

# Harnessing IoT for Remote Patient Monitoring



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**Healthcare is  
failing changing.**

## PREVENTION



## DIAGNOSIS



## SYSTEMS



## RESEARCH



## FINANCE



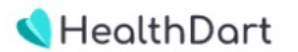
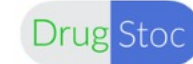
## TREATMENT



## HEALTH HARDWARE



## SUPPLY CHAIN



2022  
AFRICA  
HEALTH TECH



Holon IQ



**Digital Health is the  
future present.**



## **Definition:** Remote Patient Monitoring

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**Remote Patient Monitoring** is a digital health solution that captures and records patient physiologic data outside of a traditional health care environment.

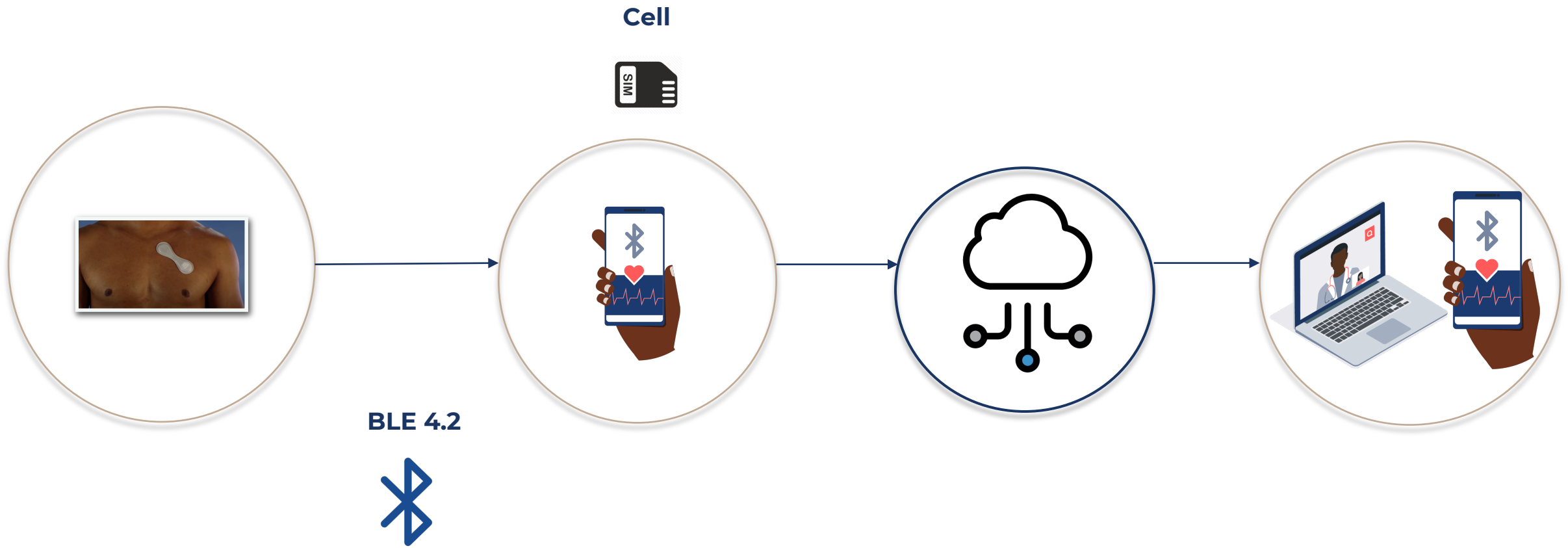


## **Definition:** Internet of Things (IoT)

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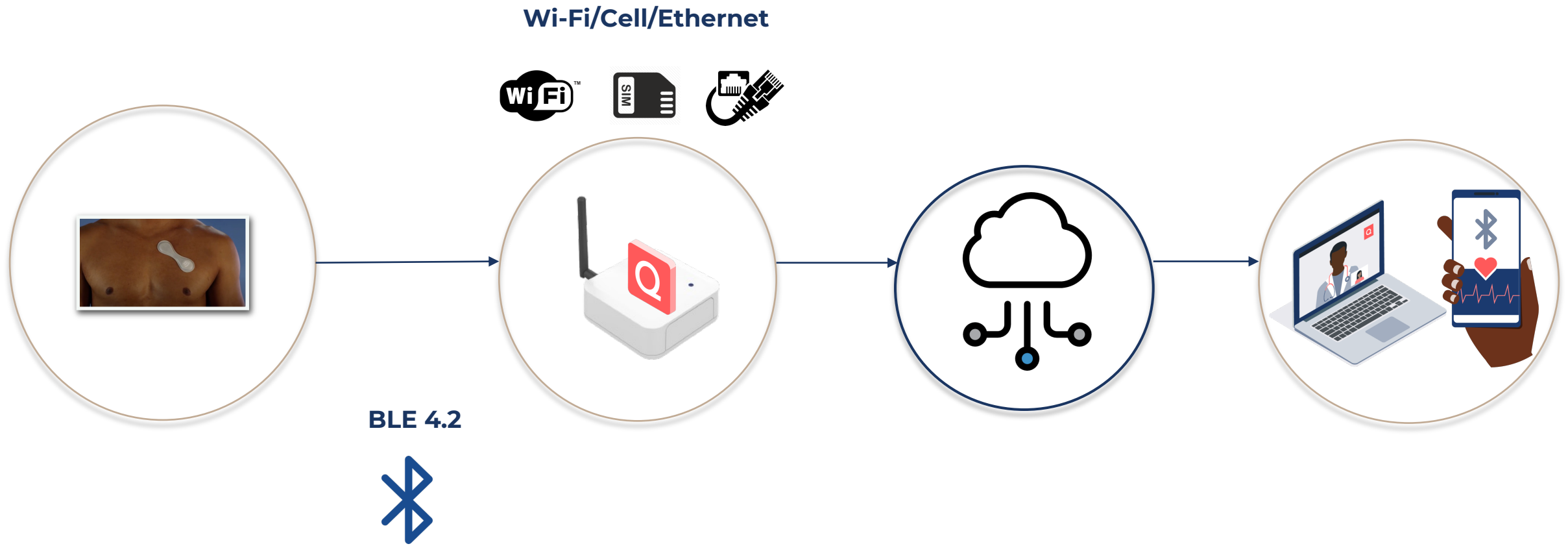
**Internet of Things:** a network of devices connected through the internet - that are able to communicate, exchange data, and interact with each other remotely or automatically.

# IoT Architecture





# IoT Architecture



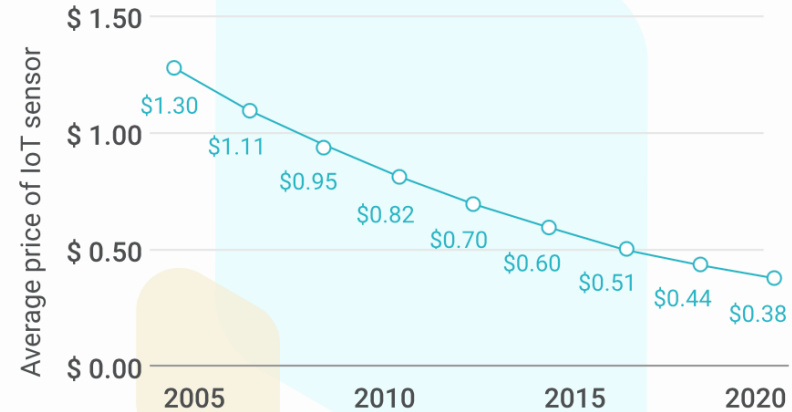
# IoT: Why now?



## We have had machines talking to each other for decades... but why the IoT NOW?

1. **Lower (and falling) technology prices:** The cost of hardware (sensors, modules, etc.) and connectivity is reduced almost every year.
2. **Advanced connectivity:** There has been a tremendous development around connectivity in the last few years. Even traditional Wifi and Bluetooth are equipped with much better capabilities and features that work well for several types IoT devices, such as Smart Homes, Wearables, Healthcare, etc.
3. **Advanced analytics:** The impressive development of Big Data and Artificial Intelligence (AI) can add great value to the data that we collect from IoT sensors.

As the price of IoT sensors falls, use is expected to increase



Source: Microsoft, 2019 Manufacturing Trends Report.

# Benefits of remote patient monitoring

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## Visibility

Provides visibility into patients' lives outside of their scheduled appointments.

## Early Intervention

Provide opportunities to intervene more quickly when health conditions worsen.

## Meaningful Insights

Timely, meaningful, and realistic to the patient's lifestyle.

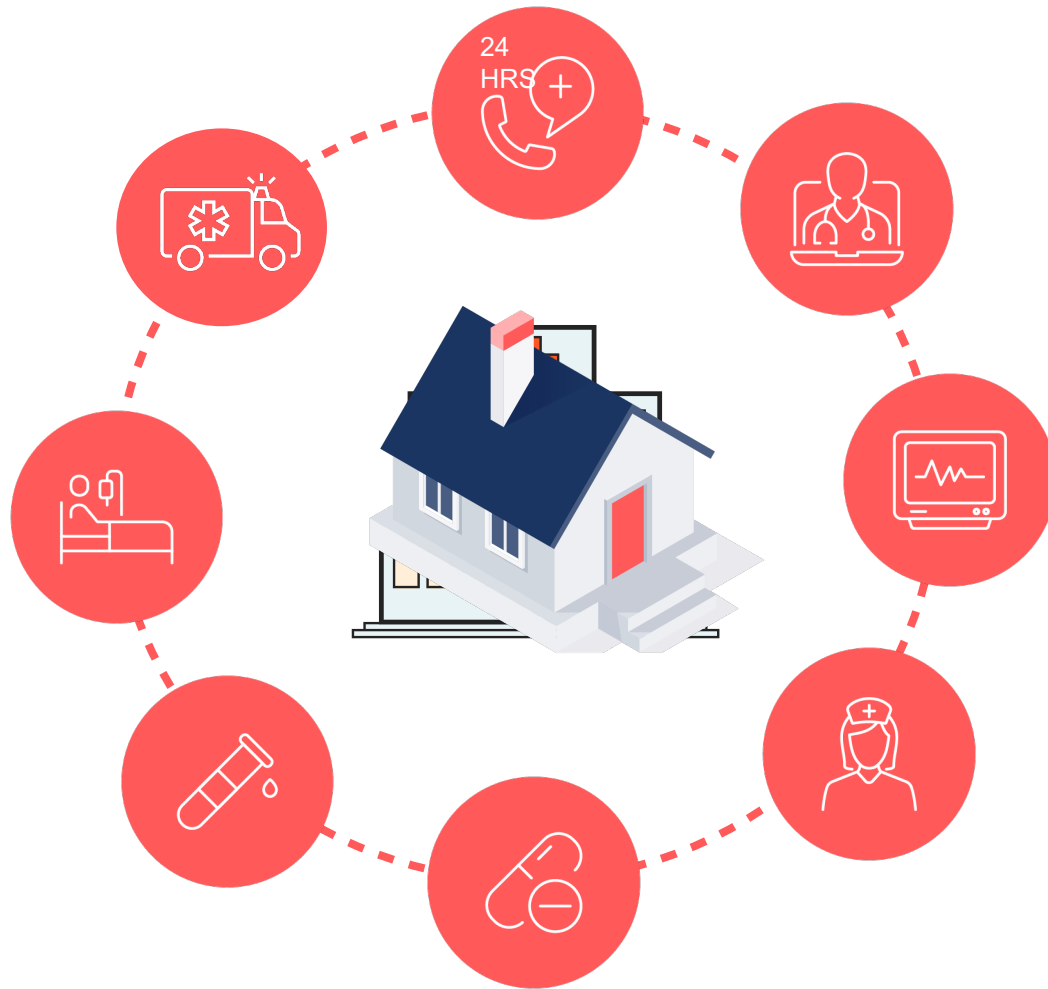
## Better Patient Involvement

Facilitate conversations between patients and physicians around the impact of disease and response to treatment.

## Better Patient Engagement

Engaging patients in their own care by providing them access to their own data so they can better understand the impact of their treatment and advocate for their medical needs.

# HAH: Bringing **essential elements of in-hospital care**, home



CLINICAL OVERSIGHT BY TREATING DOCTOR

REAL-TIME VITAL SIGN MONITORING

24-HOUR CLINICAL COMMAND CENTRE

IN-PERSON AND VIRTUAL VISITS

MEDICATIONS

INTRAVENOUS THERAPY

SHORT-TERM OXYGEN

LABORATORY SERVICES

SKILLED NURSING

ALLIED HEALTHCARE SERVICES

RAPID RESPONSE PROTOCOLS INCL. EMS

## Helping taking patients “off the grid”



*Operation  
Healing Hands  
passion • patients • purpose*



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