Bridging the consumer-clinic revenue gap to the $42 billion mHealth market

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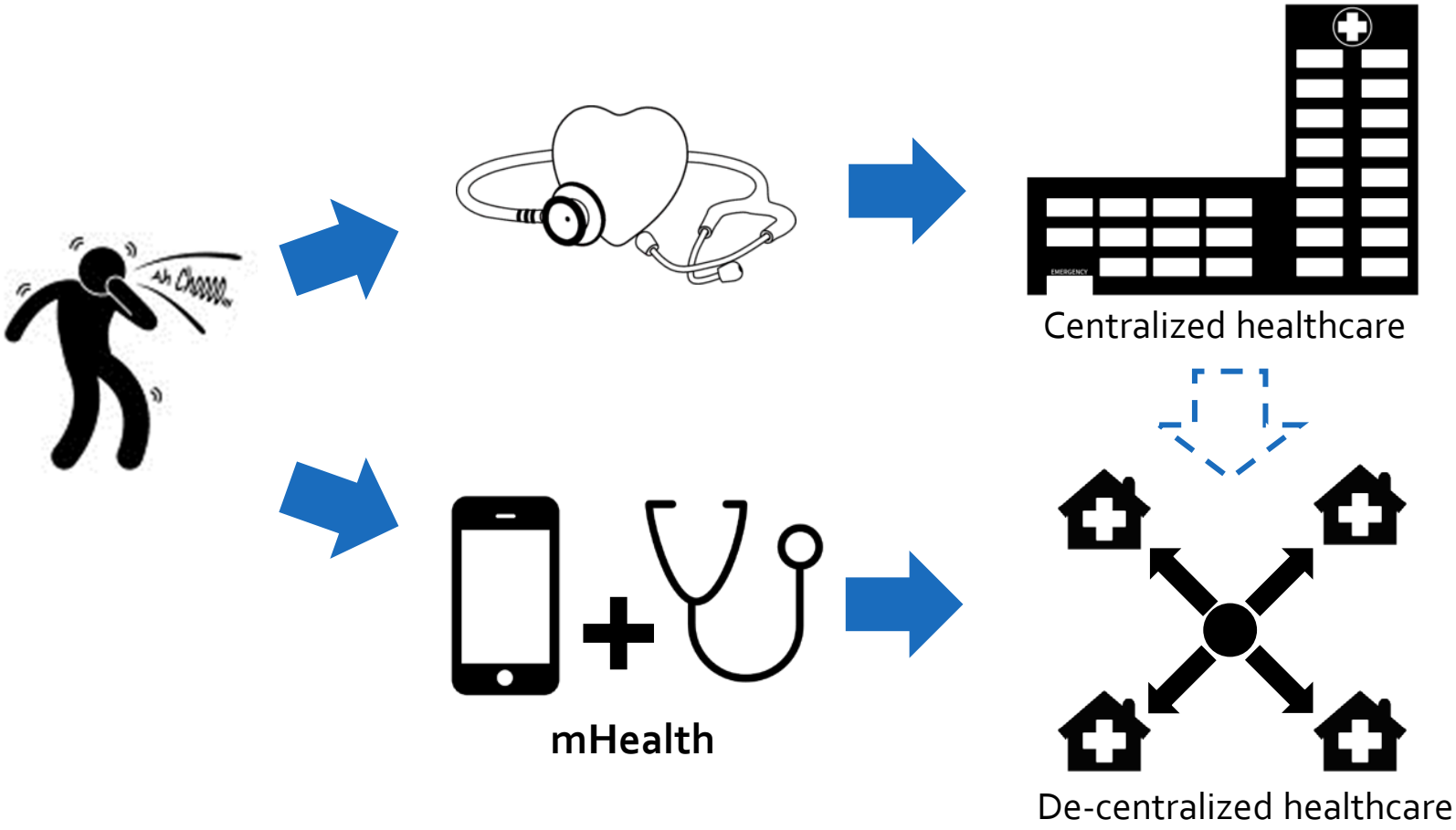
mHealth technology is a key enabler of the shift to decentralized healthcare



Opportunities for mHealth are almost anywhere

Emergency medicine

Primary care

In-field / remote settings

Self management

Chronic care

Home Care

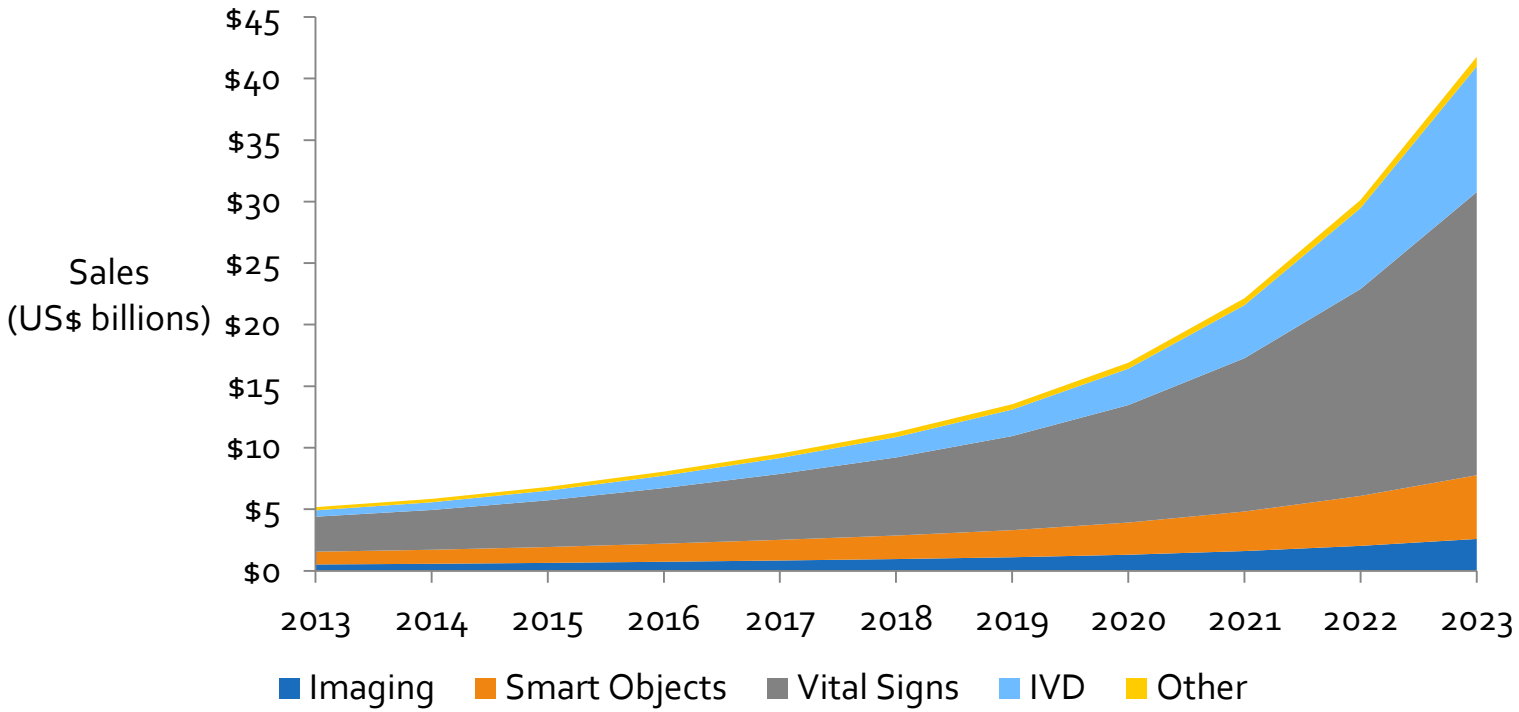
Sport & Fitness

Food & Nutrition

Security & Safety

Clinical markets — **Consumer markets**

By 2023, mHealth will grow over $41 billion; vital sign monitoring will remain one of the cornerstones



- **Clarification of regulatory approaches will help the clinical space grow**
- **Decision-support algorithms will actively drive adoption of mHealth devices**
- **Vital signs monitoring (VS) and IVD are the cornerstones of the mHealth industry** and will make up 80% of the mHealth devices market by 2023

Technologies that can transition the consumer-clinical gap, can capitalize in both markets

Clinical

IVD

Vital signs

Imaging

Other

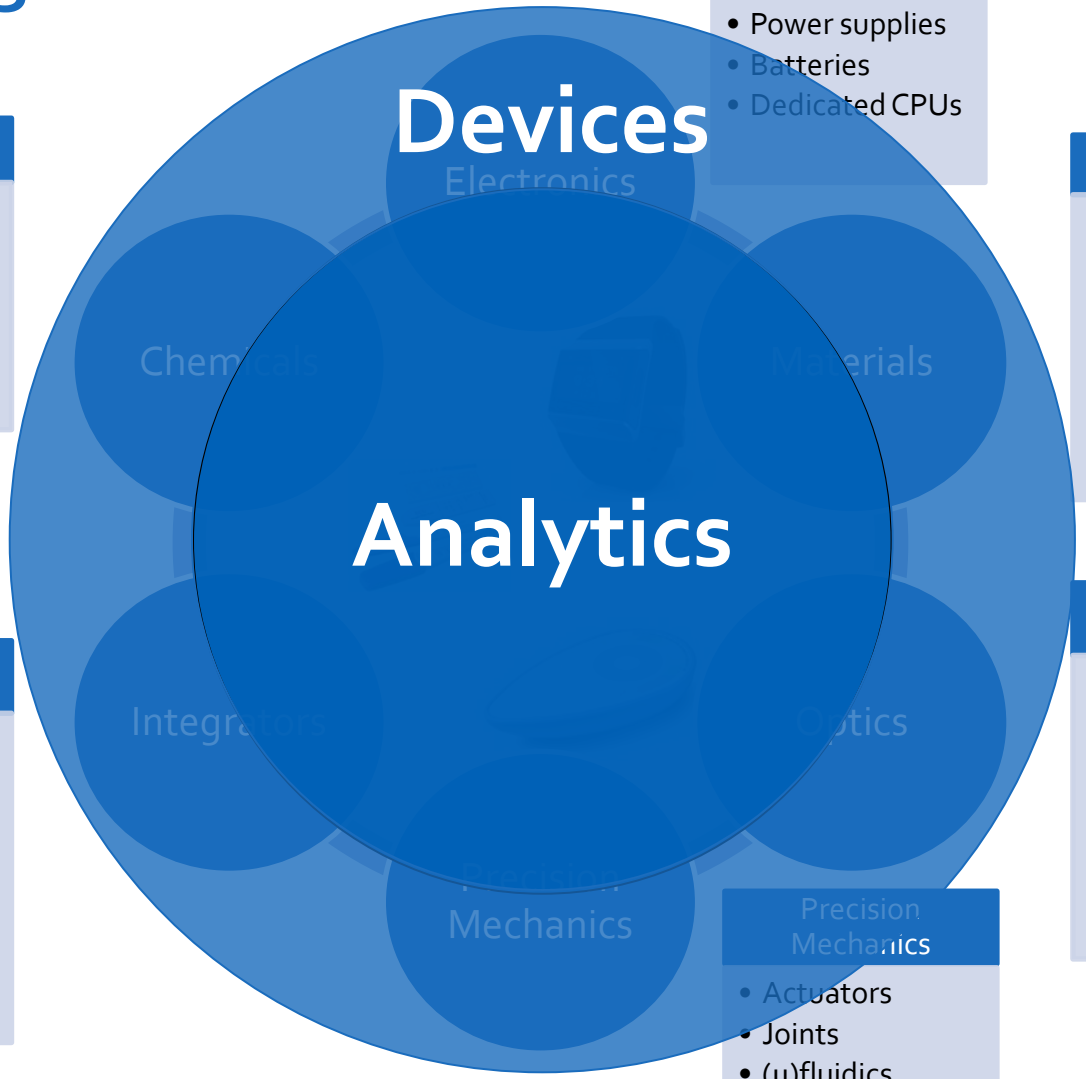
mHealth

IVD

Vital signs

Consumer

Leveraging the analytics is critical to generate revenue



Electronics
- Amplifiers
- Filters
- Power supplies
- Batteries
- Dedicated CPUs

Chemicals
- Reagents
- Disinfectants
- Binding agents
- Stabilizers

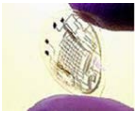
Materials
- Adhesives
- Polymers
- Alloys
- Nanomaterials
- Composites
- Coatings
- Smart fabrics

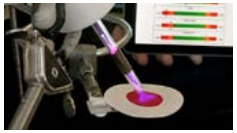
Integrators
- Manufacturing
- Miniaturization
- Packaging
- Systems engineering
- Backend systems

Optics
- Filters
- Lenses
- Detectors
- Lasers
- SLDs
- LEDs
- Gratings

Precision Mechanics
- Actuators
- Joints
- (μ)fluidics
- Enclosures
- Translation

Emerging devices can measure more relevant biomarkers, with increasing accuracy





Tears

Saliva

Sweat

Skin

Urine

Stool

Temperature

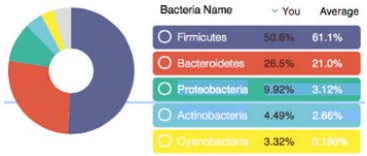
Heart rate

Activity

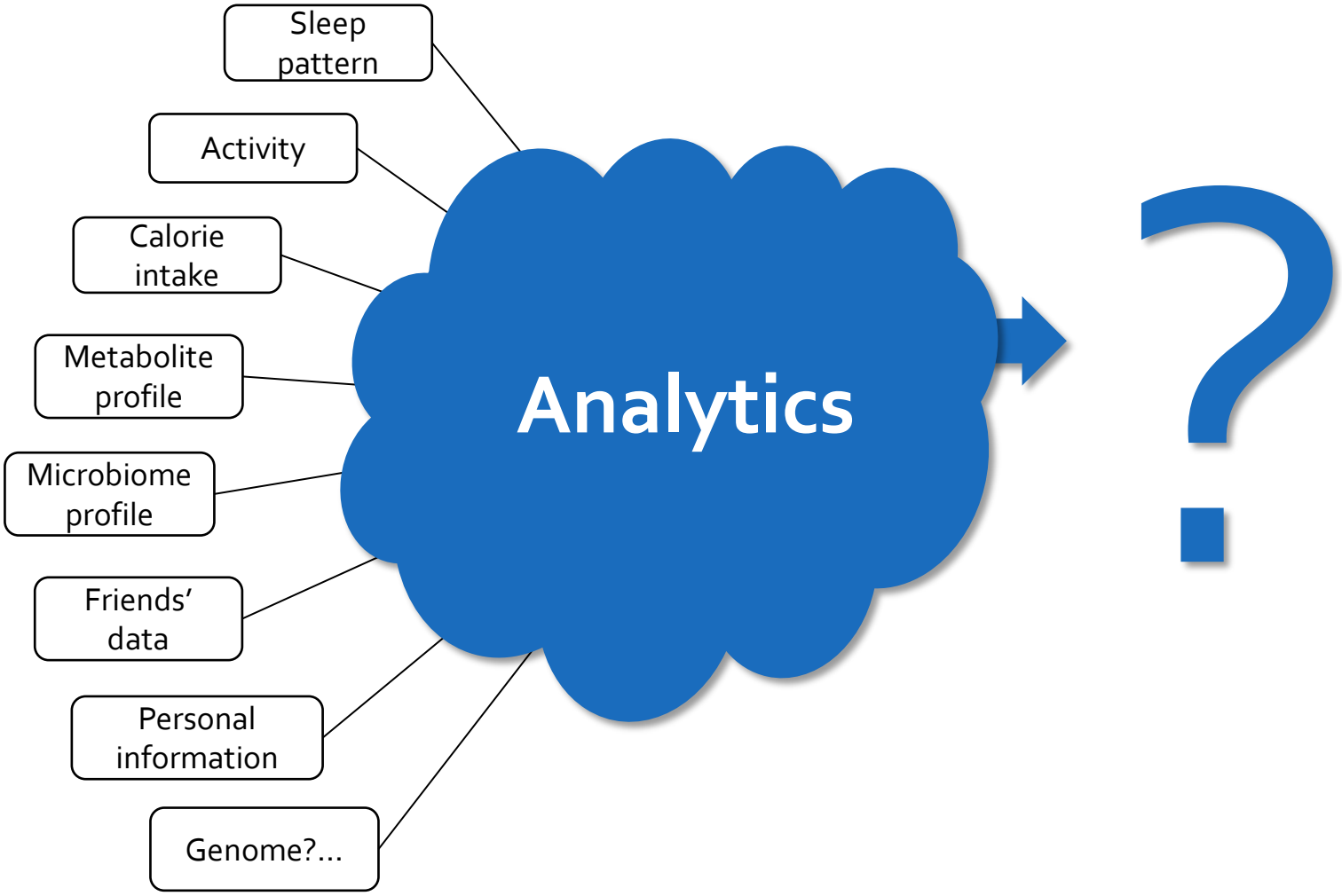
Respiration

Nutrients

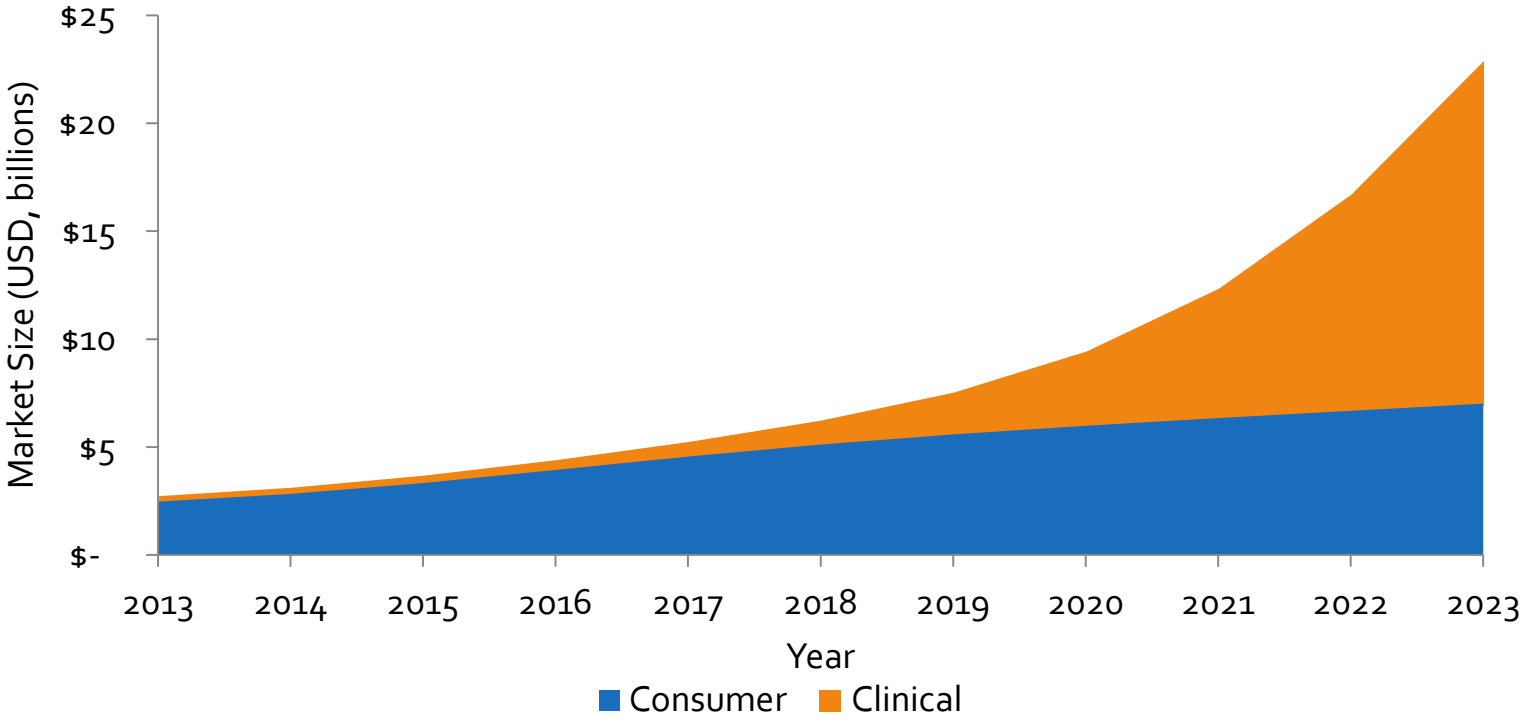
Microbiome



mHealth needs analytics to help translate big data into actionable recommendations



To get to the big money, companies must build their path to the clinical market



- After a slow start, developing markets leap-frogging technology adoption, combined with clarification of regulations, will see the clinical market expand rapidly
- In 2023, clinical applications constitute a market value of $16 billion and represents 70% of the total mHealth vital signs monitoring market.

mHealth startups utilize different strategies to bridge the revenue gap

Withings
Inspire health

- Targeting consumer applications, compatible with **third-party apps**
- Technology platform designed with **potential for clinical accuracy**

proteus®
DIGITAL HEALTH

- Wearable + ingestible device is **unfamiliar territory for FDA** approval
- **Targets the consumer market** with sensor product only

biovotion
bodymanagement

- Wearable **accuracy on par with current clinical** monitoring equipment
- **Software can analyze and evaluate** patient data to alert patient and caregivers

LifeQ

- **Open-access analysis platform,** aimed to find causes for the gathered data
- Developed optical sensor, to **incorporate into third-parties'** wearables

Can the technology transition the consumer-clinical revenue gap?

- Can the technology provide **meaningful, actionable information** for consumers?
- Will the product generate revenue to **fund further technology development?**

- Can the technology **claim the accuracy needed** for the regulated clinical market?
- Can my sensor package be **downsized for consumer applications**?

- **Can the technology evolve to enter the clinical market in the long-term?**

- **Can the technology capture consumer applications for short-term revenue?**

Thank you

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