



# 모바일 디바이스의 보건학적 가능성과 도전 : Concepts and Examples

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# Background



- Rapid increase of **mobile penetration** rate
- **Every second use** of smartphone in most users (from ‘wake-up’ to ‘bed time’)
- Evolutionary innovation of **smartphone sensors**
- Rapid innovation of **wearable devices** and **IoT**
- Substantial increment of **SNS use** on smartphones
- Possibility of information **sensed** by smartphone and IoT (location, motion, image...) and **collected** by SNS as **Big Data** to improve quality of life

# Emergence of mHealth

- based on mobile devices
- utilizes new types of data, information, and methods
- applies to the entire and/or specific processes of healthcare and public health
- innovatively supports overcoming the current problems or barriers of healthcare
- generates a new health care paradigm that debunks a conventional conceptual model of healthcare system
- develops the effectiveness and efficiency of healthcare for each stakeholder
- increases quality of life for all

# Why is mHealth so special?

- New data sources
- New analysis methods
- New knowledge
- New health care concepts
- New evaluation tools
- New jobs in public health
- New public health paradigm
- Innovative development of global health programs

# Big Data in public health

- Big Data generated by ICT and conventional data sources open a new view of individual lives and behaviors
- Once linked with other health-related data, Big-data will
  - Uncover population health patterns,
  - Predict long-term conditions
  - Identify non-traditional intervention points

# Any challenges?

- Validation
- Standardization
- Interoperability
- Interpretation
- Legal issues
- Interest of conventional stakeholders
- Technical hurdles
- Cost and pay



**Thank you !**