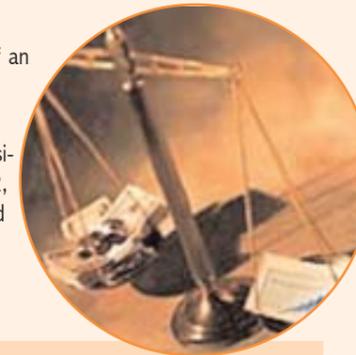




## Balanced Scorecard

By: Heayam Hazeem

The Balanced Scorecard is an organizational framework for implementing and managing strategy at all levels of an enterprise by linking objectives, initiatives, and measures to an organization's strategy. The scorecard provides an enterprise view of an organization's overall performance. It integrates financial measures with other key performance indicators around customer perspectives, internal business processes, and organizational growth, learning, and innovation. Since the concept was introduced in 1992, Balanced Scorecards have been implemented at corporate, strategic business unit, shared service function, and individual levels at hundreds of organizations in both the private and public sectors -- worldwide.



### Why Scorecarding?

- Translate strategy to action, making strategy everyone's job.
- Manage the intangible assets e.g. customer loyalty, innovation, employee capabilities.
- Leverage cross functionality without changing the structure of the business.
- Measure what matters the critical few vs. the important many in real-time, not just after the fact.
- Create a daily management system for the day-to-day navigation of the business.

### To "Scorecard" Successfully

- Reach cross-functional agreement on strategic direction
- Translate the strategy into staff's "everyday speak"
- Understand the cause and effect of linkages between strategy/process capability
- Identify the measures of success; critical strategic initiatives; and process drivers
- Set up accountability contracts
- Cascade the Scorecard into the organization

### What You'll Get

- Alignment and focus of the organization around a common purpose and strategic direction
- Resource prioritization and allocation
- An on-going feedback mechanism to make real-time, mid-course adjustments to priorities
- A set of balanced metrics
- "Now I understand how I contribute to the business strategy -- and the bottom line!"

HID has taken the first steps of using the balance scorecard and have initiated a project to introduce it in MoH. For the first time, leaders and executive management of the ministry will be able to apply the business logic that transforms ministry's data into the strategic information required to direct action, while monitoring the outcome with a comprehensive and intuitive digital dashboard. The dashboard quantifies and graphically displays intuitively readable gauges of performance indicators in summary views that measure what matters, not just what is available. It will also provides the opportunity to take each drill down further by allowing what is called "drill-through" to the individual indicator and look at ways to re-engineer the engine processes to get better performance.

Source : Visum Solutions, Inc. is a software and consulting company which helps enable, sustain and institutionalize performance and process management methodologies.



Heayam hazeem  
Head of Application Managment Section

## Health Statistics 2004

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 provision of Health care requires proper planning of health services and follow up on health plans. These require the availability of sufficient data and data analysis to provide accurate information necessary for decision makers and program managers to develop their plans and policies. Planning is thus a translation of the available information". For these purposes, The Ministry of Health makes many efforts and devotes special attention to strengthen Bahrain National Health Statistics and Health Informatics.



performance and the degree Ministry's progress towards the achievement of the target, as well as outcomes of the health services". The contents of the report include financial and human resources, primary and secondary care statistics and health services at the private sectors. The major addition on the content of this edition a new chapter covers statistics about the services at Joslin Diabtics Center.

The major health indicators presented in the report which reflect improvements in health status of the people in the Kingdom, such as, the percentage coverage of health services is 100%, the coverage of safe water at homes is 100%, life expectancy at birth 73.8, crude death rate 3.1 per 1000 population, infant mortality rate is 9.5 per 1000 live births, the probability of dying under five years of age is 11.2 per 1000 live births.

Furthermore, the Kingdom is a pioneer in the immunization coverage against most of the communicable diseases. For example, the Poliomyelitis coverage reached 97.7%, Diphtheria, Tetanus, Pertussis (DPT) 97.7% , and for Measles, Mumps, Rubella (MMR1) 98.8% and 100% MMR2 coverage.

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.

To enlarge the benefit of the Health Statistics report, the Health Information Directorate has published the report on the Ministry of Health Website [www.moh.gov.bh](http://www.moh.gov.bh). in addition to that the information is available on CD's.

The Health indicators presented in the report were based on The National Health Indicators recommended by World Health Organization which aim to implement the following goals:

- The demographic data presented in the report, Population growth, and their distribution by sex and age reflects directly the Health Status in the Kingdom. In addition to that it is considered as a good instrument to measure their health demands.
- Assemble, compile, and publish comprehensive National Health Statistics for all the services provided in the Health Institutes in both government and private sectors.
- To Facilitate data provision and accessibility for all health professional in the health field.
- To utilize the information in decision-making and Health Planning.
- To form a unified framework and standardized the publication of all Health Statistics between all health institutes in the country.

Health Information Directorate has the honor of presenting the 24th Edition of the Health Statistics report - 2004, which, illustrates the changes in the services and programs in healthcare sector. The indicators in this report provide details on population health problems, health care

## Farewell Party



Lakshmana Padmanabhan

HID held a farewell party for Mr Lakshmana Padmanabhan, who worked at the directorate as a Senior System Analyst for more than five years. The party was attended by all HID staff. Mr. Ebrahim Al Nawakda, Acting Director of HID, gave a short speech about his valuable contributions to HID. He thanked him on behalf of all staff and wished him good luck.



## Congratulations



On behalf of the Health Information Directorate (HID) management and staff, we would like to congratulate Mr. Ebrahim Al Nawakda for his appointment by H.H the Prime Minister Sh. Khalif Bin Salman Al Khalifa as Health Information Directorate acting director.

The HID management and staff would like to wish him all the best in the future.

## Database

By: Sanjeev Sukare

Database is a structured collection of data. Data refers to the characteristics of people, things, and events and in a database it is organized in a fashion that makes it easy to access, manage and update. There are two main types of database; flat-file and relational.

In order to understand the difference between a Flat File and Relational Database imagine a sheet of paper that contains some columns and rows (in other words a table). Each column in this table represents a specific category of information like name, date of birth etc and the combination of information in all columns for a single row forms a record. The information about the person's demographic details (name, address etc) and his/her health center visit is easy to maintain in such a table as one record if a person visits the health center only once, but if he visits more than one time then there is a problem. This problem can be overcome by adding more columns in the end, but then how many columns should be added. The outcome of such a data storage mechanism in a live environment will be space wastage and eventually complex programming. An alternative to this would be to maintain each health center visit as a separate record and repeat the name and address of the person. But if the person is a lady whose family name changes after marriage then her family name has to be changed in all the earlier records. Thus managing repeated information can turn out to be a nightmare besides being costly in terms of time and processing. The repetition of data can be overcome by maintaining the demographic details of the person in one table called "Person" as one record and then maintaining the health center visit details in a separate table called "Health Center Visits" as separate records, one for each visit. In order to link/relate the two tables a column needs to be identified that is common to both the tables and which will rarely change, CPR will be a



good choice for such a case. The database has thus been transformed from a "flat file" database to a "relational" database. The flat file database is adequate for many small applications, fast to implement and easy to design however it is not well suited for concurrent data access and hence prone to corruption. The other disadvantages include possible data redundancy and data inconsistency. The data redundancy can cause a file to become large which in turn affects the performance of queries.

The relational database was born in 1970 when E.F. Codd, a researcher at IBM, wrote a paper outlining a way to use relational calculus and algebra to allow non-technical users to store and retrieve large amounts of information. Codd envisaged a system where the user would be able to access information with English like commands. Since then, there has been no looking back for the relational database and it has grown in popularity worldwide. Today it is the standard for storing and managing data. Among the many advantages of a relational database are that they are simple, disciplined, easy to maintain, better security and better concurrent connections handling capability. Oracle and Microsoft SQL Server are amongst the most popular relational databases in the world.

The relational database has brought a revolution in the management of interrelated data and hence is the first step towards effective data management.

Ministry of Health has embraced this revolution by making relational databases as the standard for new systems development.

Sanjeev:Systems Analyst

## حفل تكريم المساهمين في تطوير نظم المعلومات الصحية



أعضاء أفضل مشروع لعام 2004

Business Intelligence



محمد نعمت



شفيع النطعي

### موظفي عام 2004

صورة جماعية لموظفي إدارة المعلومات الصحية



إلهام البحرنة

تحت رعاية وزيرة الصحة سعادة الدكتورة ندى عباس حافظ، نظمت إدارة المعلومات الصحية حفل تكريم المساهمين في تطوير نظم المعلومات الصحية لعام 2004، وذلك يوم الثلاثاء الموافق 11 مايو 2005 في "قاعة دائرة المعارف" بكلية العلوم الصحية. وتم خلال الحفل توزيع شهادات تقديرية وجوائز على جميع المكرمين من موظفين الإدارة وإدارات الوزارة.

بدأ الحفل بكلمة ترحيبية للصحة للسيد إبراهيم النواخذة - مدير إدارة المعلومات الصحية بالوكالة والتي شكر فيها جميع من ساهموا وبشكل فعال في دعم وتطوير نظم المعلومات الصحية، وتقدمت بعد ذلك، السيدة إلهام البحرنة من الإدارة بكلمة نيابة عن 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 تقنية المعلومات في الحفل الصحي خلال العام 2004.

وقد تم أيضاً خلال هذا الحفل وكما في السنوات السابقة تكريم عدد من المساهمين في تطوير نظم المعلومات الصحية من خارج إدارة المعلومات الصحية إذ بلغ إجمالي عدد المكرمين أربعة وعشرين مكرم. وقد تفضلت صاحبة السعادة الوزيرة بإلقاء كلمة شكر لجميع المكرمين والحضور بعد ذلك تفضلت سعادتها بتوزيع الشهادات على المكرمين، والجدير بالذكر أن مشروع الـ Business Intelligence قد حاز على جائزة أفضل مشروع خلال العام 2004.

هذا وقد حضر الحفل سعادة وكيل الوزارة د. عبدالعزيز يوسف حمزة والوكلاء المساعدون وعدد من مدراء الإدارات وموظفي الوزارة وعدد من المدعوين



دعم متواصل لمسيرة الإدارة

إبراهيم النواخذة



تكريم عدد من المساهمين في تطوير نظم المعلومات الصحية من خارج الإدارة



بعضاً من موظفي الإدارة المكرمين

## Demographic Dynamics

By: Amal Al-Arrayed

Demographic dynamic represent a changing age structure of the population and generally stem from underlying change in fertility and mortality . Other types of events such as war or immigration can affect the demographic profile in relatively short period, a changing age structure (e.g. rising dependency ratio) usually reflects the consequences of gradual changes or trends in birth rates and life expectancy. These demographic changes will undoubtedly have profound social and economic implications.

The economic effects of demographic changes are manifested through two main channels:1) On the demand side, it has implications for aggregate consumption and saving propensities. 2) On the supply side, changes in the population profile characterize changes in relative productivity and labor supply that occur over an individual's working life.

Amal Senior Computer Specialist

## About Teamwork....

By: Elham Al-Bahama

In the real world, you have to work with people, you don't always know the people you work with, and you don't always get along with them. Your boss won't particularly care, and if you can't get the job done, your job may end up on the line. "Life is all about group work, whether we like it or not". By Hannah Nichols

### Teamwork Quotes and Proverbs

TEAM = Together Everyone Achieves More

It is really amazing how much you can accomplish when it doesn't matter who gets the credit.

There is no "I" in "Teamwork", simply stated, it is less me and more we.

A job worth doing is worth doing together.

Coming together, sharing together, working together, succeeding together.

Teamwork divides the task and doubles the success.

None of us is as smart as all of us " Ken Blanchard"

Elham: Senior Administrative Analyst

## Health Call Center

By: Shafia Al-Notee

Today, healthcare consumers expect fast, accurate, and reliable information when they call their doctor, clinic, hospital, pharmacy or other health-care provider. Suppliers of such services are constantly being challenged to provide solutions to serve the increasing in consumers' demand. Health Centers all over Bahrain receive an average of 1,044 telephone calls per day relating to medical appointments. This excludes Salmaniya which receives approximately 720 walk-in patients per day.

Health call centers is one of the solutions that has proven to be very efficient and cost effective which will provide a wide variety of services, including appointments scheduling, clinical advice/triage, referral and answering service. A fully functional Call center should have the key components listed below:

### 1. Automatic Call Distributor (ACD)

ACD distributes calls to Agents as they are received. The calls may be distributed in various ways to optimize usage of the Call Center resources and allow the best possible Agent to service the callers.

### 2. Predictive Dialer

A Predictive eliminates wasted time in the calling process and improves productivity by screening out busy signals, no answer, out of order, and answering machine calls.

### 3. Interactive Voice Response (IVR)

IVR provides information to a customer by turning the touch tone pad of a telephone into a keyboard. As a result, many standard queries formerly answered by an agent can be handled by an IVR, freeing agents for more complex, value added work. It gives callers a self service option, speeding up the transaction for the caller.

Moreover, the call center will be staffed by trained, experienced manpower who utilize protocols or guidelines to provide services based on the nature of the call. The staff will be able to handle multimedia communications, including phone calls, email, fax and messaging.

Ministry of Health has initiated a Health Call Centre Project (HCCP) which will be implemented over several phases:

**Pilot Phase:** Will start with a basic configuration for 3-4 agents and will serve the appointment scheduling for 4 Health Centres initially.

**Rollout Phases:** Implement more mediums of contact, and extend the geographic area to cover the other health centres. Also more services will be added such as providing healthcare consultation and advice.

Health call center would be able to automatically answer simple standard questions with an interactive voice response capability further accelerating replies to caller inquiries and minimize telephone operator intervention. In addition, it would expedite the accessibility to all health centres via telephone, and decrease the queue and waiting time of patients.

Shafia: Senior Computer Analyst

## Enterprise Network Security

By: Nilantha Kumara Dissanayake

The security of the Enterprise Networks has become a real challenge as these networks are becoming a part of the public networks. The Enterprise Networks stand at the center of today's organizations, transmitting vital and often highly sensitive information while connecting users to essential resources. In a perfect world, we could leave unprotected systems online all of the time without feeling threatened by outsiders, but unfortunately the Internet is far from perfect, and there are individuals out there who are happily scanning ISP net blocks for exploitable systems in search of their latest target. Hence, the Network security is a major concern for businesses with online services and as networks grow in size and complexity, protecting them from threats has become more difficult.

Protecting and restricting access to the information reside on distributed servers is a challenge as operating systems in distributed environments do not provide adequate information security. These operating systems are built around the super user concept, which creates vulnerabilities through a single, privileged user account that has full access to applications, data and audit logs. Attempting to manually enforce security in this environment is extremely time-intensive and mostly ineffective. Similarly, the problem with the some Network Security Mechanisms in the e-business market place is that the non-integrated security devices don't provide comprehensive coverage of information security.

The Enterprise Network Security Mechanisms are continuously evolving to safeguard the information by ensuring Confidentiality, Integrity and authentication. The evolving Security System could be able to alert the Security Administrator by monitoring any abnormal events occurring at the security devices such as Firewall, Network Intrusion Detection System, Proxy Server and Host-based Intrusion Detection System and continues to safe guard the information even when any of the security devices are compromised. In the meantime, the role of Network Administrators is changing from monitoring and escalation to monitoring and troubleshooting. The cost of managing Security Mechanisms and keep track of the variety of activities that go on the information systems of the enterprises are increasing.

While it's important to keep software up-to-date and limit the amount of potentially exploitable software from our systems, it is also equally important to limit what is available to the outside world. Of course, even the best security administrators occasionally make mistakes and unfortunately, there are occasions when a system may be more open than is desired due to a configuration fault.

Nilanth: Computer Systems Analyst

## MoH Website Revamped

By: Maban Mansoori

Ministry of Health has the pleasure to announce the launching of the new layout and design of MoH Website. The MoH website is wholly updated; it can be visited via [www.moh.gov.bh](http://www.moh.gov.bh).

The website includes much valuable content about the Ministry and its services. It has many features such as Tenders, Job vacancies, Appointments, Conferences and workshops, Doctor and Dentists Directory and many others. Additionally, it is planned to bring new e-services on the website very soon,

The website is designed and updated by Web Services Group at Health Information Directorate. Accordingly, The Health Information Directorate would like to give special thanks to the trainee Mr. Sadiq AlHayki - University of Bahrain for his touches on the design and updating the web site

Finally, all are encouraged to visit the website and give their feedback.



Sadiq Hassan  
University of Bahrain



Maban: Senior Computer Analyst

### Health Information Directorate



### طرق الاتصال بمكتب المساعدة الفنية

تبان مكتب المساعدة الفنية التابع لإدارة المعلومات الصحية يقع في المبنى الرئيسي الجديد التابع لمجمع السلمانية الطبي في الدور الرابع مقابل الأجنحة 410 ، 411 و 412 وللاتصال بمكتب المساعدة الفنية يرجى إتباع احد الطرق التالية:

(1) في حالة وجود شكوى في الأجهزة التابعة لإدارة المعلومات الصحية .. أجهزة الحاسب الآلي وملحقاته، هناك عدة طرق:

(أ) الاتصال بالخط التلفوني المباشر 17289888 - أو التحويل الداخلي 4888.

(ب) إرسال رسالة إلكترونية : باستخدام صفحة الوزارة الإلكترونية - الانترنت - يمكن إرسال رسالة إلى مكتب المساعدة الفنية عن طريق الضغط على خيار المساعدة الفنية : HELP DESK وإتباع التعليمات في الشاشة .

(2). في حالة الحاجة للذهاب لمبنى مكتب المساعدة الفنية يرجى إتباع العنوان المشار إليه في مقدمة الموضوع .

## Calling HID Help Desk

The HID help desk office is located in the main salmaniya medical complex on the fourth floor opposite to ward 411, ward 412.

For calling HID help desk please follows one of the methods:

- In case of computer equipment problem (pc, printer, scanner, etc...) use one of the following steps :
  - Call 17289888 or extn. 4888 to talk with help desk staff, and report your problem.
  - Sending an email thru ministry of health page - INTRANET - .
- If need, visit HID at their location outline above.



### Control

Control is a key management function. A manager must know where the team stands against standards and objectives, and whether mistakes are being made or rules broken. However, this works both ways. Working without control is like bowling with a curtain hiding the pins - you hear them fall but you don't know how many you hit or how to improve. The three main types of management control are:

- **Controlling errors** made by the team members through lack of experience, inadequate training, incompetence, laziness, etc.
- **Discipline** team members who have broken the rules of the organization/team
- **praising** team members' performance against accountabilities, standards and objectives

In the next edition of Infoline we will go through the controlling errors and how to correct them.

*Source: The Manager's Pocketbook, John Townsend*

### HID Socials



A day out to all HID employees been organized by HID Social Committee

### KEEP IN MIND

All truths are easy to understand once they are discovered; the point is to discover them.

### GALILEO

### A web site to visit

#### "EMR Journals Information Directory"

The directory includes 288 Health and Biomedical Journals published in the Region and indexed in IMEMR on a regular basis. The Directory includes the basic bibliographic information for each journal, i.e. title, publisher, start date, ISSN, subject, country of publication, frequency, abstract, etc.

Please visit the following site <http://www.emro.who.int/emrjorlist>