Innovative models delivering mHealth

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Agenda

1. Introduction
2. Summary of Mobile Apps
3. Use of M2M in medical Apps
4. Use of IMS
5. Business Model proposal
6. Barriers
7. Conclusions

Introduction

- **There is no industry where communications play a more critical role than in Healthcare where clinicians need to effectively communicate to the right person about the right patient at the right time.**

- **There is also no industry where information about clients – health records, images, health status - play a more critical role than in healthcare.**

- **The advent of the mobile Internet, the availability of smart phones/tablets, and the introduction of innovative mobile healthcare applications will revolutionize the way clinicians communicate and collaborate.**

Mobile apps

- **Consumer**
  - Medical records
  - Px management
- **Medical**
  - Radiology
  - Medicine calculators
  - Eye chart
- **Emergency**
  - Quick procedures
  - Emergency algorithms
  - Clinical policies
  - Decision rules

Use of M2M in medical apps

- **Monitoring**
  - Elderly
  - Patients
  - Pharmaceutical tracking
  - Telemedicine

AdvaMed
Advanced Medical Technology Association

HEALTH INSURANCE PORTABILITY and ACCOUNTABILITY ACT
HIPAA
ADMINISTRATIVE SIMPLIFICATION: PRIVACY, SECURITY, TRANSACTIONS

- **Emergency**
  - Heart rate
  - Diabetes
  - Remote surgery

IMS:mHealth Service Delivery Requirements for Mobile Operators

- **Mobile operators are in the position to drive significant value for the healthcare industry by delivering value-added services that help improve communication and collaboration for clinicians.**
- **However, to capitalize on the multi-billion mHealth market, mobile operators will need to select the right healthcare communications platform and applications that will enable them to quickly and cost-effectively deploy over their next-generation 3G/LTE networks.**
- **Mobile operators should consider the following key criteria in their selection process.**

1. Carrier-grade LTE/RCS-e compliant platform
2. Unified communications and collaboration solution with real-time patient context
   - HD videoconference, presence, collaboration/sharing, etc
3. Seamless integration with Healthcare communications and IT silos
4. HIPAA compliant
5. Multiple smartphone/tablet OS support

IMS:mHealth Service Delivery Requirements for Mobile Operators

Deployment in IMS Network

Deployment in 3G/LTE Network

Business model

- **Benefits for Service Providers**
  - IMS is an standard multimedia architecture widely adopted by Service Providers
  - It facilitates the introduction of new services, such as mHealth
  - Each new added service requires the payment of a license both in the IMS core and the Application Server, making it almost like a “pay as you grow” feature
  - Only SP’s with IMS architecture can offer QoS

- **New Vertical, opportunity for bundles**
  - The introduction of Unified Communication services such as HD videoconference, presence, collaboration, QoS are very attractive to medical apps, providing an added value compared to free apps.

Barriers

- **Connectivity**
  - Faster LTE adoption to improve the experience of high bandwidth consumption apps such as HD videoconference, also the use of FMC brings better communication networks
- **QoS**
  - Better Medical applications will require ensured Quality of Service
- **Human contact**
  - Medicine is a profession witch requires high person to person skills, and the human touch is essential.
- **Standards**
  - Lack of worldwide standards tend to increase the cost of good quality solutions
- **Security compliance**
  - Medical records are confidential, a strong method to reinforce this is mandatory

Conclusion

- **The use of an IMS based platform for mHealth services provides the following benefits:**
  - Faster access to doctors through availability information
  - Better connectivity for doctors by using WiFi and 3G/4G networks
  - Consolidate devices (pagers, cell phones, and PDAs), and fax, e-mail, calendar, and phone through one application to allow staff the freedom to work smarter.
  - Faster decision making and care by collaborative communication accessing vital patient information anytime, anywhere
  - Reduce Hospital Communication, Paging and Integration Expenses
  - Improve Risk Management and Accountability through Automated Tracking
  - Customize for medical specialties, such as Emergency Department, Cardiology, Oncology, etc.

Thank you

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