



Patient Status Engine

Patient 4.0

Health-IT Talk Potsdam 15.10.2018



The Digital Future of Patient Monitoring

- *Anytime, anywhere, in hospital, at home*
- *Robust, accurate, wireless patient data capture and analysis*
- *Direct, real-time, quantitative patient outcome measures*

Digital Health?

Digitisation of Process and Information

- Hospital information systems (Electronic patient records etc)
- Electronic prescribing, billing, imaging etc
- Many apps – reminders for appointments, medications etc

Combine with connectivity

Business process engineering



Digital Health?

Digitisation of Experience

- Virtual Reality
- Shared experiences through social media and apps
- Wisdom of the crowd – new ways to learn

Patients become consumers



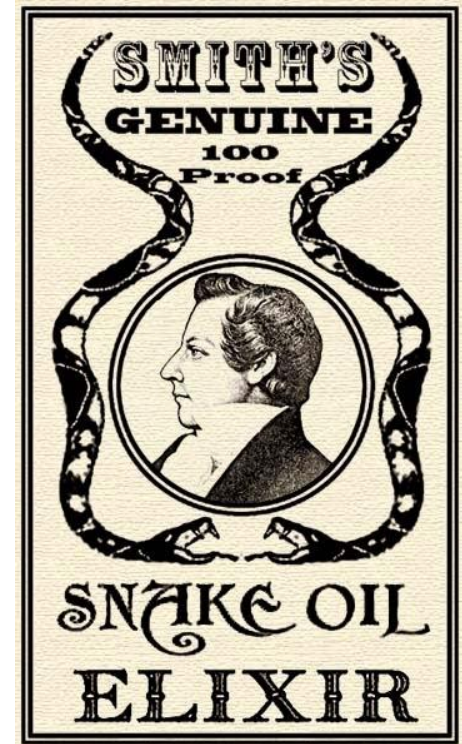
Digital Health?

“From ineffective electronic health records, to an explosion of direct-to-consumer digital health products, to apps of mixed quality.

This is the digital snake oil of the early 21st century.”



Dr James Madara
American Medical Association CEO



This clock has stopped.



But it is extraordinarily accurate. How?

What do these numbers represent?

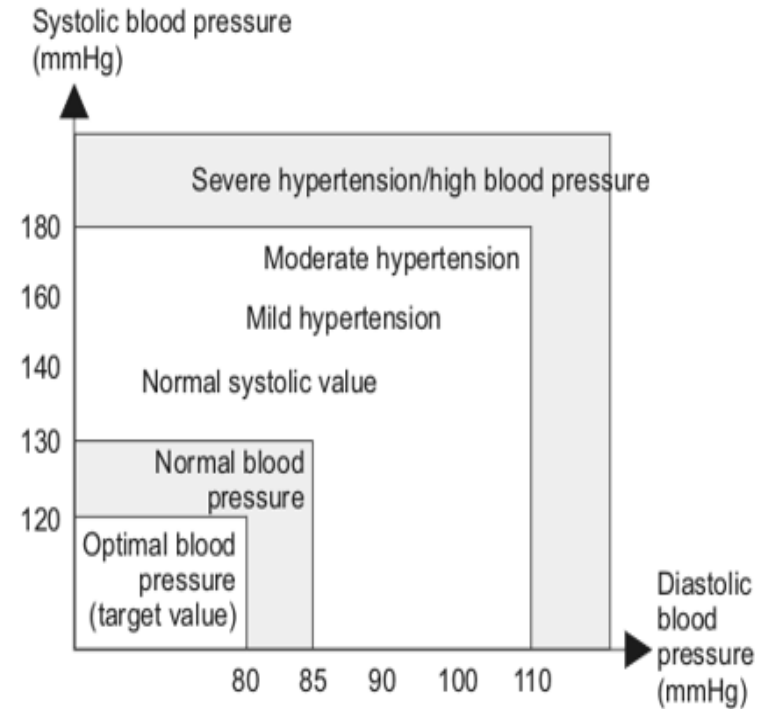
98.6

37.0



These numbers?

120 / 80



According to the blood pressure classification by the WHO/ISH.

These numbers?

60 - 80



Are these numbers Right or Wrong?

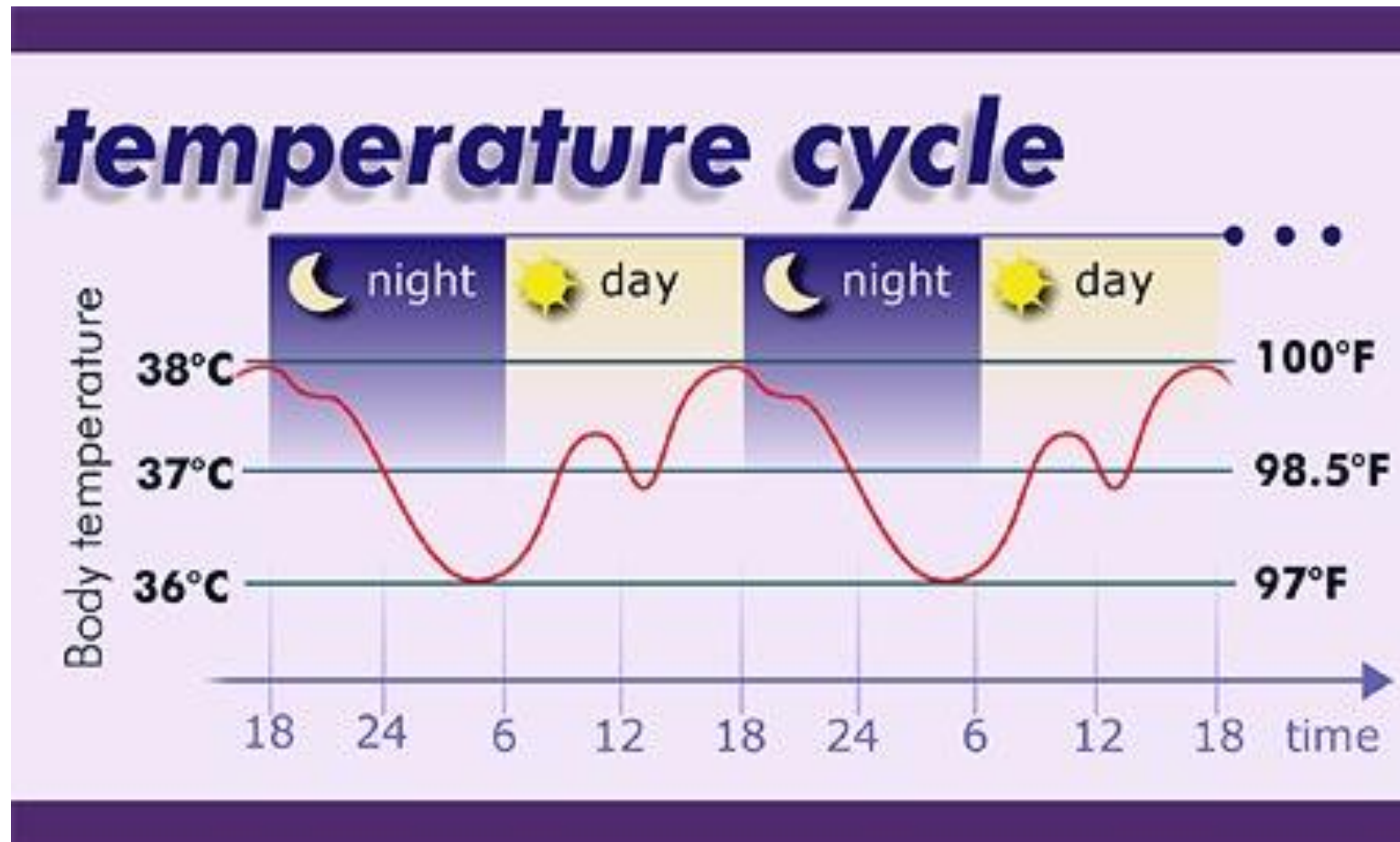
Sometimes these numbers are right

Most of the time they are wrong
and often misleading

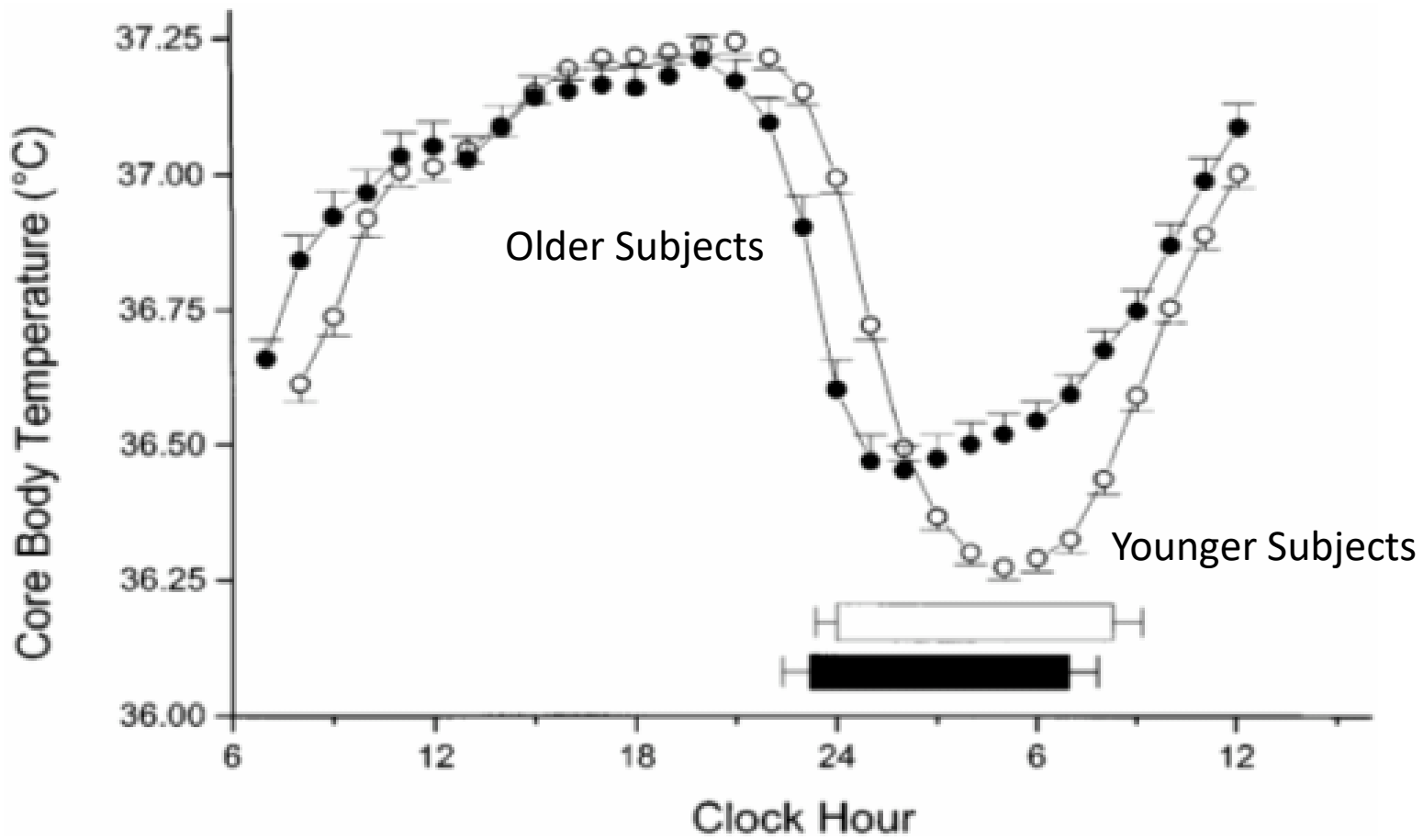
It Depends on



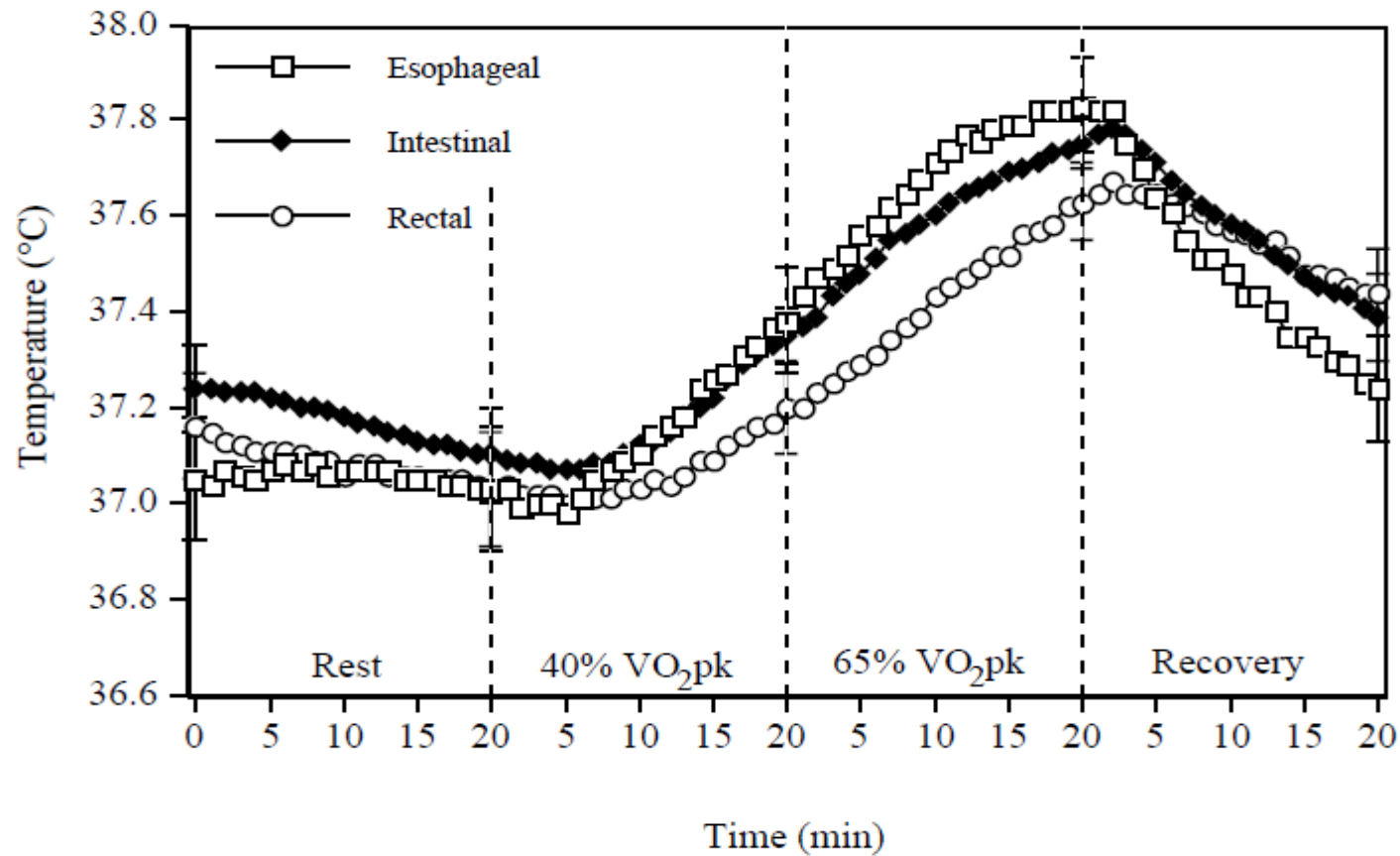
Time of Day (Circadian Cycles)



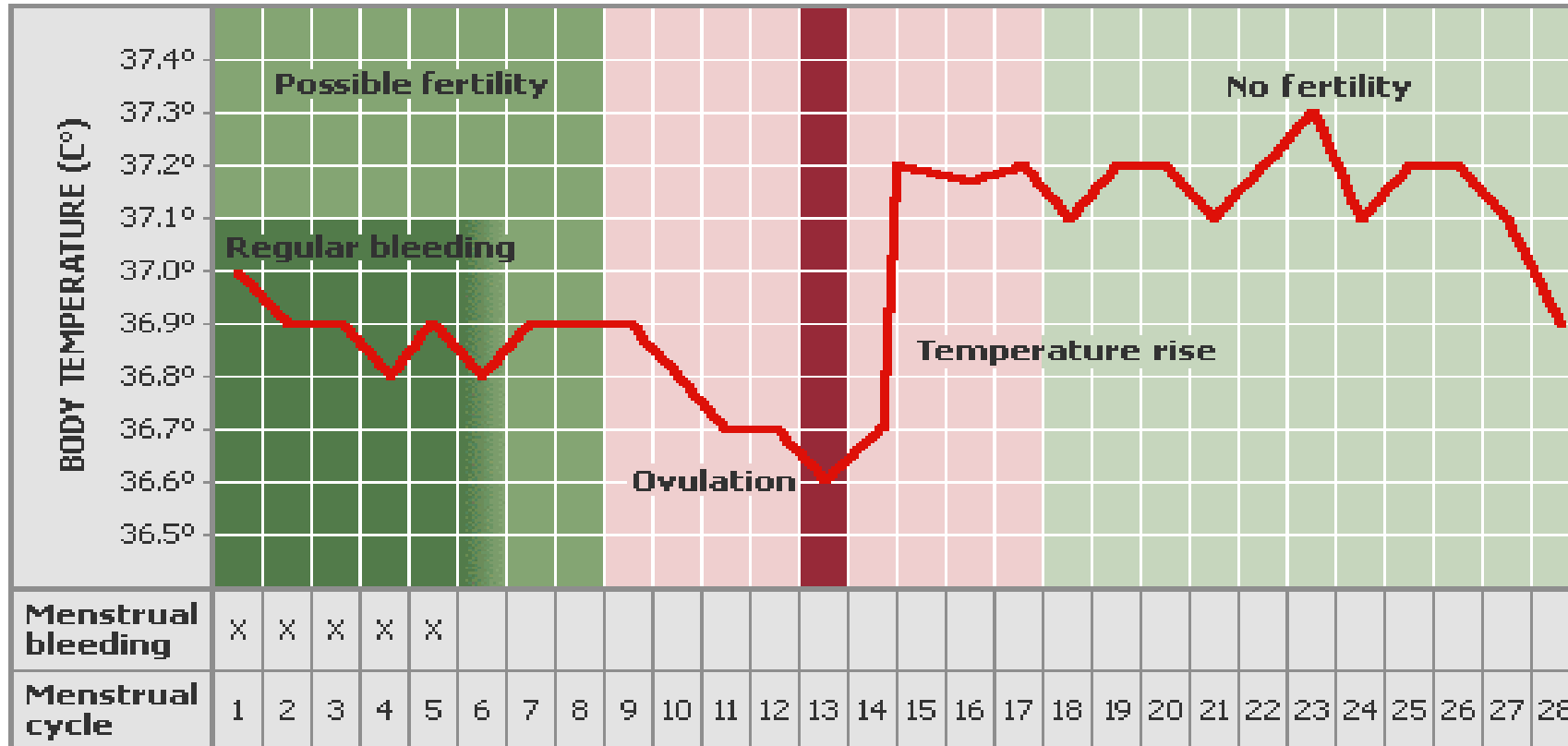
Age



Activity / Exercise (and where it's measured – *Ouch!*)

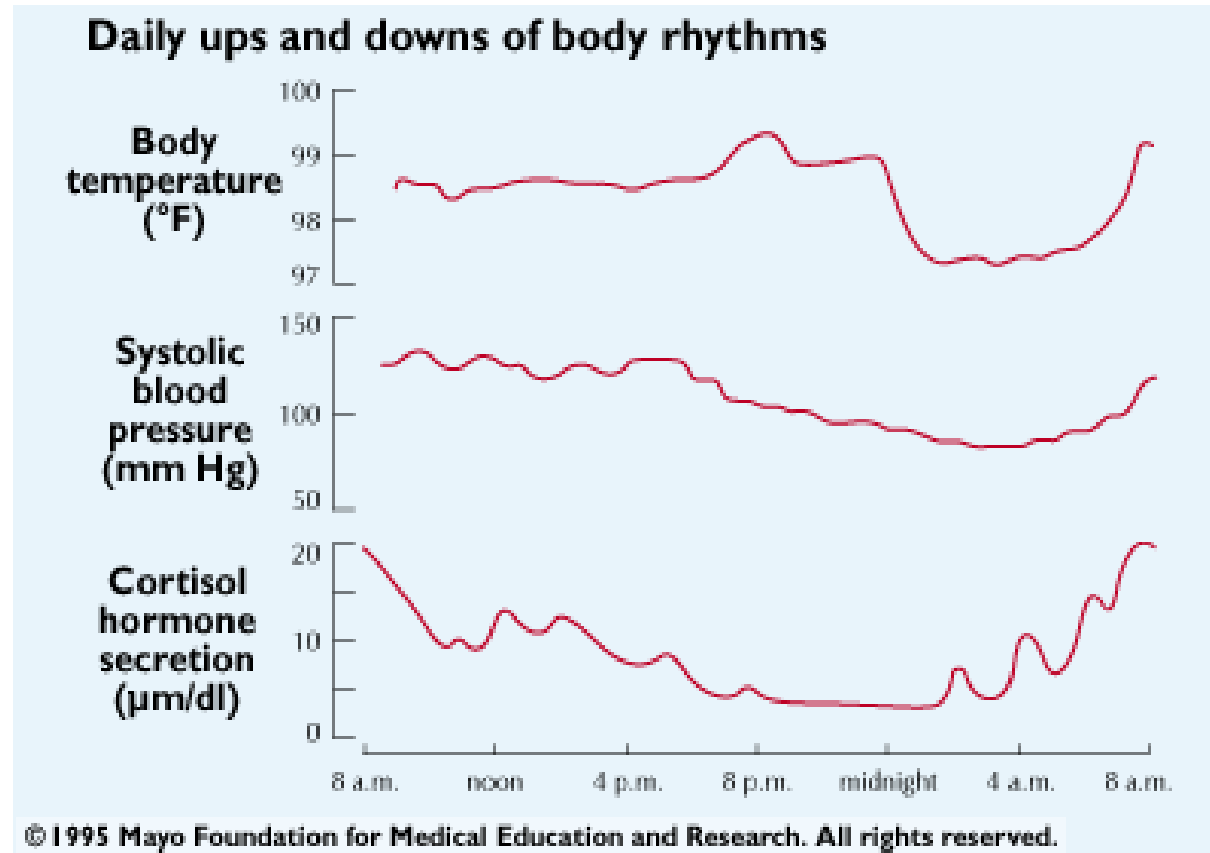


Time of Month (Menstrual Cycles)



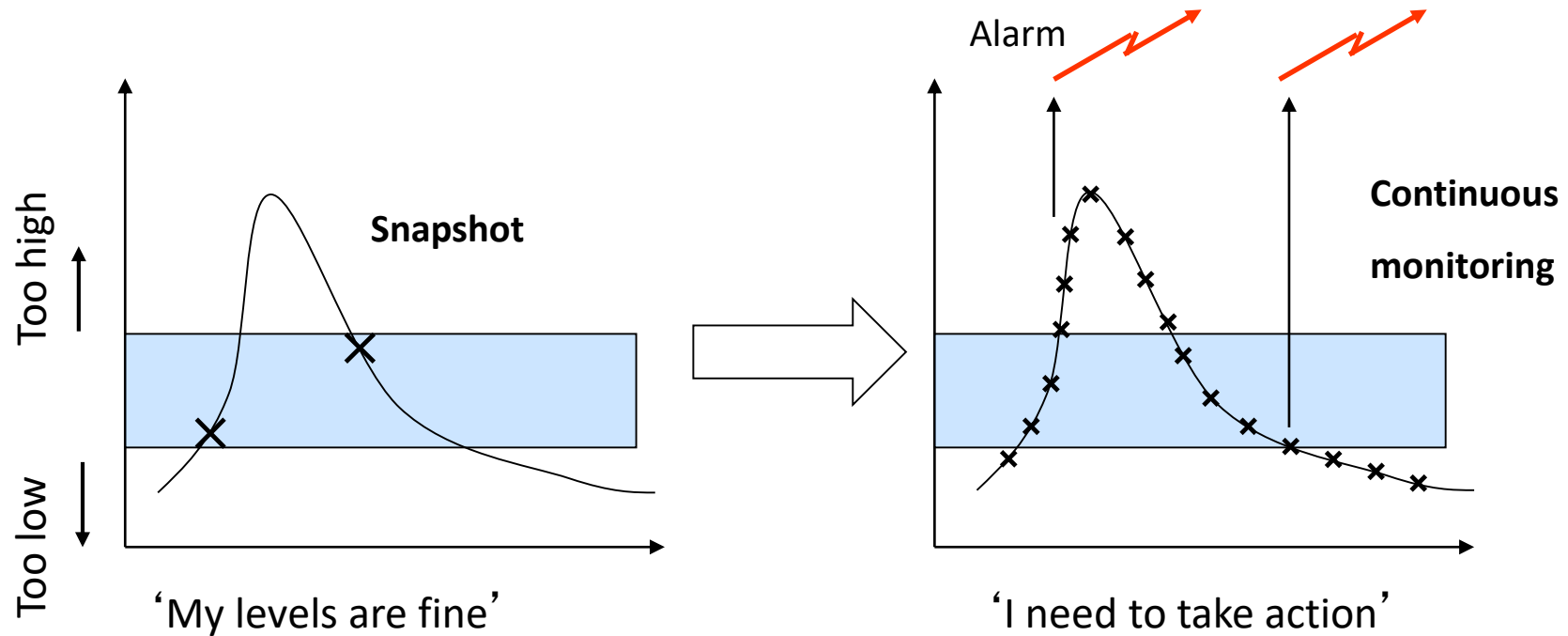
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And Not Only Temperature

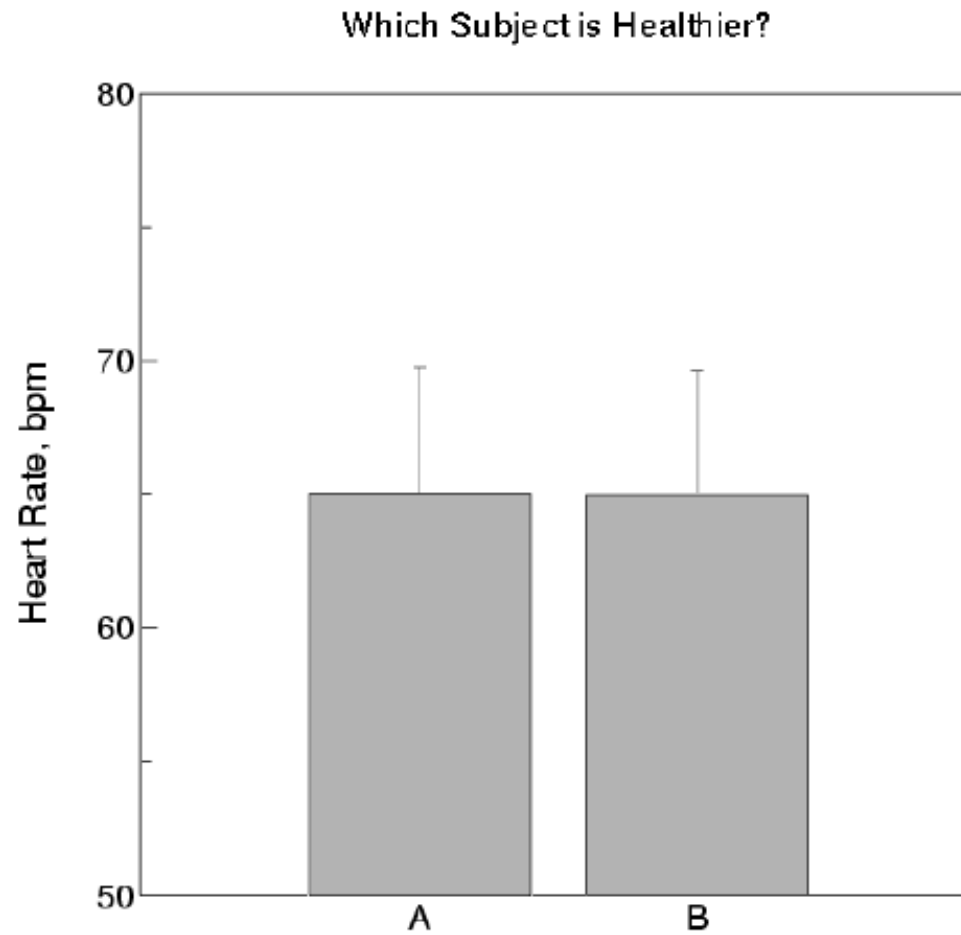


Our bodies have more than 100 circadian rhythms

Looking Continuously

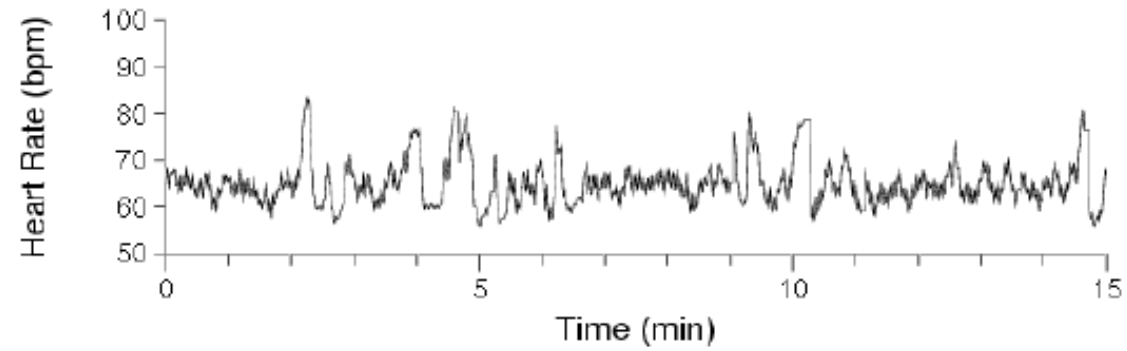


And Looking More Closely



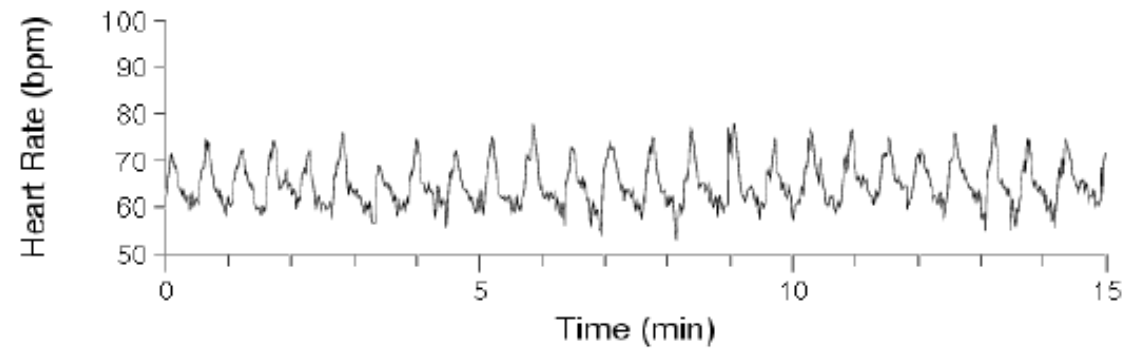
Reveal What's Really Going On

A: Mean 65.0 SD = 4.8



Healthy

B: Mean 65.0 SD = 4.7



Sleep Apnoea

Digital Health?

Digitisation of Content

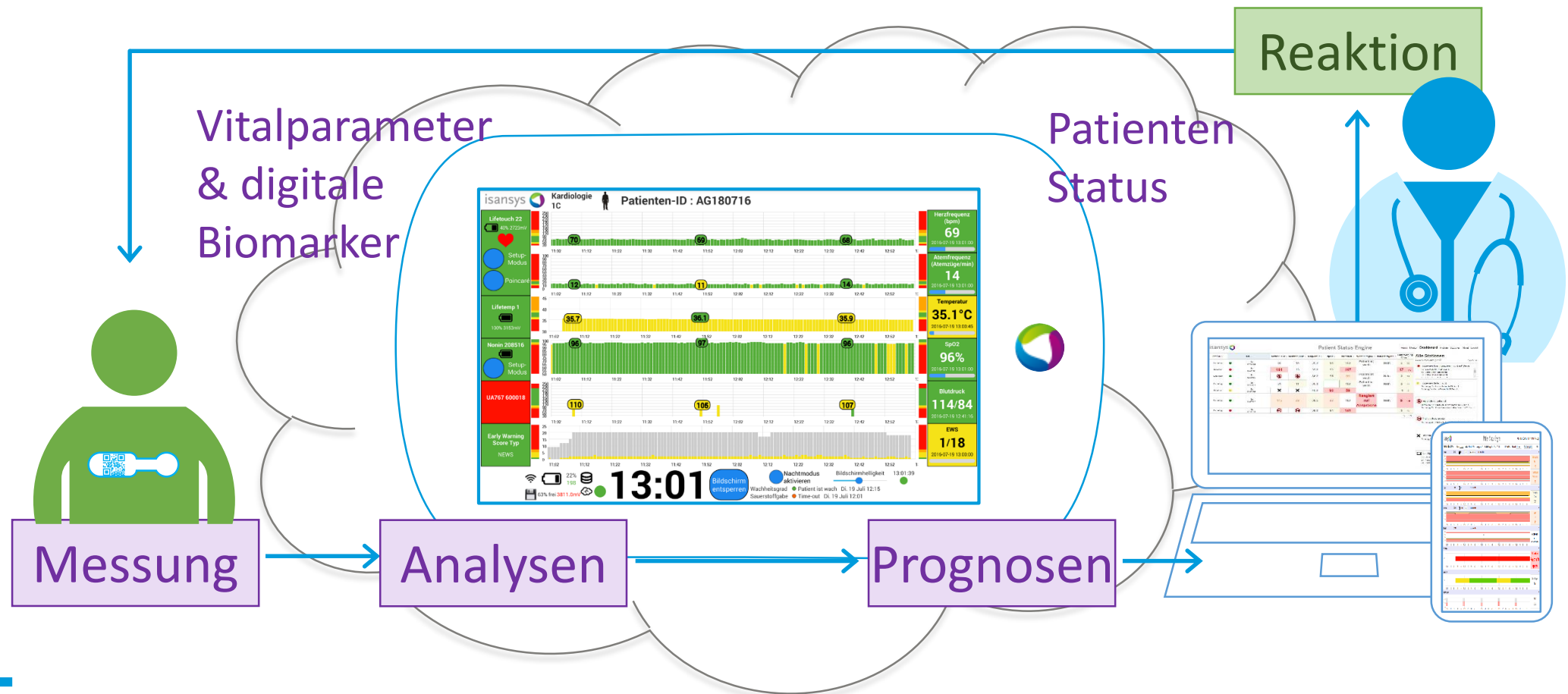
- Genome
- Epigenome
- What about your Physionome?

The truly disruptive step



Die Patient Status Engine (PSE)

Neue Möglichkeiten im Patientenmonitoring



Die Patient Status Engine (PSE)

Neue Möglichkeiten im Patientenmonitoring

Ein komplettes System:

- **Tragbare kabellose Sensoren:**
 - Puls, Temperatur, Atmung, EKG auf Abruf
 - SPO2 – Blutsauerstoff, PPG
 - Blutdruck auf Abruf
- **Dokumentation:**
 - Automatisch befüllte Fieberkurve
 - Schnell, fehlerfrei, kontinuierlich und genau
- **Interoperabel:**
 - Einbindung in die digitale Patientenakte / KIS
 - Telemedizin: Autorisierter Zugriff von überall möglich
- **Early Warning Scores (EWS)**
 - Kritische Werte auf einem Blick
 - Frühwarnsystem bei Zustandsänderungen



Neue Möglichkeiten im Patientenmonitoring:

Die Patient Status Engine (PSE) von Isansys ermöglicht eine

 *kabellose*

 *ortsungebundene*

 *digitale*

Beobachtung des Gesundheitszustands von Patienten

Neue Möglichkeiten im Patientenmonitoring

Die Isansys Patient Status Engine PSE



Status Quo:

- Punktuelle Werte
- Zeitdruck
- Fehlerquellen
- Verkabelte Patienten
- Demobilisierung
- Unterbrechungen

???



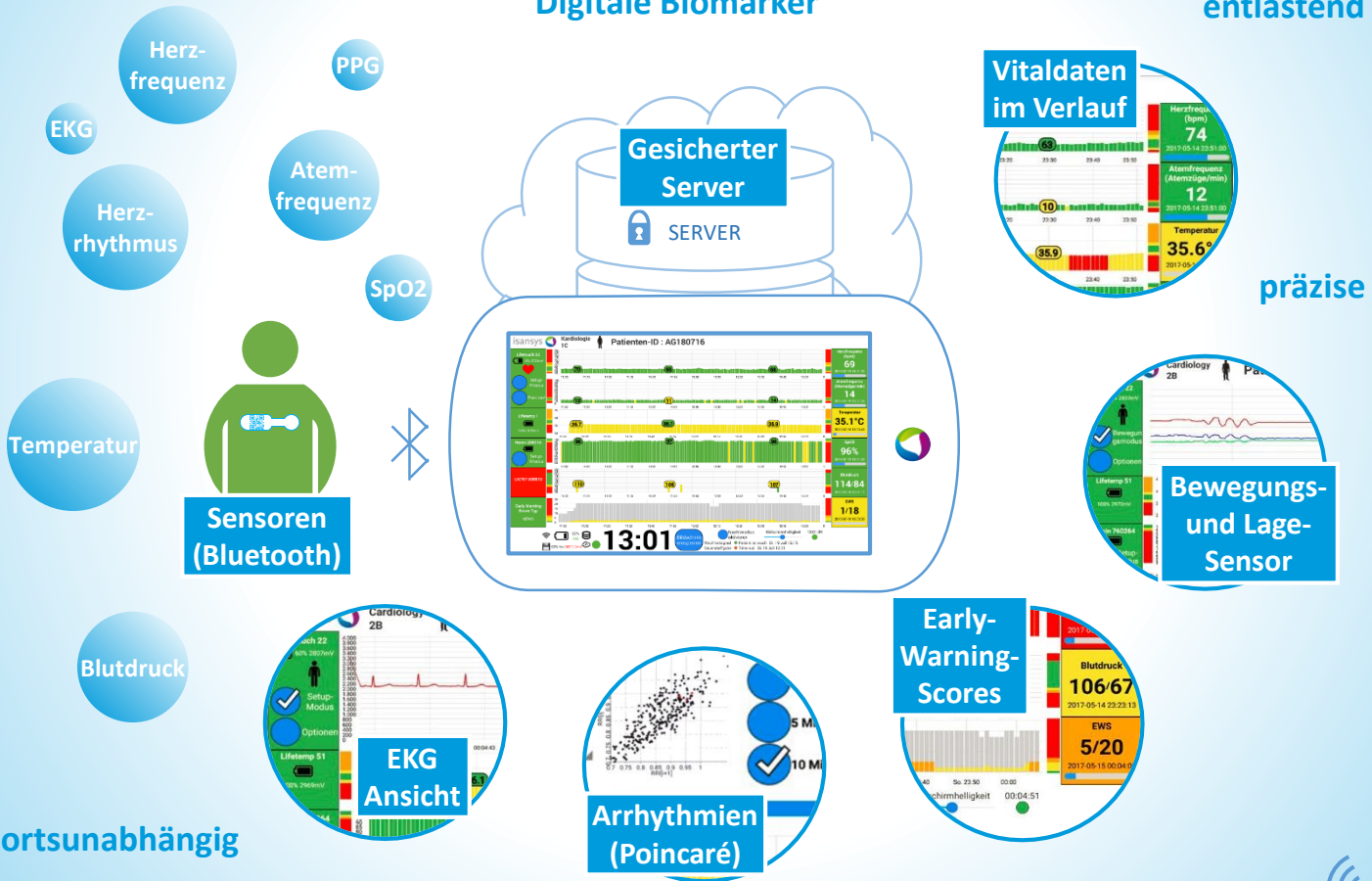
kontinuierlich

Algorithmen

zeitsparend

entlastend

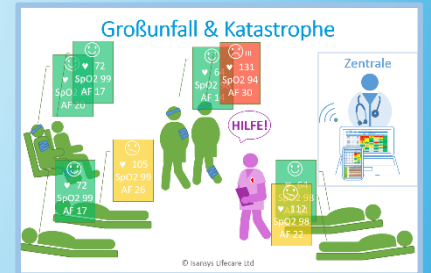
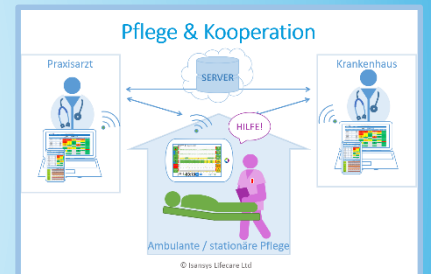
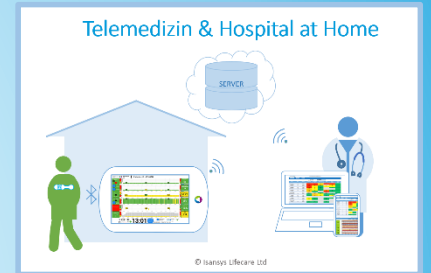
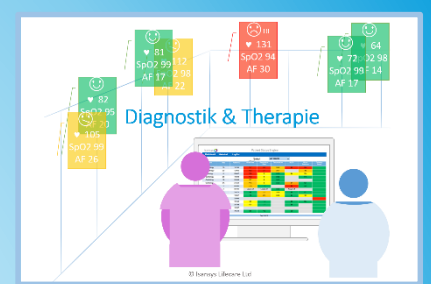
Digitale Biomarker



ortsunabhängig

mobilisierend

Übertragung via
WLAN, GSM

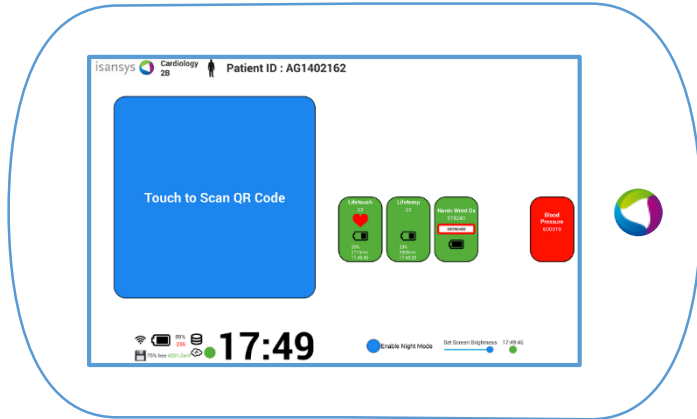


ISANSYS

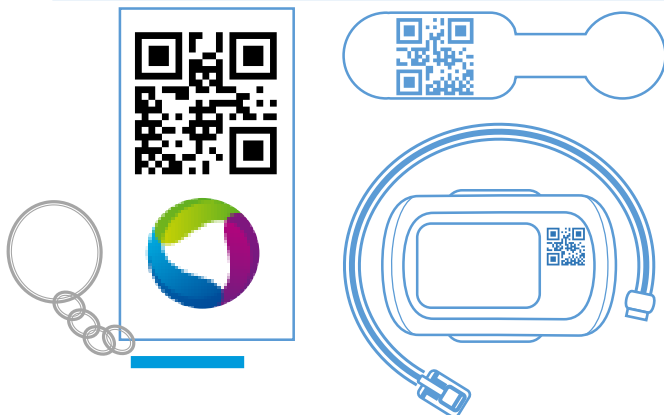
Patient Status Engine

Die Technik

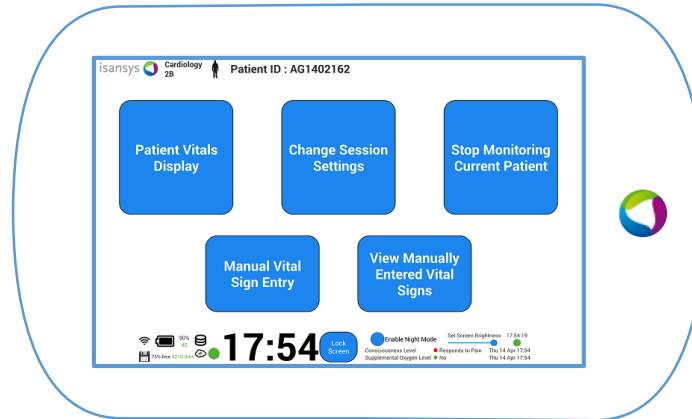
Die Sensoren und der Patient Gateway



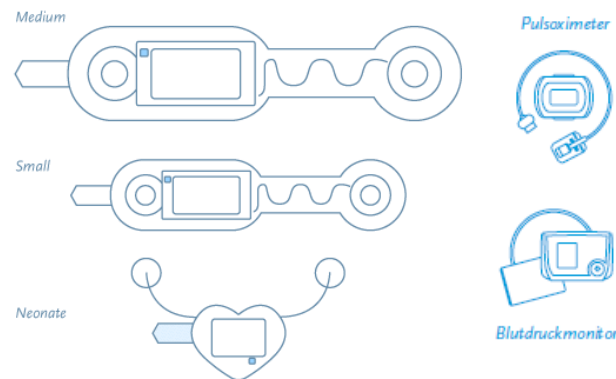
Einfache, sichere Identifikation von Nutzern und Geräten per QR-Code und Bluetooth.



05.10.2018



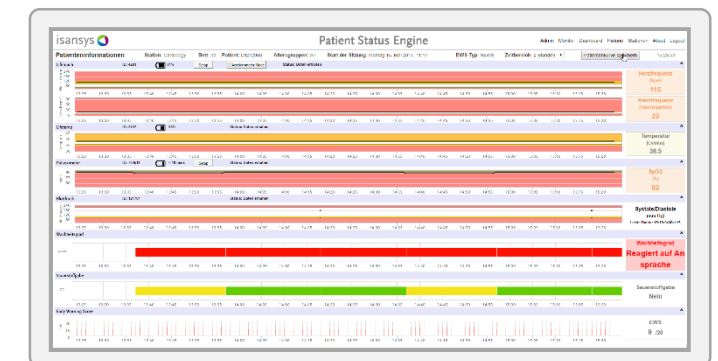
Übersichtliches Nutzermenü. Verschiedene Geräte. Anpassungsfähig.



© Isansys Lifecare Europe GmbH

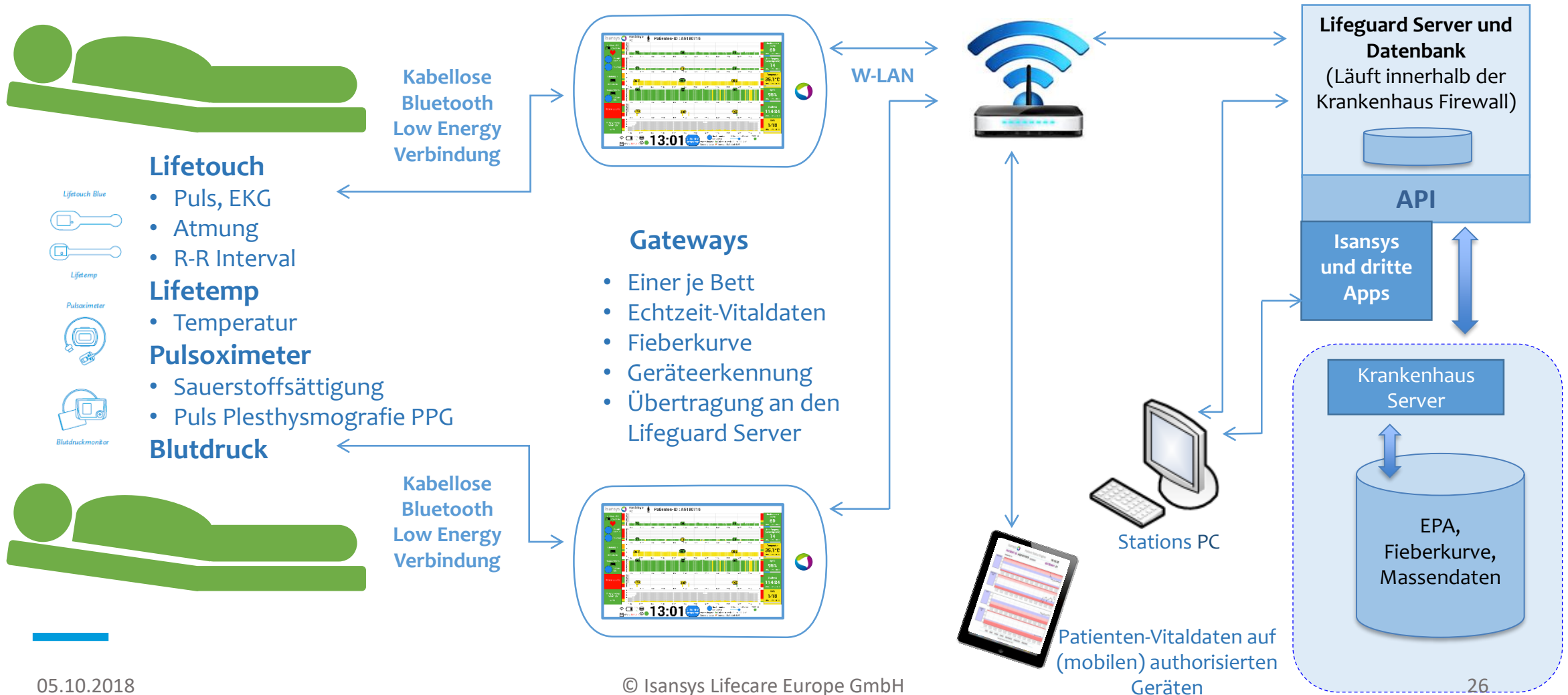


Aktuelle Werte und Verlauf auf einen Blick. Ohne zusätzliche Messungen.



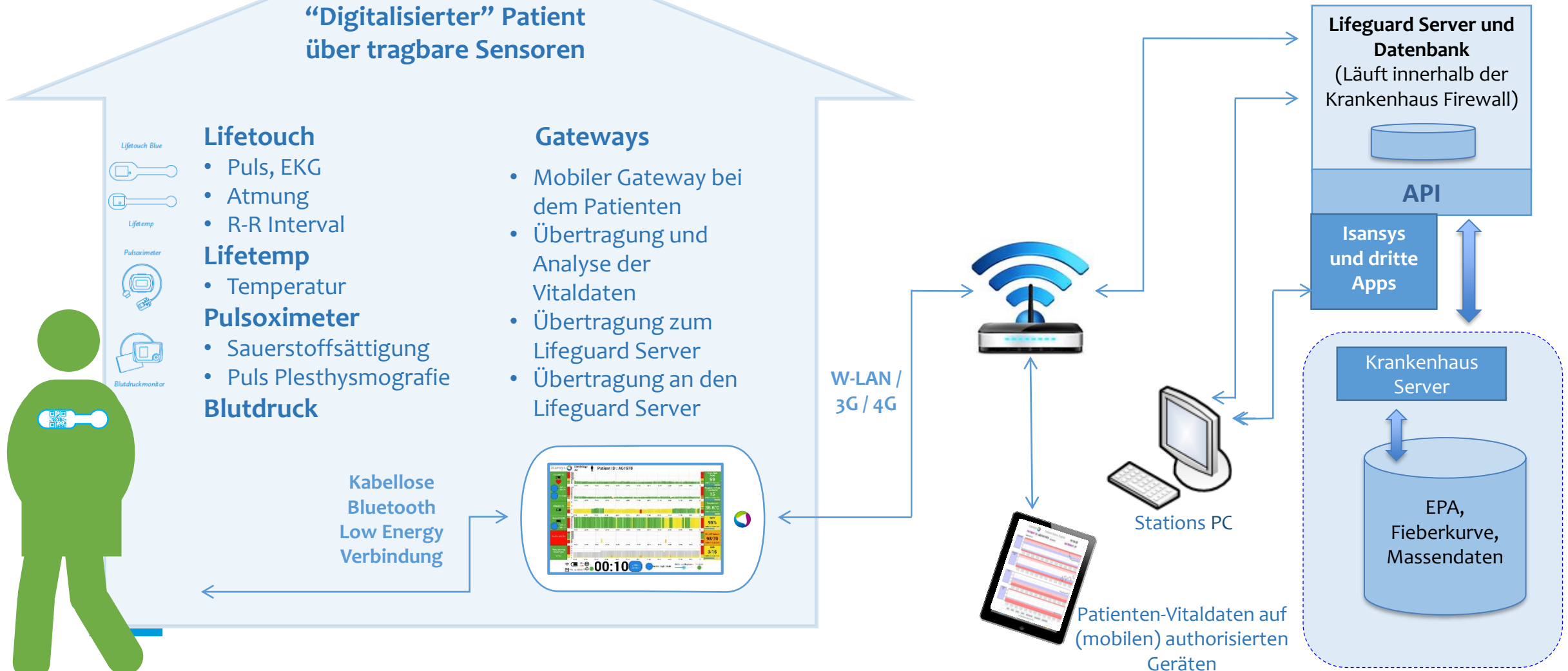
25

Integration in die Krankenhaus IT



Integration in der ambulanten Patientenversorgung

“Digitalisierter” Patient über tragbare Sensoren



Kontakt

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