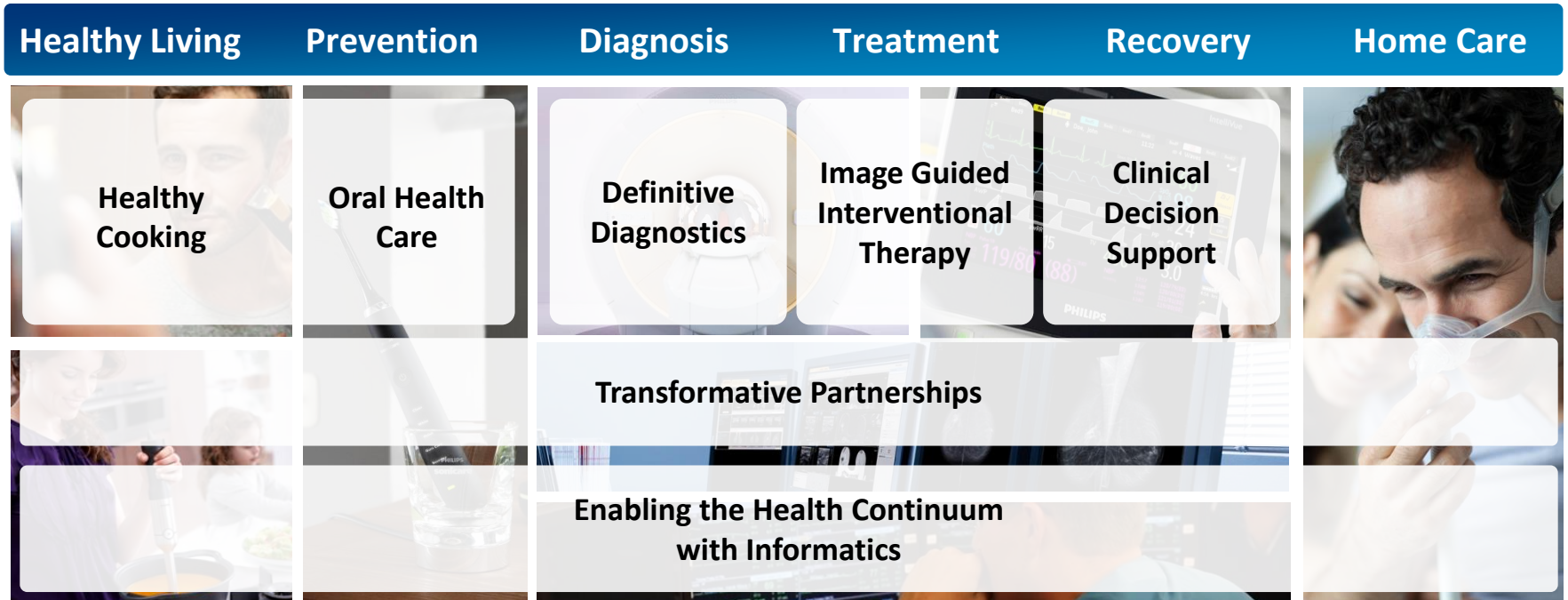


# Winning in HealthTech - business examples

September 23, 2014

# Winning in HealthTech – business examples



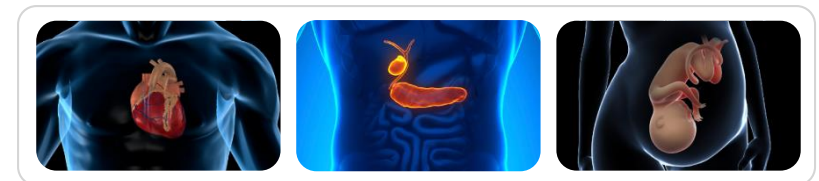
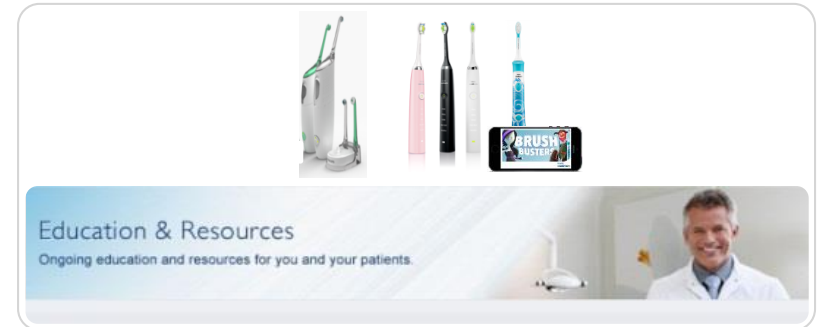
# Oral Health Care: key contributor to your health

**Pieter Nota**

CEO Philips Consumer Lifestyle

# Oral Health Care is a key contributor to your health

- Consumers show a **growing awareness and increasing interest** in Oral Health Care
- Philips delivers **superior solutions** for better Oral Health Care, **beyond brushing only**
- Health of the mouth, the “gateway” to the human body, has impact on people’s **overall health**
  - Severe gum disease can lead to increased risk of stroke and heart attack<sup>1</sup>
  - Gum disease can make diabetes difficult to control<sup>2</sup>
  - With gum disease some pregnant women may be more likely to deliver a pre-term baby<sup>3</sup>



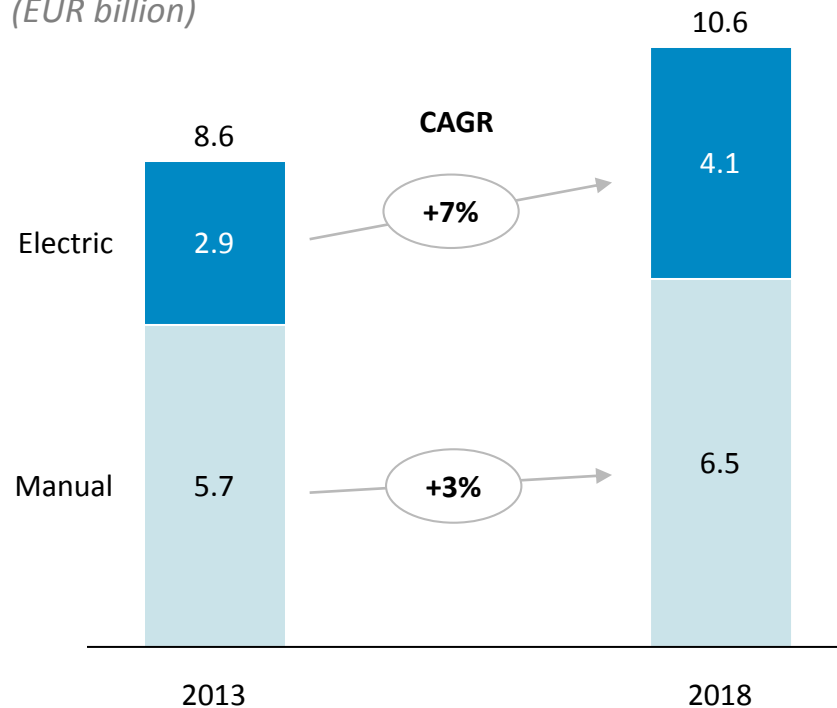
<sup>1</sup> Source: Scannapieco FA et al. Ann Periodontol 2003;8:38-53; <sup>2</sup> Source: Kiran M, et al. J Clin Periodontol 2005;32:266-272

<sup>3</sup> Source: Offenbacher S et al. J Periodontol 1996;67(Suppl 10): 1103-1113

# The Electric Oral Health Care market offers significant potential and Philips is gaining market share

## Electric toothbrush segment grows faster than manual

Market value electric vs. manual toothbrush<sup>1</sup>  
(EUR billion)



*Less than 20% of the world uses electric toothbrushes*

## Key achievements

- **Global market share<sup>2</sup> increase** of +2.2 points over past 12 months; total share in the high 20's; #1 positions in North America, Japan and China
- **Brand preference<sup>3</sup> increase** of 2 points
- 69% of our products **score 4.3 or higher** in consumer ratings<sup>4</sup> (out of 5)
- **Strong global leadership<sup>5</sup>** in “the **most-often-recommended**” by dental professionals

# We are delivering superior innovations that help improve oral health for consumers, driving our share



## **DiamondClean:**

- Healthier, whiter teeth

## **FlexCare Platinum:**

- Cleans exceptionally between teeth
- Pressure sensor technology



## **Sonicare for Kids:**

- 75% more effective plaque removal than a manual tooth brush
- Brush Busters App helps kids learn healthy oral habits from early age



## **AirFloss Pro:**

- Clinically proven to be as effective as string floss for gum health
- Removes 99.9% of plaque from treated areas

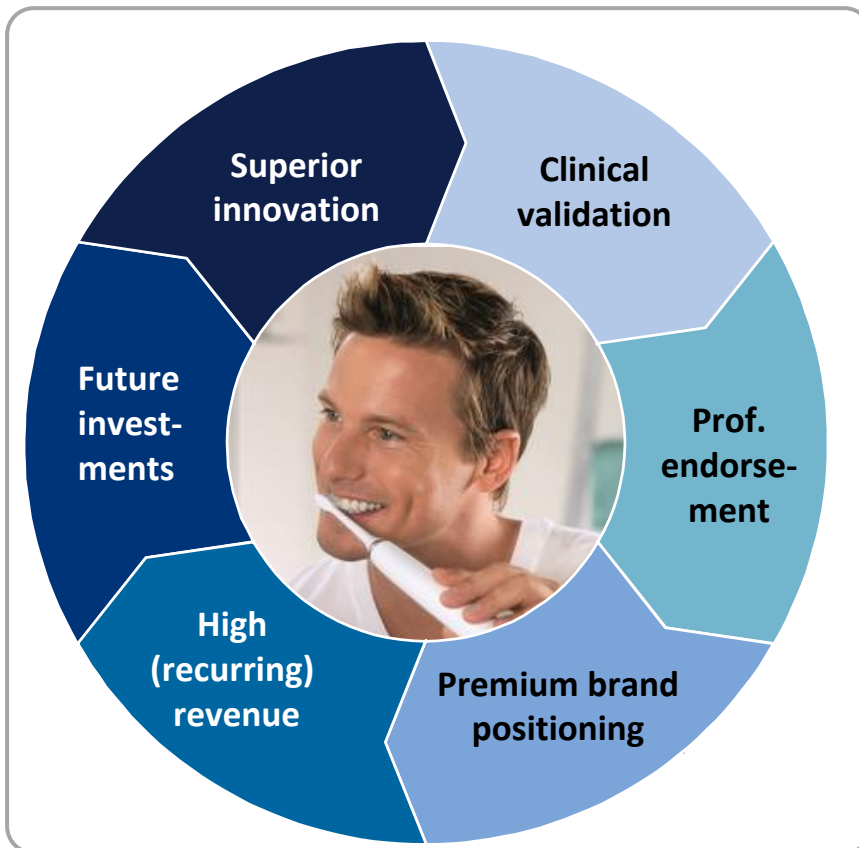


## **Whitening (QuickPro):**

- Breakthrough two-layer technology seals in hydrogen peroxide
- Whitens four shades – in just five minutes

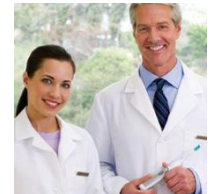
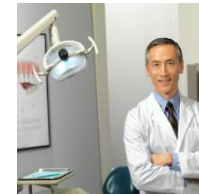
# We continue to create value, leveraging our repeatable model for success

## Repeatable model for success



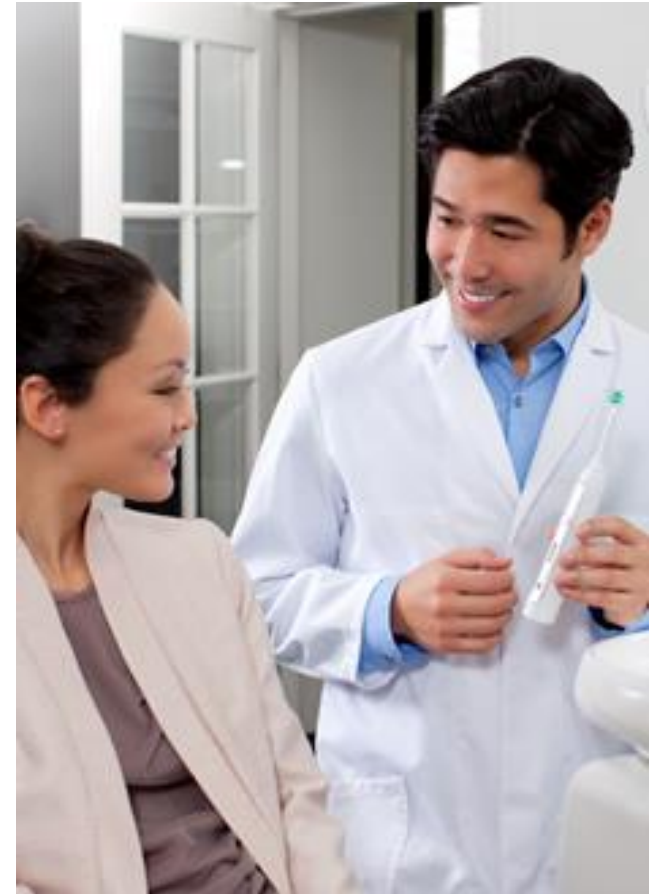
## Philips is uniquely positioned to develop the Oral Health Care market

- **Expertise** from clinicians and researchers **across the broader Philips organization** to support and further develop superior innovation
- **Leveraging clinical expertise** to further demonstrate the **link between oral health and overall health**. Performing clinical studies in cooperation with leading dental universities
- Future potential for data generation and integration into the **cloud based Digital Health Platform** to provide **total health and well-being solutions**



# Key takeaways

- Consumers show **growing awareness** of the importance of their oral health care
- Oral Health Care is a **gateway to overall health**
- The Electric Oral Health Care market offers **significant potential** and we are gaining share
- We deliver **superior innovations** that improve oral health and drive our global share increase
- We continue to capture the **value creation opportunity** by leveraging our **repeatable model for success**





# Healthy cooking: foundational to your health

**Pieter Nota**

CEO Philips Consumer Lifestyle

# Healthy Cooking is foundational to overall health

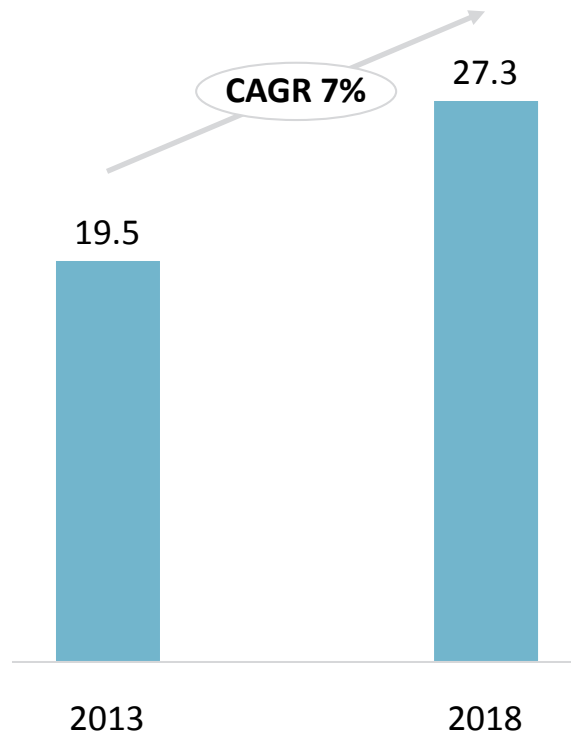
- **Healthy eating** is a global mega trend and consumers increasingly value fresh, **home made food**
- Understanding **local consumer insights** is key to success
- Philips **improves people's lives** by developing healthier, tastier and easier ways to cook, **around the world**



# Philips is market leader in multiple segments of the growing small kitchen appliances market

## The market for small kitchen appliances offers substantial potential

Market size small kitchen appliances<sup>1</sup> (EUR billion)

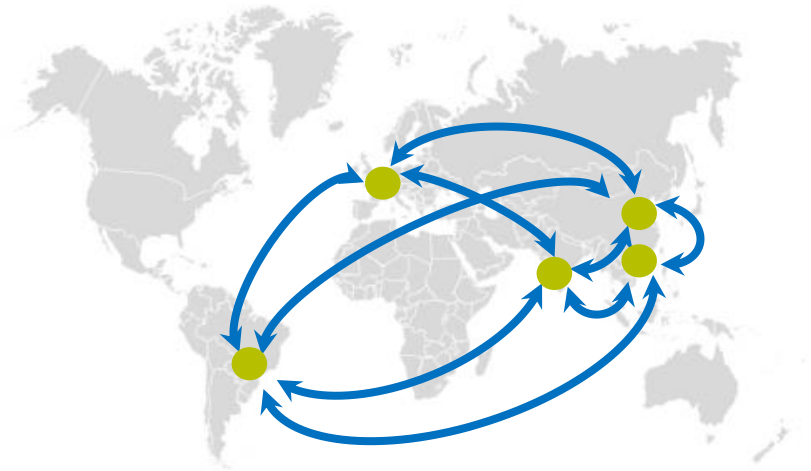


## Key achievements

- Present in over **100 countries** around the world with a global market share in the low teens
- Philips has achieved **global market leadership** in several segments<sup>2</sup>
  - #1 brand in Home Cooking & Food Preparation Devices
  - #1 brand in Low Fat Fryers
  - #1 brand in Juice Extractors
  - #1 brand in Food Processors
- **Brand preference<sup>3</sup> increase** of more than 3 points
- ~50% of our products **score 4.3 or higher** in consumer ratings<sup>4</sup> (out of 5)

# Philips improves people's lives around the globe by developing healthier, tastier and easier ways to cook

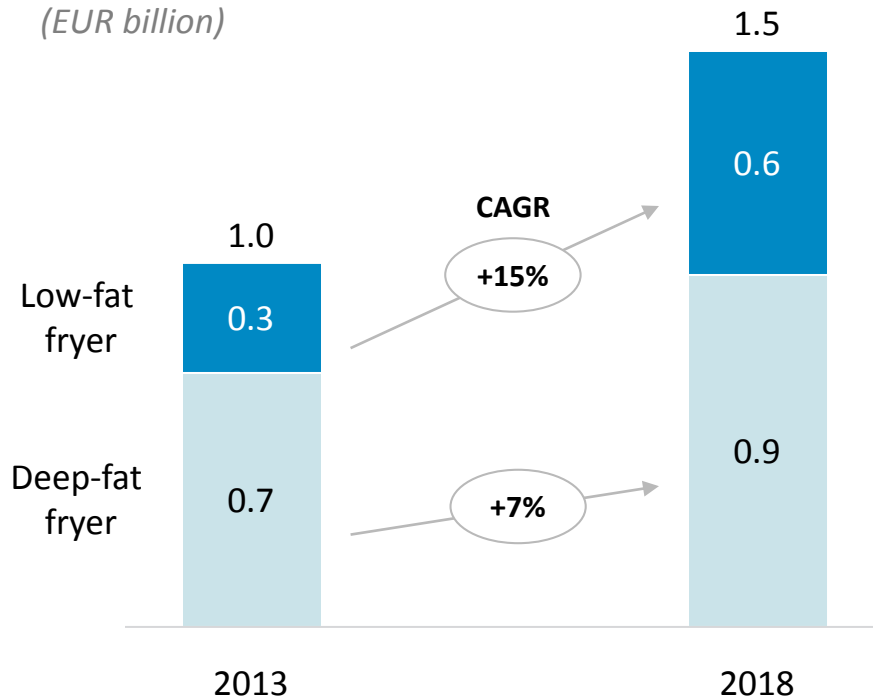
- Global network of product creation hubs enable **locally relevant innovation**
- Converting local insights into **locally meaningful propositions**
  - Airfryer adapted as “NonFryer” in Japan
  - Soymilk Maker in China adapted as Soup Maker in Europe
  - Noodle Maker in China adapted as Udon Maker in Japan; Pasta Maker in the USA



# Our innovations drive market growth and we bring them to global scale: Airfryer example

## Airfryer drives significant market growth

Market value deep-fat fryer vs. low-fat fryer<sup>1</sup>  
(EUR billion)



The Singapore Heart Foundation supports the Airfryer. It is a way to cook with up to 80% less fat<sup>3</sup>



## Scaling towards a strong geographical presence

- **Philips is the # 1 brand in Low Fat Frying<sup>2</sup>**
  - 3.7 million Airfryers sold
  - Available in 100 countries
  - Hundreds of recipes
  - Collaborations with 10+ food companies
- **Japan** (#3 market worldwide) has achieved 4% market share in small kitchen appliances in < 2 years with locally relevant NonFryer
- **North America** (#1 market worldwide): Airfryer just launched and off to a strong start; MasterChef partnership heats up interest

# We continue to create value through global scale and local relevance with our repeatable model for success

## Repeatable model for success



## We will continue to create value

- **Expanding current portfolio** with relevant added benefits, extending the attractiveness of our propositions
- **Geographical expansion** addressing white spots
- **Healthy Cooking extends** to personal nutrition management enabled by digital connectivity and potential **integration of data into the cloud based Digital Health Platform**

# Key takeaways

- Healthy Cooking is a **key contributor to overall health**
- The market for small kitchen appliances is growing and **Philips is leading** in multiple segments
- Philips **improves people's** lives by developing healthier and easier ways to cook
- Philips has a proven **repeatable model for success**, leveraging global scale and local relevance
- We see a **sustainable level of growth** driven by innovation and geographic expansion



# We will leverage consumer capabilities to increase growth and profit in our home care businesses



Healthy Living

Prevention

Diagnosis

Treatment

Recovery

Home Care

## Proposition development

- Deep consumer insights and local relevance
- Time-to-market and cost competitiveness
- Recurring revenue models

## Consumer engagement

- Consumer decision journeys
- Communication
- Social media

## Go-to-Market

- Distributor/business partners
- Consolidated customers
- Improved (online) marketing





# Supporting affordable healthcare through Definitive Diagnostics

**Brent Shafer**  
Philips North America

# Definitive Diagnostics: the most efficient and effective way to an accurate diagnosis

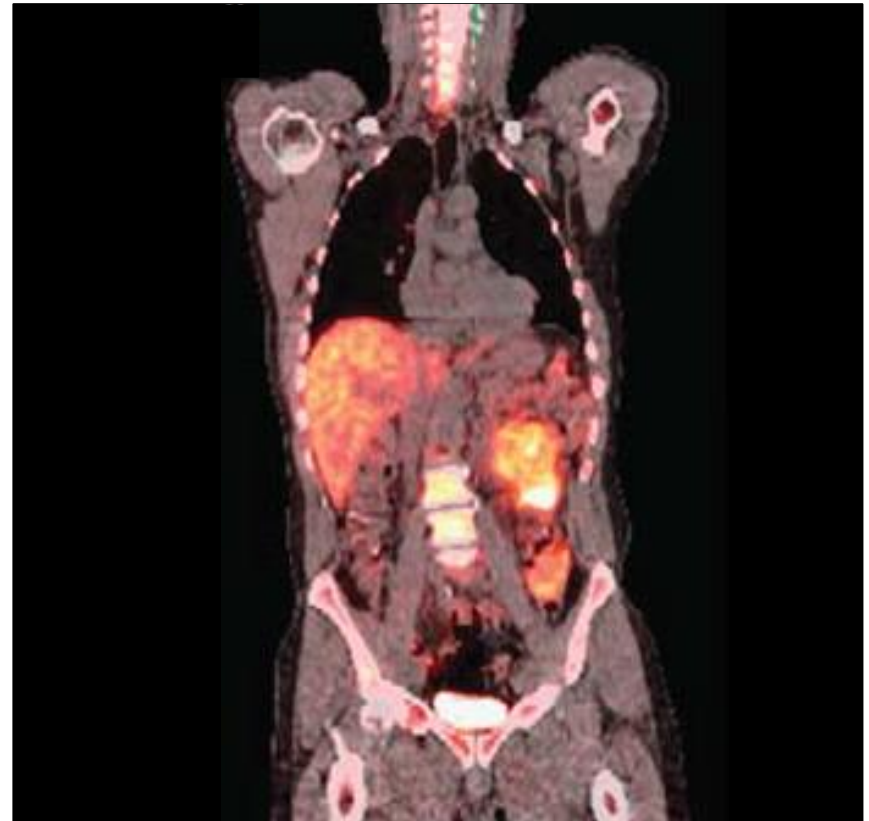
- Rapidly get to the **right diagnosis** to move into treatment phase
- Accurately monitor treatment progress and adjust to **ensure effectiveness**
- Requires **advanced imaging** to acquire data, combined with all the relevant information about the patient
- Both customers and patients looking for a **definitive and accurate diagnosis**



**The shortest path to the best care at the lowest cost**

# Significant improvements in diagnostics to yield major benefits for patients and Healthcare Systems

- **Market** for Diagnostic Imaging and Informatics estimated at **EUR 24+ billion<sup>1</sup>**, very substantial additional opportunity for pathology and point of care diagnostics
- **Significant strides to made**, despite enormous progress in last decade
  - 40,000 critically ill U.S. hospital patients die with unknown medical condition
  - Over 100k misdiagnosis claims in NA
  - Misdiagnosis of Alzheimer's can cost up to USD 14k per patient, per year
- Improvements in diagnostics and informatics will have **huge impact on healthcare quality and cost**



# Expand beyond single system deals and build complete integrated solutions from unique portfolio of offerings

## Digital imaging



### Ingenia Digital MRI

Unique imaging and workflow benefits



### IQon Spectral CT

Allows tissue characterization

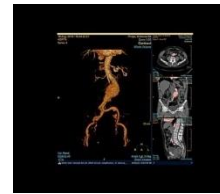


### Vereos Digital PET-CT

Breakthrough in image quality and quantification

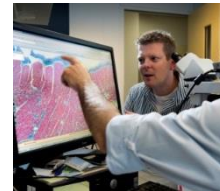


## Advanced informatics



### IntelliSpace Portal

Visualize integrated information for decision support



### Digital Pathology

Digitization of pathology information for diagnosis

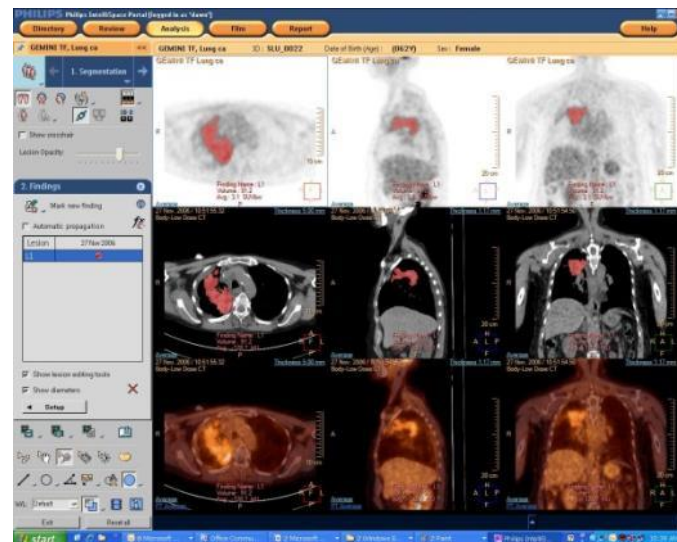


Co-creation partnerships to design integrated clinical solutions

**Creating a stronger competitive position**

# Diagnosing and tracking cancer

- **Cancer** is becoming a **chronic disease**, with many patients treated for years in the advanced stage; escalating costs
- **Philips Multi-Modality Tumor Tracking** is used by many, including MD Anderson Cancer Center for more confident, precise decision making
- Cleveland Clinic, Johns Hopkins, Mayo Clinic, Duke and more – **improve diagnosis** of prostate cancer using **UroNav** which combines imaging techniques for biopsy
- Of the **top 50 cancer hospitals** in the U.S. named by US News in 2014, **100% choose Philips**: e.g. Memorial Sloan Kettering, Dana Farber



**Top 50 cancer hospitals in the United States named by US News in 2014**

# Driving definitive diagnosis through partnerships

- **University of Washington**
  - Serving a large and diverse population: 1/4 of the land mass of the US (including Alaska)
  - Innovating their clinical practice to drive definitive diagnosis and effective patient management
- Philips and the University of Washington are **combining advanced imaging equipment, processing and analytics** to:
  - Improve clinical outcomes
  - Drive operational improvement and efficiency
  - Reduce costs per patient



# Growing our business, building on leadership of innovative technologies, integration and partners

## Innovative Technologies

- Leading edge portfolio of digital diagnostic systems
- Multi modality and Multivendor Image handling solutions
- Global offering, building on strong heritage



## Integration

- Interface visualization, reporting & collaboration in one platform
- Clinical Decision Support
- Modules for specific workflows



## Partnerships

- New Business Models
- Smart solutions co-created in clinical environment





# Key takeaways

- **Market** for Diagnostic Imaging and Informatics estimated at **EUR 24+ billion<sup>1</sup>**, substantial further opportunity for pathology and point of care diagnostics
- Philips combines a **unique portfolio** to create complete and integrated solutions for definitive diagnosis
- Improvements in diagnostics will have huge **impact on healthcare quality and cost**
- Creates stronger competitive position and expands our business so we can **grow faster and be more profitable**





# Advancing treatment with Image Guided Therapy

**Gene Saragnese**  
Imaging Systems

# Image guided therapies are growing rapidly

- **Rapid growth of minimally invasive procedures**
  - Approx. 4 million<sup>1</sup> coronary stent procedures per year globally
  - Minimally invasive repairs of heart defects<sup>2</sup> expected to quadruple from 2013 to 2020
- Growth in new procedures enabled by **real-time imaging, fused images, and advanced guidance**
- These procedures provide **key benefits for healthcare systems and patients**
  - Shorter hospital stay
  - Reduced patient trauma
  - Shorter recovery time



# We deliver integrated solutions that provide real time therapy guidance and feedback

## Leadership, technology and Clinical Integration

- Leadership positions in iXR<sup>1</sup> and Ultrasound
- Real time image processing
- Device miniaturization
- Deep clinical expertise
- Expanding range of clinical applications for minimally invasive interventions



## Innovating with Industry-leading partners

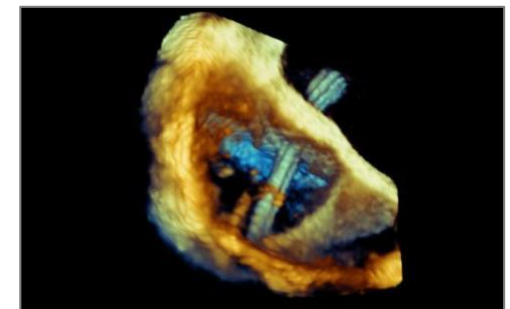
- 100% of the top 50 U.S. Heart Surgery and Cardiology hospitals<sup>2</sup> in 2014 have chosen Philips
- Plus:
  - University Hospital Eppendorf
  - University Hospital Beaujon
  - University Hospital Zurich
  - Antonius Hospital Nieuwegein

Top 50 cancer hospitals  
in the United States  
named by  
US News in 2014

## Enabling Real Time Adaptive Therapy

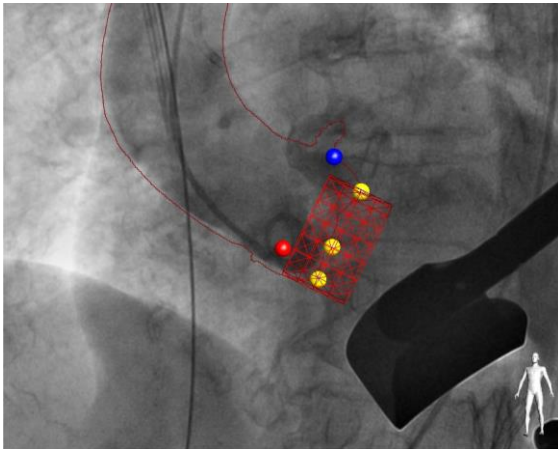
### EchoNavigator

- Fusing live X-ray and live echo for intuitive guidance to treat structural heart disease
- Greater insight and confidence in finding and treating the problem



# We have introduced a wide range of unique therapy guidance solutions

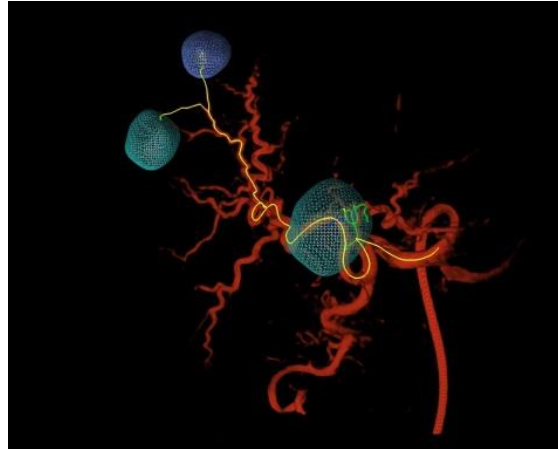
## Cardiology



### HeartNavigator

- Guides minimally invasive treatment of heart defects
- Simplifies planning, selection of the appropriate device and choice of optimal imaging parameters

## Oncology



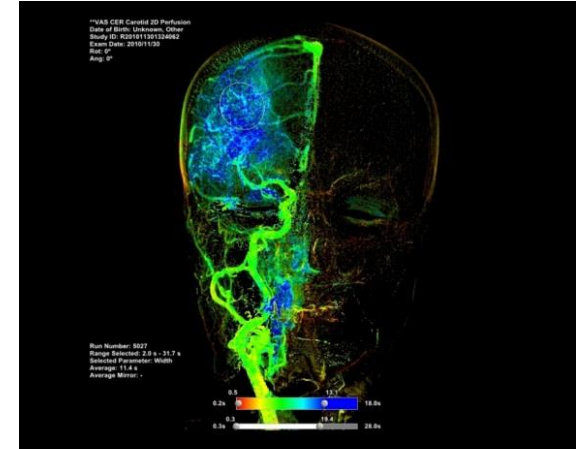
### OncoSuite

- World's first complete interventional solution for tumor embolization

### MR Linac

- MR imaging allows for real time Radiation therapy optimization

## Neurology



### NeuroSuite

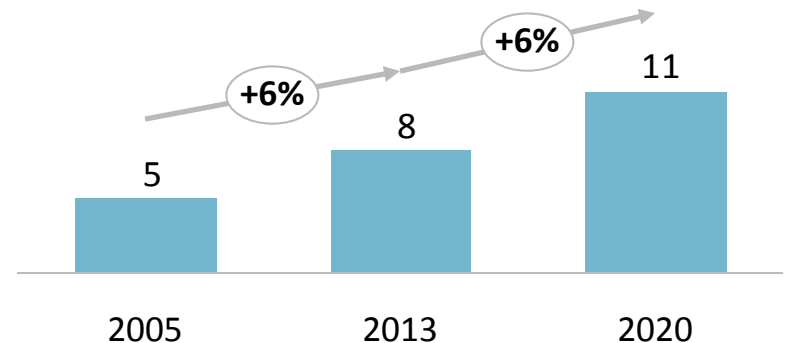
- Image guided neurological interventions growing at around 9%<sup>1</sup>
- Supports catheter guidance through narrow vessels
- Allows more effective device placement

# Image guided therapies drive profitable growth for our customers and Philips

- Many new minimally invasive procedures on the horizon:
  - Mitral valve replacement
  - Selective internal radiation therapy
  - Targeted chemotherapy of liver & prostate
  - Stroke treatment
- Enlarging eligible patient population
- Expanding our customers' service offerings
- Expanding our business with software, applications and consumables to gain share
- Philips market opportunity<sup>1</sup>: EUR ~4 billion with high single digit growth and above average margins

## Growing minimally invasive interventional Cardiovascular procedures

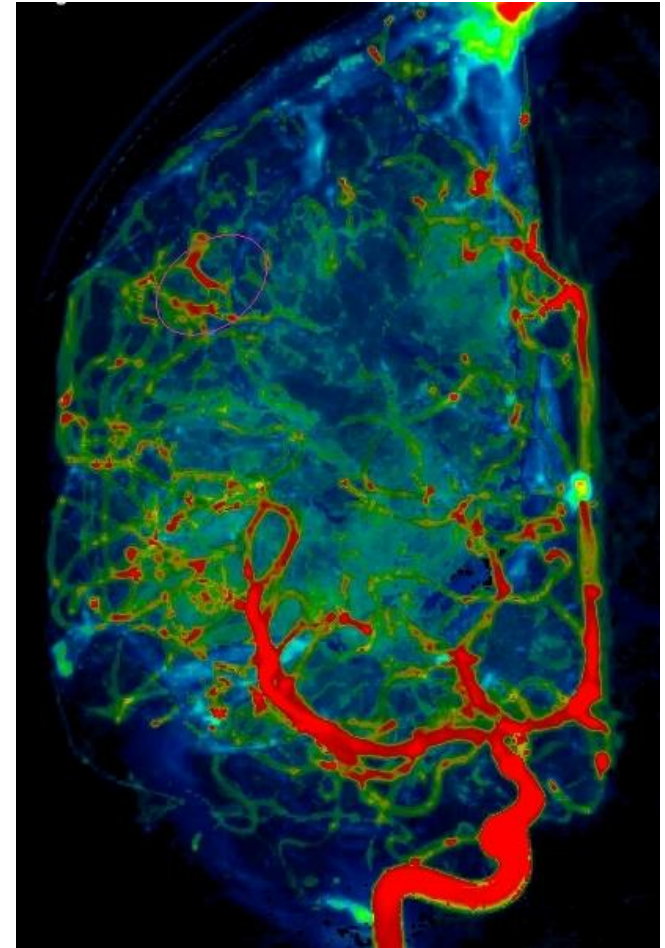
*Minimally invasive interventional cardiovascular procedures (million)*



- Cardiovascular procedures continue to grow ~6% CAGR<sup>1</sup>
- Interventional Oncology procedures expected to grow double digit<sup>1</sup>
- Neurological procedures growth 9%<sup>1</sup>

# Key takeaways

- **Image guidance** a **high growth** market with above average **profitability** driven by **benefits** to healthcare and patients
- Philips **sustained leadership** enabled by:
  - Core technology innovations to create integrated solutions
  - Intimate partnerships with industry leading Healthcare providers and technology partners
  - High barriers to entry
- Image guided therapies **expanding service offerings** for our customers and Philips







# Improving outcomes with Clinical Decision Support

**Michael Mancuso**

Patient Care and Monitoring Solutions

# Customers are seeking new ways to improve outcomes and reduce costs

- In the USA, **preventable medical errors cost EUR 14-22 billion**<sup>1</sup>, and an estimated 44,000 to 98,000 deaths are attributed to medical errors <sup>2</sup> annually
- In the United Kingdom, **1 of every 10 patients experiences complications** during a hospital stay (similar statistics in Spain, France, Denmark)<sup>3</sup>
- Clinicians handle **2000 data points per ICU patient per day** on average; this amount will increase 25% over five years<sup>4</sup>



<sup>1</sup> Kohn L, et al.: To Err Is Human: Building a Safer Health System. Washington, DC: National Academy Press; 1999

<sup>2</sup> Donchin Y, et al. : A look into the nature and causes of human errors in the intensive care unit. Critical care medicine 1995,23(2):294-300

<sup>3</sup> World Health Organization

<sup>4</sup> Manor-Shulman O, et al. Quantifying the volume of documented clinical information in critical illness. J Crit Care 2008; 23(2): 245-250.

# Differentiation through integration of clinical depth, informatics, and new business models

- Our **leadership positions in Patient Monitoring and Therapeutic Care** provide integrated critical care around the patient
- Our deep, **rich clinical knowledge** enables better outcomes
- We are changing the dynamics of healthcare delivery by partnering with **our customers**
- We are **transforming care** by delivering innovative clinical decision support and data analytics solutions

Worldwide 2013	Market position	Market share <sup>1</sup>	
Patient Monitoring	#1	40%	↑
Therapeutic Care	#1	22%	↑



# Clinical Decision Support: A rapidly growing market

## Intensive care unit clinical decision support and clinical analytics

**2014:** A significant presence in a high-cost, high-acuity care area



**EUR 0.8+ billion**

## Hospital-wide CDS, clinical and operational analytics

**By 2016:** Focus on improving whole hospital populations by improving care for patients

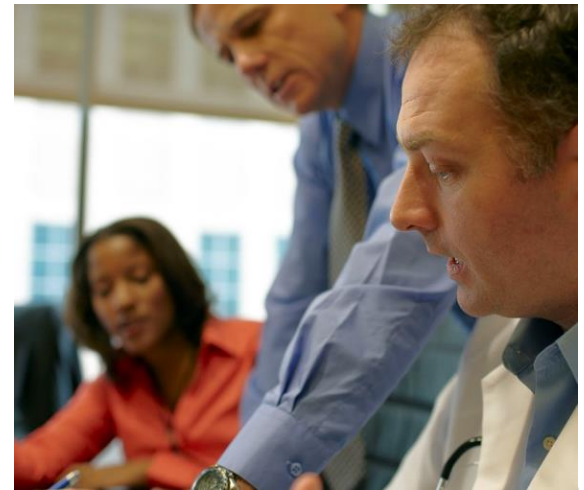


*Put on in the emergency department, worn throughout the hospital stay and at home*

**EUR 2+ billion**

## Decision support for governments, pharma, and Accountable Care Organizations

**By 2020:** Scale globally to cover population-level, information exchange, across the Health Continuum including the home



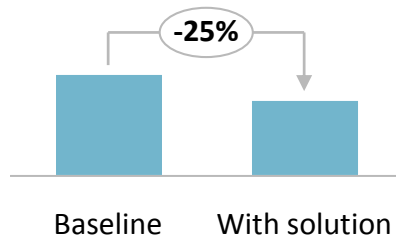
**EUR 4.6+ billion**

# Major clinical studies: Improved outcomes and savings

## Guardian “Vitals” study

- 18,000 patients, 10 hospitals, three continents
- Decreased length of stay by 25%
- Decreased time to complete and record vital signs by 33%
- Increased survival of deteriorating patients by 6.3%<sup>1</sup>

*Decreased length of stay*

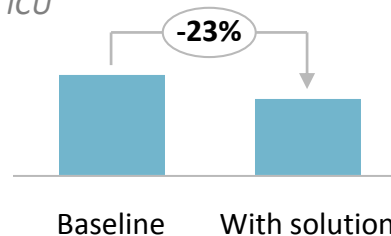


**Using analytics to improve decision making, support rapid response teams, and save lives**

## Catharina Hospital, Netherlands

- Automated early warning and decision support study
- Decreased unplanned readmissions to the ICU by 23%
- Decreased length of stay by 24%

*Decreased unplanned readmissions to the ICU*



**Improving care and shortening hospital stays using clinical decision support**

## Project AWARE with Mayo Clinic

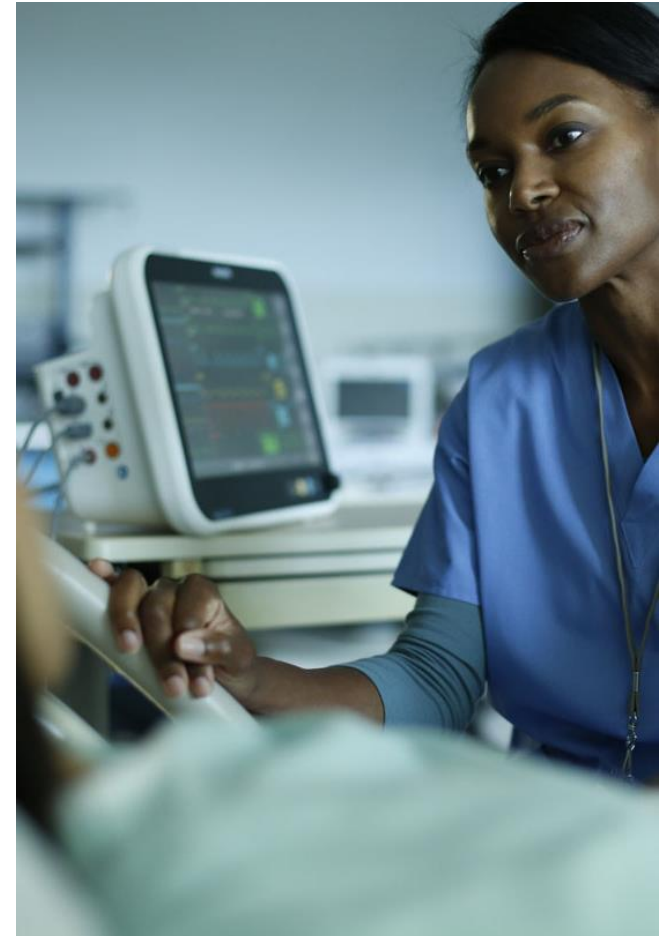
- Patient-centric, clinical decision support and analytics for intensive care across 12 hospitals
- Expected results
  - EUR 62 million savings over 3 years through efficient resource utilization, reduced length of stay
  - Better adherence to best practices and care protocols
  - Improved outcomes by decreasing ICU complications, mortality, and readmissions

**Improving clinical and economic outcomes in the intensive care unit with decision support and analytics**

<sup>1</sup> Bellomo R, Ackerman M, Bailey M, et al. A controlled trial of electronic automated advisory vital signs monitoring in general hospital wards. Crit Care Med. 2012;40(8):2349-2361.

# Key takeaways

- Our leadership positions in **Patient Monitoring and Therapeutic Care** provide great outcomes for doctors and patients and drive significant value creation
- Philips innovative **clinical decision support** solutions improve outcomes and safety, and lower costs for patients and hospitals
- Philips has demonstrated **improved outcomes and healthcare savings** in major clinical studies
- **Rapid innovation** in delivering **integrated critical care** around the patient enables us to expand into new markets, including the home







# Driving Transformative Partnerships across the Health Continuum

**Bob Reese**

Healthcare Transformation Services

# Driving transformative healthcare partnerships

- Increased **pressure to reduce healthcare cost**, especially for complex care and chronic diseases
- As individuals decide how to access healthcare, solutions required to be **patient centric**
- Customers seeking to secure long term access to **state-of-the-art equipment** and services at **predictable cost**
- Faster **adoption of innovation**



# Redefining the delivery of care in partnership with the Stockholm County and Karolinska University Hospital

- Philips will provide access to **state-of-the-art imaging systems equipment and services** for 14 years for 600-bed new hospital site, at predictable costs
- Strong focus on
  - Continuous education services
  - Professional services to optimize efficiency, care flow and outcome
- Innovation center bringing together **industry, academia and healthcare institutions**
- Improved opportunities for individual decision making in **improved access to high quality care**
- Rapid implementation, testing and learning of process, technology and people related improvements



# Driving value for customers, patients and Philips

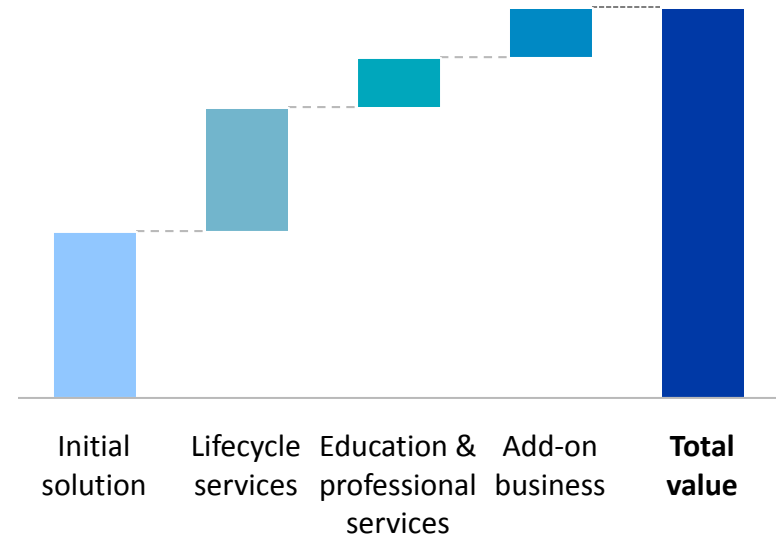
## Benefits for the customers and patients

- Hospital remains current with up-to-date technology at predictable cost
- Improved patient care and clinical outcome through better coordinated care
- Faster innovation and continuous education through local hubs

## Benefits for Philips

- Incremental value through a combination of equipment, solutions and services
- Predictable revenue stream
- Stronger position for Philips through a long term relationship with the customer

## Recurring revenue built up of several streams



Generates a **recurring revenue stream for multiple years** with solutions that include Education, professional services and add-on business  
**increase value up to 30%**

# Building strong partnerships in a high growth market

## Commitment to customers

### *Performance metrics*

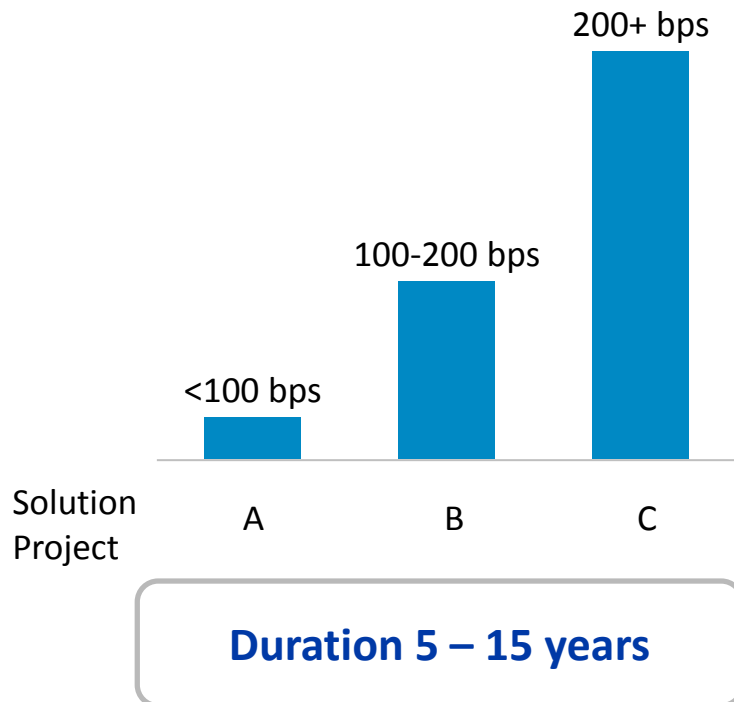
- Up time
- Resolution time
- Customer satisfaction rate
- Training and education program according plan
- Technology innovation roll-out according plan
- Cost savings and efficiencies according plan

Addenbrooke's Hospital, Cambridge  
Orbis Akerhus University Hospital  
La Fe Georgia Regents  
Mount Vernon Hospital, London  
Rijnland Isala klinieken Rijnstate  
New Karolinska Solna  
Kings College Hospital London  
Royal Victoria Hospital Belfast  
Sant Pau 12 hospitals Bahia state  
New Cross Hospital Wolverhampton  
Ashford and St Peters Kubin Clinic

**20+ projects under negotiation**  
**Increase value up to 30%**

# Our integrated solution approach is margin accretive to our overall business

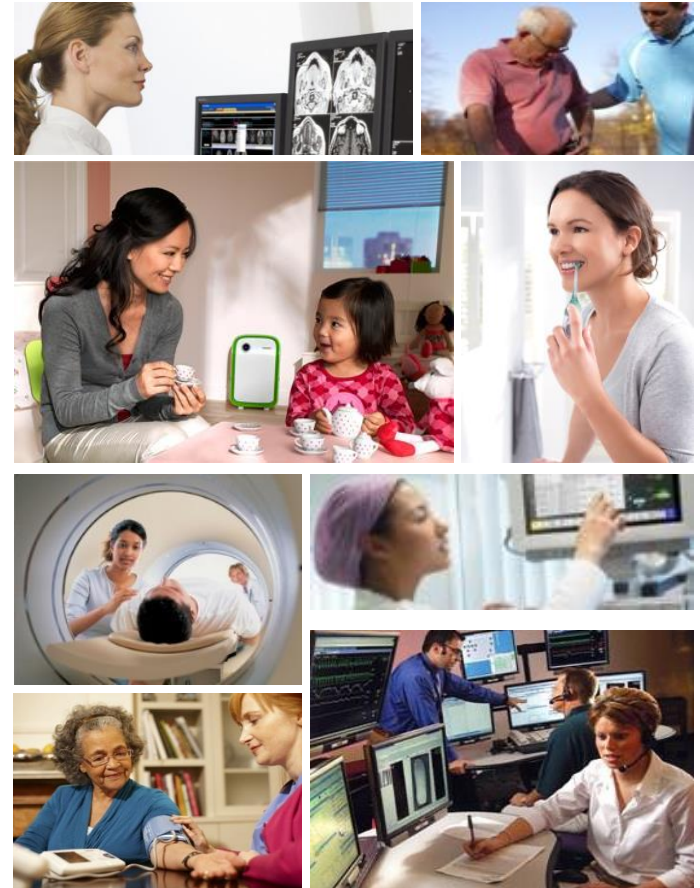
## Solutions margin increase vs stand-alone sales model



- **Higher market share of equipment**, better ability to consider total lifetime value
- Higher **percentage of services**
- **Additional consulting opportunities** to advise on enterprise cost reduction
- Visibility and access to **adjacent opportunities in products, IT integration, data analytics (SaaS)**
- Significant potential to **drive SG&A productivity**

# Key takeaways

- Accountable care and value based healthcare are **changing the global landscape**
- Health systems are looking to achieve **better clinical outcomes, patient access** and **financial performance** across the Health Continuum
- Opens up **tremendous growth opportunities**, new business models, and multi year partnerships; **value and growth accretive**
- **Philips is acting on the opportunity already** with transformative services, system integration, and supporting population health management







# Enabling the Health Continuum with Informatics

**Jeroen Tas**

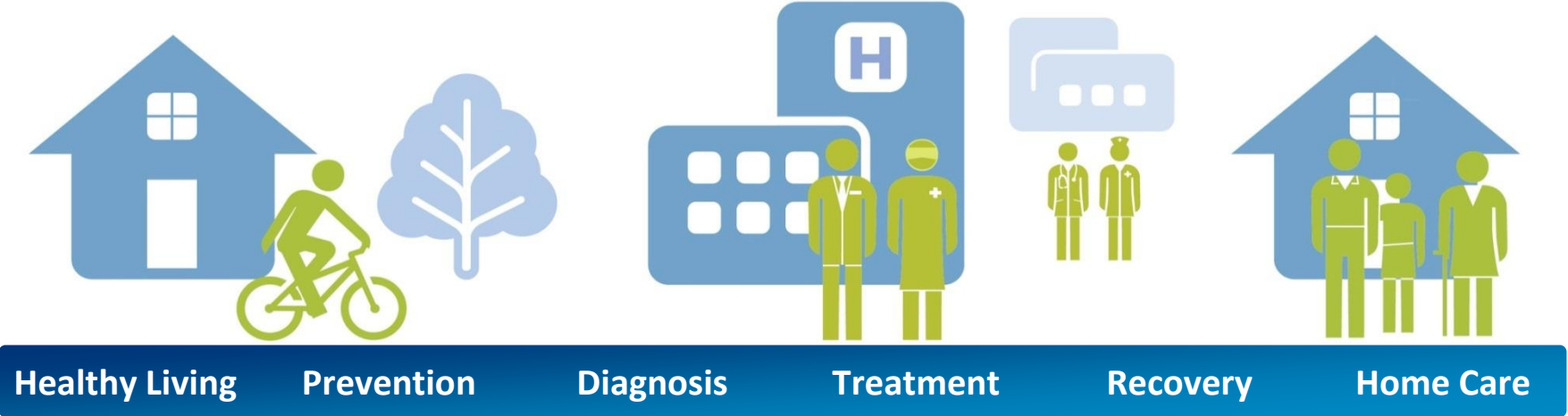
Healthcare Informatics, Solutions and Services

# The changing global healthcare landscape requires a fundamentally different informatics approach

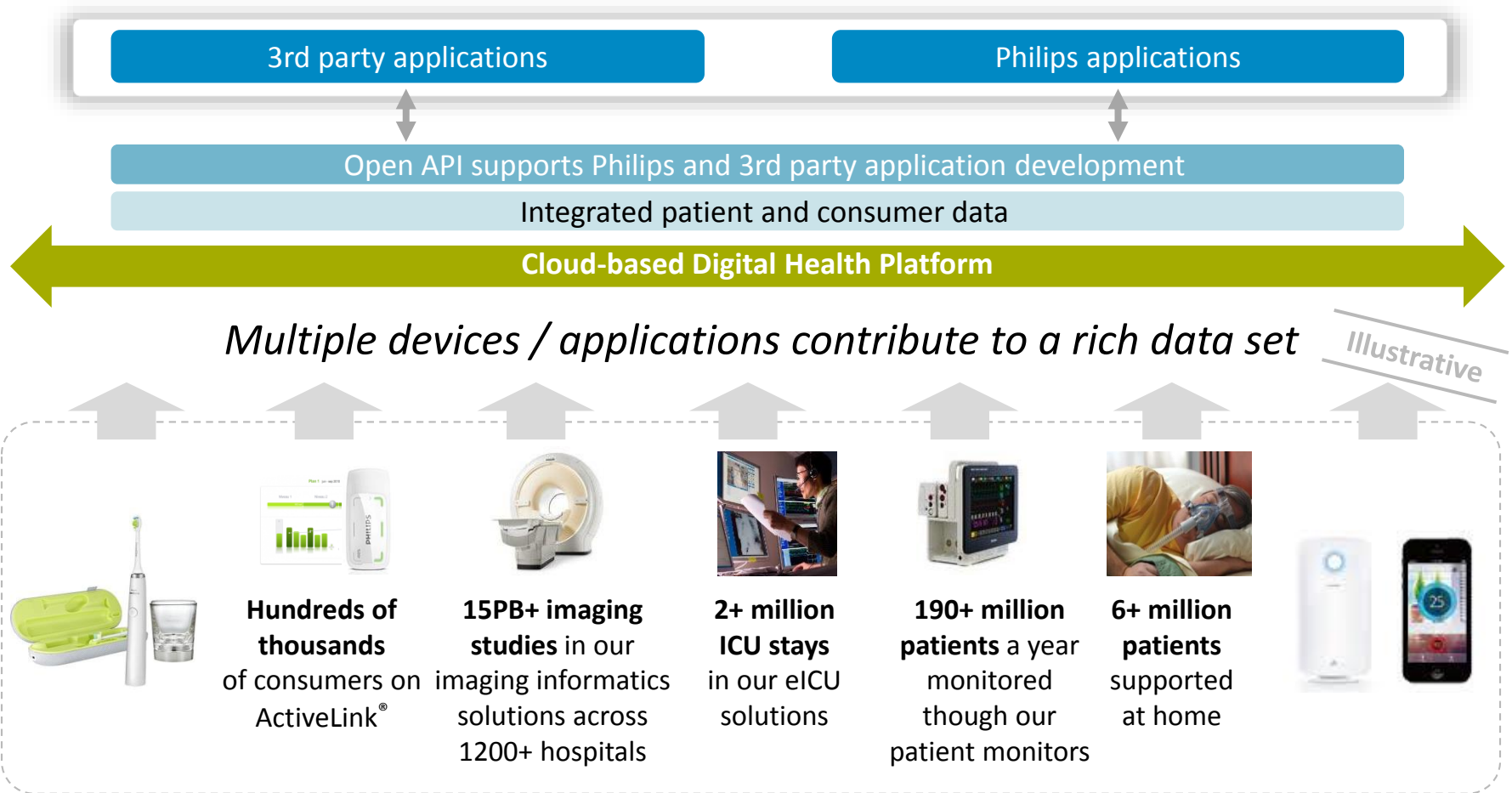


- Enabling **population health management, including Healthy Living and Prevention**
- **Patient centric solutions**, with built in **collaboration** models across the health continuum
- **Integrating data from disparate point solutions** across hospitals, physician practices, insurance, consumer homes
- Provide **actionable and context sensitive information** to clinicians, patients and care givers

# Philips Digital Health Platform designed to support the Health Continuum



# Our clinical depth and data pools across the Health Continuum put us in a unique position



# Application suite includes care coordination and remote patient monitoring for improved outcomes

## Applications on the Digital Health Platform...

### eCareCoordinator for clinicians

- Population health management and care coordination
- Remotely monitor patients' vital signs and health status
- Monitors hundreds of patients simultaneously and prioritizes need of care through data analytics

Radboudumc



### eCareCompanion for patients

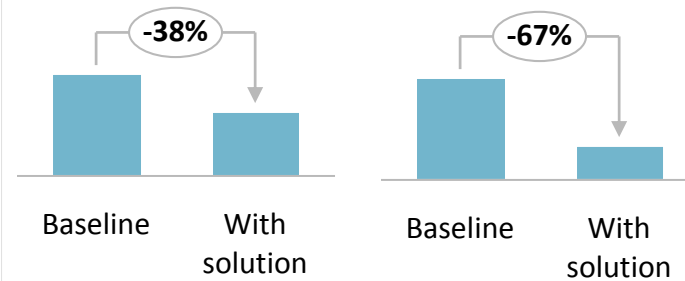
- Enables real-time communication with care team
- Health coach to patients with chronic conditions like heart disease, diabetes, COPD, cancer



...enabling programs to achieve relevant financial and clinical improvements<sup>1</sup>

Hospital visits

ED<sup>2</sup> visits



Less days in a hospital  
**10.2/patient/year**



Total cost reduction  
**\$27k/patient/year**

# Advanced clinical decision support based on holistic patient view

## Innovation programs with leading institutes..

- Innovation programs underway at MD Anderson (radiology) and University of Chicago

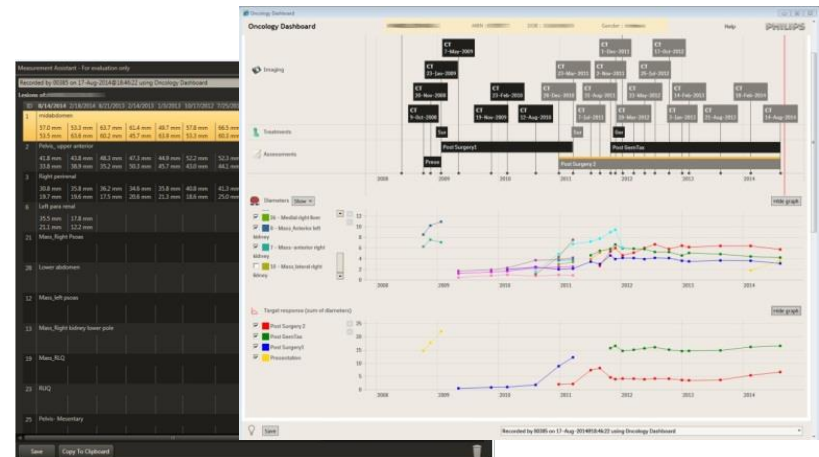
THE UNIVERSITY OF TEXAS  
**MD Anderson**  
**Cancer Center**  
Radiology, Oncology



THE UNIVERSITY OF  
**CHICAGO**

## ...to improve diagnosis / treatment of acute conditions (e.g. cancer)

- Information integrated from multiple patient studies
- Presents treatment progress on multiple tumors over time
- Context sensitive information gives the physician concise patient status at the point of diagnosis



# Key takeaways

- New solutions for **population health and support of the Health Continuum**, grounded in big data, social and mobile technologies
- The cloud based **Digital Health Platform** is the foundation for all connected health devices and informatics products
- It is the foundation for an **open ecosystem** that will **drive rapid innovation** to deal with the challenges along the Health Continuum around the globe
- **Our informatics platform-based business is already EUR 500+ million** and we see tremendous opportunities in a large (EUR 20+ billion) and rapidly growing market

