Multinational Initiative for Cloud Computing in Health Care

[MUNICH]

Professor Dr. Christoph Thuemmler, Edinburgh Napier University

Christoph Thümler, Armin Schneider, Hubertus Feussner, Julius Müller, Sofyane Khedim, Altaf Sadique, Thomas Jell, William Buchanan, Rajeev Dhand, Lu Fan, Owen Lo
MUNICH Platform

Things

- Surgical Instruments
- Medication
- Patients
- Staff
- Consumables/Materials
- Web services
- Smart device outputs (ECG, Puls-oxy, digital images)

Content

- Patient flow
- Supply chain management
- Financial hospital controlling
- Probabilistic predictive elements (Real time risk assessment OP)
- Infectious disease prevention
- Pre-surgical management
- OP planning

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MUNICH Platform

(Things, Services, Cloud, [VLAN?])

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RFID Objects

Output

- Monitoring of consumables
- Use of objects not necessary for intervention (sponges in MIC)

Technology

- Objects equipped with RFID Tags
- Use of HF tags

Challenges

- Placement of antennas
- Reading distances
- Distortions of reading field

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RFID Staff

Output

- Team readiness
- Location of team members

Technology

- Role specific transponder in pocket
- Use of UHF tags

Challenges

- Placement of antennas

Kranzfelder et al., J Surg Res 2011

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Socio-economic Impact

- Quality of care
- Effectiveness and efficiency
- Patient safety
- Documentation
- Litigation
- Market advantage for Pharmaceutical whole sellers
- Hospital controlling
- Patient empowerment – Cohesion
- Governance (Theatre)
Financial Controlling in Healthcare

- Medicchem Leeds
- Import of pharmaceuticals manufactured in Asia
- Platform to add value by providing additional information for users
- Paid by end-user / value chain participants
- Market advantage by providing valuable services (manufacturing date, shipment, distribution pathway, advanced consumer information warnings, etc.)
- ROI within 12-24 months