

Wireless Body Area Network (WBAN)

Applications Necessity in Real Time Healthcare

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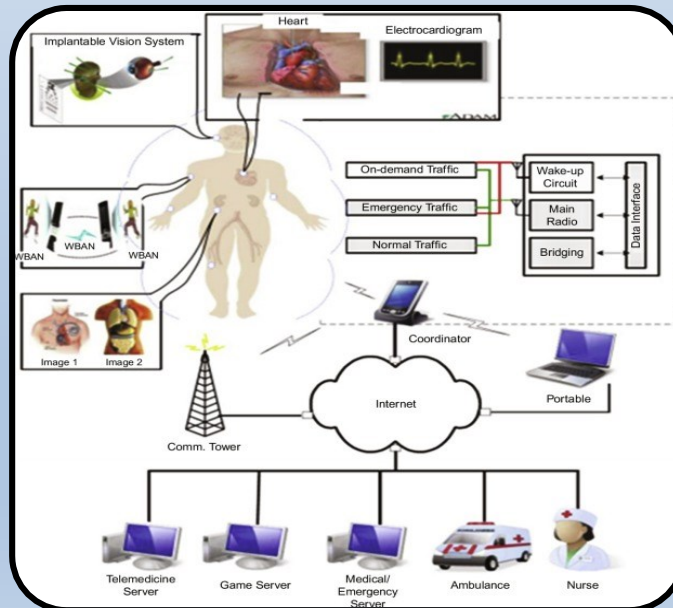
References



Introduction

Necessity

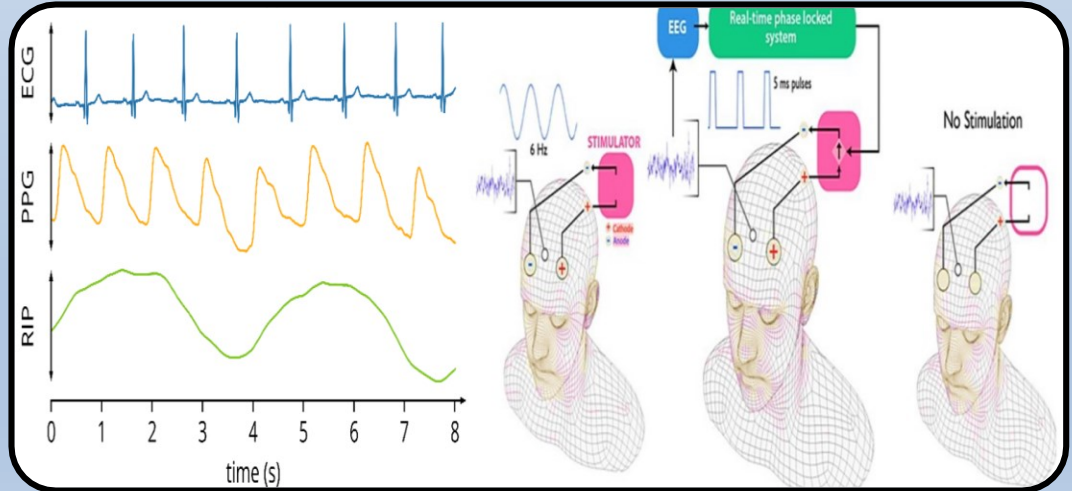
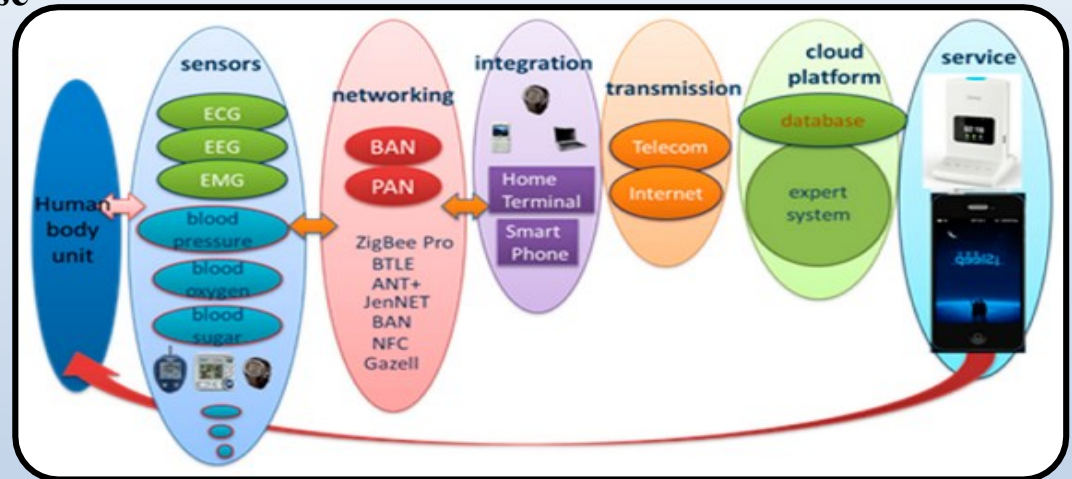
- **ICT Applications in Telemedicine**
- **WBAN Applications in Telemedicine**
- **Value WBAN in Electronic-Commerce**
- **Ubiquitous HealthCare in Telemedicine**
- **Evolution in Real Time Telemedicine**



Introduction

WBAN Growth → Challenges Response

- Real Time Health Care
- Prevention and Diagnosis
- Reduce Vulnerabilities
- Independent Living for Elders
- Improve Mental Health Cares
- Thought and Behavior Control

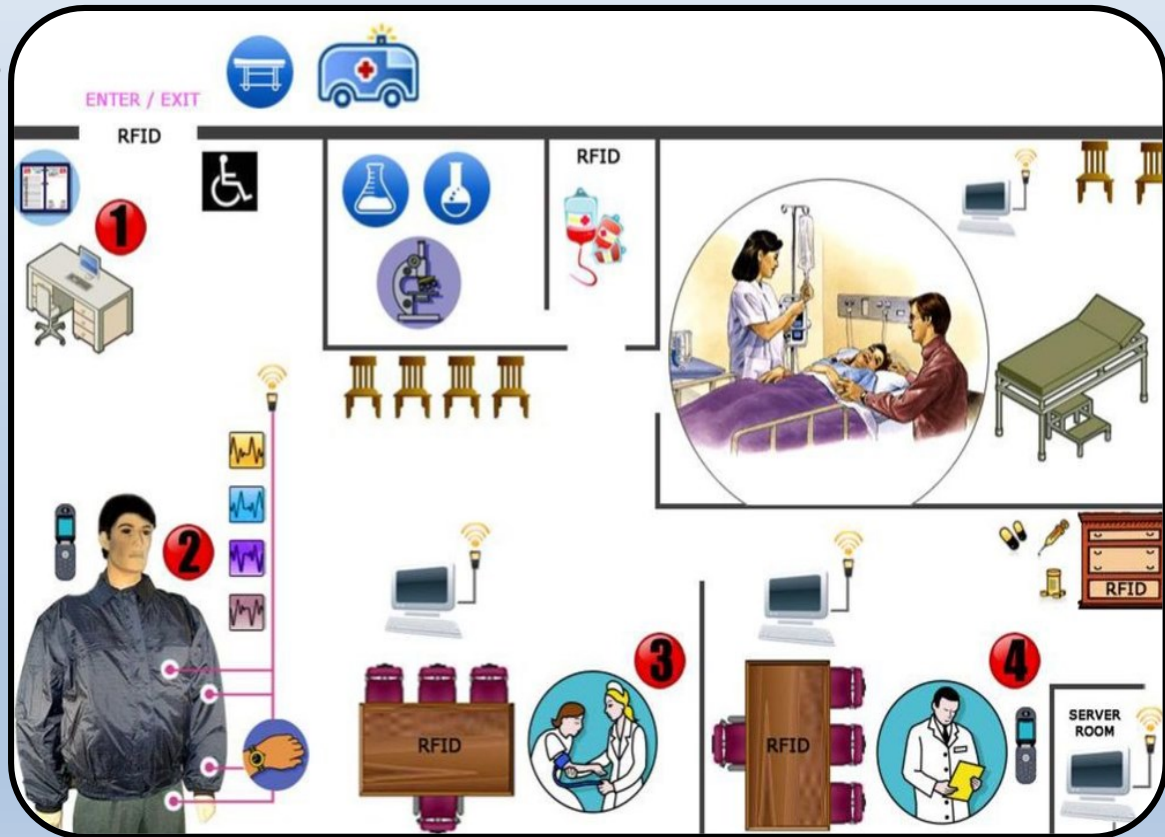


Introduction

WBAN Evolution Answers to Telemedicine Challenges

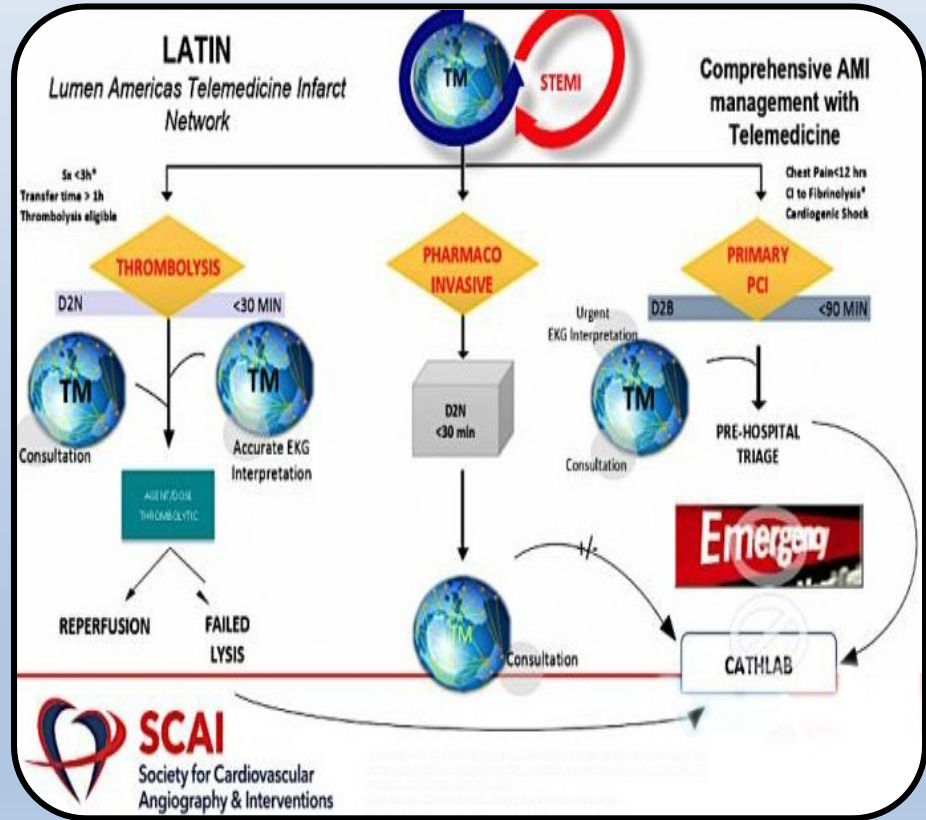
Telemedicine Expectations in WBAN

- Prevention is Better than Cure
- Ecosystem Tele Healthcare Strategies
- Improve the Quality of Life
- Reduce Sudden Mortality



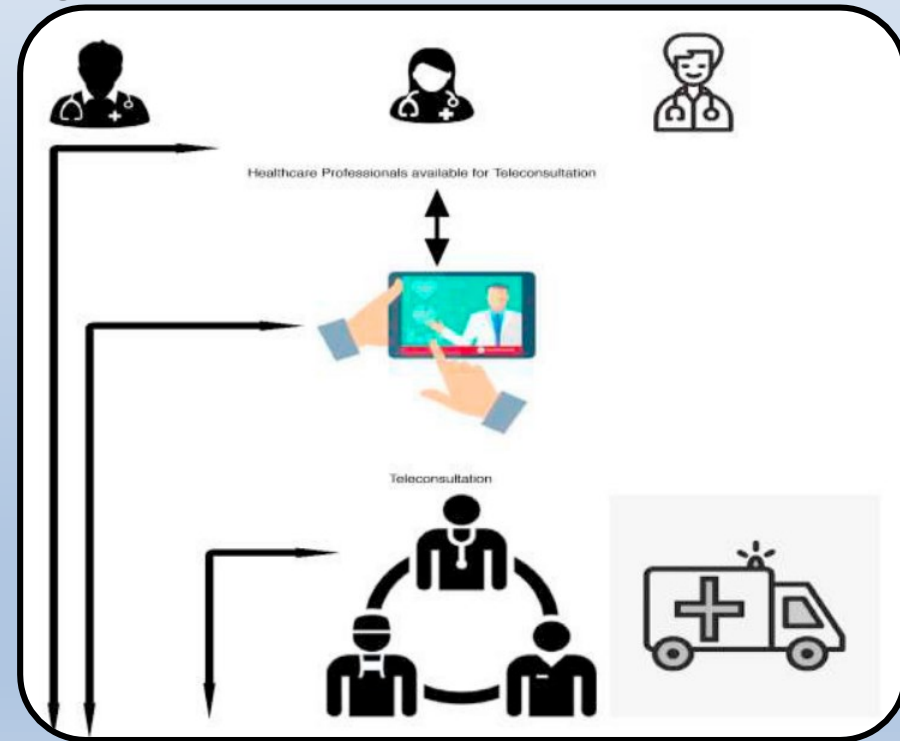
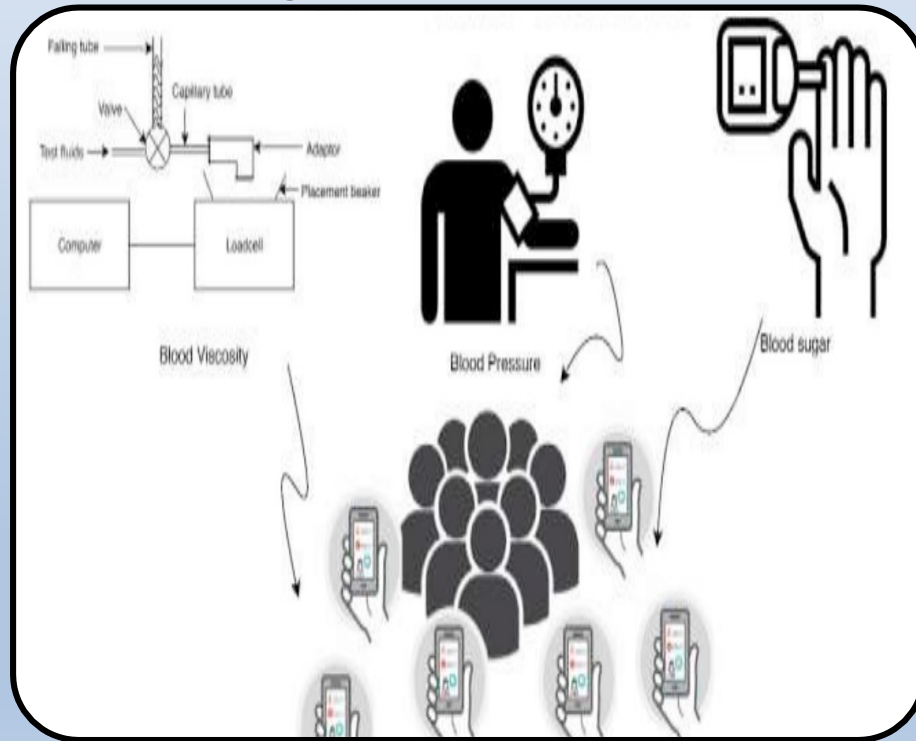
Introduction

- SCAI Telemedicine Token with EKG



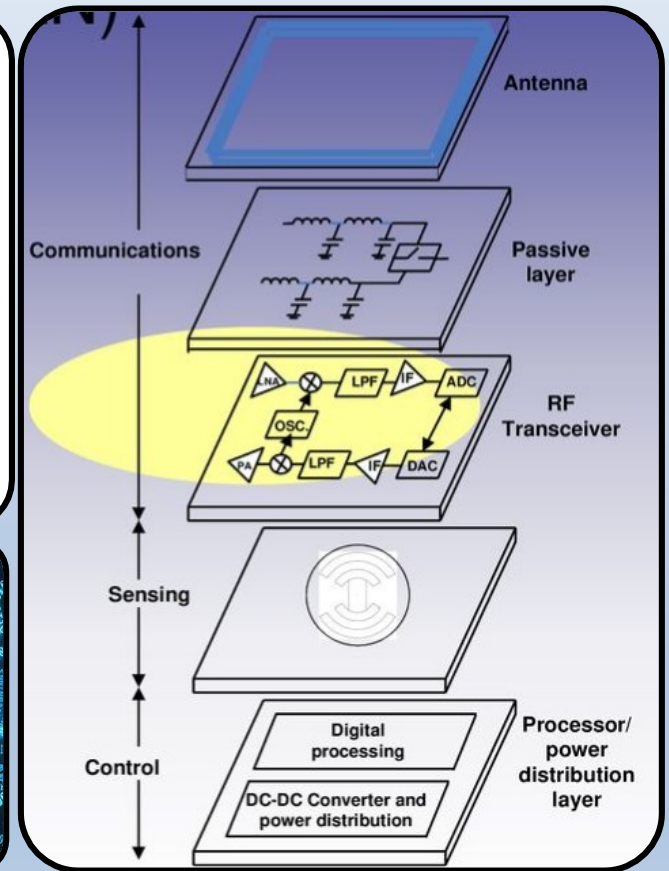
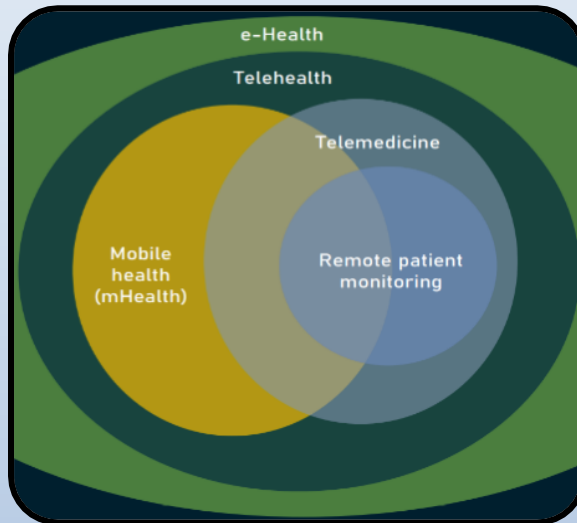
Introduction

- **Primary Medical Care is the Main Foundation of the Health System**
- **Implement a Digital Medical Identity Framework Based on a Tokens**
- **Application in Medicine and Analysis in Humanities**
- **Creating Fundamental Issues and Values by Engineers**



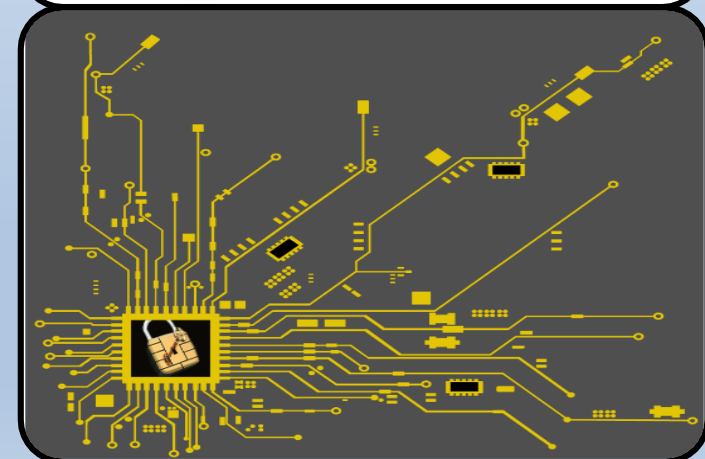
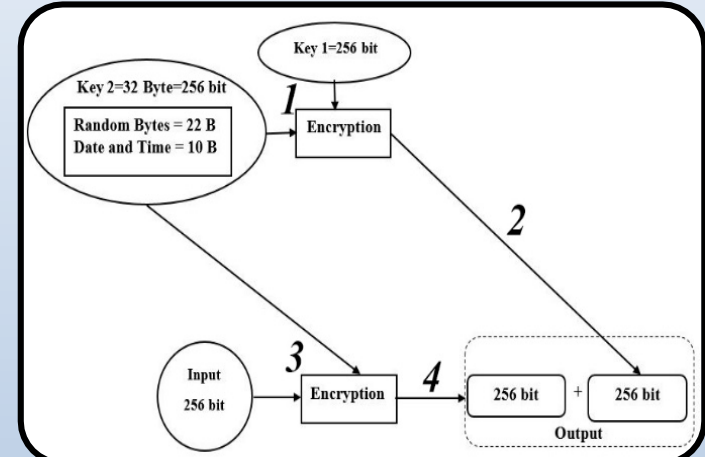
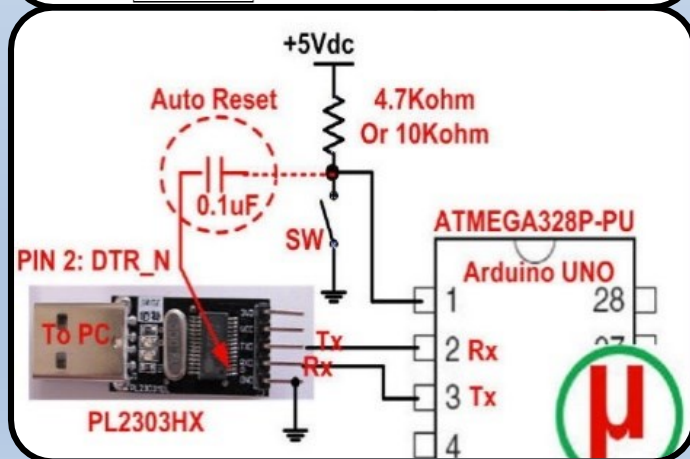
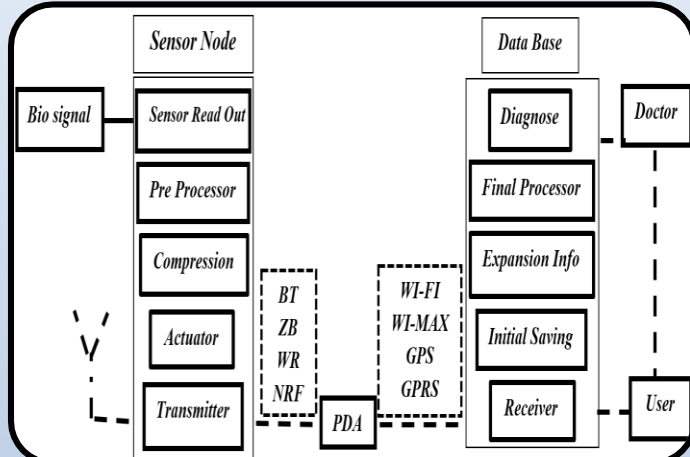
Methods

- Designing a Real Time Medical Care System
- Desire of Humans to Ubiquitous Monitoring Health



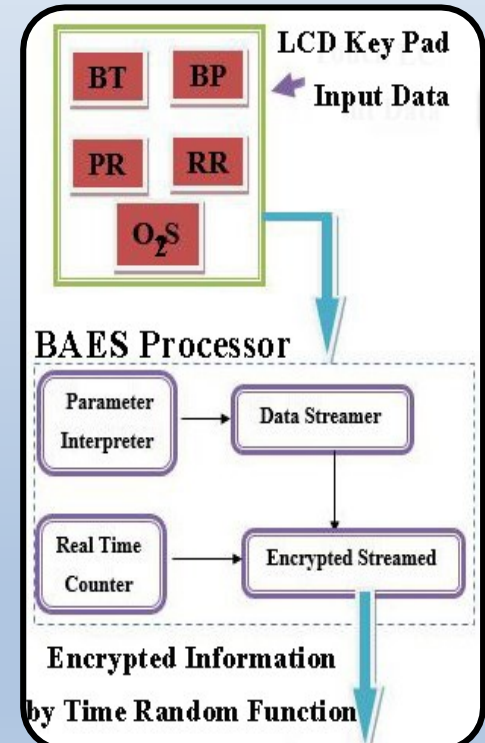
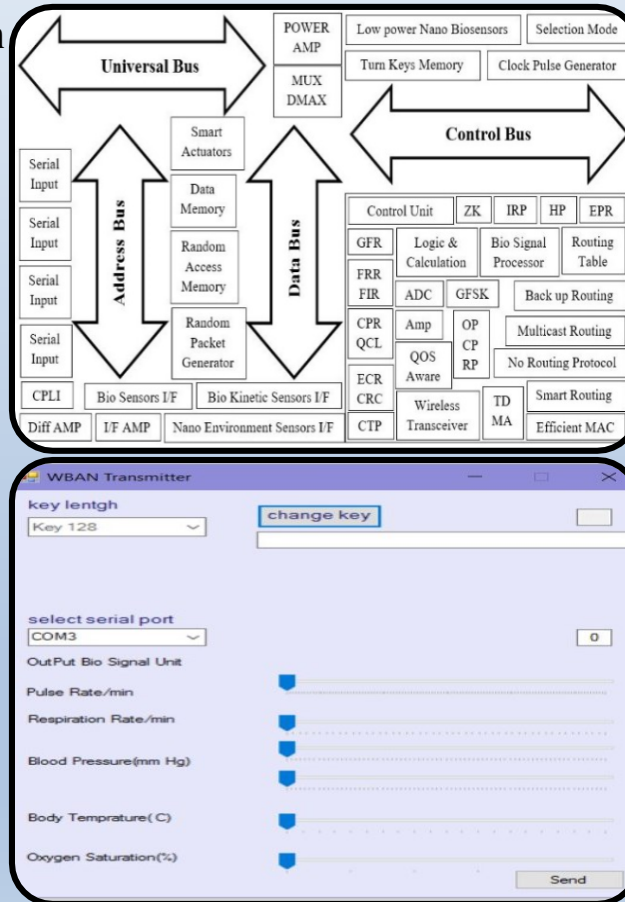
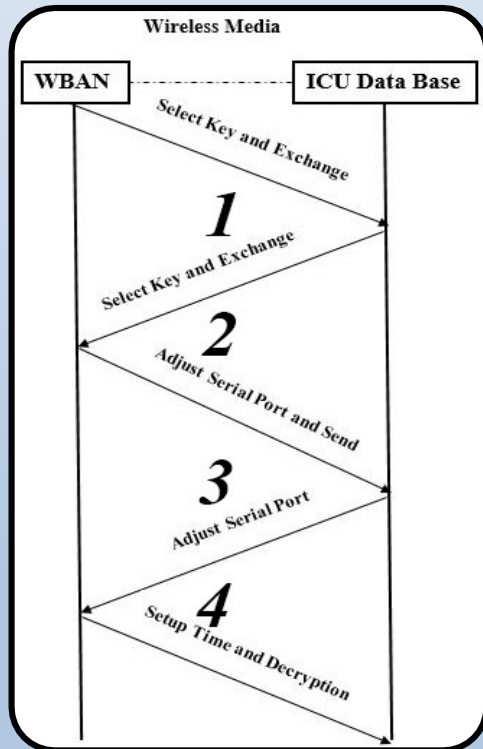
Methods

- Previous Research on Energy Efficient and Security
- Design Real Time WBAN in Medical Care and Simulate in MATLAB and AVR
- Design Biomedical Signal Encryption Module (BAES)



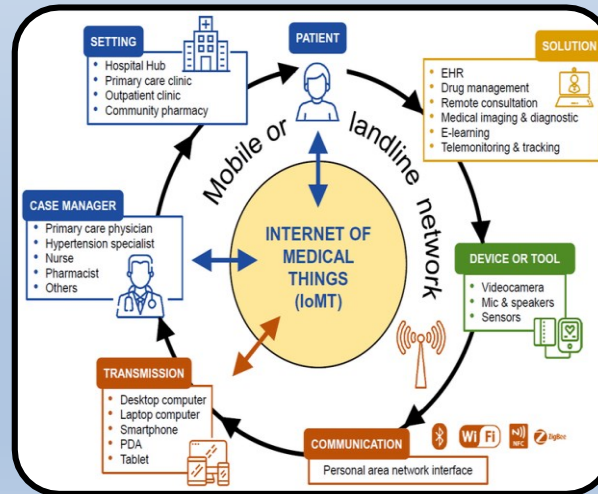
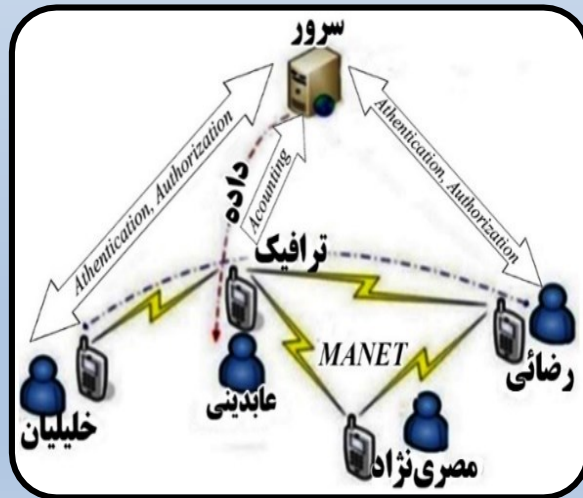
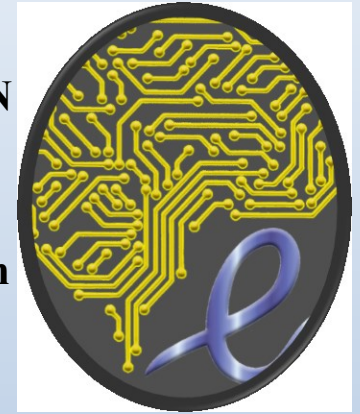
Methods

- Design Energy Efficient Biomedical Signal Processor (BSP)
- Design Application in C# with Deep Learning
- Vital Signs Emulator Software in Proposed WBAN
- Proposed WBAN Platform



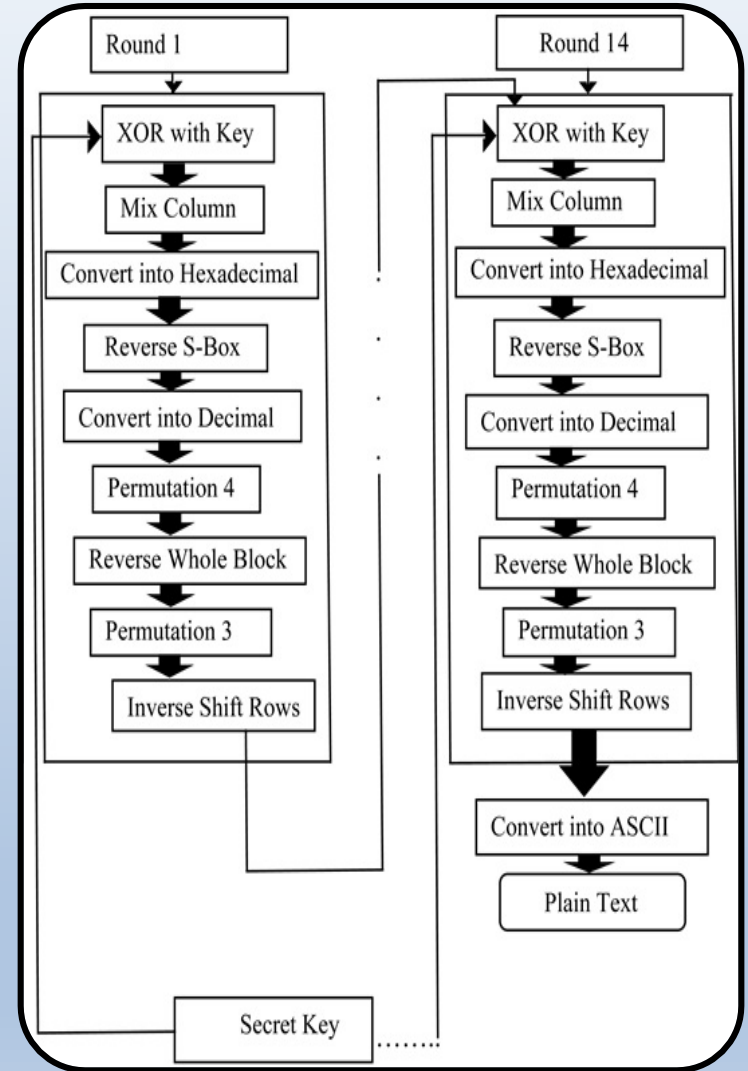
Methods

- Evolution of IoT in Telemedicine by our Platform
- Continuous Monitoring of Vital Signs Digitization
- Confident Medical Data in Intelligent and Mobile WBAN
- Valuable and Sensitive Biomedical Signals in WBAN
- Easy Access to HER Based on WWL Tele-ICU Ecosystem



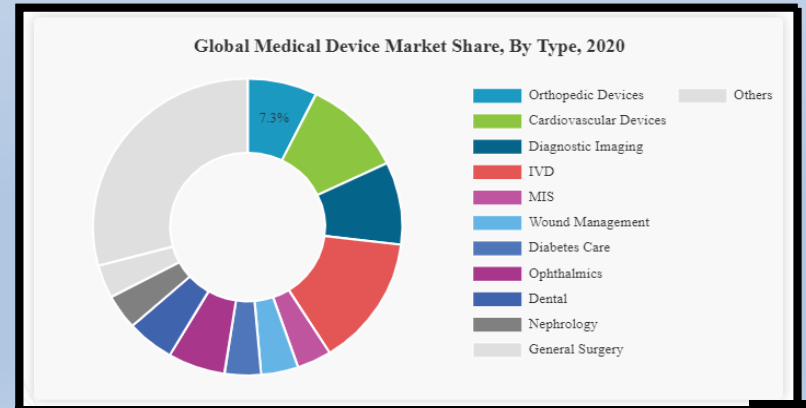
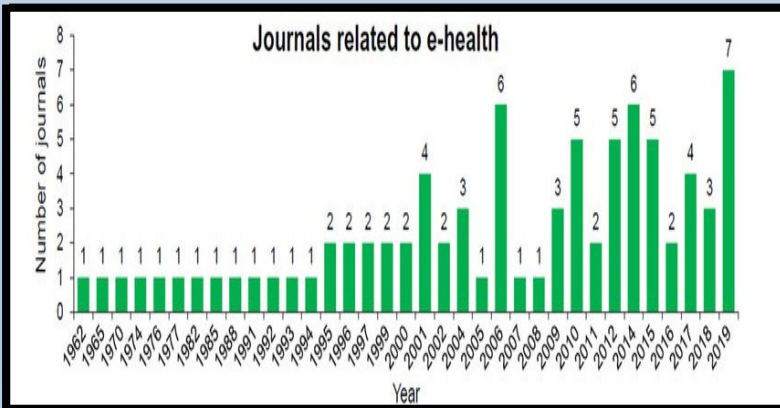
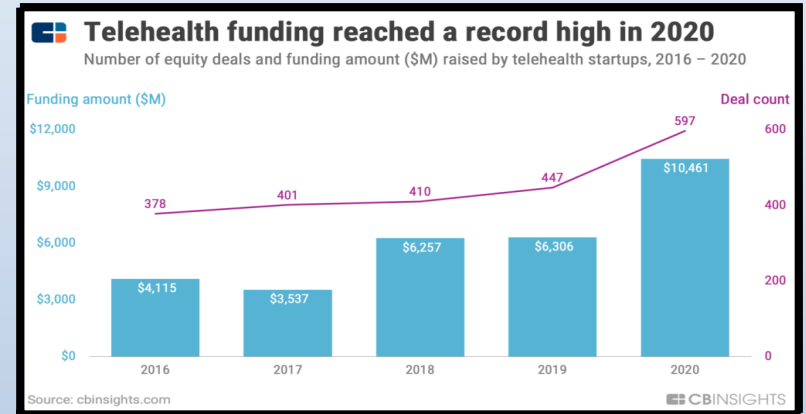
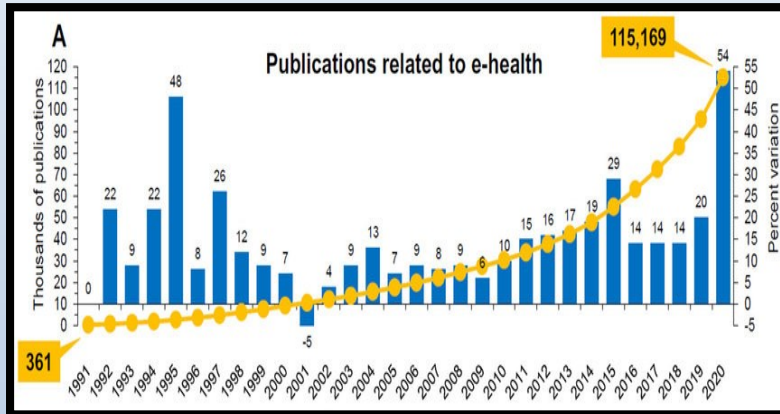
Methods

- Establishment of the World Wide Ledgers (WWL)
- Solve Security and Energy Efficiency Challenges
- Biomedical Signal Processor (BSP)
- Bio Signal Advanced Encryption Standard (BAES)



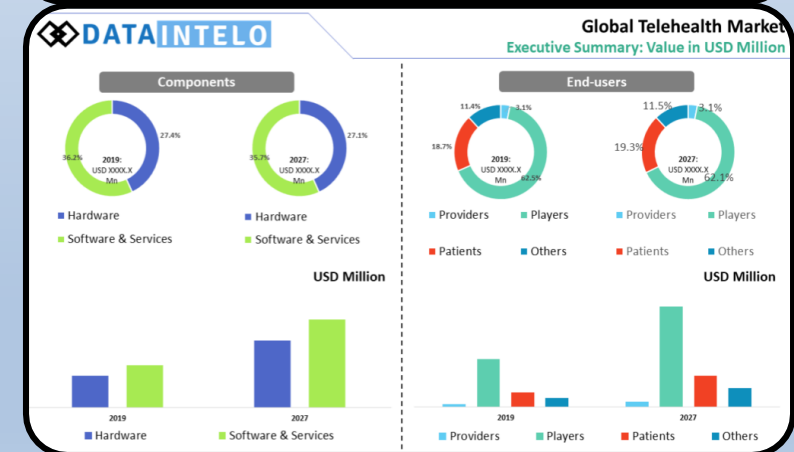
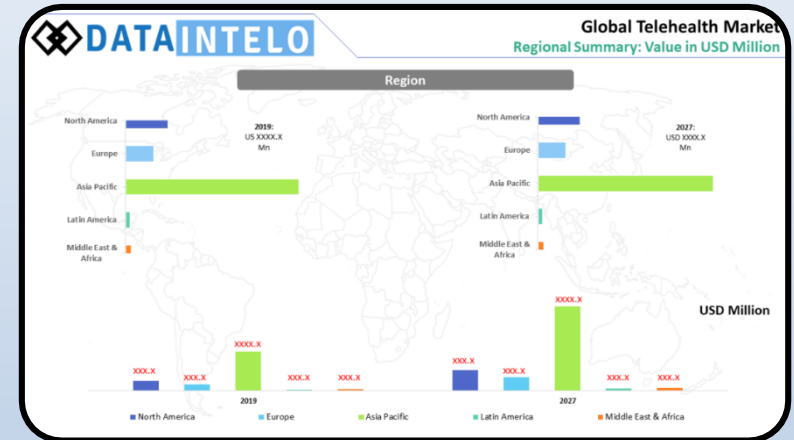
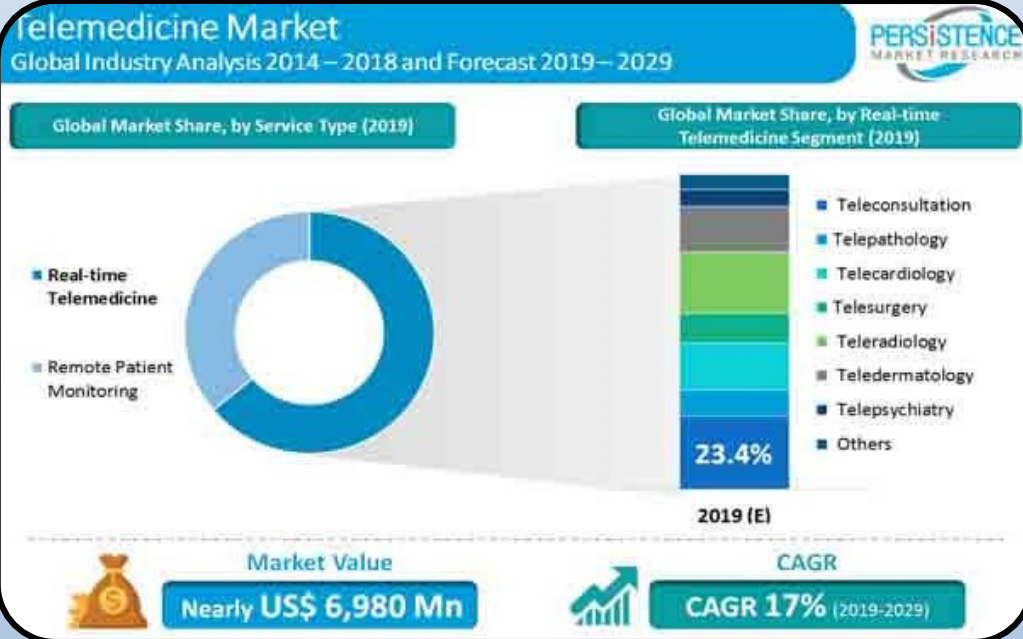
Results/Discussion

- Necessary WBAN in a Healthcare Monitoring
- Maximum Performance with Universal Approach
- Improve Real Time Real Time Telemedicine Platform



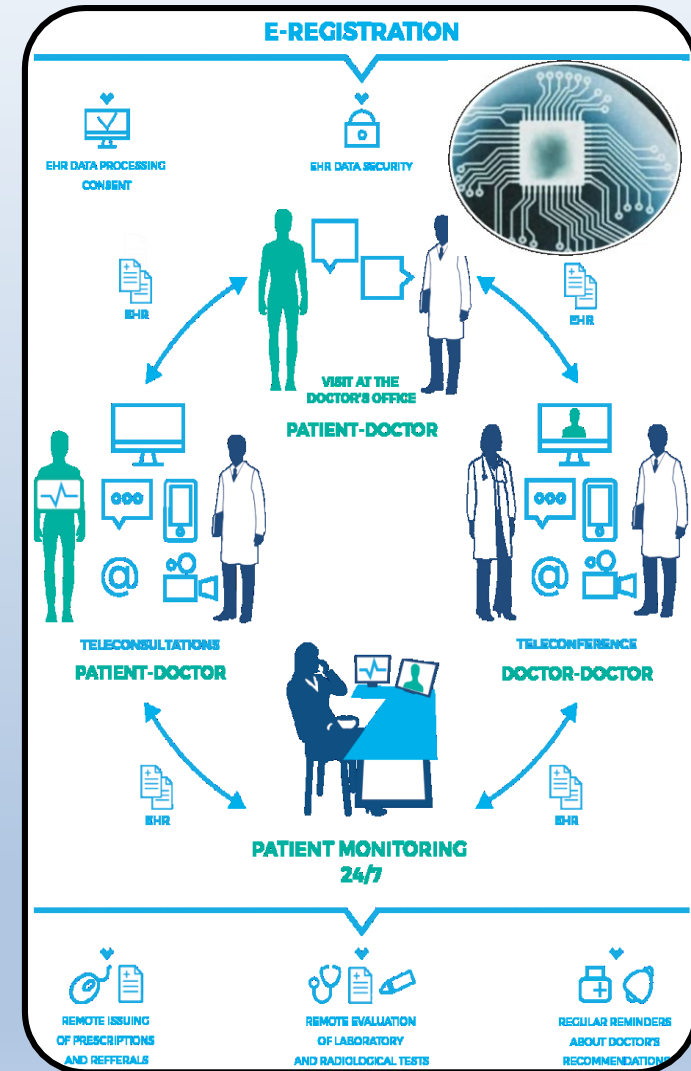
Results/Discussion

- Better Diagnosis and Prevention Better Cure
- A Plan to Improve Health and Medical Care
- Reduce Costs of Treatment and Medical Care
- Implementation in the Network of HealthCare
- Investments Trends in Startups of Telemedicine



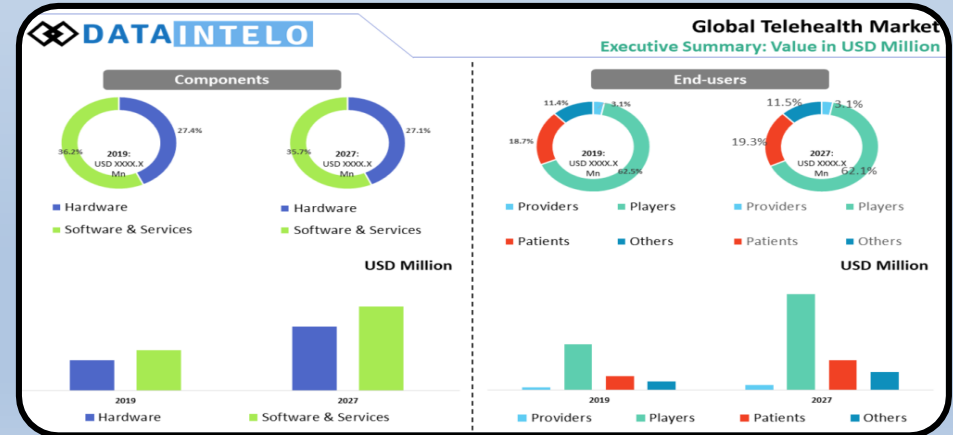
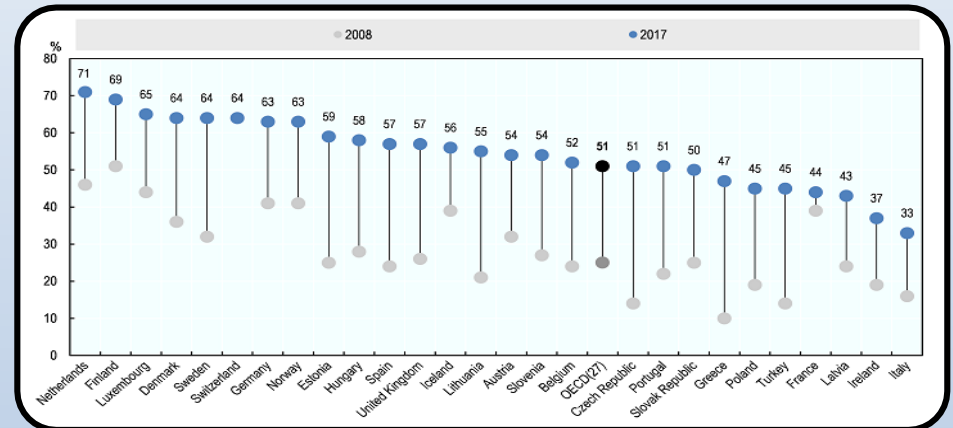
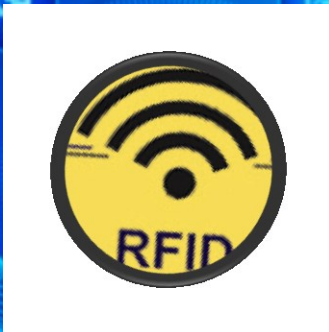
Conclusion

- Extract from Articles and Books Detailed Studies
- A Plan to Improve Quality of Life
- Healthcare System According to WHO Policies
- Directors and Actors in Medical Care Ecosystem



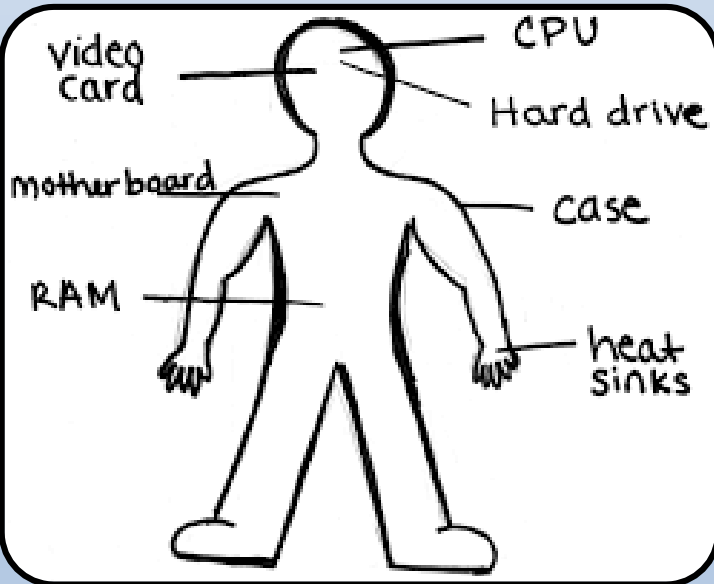
Conclusion

- Application of Innovations by Physicians Testing on Humans
- Better Evaluation of Computational Results and Statistics
- Development of Health Information Technology (HIT) Offices



Conclusion

- Telemedicine Token on the WBAN Platform
- Tele ICU Economic Ecosystem on WWL Policies
- Foresight, Future Research and Open Research
- Development of Electronic-Textile and Smart Clothes
- Integration and Compatibility of Biosensors to Body
- Next Generation of Computers (Body Computer)



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