخصي وتوظيفه في عملية إدماج معلومات المنظومة الصحية . مثّل الوفد التونسي الشقيق كل من الدكتور منصور بن عبدالله، أستاذ بكلية الطب ورئيس معهد السرطان والمهندس الهاشمي بن حبيب شنقل رئيس مصلحة النظم الاستشفائية بمركز المعلوماتية التونسي

وقد رافق الوفد السيد/ محمد الشهابي من إدارة المعلومات الصحية طول فترة زيارته والتي غطت بنجاح برنامجها الموضوع .

Be our guest...!

By: Fakhriya Hashim*

It is the pleasure of the Health Information Directorate (HID) to contact Dr. Nagalla Das, Medical Consultant in Biochemistry at Pathology department - Salmaniya Medical Complex (SMC) to cover in brief with him some of laboratories services provided to the patients in the Kingdom of Bahrain.

Dr. Nagalla Das

He started his talk "department of Pathology before the year 1993, used to enter all the patients information in a log book and retrieve them manually with statistical analysis as required.

Effective from 1993, Pathology department with co-ordination of HID implemented an automated system for Clinical Biochemistry, Hematology, Transfusion medicine (Blood bank) Microbiology and Serology on the main health informatioon system (MDIS). This facility was then extended in 2001 to Histology/Cytology systems to produce various types of reports".

He added "Currently three years online data is available to monitor chronic cases . It is advisable to improve the technical lim-

itation of disk space availabile and keep such data for at least five years.On the other hand, if the facility of an e-request and bar coding is implemented, such facility accompanied by pneumatic tube system will then transport samples simultaneously from A&E ward patients to A&E laboratory system in shorter time without messengers".

He continued "the co-operation between Pathology department at SMC and Health Centers is ongoing and currently one third of Health Centers are now provided with Network connection. If such automation is extended to all Health Centers, it will then decrease issuing requests with wrong CPR and illegible requests. Also viewing the results by the two parties is an advantage to avoid repetition of the same tests.".

Finally he said "HID is trying constantly to progress and it has made rapid strides recently to update the system and he thanked all concerned personnel for their efforts and being a strong team at work."

*Fakhriya: Administrative Analyst

On going projects

Connecting MoH to Computer Network

By Victor Del Castillo*

The main objective of the project is to connect MoH buildings and Health Centers to MoH computer network. This will enable users to use Health Information System, File & Print Sharing and Internet connectivity in addition to GroupWise email services.

Sitra, Muharraq and Hamad Kanoo Health Centres were physically structured at the end of last quarter of 2001 and were total-

ly activated in the first quarter of 2002.

Three more Health Centers and two Maternity Hospitals namely: (A'ali HC, NBB HC, Sheikh Salman HC, Jidhafs MH and Muharraq MH) are expected to be connected to MoH network. Structured cabling is completed and HID is currently acquiring the computer equipment for these facilities.

To cope with the new and fast moving technology, HID piloted the Wireless Local Area Networking in its perimeter. The IT staff can now roam with their PC's or Laptops without any physical cable connected to the wall and still be connected to the network. Once fully tested, HID will be implementing the same technology in some specified locations. This technology might be introduced once the new system is approved

Project Memebers: Reza, Mahesh, Rajesh, and Victor

and implemented.

It is the goal of HID to connect all MoH premises to this Wide Area Computer Network. An "Infrastructure Networking Project" is underway to accomplish this in the short period possible.

*Victor: Network Administrator

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"It's the latest innovation in office safety.
When your computer crashes, an air bag is activated
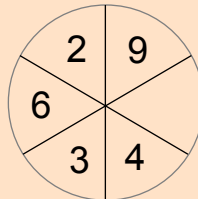so you won't bang your head in frustration."

A Web Site to Visit

The Meditation Tip of the day:

Daily wisdom from different sources, a different quote every day. Browse through the site to find articles about wisdom , creativity, and having fun. www.deeshan.com

Keep in mind

IF you wish to know the mind of a man, listen to his words.

chinese proverb

A chance to win .....!!!!

Which number goes in the empty segment:

The solution is available online at http://intranet.health.gov.bh/hid/hid.html#challenge
Send the answer no later than 30/01/2003 addressed to HID Editorial as shown below, either by post or email, and get the chance to win a prize.
Last issue winner: Khulood Ashoor, Nurse.

HID Socials

HID social committee invited all HID staff to have one hour celebration of the Eid event.

Health Center Automation Project
Phase III

By L. P. Padmanabhan *

Automation of Health Centers is an ongoing effort by the Ministry of Health. The main aim in such automation is to provide the necessary infrastructure to enable the health centers to exchange information with each other and with SMC.

The first phase of automation was completed in 1999 with the automation of Al Naim, Al Razi, Ibn Sinna, Bilad Al-Qadeem, Sh. Sabbah, Al Hoora and Isa Town Health Centers. In the second phase, which was completed in 2002, Sitra, Muharraq and Hamad Kanoo Health Centers were automated.

In the third phase of the Health Center automation project (HCAP3), which is being undertaken now, in addition to three Health Centers two peripheral Maternity Hospitals have also been included. In this phase, the three Health Centers, A'Ali, NBB and Shaikh Salman and the two Maternity hospitals Jidhafs and Muharraq will be automated. The project is planned to be completed by the end of March, 2003.

These Health Centers and Maternity hospitals will be provided with network cabling with access points at different locations within these facilities. They will be equipped with sufficient PCs and printers for using the system. The networks will be connected to the servers at SMC through a leased line using Frame Relay.

On completion of implementation of the systems, the users at these facilities will be able to do the following.

1) Patient appointments can be booked for various clinics at the Health Centers and maternity hospitals. This will enable the recording of patient visits and have better control over the movement and update of medical record files at these facilities. The users will have the facility to get the patient demographic data directly from Central Information Organization (CIO) based on CPR number. There will be search and enquiry facilities available in the system.

2) Patient appointments can also be booked for any of SMC clinics directly by the Health Center users for referrals.

3) All laboratory test requests and results can be entered into the system and they will be accessible to everyone concerned. Results of any lab test done at SMC can also be viewed from the Health Centers.

4) Wherever Radiological services are available, requests for examinations can be entered in the system and all concerned can view the reports. Reports of radiological examinations done at SMC can also be viewed at the Health Centers.

The above mentioned services will improve the quality of service provided to the patients at these Health Centers and Maternity hospitals. It will also reduce manual tasks and improve staff utilization and efficiency.

Hussain Ahmed
Computer Programer

Sima Zainal
Head of Reasource Managment
Project coordinator

Ebrahim Adam
Sr. Computer
Software Specialist

Sharifa S. Haidar
Computer Programmer

Mohammed Khalil
Computer System Analyst

*L.P. Padmanabhan
Sr. System Analyst
Project Manager

HCAPIII Team Members

Health Facilities in the Kingdom of Bahrain

Region 2

Region 1

Region 3

Geriatric Hospital

Muharraq Maternity Hospital

Al Dair H.C.

Al Hoora H.C.

Ibn Sinna H.C.

Naim H.C.

Al Razi H.C.

Muharraq H.C.

Sh. Salman H.C.

NBB H.C.

Psychiatric Hospital

Jidhafs Maternity Hospital

Jidhafs H.C.

International Hospital

Gulf Dental Specialty Hospital

Budaiya H.C.

Bilad Al Kadem H.C.

Isa Town H.C.

A'Ali H.C.

American Mission Hospital

Bahrain Specialist Hospital

Sh. Sabah H.C.

SMC Hospital

Ibn Al Nafis Hospital

Sitra Maternity Hospital

Sitra H.C.

BDF Hospital

L. Riffa Maternity Hospital

E. Riffa H.C.

Hamad Kanoo H.C.

Awali Hospital

Region 4

Hamad Town H.C.

Kuwait H.C.

Mohammed Jassim Kanoo H.C.

W. Region Maternity Hospital

Zallaq Clinic

Jaw Askar Clinic

Status of H.C. Automation

- 🟩 Automated
- 🟦 Automation In Progress
- 🟥 Not Automated

Facility type	🟩	🟦	🟥	⬜	
Hospital (Gov't)	2	2	4	1	**9**
Hospital (Private)	0	0	0	6	**6**
Health Centre	10	4	6	0	**20**
Clinic	0	0	2	0	**2**
	12	**6**	**12**	**4**	**37**