

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 Singular Logic



#### 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),
- Mayo Clinic : The first co-operation between Mayo Clinic and a European Hospital (1995 – 1996).





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### Healthcare Challenges & Trends



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**Improves Patients Care** 



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



#### **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)



**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



#### **Abides by Government Requirements**



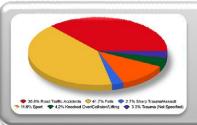
Fully covers the legal requirements for the Healthcare industry in all countries implemented:

- 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



#### **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)



#### **Adapts to New Business Environment**

#### **Management Reporting**

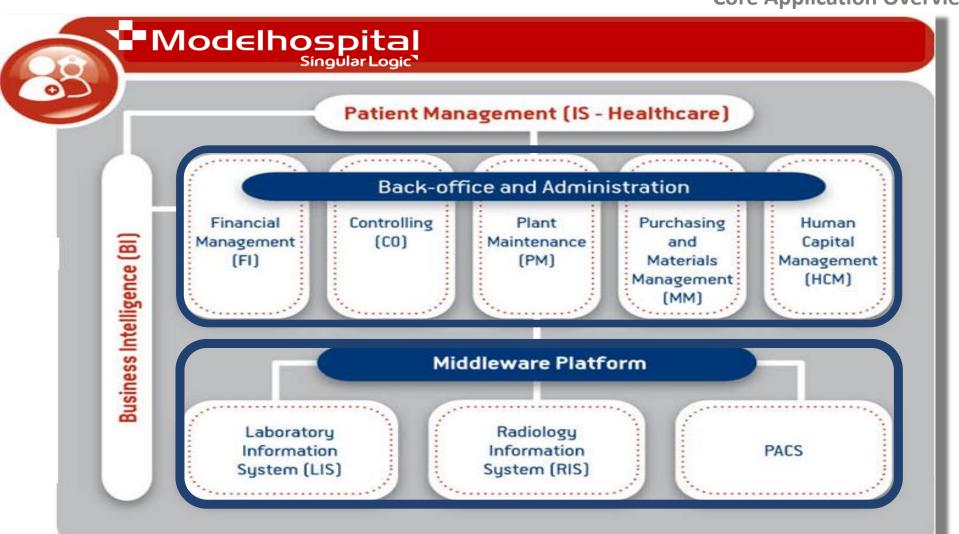
- Dashboard style top management reporting for rapid identification of threats and opportunities
- Multi level real time reporting tools providing drill-down information for management decision making
- Reporting at Healthcare Group or Institution level

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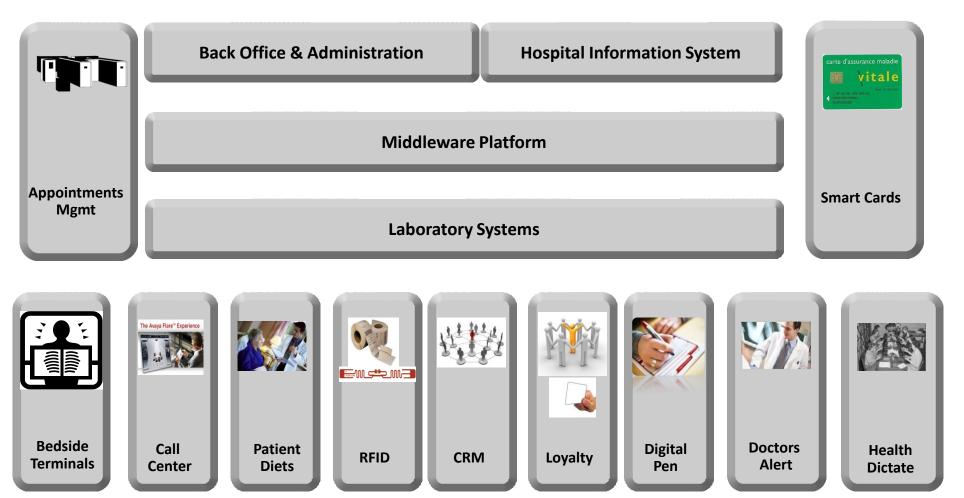


**Core Application Overview** 





#### The Big Picture



### SingularLogic T

### 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





**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



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



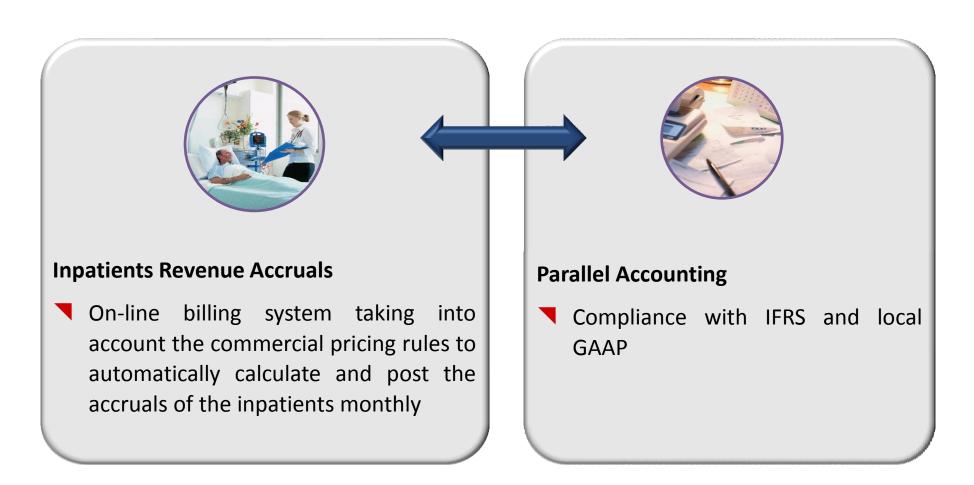
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**Process Driven Management System:** 

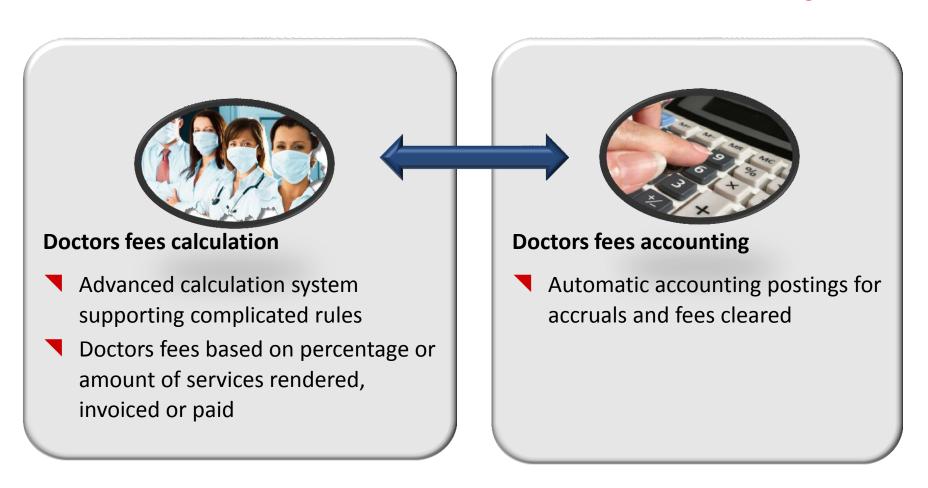
**Financials Tools** 





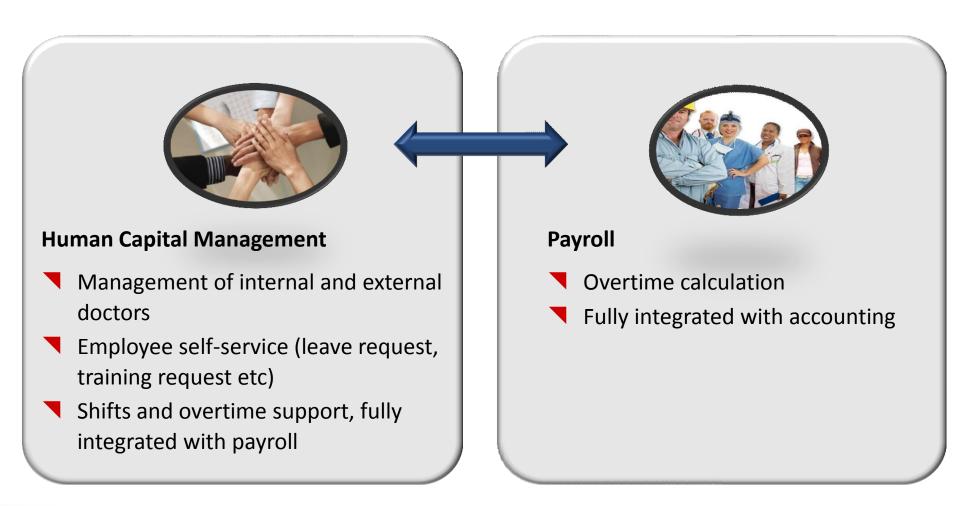
Process Driven Management System:

Doctors fees management Tools





Process Driven Management System: Human Capital Management and Payroll Capabilities





#### 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

### 2

### 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



**VP Operations** 

### Agile and Responsive Operations

#### Sample KPIs

- Bed Utilization
- Scheduled Surgeries
- Medical Staff efficiency

Appropriate staffing levels, both skill mix and contract labor



**VP Nursing** 

High Nursing & Patient Satisfaction

#### **Sample KPIs**

- Discharge Diagnosis
- Infection Rates
- Re-admission rates

Positive financial results and ROI



**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

# Business Intelligence: Operating a Best Run Hospital Singular Logic



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#### 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

