

# Investor & Analyst Conference 2019

## Welcome

September 18, 2019  
CGM Innovationsforum, Koblenz

## Synchronizing Healthcare



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## Management Board – CompuGroup Medical SE



**Frank Gotthardt**  
Founder and Chief Executive  
Officer



**Frank Brecher**  
Chief Process Officer



**Uwe Eibich**  
Board Member Telematics &  
eHealth Platforms



**Dr. Ralph Körfgan**  
Board Member Ambulatory &  
Pharmacy Information Systems



**Michael Rauch**  
Chief Financial Officer



**Hannes Reichl**  
Board Member Clinical &  
Social Care

# Agenda

10:30 – 11:00	<b>Registration</b>
11:00 – 13:00	<b>Welcome</b> Michael Rauch, Chief Financial Officer <b>Synchronizing Healthcare</b> Frank Gotthardt, Chief Executive Officer <b>Financials &amp; Outlook</b> Michael Rauch, Chief Financial Officer <b>Telematics Infrastructure</b> Uwe Eibich, Board Member Telematics & eHealth Platform <b>Q&amp;A</b>
13:00 – 14:00	<b>Lunch incl. Telematics Infrastructure demonstration</b>
14:00 - 15:30	<b>Ambulatory Information Systems / Pharmacy Information Systems</b> Dr. Ralph Körfggen, Board Member Ambulatory & Pharmacy <b>Hospital Information Systems</b> Hannes Reichl, Board Member Clinical & Social Care <b>Q&amp;A</b>

# Investor Relations Update

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## Your contact

Claudia Thomé

Head of Investor Relations

T: +49 (0) 261 8000-7030

F: +49 (0) 261 8000-3200

[claudia.thome@cgm.com](mailto:claudia.thome@cgm.com)



## CompuGroup Medical SE

Maria Trost 21

56070 Koblenz

Germany

Phone: +49 (0) 261 8000-6200

E-Mail: [investor@cgm.com](mailto:investor@cgm.com)

ISIN DE 0005437305

WKN 543730

Frankfurter Wertpapierbörse

Prime Standard

TecDAX / SDAX (MDAX as of Sept 23, 2019)

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# Synchronizing Healthcare

**Frank Gotthardt, Founder & CEO**

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**The world is changing.**

The world is changing

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The top 1% of **patients** consume 30% of health  
**resources. Nearly half are elderly.**

Source: 6 Global Trends Sweeping Healthcare, 2015



The world is changing

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More people die from **improper nutrition**  
than from **malnutrition.**

Source: Homo Deus – A Brief History of Tomorrow, Yuval Noah Harari, 2017

# The world is changing (Example)

## Diabetes around the world



### Diabetes in urban and rural environments

Diabetes in **urban** areas



2015 269.7 million  
2040 477.9 million

Diabetes in **rural** areas

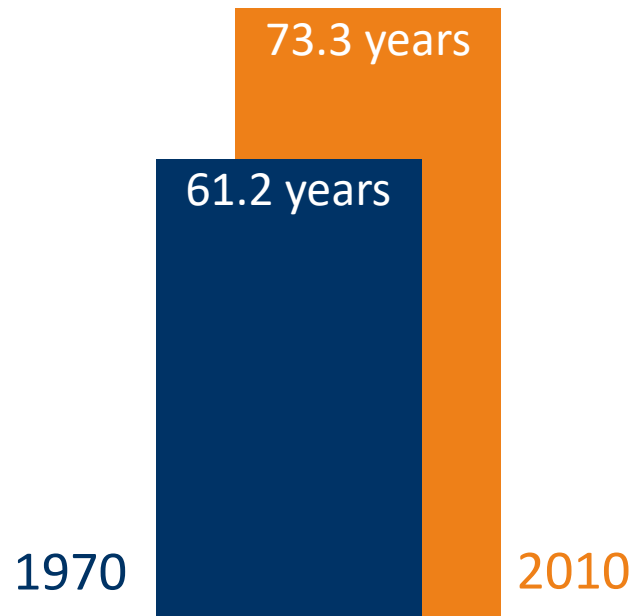


2015 145.1 million  
2040 163.9 million

> 640m people  
worldwide  
will suffer from  
diabetes in 2040.

## The world is changing

Life expectancy growth 20% in between 1970 and 2010.



This means **12 more years.**

## Significance for health systems and society

**Fewer young people**  
will be able to care  
for more **elderly sick**  
**people.**



Higher costs

Lower quality

Social differences

**What is needed?**

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# **Digital Transformation in Health Care.**

## Digital Transformation in Health Care



**People need to stay healthy longer.**

Preventive health care

Early detection

Rapid intervention

Efficient and effective treatment

## Digital Transformation in Health Care

**Demand for outpatient/home care is growing.**

Home care involves various groups of people with different expertise (e.g. Relatives, Caregivers & Doctors).

Structured communication and availability of information is crucial.

Avoidable admissions to nursing homes or hospitals are prevented.



→ **CGM Netherlands already has the right solution with Zorgverband**

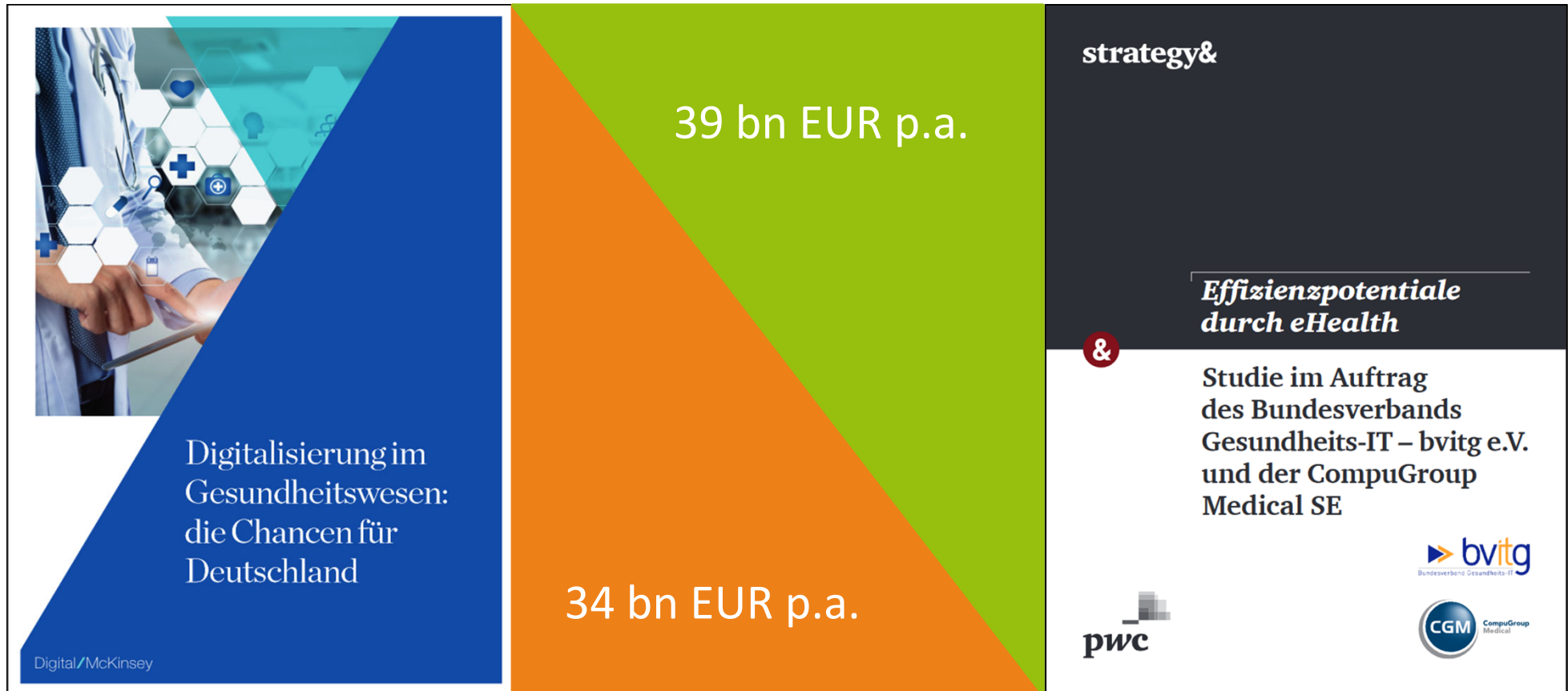


# Digital Transformation in Health Care

Involvement of self-determined citizens/patients is crucial.



## Significance for health systems and society



## Significance for health systems and society

37,00

Efficiency gains from E-Health p.a.



0,50

Prevention p.a.



**Note:** The German Cancer Research Center has a total budget of 0.28 billion Euros.

## Significance for health systems and society

Large growth potential in the German market as it transitions into a more digitally-enabled industry

### Overview

- **Telematics Infrastructure** is an important precondition to **enable new digital services** in health care
- **Personal Health Records** will become an important factor to establish and enable **new eHealth services** and **connect patients and health care professionals**
- Current studies show **huge potentials in digitization** of health care
- **Potential savings of €34bn** from digital service
- Approximately **€39bn in efficiency potential** of eHealth in German Health care

Digital Service		Potential (€bn)
Paperless data	eHealth record, e-prescription, drug safety check	9.0
Online Interaction	Teleconsultation, remote monitoring, e-triage	8.9
Workflow automation	eCare, tracking, discharge management, automated logistics	6.1
Decision support	AI-based treatment advice, cost analysis, genetic tests	5.6
Patient self-treatment	Management of chronic diseases, medical chat-bots, remote diagnosis tools	3.8
Patient self-services	Online appointment booking	0.5
Total		33.9

**CGM is a perfect fit.**

## CGM is a perfect fit

### Coverage

International corporate structure with strong regional presence and unique coverage of healthcare providers.

### Connectivity

Intelligent connectivity of all participants on the basis of structured medical information.



### Clinical Decision support

Clinical Decision Support Systems (CDS) for more efficiency, for greater effectiveness and for best quality.

### Patient Empowerment

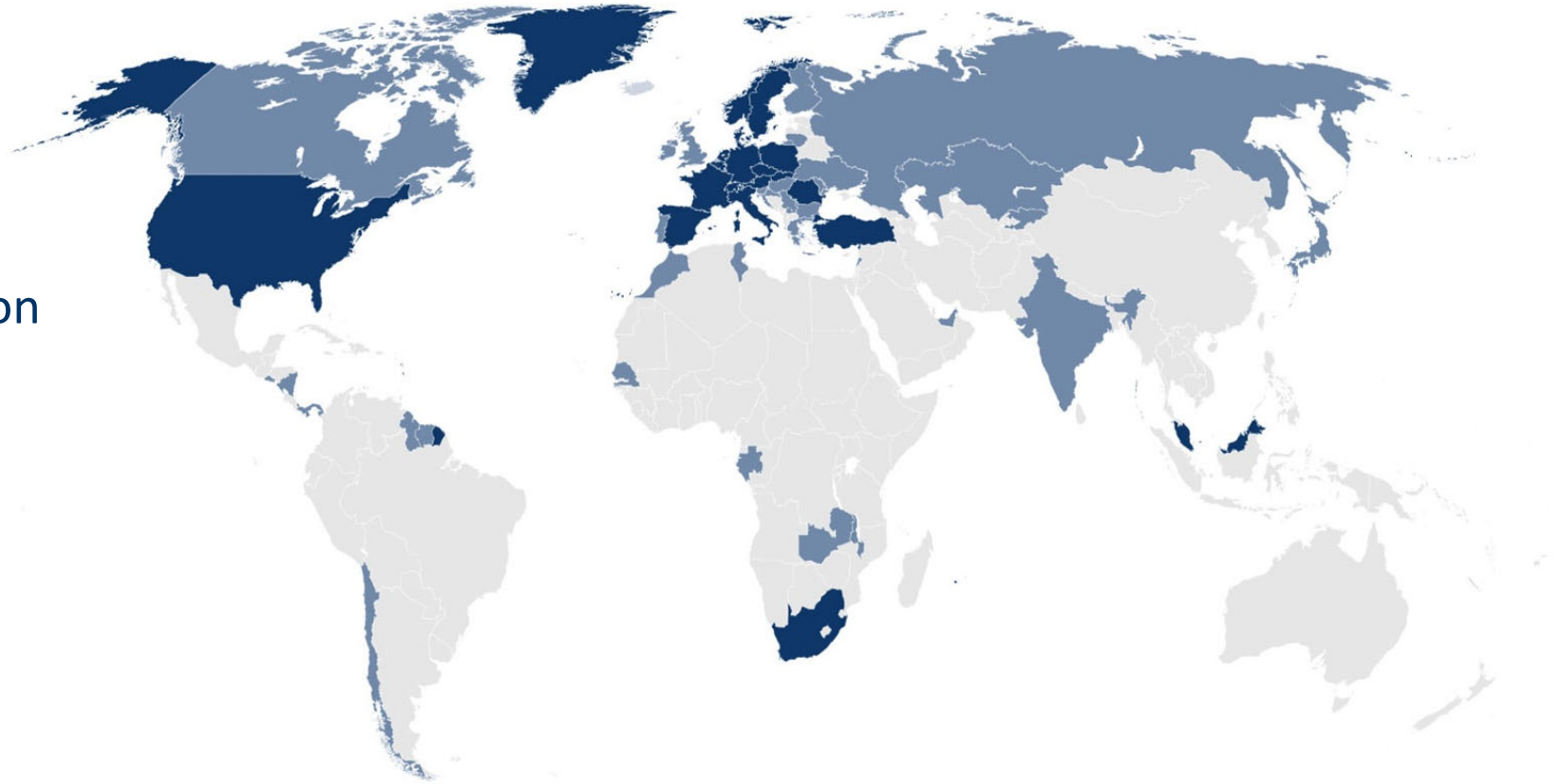
Networked health services for patients.

GPs (and certain specialists) decide about 75% of spendings in the healthcare sector.

## Geographical footprint of CGM

Users:  
More than 1 million  
health care  
professionals  
worldwide

- Locations in 19 countries
- Products in 56 countries



## Customers of CGM



Practices

Pharmacies

Hospitals

Laboratories

Care facilities

Rehabilitation

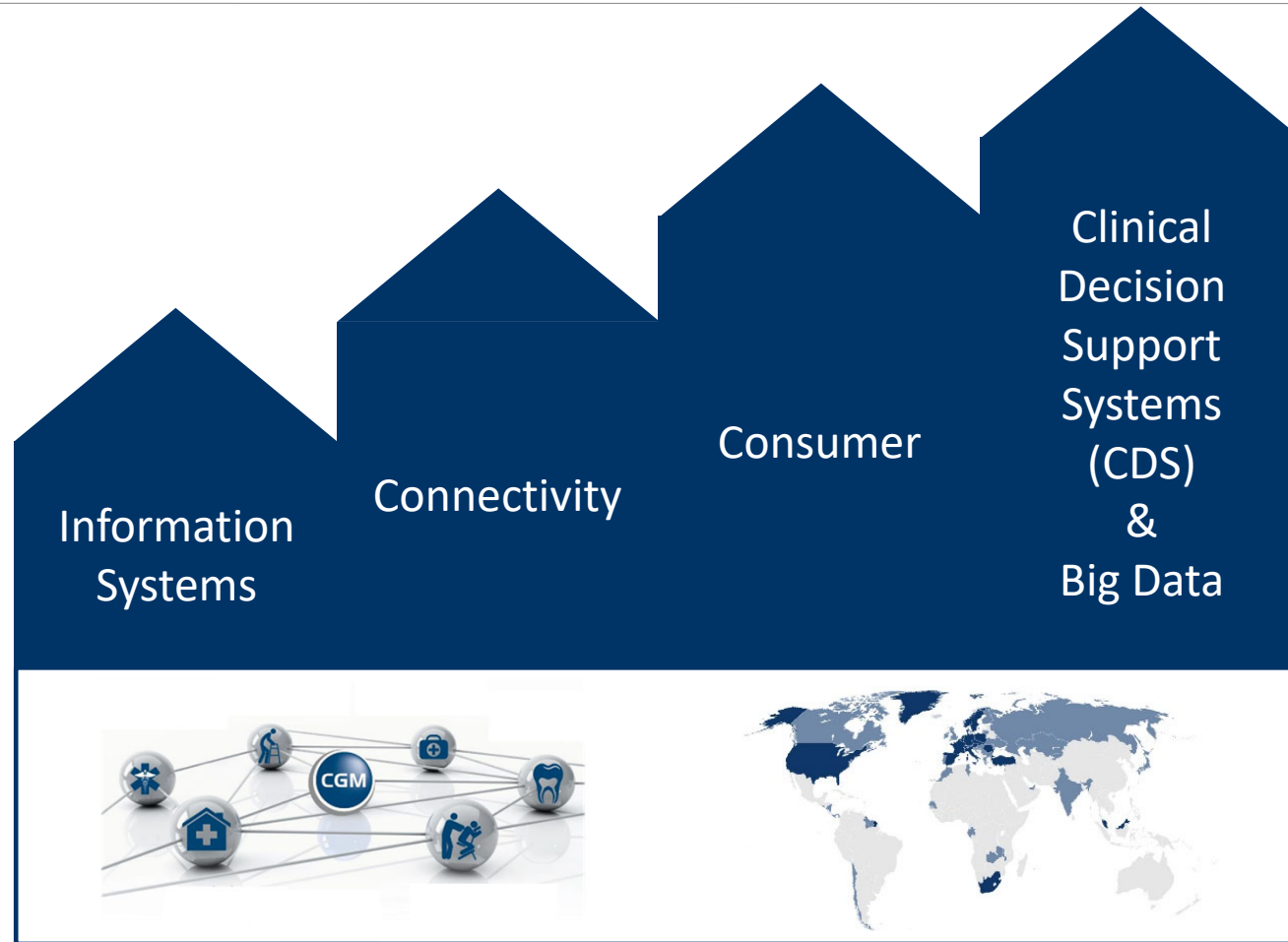
Health insurances

Consumers

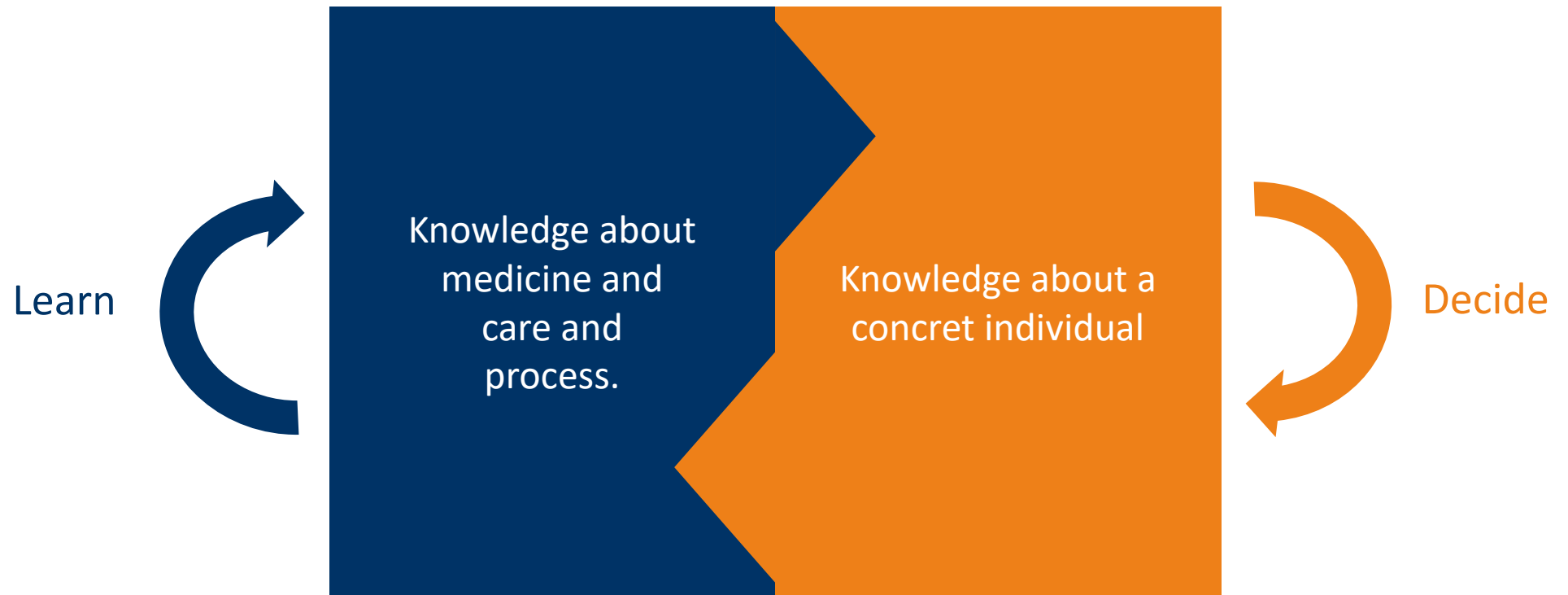
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## Ecosystem for growth



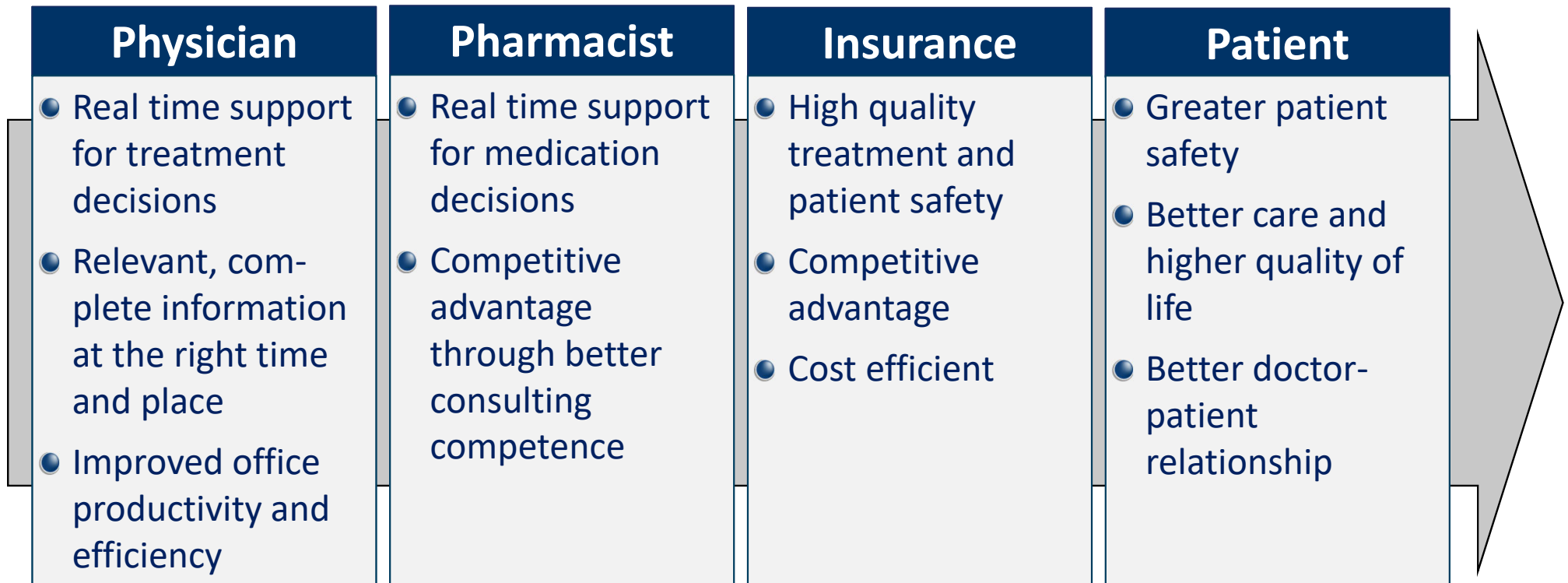
## Special: Clinical Decision Support Systems



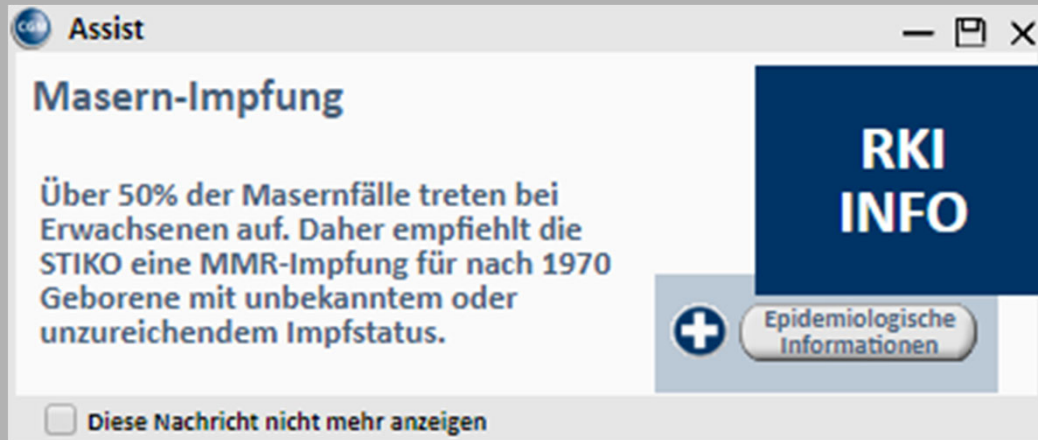
## Special: Clinical Decision Support Systems



## Clinical Decision Support Systems



## Example: Vaccination



More than 50% of measles cases occurred in adults.

Alert in our doctor's software:

Recommendation for carrying out vaccination if people were born after 1970 and the vaccination status is unclear.

CDS PREVENTS SUFFERING AND SAFES LIVES.

## Example: Drug Therapy Safety Management

### Coverage

International corporate structure with strong regional presence and unique coverage of healthcare providers.

### Connectivity

Intelligent connectivity of all participants on the basis of structured medical information.



### Clinical Decision support

Clinical Decision Support Systems (CDS) for more efficiency, for greater effectiveness and for best quality.

### Patient Empowerment

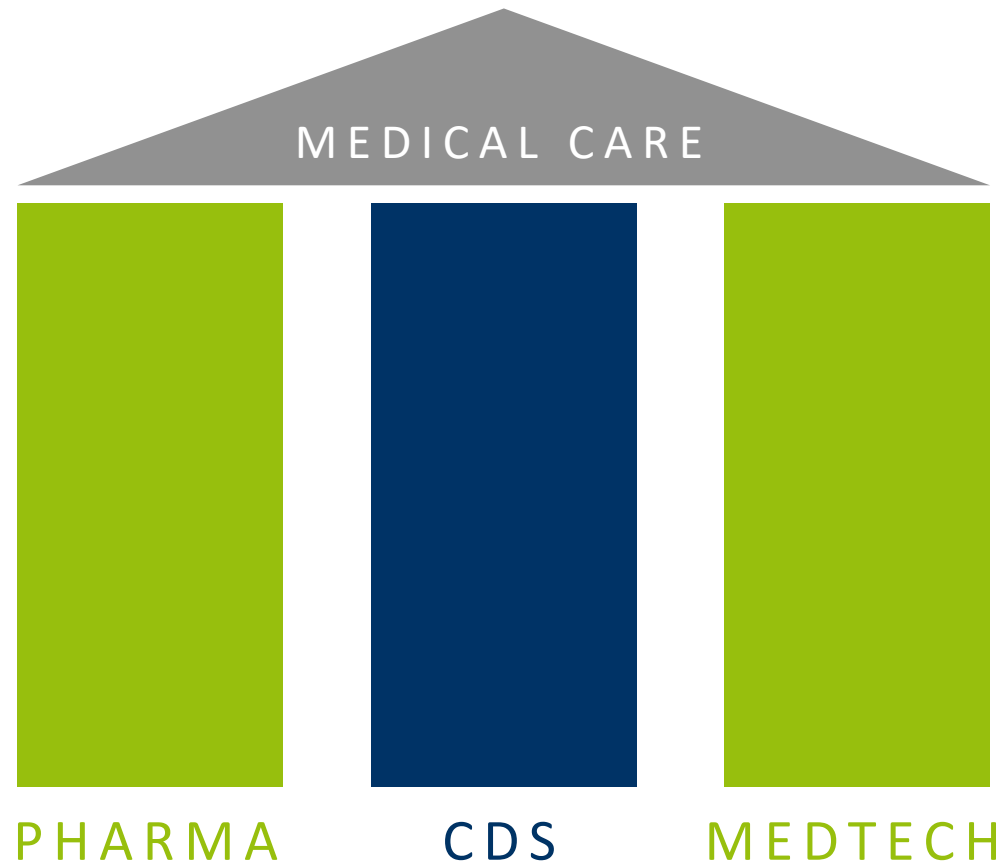
Networked health services for patients.



ARZNEIMITTELKONTO NRW

## Future of Clinical Decision Support Systems (CDS)

CDS WILL  
BECOME THE  
THIRD PILLAR IN  
SUPPORTING  
MEDICAL CARE.



# Conclusion.



## Conclusion



OUR WORLD IS CHANGING AND OUR  
EXPECTATIONS ARE RISING.

THUS THE MARKET IS GROWING FOR  
DIGITAL HEALTH.

CLINICAL DECISION SUPPORT WILL BECOME  
THE THIRD PILLAR.

**CGM is a perfect fit.**

Nobody should suffer or die because at some point medical information was missing.

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# Financials & Outlook

Michael Rauch, CFO

## Excellent financial performance



### Sustainable growth

Revenues	EBITDA	EPS
18%	17%	19%
CAGR 2002-2018		



### High shareholder return

Average annual TSR of 22%  
from 2007-2018



### Upgraded listing

Moving up to Germany's midcap index  
MDAX in 09/2019 –  
Listed in TecDax since 2013



### Long-standing track record of value-adding M&A

M&A spend ~€500m, reducing  
EBITDA multiple from ~13x to ~5x



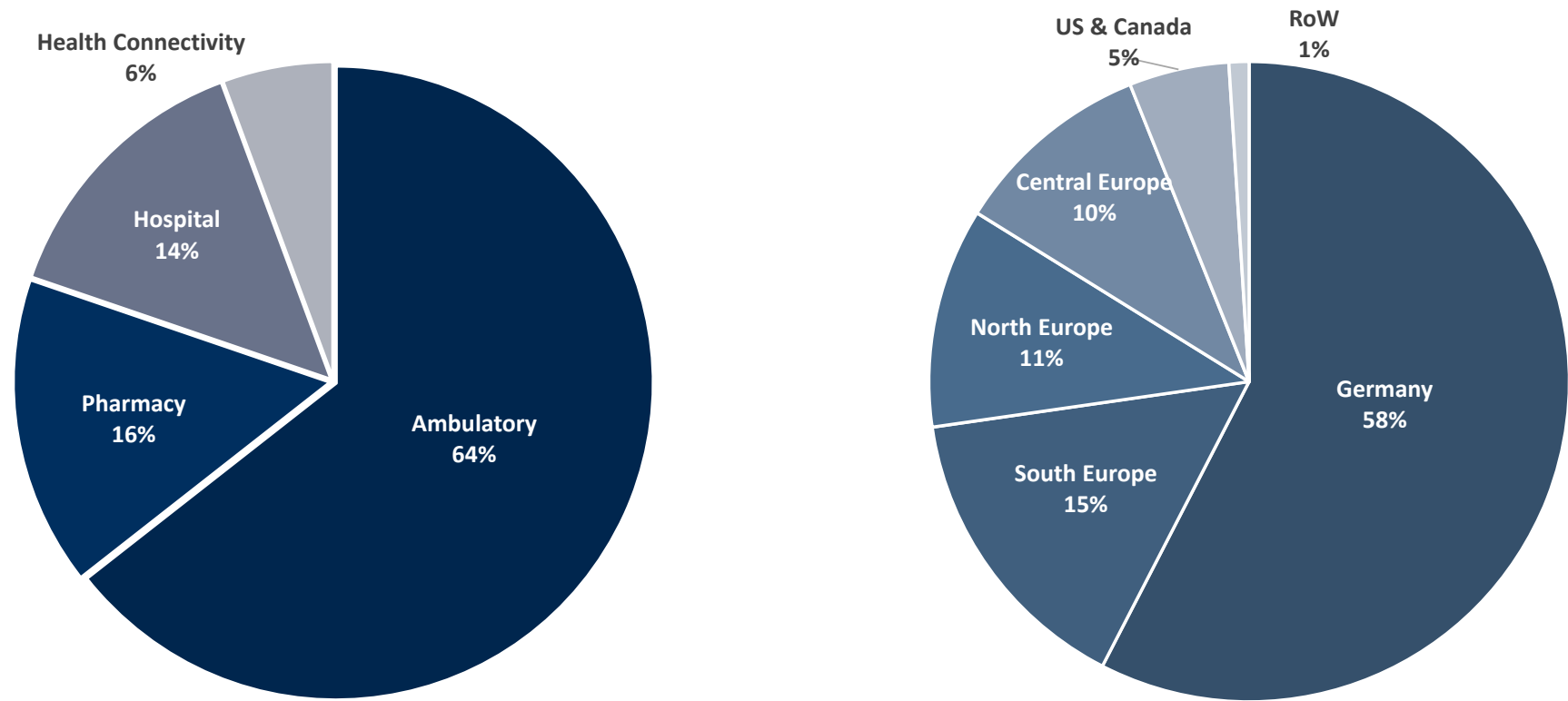
### Highly cashflow generative due to strong recurring revenues and high profitability



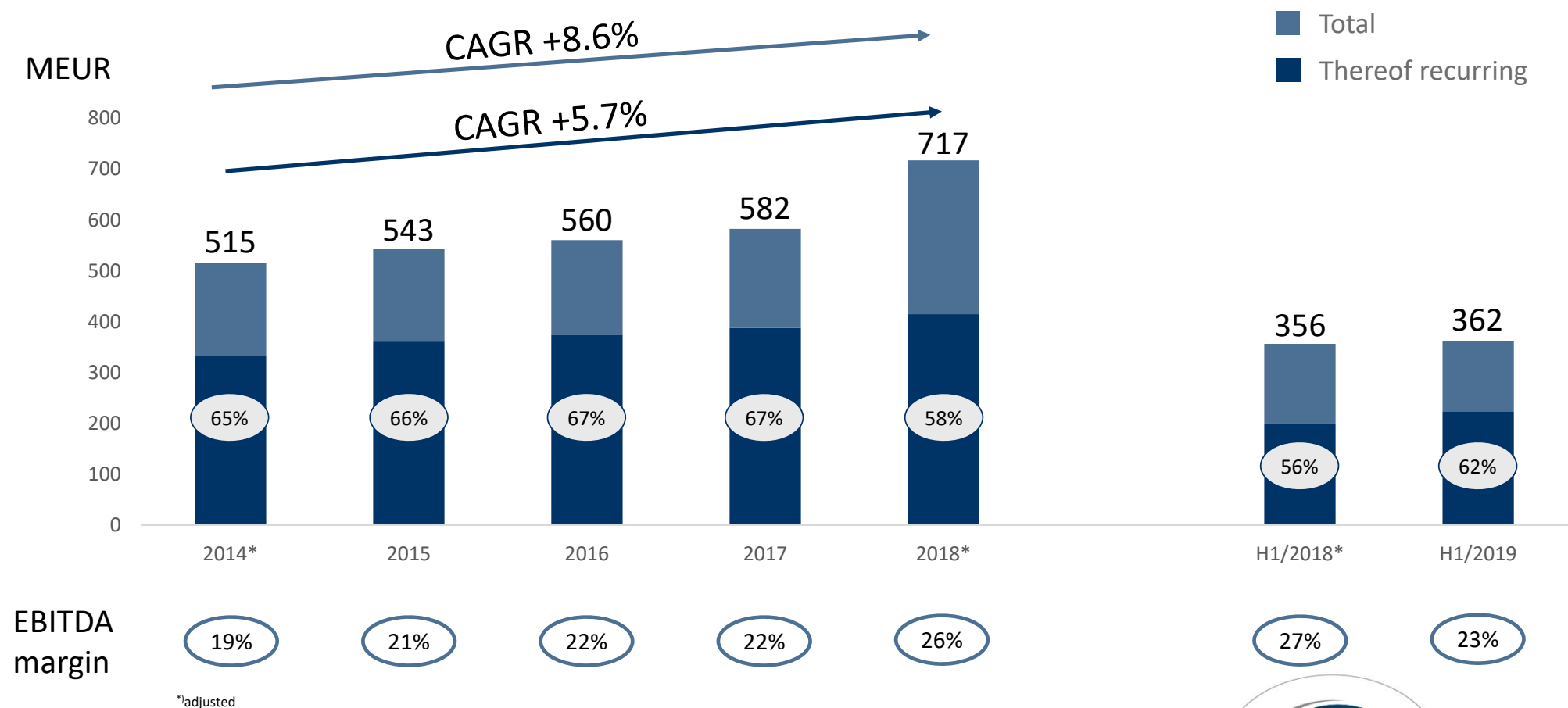
### Deleveraging quickly post acquisitions

Reduced leverage from 3.5x to  
1.5x within 4 years (2014-18)

# Diversified revenue base by product and regions – FY 2018

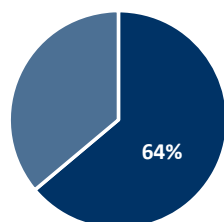


# Strong recurring revenue base and high margins



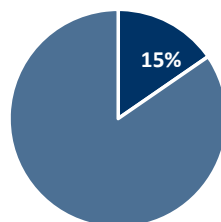
## Attractive growth and margins across the segments

### Ambulatory Information Systems



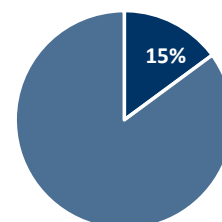
Revenue share<sup>1)</sup>

### Pharmacy Information Systems



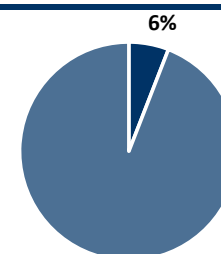
Revenue share<sup>1)</sup>

### Hospital Information Systems



Revenue share<sup>1)</sup>

### Health Connectivity Services



Revenue share<sup>1)</sup>

in EUR	Ambulatory Information Systems		Pharmacy Information Systems		Hospital Information Systems		Health Connectivity Services	
	H1/2019	yoy	H1/2019	yoy	H1/2019	yoy	H1/2019	yoy
Revenue	231m	-2%	56m	+5%	54m	12%	21m	+9%
EBITDA	79m	-6%	17m	20%	5m	+18%	8m	+18%
Margin	34%	-1ppt	30%	+4ppts	10%	+1ppt	37%	+3ppts

<sup>1)</sup> Of total revenues



## M&A criteria

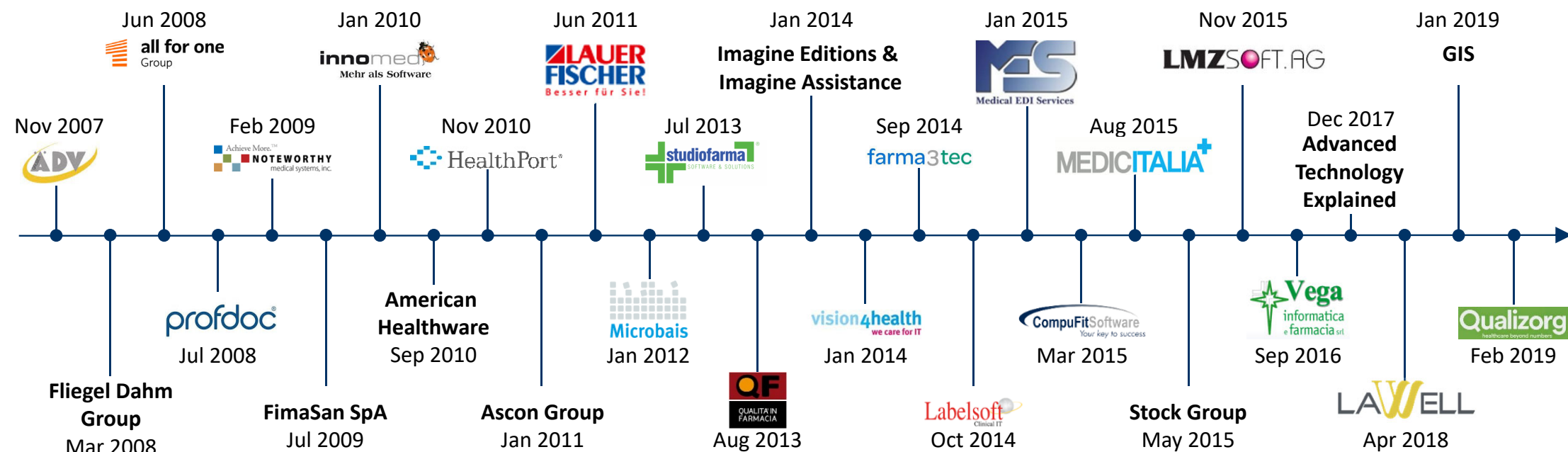
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- Strategic fit
  - Core business segments
  - High recurring revenue potential
  - Innovative and complementary product features
- Market leading position or complementary add-on
- High profitability and/or path to substantial synergy realization
- Strong and sustainable cash generating profile
- Adequate valuation based on growth assumptions

# Strong M&A track record with proven integration capabilities

(Selected acquisitions)

M&A spend ~€500m<sup>1</sup>

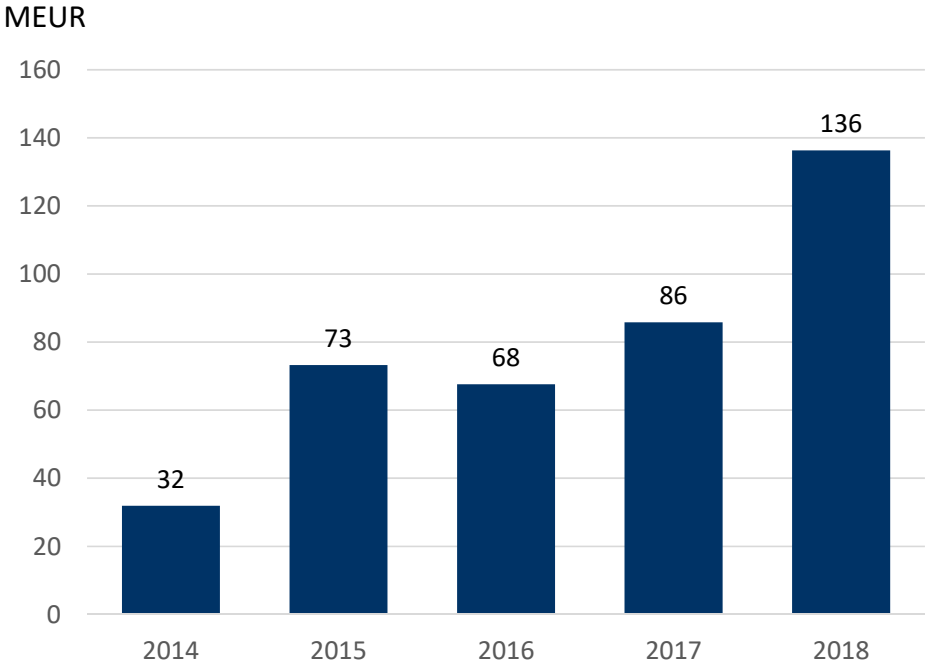


EBITDA acquisition multiple of ~13x down to ~5x<sup>1</sup>

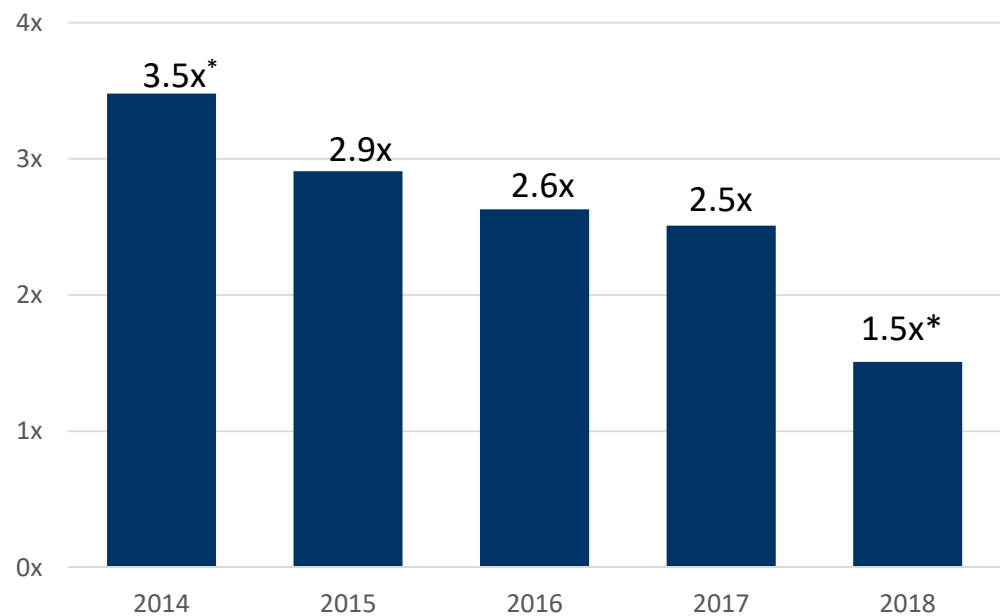
<sup>1</sup> M&A spend for transactions since 2007, EBITDA multiple for the most relevant transactions at time of transaction and FY2018.

# Strong operating cash flow and fast deleveraging post acquisitions

Operating cash flow



Leverage



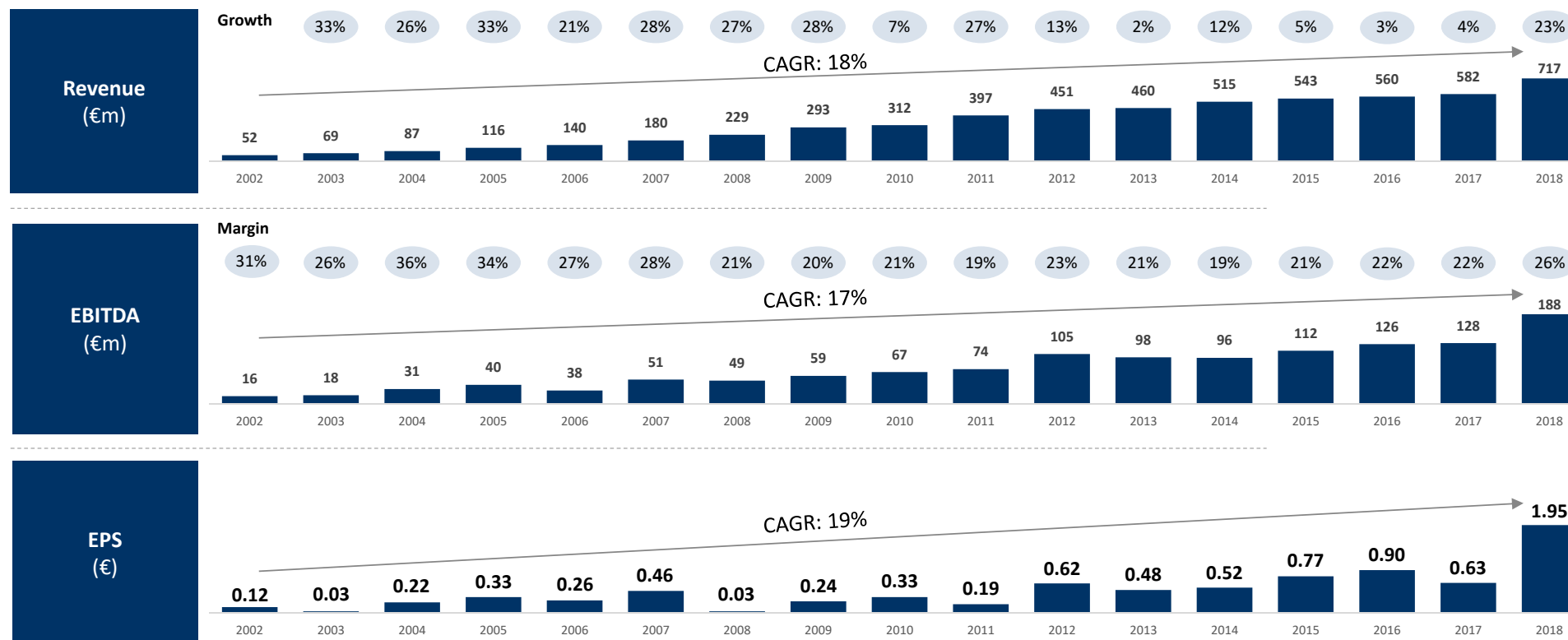
\*adjusted



# Guidance 2019 unchanged excluding M&A

- CGM guidance for 2019 (as of September 15, 2019):
  - **Unchanged revenue guidance** expected to be in the range of 720 MEUR to 750 MEUR
  - **Operating income (EBITDA)** is expected to be in the range of 190 MEUR to 205 MEUR, including costs for abandoned major M&A transaction in the range of 175 MEUR to 190 MEUR
- This outlook reflects all currently available information and management's forecasts regarding speed of market penetration, market share developments and price evolution related to the further roll-out of the Telematics Infrastructure in Germany in 2019
- The guidance does not include revenue and costs associated with potential and currently undetermined further acquisitions during 2019
- The guidance for the 2019 financial year represents management's current best estimate of the market conditions that will exist in 2019 and how the business segments of CGM will perform in this environment

## Excellent long-term financial track record



EBITDA and eps adjusted for 2011, 2014 and 2018.

## Investment Highlights - Well positioned for future growth

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- Strong and **leading market positions** across the business areas and regions
- Reliable business model with **> 60% of revenues recurring**
- **Major beneficiary from digitization** in Healthcare
- Sustainable **EBITDA margins on a high level**
- Long-standing track record of **value enhancing M&A**
- **Sufficient headroom** for further growth
- **Strong free cashflow** enabling **fast deleveraging** and established **dividend payout**

## Next events

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- November 7<sup>th</sup>, 2019: Q3 Financials
- February 5<sup>th</sup>, 2020: Preliminary FY 2019 and Q4 Financials
- March 25<sup>th</sup>, 2020: Annual Report 2019
- May 7<sup>th</sup>, 2020: Q1 Financials
- May 13<sup>th</sup>, 2020: Annual Shareholders' Meeting

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# Telematics Infrastructure

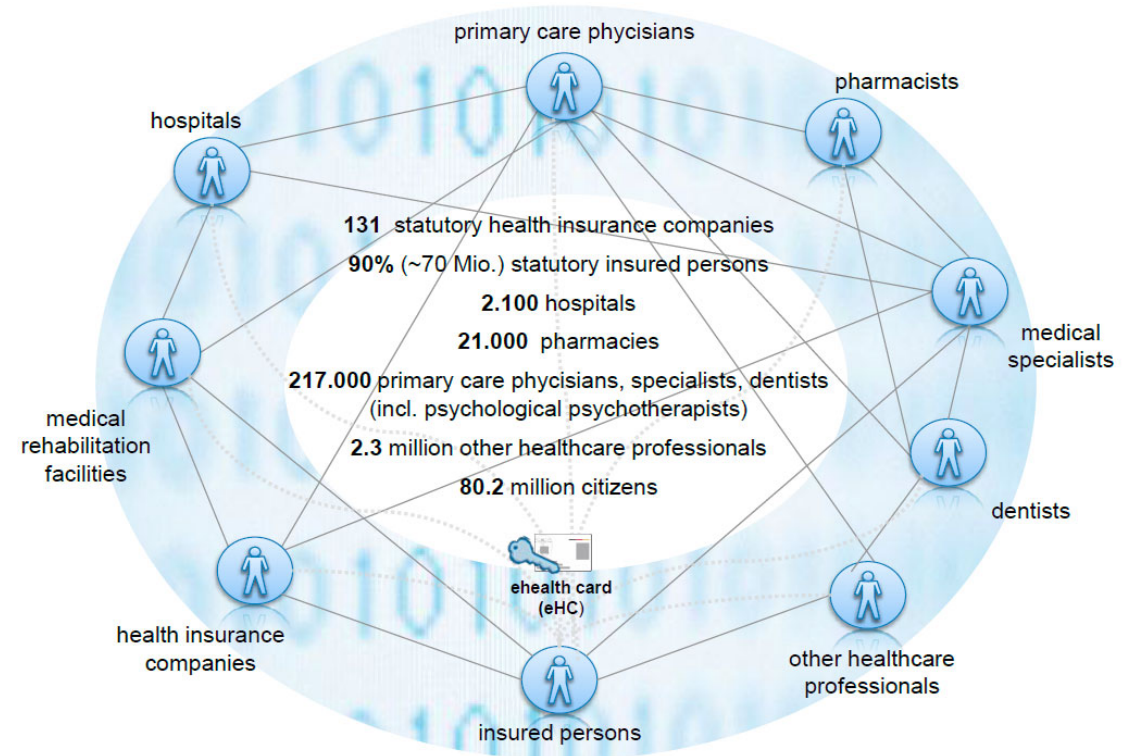
**Uwe Eibich, Board Member Telematics & eHealth Platforms**



# A Secure Network for German Healthcare

## Telematics Infrastructure

- Comprehensive network infrastructure for every ambulatory and inpatient facility
- Definite and unambiguous authentication of all participants
- Highest level of security for safe and reliable exchange of sensitive health data
- Secure data exchange only with the consent of the patient: two-key principle (eGK & HBA)
- Foundation for medical eHealth services



# 15 Years of History

- Introduction of the electronic health card (eGK), with the aim of improving medical care
- The legal basis for the introduction of the eGK is created in 2003 (GMG law)
- The ORS1 project to develop and test the Telematics Infrastructure (TI) technology started in 2013
- In 2017 the first phase (VSDM) of the ORS1 project ended; the second phase (NFDM/eMP) was changed to a market oriented model.
- The official start of Online Productive Operation of TI was decided in July 2017
- CGM started TI roll out end of 2017 with first certified TI components in the market
- 1<sup>st</sup> Deadline for doctors and dentists to use VSDM service until Dec, 31<sup>st</sup> 2018
- 2<sup>nd</sup> Deadline for doctors and dentists to use VSDM service until Jun, 30<sup>th</sup> 2019 if an order was placed until Mar, 31<sup>th</sup> 2019



Ärzte Zeitung online, 12.05.2018  
★★★★★  
Telematikinfrastruktur

**Spahn bekennt sich klar zur Gesundheitskarte**

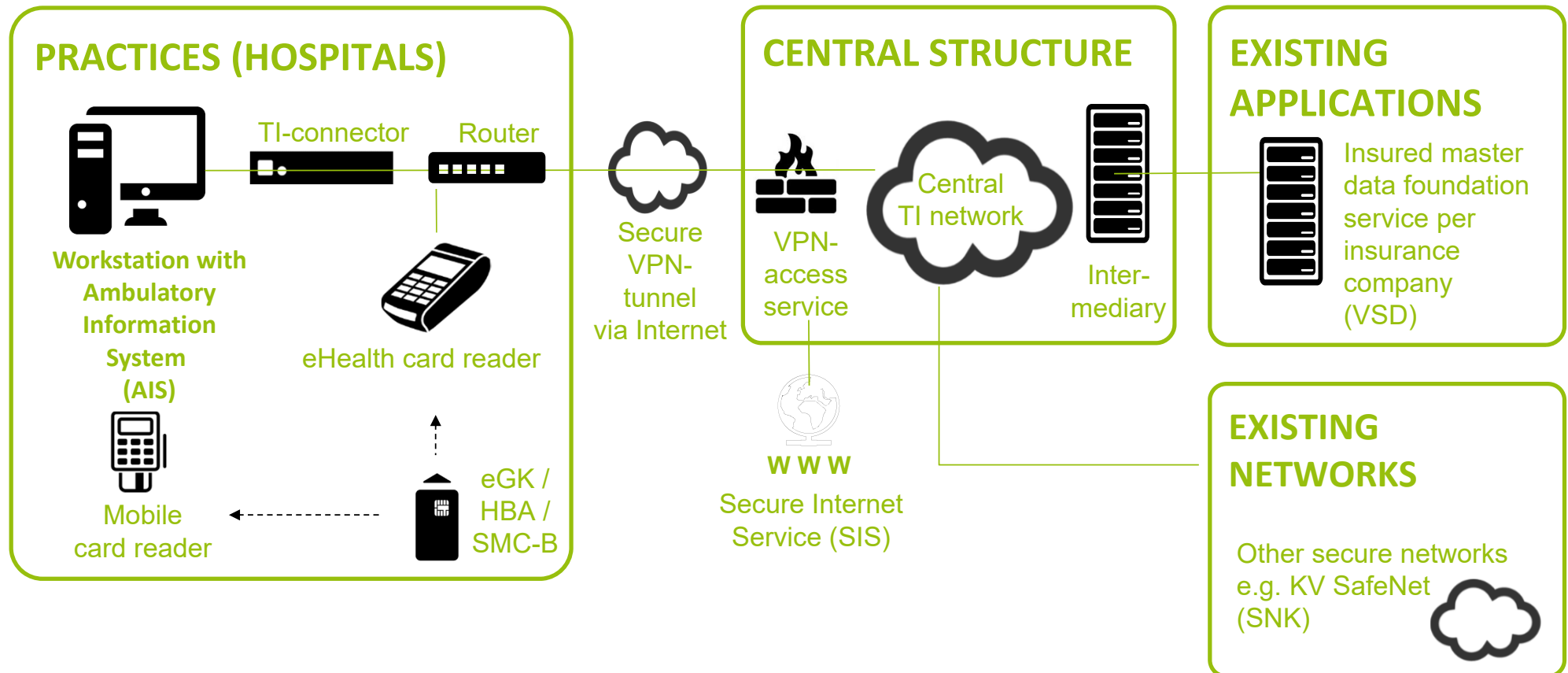
Nach zuletzt kritischen Worten auch von Gesundheitsminister Jens Spahn ist bereits das Ende des Projekts der Gesundheitskarte ausgerufen worden. Jetzt hat der Minister die Dinge klar gestellt.

f t x G+ e Kommentieren (1)



Gesundheitsminister Spahn auf dem Ärztetag, bei dem es auch um das Thema Fernbehandlung ging.  
© Michaela Illian

## Overall TI Structure with Central and External Components



## CGM Offers a Complete Chain of Components to Access TI

- **CGM Online access (VPN service)**  
Secure online connection to the telematics infrastructure (VPN service) and, if not already available, (DSL) Internet access
- **Connector KoCoBox Med +**  
Highly secure access point of the practice / clinic to the TI and connection of the primary systems and card terminals
- **VSDM-Module for primary systems**  
Primary software (AIS, HIS) supports connector and VSDM implementation
- **eHealth card terminal (stationary / mobile)**  
Reading of the eGK, the practice or institution card and the electronic health professional certificate
- **Practice or Institution Card (SMC-B)**  
Connection to TI only possible if practice or hospital is registered
- **Electronic Health Professional Card (HBA)**  
Chip card for identifying the holder in the TI; Required for QES or medical value-added services
- **Installation & Training**  
More than 600 certified TI technicians & specialists



## CGM Installations Are Running Very Satisfactory

### ● Connector KocoBox Med+

- Connectors are working reliably and performant. The hardware is very stable.
- Software disruptions are transmitted via a decentralized error monitoring system to CGM and evaluated daily
- In this way, an early - at best - proactive support is ensured

### ● CGM VPN access service

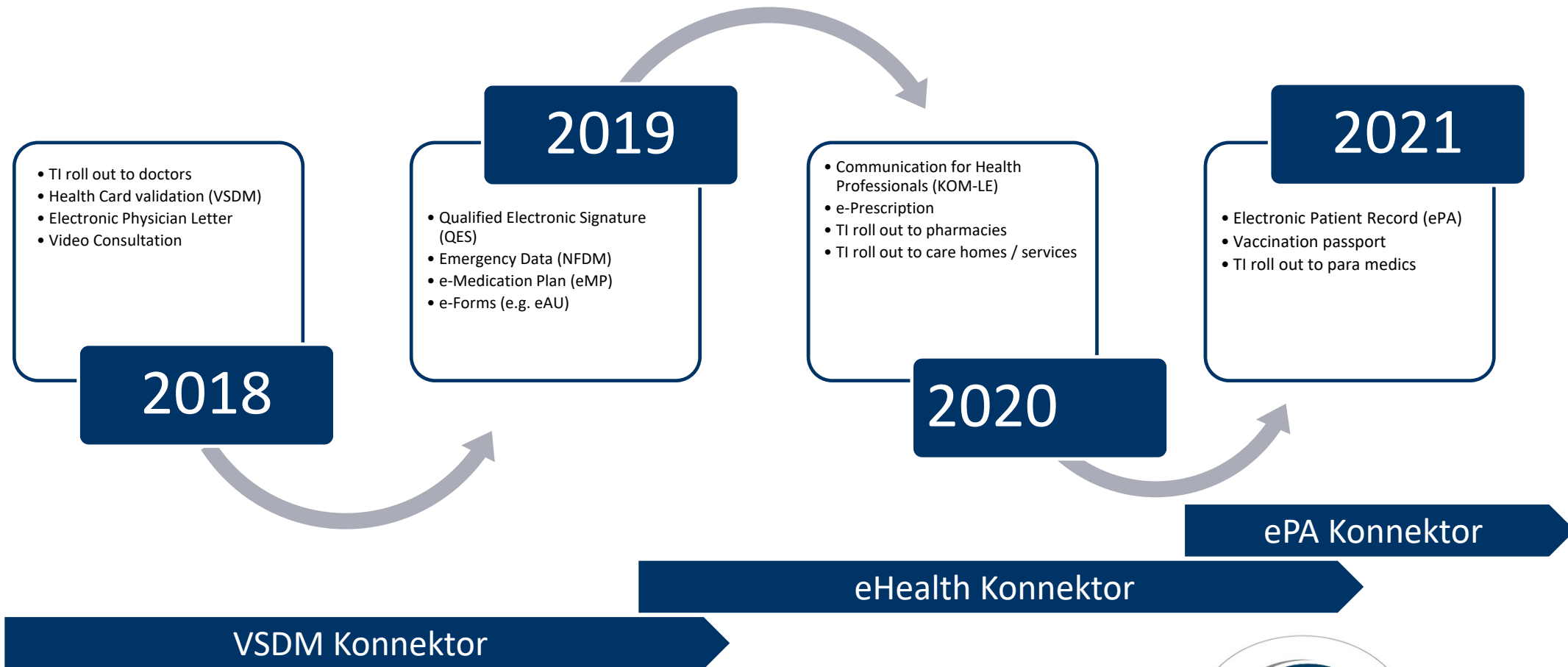
- Stable operation of this central TI component
- Two major disruptions due to external influence (Internet malfunction, TI central operations error)
- Intrusion detection and failure radar in place



# The German eHealth Roadmap



## eHealth Roadmap in Germany





## eHealth Konnektor – A Basis for Medical Applications

- A **software upgrade** will update the connectors already installed and introduce enhanced functionality
- Qualified Electronic Signature (QES) is a prerequisite for upcoming medical applications ( e.g. e-prescription)
- Emergency Data Management (NFDM) as a first medical application will maintain an individual emergency data set on the e-Health card of each insured person
- e-Medication Plan (eMP) will maintain an individual medication plan on the e-Health card of each insured person and insure a data exchange between doctors and pharmacy
- KOM LE a new service for communication standard will enable the secure exchange of documents amongst health professionals

APOTHEKE

» Alle Artikel

TELEMATIKINFRASTRUKTUR

### Compugroup bringt E-Health-Konnektor auf den Weg

STUTT GART - 21.08.2019, 15:15 UHR

0

Für die Anbindung an die Telematikinfrastruktur, über die künftig unter anderem E-Rezepte ausgetauscht werden sollen, benötigen Apotheken bestimmte Hardwarekomponenten, darunter auch einen sogenannten Konnektor. Allerdings darf es nicht irgendein Konnektor sein, sondern nur ein „E-Health-Konnektor“ erfüllt die Anforderungen. Die Compugroup (CGM) hat nun einen solchen Konnektor zur Zulassung eingereicht – nach eigener Aussage als erster Hersteller am Markt.





## QES is a Prerequisite for Further TI Applications

- The Qualified Electronic Signature (QES) is a legally compliant electronic signature for formal documents
- QES guarantees the recipient that the sender is a verified user of the Telematics Infrastructure and that the signed document has not been changed after signature
- A Qualified Electronic Signature can only be made with an electronic health professional card (eHBA) and a pin code entry
- QES software upgrade is included in all connectors sold and will be distributed with the upcoming SW Upgrade for the eHealth Konnektor.
- QES is a necessary prerequisite for NFDM



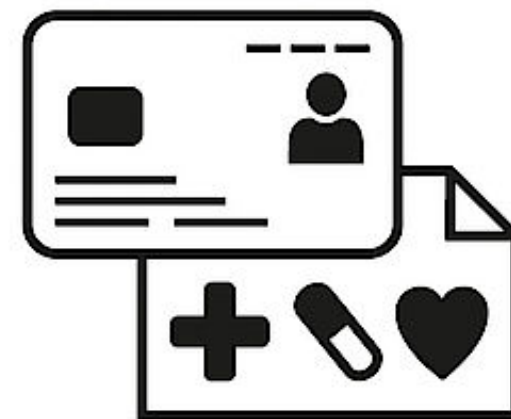
## NFDM and eMP Are Planned as Concurrent Release

### ● Emergency Care Data Set (NFDM)

- Provides quick access to emergency-related data such as medications, allergies, drug intolerances and diagnoses as well as additional information that patients can volunteer
- The emergency data can be created, maintained and read by a physician when you are with a doctor (using TI & Koco-Box)
- The right to access exists also in the preclinical rescue service, in the emergency department and for patients with acute complaints in outpatient treatment

### ● Electronic Medication Plan (eMP)

- In the future, even demanding examinations will become possible individual patient data such as body weight or organ function information account
- The eMP will also enable better Medication Safety applications (AMTS)



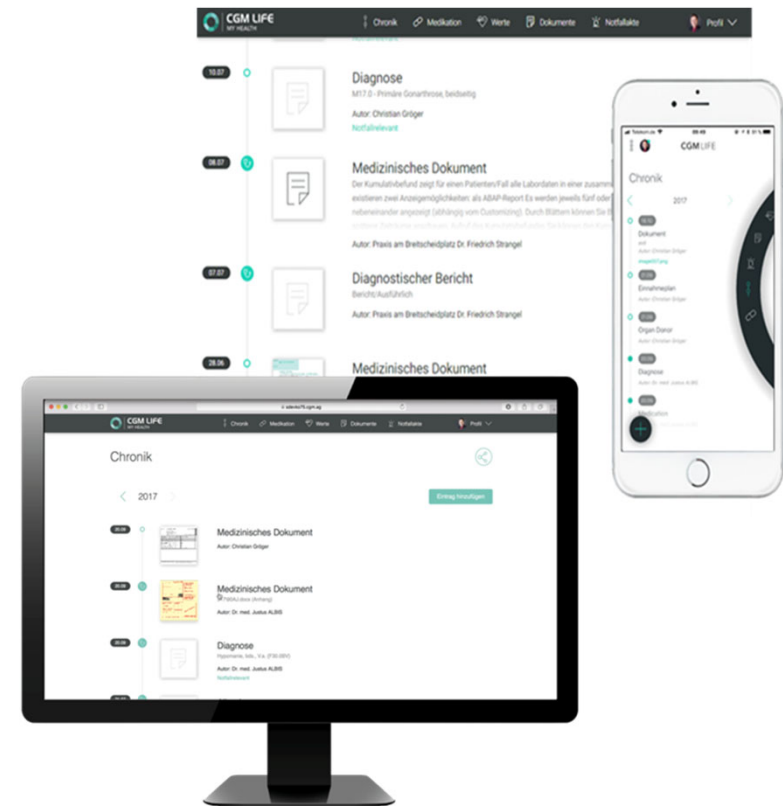
## KOM-LE

- Secure exchange of digitally signed documents between healthcare providers (KOM-LE)
  - e-Letters from doctor to doctor
  - Doctor referring patients to a specialist or hospital
  - Discharge letters from hospitals to the family doctor
- Requires a KOM-LE client module and functionality in the primary software
- Also requires a professional KOM-LE service in the central TI network to provide the subcomponents Account Manager and Mail Server
- The use of KOM-LE is voluntary and not a requirement within the TI



# Electronic Patient Record (ePA) as Regulated Competition

- German health funds have to offer an electronic patient record (ePA) to its insured members latest Jan, 1<sup>st</sup> 2021
- gematik has released ePA specifications in May 2019
- gematik has to release specifications for patient access (via Smartphone)
- New health cards equipped with NFC chips starting in Dec 2019
- A new connector release is needed to connect to ePA
- Several Health funds have released tenders on ePA development and operation



## Market Status



## TI Roll Out (VSDM) to Health Care Facilities in Germany

### Doctor/Dentist

225,000 doctors,  
dentists and PTs  
in ~150,000 practices

Start 2018  
Deadline  
Jun, 30<sup>th</sup> 2019

### Pharmacy

51,000 pharmacists  
in ~19,000 pharmacies

Start 2019/2020  
Deadline  
Sep, 30<sup>th</sup> 2020<sup>\*)</sup>

### Hospitals

160,000 doctors  
in ~1,900 hospitals

Start 2018  
Deadline  
Jan, 1<sup>st</sup> 2022<sup>\*)</sup>

Source: KBV / KZBV 2018 / ABDA 2017 / DKG 2017

<sup>\*)</sup> Draft law "Gesetz für eine bessere Versorgung durch Digitalisierung und Innovation" // PT = Psychotherapist

## Roll Out (VSDM) to Outpatient Practices

- TI Roll out to practices of doctors, dentists and psychotherapists. Practices, not (yet) health professionals were connected to the TI infrastructure
- TI is an obligation for health professionals working for statutory health insurance (GKV), private doctors (PKV) are excluded
- Some specialists have no obligation to connect to the TI service, e.g. pathologists and laboratory doctors
- In a press release gematik announced approx. ~100,000 TI installations and ~20,000 uninstalled TI orders per end of June 2019
- CGM installed TI components in ~52,000 (43%) practices, the remaining practices are distributed amongst three other TI vendors
- Assuming ~120,000+ TI Installations in total today, one can estimate 15% to 20% of the practices without TI access

~150,000 medical practices in Germany



## A Market Snapshot

- CGM is offering a complete TI product bundle since end of 2017
- ~54,000 practices have ordered a TI connection from CGM, of which ~14,000 practices are using a competitive CGM primary software product
- All software vendors have developed the necessary interface to TI and VSDM
- The financing agreement for doctors was currently renegotiated
- Competitors are Arvato/Secunet, RISE and Telekom.
- TI rollout to GP/specialists and dental practices is almost completed. But c.15% of the practitioners refuse to install TI services
- TI roll out to pharmacies will start soon







Jens Spahn, Federal Minister of Health:

"Although I understand the restraints after 14 years of waiting for the health card, I advise doctors: **Get a connector.** It is the basic requirement for further networking. We need a secure network and secure communication methods so that the electronic patient record, ePrescription and emergency care data set can be deployed. Without connectors doctors lose the connection to the future!"

Deutsches Ärzteblatt  
(German Medical Journal), 23. Juli 2018



## Competitive Landscape

TI Components	Arvato/Secunet	CGM	RISE	Telekom
VPN Access Service	Arvato VPN Service	CGM VPN service	Arvato VPN Service	Telekom VPN Service
Konnektor	Secunet-Konnektor	CGM-Konnektor	Rise-Konnektor	Telekom-Konnektor
Smart Card ( SMC, HBA)	Cooperation with medisign	Cooperation with Bundesdruckerei	Cooperation with medisign, Telekom	TeleSec own card provider
eHealth Card Reader	Ingenico, Cherry	Ingenico, Cherry	Ingenico, Cherry	Ingenico, Cherry
Sales to health providers	Cooperation with SW vendors, Medatixx and others	CGM AIS sales organization, Cooperation with SW vendors, Online-Shop, Call Center	Cooperation with SW vendors, e.g. Dampsoft	Cooperation with SW vendors, mainly Medatixx
Technical service / Installation	Cooperation with SW vendors / technical service providers 	CGM AIS service partner, contracted technical service provider self installation tools 	Cooperation with SW vendors / technical service providers 	Cooperation with SW vendors / technical service providers 
Market share / Innovation				

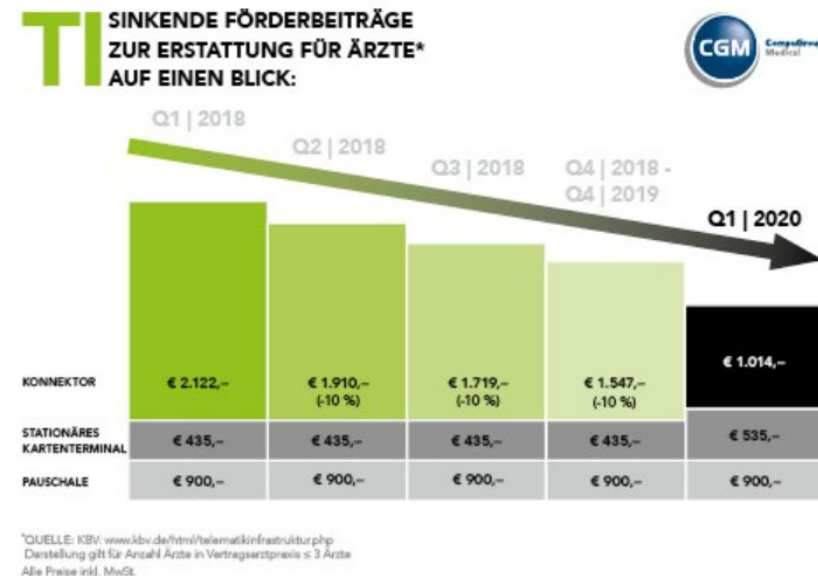
## Updated Financing Agreement Starting 2020\*

### Doctors/Dentists

- Updated financing agreement will come into effect next year (Jan 1<sup>st</sup> 2020)
- Connector financing will be reduced to €1,014 (minus €535)
- The refund for card readers will be increased to €535 (plus €100)
- A practice (1 to 3 doctors) will then receive a refund of €2,449 (instead of €2,882) to buy a TI package

### eHealth – Upgrade for Doctors

- eHealth-Connector Upgrade (NFDM/eMP) is financed with €530 and €1.50 p.m. for the recurring operating costs
- Additional card readers €535



### Pharmacies

- A financing agreement for pharmacies is in place eHealth-Konnektor as a precondition
- €2,642 for Konnektor and two eHealth card readers. Current TI pricing above refund

\*All amounts:  
VAT included

## Our Current TI Offering for Doctors and Dentists

- One stop shop!
- TI offer suitable to ALL doctors and dentists in Germany
- Includes delivery and installation on site
- Price corresponds to TI financing in Q4 / 2018  
= €2,880 incl. VAT (refund: €2,882)
- Package sold by CGM partners and CGM call center
- Competitors offer TI package at the same price level
- Similar offering and same pricing for pharmacies

**ZUKUNFT-IST-JETZT-ANGEBOT**

MEHRWERTE DURCH DIE MEDIZINISCHEN ANWENDUNGEN  
Fax: 0261 8000-2399 | E-Mail: [bestellung.ti@cgml.com](mailto:bestellung.ti@cgml.com) | CGM-Infoline: 0261 8000-2323

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**HIERMIT BESTELLE ICH:**

☒ **CGM-PAKET  
TELEMATIKINFRASTRUKTUR  
€ 2.880,-**

- VSDM-Konnektor KoCoBox MED+ (QES-ready)
- Secure Internet Service (SIS) mit 1,5 GB Datenvolumen\*
- Freischaltung VPN-Zugangsdienst
- eHealth-Kartenterminal inkl. gSMC-KT\*\*

☒ **ORGA 6141 online**  
inkl. gSMC-KT

☐ **CHERRY Tastatur G87-1505**  
inkl. gSMC-KT ☒ weiß ☐ schwarz

- Anfahrt, Installation und Inbetriebnahme in Ihrer Praxis
- Einweisung der Mitarbeiter in Ihrer Praxis

☒ **SERVICE-PAKET BETRIEB** € 82,67 mtl.

- Servicegebühr Konnektor KoCoBox MED+
- VPN-Zugangsdienst (aktuelle Bestandsnetze inklusive)

**TI-BASIS-FÖRDERUNG:**

- TI-Basispaket einmalig € 2.882,-
- Betriebskostenpauschale € 248,- quartalsweise

☐ **CGM-PAKET TELEMATIKINFRASTRUKTUR  
INKL. MED. ANWENDUNGEN  
€ 3.280,- ~~statt € 3.410,-~~**

Zusätzlich zu den Bestandteilen des CGM-Pakets Telematikinfrastruktur erhalten Sie die Bereitstellung\*\*\* des Konnektor-Firmware-eHealth-Upgrades zur Unterstützung der Fachanwendungen\*\*\*

- inkl. Notfalldatenmanagement (NFDm): Speicherung notfallrelevanter Daten auf der eGK
- inkl. elektronischer Medikationsplan (eMP): Speicherung des Medikationsplans auf der eGK

**SPAREN SIE € 130,-**

**eHEALTH-FÖRDERUNG:**

- eHealth-Konnektor-Upgrade einmalig € 530,-
- Zusätzliche eHealth-Kartenterminals einmalig € 435,- je 625 Betriebsstättenfälle pro Quartal
- Betriebskostenpauschale\*\*\* € 4,50 pro Quartal

**ZUSÄTZLICH BESTELLE ICH:**

<input type="checkbox"/> stationäre(s) eHealth-Kartenterminal(s) <b>ORGA 6141 online</b> inkl. gSMC-KT	<b>€ 665,21</b>
<input type="checkbox"/> stationäre(s) eHealth-Kartenterminal(s) <b>CHERRY Tastatur G87-1505</b> inkl. gSMC-KT <input checked="" type="checkbox"/> weiß <input type="checkbox"/> schwarz	<b>€ 665,21</b>
<input type="checkbox"/> mobile(s) eHealth-Kartenterminal(s) <b>ORGA 930 M online</b>	<b>€ 355,81</b>

## Online Offer “Do-it-yourself”

- Online order portal [www.kocobox.de](http://www.kocobox.de)
- Neutral product offer
- Suitable for every practice software
- Self-installation by doctor
- Smart SW tools enable self installation of TI components
- Technical service (installation) can be booked optionally
- Attractive pricing
- Immediate delivery
- More than 2,500 orders so far

160 € **SOMMER-RABATT\***  
Gutschein-Code: VSDM-TI-2018

\*Angebot gültig für bestellte oder vorhandene TI-Integrationsmodule (VSDM-TI-Module). Anwender der CGM erhalten bereits kostenlos das TI-Integrationsmodul in Verbindung mit dem Konverter Kocobox VSDM und sind daher von diesem zusätzlichen Rabatt ausgeschlossen.



**Telematikinfrastruktur für alle – sparen Sie bis zu 715 €!**

Für jede Praxissoftware geeignet.\*\* KoCo ist bereits mit über

50 verschiedenen **Arzt- und Zahnarztinformationssystemen** erfolgreich.

(\*\* gilt für jede von der gematik bestätigte Praxissoftware)

# TI Orders & Installation in 2019

## Doctors/Dentists

- TI roll out (VSDM) has passed installation deadline (Jun 30<sup>th</sup>, 2019)
- New financing agreement for 2020 may give a sales push for Q4/2019
- c.55k to c.57k TI installations in total

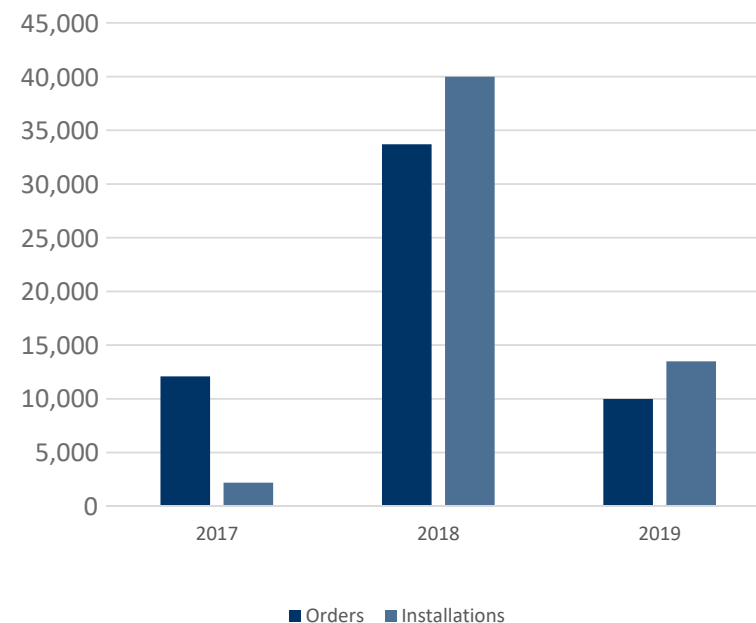
## Hospitals

- ~250 TI orders and ~180 installations in hospital outpatient clinics/ambulances & reception
- eHealth Connector is a precondition

## Pharmacies

- CGM has already collected ~400 orders
- TI Roll out will start 2020
- eHealth Connector is a precondition

TI roll out doctors/dentists

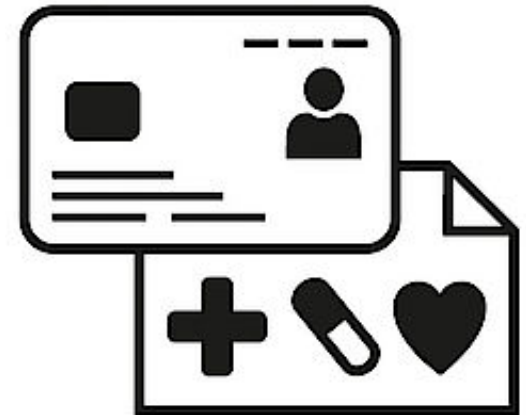


# Outlook



## Telematics Infrastructure – a Growing Business

- The Digitization of German healthcare is driven by a accelerated legislation initiatives
- TI roll out creates a growing customer base by stepwise connecting medical facilities of all healthcare sectors
- VPN Access Service and Konnektor as a basic service are needed in every practice and clinic to connect to the TI infrastructure
- QES and HBA will enable new medical e-Health-services and enlarge the customer base with each individual health professional
- Digitization in healthcare will grow by more and more eHealth-Services for administrative and medical purposes
- A electronic patient record (ePA) will complete the TI network to support medical eHealth services with patient data
- ePA and Access Service via smartphone will open TI for citizens and patients



# TI Product Roadmap

2018

2019

2020

2021

2022

## TI Components (HW):

VSDM Konnektor

eHealth Upgrade

eHealth-/ePA-Konnektor

KocoBox Konnektor G3

KocoBox Konnektor G4 (new HW)

eHealth card reader, Smart Cards

## TI Services:

VPN Access Service

KOM-LE Service

ePrescription Service [?]

ePA Services

## SW Modules in AIS, HIS etc.:

VSDM Module

QES/NFDM/eMP module

KOM-LE Module

ePrescription Module

ePA Services Modules



## TI Roll-out to Other Sectors of Healthcare

### Care

14,480 care homes  
14,050 care services

**Start 2020<sup>\*)</sup>**

### Midwives

c.24,000 midwives

**Start 2021<sup>\*)</sup>**

### Physiotherapist

c.160,000  
physio therapists  
in c. 38,000 practices

**Start 2021<sup>\*)</sup>**

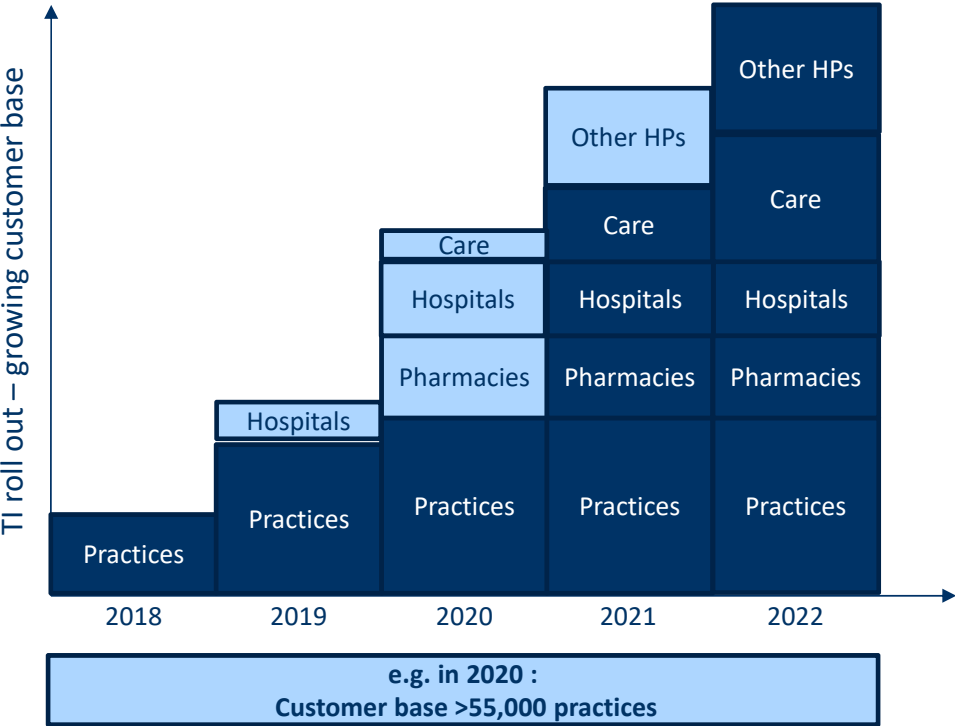
Source: VDEK / Statista

<sup>\*)</sup>Draft law "Gesetz für eine bessere Versorgung durch Digitalisierung und Innovation"

# TI Business Outlook

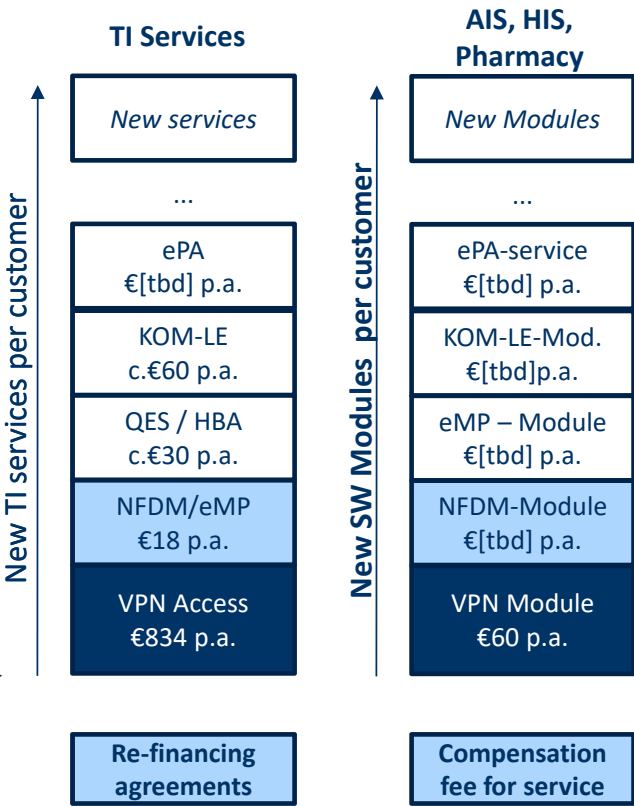
## Growing & stable customer base

Medical facilities (practices, hospitals etc.)  
Health professionals (doctors, pharmacists etc.)



## Growing revenue per customer

TI components, smart cards etc.  
Medical TI services/applications



- Stepwise TI roll out is building up a customer base (2019 YTD: 55,000 practices)
- Growing recc. revenues (basic TI services ) by additional onboarding of health professionals
- Growing recc. revenue per customer driven by new services and/or new components
- Growing revenue with software modules for doctors, pharmacies, clinics etc.
- Frequent renewal of TI components (Konnektor, SMC) due to limited certificate lifetimes (4y)

## TI is Driving the Digitization of Healthcare

- Framework due to legal and regulatory incentives as starting point for roll out and driver for further development
- Early mover advantage and technology leadership grants CGM edge over competition
- Superior and reliable components and services resulting in a high market share
- High coverage of CGM software customers and remarkable market share with customers of competitive software vendors
- Growth potential due to future rollout in other sectors and medical eHealth-services driving the digitization of healthcare
- Consumer will become future participants and users of TI eHealth services



Investor & Analyst Conference 2019

Q&A

Synchronizing Healthcare



## During Lunch: Telematics Infrastructure

### Watch TI Components and Services work!

- Check of electronic health card (VSDM)
- Electronic Medication Plan (eMP)
- Emergency Data Management (NFDm)

**LIVE DEMO \***  
**in**  
**Room 11002**  
**Group 1: 01:00pm**  
**Group 2: 01:30pm**



\*For the webcast participants, the presentation continues at 2pm CEST.

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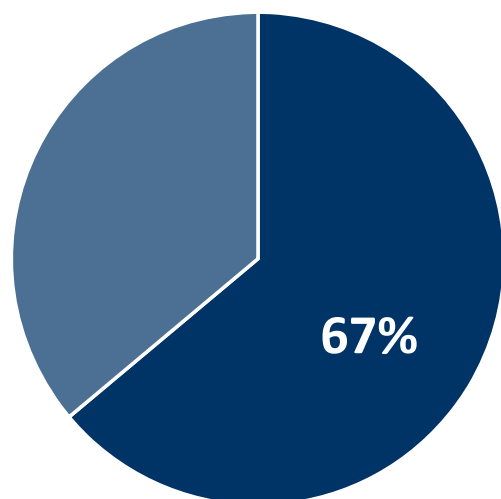
Investor & Analyst Conference 2019

# Ambulatory & Pharmacy Information Systems

**Dr. Ralph Körfggen, Board Member Ambulatory & Pharmacy**

## AIS– Attractive Customer Base, Excellent Market Position & TI Rollout

### Revenue split H1/19



■ Non-recurring  
■ Recurring

**€231m**

Revenues

**-2%**

yoy

**+20%**

H1 CAGR 16-18

**€79m**

EBITDA

**-6%**

yoy

**34%**

Margin

**~210k**

Physicians

**#1**

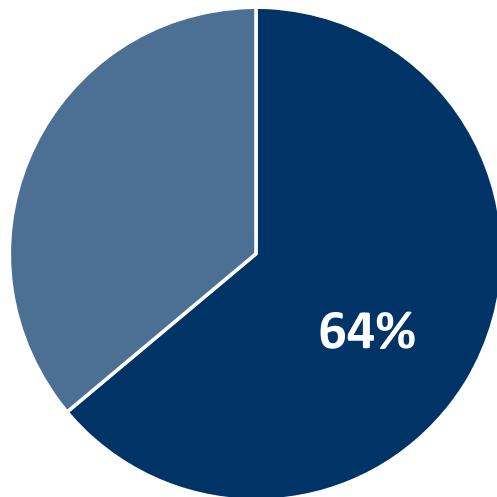
Market  
position

**~3x**

vs. next  
competitor

## PCS – High Recurring Revenue Share and Strong Market Position

### Revenue split H1/19



■ Non-recurring  
■ Recurring

**€56m**  
Revenues

**+5%**  
yoy

**+12%**  
H1 CAGR 16-18

**€17m**  
EBITDA

**+20%**  
yoy

**30%**  
Margin

**~17k**  
Pharmacies

**#1**  
Market  
position

**~2x**  
vs. next  
competitor



# The Ambulatory & Pharmacy Information Systems Sector

## CONTEXT

- Contains the segments of GPs/ Specialists, Dentists & Pharmacists
- CGM has grown into a leading eHealth provider within the Ambulatory & Pharmacy market with **revenue growth** of ~€470M (15% p.a.) in past 10 years
- **Growth** and international footprint strongly driven **by acquisitions** of competitors and complementary companies
- **Successful integrations** led to **broad product portfolio** and presence of CGM in 55 countries
- Strong starting point **for further sustainable growth above market**

## KEY TOPICS COVERED TODAY

1



Division Overview

2



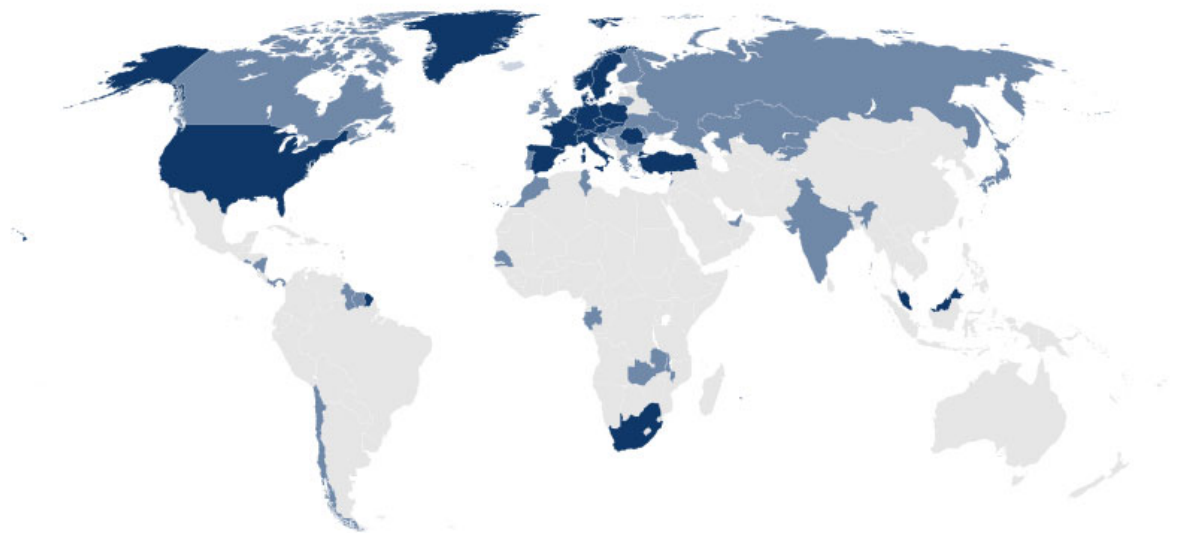
Trends & Perspectives

3



Strategic outlook

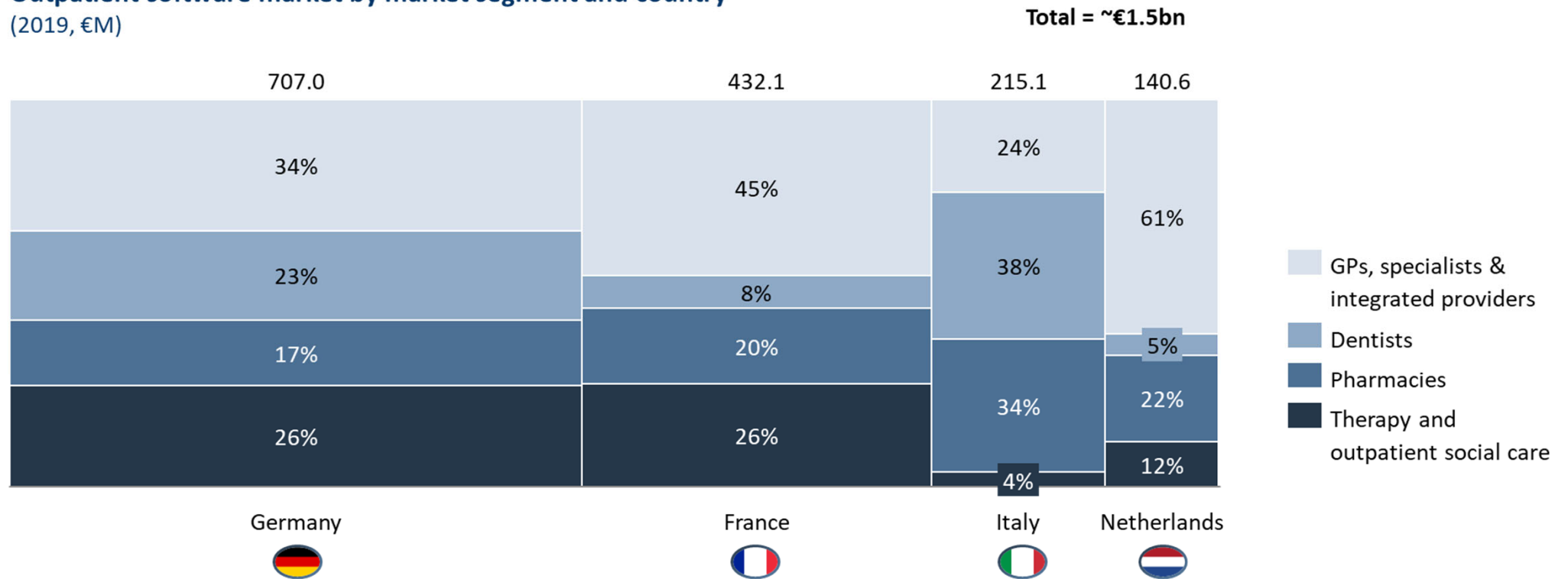
## We Have a Global Presence, with Main Focus on Europe



2018	AIS	PCS	Total
Revenue	€462m	€113m	€575m
EBITDA	€159m	€33m	€192m
Margin	34%	30%	33%

## Deep Dive in 4 Focus Countries: Market Size Across all Market Segments at ~€1.5bn Today

Outpatient software market by market segment and country  
(2019, €M)



Source: e4g project team market model

# CGM Holds Strong Positions in the Four Focus Countries



Germany



France



Italy



Netherlands

Market size (all segments)<sup>1</sup>

€707m

€432m

€215m

€141m

GP, specialist & integrated provider<sup>2</sup>



Dentist



Negligible market share

Small market share

Not present in this market

Pharmacy



Not present in this market



1. Market size 2019 includes all customer segments across four focus countries GER, FR, IT, NL;  
2. Integrated providers do not exist in Germany and Italy | Source: e4g project team analysis, market model

# Going forward eight major trends are shaping the outpatient eHealth market

## Core customers



**Consolidation** and **integration** of outpatient care providers



**Generation change** among physicians with shift towards younger and more female customers

## Healthcare delivery



**Patients** increasingly evolving towards **consumers** taking control of their health



Shift towards **value-based healthcare** requiring higher outcomes at efficient cost structures



**Mobilization** of care delivery through increasing adoption of remote and homecare solutions



**Governments** further driving **initiatives** towards digitalization of healthcare



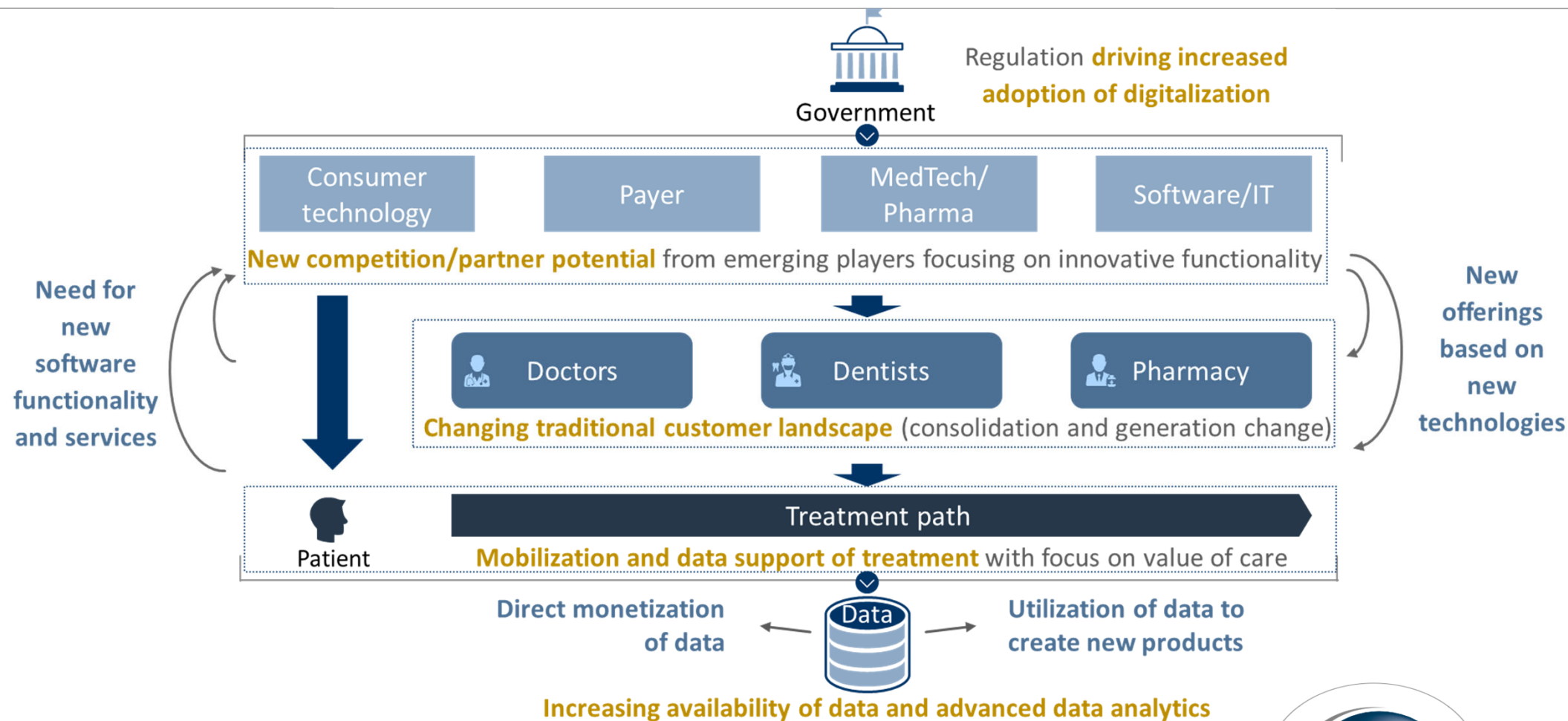
Rising **use of large data sets** to manage clinical and administrative processes



Utilization of **new technologies** and increasing **cross-country competitive pressure**



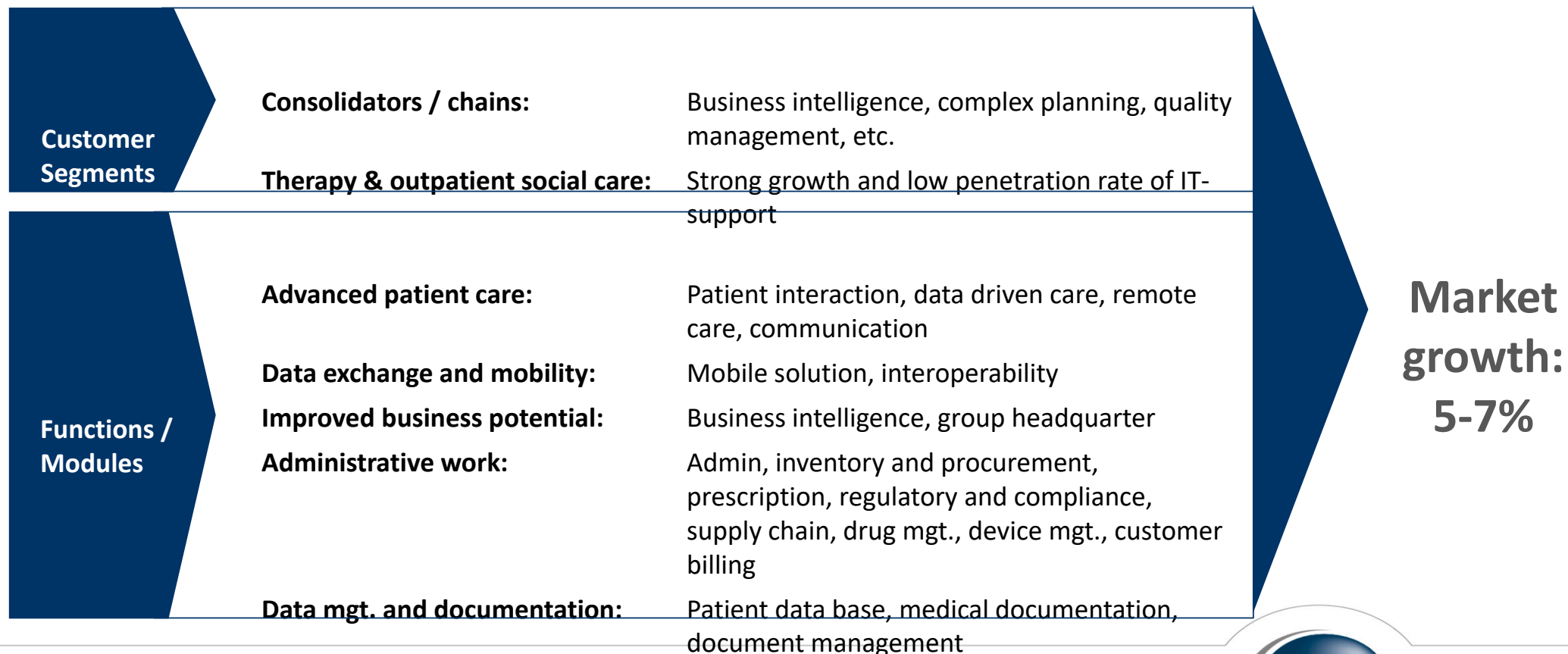
## These Trends are Impacting CGM's Traditional Customer Markets but also Provide Opportunities in Emerging New Market Segments



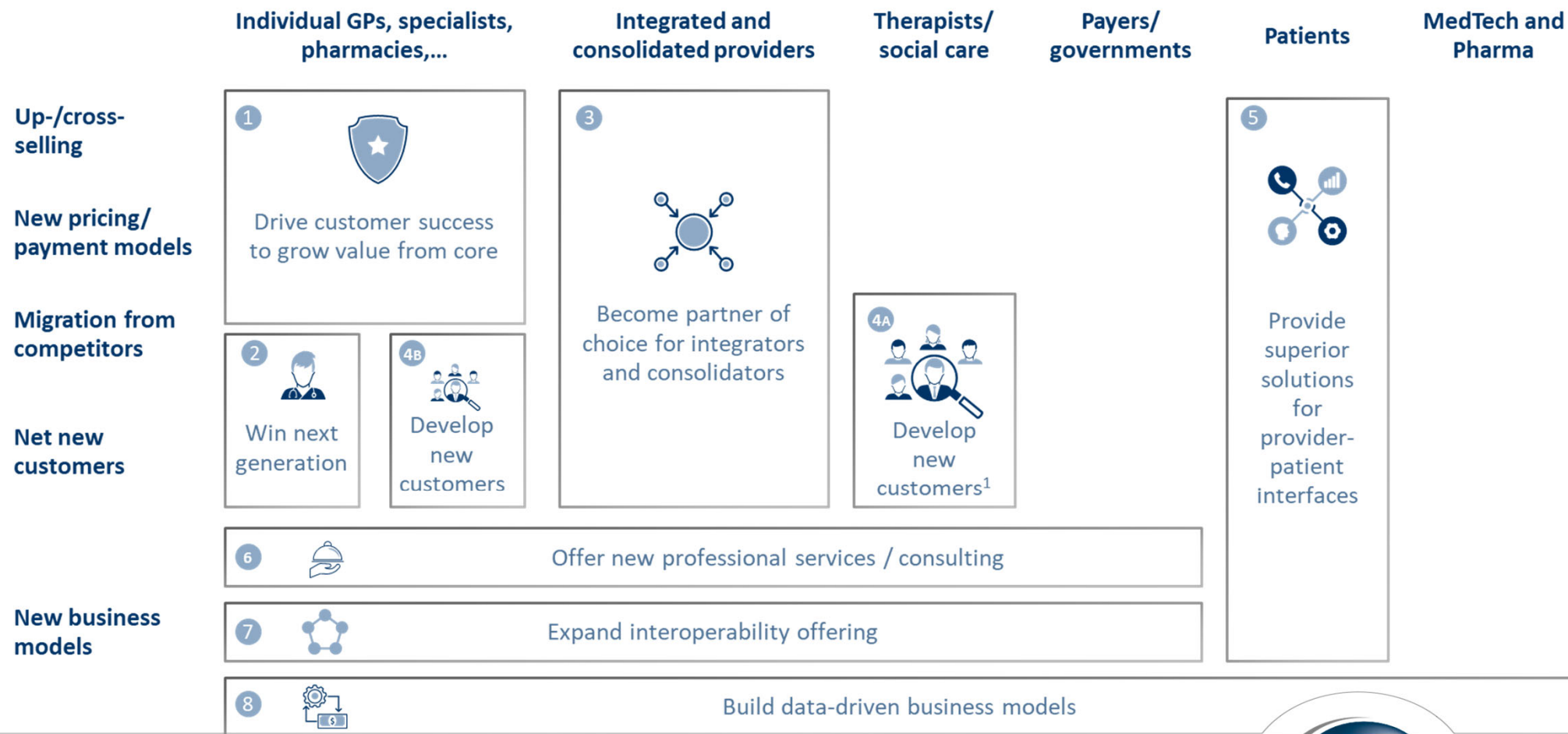
## The Trends Provide a Market Tailwind Allowing a Potential Growth of ~5-7%



### Main growth drivers (selection)



# Eight Strategic Thrusts Defined to Enable Organic Growth





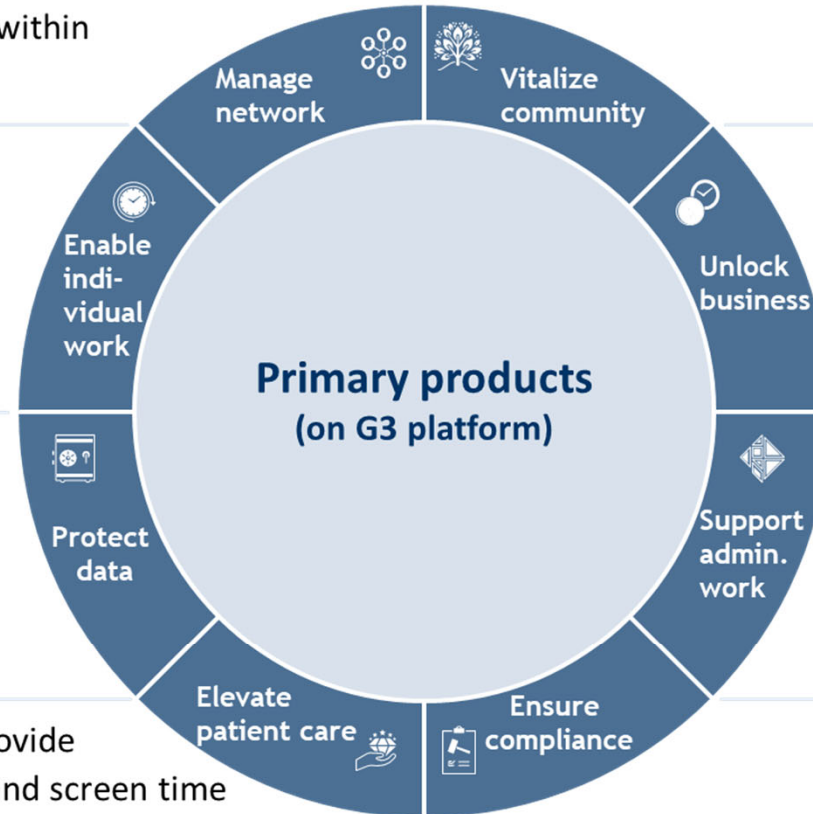
## Outlook on the Target Portfolio

**Cooperation** in joint enterprise / chain of practices or pharmacies, **workflows** to manage partners, **data sharing**, **HR management**, implementation of standards, **partnering** within same premise or across sites

**Part-time working models**, **work remotely** (e.g. site visits, home-office, etc.), customized interfaces, **rights managements**

**Securely store data**, provide maximum **protection** against **cyber attacks**, data theft, and virus attacks

Access to comprehensive **patient data**, provide best-in-class **treatment**, minimize admin and screen time and enable me to spend more time with patients, seamless and hustle-free **patient experience**, modern **communication tools**



**Transfer information**, connect with community of experts, exchange information seamlessly across **partner network**

Create innovative, time-saving **workflows**, **benchmarks**, targeted tips, **support**

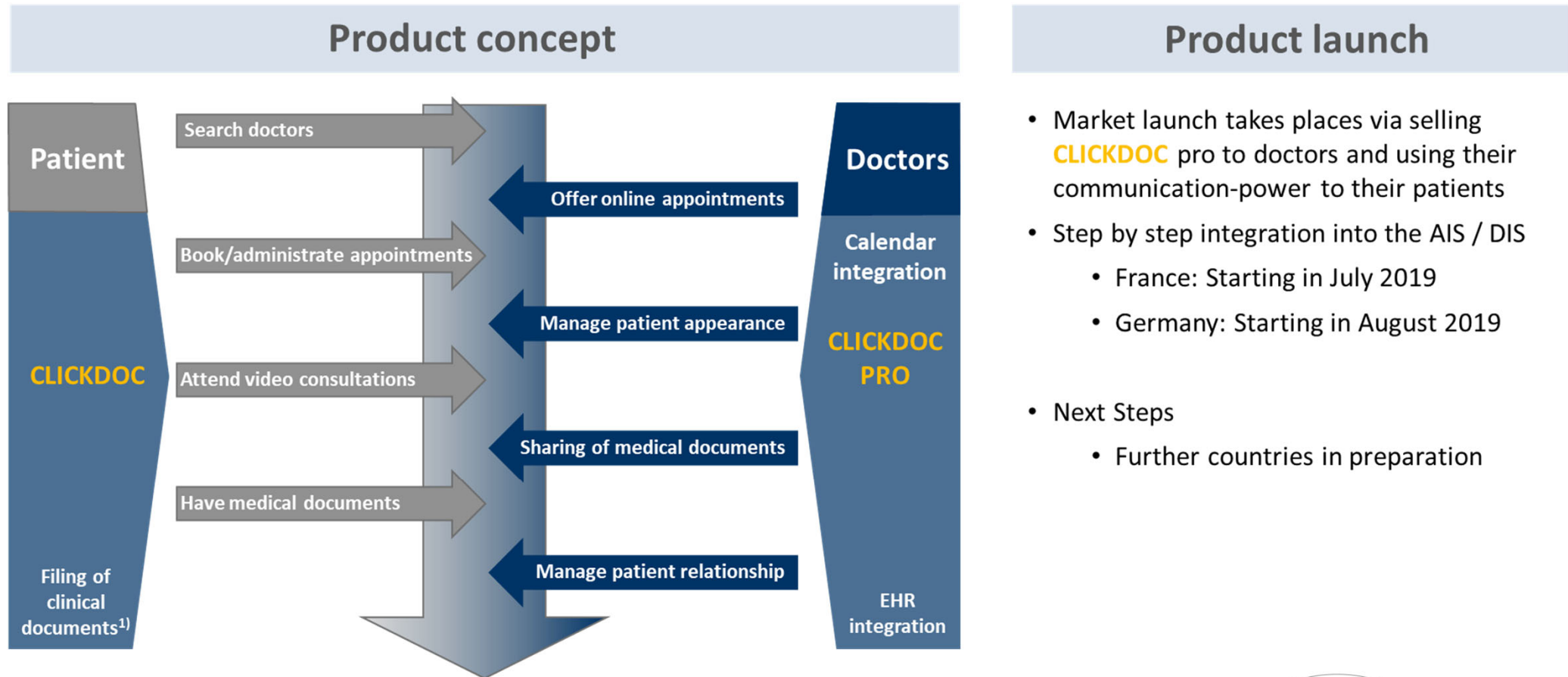
**Document** relevant information in a safe and efficient way, management systems to efficiently **schedule** appointments and **allocate resources**

Fulfill the required documentation, **ensure regulation**, prepare for **future regulatory changes**



## CLICKDOC: Attractive Tool for Doctors-Patient-Interaction – Ramp-up of Market Launch

CLICKDOC



1) Using CGM LIFE as a secure platform

- **Attractive customer base and strong market positions**
- Global presence with **focus on Europe**
- Market growth of 5-7% expected
- **Potential** to roll out and monetize further product features
- **EBITDA margins** on a high level
- **Major beneficiary of digitization in Healthcare**

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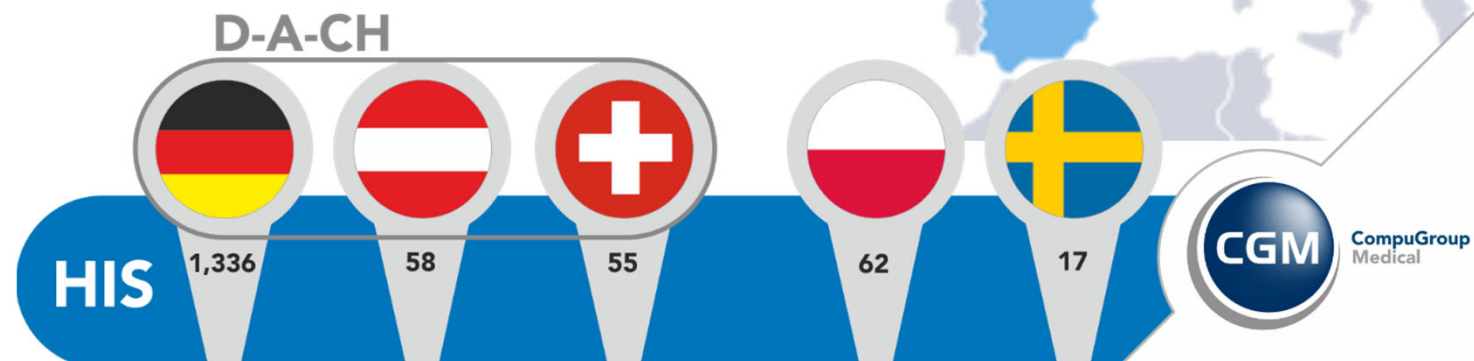
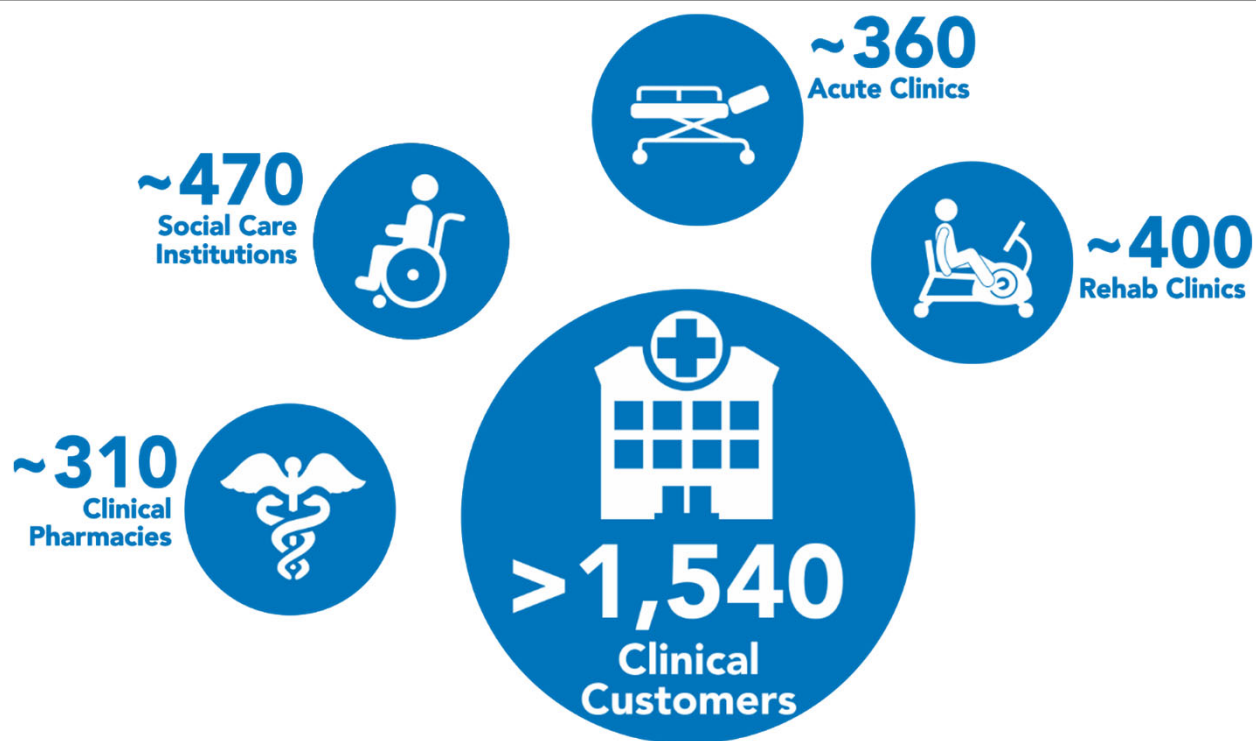
# Hospital Information Systems

Hannes Reichl, Board Member Clinical and Social Care

## HIS – Excellent Operating and Financial Performance



## More than 1,540 HIS Clients



## Operating in an Attractive Market: Hospitals D-A-CH

### EMR/EHR Market by Product – DACH

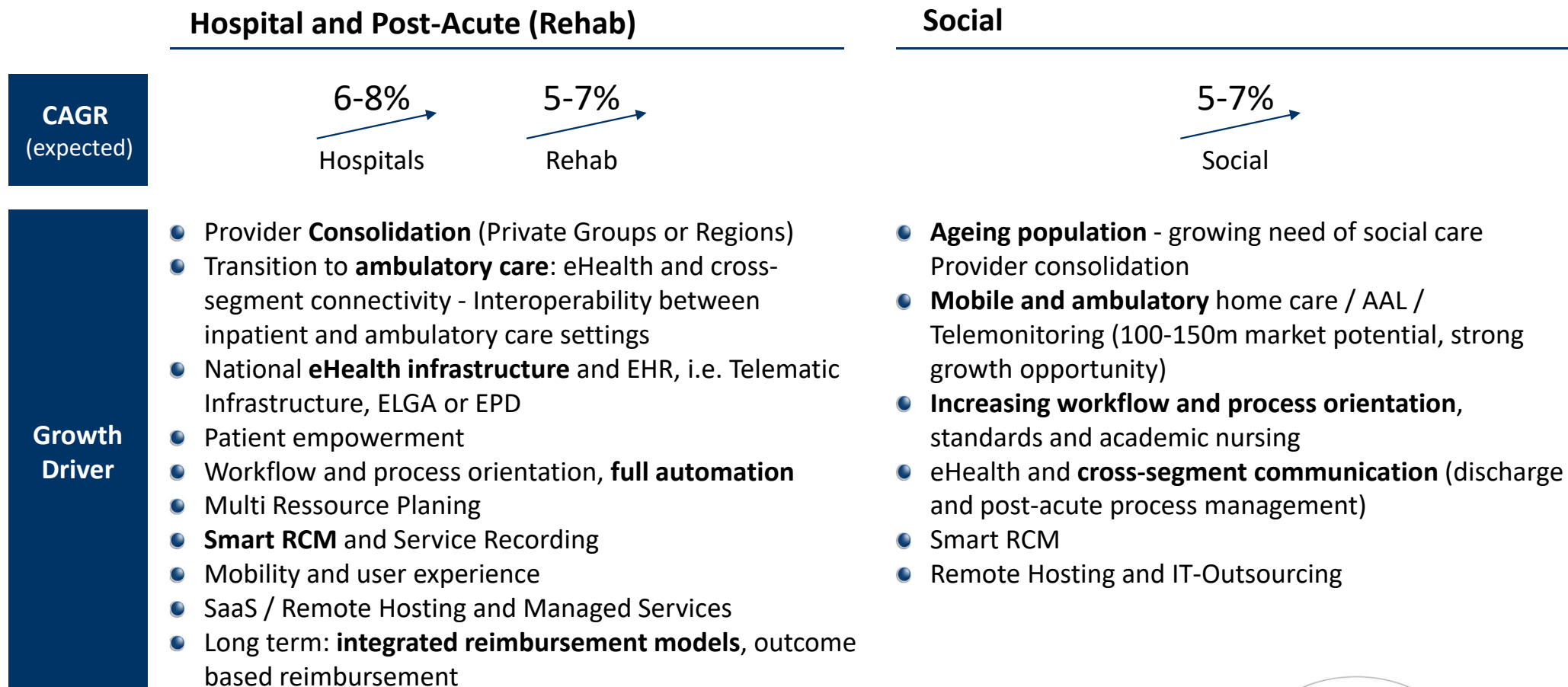
(Revenues in \$m)

Product Type	2018	CAGR (18-23)
Admin / Operational	310	+1%
<b>Clinical Systems*</b>	<b>186</b>	<b>+5%</b>
Interop / Data Exchange	131	+1%
Wellness / PHM Modules	28	+11%
<b>Financial / RCM*</b>	<b>66</b>	<b>+13%</b>
<b>TOTAL</b>	<b>720</b>	<b>+4%</b>

**\*CGM relevant  
market segments**

Source: Signify Research March 2019

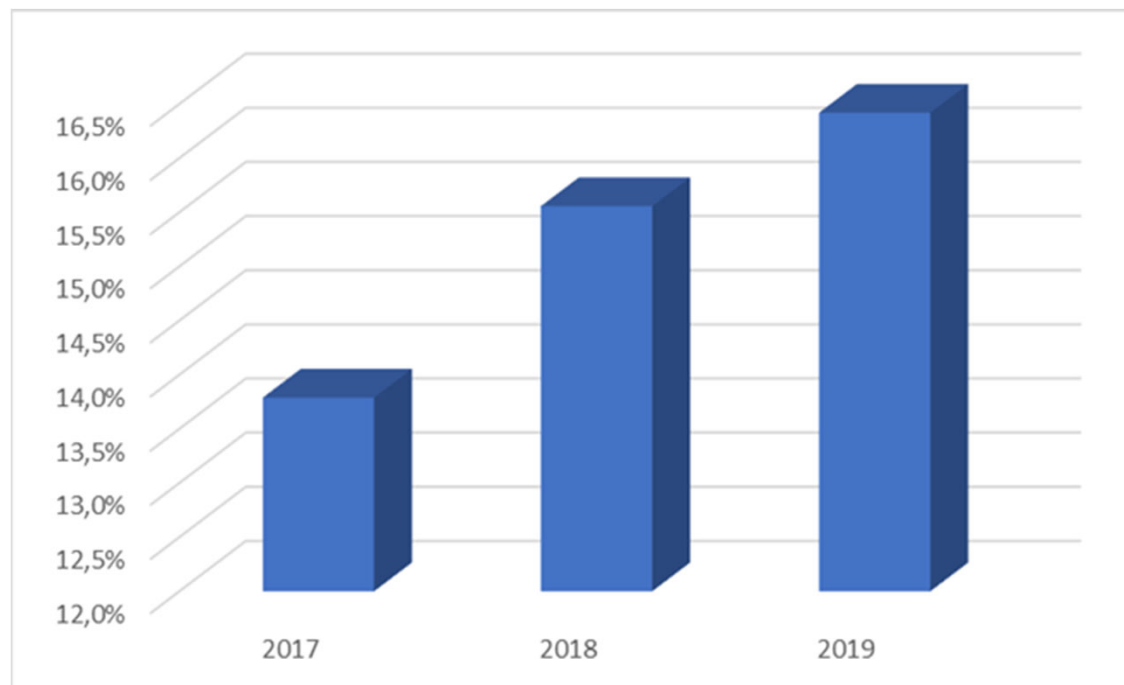
## Growth Drivers – CGM View





## Increasing Market Share in the DACH region

**CGM: Market share DACH region, % of beds**



## Customer Profile D-A-CH and Length of Relationship

Market	Type	Sales Cycle	Length of relationship	Contract Term	Non rec vs. rec. rev
Hospital Acute	Single facility	1-2yrs	~10-15	2-5 yrs non recurring*1 5yrs initial minimum maintenance then evergreen	49%:51%
Hospital Acute	Small chain (5)	2-3yrs	>15yrs		
Hospital Acute	Large chain	2-5yrs	>20yrs		
Hospital Reha	Singly facility	0,5-1yrs	5-10yrs	2-3 yrs non recurring*1 recurring = evergreen	46%:54%
Hospital Reha	Chain	1-2 yrs	10-15yrs		
Social	Mid-Sized Chain	1-2yrs	10-15yrs	1-2 yrs non recurring*1 recurring = evergreen	35%:65%
Social	Large Chain	2-3yrs	>15yrs		

\*1 Revenue recognition is based on IFRS POC Rules

## G3 Technology – CGM Health Alliance – Basic Ideas

### Market demands and trends

- Integrated care, ongoing transition into ambulatory care
- Healthcare data to be shared and mined
- Growing need for process and resource optimization
- Provider consolidation vertical and across the whole care continuum
- Patient empowerment/engagement and care-coordination
- Ongoing trend into remote hosting and to outsource IT operation to reduce cost
- Continuous delivery of innovation and migration of clients into new technology
- Usability and physician fatigue/burnout problem due to weak and complex UI

### Technical capabilities

- Interoperability and service orientation
- Need for unified medical data models
- Need for workflow support and multi-resource planning
- Need for an holistic and service oriented eHealth eco-system
- Need for Consumer eHealth capabilities, patient apps and process-support for e.g. chronic diseases
- Need for web- and native cloud based platform
- Micro-service oriented, highly interoperable system architecture
- Complete workflow support - perfect and modern UX

# HIS Product-Suites



Nonstop  
Healthcare.

Suites	Target Markets
<b>CGM CLINICAL</b> <small>Clinical Workflow System</small>	<b>Acute &amp; Rehab Clinics</b>  
<b>CGM SOCIAL</b> <small>Social Institution Workflow System</small>	<b>Social Institutions</b> 
<b>CGM HEALTH ALLIANCE</b> <small>Collaborative Workflow System</small>	<b>Health Regions</b> 

# CGM CLINICAL vs. other HIS Systems: Value Proposition



## New Cost-Effective Technology

### Runs in every Browser and keeps cost low (HTML 5)

- No investment, lower maintenance cost, device independent

### Private cloud-based infrastructure

- Low investment, lower operational cost
- High availability and scalability

### Open architecture, interoperability platform

- integration can be executed by partners
- CGM speaks FHIR internally
- shortest time to market possible

### Workflow Support and consistent task management

- system navigates – user consumes

### Modern intuitive UX design and usability

- prevents physician burnout problem
- intuitive learning

### Common clinical data model

- Consistent terminology and ontology over the whole platform (incl. partners)

### Full object transport support (USP comparable with SAP)

- Highly secure upgrades and consistent operation, low risk

## Competitive Landscape

### Client Server-Based Technology

#### Needs installation on local clients or terminal server

- Dedicated HW, installation effort, device dependent

#### Monolithic design

- Higher cost to bring it to the cloud (Citrix needed)
- Hard to maintain, difficult to scale

#### Proprietary solution

- Integration of third-party needs development effort
- Standards not supported throughout the full system
- Long lead time for new functionality

#### Inconsistent Navigation and Workflow Management

- User needs to navigate

#### Last generation UI

- Low efficiency, burden for end user
- high training cost

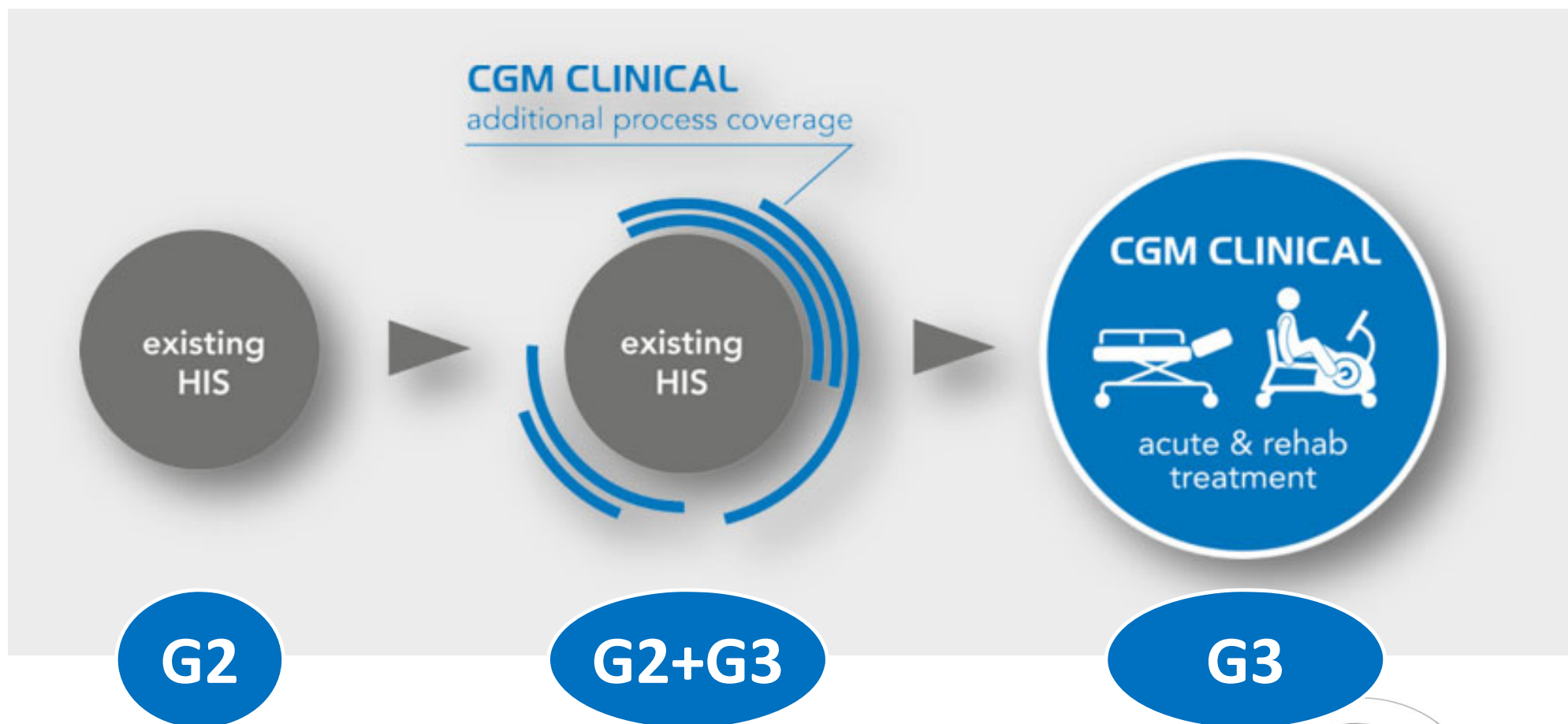
#### Multiple EHRs with duplicated records/data objects

- Inconsistent data and information
- high effort to retrieve data for BI and research









#### no automation of upgrade processes, semi-manual operation



## Convergence Program - Evolutionary Migration of Existing Customers



# CGM CLINICAL G3: Installations & projects (Sept 2019)

 <b>DEUTSCHLAND</b>	 <b>Protestant Clinic Bethanien Greifswald</b>	 <b>Sankt Rochus-Hospital Telgte</b>	 <b>Eye Clinic Bellevue Kiel</b>	 <b>Sankt Rochus Kliniken Bad Schönborn</b>	 <b>SSK Bad Rothenfelde (3 Clinics)</b>	 <b>Medical Park Clinics (13 Clinics)</b>				 <b>Klinik Niederrhein</b>
	Care Management	Pilot Medication (1 Clinic)	Pilot Care Management (2 Wards)	Surgery	Medication	Medication, Care Management, Surgery	Medication, Care Management, Surgery	Medication, Care Management, Surgery	Medication, Care Management, Surgery	Medication
		Rollout Medication, Multidimensional Resource Planning	Rollout Care Management							
 <b>SCHWEIZ</b>	 <b>Private Clinic Siloah</b>	 <b>Felix Platter Spital</b>								
	Medication, Children Medication	Medication, Timeline	Medication, Timeline, Prescription	Timeline	Medication, Timeline	Medication, Timeline				
	Ordering, Timeline	Resource Controlling	Ward Management, Dashboards							
 <b>ÖSTERREICH</b>	 <b>Vorarlberger Federal State Clinics (5 Clinics)</b>	 <b>Lower Austria Federal State &amp; University Clinics (19 Clinics)</b>	 <b>Klinik St. Josef Braunau</b>							
	Medication, Care Management, Electronic Patient Record	Human Resources	Mobile							
	Surgery	Medication, Timeline, Surgery, Care Management, Resource Planning, Mobile, Basic RIS, Patient Portal, Findings Management, Ambulance & Ward Processes, Service Documentation, Patient Administration								

■ CGM CLINICAL G3 Live installations  
■ CGM CLINICAL G3 Actually ongoing projects  
■ CGM CLINICAL G3 Won tender - project in preparation



CGM has been awarded for....

## Project NÖKIS (NÖ Landeskliniken-Holding)

to conclude a

## FRAME-CONTRACT for

**> 10 years**  
**> €100m**

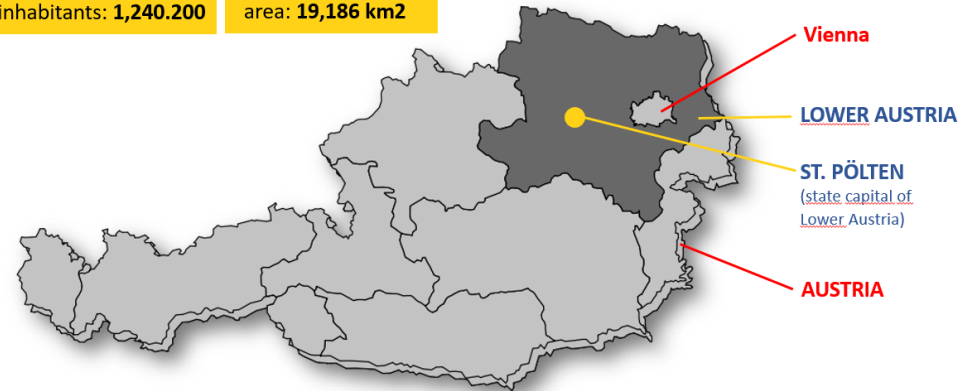
Landeskliniken-Holding   
IHRE GESUNDHEIT. UNSER ZIEL.



The federal state "Lower Austria" is the largest country in Austria and the second largest in terms of population.

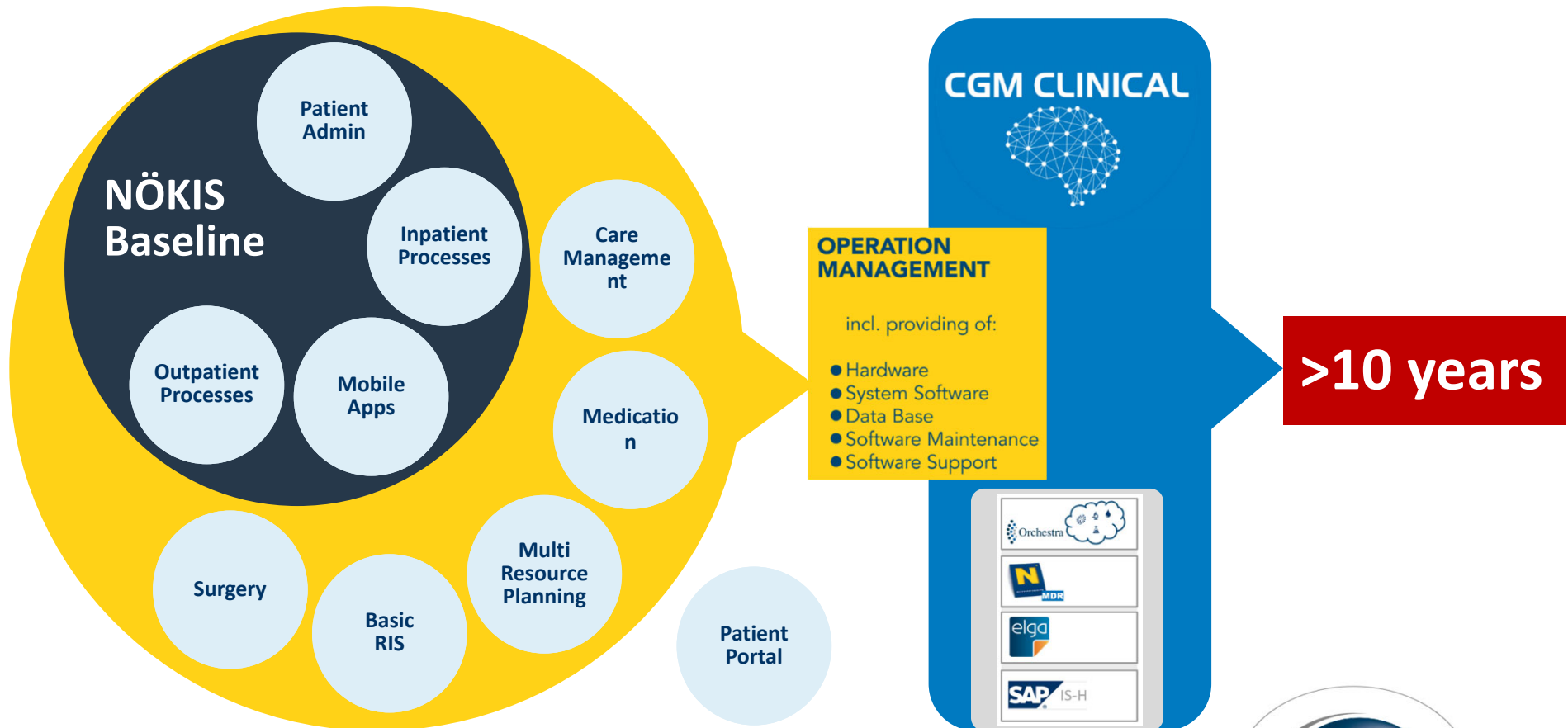
inhabitants: 1,240.200

area: 19,186 km<sup>2</sup>





## Functional areas of the software & existing SW-providers



## Value Creation Plan

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- **Add ~1% market share p.a. in all market segments in D-A-CH**
- **Migrate existing clients and reduce maintenance cost of G2 products**
- **Enter new market segments in Social care i.e. home care**
- **Scale CGM Health Alliance over all CGM markets**
- **Benefit from the European HIS market consolidation**
- **Enter new geographic markets ie. U.S., France, Spain, UK, ..**

Investor & Analyst Conference 2019

Q&A

Synchronizing Healthcare

