Emerging Healthcare Trends & IT Advancements: Key Combination for Future Success

Daniel Rodriguez

John Burnley

Objectives
To research IT advancements and improve my understanding of the healthcare industry.
To analyse how IT advancements can aid the healthcare industry at large.

Methods
- Conduct research through a combination of scholarly & practitioner articles
- Reference PAC Health Research Institute for additional research
- Use of observations at different appointments over the past year
- Form predictions and analyse how IT and the healthcare industry could complement each other

Conclusions
- Healthcare providers need to adopt new technologies to address industry trends; this should be best accomplished by using a combination of these technologies
- Value-based care, value-based payment and telemedicine are the main trends that should be the focus for adding new technologies
- Challenges and risks are present when adding new technologies to systems; a healthcare provider must evaluate current immediate needs and make decisions based on those needs

References
Methods

- Conduct research through a combination of scholarly & practitioner articles
- Reference PwC Health Research Institute for additional research
- Use of observations at different appointments over the past year
- Form predictions and analysis over how IT and the healthcare industry could complement each other
Conclusions

- Healthcare providers need to adopt new technologies to assist them with industry trends; this would be best accomplished by using a combination of these technologies.

- Value-based care, value-based payment and telemedicine are the main trends that should be the focus for adding new technologies.

- Challenges and risks are present when adding new technologies or systems; a healthcare provider must evaluate current immediate needs and make decisions based on those needs.
Objectives

To research IT advancements and improve my understanding of the healthcare industry.

To analyze how IT advancements can aid the healthcare trends of 2017.
References


Blockchain vs KSI Blockchain
Clinical measurements, observed symptoms

Clinical Data Collection  

Monitoring and Control

Cloud based storage

Authorized access

Sharing with caregivers

Feedback, Test results, doctor’s opinion

Personal Health Record System
Smart Clothing Healthcare System
<table>
<thead>
<tr>
<th>Product name</th>
<th>Category</th>
<th>Comfort index</th>
<th>Usability</th>
<th>Machine wash</th>
<th>Accuracy</th>
<th>Sustainability</th>
<th>Physiological index</th>
<th>Real-time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Smart bracelet</td>
<td>Wearable 1.0</td>
<td>High</td>
<td>Very easy</td>
<td>No</td>
<td>Low</td>
<td>Yes</td>
<td>Simple</td>
<td>Yes</td>
</tr>
<tr>
<td>Smart watch</td>
<td>Wearable 1.0</td>
<td>High</td>
<td>Very easy</td>
<td>No</td>
<td>Low</td>
<td>Yes</td>
<td>Simple</td>
<td>Yes</td>
</tr>
<tr>
<td>ECG monitoring instrument</td>
<td>Wearable 1.0</td>
<td>Low</td>
<td>Hard</td>
<td>No</td>
<td>High</td>
<td>Yes</td>
<td>Simple</td>
<td>No</td>
</tr>
<tr>
<td>Heart rate monitor</td>
<td>Wearable 1.0</td>
<td>Middle</td>
<td>Easy</td>
<td>No</td>
<td>High</td>
<td>No</td>
<td>Simple</td>
<td>No</td>
</tr>
<tr>
<td>Fall detection device</td>
<td>Wearable 1.0</td>
<td>Middle</td>
<td>Easy</td>
<td>No</td>
<td>Low</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>Smart clothing</td>
<td>Wearable 2.0</td>
<td>High</td>
<td>Very easy</td>
<td>Yes</td>
<td>High</td>
<td>Yes</td>
<td>Complex</td>
<td>Yes</td>
</tr>
</tbody>
</table>
Wanda Cardiovascular Disease System (Wanda-CVD)
Wide Body Area Network (WBAN)