Integrate Every Aspect of Patient Care with a Hospital Management System
Agenda

- HYGEIA Group Profile
- Challenges and Trends in the Healthcare Industry
- Why Model Hospital Management System
- What is Model Hospital Management System
- Conclusion
Company Overview

- **Hygeia Hospital** is an ultra modern general acute care Hospital of 44k sq. m. in the Northern suburbs of Athens, in close proximity to Athens International Airport. The hospital is licensed for 440 beds (active 301), has 18 operating theaters, and 4 Intensive Care Units.

- **Mitera** Hospital is a state-of-the-art Maternity, General and Children's Hospital of 35k sq.m. adjacent to Hygeia. The Hospital is licensed for 501 beds (active 341), has 19 operating theaters, 22 delivery rooms and 3 Intensive Care Units.

- **Leto** Maternity Hospital is a modern Maternity and Gynecology Hospital of 6.5k sq.m. in central Athens. The Hospital is licensed for 100 beds (active 97), has 7 operating theaters, 7 delivery rooms and an Intensive Care Unit.

- **Hygeia Tirana** opened in July 2010 and is the 1st integrated private hospital of its kind in **Albania**. The 220-beds hospital (active 77) is a approx. 25k sq.m state of the art facility on a main traffic artery of Tirana.

- **Achillion** is a 7k sq.m. facility with 90 beds (active 70) located in Limassol, **Cyprus**. The hospital has 8 operating theaters, 3 delivery rooms, and an Intensive Care Unit.

- **Evangelismos** is a 6.2k sq.m. facility with 71 licensed beds (active 41) and is located in Paphos, **Cyprus**. The hospital has 3 operating theaters, 2 delivery rooms and an Intensive Care Unit.

- **Y-Logimed** supplies with medical products, medicines, consumables and implantable devices Hygeia Group hospitals, aiming at economies of scale.

- **Stem Group**, aims to develop a stem cell bank network in Greece and the S.E. Europe. Its Greek subsidiary Stem-Health Hellas commenced operations in H1 08.
Hygeia Group, Leader in the Greek Healthcare Market

Hygeia group in Numbers
- 6 Hospitals in 3 Countries & 2 Diagnostic Centers
- Includes General, Maternity and Pediatric Clinics
- 1,322 beds capacity
- Over 322k. available patient days
- Over 49k. inpatients
- Over 41k. operations, over 10k. deliveries
- 3,300 employees
- Over 3,000 Co-Operative physicians

Hygeia Awards
- Included amongst the top companies in Best Workplaces’ 2011 (Greek ranking),
- 2011 award for Best Corporate Governance in Greece,
- 1st Volunteering Award for "Environmental awareness against poverty" in 2011
- The only hospital to have received the TRUE LEADER Award in 2011 (ICAP Group).

International Co-Operations
- Johns Hopkins International: for the provision of Medical Second Opinion (2011),
- Harvard Medical Int.: Consulting in Leadership, Training and Quality (2002 – 2010),
- Massachusetts General Hospital, Brigham & Women’s Hospital & Dana Farber Cancer Institute (1999 – 2005) (Partner),
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Healthcare Challenges & Trends

- Patient Care Improvement
- Consumer Driven Patients
- Control Cost
- Government Requirements
- Security and Trust
- Rapidly changing business
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Why Model Hospital Management System

- Standardized business processes based on:
  - Healthcare industry best practices embedded in the SAP Solution
  - Accumulated business experience build-in the Hospital Management System

- Better patient treatment with full tracing capabilities of the whole patient medical history
  - Common Electronic Patient Record functionality for all hospitals

- New capabilities of using common facilities for all hospital
  - (common PACS infrastructure, centralization of Laboratory facilities, etc)

- Standardized processes covering end-to-end basic functions such as:
  - Patient Administration (admission, ward management, discharge, billing, payment)
  - Central automated processes for purchasing and stock replenishment
  - Pharmacy administration

- Unified working experience for all users-functional areas across Hospitals:
  - Ward management, Outpatients processing, etc

Improves Patients Care
Why Model Hospital Management System

Supports Consumer-Driven Patients

**Billing**
- Pricing based on the sophisticated SAP pricing (if we can describe, we can implement)
- Support for Diagnosis Related Groups (DRG) billing

**Marketing**
- Flexibility to implement different and complicated marketing/commercial strategies
- Flexibility to develop marketing strategies at group level (and not only hospital level)
- Support for new marketing ideas (Healthcare Card, “Fly and get a check-up” etc)

**User Friendly**
- Multi Language, multi Currency, multi culture system ready to hospital medical tourists

**Patient Communication**
- Open platform ready to support Healthcare Portals for building new channels of communication with the patients (Bedside terminals, appointment management, medical records etc)
Why Model Hospital Management System

Controls Cost

- Optimizing utilization of all Hospital resources
  - Scheduling and planning for the departments
  - On-line interface with vendors

- In depth cost analytics & controlling (cost center level, case level, service level)

- Multi level Profit and Loss (P&L) reporting
  Top class Business Intelligence (BI) to support decision making

- Real time early warning system

- Quick Rollouts to new Hospitals, securing:
  - quality and reliability
  - fast implementation times, low risk

Innovation at your doorstep
Why Model Hospital Management System

Abides by Government Requirements

- Fully covers the legal requirements for the Healthcare industry in all countries implemented:
  - Patient Book, External Patient Book, etc
  - Daily and monthly doctor’s services, etc

- Fully covers the Healthcare industry special business needs in all countries implemented:
  - Flexible application for calculation and administration of Doctor Fees
  - Submissions to Public and Private Insurance Providers

- Prepared Government Mandated Statistics:
  Reports providing the required information, which needs to be submitted to the government authorities for specific audits/ functions

- Ease of adaptation:
  Flexible platform to implement every new law requirement in time and at low cost
Why Model Hospital Management System

Offers Security and Creates Trust

Robust security system
- Based on the bullet-proof SAP authorization concept, based on user roles
- Paperless hospital realization

Functionality to support special security level needs
- VIP patients
- Special wards (psychology treatment)
Why Model Hospital Management System

Adapts to New Business Environment

Management Reporting

- Dashboard style top management reporting for rapid identification of threats and opportunities
- Multi level real time reporting tools providing drill-down information for management decision making
- Reporting at Healthcare Group or Institution level
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What is Model Hospital Management System

Core Application Overview

Patient Management (IS - Healthcare)

Back-office and Administration
- Financial Management (FI)
- Controlling (CO)
- Plant Maintenance (PM)
- Purchasing and Materials Management (MM)
- Human Capital Management (HCM)

Middleware Platform
- Laboratory Information System (LIS)
- Radiology Information System (RIS)
- PACS

Business Intelligence (BI)
What is Model Hospital Management System

- Back Office & Administration
- Hospital Information System
- Middleware Platform
- Laboratory Systems
- Appointments Mgmt
- Smart Cards
- Bedside Terminals
- Call Center
- Patient Diets
- RFID
- CRM
- Loyalty
- Digital Pen
- Doctors Alert
- Health Dictate

The Big Picture

Innovation at your doorstep
What is Model Hospital Management System

**Process Driven Management System: Healthcare Main Process**

**Resource Planning and scheduling**
- Optimized utilization of inpatients clinics and outpatients departments

**Patient administration**
- Full tracking of patient’s movements throughout his stay

**Service Rendering (services, materials and drugs)**
- Real-Time integration with accounting and on-line stock control
- Bar Code management to eliminate mistakes

**Payment Handling**
- Covering all types of payments with combinations
- Submission to Insurance Providers

**Patients Accounting**
- Flexible billing system ready to support a wide variety of commercial strategies
- Insurance provider contracts

**Medical documentation**
- On-Line interface with Lab and imaging systems based on (HL-7) format
What is Model Hospital Management System

**Process Driven Management System:**
Supply Chain Management Subprocess

- **Monitor stock and requirements**
  - Increased transparency into requirements and consumption with access to historical data

- **Manage safety stocks**
  - Tools to support the decision of the safety stocks levels

- **Materials Requirements Planning**
  - State of the art MRP system supporting every business need

- **Budgeting**
  - Manage purchases versus budget on a material group/department level

- **Supply Chain Management**
  - Minimize the warehouse and procurement cost with the optimum stock level

- **Purchase Order and Purchase Receipt**
  - On line interface with suppliers to eliminate the human capital needed and minimize the mistakes

- **Suppliers Evaluation**
  - Some key performance indicators are automatically calculated from the procurement process
  - Further Analysis for delivery reliability, price reliability, returns
What is Model Hospital Management System

Process Driven Management System:
Pharmacy Management Subprocess

- **Monitor the drugs consumption to the departments**

- **Departments Replenishment**
  - Multiple approaches for the departments replenishment, based on consumption or safety stocks

- **Central Pharmacy Warehouse Replenishment**
  - MRP rules for optimized drugs replenishment

- **Localization rules for drugs tracking**
  - Sophisticated reporting for drugs tracking

- **Purchase Order and Purchase Receipt**
  - On line interface with suppliers to eliminate the human capital needed and minimize the mistakes
What is Model Hospital Management System

**Process Driven Management System:**

**Financials Tools**

*Inpatients Revenue Accruals*

- On-line billing system taking into account the commercial pricing rules to automatically calculate and post the accruals of the inpatients monthly

*Parallel Accounting*

- Compliance with IFRS and local GAAP
What is Model Hospital Management System

Process Driven Management System:
Doctors fees management Tools

- Advanced calculation system supporting complicated rules
- Doctors fees based on percentage or amount of services rendered, invoiced or paid

Doctors fees accounting
- Automatic accounting postings for accruals and fees cleared
What is Model Hospital Management System


Human Capital Management
- Management of internal and external doctors
- Employee self-service (leave request, training request etc)
- Shifts and overtime support, fully integrated with payroll

Payroll
- Overtime calculation
- Fully integrated with accounting
What is Model Hospital Management System

Process Driven Management System: Controlling and Costing Capabilities

**Controlling**
- Support of complicated cost center hierarchy
- Advanced rules for the cost flow management to support cost distribution based on every characteristic available

**Case based Costing**
- Valuable information of profit and cost on case level

**Service based Costing**
- Possibility to distribute the cost to service level
- Support for profit and cost analysis on service or group of services level
Business Intelligence: Getting the Full Picture

Key Performance Indicators (KPIs)
- Best Practices identified KPIs
- Ready to support your business KPIs
- Study KPIs versus previous year/month, compare between hospitals or against external benchmarks

Business Oriented Dashboards
- Pre-configured dashboards of Healthcare KPIs
- Benefits Executives, Administrators, VPs, & Directors
- Balanced KPI approach
- Maximize investment in Hospital Information Systems

Early notification of positive and negative trends

Appropriate staffing levels, both skill mix and contract labor

Positive financial results and ROI

VP Operations
- Agile and Responsive Operations
- Sample KPIs
  - Bed Utilization
  - Scheduled Surgeries
  - Medical Staff efficiency

VP Nursing
- High Nursing & Patient Satisfaction
- Sample KPIs
  - Discharge Diagnosis
  - Infection Rates
  - Re-admission rates

VP Finance
- Improved finances and reimbursement
- Sample KPIs
  - Cash on Hand
  - Profitability
  - Collections

C-Level Executive
- Executive Oversight
  - Hospital Utilization
  - Top 10 ICD-9 in revenue
  - Profitable Surgeries
  - Net New Growth

Innovation at your doorstep
Business Intelligence: Operating a Best Run Hospital

Operational Management

KPI Analysis

Rolling 12 Months - Admissions

Last 7 Days Capacity Utilization - Inpatient

Inpatient DRGs

Inpatient ER Surgery Outpatient

Measure

ER Presents 1002.24 957.51 994.20
ER Admits 958.34 946.34 894.20
LWOS (Leave Without Being) 12.03 12.64 12.00
Divers 9.70 9.51 15.48
Time to Triage 9.77 9.45 6.75
Time to Treatment 17.94 16.04 17.00
Time in ER 80.57 82.45 75.00

Inpatient ER Surgery Outpatient

Measure

Total Surgeries 25,667 25,519 23,777
OP Surp Requiring IP Admit 3.06 3.04 3.49
OR Waiting Time 21.17 22.94 20.00
OR Waiting List 6.62 6.74 6.80
OP Perioperative Time 78.02 77.27 78.00
OR Utilization 0.79 0.76 0.78
OR Non-Surgical Time 0.10 0.10 0.10

Inpatient ER Surgery Outpatient

Measure

Total Outpatient Admits 129.91 126.58 138.56
RVUs 169.26 170.54 167.50
Average Appointment Wait Time 6.92 6.83 6.50
Total AS Admits/Visits 129.10 127.54 118.99
No Shows 5.65 5.65 5.32
Registration Wait Time 15.42 15.15 15.00
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Why Model Hospital Management System

Because.....

Model Hospital Management System is NOT just a IT system...

It is a time-proven business proposal for best-run Healthcare Organizations

Solution officially certified by SAP AG