



# Capital Markets Day 2018

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## Agenda

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08:30 – 08:35	<b>Welcome</b> , Markus Georgi	
08:35 – 08:50	<b>Introduction</b> , Stephan Sturm	
08:50 – 09:20	<b>Fresenius Helios – Business Overview</b> , Francesco De Meo	15 – 31
09:20 – 09:50	<b>A Medical View Across Borders</b> , Ralf Kuhlen	35 – 52
09:50 – 10:20	<b>Helios Germany – Overview</b> , Franzel Simon	55 – 75
10:20 – 10:40	<b>Q&amp;A</b>	
10:40 – 11:00	<b>Break</b>	
11:00 – 11:40	<b>Quirónsalud – Overview</b> , Héctor Ciria	79 – 109
11:40 – 12:00	<b>Q&amp;A</b>	
12:00 – 13:00	<b>Lunch Buffet</b>	
13:00 – 13:20	<b>Views on Health Care Germany &amp; Spain</b> , Andreas Meier-Hellmann, Leticia Moral	113 – 135
13:20 – 13:50	<b>Cost Synergies by Integration</b> , Enrico Jensch & Pedro Rico Pérez	139 – 150
13:50 – 14:20	<b>Helios Germany – Efficiency</b> , Olaf Jedersberger & Corinna Glenz	153 – 178
14:20 – 14:40	<b>Q&amp;A</b>	
14:40 – 15:00	<b>Break</b>	
15:00 – 15:30	<b>Quirónsalud – Digital Transformation</b> , Adolfo Fernández Valmayor <b>Helios Germany – Innovation &amp; Digitalization</b> , Jörg Reschke	181 – 204
15:30 – 15:45	<b>Fresenius Helios – CFO Update</b> , Daniela Hommel	207 – 215
15:45 – 16:05	<b>Fresenius Helios – Summary &amp; Outlook</b> , Francesco De Meo	219 – 232
16:05 – 16:25	<b>Q&amp;A</b>	
16:25 – 16:35	<b>Closing Remarks</b> , Stephan Sturm	

# Today's Presenters

## Today's Presenters

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**Stephan Sturm**

**Chairman of the Management Board  
Fresenius Management SE**

Stephan Sturm, 54, became Chairman of the Management Board of Fresenius (equivalent to President and CEO) on July 1, 2016, after serving for 11 and a half years as the company's Chief Financial Officer. Before joining Fresenius in 2005, he was a Managing Director of Credit Suisse First Boston (CSFB), from 2000 as Head of Investment Banking for Germany and Austria, and also served on CSFB's European Management Committee. During his more than 13 years in investment banking, Stephan Sturm held various executive positions with BHF-Bank, Union Bank of Switzerland, and CSFB in Frankfurt and London. Prior to entering investment banking in 1991, he was a management consultant at McKinsey & Co in Duesseldorf and Frankfurt. Stephan Sturm holds a degree in Business from Mannheim University.



**Rachel Empey**

**Chief Financial Officer  
Fresenius Management SE**

Rachel Empey, 41, is Chief Financial Officer of Fresenius and a member of the Fresenius Management Board. Before joining Fresenius on August 1, 2017, she served as Chief Financial and Strategy Officer of Telefónica Deutschland Holding AG and member of the Telefónica Deutschland Management Board, starting in 2011. Previously, Rachel Empey held a number of key international finance and controlling positions in the Telefónica group. She started her career as an auditor at Ernst & Young and a business analyst at Lucent Technologies. Rachel Empey, who is British, is a chartered accountant and holds an MA (Hons) in Mathematical Sciences from the University of Oxford.

## Today's Presenters

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**Dr. Francesco De Meo**

**Member of the Management Board  
Fresenius Management SE  
Chief Executive Officer  
Helios Health**

Francesco De Meo, 54, joined the Management Board of Fresenius in January 2008 with responsibility for Fresenius Helios, and since March 2018 he has served as CEO on the Helios Health Management Board. He joined the Helios Management Board in 2001 with responsibility for human resources, legal affairs, research and science, and at the same time was also appointed Labor Relations Director. Francesco De Meo started his career at Helios in 2000 as Head of the Legal and Human Resources Departments. Before that, he was director of Rauser AG, a management consultancy in Reutlingen, Germany, and practiced as an attorney. Francesco De Meo holds a doctorate in Law from Tübingen University.



**Daniela Hommel**

**Chief Financial Officer  
Helios Health**

Daniela Hommel, 43, became Chief Financial Officer of the Helios Health Management Board in March 2018. Before joining Fresenius as Senior Vice President Corporate Compliance in 2012, she worked as an auditor at KPMG in Frankfurt for several years, becoming a partner in 2008. Daniela Hommel holds a degree in Business Administration from Martin Luther University Halle-Wittenberg in Germany, and the Virginia Polytechnic Institute and State University in Blacksburg, Virginia, USA.

## Today's Presenters

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**Prof. Dr. Ralf Kuhlen**

**Chief Medical Officer  
Helios Health**

Ralf Kuhlen, 52, became Chief Medical Officer of the Helios Health Management Board in May 2018 after serving almost eight years as Medical Director of the Helios Management Board. Before joining Helios in 2007 as Head of Intensive Care at Helios Hospital Berlin-Buch, he held various positions including Medical Director at Aachen intensive care University Hospital and later Deputy Medical Director at Aachen University, where he was appointed as professor for anesthesia in 2003.



**Enrico Jensch**

**Chief Operating Officer  
Helios Health**

Enrico Jensch, 48, became Chief Operating Officer of the Helios Health Management Board in March 2018, after being responsible as Managing Director for Helios International since 2015 and for the Helios region Center since 2012. Before that, he was Managing Director for the Helios hospitals Bad Saarow and Schwerin. He joined Helios in 2006 as Head of Human Resources, from the acquired Humaine Hospital Group. Enrico Jensch studied law at Berlin University and also holds a degree in Hospital Management / Business Administration for the health care sector.

## Today's Presenters

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**Franzel Simon**

**Chief Executive Officer  
Helios Kliniken**

Franzel Simon, 51, joined the Fresenius Helios Management Board in March 2018 as Chief Executive Officer, including responsibility for legal affairs, transactions and corporate communications. Previously, he held various positions within Helios, including management of the Helios region North since 2006 and Managing Director for the Helios hospitals Schkeuditz and Schwerin. Before starting at Helios in 2001 as assistant to the managing director, he held a number of administrative positions in various hospitals. Franzel Simon holds a degree in Business Administration from Aachen University of Applied Sciences.



**Héctor Ciria**

**Chief Executive Officer  
Quirónsalud**

Héctor Ciria, 39, became Quirónsalud's Chief Executive Officer (CEO) in March 2017. He joined Quirónsalud (formerly IDCsalud) in 2012 as CFO, Strategy & Corporate Development after IDCsalud was acquired by CVC Capital Partners. Prior to IDCsalud, he was a principal at Apax Partners, where he worked for five years in the health care team, based in Madrid, London and New York. He started his career at McKinsey & Co. in Madrid. Héctor Ciria graduated in Civil Engineering, with a dual degree from both UPC (Barcelona) and ENPC (Paris). He also holds a Master of Science in Aeronautics from MIT (Cambridge, Massachusetts) and an MBA from Columbia Business School (New York).

## Today's Presenters

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**Jörg Reschke**

**Chief Financial Officer  
Helios Kliniken**

Jörg Reschke, 46, was appointed Chief Financial Officer of the Fresenius Helios Management Board in 2010, and is today responsible for IT strategy, Procurement and Pharmacy. From 2006 until 2010, he headed Helios' Berlin-Brandenburg region after serving as Head of Administration at Helios Hospital Berlin-Buch and Managing Director of Helios Hospital Aue. Jörg Reschke started his career in 1996 in Helios' central procurement division. He holds a degree in Economics.



**Adolfo Fernández Valmayor**

**IT & Digital Transformation Director  
Quirónsalud**

Adolfo Fernández Valmayor, 52, was appointed as IT & Digital Transformation Director and member of Quirónsalud's Management Committee in 2015, after the merger of IDCsalud and Quirón. Before joining Quirónsalud in November 2011 as General Manager, Adolfo Valmayor worked at IBM and founded his own IT consultancy company in 1992, which was integrated into Bull (now part of ATOS group) in 2007. He graduated in Industrial Engineering from Universidad Politécnica de Madrid and holds an Executive MBA from IESE University.



## Today's Presenters

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**Dr. Leticia Moral**

**Quality & Innovation Director  
Quirónsalud**

Leticia Moral, 58, joined Quirónsalud's Management Committee (formerly IDCsalud) in 2014, with responsibility for Quality and Innovation. Prior to Quirónsalud, she was a partner in Globesalud, a specialized health consulting firm with projects in Latin America, the Middle East, and Spain. She was General Director of Servicio Madrileño de Salud from 2001 to 2004, during which time she was responsible for the planning and management of a public hospital network and primary care centers in the Madrid region. Previously, Leticia Moral was General Manager of a private health care company and held other relevant positions in the sector. A medical doctor specialized in psychiatry, she earned a PhD at the University of Valladolid and also holds a Master's degree in Health Care and Hospital Management.



**Prof. Dr. Andreas Meier-Hellmann**

**Chief Medical Officer  
Helios Kliniken**

Professor Andreas Meier-Hellmann, 58, became Medical Director of the Helios Management Board in May 2018. Since 2007, he has been a member of the Medical Advisory Board of Helios Hospitals. Prior to that, he was Chief Consultant of the Department of Anesthesia, Intensive Care and Pain Management at Helios Hospital Erfurt and Deputy Medical Director of the Department of Anesthesia and Intensive Care at Friedrich Schiller University in Jena. Before becoming a specialist in anesthesia in 1994 and shortly afterwards receiving his post-doctorate qualification, Andreas Meier-Hellmann completed his medical studies and his doctorate at the Free University of Berlin.

## Today's Presenters

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**Dr. Pedro Rico**

**COO of Private Hospitals  
Quirónsalud**

Pedro Rico, 47, joined Quirónsalud's Management Board in April 2015 as COO of private hospitals. He has held several management positions in the group over the last 12 years, as Medical, Quality and Research Director, Regional Manager of Galicia, País Vasco and Canary Islands, and Hospital General Manager of Quirónsalud A Coruña. Before joining Quirónsalud in 2006, Pedro Rico was an internal medicine physician and responsible for the emergency room in a public referral hospital in Galicia. He also was Chief of Residents and responsible for the Evidence-based Medicine Training Program. He specialized in internal medicine, with a degree from Universidad Santiago de Compostela. He also holds several several Master's-level certifications in Health Care Management from IESE University and Universidad Pompeu Fabra.

## Today's Presenters

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**Olaf Jedersberger**

**Chief Operating Officer**  
**Helios Kliniken**

Olaf Jedersberger, 47, has been Chief Operating Officer of the Helios Management Board since 2008, and has served since 2010 as Managing Director of the operating business, including responsibility for budget, rehabilitation, medical care centers and nursing facilities. Prior to that, he was responsible for Helios' Central region. He joined Helios as Head of Controlling at Helios Hospital Erfurt, where he became Managing Director in 2002. Olaf Jedersberger studied Business Administration at the University of Erlangen-Nuremberg and started his career as a regional government consultant.



**Corinna Glenz**

**Regional Director**  
**Helios Kliniken**

Corinna Glenz, 45, was appointed Regional Director for Helios' Central region, including 19 hospitals in Hessen, Thuringia and the Franconia region, in March 2018, after being responsible for other regions including South and Mid-West Germany for the previous six years. She joined Helios in 2006 as a Managing Director for Helios Hospitals Bad Schwalbach and Idstein, after serving several years in positions for Fresenius University of Applied Sciences and managing a hospital for Wittgensteiner Kliniken. Corinna Glenz holds a degree in Chemistry from the Fresenius University of Applied Sciences.

## Safe Harbor Statement

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This presentation contains forward-looking statements that are subject to various risks and uncertainties. Future results could differ materially from those described in these forward-looking statements due to certain factors, e.g. changes in business, economic and competitive conditions, regulatory reforms, results of clinical trials, foreign exchange rate fluctuations, uncertainties in litigation or investigative proceedings, and the availability of financing. Fresenius does not undertake any responsibility to update the forward-looking statements contained in this presentation.

Capital Markets Day, 8 June 2018

**Helios.health**

# **Fresenius Helios Business Overview**

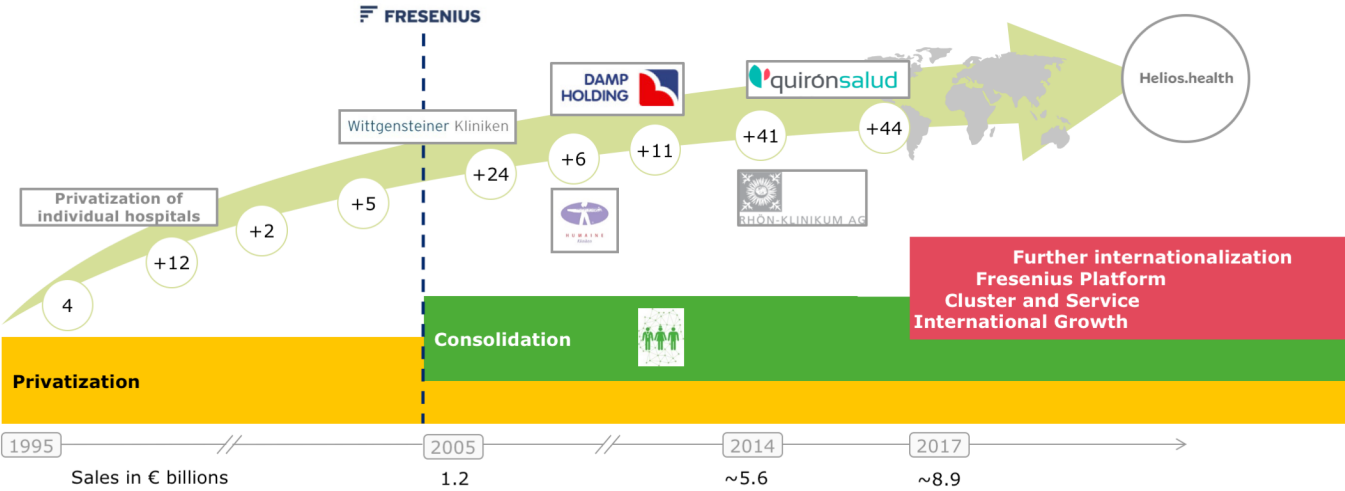
Francesco De Meo – CEO Helios Health

# Key Take-Aways

- Successful across different health care markets
- Learn from each other, learn from the best
- Best practice transfers drive international transformation
- Prepared for further regional expansion

# Overview Helios

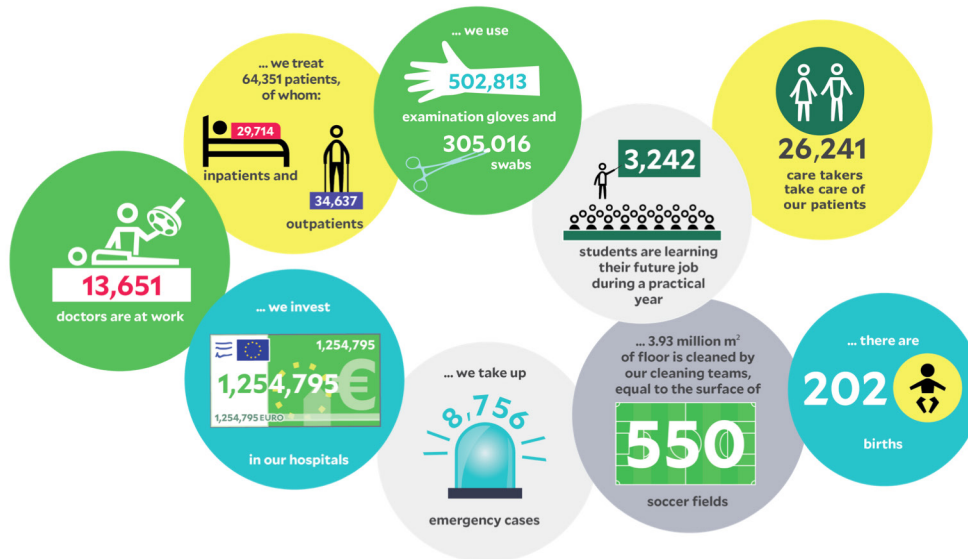
# Helios Milestones



○ Acquired number of hospitals



# Any Single Day at Helios in Europe



# Helios KPIs



**Helios Spain business model allows for significantly higher ratio of outpatients**

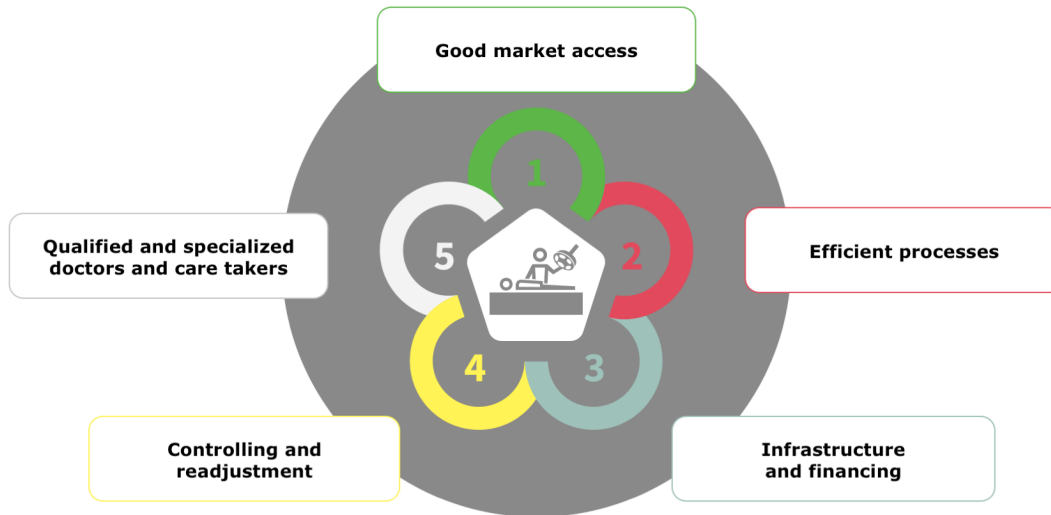
■ Spain 
 ■ Germany 
 <sup>1</sup> Includes doctors under mercantile relationship 
 <sup>2</sup> Includes 2.2 million Emergency Room cases 
 <sup>3</sup> Includes 89 outpatient clinics (Germany) and ~300 ORPs (Spain)

Helios.health

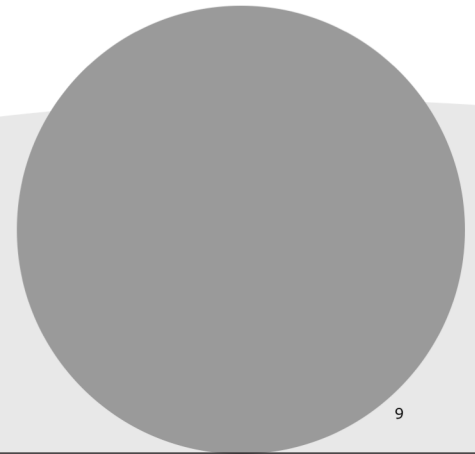
# The Helios Value Approach



# Prerequisites to Provide High-Quality and Cost-Efficient Health Care



# What Makes the Difference



# Business Comparison

## Regulation Density

### Medium with local variations

- Depending on state-by-state regulations
- Variable health care models (PPP)
- No sector boundaries

### High and nationwide

- Low flexibility for state-specific regulations
- Uniform health care models
- Strict sector boundaries

## Insurance System

- Private full-coverage insurance additional to public insurance
- ~20% of population with private coverage

- Private full-coverage insurance instead of public insurance
- Complementary private insurance
- ~11% of population with private coverage

## Financing

### Multiple financing models

### Separate financing models

## Growth Opportunities

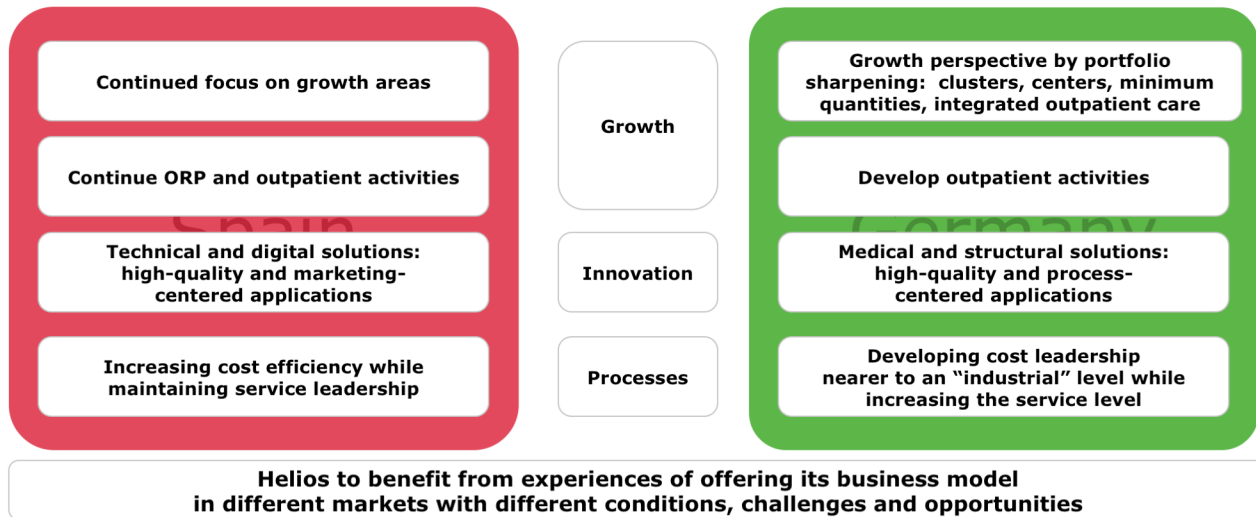
### In a dynamic market

- Consolidation opportunities
- Greenfield and ORP
- Digitalization for services and growth

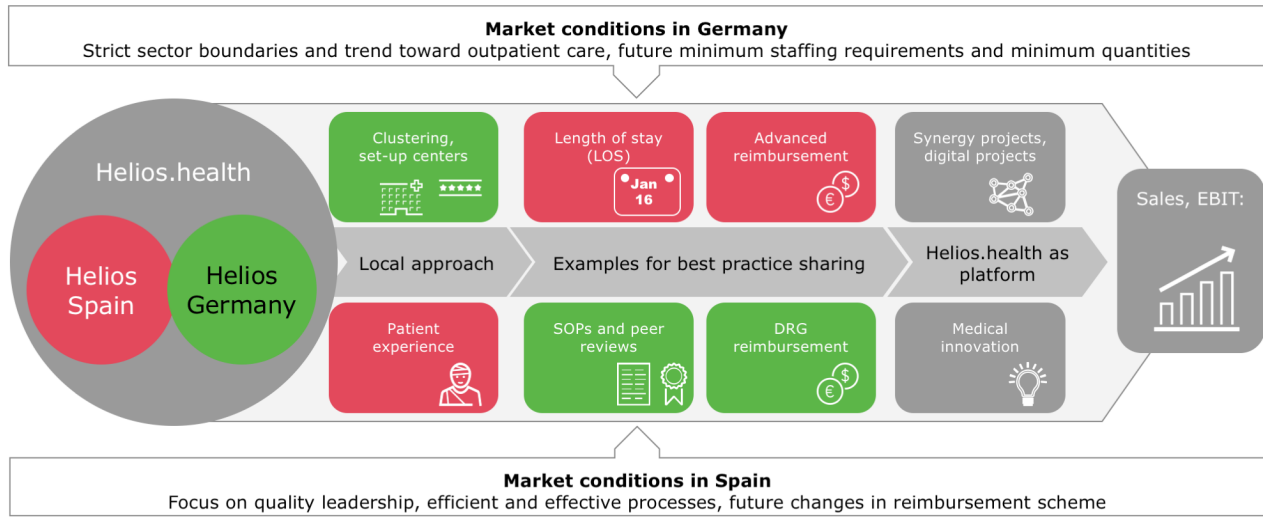
### In a largely saturated market

- Rare privatization or consolidation
- Outpatient growth against boundaries
- Process digitalization

# Strategy by Country

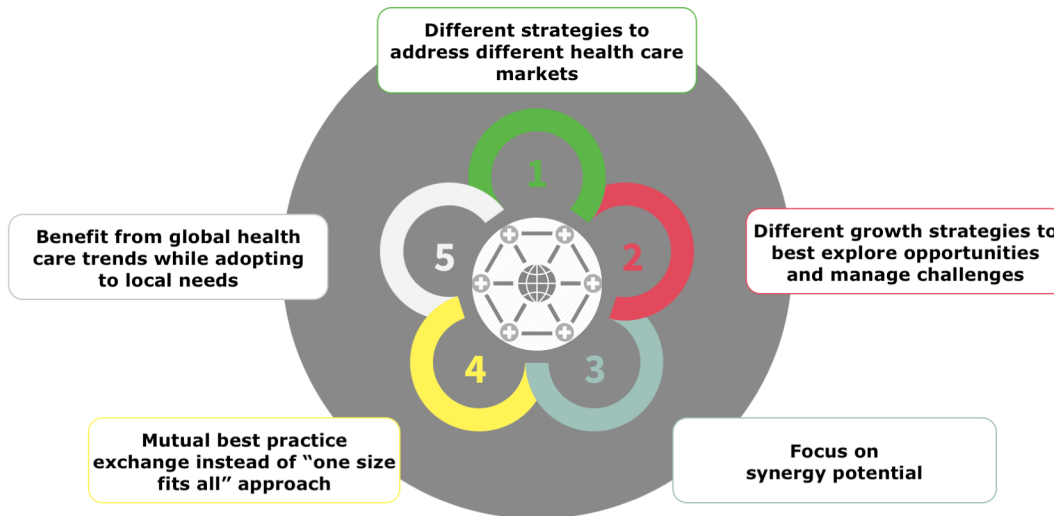


# Best Practice Transfer



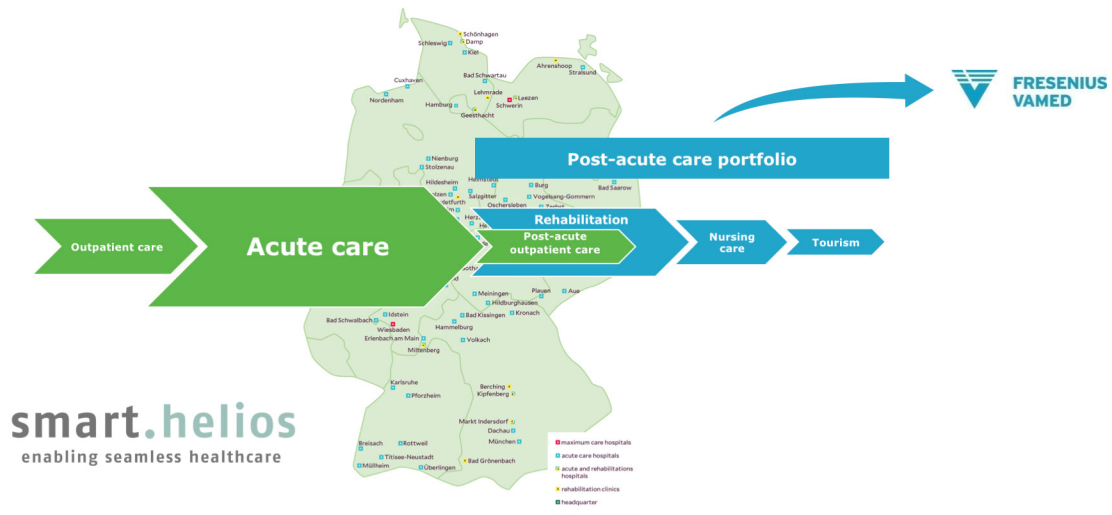


# Best in Class: Adopting to Market Specifics and Fostering Know-How Transfer

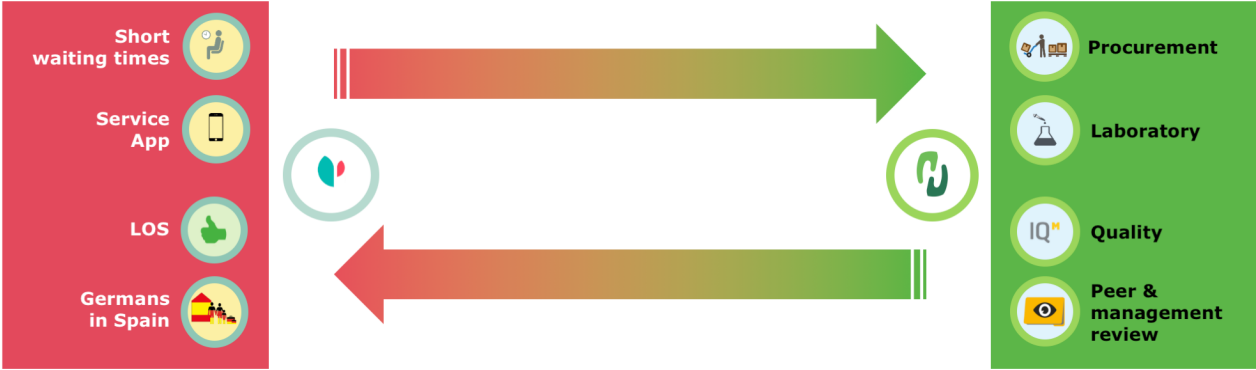


# **From Best Practice Transfer to an International Transformation**

# Portfolio Sharpening - New Growth Prospects



# Learning by Integration



**Constant interaction to develop best practice and achieve synergies across the group**

■ Processes ■ Services ■ Results

# The Best of Both Worlds



Capital Markets Day, 8 June 2018

**Helios.health**

# **A Medical View Across Borders**

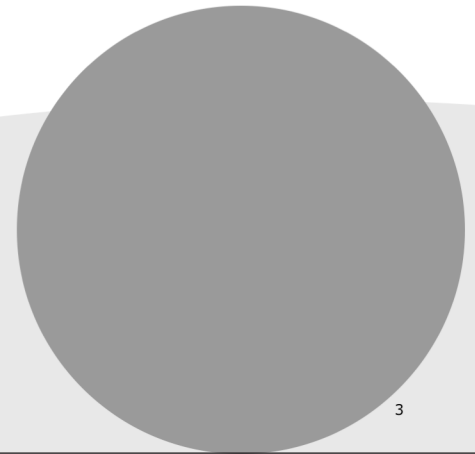
Ralf Kuhlen, MD, PhD – CMO Helios Health

# The Best of Both Worlds



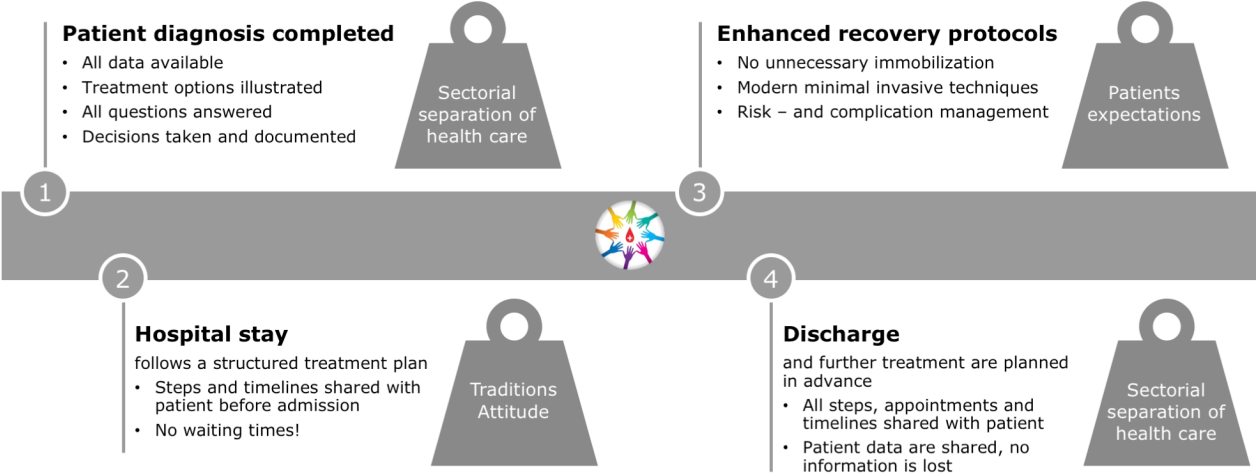
# Key Take-Aways

- Helios has a patient-centered vision
- Spanish health care system has excellent quality while being very efficient
- Medicine has no borders – good medicine has
- Good medicine and economic success fit together

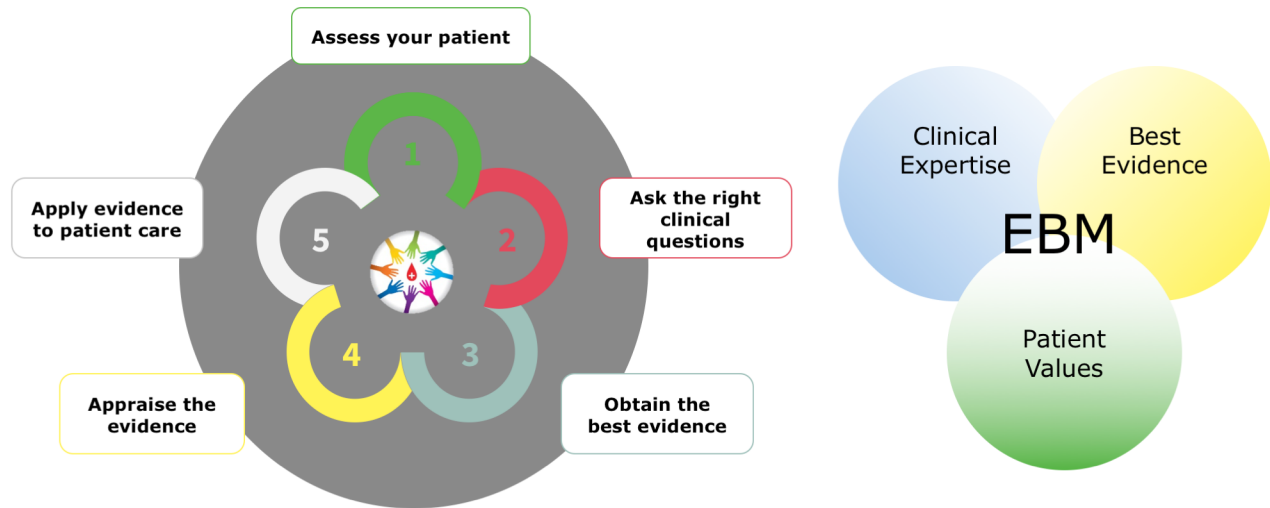




# Our Patient Centered Vision

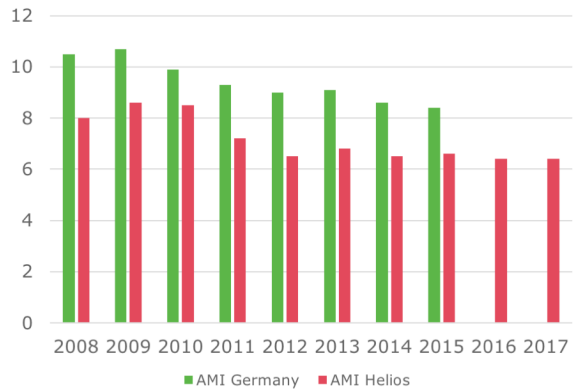


# Evidence-Based Medicine (EBM) – a Global Standard for Patient-Centered Care

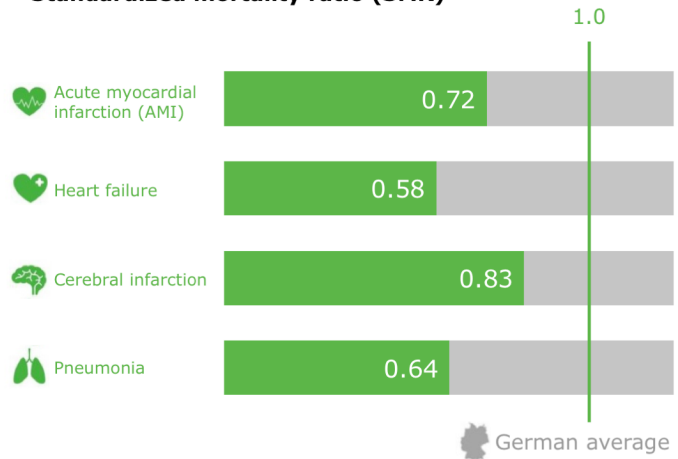


# Quality First!

## Acute myocardial infarction (AMI)



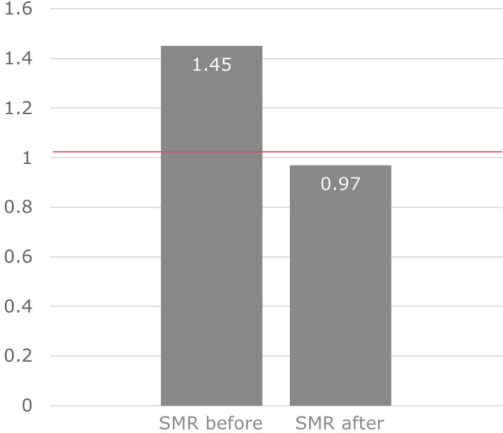
## Standardized mortality ratio (SMR)



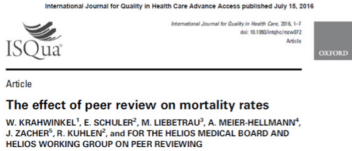
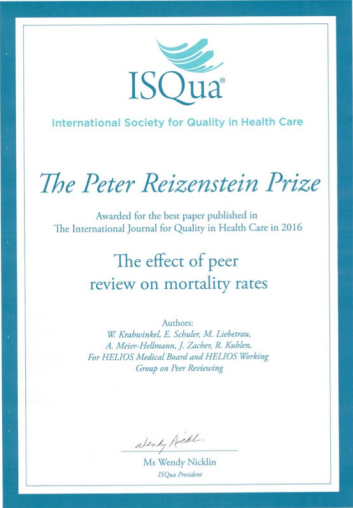
# Peer Review



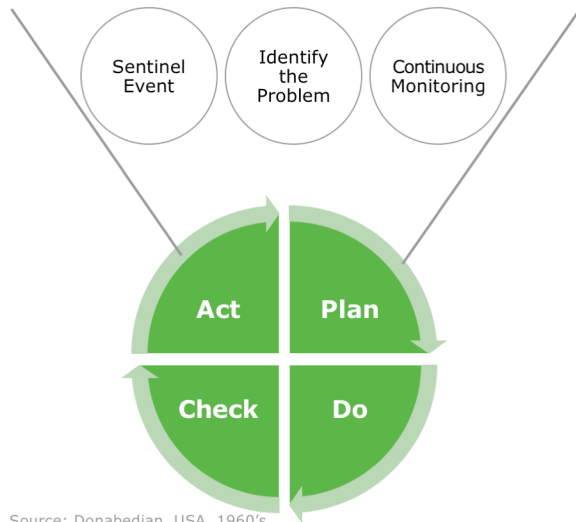
# Proven Success in Germany!



Cumulative mortality effect peer reviews



# Two Standard Quality Management Cycles



Source: Donabedian, USA, 1960's



## Days Spent as Inpatient Every Year?

1.8

0.9

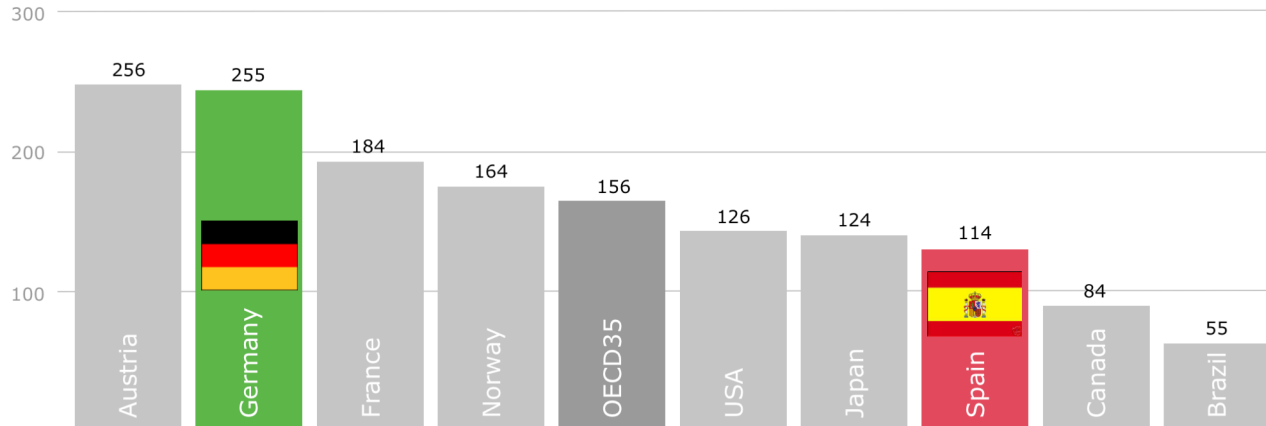
0.7

0.6

# Health Care Utilization across Borders

## Hospital discharges, 2015 (or nearest year)

Per 1,000 population





# Factors to Compare Health Care Systems

**Health status**

**Health care system**

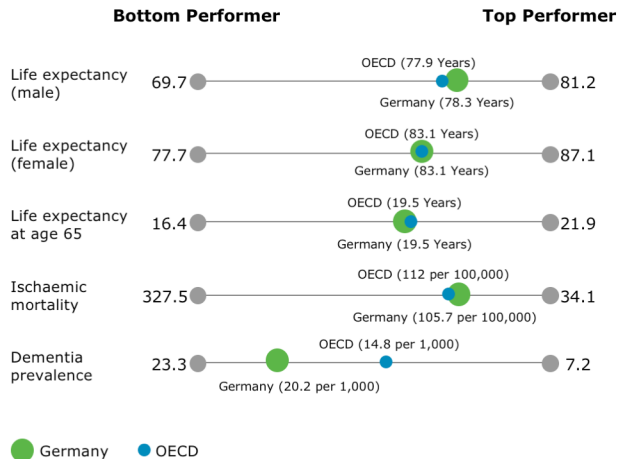
- Access
- Quality
- Expenditure & financing
- Health care resources
- Sectorial structure

**Risk factors**

**Epidemiologic, demographic, economic, social and cultural context**

# OECD Comparison on Health Status

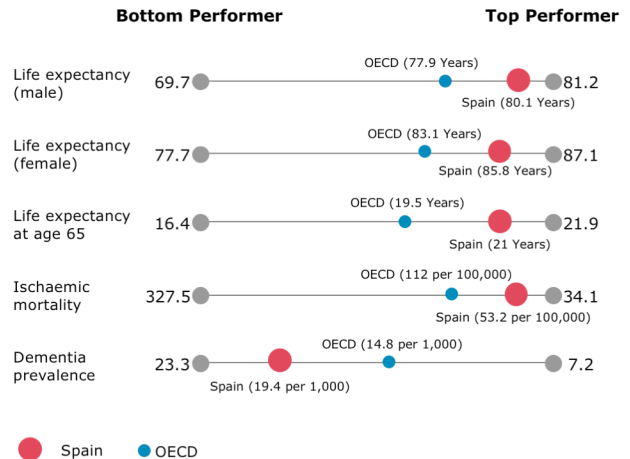
## Health Status Germany:



Source: OECD Health Statistics

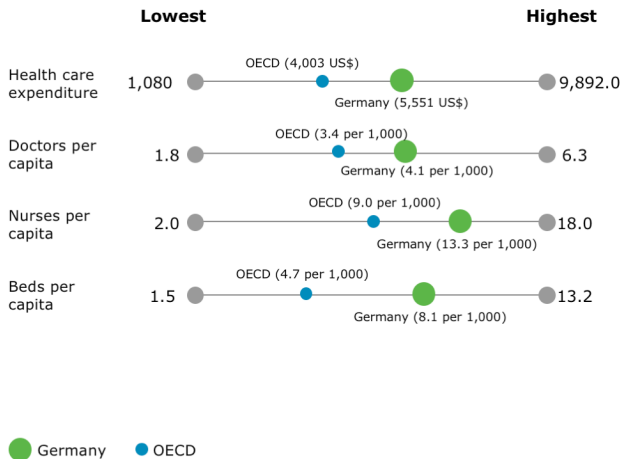
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## Health Status Spain:



# OECD Comparison on Health Care Resources

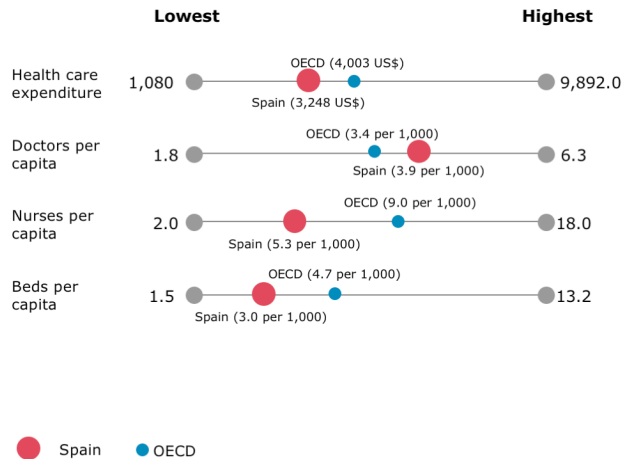
## Health care resources Germany:



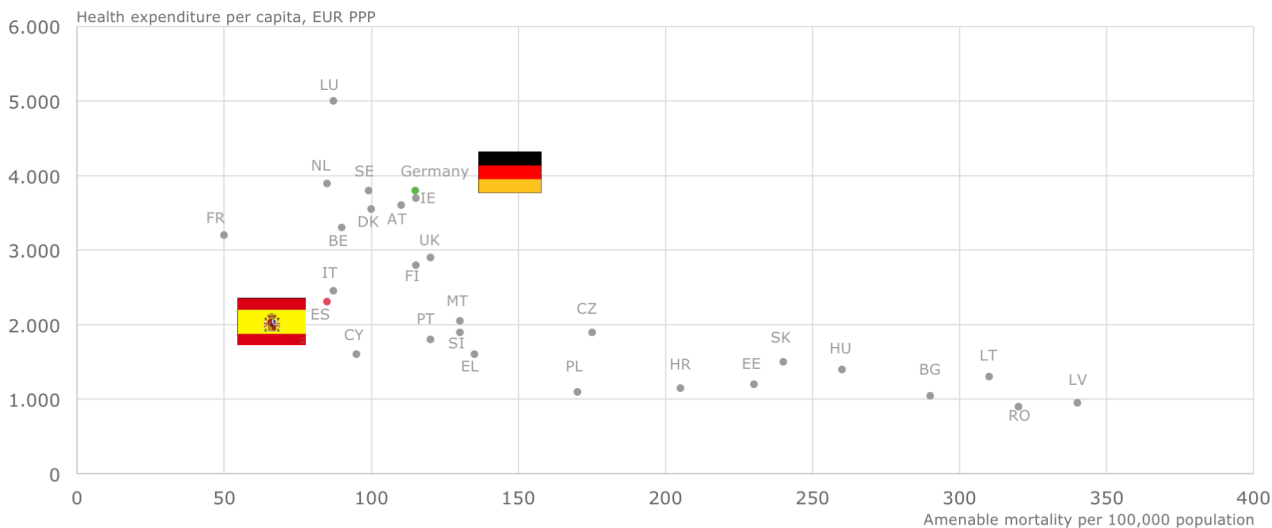
Source: OECD Health Statistics

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## Health care resources Spain:

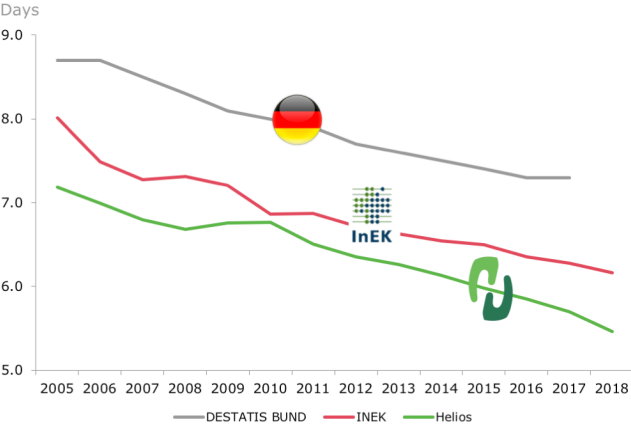


# Different Health Care Systems – Different Efficiencies



Source: OECD Health Statistics

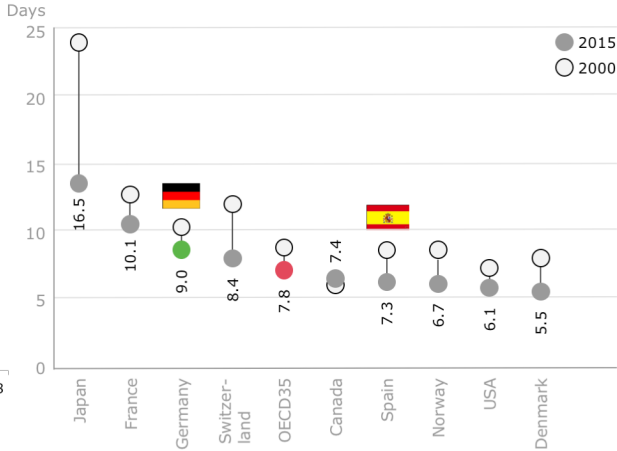
# Process – the LOS as an Indicator



LOS acute care DRG comparison

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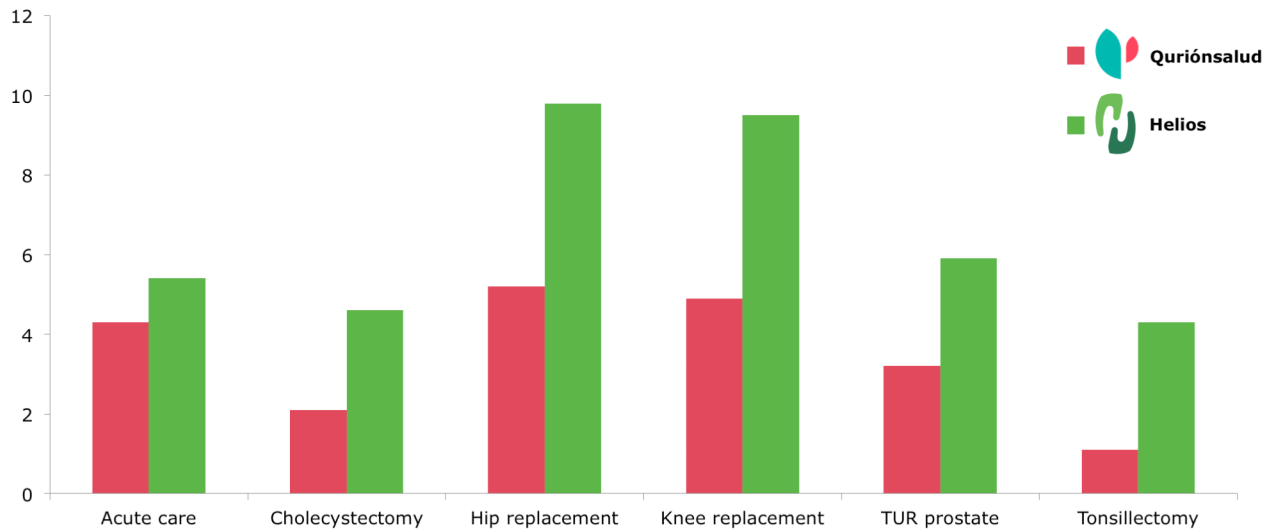
Average LOS in hospital, 2000 and 2015 (or nearest year)



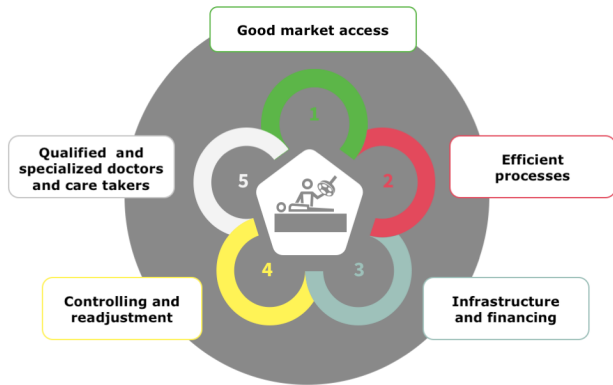
LOS all hospital stays, incl. mental disease

Source: OECD Health Statistics

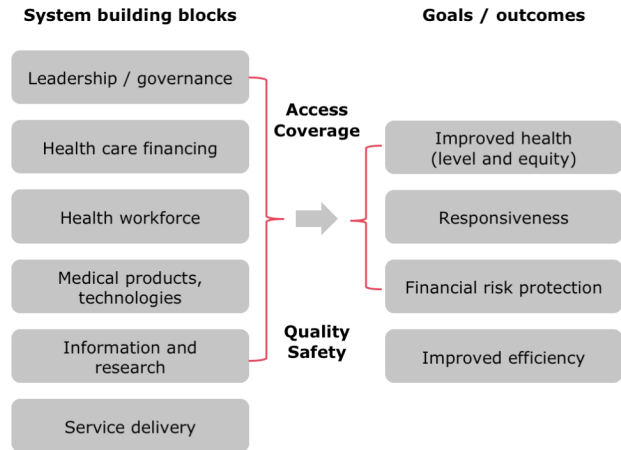
# Examples for LOS Differences



# Medicine Aware of its Borders and Limits?



## The WHO Health Systems Framework



Capital Markets Day, 8 June 2018

# Helios Germany Overview

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Franzel Simon – CEO Helios Kliniken





# The Best of Both Worlds



# Key Take-Aways

- Attractive business with high entry barriers
- Regulatory framework offers challenges and opportunities
- Helios Germany is the ideal partner for cross-sectoral care
- Pioneer in new care models
- Excellently prepared for the future

# Corporate Management Team



**Franzel Simon**  
Chief Executive  
Officer (CEO)



**Armin Engel**  
Chief Service  
Officer (CSO)



**Karin Gräppi**  
Chief Labor  
Officer (CLO)



**Olaf Jedersberger**  
Chief Operating  
Officer (COO)

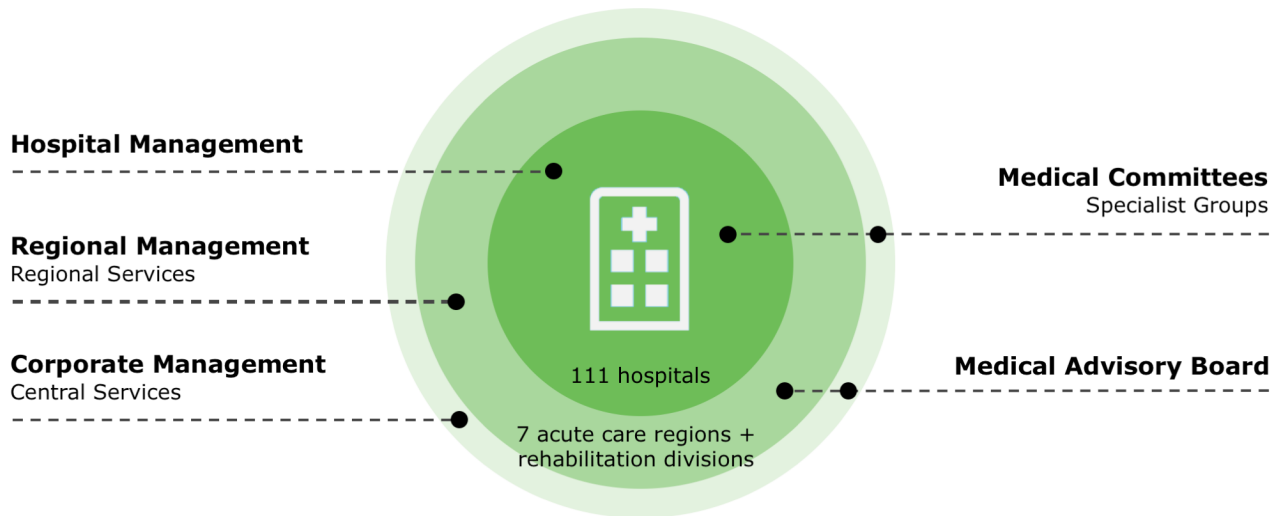


**Andreas  
Meier-Hellmann**  
Chief Medical  
Officer (CMO)



**Jörg Reschke**  
Chief Financial  
Officer (CFO)

# Local Responsibility – Company-Wide Networking



# Extended Management Team



**Reiner Micholka**  
Regional Manager  
Lower Saxony Region



**Manuel Berger**  
Regional Manager  
North Rhine-Westphalia Region



**Corinna Glenz**  
Regional Manager  
Central Region



**Marcus Sommer**  
Regional Manager  
South Region



**Marc Baenkler**  
Regional Manager  
North Region



**Mate Ivančić**  
Regional Manager  
Central-North Region



**Roland Bantle**  
Regional Manager  
East Region



**Jan Leister**  
Manager  
Helios Rehabilitation Clinics



# Medical Advisory Board and Specialist Groups



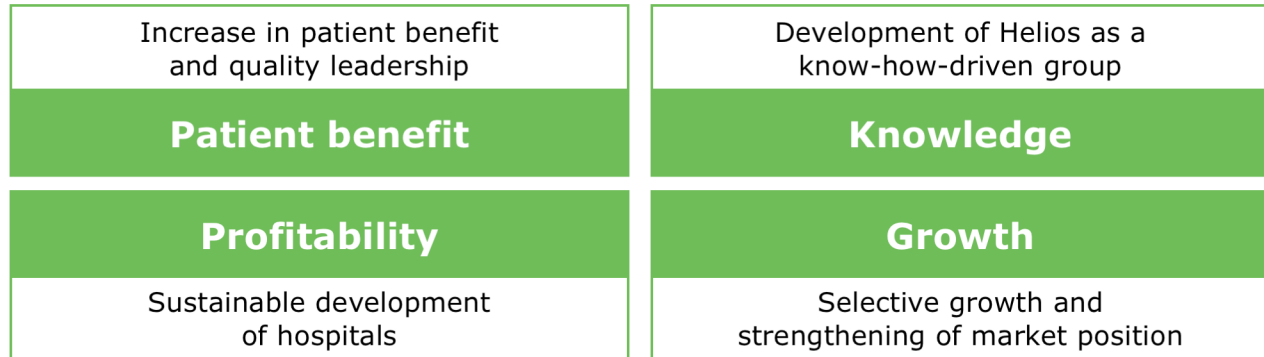
The Helios Medical Advisory Board

Our Medical Advisory Board and 27 Specialist Groups guarantee the further development of medicine and quality. They provide support to management, develop medical concepts, adopt standards and make recommendations for action.

All therapy-relevant purchasing decisions are made exclusively according to medical criteria.

# Strategic Objectives

Helios's target matrix for medical and economic success:





## 74,000 employees in Germany

Promoting the compatibility of job and private life – providing 32 kindergartens, flexible working hours, job-sharing offers

350 different occupational areas

Training: 49 training centers for more than 3,000 young people

Three simulation centers.  
Amboss knowledge platform: free access for around 12,000 doctors

€30 million for training and development

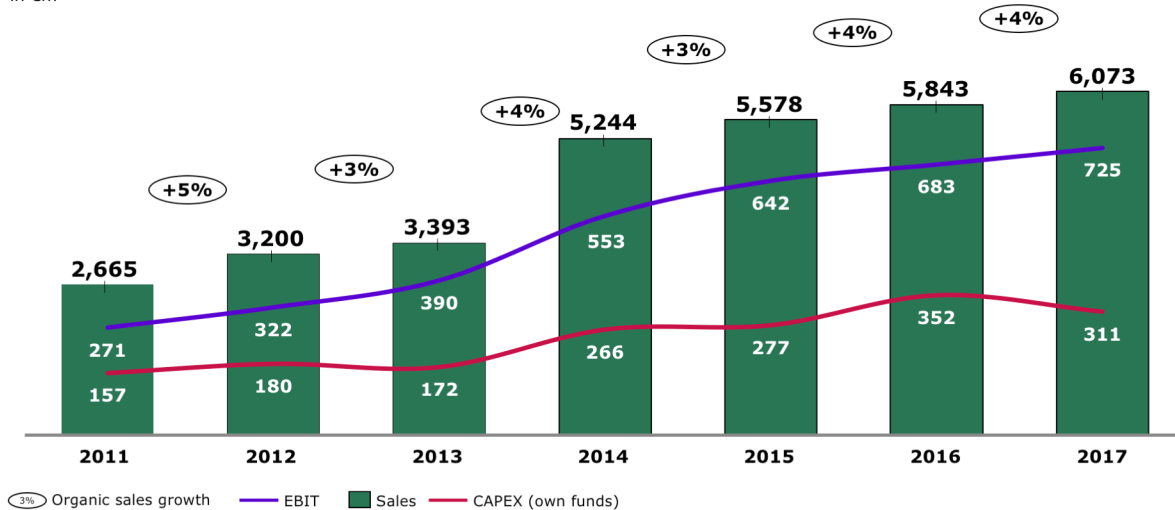
Employee health – different courses available at all locations

Helios Plus card: free supplemental health insurance providing private patient comfort and treatment by a senior physician



# Sales and EBIT Development – Steady Growth

in €m

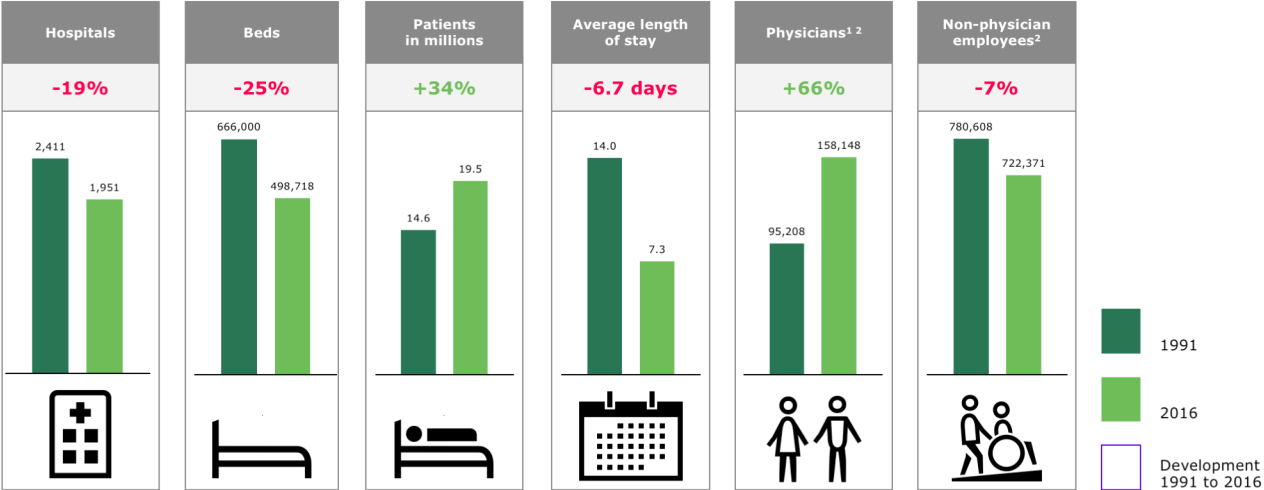


# The Acute Care Hospital Market in Germany

	Public	Non-Profit	Private	Helios
Hospitals	570 (29.2%)	674 (34.5%)	707 (36.2%)	88 (4.5%)
In-Patient Cases	9.8m (49.0%)	6.41m (34.2%)	3.16m (16.8%)	1.23m (6.1%)
Beds	238,803 (47.9%)	166,858 (33.4%)	93,057 (18.7%)	29,618 (5.9%)
Length of stay (days)	7.3	7.0	7.7	6.4

Based on most recent available data of the German Federal Statistical Office (2016) and respective internal Helios data

# German Hospital Market – Major Trends

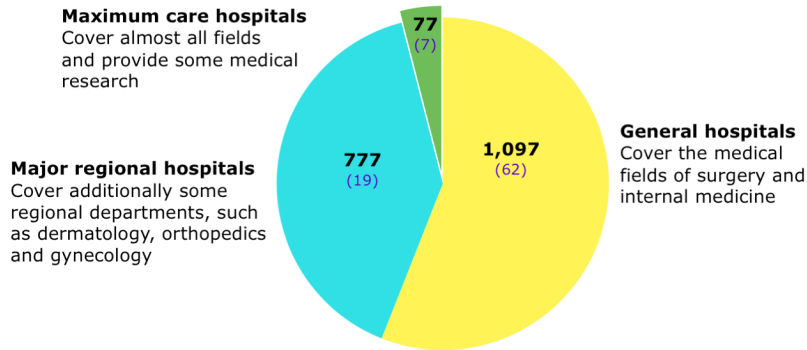


<sup>1</sup> full-time physicians <sup>2</sup> On a full-time basis converted | Source: German Federal Statistical Office

# Hospital Landscape in Germany

## Hospital care levels in Germany (Helios)

In Germany, we have 1,951 acute care hospitals which fall into 3 main categories:



Source: German Federal Statistical Office,  
Maximum care hospitals are defined as acute care hospitals with >800 beds

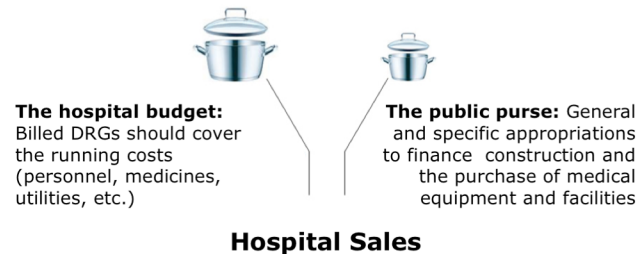
# Dual Hospital Financing in Germany

## In accordance with the Hospital Financing Law (KHG) (Section 1)

- Hospital planning is carried out at the state level
- Must be included in the state hospital plan
- Approved specialist departments

## "Who pays the hospital?"

The principle of **Dual Financing** ("two different pots")



# DRG Budget Process

$$\begin{aligned} &\text{Hospital admissions} \quad \times \quad \text{Case mix index} \\ &= \\ &\quad \text{Sum of relative cost weights} \\ &\quad \text{(Bewertungsrelationen)} \\ &\quad \times \\ &\quad \text{Base rate (Basisfallwert)} \\ &= \\ &\quad \mathbf{Budget} \end{aligned}$$

## Example: Hospital Admission Franklin

Justin Franklin (fund manager, 33) appendectomy, released from hospital after 3 days

### Invoicing Admission Franklin:

Relative Cost Weight:	1.0
x Base rate	<u>€3,500*</u>
<b>= Payment</b>	<b>€3,500</b>

**Budget**





### Hospital:

Relative Cost Weight:	1.0
x Admissions	10,000
x Payment/Admission	<u>€3,500*</u>
<b>= Proceeds</b>	<b>€35m</b>

\* The exact Federal base rate (Bundesbasisfallwert) for 2018 is: €3,467.30

# Changes in Hospital Financing 2019 and Beyond

## Content of coalition contract

-  Extending the structural fund
-  Financing wages for incremental nurses
-  Forming clusters and centers
-  GBA<sup>1</sup> requirement for emergency services

<sup>1</sup> Gemeinsamer Bundesausschuss (Joint Federal Committee)

## Opportunities for Helios Germany

- Financial support to accelerate market consolidation
- Bundling of services
- Additional sales following possible center and quality surcharges
- Elimination of *Fixkosten-degressionsabschlag* (FDA) through centers confirmation in the hospital plan
- Competitors ceasing to provide emergency services



# Changes in Hospital Financing 2019 and Beyond

## Contents of coalition contract

- Introduction of minimum nursing staff levels
- Further negative DRG catalog effects
- Rising FDA (*Fixkostendegressionsabschlag*) discounts through volume expansion starting in 2019

## Challenges for Helios Germany

- Higher costs
- Sales impacted by negative catalog effects, in particular cardiology
- Sales impacted by increasing discounts

# Minimum Quantities and Forming Centers

- From "everyone does everything" toward specialization
- As early as 2017, Helios voluntarily started Medical Specialist Groups
- Now a mandatory requirement of both health insurers and the government!
- Tangible quality increase through minimum quantities and creation of centers. But an initial decrease in sales through the startup effect, as efficiency in the hospitals declines and not all efficiencies benefit the hospitals directly



**Streit um mehr Zentralisierung**

Die Experten fordern eine stärkere Zentralisierung von Leistungen in spezialisierten Zentren und eine Reduzierung der Bettenzahl in kleineren Krankenhäusern.

**Mehr Vorgaben, mehr Sanktionen**

Die Krankenkassen fordern eine Verschärfung der Vorgaben für die Krankenhäuser, die die Mindestmengen nicht erfüllen, und eine Abschaffung der... (text partially obscured)

**f&w** 1|18

**Mindestmengen**  
Warum sich clevere Krankenhäuser spezialisieren und vernetzen

**JETZT ANMELDEN!**

Psych-Ergebnis  
Ergebnisuntersuchungen für 2018  
F&W von der Schwabstraße  
New York City, New York



# Growth Factors

1. Forming centers for single services, with lighthouse projects  
→ increase number of cases and improve quality after initial phase
2. Decreasing number of emergency service providers  
→ growing number of cases for remaining providers
3. Closing hospitals due to requirements of the structural fund  
→ continued market consolidation, therefore fewer hospitals competing with Helios
4. Increasing the service quality for patients and their families  
→ patient loyalty
5. Development of new business areas (e.g. outpatients, ORP, third party hospital management)
6. Increased integration of outpatient and inpatient treatment
7. Selective acquisition of hospitals in Germany

# Summary

- Anticipated political regulations will impact financial performance
- Helios Germany has taken decisive measures to counteract regulatory challenges:
  - Superior medical quality
  - Digitalization
  - Clustering
  - Cross-sectoral care
  - Development of new care models
  - Sharpening of hospital portfolio
- Helios Germany is excellently prepared for the future!



# Quirónsalud Overview

Héctor Ciria – CEO Quirónsalud

8 June 2018



# The Best of Both Worlds



INTEGRATION THROUGH INTERACTION

# Key Take-Aways

- Leading hospital group in Spain
- Spanish market offers diverse range of financing models
- Multiple opportunities for growth
- Top priorities are medical quality, patient experience and digital transformation



## Agenda

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### 01 Management Team

---

02 Spanish Hospital Market

---

03 Quirónsalud Group Overview

---

04 Growth for the Next Years

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## Quirónsalud Management Team



**Víctor Madera**  
Chairman  
(non-executive)



**Héctor Ciria**  
CEO

Today's speakers

### 5 support areas



**Miguel Mascaró**  
Finance & Control (CFO)



**Adolfo Fdez. Valmayor**  
IT & Digital Transformation



**Juan Carlos González**  
Talent & Organization



**Julio Fdez Llamazares**  
Communication



**Leticia Moral**  
Quality & Innovation

### 3 operating areas ("COOs")



**Pedro Rico**  
Private Hospitals



**Juan Antonio Álvaro**  
Public Hospitals Madrid



**Fernando Camino**  
Occupational Risk  
Prevention (ORP)

## Agenda

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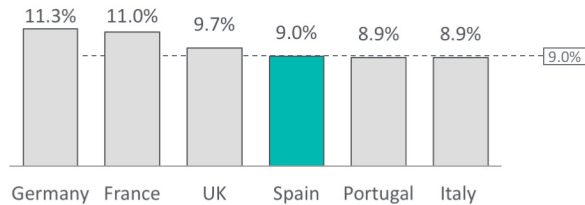
- 01 Management Team
- 02 Spanish Hospital Market**
- 03 Quirónsalud Group Overview
- 04 Growth for the Next Years



## Spain vs. European Peers

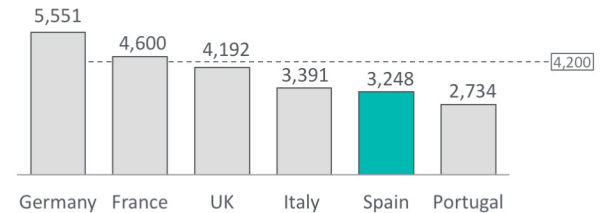
### Total health care expenditure

(% of GDP)



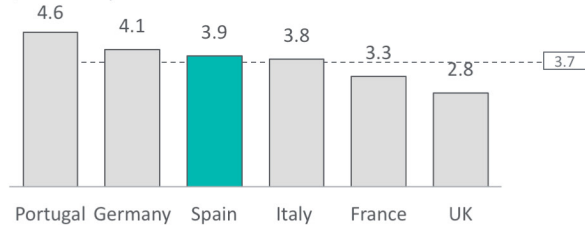
### Total health care expenditure

(US\$ PPP per capita)



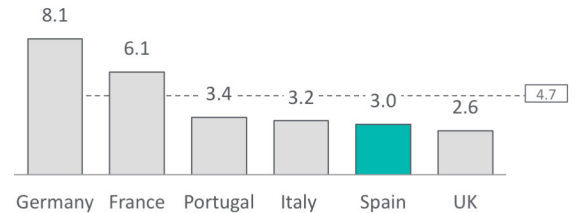
### Physicians density

(x 1,000 inhab.)



### Hospital beds density

(x 1,000 inhab.)



Source: OECD 2017, based on data from 2015 and 2016

## Spanish Health Care System Snapshot



Universal coverage  
(100% population)  
47 million users



For free  
No copayments  
Financed with taxes



70% of total  
expenditure

Duplicative  
10 million insured  
(~20% of population)

Paid by users  
~€770/year per user

30% of total  
expenditure

Private system  
supports public  
system by  
releasing  
resources

### Why pay for private insurance?

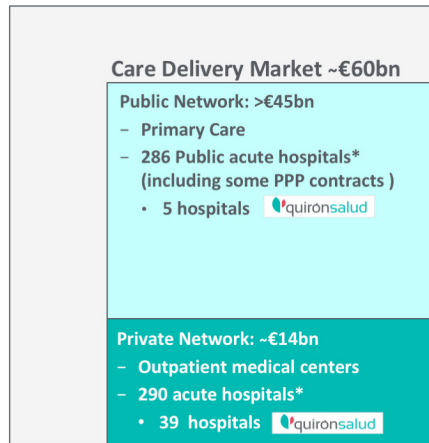
- Shorter waiting times
- Direct access to specialist doctor
- Freedom to choose doctor
- Comfortable hotel services (e.g. single room)

Source: Ministerio de Sanidad y Consumo, IDIS, DBK, Company Internal Estimates

# Care Delivery Market in Spain Amounts to ~€60bn

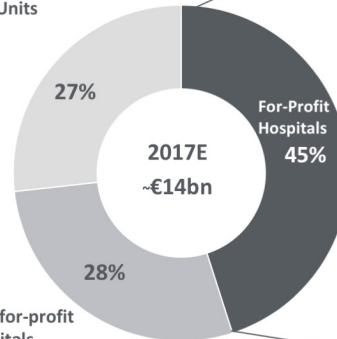
Spain GDP '17 €1.2 trillion

Total health care expenditure '17E ~€100bn

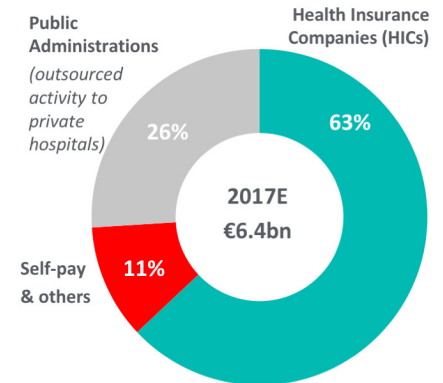


## Private Network

Outpatient Medical Centers & Specialist Units



## For-Profit Private Hospitals, Sales by Payor



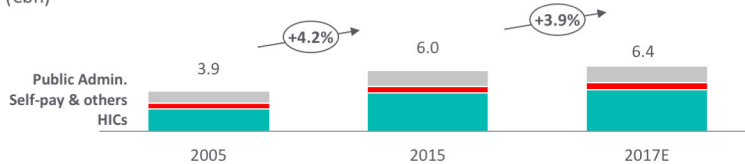
\* Excludes geriatric and psychiatric hospitals, rehabilitation hospitals, etc. If those are added, total number of hospitals in the Public Network amounts to 355, and in the Private Network to 444  
 Source: Ministerio de Sanidad y Consumo, CNH 2017, IDIS, Company Internal Estimates

Excluding Occupational Risk Prevention (ORP)

# Spanish For-Profit Private Hospitals Growth

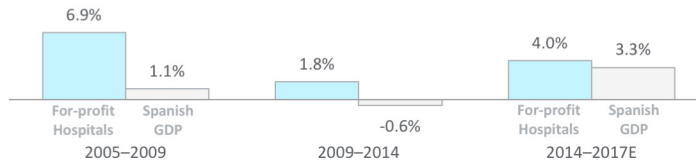
## For-Profit Private Hospital Market

(€bn)



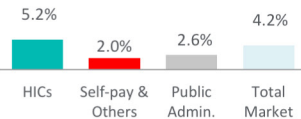
4% CAGR historically  
Expected to continue  
growing at 3%–4% p.a.

## Private hospital market vs. Spanish GDP growth

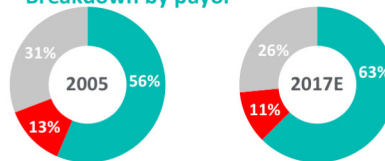


Sector growth  
above GDP in all  
economic cycles

## Sales CAGR 2005-2017E



## Breakdown by payor



Growth fueled by  
Health Insurance  
Companies (HICs)

Source: OECD 2015, IDIS, DBK, Company Internal Estimates

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- 01 Management Team
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- Business Units
- Integration with Fresenius Helios
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## Quirónsalud Group Snapshot

#1 hospital group in Spain

~ **€2.8bn** sales in 2017, **+10%** vs '16 (+6% organic)

> **100** health care centers, including **45** hospitals with c. **7,000** beds

~ **40,000** employees

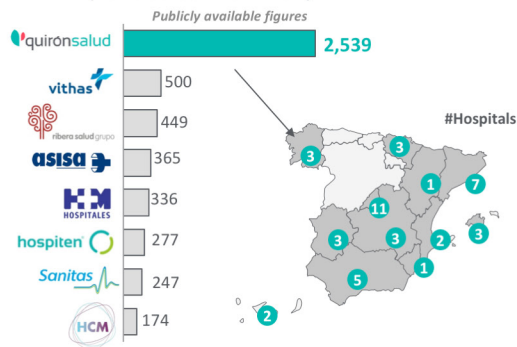
Over **300** ORP centers, direct access to **5 million** workers

Strong commitment to **quality, education** and **innovation**

Already present in **LatAm**

## Largest Spanish hospital operator







(2016 Sales in €million)



Source: annual accounts, internal analysis, press releases



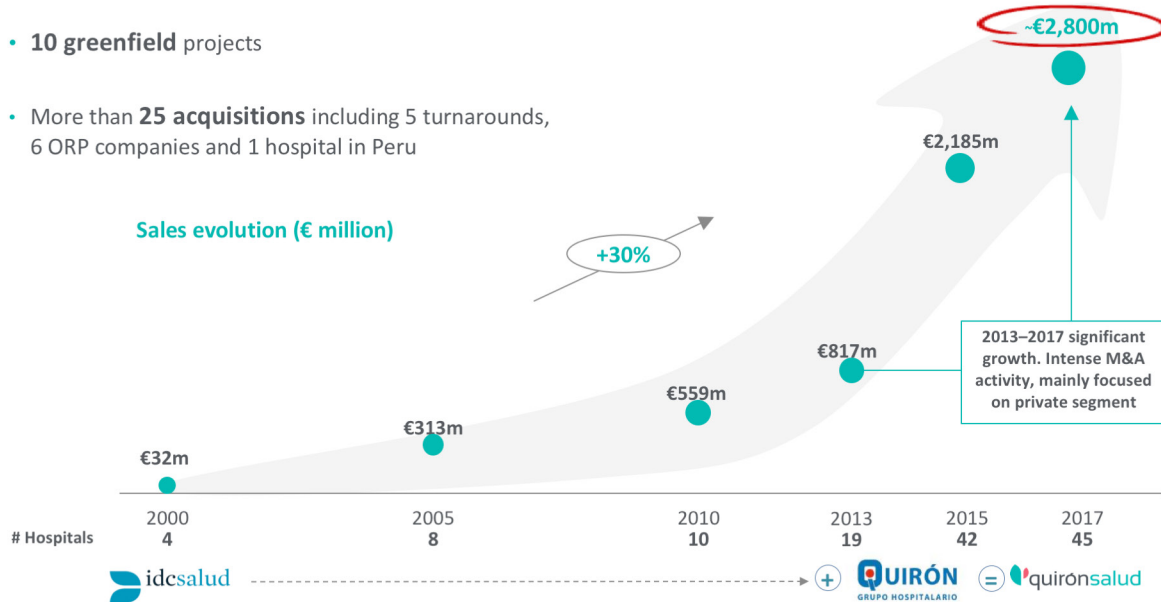
## Quirónsalud Group KPIs

		2017	Total Growth YoY*
Outpatient consultancies		8.6 million	+12%
Emergencies		2.6 million	+8%
Inpatient			
Patient Days		1.5 million	+5%
Discharges		350 thousand	+5%
Avg. Length of Stay		4.3 days	–
Occupation rate		62%	+ 1 p.p.
Surgeries		400 thousand	+8%

\* Includes organic and inorganic growth

## A History of Growth

- Sustained **organic growth**, above market
- **10 greenfield** projects
- More than **25 acquisitions** including 5 turnarounds, 6 ORP companies and 1 hospital in Peru



# Over the Last 4 Years, M&A Has Played a Transformational Role

20 acquisitions between 2014–2017...

... with significant value creation

## 1 Creation of Spanish market leader (#1 Group acquired #2)



About **€100m** of annual synergies, most of them already realized and in a steady state

## 2 Acquisition of prestigious hospitals in local markets



Mainly coming from...

- Procurement
- Internalization of services (laboratory, cleaning, catering, etc)
- ORP network rationalization
- Headquarters

## 3 Creation of market leader in ORP sector



Development of Permanent Improvement Program

## Our People

---

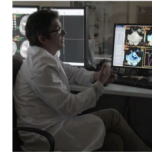
More than **32,000** employees and **8,000** mercantile doctors

**75%** female and **74%** indefinite contracts

Among **Top 10 employers** in Spain

**Unifying cultures** after 20 acquisitions in the last 4 years

**Quirónsalud Campus** corporate university



## Prestigious Hospitals in Every Large Spanish City

### Top 10 Spanish provinces

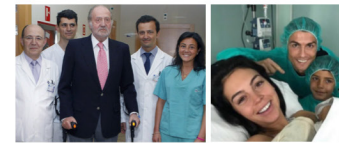
Province	Population (million)		Quirónsalud # hospitals
Madrid	6.5		11
Barcelona	5.6		7
Valencia	2.5		1
Sevilla	1.9		2
Alicante	1.8		1
Málaga	1.6		2
Murcia	1.5		1
Vizcaya	1.1		1
La Coruña	1.1		1
I. Baleares	1.1		3

### Celebrities at Quirónsalud

**Ruber**  
HOSPITAL RUBER INTERNACIONAL  
Grupo Quirónsalud



Hospital Universitario **Quirónsalud**  
Madrid



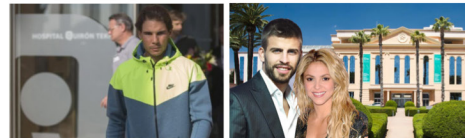
Hospital Universitari **Dexeus**  
Grupo Quirónsalud



Hospital Universitari **General de Catalunya**  
Grupo Quirónsalud



**CENTRO MÉDICO TEKNON**  
Grupo Quirónsalud



# Management Priority on Quality and Patient Experience

## Top quality standards and certifications



La Fundación Jiménez Díaz recibe el sello de calidad EFMQ 5 Star 650+ por su excelente gestión

21 de mayo 2018

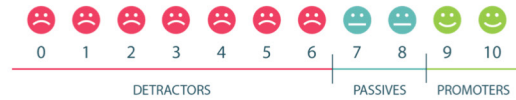


## Focus on patient experience

Collaboration with Cleveland Clinic



Continuous monitoring of NPS



CM Teknon



International Seminar on Patient Safety and Clinical Excellence, 5th edition in May 2018



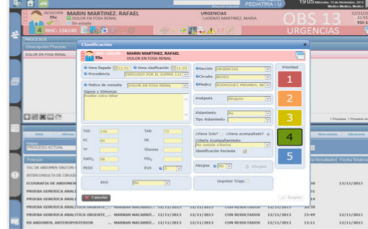
# Embracing the New Digital Opportunities

Internal  
Developments



## Care Management System (Casiopea)

Fully integrated health care system with doctors ...



... porters, nurses...



... and management



## Patient Portal (app & web)

- Started in Q4 2016
- +700,000 patients registered
- +1 million appointments
- ~10% of Quirónsalud's total outpatient consultations

Online appointment



Access to medical records



## Equipped with the Latest Technology

### Cutting-edge high-tech equipment

- 86** MRIs
- 60** Multi-sliced CT scans
- 23** Linear accelerators
- 12** PET-CTs
- 5** Da Vinci surgical robots
- 4** SPECT-TCs
- 1** Gamma Knife
- 1** Cyber Knife



**1<sup>st</sup> proton beam therapy center in Spain, to be opened in Q4 2019**





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# Quirónsalud Group Structure & Business Units

Simplified



**Hospitals**  
**quirónsalud**

Fundación Jiménez Díaz | Ruber | HOSPITAL RUBER INTERNACIONAL | CENTRO MÉDICO TEKNON

- Health care services
- 45 hospitals, 81 medical centers
- Real Estate owned in 30 hospitals

**ORPs**  
**quirónprevención**

- Health & Safety at workplace
- Over 300 centers
- 5 million workers covered

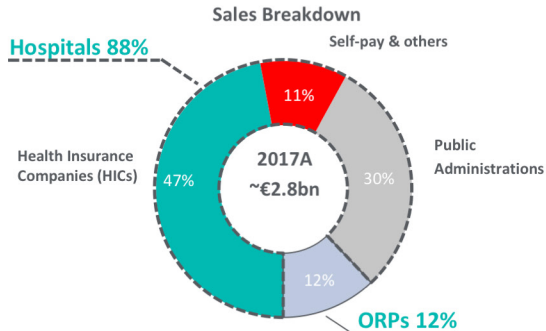
**Transversal Units (internal services)**



- Laboratory
- Radiology
- Pathology



- Non-health care services (cleaning, kitchen, cafeteria, maintenance, etc.)
- Central procurement unit
- IT & call center

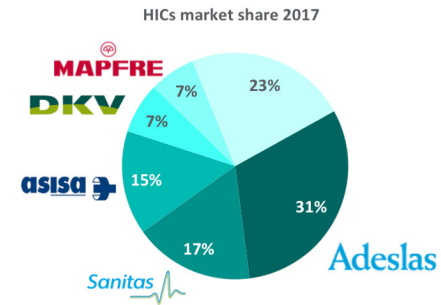


## Hospital Private Activity



### HICs

- Quirónsalud has agreements with all relevant HICs
- 90% national and 10% international
- National HICs
  - Market growth at 4–5% p.a.
  - Top 5 control close to 80% of market
  - Quirónsalud has improved its positioning vis-à-vis HICs, establishing recurrent win-win relationships
- International HICs cover the travel segment and medical tourism



Source: ICEA

### Self-pay

- Prestige and quality
- Activity is generated from
  - Highly reputed specialists offering private services only
  - Patients without private health insurance
  - Treatments not covered by insurance plans (plastic surgery, fertility)

Ruber Internacional (Madrid)



Quirónsalud Madrid



CM Teknon (Barcelona)



Quirónsalud Marbella





## Hospital Public Activity – General Overview

### Long-Term Contracts

- 5 hospitals: 4 in Madrid and 1 in Catalonia
- Stable and secure contracts
  - Terms: 30 years in Madrid, 10 in Catalonia
  - Expiration dates in Madrid 2036-2041
  - Tariffs adjusted by CPI
- Hospitals integrated in public network with assigned population area
- Revenue model: (i) capitation fee or (ii) DRG /Activity



### Short-Term Contracts

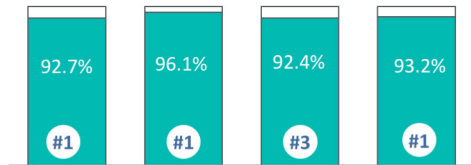
- Outsourced activity to private players, typically to reduce surgical waiting lists
- Variable length of contracts (typically 2–5 years)
- More than 10 Quirónsalud hospitals, broad geographical distribution



# Hospital Public Activity – Patient Satisfaction in Madrid



## 2017 Patient Satisfaction Survey in Madrid



Quirónsalud	FJD	Hosp. Villalba	Hosp. Rey Juan Carlos	Hosp. Infanta Elena
Complexity	Group III	Group II		Group I
# Hospitals	8	13		6

## Evolution of Quirónsalud hospitals in satisfaction rankings

	2010	2011	2012	2013	2014	2015	2016	2017
Group III FJD	1	2	1	1	1	1	1	1
Group II Hosp. Villalba	-	-	-	-	-	1	2	1
Group II Hosp. Rey Juan Carlos	-	-	1	1	1	2	1	3
Group I Hosp. Infanta Elena	2	1	2	1	2	1	2	1

**Quirónsalud hospitals consistently lead the user satisfaction rankings in Madrid's public system**

Source: Servicio Madrileño de Salud

## ORP Business Unit



### Leader in a ~€1.3bn market

Publicly available figures

Main Groups	Quirónprevención	Cualtis	ASPY Salud	Grupo Preving	MAX PREVENCIÓN SERVICIO DE PREVENCIÓN
Rank by Sales	#1	#2	#3	#4	#5
ORP Centers (approx.)	300	130	200	200	60

### Growth & synergies in the ORP sector

	2016	2017	2018E	
• Sector is growing thanks to <b>positive cycle</b>	Spain GDP growth	3.3%	3.1%	2.7%
• Further expected <b>synergies</b>	Unemployment rate	19%	17%	15%

### Large potential for hospital growth (cross-referral)

- **5 million** workers covered
- **2 million** medical checkups per year
- **300** ORP centers network
- **New services** contracted with Quirónsalud: laboratory, imaging, etc.
- **Direct dialog** with largest Spanish corporates (Ibex 35)

Telefonica

Endesa



REPSOL

INDITEX

IBERIA

Source: annual accounts, internal analysis, Aspren, press releases

## Agenda

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Business Units

**Integration with Fresenius Helios**

- 04 Growth for the Next Years



## Integration with Fresenius Helios on Track, Promising Start





## Agenda

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# Organic Growth in all Segments

## Positive macro trends ...

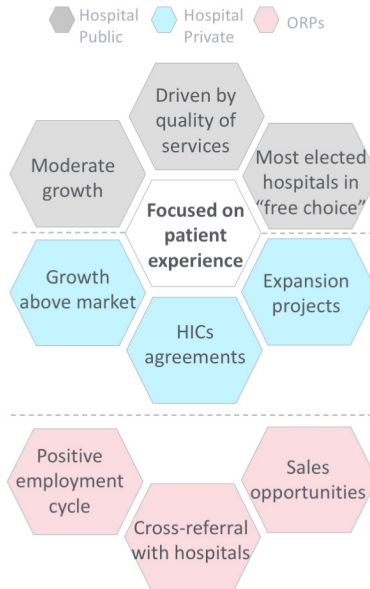
- Spain is leading growth in EU
  - +2.7% GDP '18E growth
  - Reducing unemployment



**Spain raises 2018 growth forecast to 2.7 pct of GDP**

- Private hospital market to grow at 3-4%, outperforming Spanish GDP

## Top line growth in all units ...



## Various efficiency levers ...

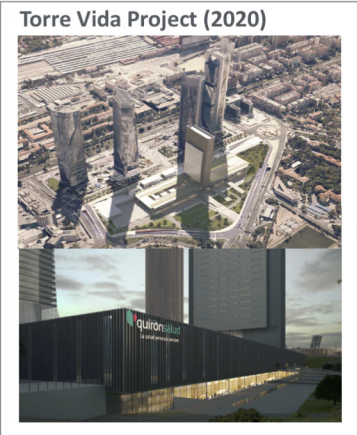
- Internalization of services (Transversal Units)



- Corporate projects
  - Shared services centers
  - IT systems convergence
  - Revenue assurance program

- Permanent operational improvement program

# New Greenfield Centers – 5 Openings Within the Next 3 Years

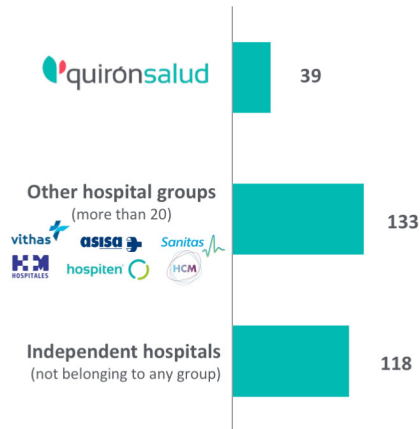


# Inorganic – Further M&A Opportunities

## Spain

Selective opportunities in a still fragmented private market

# Acute hospitals in private network



Source: CNH 2017



## LatAm

Analyzing opportunities in growing markets

- Present in Peru since Jan '17
  - Positive performance in our 1<sup>st</sup> year. Above expectations
- Some countries in Latin America could be attractive
  - Improving regulatory and institutional conditions
  - Relevant market sizes, with growth potential
  - Opportunities for market consolidation



Capital Markets Day, 8 June 2018

**Helios.health**

# **Views on Health Care – Germany**

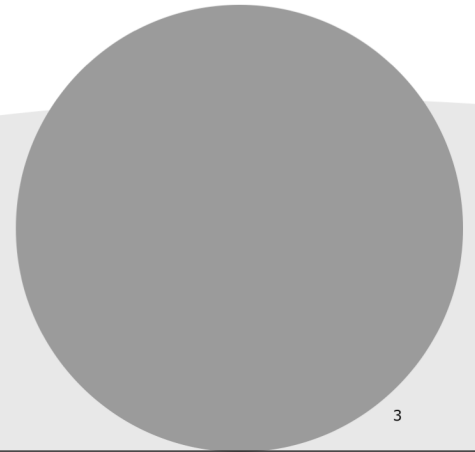
Andreas Meier-Hellmann – CMO Helios Kliniken

# The Best of Both Worlds



# Key Take-Aways

- Increasing efficiency while maintaining superior quality levels
- Scale matters – creation of specialized medical centers fosters quality improvements



# The German Hospital Market

## External factors on efficiency

- Fixed prices
- Given nurse-to-patient-ratio in near future
- Too many hospitals

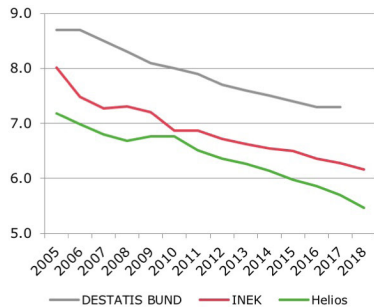
## Steerable factors we focus on

- Extended length of stay
- Too many intensive care beds
- Strict separation of outpatient and inpatient care
- Complex medical interventions in too many hospitals with insufficient frequency

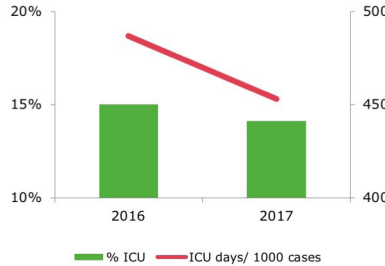


# LOS and Use of Intensive Care Resources

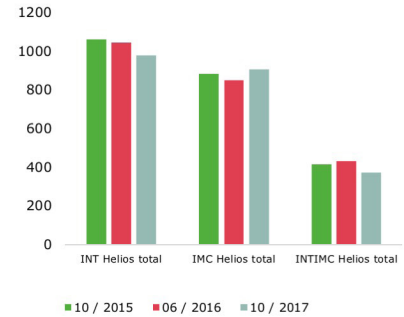
LOS Germany



Intensive Care Unit Usage



Volume of INT and IMC beds



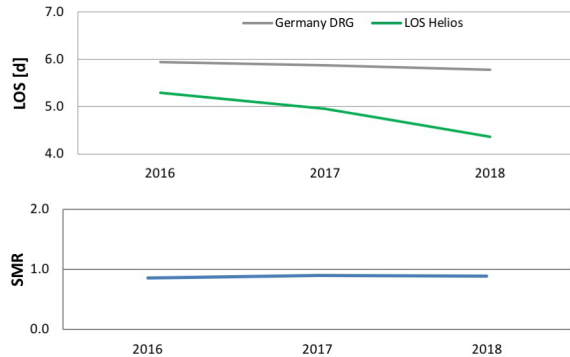
LOS = Length of stay    INEK = German Institute for Hospital Reimbursement    DESTATIS BUND = German statistical data  
 ICU = Intensive Care Unit    INT = Intensive Care    IMC = Intermediate Care

## **Too Many Beds / Extended LOS**

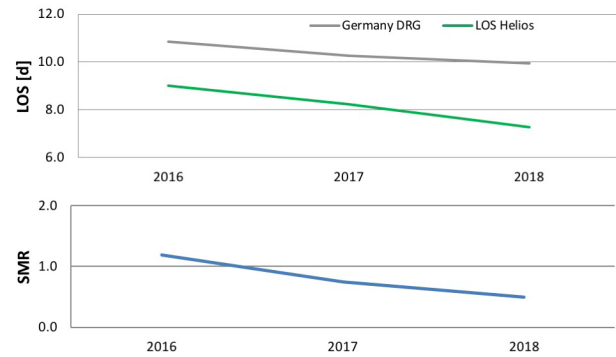
- Standard Operating Procedures (SOPs) with clear setting of patient pathways improve patient outcome
- SOPs decrease LOS
- Introduction of SOPs for an increased number of patient cohorts
- Our excellent track-record of quality management demonstrates that we can sustainably improve treatment & care of our patients

# SOPs Decrease LOS

**AMI w/PCI**  
**2016 till 2018/04** (2018 after SOP implementation)



**Hip replacement, Coxarthrosis**  
**2016 till 2018/04** (before and after SOP implementation)



**Increasing efficiency while maintaining superior medical quality levels**

SOP = Standard Operating Procedures    LOS = Length of stay    AMI = Acute Myocardial Infarction    PCI = Percutaneous Coronary Intervention  
 SMR = Standard Mortality Rate

# Strict Separation of Outpatient and Inpatient Market

## What we can learn from Spain

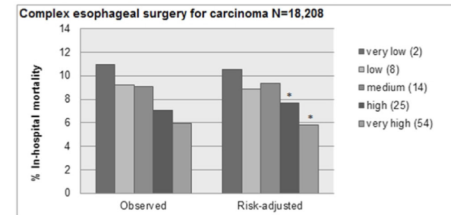
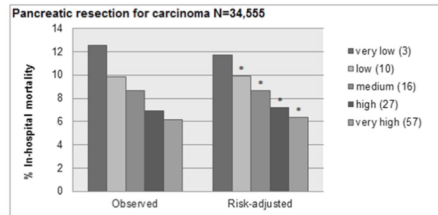
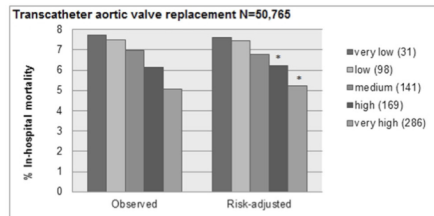
125,000 saved days ( $\approx$ 350 beds) due to supply of small interventions in outpatient setting!

## What will we do in Germany

- Seizing opportunities to penetrate the outpatient market:
  - Building units for outpatient surgery
  - Extending the offer of outpatient medicine

# Proven Inverse Correlation Between Case Numbers and Mortality

- Centralization
- Creating medical centers with a volume at least as high as or even higher than the biggest centers we currently have in Germany

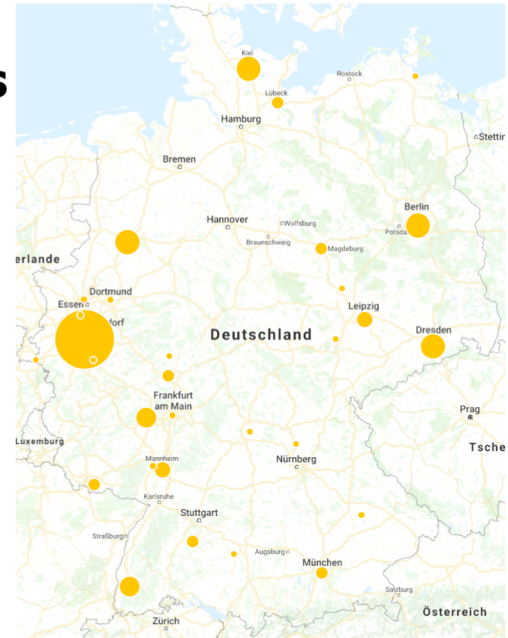
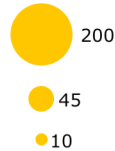


Nimptsch U, Mansky T. BMJ Open 2017;7:e016184. doi:10.1136/bmjopen-2017-016184

# Oesophagectomies at German University Hospitals

Location	Cases
Uni Köln	185
Charité – Berlin	82
Uni Dresden	76
Uni Münster	73
Uni Freiburg	72
Uni Heidelberg	58
Uni Mainz	58
Uni Kiel	48

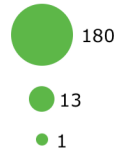
University hospitals



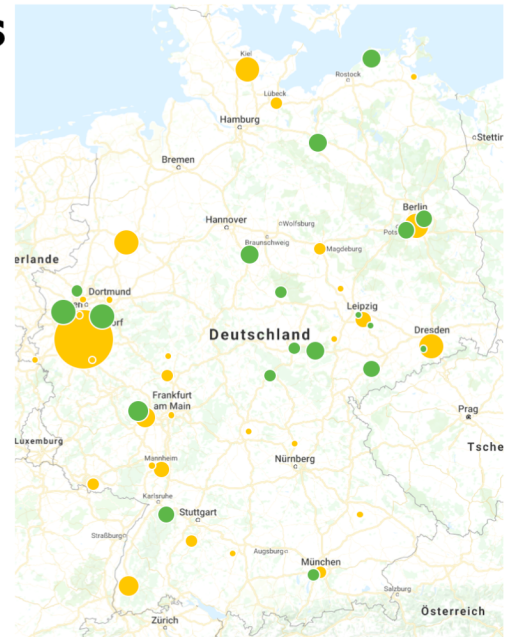
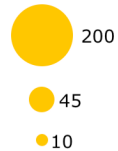
# Oesophagectomies in Helios

Location	Cases
HSK Wiesbaden	22
EVB Berlin	20
Krefeld	17
Hildesheim	16
Berlin-Buch	14
Erfurt	13
Wuppertal	12
Hanseklinikum Stralsund	10
Pforzheim	10
Schwerin	10
<b>Total</b>	<b>172</b>

Helios hospitals



University hospitals



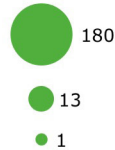
# A Lighthouse (in the North Sea)

Location	Cases
HSK Wiesbaden	22
EvB Berlin	20
Krefeld	17
Hildesheim	16
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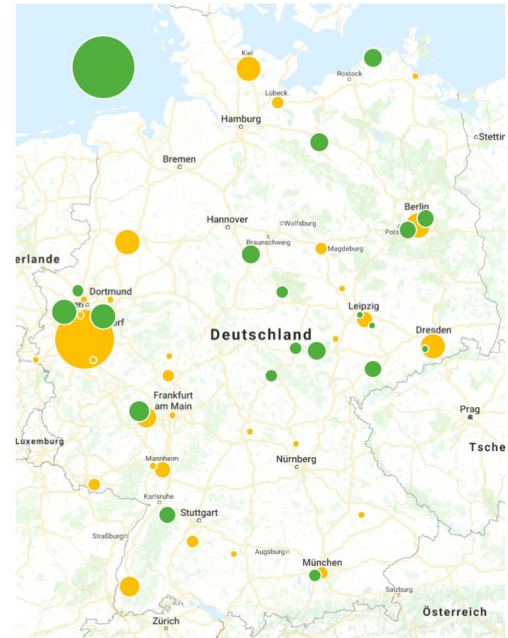
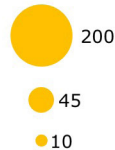
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Uni Mainz	58
Uni Kiel	48

Helios.health

HELIOS hospitals



University hospitals





# Scale Fosters Medical Quality Improvements

- First complete centralizations of complex medical interventions started
- Helios has critical size of hospitals to create medical centers with at least as many or more patients than the largest provider in Germany

Intervention	University hospital with highest number of interventions (n)	All Helios hospitals (n)
Pancreatectomy	Heidelberg 543	632
Cystectomy	Munich 126	437

- Growing efforts to educate patients on quality/mortality implications likely to overcome resistance to travel larger distances
- Virtuous circle: Increase of quality and reputation will attract even more patients

**Further decrease of LOS and centralization of complex medical interventions will provide sustainable growth in Germany!**

Capital Markets Day, 8 June 2018

**Helios.health**

# Views on Health Care – Spain

Leticia Moral, MD, PhD –  
Quality & Innovation Director Quirónsalud

# The Best of Both Worlds



# Key Take-Aways

- Positive patient experience is key driver of Quirónsalud's growth
- Integration of outpatient and inpatient care drives improved efficiency
- Cross-border knowledge transfer between Quirónsalud and Helios improves clinical practice

# Integration of Outpatient and Inpatient Care Drives Improved Efficiency

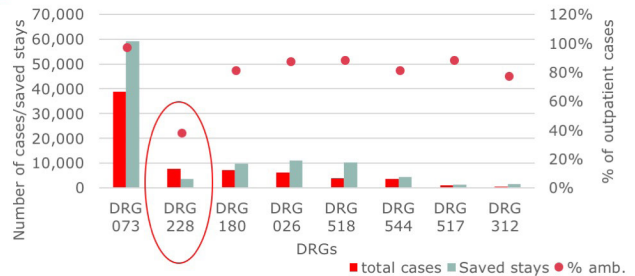
	2017	2016
Average length of stay (days)	4.25	4.29
% Substitution index in ambulatory surgery*	67.3%	67.2%

Hip replacement	2017	2016	Dif.	
			absolute	%
Number of cases	4,391	3,996	395	10%
Length of stay	6.32	6.95	-0.63	-9%
Total real stays	27,751	27,772		

LOS reduction in hip replacement increases the activity by 10% and saves 7.58 beds/day

\* % of major surgeries performed as day cases (outpatient)  
Quirónsalud data base 2017; APR DRG 32.0 version

Saved stays by outpatient surgery (day cases)



Example: Performing ~ 72,000 surgical procedures as outpatient surgery (day cases) saves 125,000 stays per year = 350 beds daily

... and gives us the opportunity to improve DRGs with "low" outpatient rate (e.g. DRG 228 Hernia procedures)

(Assumption) Saved days = length of stay of inpatient cases X n° of ambulatory surgeries

# Positive Patient Experience as Key Driver of Quirónsalud's Growth

## Patients want ...

- Services provided on time
- Empathy, their educational, emotional, and spiritual needs taken care of

## Patients expect ...

- High quality & safe care
- Innovative & affordable care

Patient Experience

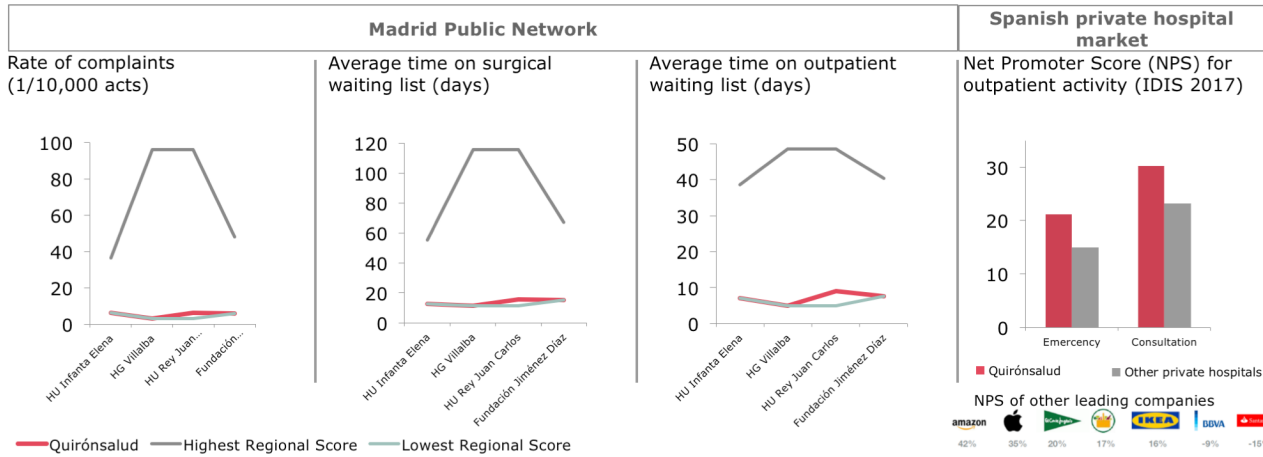
## We have to offer ...

- Patient-centered care:
  - "Care & caring" program: we teach our employees how to treat patients
  - Focus groups with patients to improve services
  - Daily monitoring of patient experience through Net Promoter Score (NPS): 184,117 patients in year 2017
- Good accessibility, short waiting list: process standardization and on time control of waiting times
  - Outpatient: less than 15 days, less than 15 minutes
  - Emergency Department: first medical attention under 30 minutes

## We have to guarantee ...

- High quality & safe care
- Innovative & affordable care
- Efficiency

# Positive Patient Experience + Short Waiting Times = Success

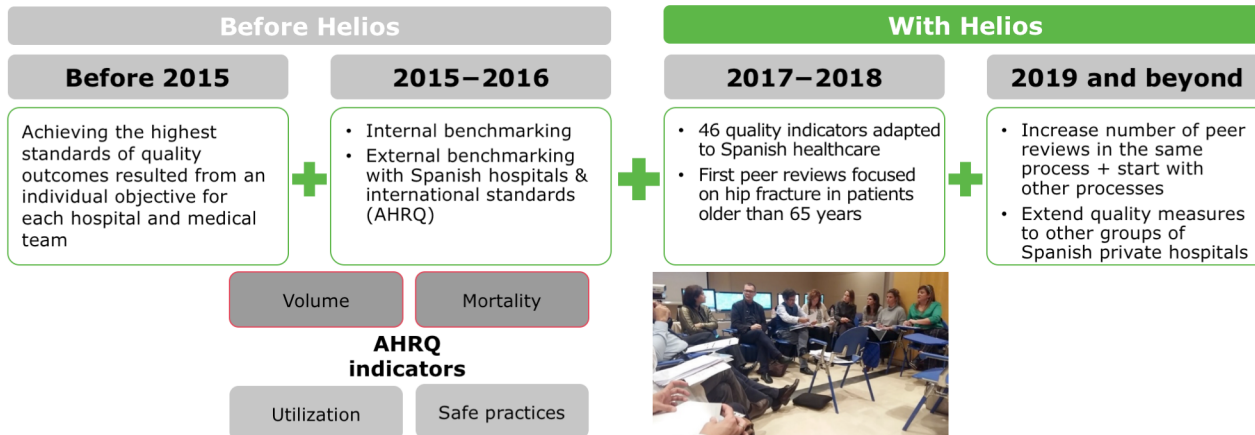


\* [http://www.madrid.org/cs/Satellite?cid=1354183538063&language=es&pagename=PortalSalud%2FPagina%2FPPTSA\\_servicioPrincipal&vest=1354183538063](http://www.madrid.org/cs/Satellite?cid=1354183538063&language=es&pagename=PortalSalud%2FPagina%2FPPTSA_servicioPrincipal&vest=1354183538063) as of 28 May 2018

**Quirónsalud hospitals lead rankings**

# Excellent Clinical Practice & Patient Safety Have Always Been Central to Quirónsalud ...

... being part of Fresenius Helios gave us the opportunity to implement an additional tool on corporate level to further improve clinical practice and patient safety

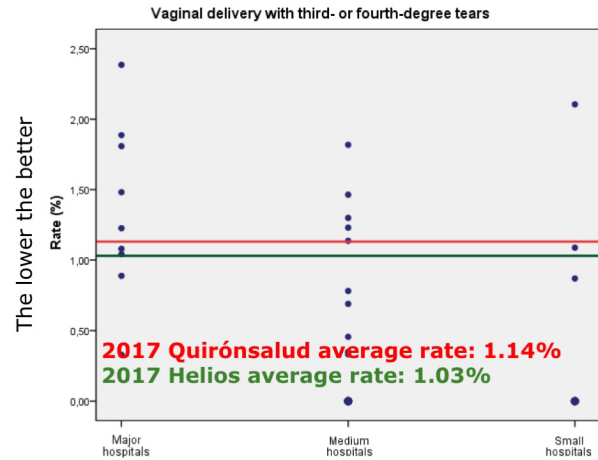
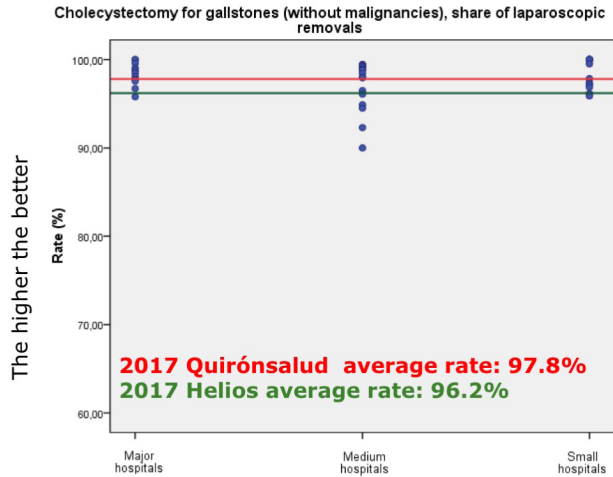


AHRQ = Agency for Healthcare Research and Quality



# Benchmarking in quality indicators

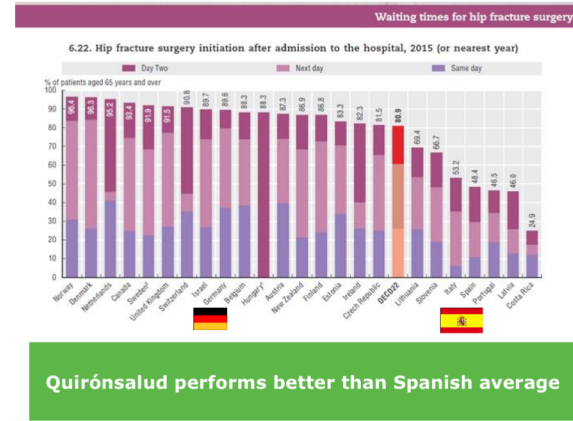
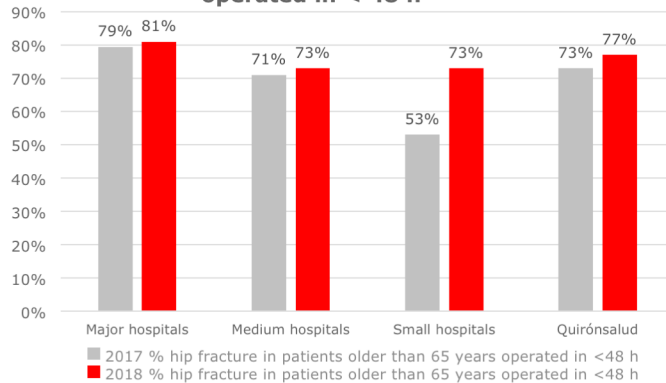
## Example: Results of 2 out of 46 adapted indicators



# Preliminary Results of Peer Review: Overall Improvement From 73% to 77%

Our target: First to achieve OECD average, German average ... and Norwegian average

Hip fracture in patients > 65 years  
operated in < 48 h



# Quirónsalud's Strategies to Treat Complex Cases

**Before  
Helios**

- 1. Continuous monitoring of complications & mortality: AHRQ volume + mortality indicators**
- 2. Multi-hospital medical teams:**
  - ✓ Maintains accessibility for patients
  - ✓ Guarantees experience of medical teams
- 3. Promoting Quirónsalud network: referring patients from small hospitals to large hospitals**

**With  
Helios**

- 4. Concentrating complex services in cities with more than one Quirónsalud hospital (first project: Heart Department in Barcelona).**

Capital Markets Day, 8 June 2018

**Helios.health**

# **Cost Synergies by Integration**

Enrico Jensch – COO Helios Health

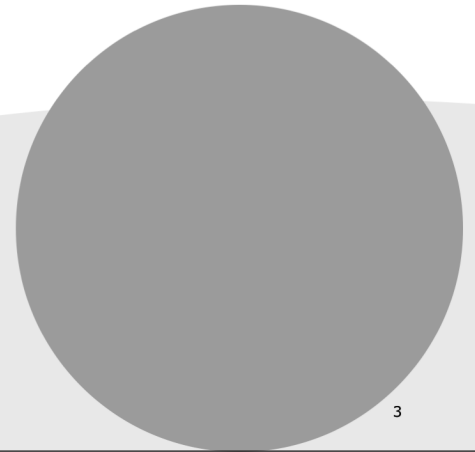
Pedro Rico Pérez – COO Private Hospitals Quirónsalud

# The Best of Both Worlds



# Key Take-Aways

- Two national champions successfully serve local health care needs
- Standard of care adapted to individual market conditions
- Size matters: Bundling of quantity & internationalization create new opportunities
- Efficiency supports quality – however, there are limits to standardization



# National Markets - Drivers and Limits

## Drivers

- No boundaries between inpatient and outpatient sectors
- Fragmented private hospital market
- Growing private insurance market

Spain

## Limits

- Elevated DSO/DPO (days sales/payments outstanding)
- Limited growth in public sector

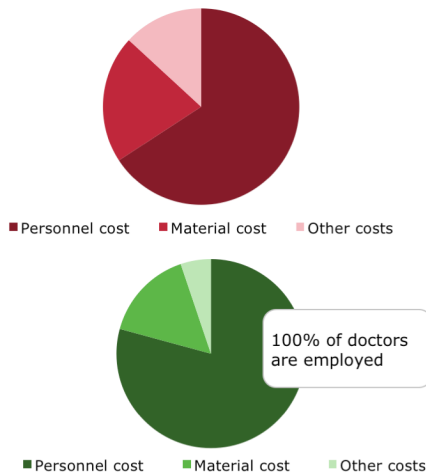
- High level of price stability
- Additional revenue for specialized services ("Wahlleistung") or premium quality

Germany

- Inflexible pricing system
- Sector boundaries
- Regulatory requirements
- No greenfield projects in public setting

# Analysis of Cost Drivers to Identify Synergies

Cost ratios are different but cost drivers are similar



Spain

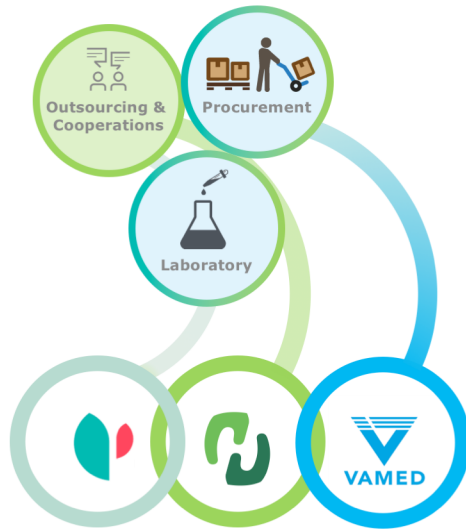
Besides improvement of process efficiency, cost savings are mainly identified in the area of variable costs, such as

- Procurement
- Laboratory services
- Medical technology
- Additional services (e.g. sterilization, shared service centers)

Germany



# Efficiency Supports Quality



Helios.health

## From single projects to common strategy

### First things first

- Each unit defines its own goals  
→ quality and price

### Synergies potential yes/no?

- Are there synergies based on individual goals and how can they be achieved?

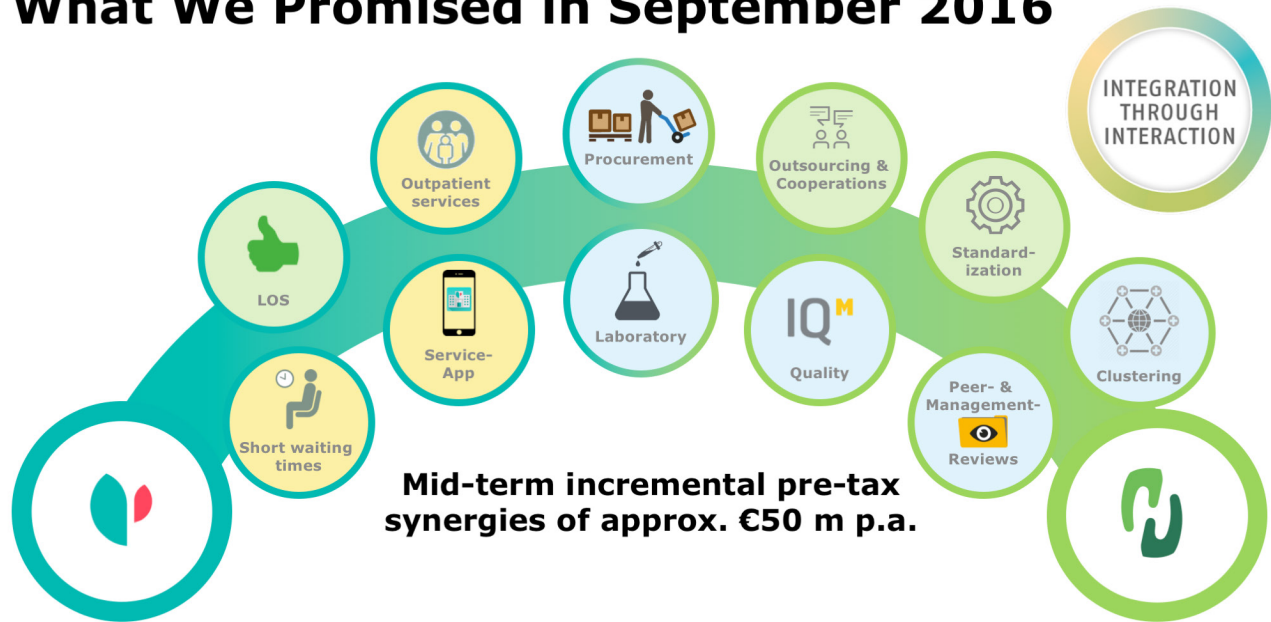
### Together we are stronger

- Combine negotiation power
- Common negotiations of volumes and price

### Use country specifics – respect cultural differences

- Different approaches to achieve goals
- Individual implementation of results

# What We Promised in September 2016



# Cost Synergies Contribute Significantly



# Mid-term Cost Synergies



## **Procurement: ~€10 million p.a.**

- “one face to the market” concept
- Best price for selected products
- European pricing – increase volumes
- Harmonization of contracts
- Foster long-term supplier relationships



## **Laboratory: ~€10 million p.a.**

- Best price + best quality
- Potential additional future synergies with “one face” -concept
- Further insourcing and restructuring in Germany



## **Outsourcing & Cooperations: ~€10 million p.a., incl.**

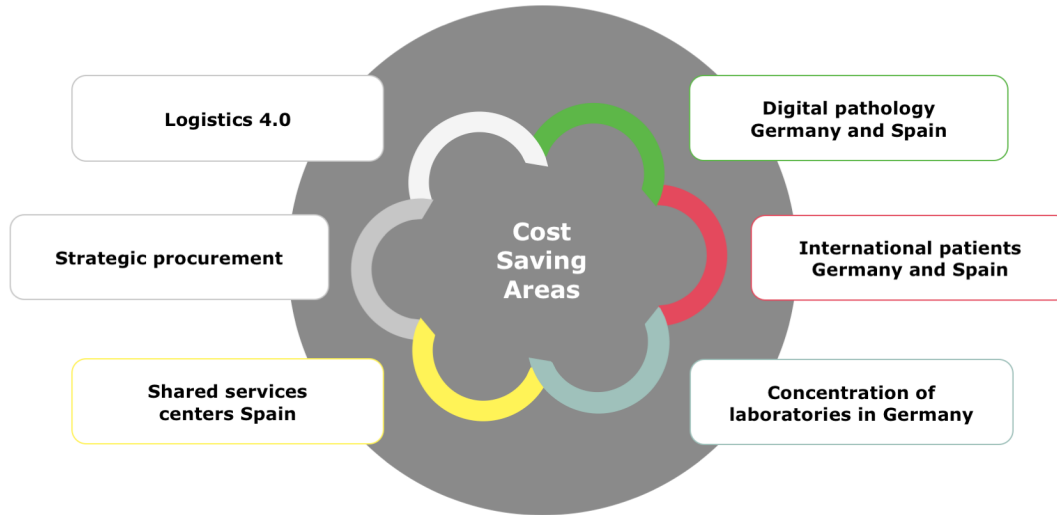
### **• Medical Engineering**

- “Takeover” of maintenance of medical devices (MD) in Spain by Vamed
- Started with high complex MD and expand to low/mid complex to all regions

### **• Medical & Technical Engineering**

- Merging with technical service of Helios Germany
- Sterilization
- Cooperation with Vamed

# Further Cost Synergies 2020 and Beyond



**~€10 million p.a. already identified**

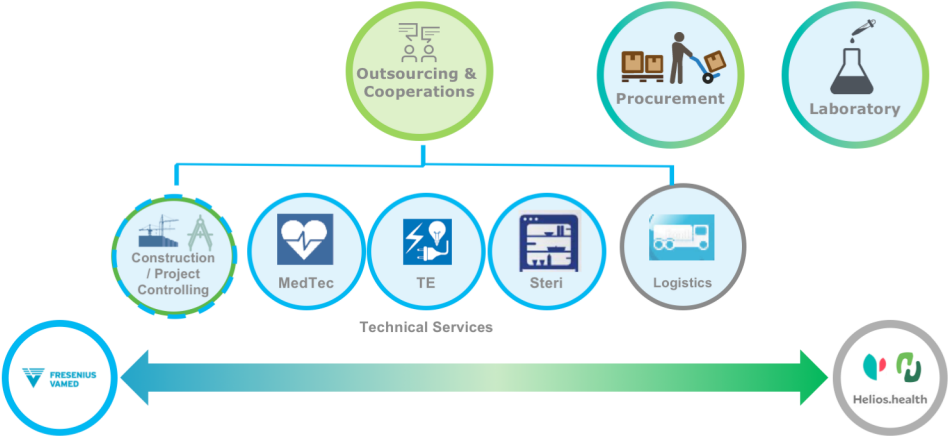
# Portfolio Synergies from Fresenius Platform

**Bundle expertise/volumes**

**Generate savings**

**Use resources more efficiently**

**Focus on core business within Fresenius platform**



# Best Practice – Next Steps



- Reorganization of Germany's laboratory landscape
- Centralization in hubs and collectors
- Integration of medical centers
- Possible expansion to outpatient market – JV



- Merging of construction and project management of Vamed and Helios Germany
- Concentration of know-how



- Cooperation with Vamed Medical Engineering
- "Everything from one source"
- Allocation of budgets via pricing model



- Centralization of Helios Germany logistic hubs
- Reduction of warehouses and capacities
- Digitalization and rationalization



- Merging with technical service of Helios
- Cooperation with Vamed
- Benefit: "everything from one source"
- Allocation of budgets via pricing model



- Development of a new business model in collaboration with Vamed and a third party

Capital Markets Day, 8 June 2018

# Helios Germany Efficiency

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Olaf Jedersberger – COO Helios Kliniken  
Corinna Glenz – Director Helios Kliniken Central Region



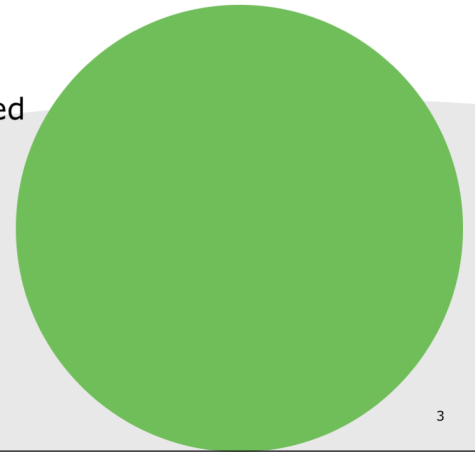


# The Best of Both Worlds



# Key Take-Aways

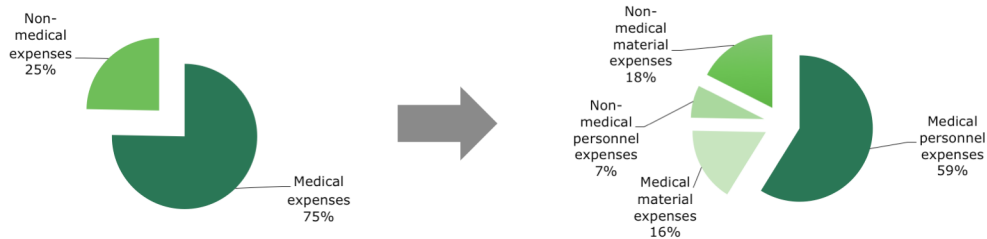
- Cost-cutting measures almost fully exploited
- Going forward, process optimization is key to increasing productivity
- Best in class measurement of productivity implemented



# Cost Leadership

## Objective: Maintaining cost leadership in Germany

Cost drivers in our 88 acute care hospitals:

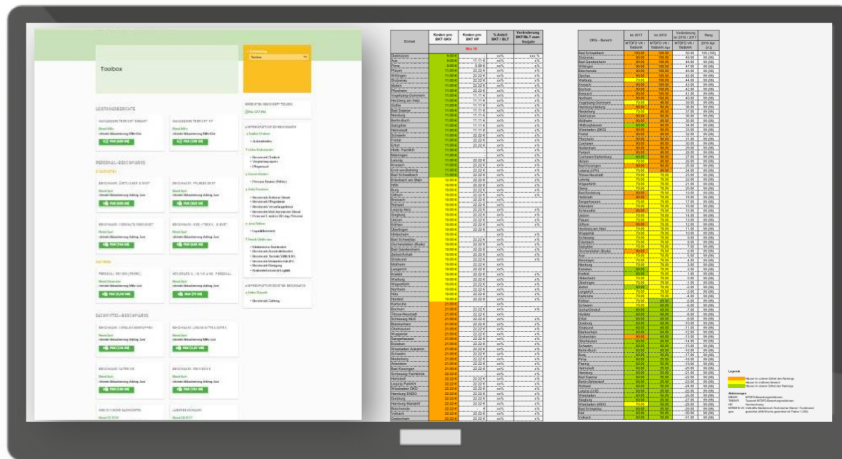


Limited impact of mere cost-cutting

## Current scope of action:

Increasing productivity through (more) efficient internal processes and structures

# Benchmarking Drives Efficiency



## Toolbox

- available online for all Helios Germany acute care hospitals

## Benchmarks

- Personnel/staffing
- (Non-)/medical material
- Others

## Reporting packages

- Updated regularly (monthly/quarterly)

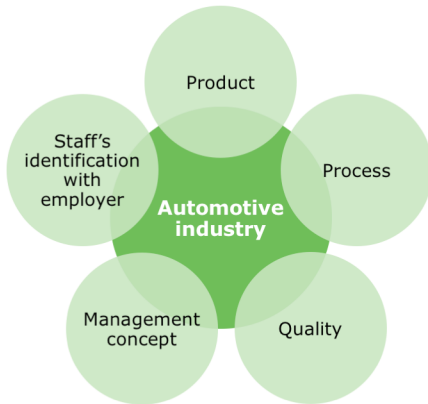
# Productivity in Hospitals?

Cost Leadership

Productivity

Economic Focus

Industrialization



Lesson learned:

**Medical treatment process = Production process**

Cost leadership as the result of optimized procedures – for us:

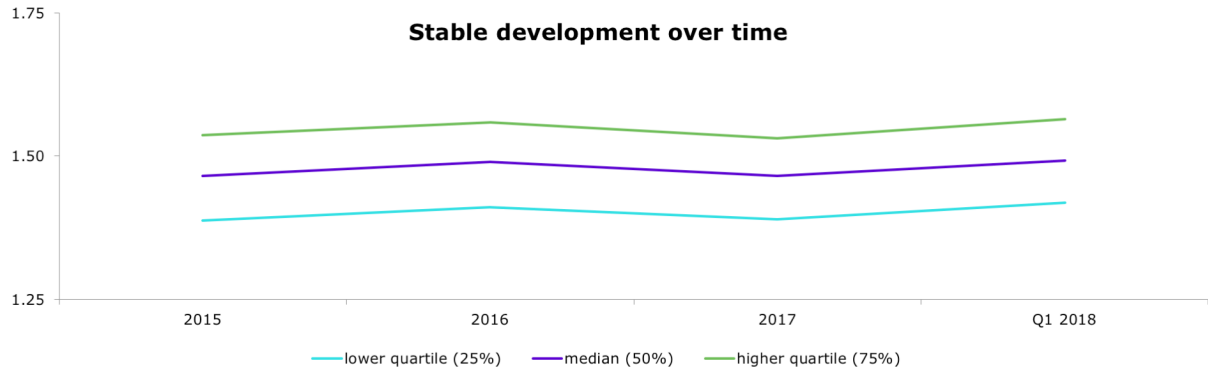
**Optimization of medical productivity through standardization**

How productive is our medical treatment process?

**We measure medical productivity!**

# Helios Measures Medical Productivity

## Medical costs



## Defining parameters to increase productivity



# Process Optimization through Standardization

## “Optimal patient paths” as a lean management concept

### SOP in medicine

Avoiding wastage

- Streamlining processes
- Resource efficiency

Cluster	Criteria (2017)	#
Cluster 1	Revenue > 200m €	6
Cluster 2	Revenue > 75m €	14
Cluster 3	Revenue > 45m €	15
Cluster 4	Revenue > 30m €	14
Cluster 5	Revenue < 30m €	19
Location	Location	6
Heart	Heart	2
*Belegklinik*	*Belegklinik*	4
Psychiatry	Psychiatry	2
Special clinic	Special clinic	3

### Best practice

Forming cluster and benchmarking structures, processes and costs

Cluster	Criteria (2017)	#
Cluster 1	Revenue > 200m €	6
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Location	Location	6
Heart	Heart	2
*Belegklinik*	*Belegklinik*	4
Psychiatry	Psychiatry	2
Special clinic	Special clinic	3

### Innovations

- Medical technology
  - Digitalization
- Continuous medical and economic monitoring and assessment of market and innovations (e.g. Da Vinci)



### Building structures reflecting medical processes and contents

Architectural design of efficient routing and formation of medical centers in buildings (e.g. new building HSK)



## Lean management in administrative processes

**Helios Dr. Horst Schmidt  
Kliniken (HSK), Wiesbaden,  
Germany**

—



## Key Facts & Figures



Maximum care provider for the state capital, Wiesbaden (Hesse)  
32 medical departments and institutes  
Academic teaching hospital of the University of Mainz

**850** Somatic beds

**150** Psychiatric and psychosomatic beds

**45,000** Inpatients per year

**>100,000** Outpatients per year

**2,250** Employees (1,744 FTEs)

## HSK – The Starting Point

- Opening in 1982 – even then already a loss-making business
- Several flagship medical departments
- Each chief physician rules as sovereign king over his department
- Business operations are determined by local politics
- No investments in maintenance
- Outsourcing of capital-intensive divisions
- Various restructuring attempts

# HSK – The Starting Point



**2011**

Decision to partly privatize the hospital – the external partner becomes minority shareholder while assuming full accountability for business operations and financial success

\* [Against privatization – Sign here](#)



**2012**

Acquisition of HSK by Rhön Kliniken AG and start of restructuring measures



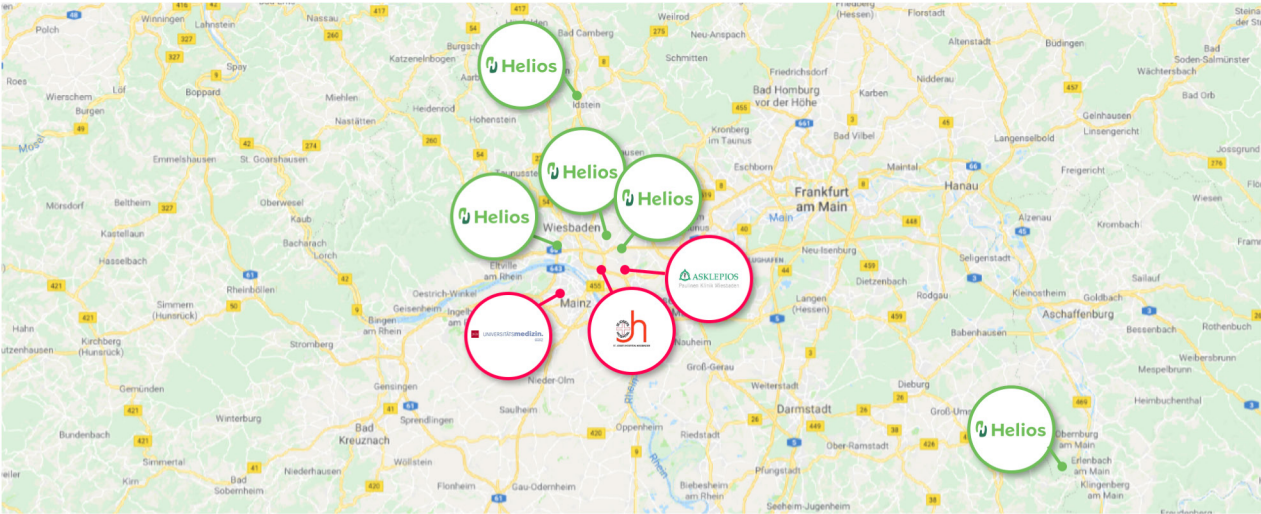
**2014**

Acquisition of HSK by the Helios hospital group

## HSK – The Starting Point

- Chief physician vacancies in three departments: general surgery, neurology, internal medicine; generally declining case numbers
- 390 FTEs staffing surplus
- Monthly losses
- Lack of investment
- Critical public and critical local politics

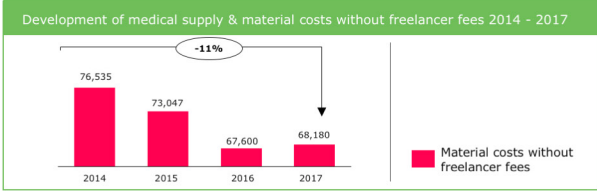
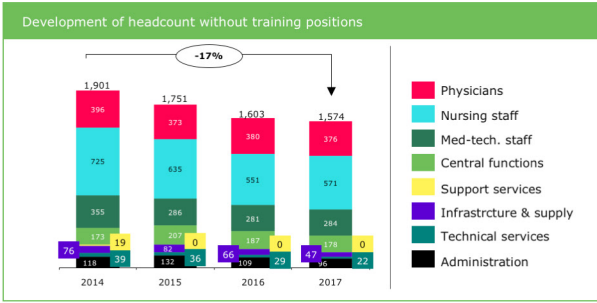
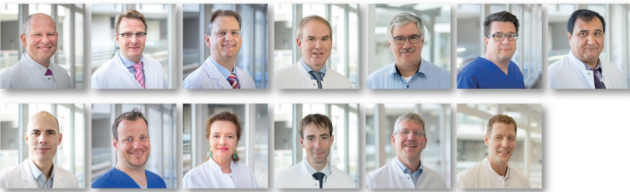
# HSK as Part of a Region



# **Our Way to Success – Step 1**

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# Classic Earnings Improvement Measures



# **Our Way to Success – Step 2**

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# The New Hospital Building as an Opportunity – What Are Our Objectives?

- Creating a modern compact building, that is attractive for employees and patients
- Optimizing workflows and processes alongside architectural structures
- Reducing legwork for patients and employees
- Concentrating and centralizing core areas, such as OR and ICU
- Expanding the range of services and attractive accommodations for private patients
- Evolving the HSK to a center of excellence in a regional network

# **The New Hospital Building**

—

# Construction Project

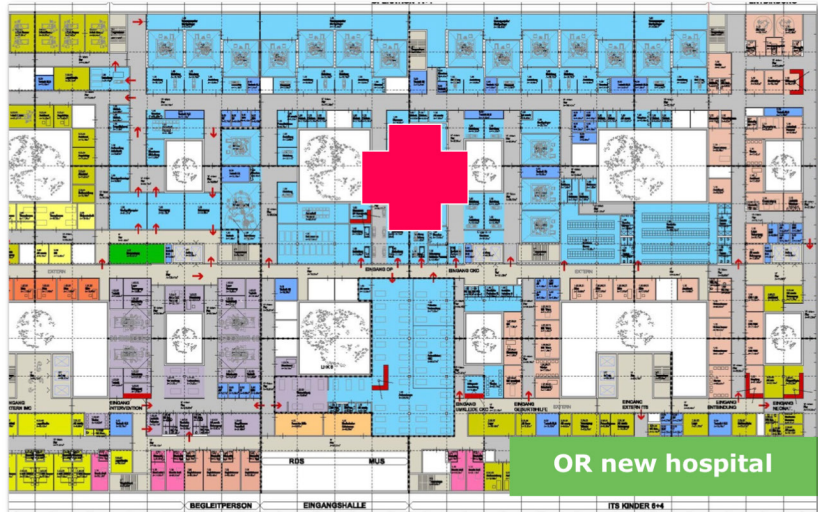


- Total area of 96,000 m<sup>2</sup> – ca. 630 family homes
- Total costs of more than €263 million; €68 million thereof financed by public funds
- Construction field situated next to current hospital building; total area of hospital, incl. delivery area and construction field: 190,000 m<sup>2</sup>
- Continuation of the buildings housing the psychiatric unit, pathologic department, laboratories, department for hygiene and hospital general administration
- Completion: end of year 2020

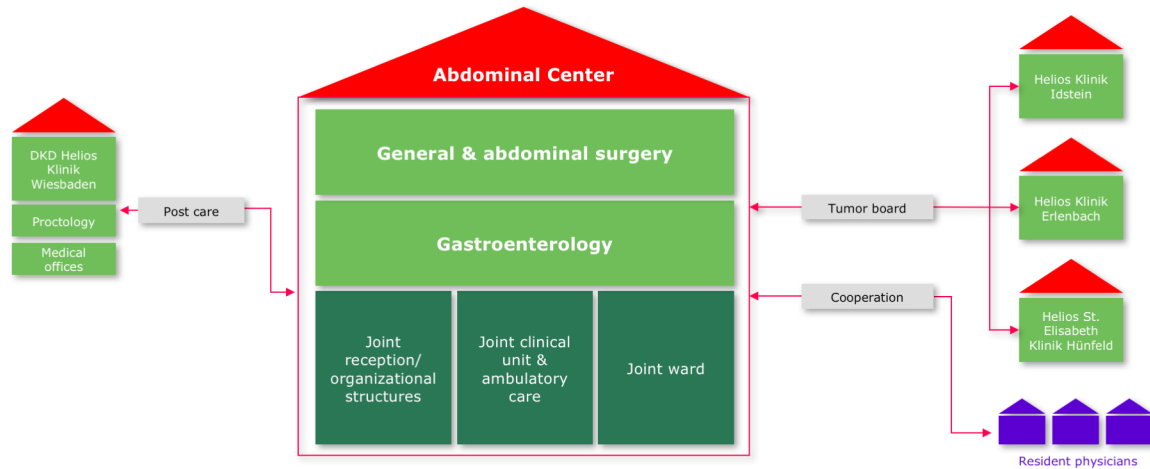
# Enhancing Productivity Using Building Standards and SOPs?



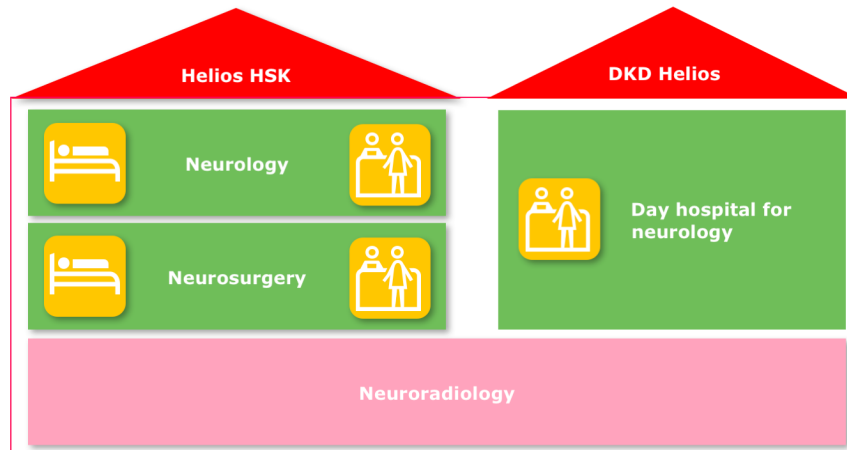
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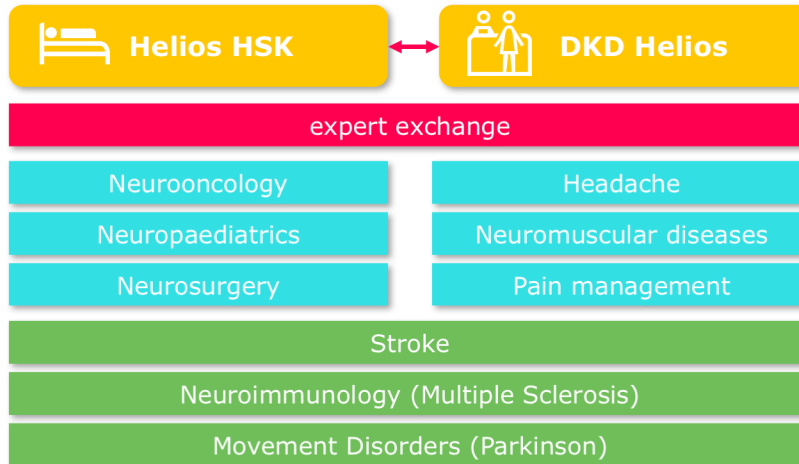
# The HSK as the Hub of a Network



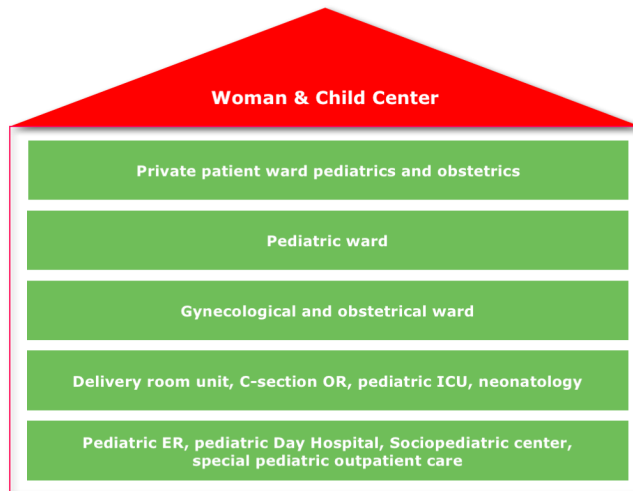
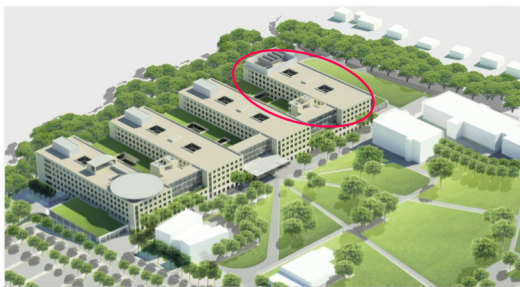
# The HSK as the Hub of a Network



# The HSK as the Hub of a Network



# The HSK as the Hub of a Network









## Quirónsalud – Digital Transformation

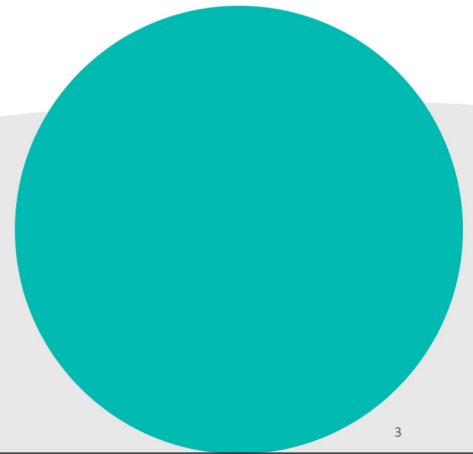
Adolfo Valmayor  
IT & Digital Transformation Director Quirónsalud  
8 June 2018

# The Best of Both Worlds



# Key Take-Aways

- Digital is not optional
- Opportunity to change doctor-patient-relationship
  - real time
  - transparency
  - personalization



Future...

Digital Transformation



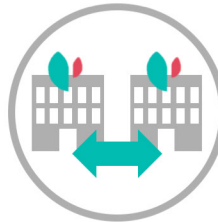
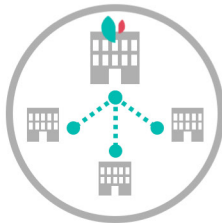
... or present

## Working along 4 Transformation Axes

## Digital Transformation

1

With our external partners



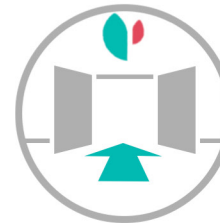
2

Among our centers



4

With our patients

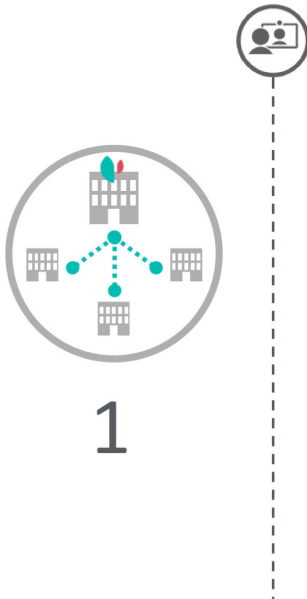


3

Inside our hospitals

## With External Partners ...

## Digital Transformation



57 primary care centers



Ambulances



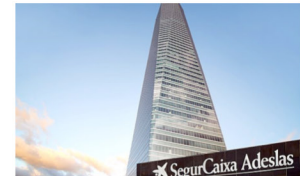
140 Nursing homes



Brain stroke Ceuta y Melilla



Torre Vieja-Orihuela

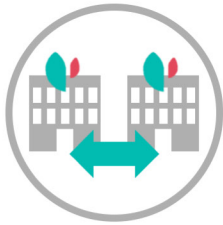


Online authorizations

## Integration with the environment

## Among our Centers...

## Digital Transformation



2



Brain Stroke Madrid



All medical services



Remote ICUs Catalonia



Digital Pathological Anatomy

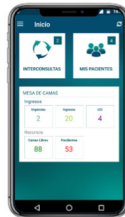
## Standardization for productivity



## Inside Our Hospitals ...

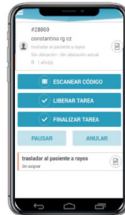


3



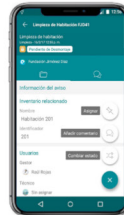
**Doctors**  
Alerts, test results,  
picture sharing  
(dermatology, allergy)

**Nurses**  
Care plan, data input,  
alerts, drugs  
administration oncology



**Porters**  
Alerts, patient moves

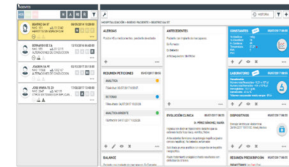
**Cleaning & maintenance**  
Alerts, To-do's



## Digital Transformation



Tablet for mobility



Room integration



**Efficiency by productivity**

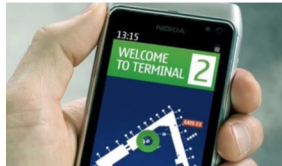
## Inside our Hospitals ...



3



- Auto admission
- Virtual ticket
- Indoor guidance
- Consent signing



"From kiosks to mobile"



### Surgery patient tracking

- Real-time information to family
- Automatic time data entry with bracelets
- Operating theaters plan follow-up

Fragile patients program  
900 steps



## Best patient experience



4



Transparency and personalization

## With our Patients ...

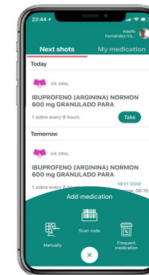
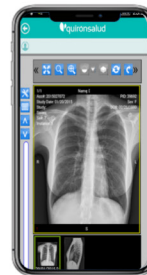
## Digital Transformation



More than 700,000 patients in portal (>56% active patients in last 6 months)



4



Over 5,000,000 access to medical record, 1,000,000 appointments, 450,000 certificates of assistance

## In their hands

## And their families...

## Patient Portal. Web Services

The screenshot displays the Quiron Salud Patient Portal interface. At the top left is the Quiron Salud logo. The header area includes the text "PORTAL del PACIENTE" and a user profile for "Daniel" with a "Cambiar contraseña" button. The main content is organized into several sections:

- Left Sidebar:** Contains navigation options such as "Cambiar paciente", "Paciente activo Adrián", "DATOS PERSONALES", "PEDIR CITA", "PRUEBAS DIAGNÓSTICAS", "INFORMES CLÍNICOS", "FORMULARIOS ENVIADOS", "EVOLUCIÓN DE INDICADORES", "DOCUMENTACIÓN INCORPORADA", and "DESCARGAS".
- Top Middle:** Lists appointment and form requests for "HOSPITAL REY JUAN CARLOS", including "PEDIR CITA ENDOCRINO", "FORMULARIO CONSULTA ENDOCRINO", and "PEDIR CITA PEDIATRÍA".
- Top Right:** Shows a list of medical services: "PEDIATRÍA", "ANÁLITICA", and "ARTROSCOPIA DE RODILLA".
- Middle:** Features a section for "Instrucciones y recomendaciones" with items like "EJERCICIOS DE PREPARACIÓN POST-PARTO", "DIETA HIPOCALÓRICA PARA DIABÉTICOS", and "CONSEJOS REHABILITACIÓN DE RODILLA".
- Bottom Right:** Displays "Evolución de indicadores" for "TENSIÓN ARTERIAL", "PULSO CARDÍACO", "RELACIÓN A", and "NIVEL DE GL". A "Conversaciones" chat window is overlaid on this section, showing messages from "Cardiología" and "Endocrinología".

Capital Markets Day, 8 June 2018

# Helios – Innovation & Digitalization

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Jörg Reschke – CFO Helios Kliniken

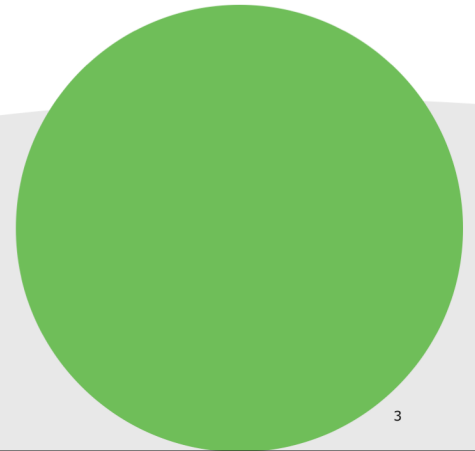


# The Best of Both Worlds



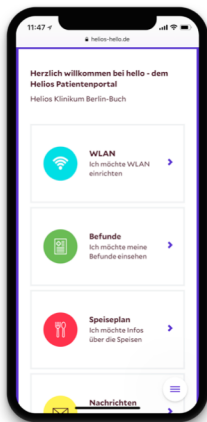
# Key Take-Aways

- Smart solutions ...
  - ... keeping in touch with patients
  - ... supporting the diagnostic and treatment process
- Digitalization fosters the connection with our partners
- A standardized data bridge is the way for exchange;  
data security and data protection is the frame

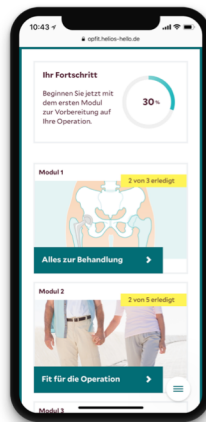




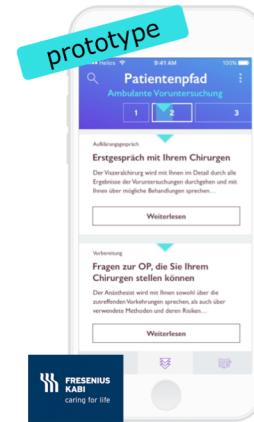
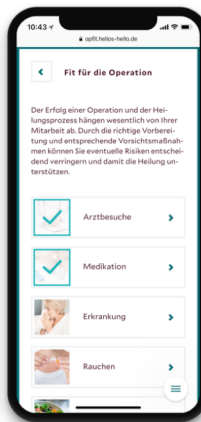
# Smart Helios – Product Portfolio



**hello**  
Patient portal



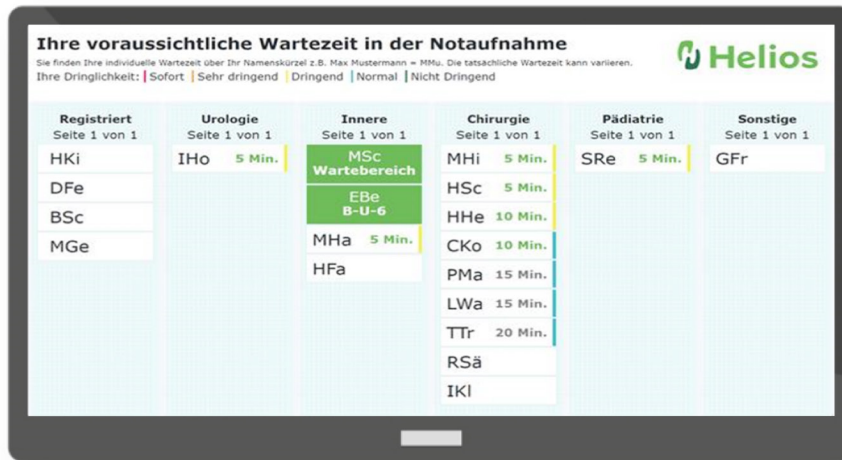
**OPFIT**  
Patient education and engagement Web service  
for hip replacement patients



**GUIDE ME**  
Digital companion and market-  
place for home care



# Waiting Times Display



Monitor in the waiting area of the emergency department

- ✓ Individual waiting time
- ✓ Pseudonym

## Emergency department

- Launched
- Roll-out in 5 departments

## Outpatient care

- Start testing: 06/2018

# Mobile Hospital App “Wound Documentation”



Medical service order



Photo documentation



Progress report



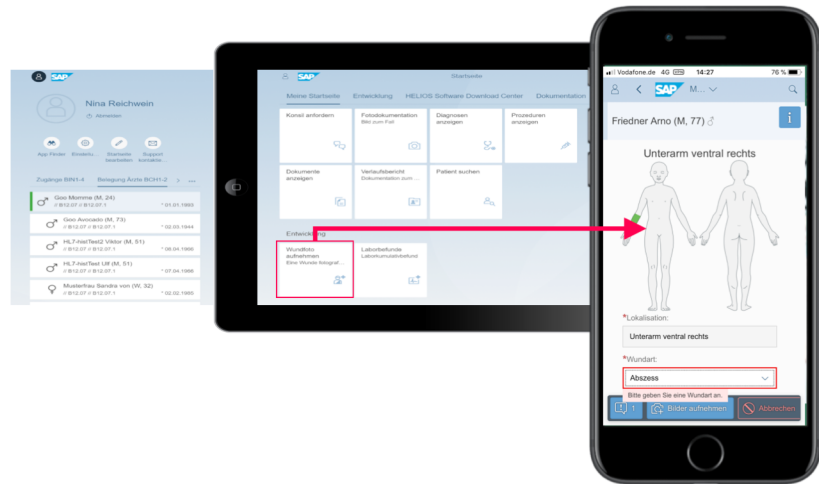
Diagnosis view



Procedures view



Document view

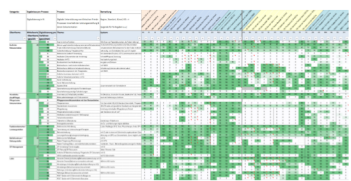


# Helios Status of Digitalization (EMR)

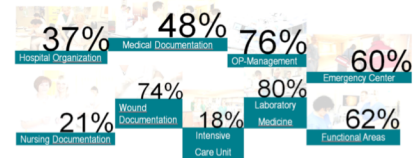
Clinical processes being evaluated



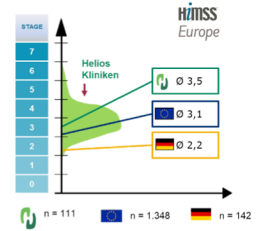
 Digitalization Cockpit



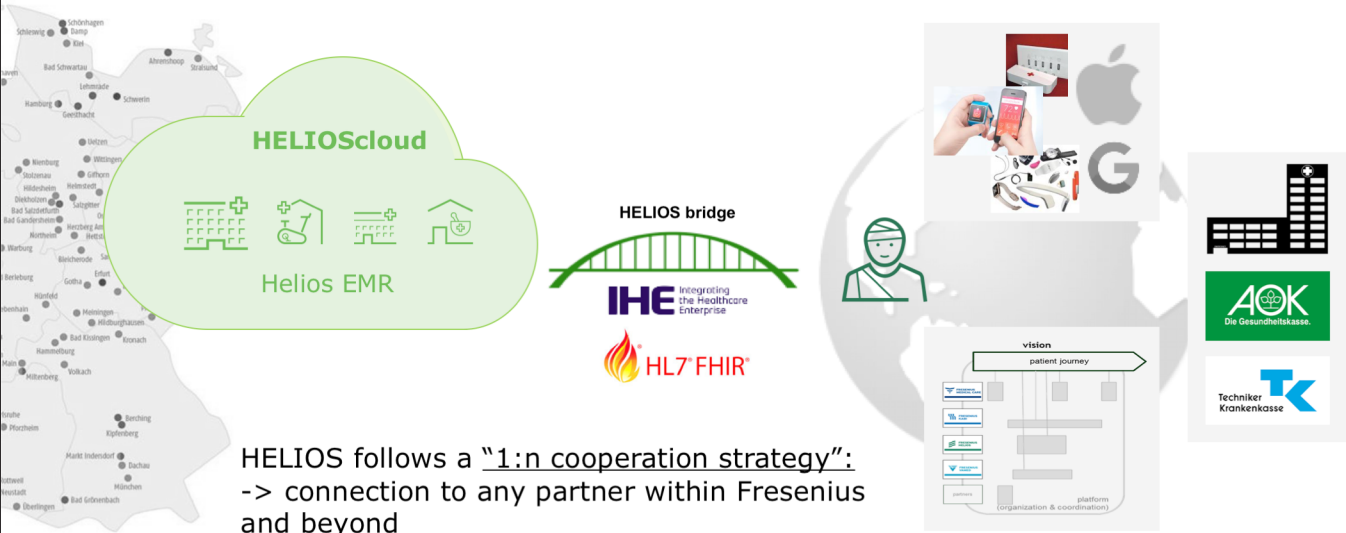
Clinical processes being evaluated



STAGE	HIMSS Analytics EMRAM EMR Adoption Model Cumulative Capabilities
7	Complete EMR, Data Analytics to improve care
6	Physician Documentation (templates), Full CDS, Closed Loop Medical Administration
5	Full R-PACS
4	CPOE, Clinical Decision Support (clinical processes)
3	Clinical Documentation, CDS (error checking)
2	CDR, Controlled Medical Vocabulary, CDS, HIS Capable
1	All Three Ancillaries installed – Lab, Rad, Pharmacy
	All Three Ancillaries Not installed



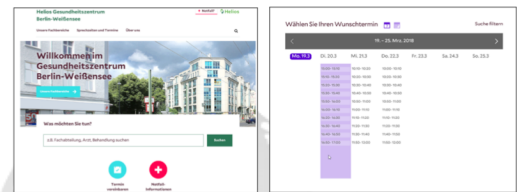
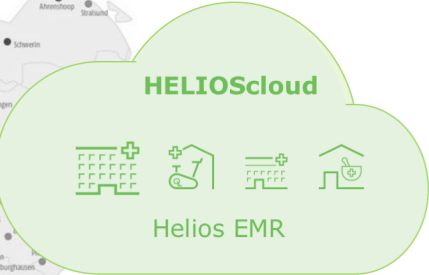
# Helios Bridge Ensures Connectivity



HELIOS follows a "1:n cooperation strategy":  
 -> connection to any partner within Fresenius  
 and beyond

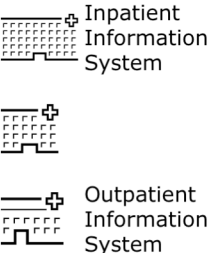


# Patient Portal and Electronic Medical Record



# Big Data

## Sources

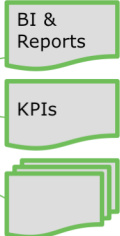


## Data storage

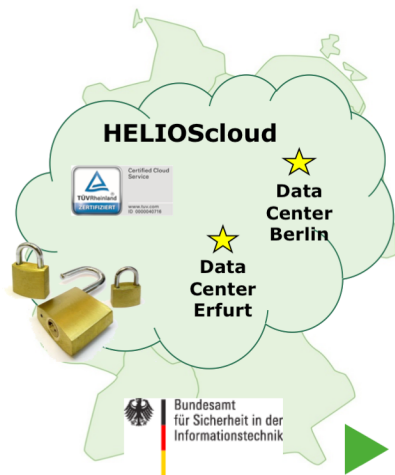


Helios Data Management

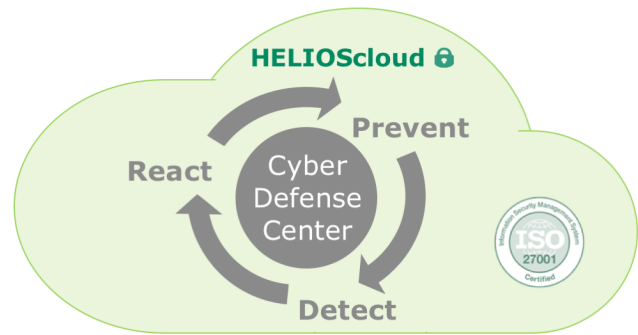
## Reports



# Actions for Data Security at Helios



Risk identification

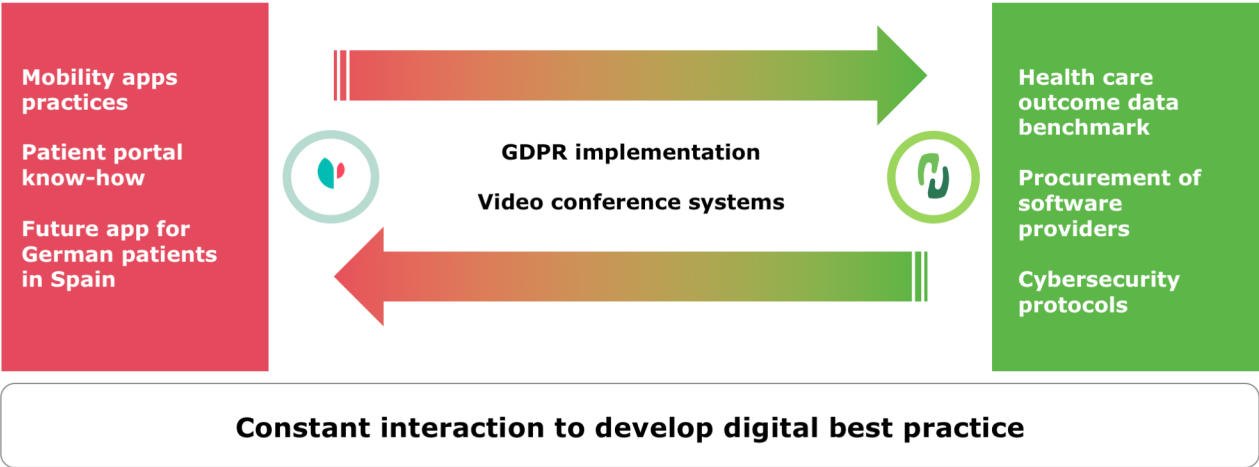


Availability





# Best Practice Transfer



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# Fresenius Helios CFO Update

Daniela Hommel – CFO Helios Health

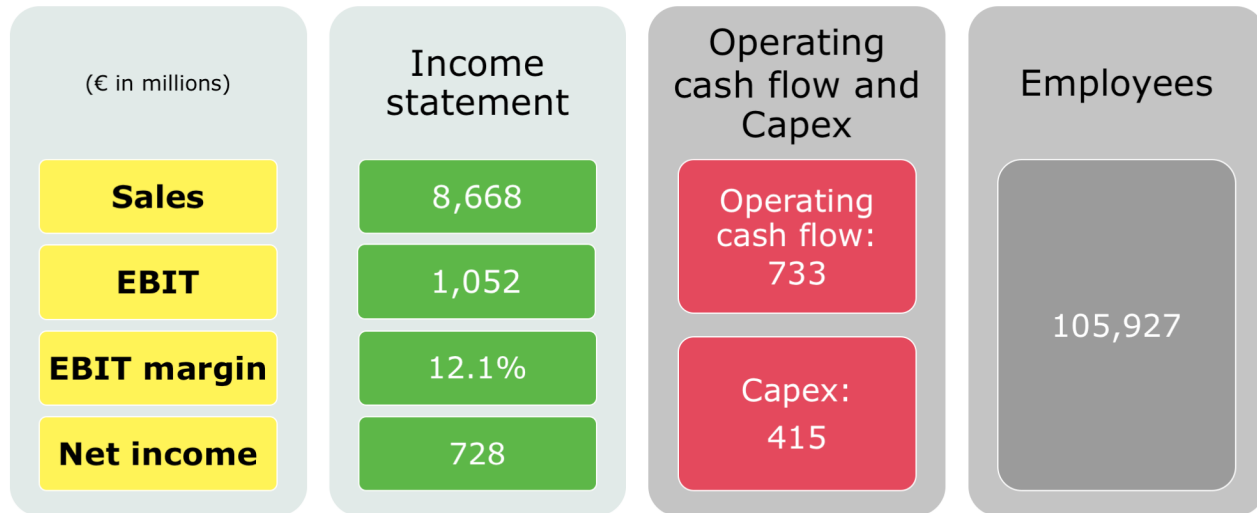
# The Best of Both Worlds



# Key Take-Aways

- Financials as of December 31, 2017 determined by local structures
- Sales and EBIT growth expected from combining the best of both worlds
- Growth supported by sharpened portfolio and investments

# Where We Stand – Financials 2017: 1+1=2



# Meaningful Financial KPIs

## KPIs

Not everything that counts can be counted, and not everything that can be counted counts.

Albert Einstein  
(1879-1955)

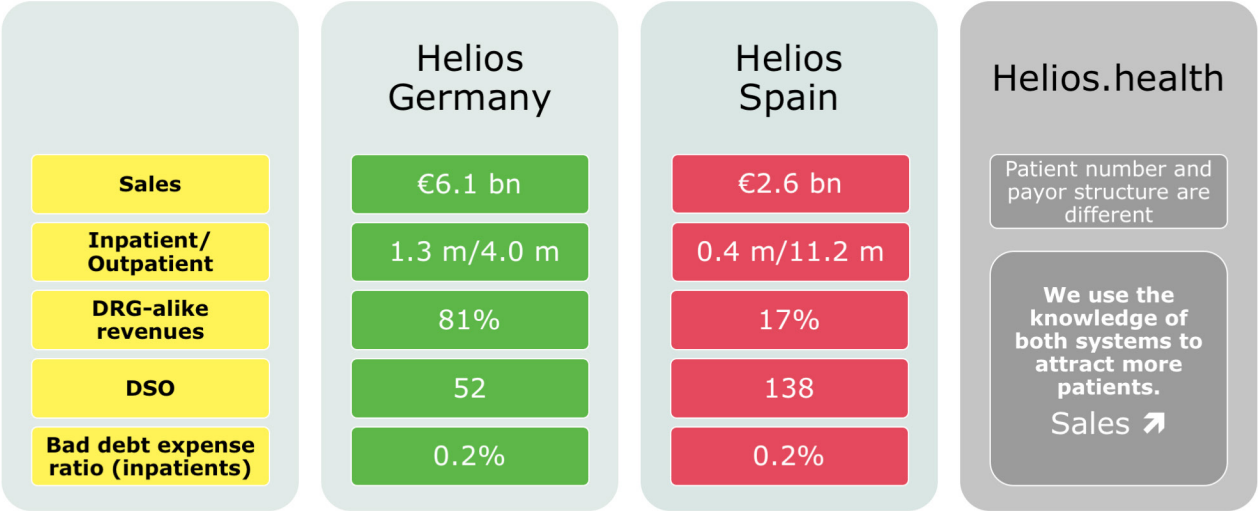


## Different Health Care Systems

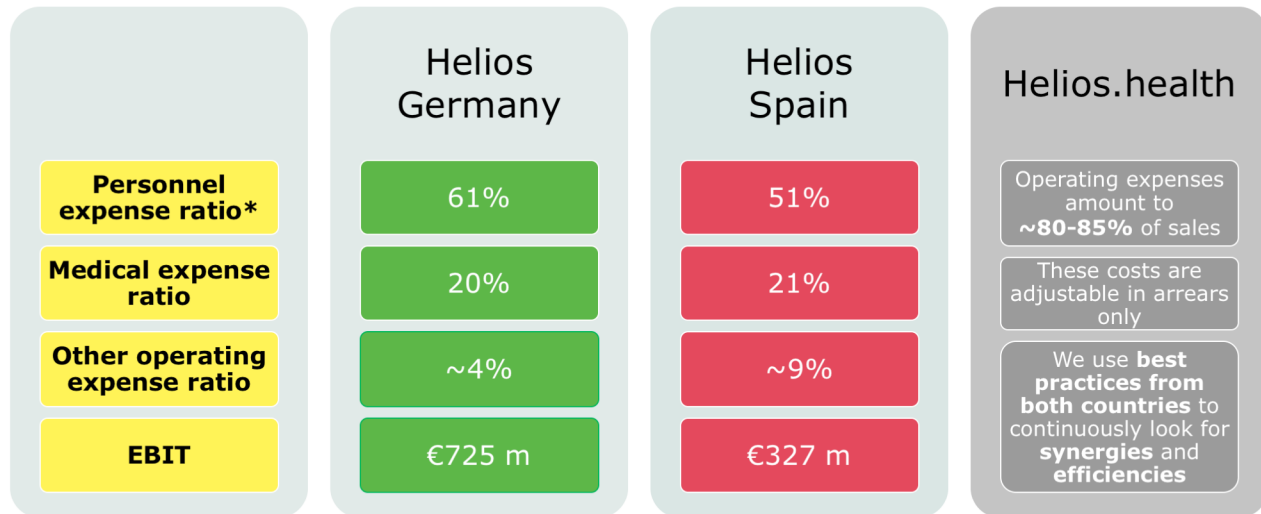


**Meaningful KPIs** = KPIs that use **standardization** where possible and allow **differences** where necessary AND allow **inherent limitations** (i.e. patient first)

# How Can 1+1 Be >2 in Sales?



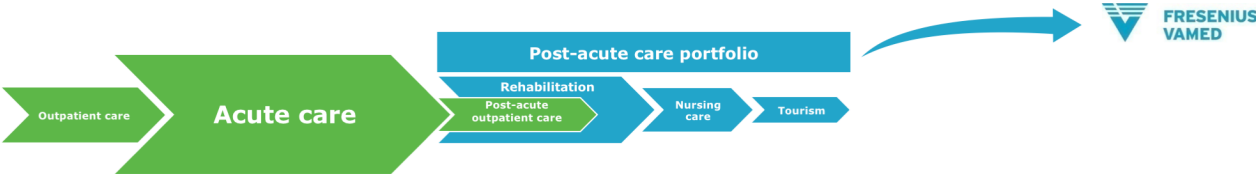
# How Can 1+1 Be <2 on the Cost Side?



\* Adjusted for mercantile doctors to be comparable

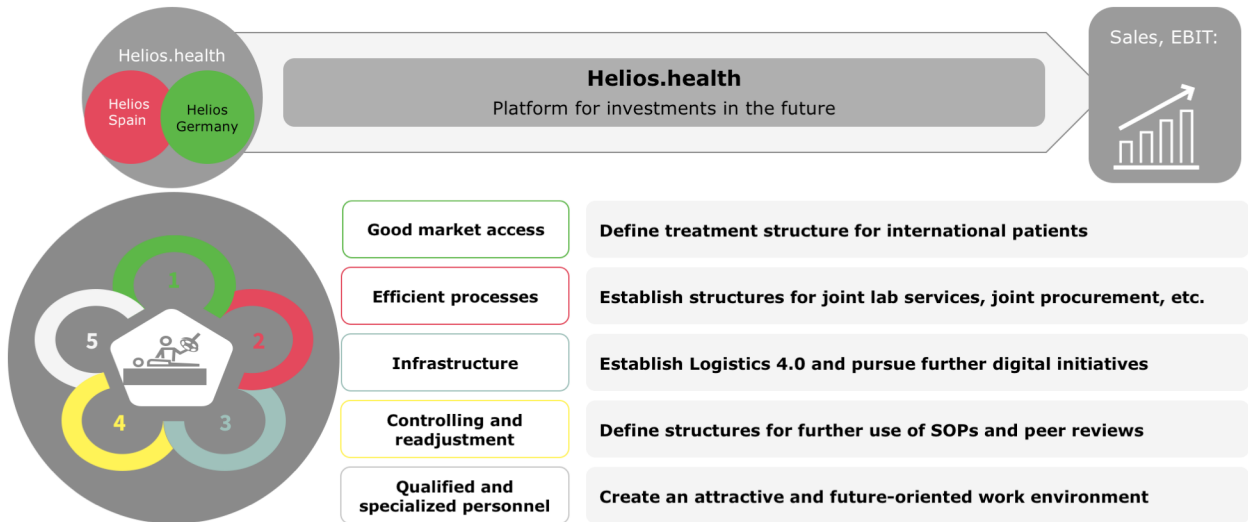


# New Growth Prospects by Sharpening our Portfolio



	Reported financials 2017	Effect of portfolio sharpening	Pro forma financials 2017
	Helios Helios.health		Helios Helios.health
Sales (€)	6,074 m	~440 m	5,634 m
EBIT (€)	725 m	~36 m	689 m
EBIT margin	11.9%		12.2%
	8,668 m		8,228 m
	1,052 m		1,016 m
	12.1%		12.3%

# 1+1 Can Be >2 by Investing in the Future



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**Helios.health**

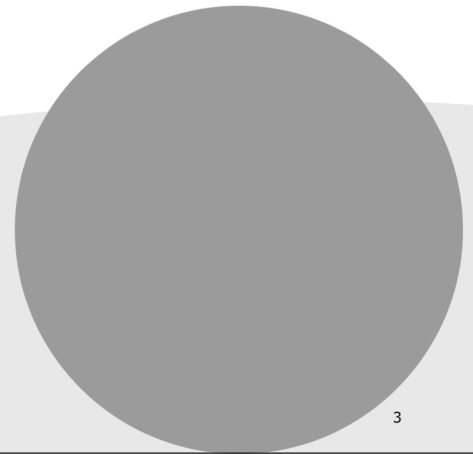
# **Fresenius Helios Summary & Outlook**

Francesco De Meo – CEO Helios Health

# The Best of Both Worlds



# Just to Reiterate ...



# Key Take-Aways Germany

- Attractive business with high entry barriers
- Regulatory framework offers challenges & opportunities
- Helios Germany is the ideal partner for cross-sectoral care
- Pioneer in new care models
- Excellently prepared for the future

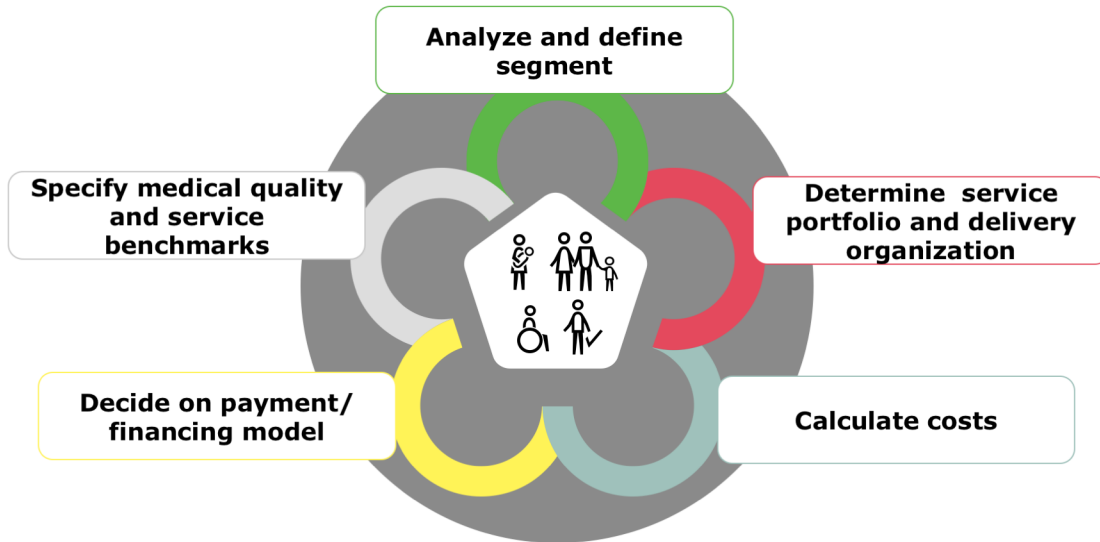
# Key Take-Aways Spain

- Leading hospital group in Spain
- Spanish market offers diverse range of financing models
- Multiple opportunities for growth
- Top priorities are medical quality, patient experience and digital transformation

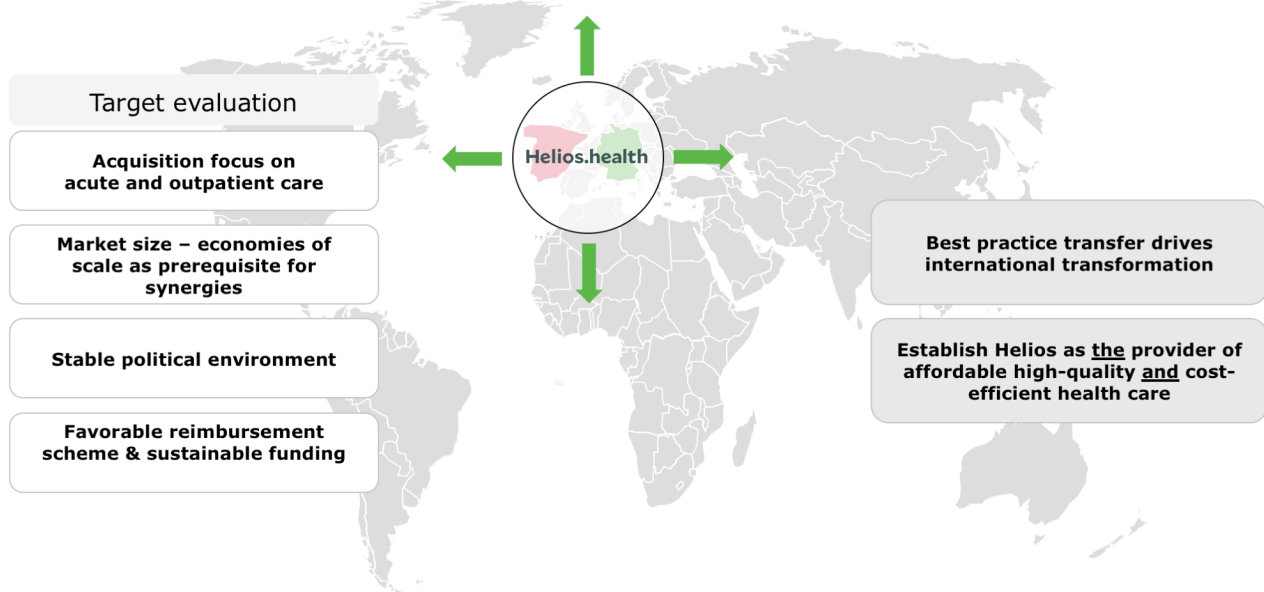
# A (more) International Approach



# Helios as Health Care Provider for a Defined Patient Segment in Any Given Market

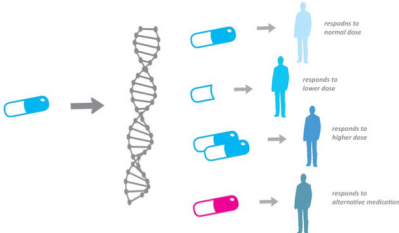


# International Acquisition Strategy



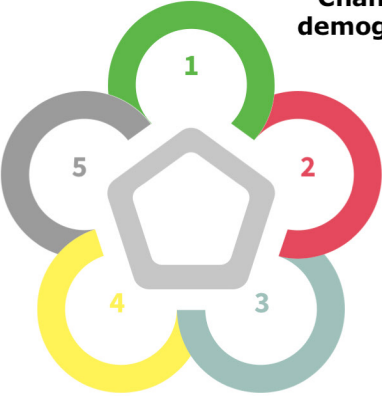
# Ready for Smart Transformation

# Five Megatrends in Health Care



**Precision replaces intuition**

**Changes in demographics**



**Focus on customer experience & expectations**

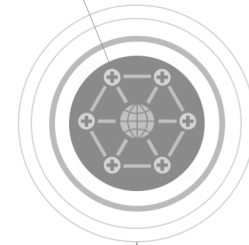
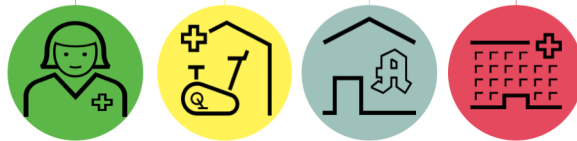


**Big data**

**Internet of things**

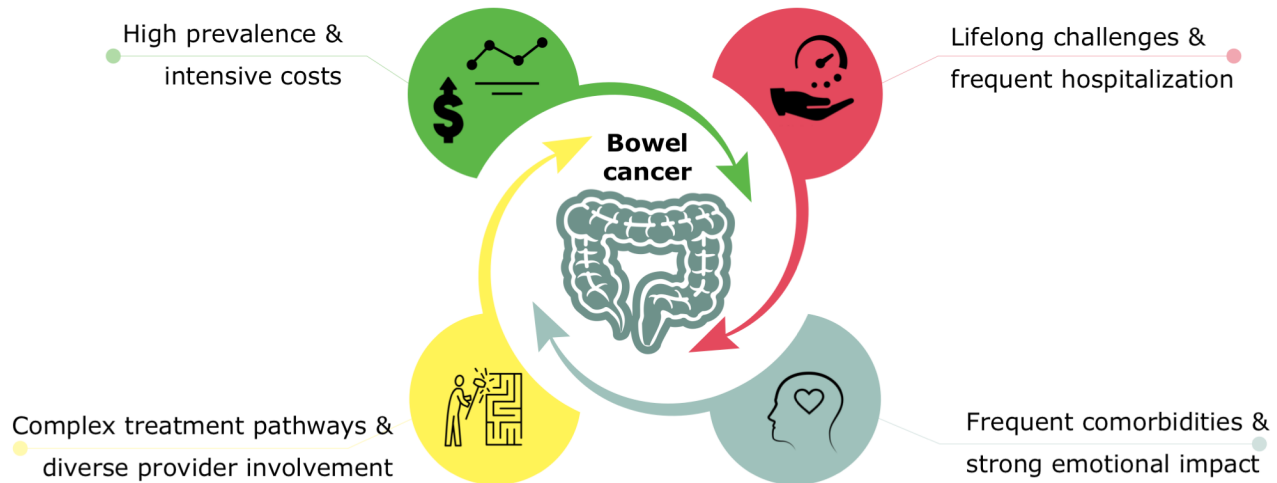


# New Business Models Ahead



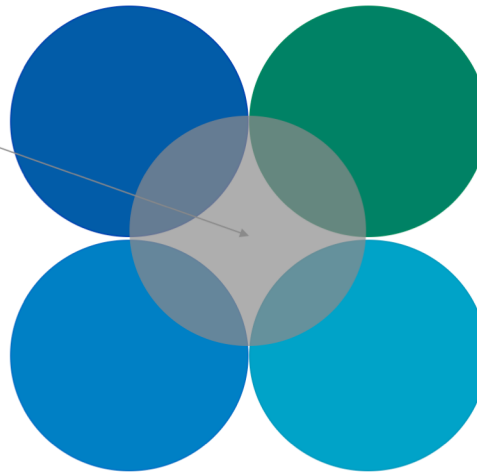
A facilitated health care platform will allow all market players to focus on their unique core competencies

# An Example for Platform Advantages



# Smart Patient within the Fresenius Platform

Smart Patient



# Key Take-Aways Summary

- Successful across different health care markets
- Learn from each other, learn from the best
- Best practice transfers drive international transformation
- Prepared for further regional expansion



# FINANCIAL CALENDAR / CONTACT

## Financial Calendar

31 July 2018	Results Q2/2018
30 October 2018	Results Q3/2018

Please note that these dates could be subject to change.

## Contact

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