

Health Information Technology for Aging in Place

Paulina Sockolow DrPH MS MBA

Associate Professor of Informatics

College of Nursing and Health
Professions



Drexel University

Technologies (Products/Services) for Aging in Place

Products:

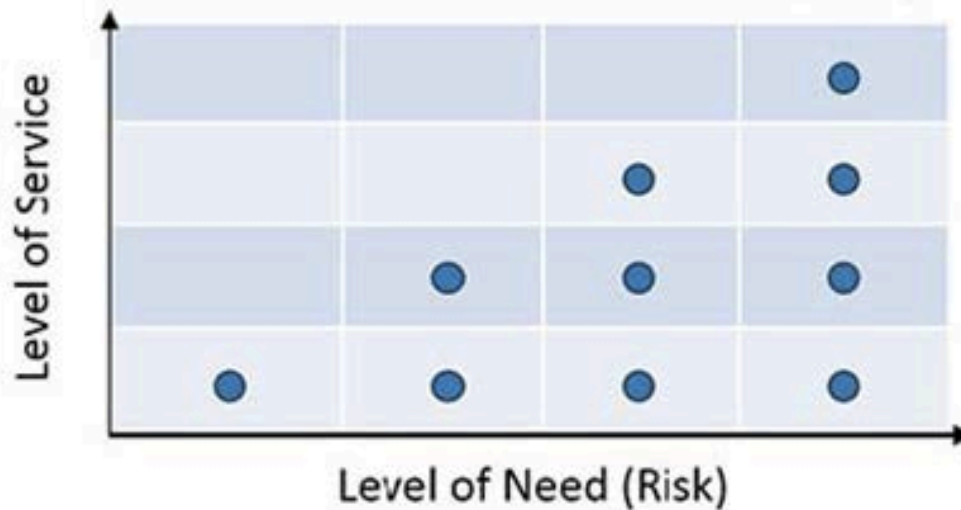
Response

Monitoring

Coordination

Connection

Level of Service vs. Need (Risk)



Cost

Privacy



Independent

IADLs

ADLs

Dependent

CC CareWheels 2015



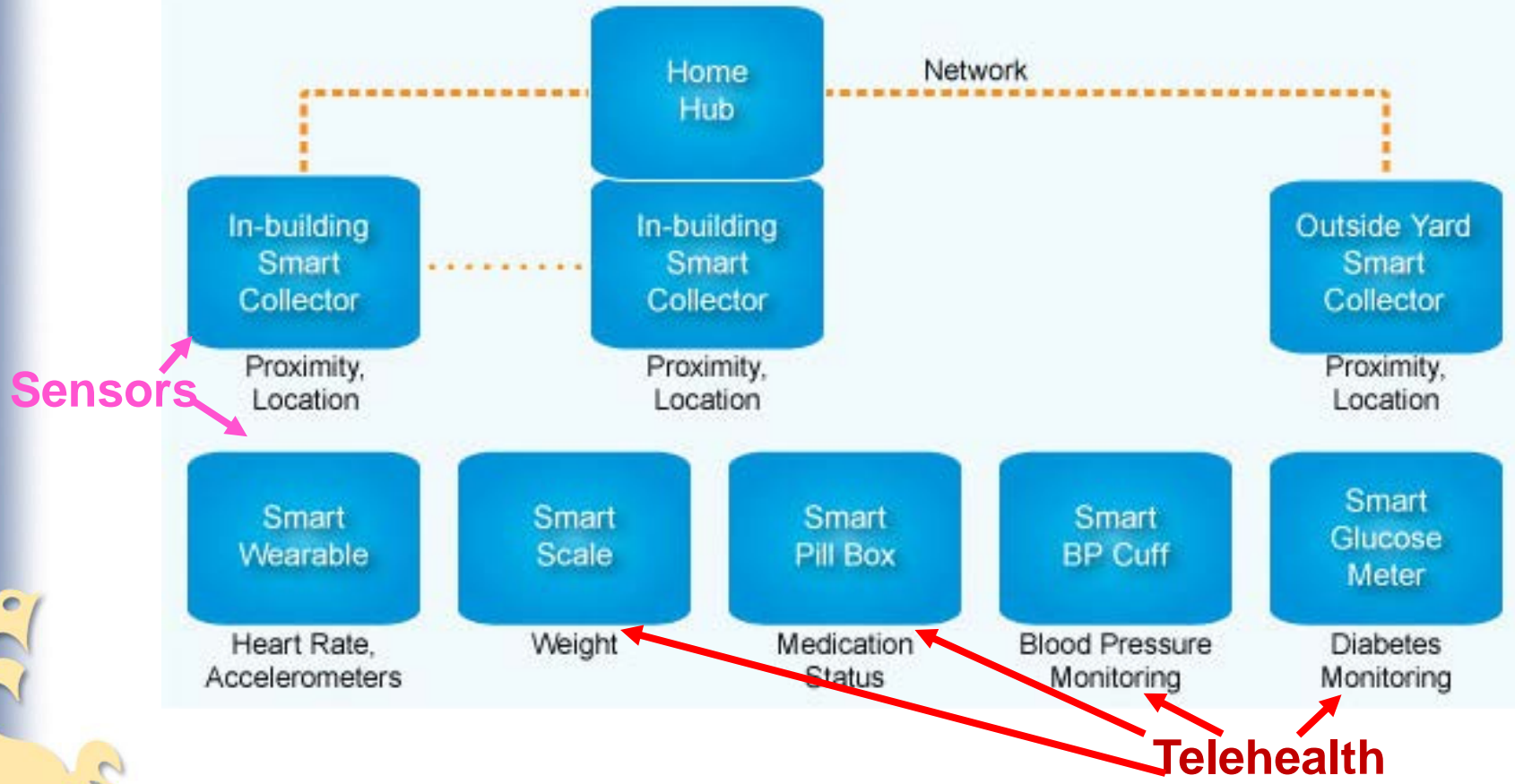
Telehealth

Use of health care information exchanged from one site to another via electronic communications to improve patients' health status

- Existing technologies
- Increasing adoption

| | |
|--|---|
|  Pedometers |  Peak Flow Meters |
|  Blood Pressure Cuffs |  Wireless Pill Bottles |
|  Pulse Oximeters |  Blood Glucose Meters |
|  Weight Scales |  Heart Rate Monitors |
|  Thermometers |  Maternal Monitors |

Telehealth, Sensors



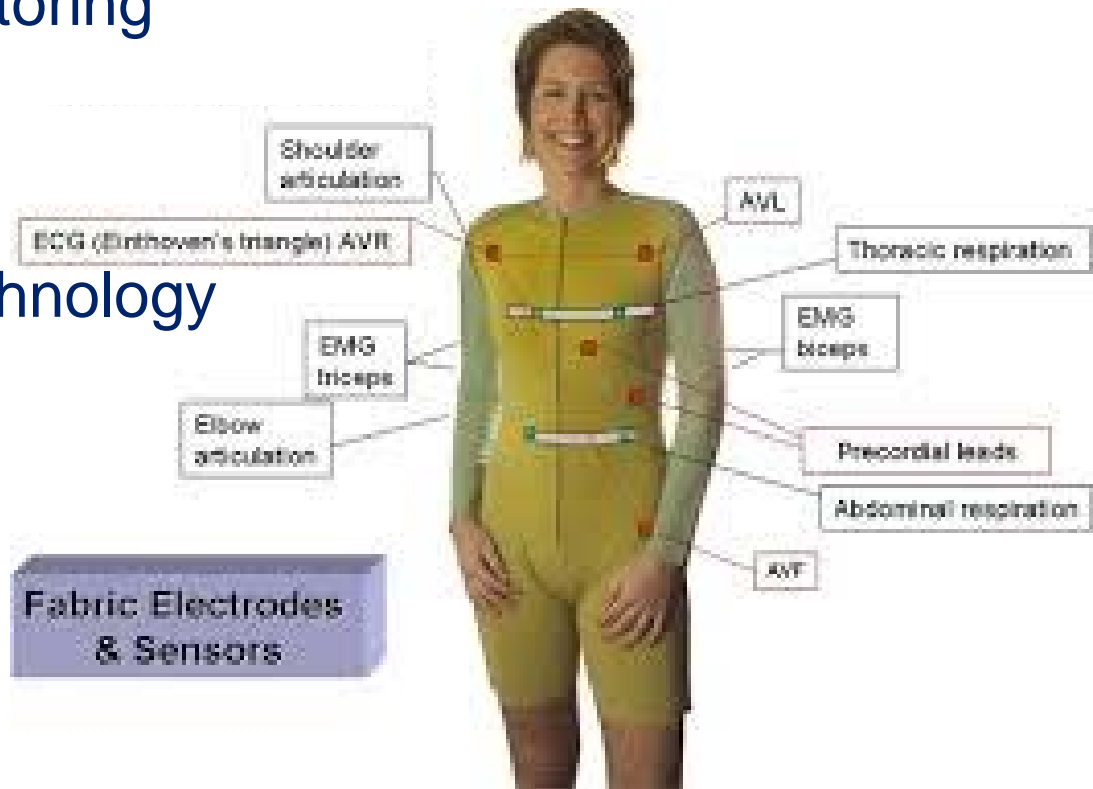
In Home Sensors



- Activity:
 - Waking
 - Walking
 - Eating/ refrigerator
 - Fall detection
- Preventive care
 - Early indication of cognitive decline
 - Trend analysis
 - Emerging technology

Wearable Sensors

- Examples
 - Cardiac monitoring
 - Respiration
- Smart fabric
 - Emerging technology



Data Integration for Caregiving

- Clinicians
 - System integrates data from multiple systems
 - Support clinician to provide care in the moment
- Family/Caregivers
 - Dashboard to enable tracking patterns at home
 - Facilitate concurrent issue identification instead of retrospective investigation





Challenges

- Firehose of data
 - What is data and what is noise?
- Integration/sharing of data among devices and information systems
- Turn data into something useful
 - Intuitive presentation
 - Right time, right place



THANK YOU