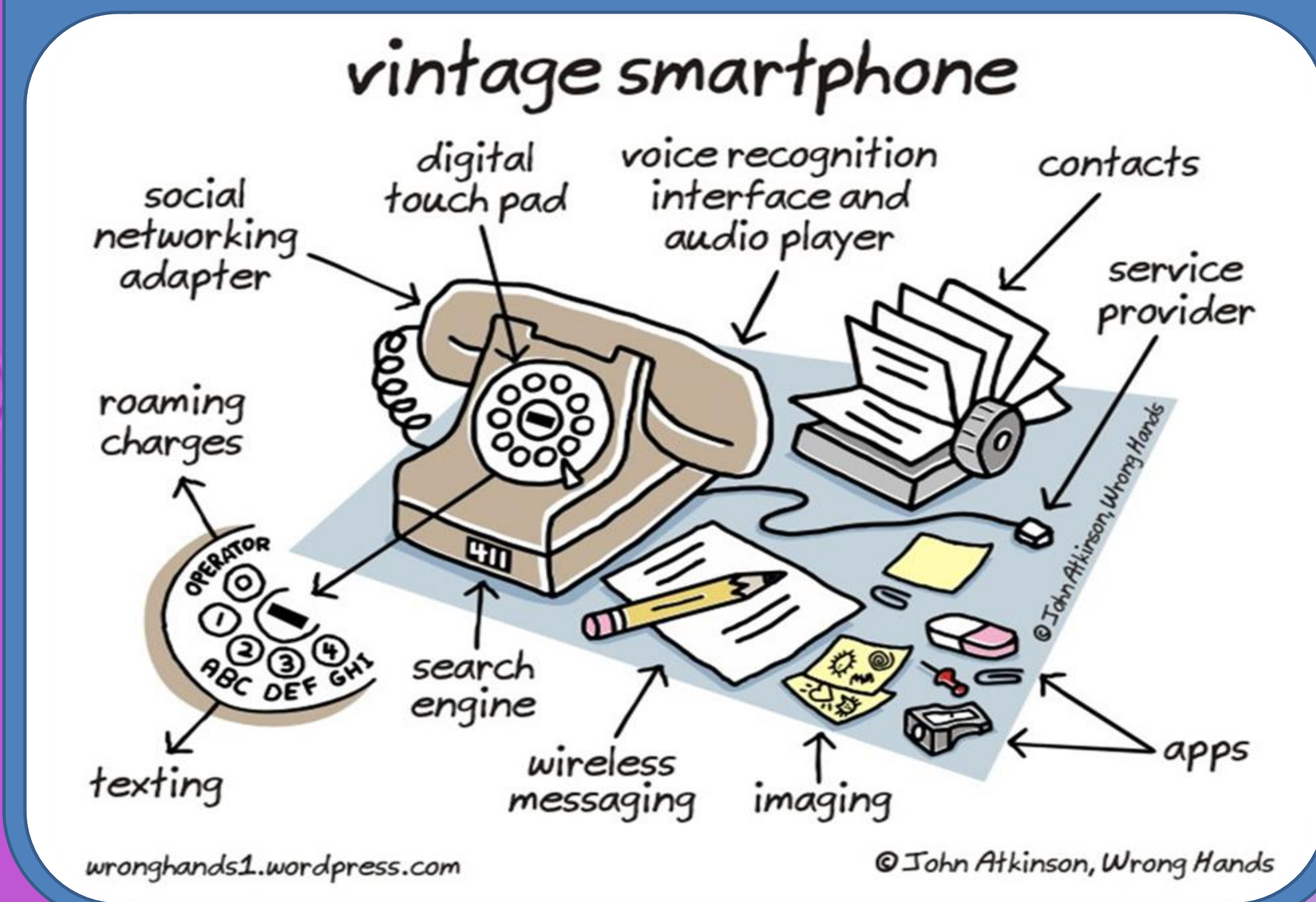


Clinical Communication Transformation – The Power of Secure Smartphones at the Bedside

Annette Brown, BSN, RN Director, Nursing Informatics • Margaret Beaman, PhD, RN, Director, Nursing Research

Problem Pictorial



Organization

EISENHOWER MEDICAL CENTER
Health Care As It Should Be

- **Not-for-profit, academic, community hospital**
 - 463 licensed beds with 71 clinics
 - 3,500 employees; 496 affiliated physicians
- **2015 Awards & Recognition**
 - Most Wired Hospital since 2012
 - Magnet Recognition® & NICHE Recognition®
 - Leapfrog Hospital Safety Score A
 - Ranked in Top 50 US Cardiovascular Hospitals (Truven Health Analytics)
 - LGBT Healthcare Equality Leader since 2013 (Healthcare Equality Index)

Health IT Value™ Results

- S Satisfaction:** Improved Internal Communication
 - “Efficient Alarm System”
 - “Easy Access to Care Team”
 - “Immediate Patient Data”
 - “Clinical Mobility”
 - “Community Quality”
- T Treatment/Clinical:** Improved Care Coordination and Environment
 - 95% text communication
 - < 1 minute to contact care team
 - 16% noise reduction
- E Electronic Information/Data:** Critical Lab Alerts
 - 100% < 1 minute
- P Patient Education:** Marketing and Signage
 - Phone cover logo & patient orientation
- S Savings:** Time
 - 1,000 RN footsteps saved per shift

Conceptual Model

Health IT Value STEPS™

Health IT creates five kinds of value of benefit to patients, healthcare providers and communities.

<http://www.hims.org/ValueSuite>

- S Satisfaction**
Patient; provider Staff; Other
Improved email with patients; improved patient education scores; *improved internal communication*
- T Treatment/Clinical**
Safety; Quality of Care; *Efficiency*
Improved patient safety; reduction in medication errors; reduced readmissions; improved scheduling
- E Electronic Information/Data**
Evidenced Based Medicine; Data sharing and Reporting; Increased use of evidence-based guidelines; increased population health reporting; *improved quality measures reporting*
- P Prevention and Patient Education**
Improved disease surveillance; increase immunizations; longitudinal patient analysis; improved patient compliance
- S Savings**
Financial/Business; *Efficiency savings*; Operational Savings; Increased volume; reduction in days in accounts receivable; reduced patient wait times; reduced emergency dept. admissions; improved inventory

Solutions



Lessons Learned & Implications

Lessons Learned

- Structural Factors
- Triple check Wi-Fi coverage
- Centralized device storage
- Signage about clinical smartphone usage
- Smartphone cases with logos
- Import PBX master communication directory

Implications

- Centralized Communication Hub
- Quick Launch Authentication
- Physical Device Security
- MDM Utilization
- Wi-Fi Coverage
- ADT, Laboratory & Radiology Integration
- Nurse Call Integration
- PBX Phone integration
- Data Center

Purpose & Design

- To evaluate the impact of smartphones at the bedside: the quality of interprofessional communication, timeliness of critical lab result reporting, nurse and physician satisfaction, unit noise reduction and RN footsteps saved.
- **Phase One:** Fall 2014 Pilot Study – Hospitalist Unit completed
- **Phase Two:** Spring 2015 ED, Observation Unit, Acute Rehabilitation
- **Phase Three:** Fall 2015 ICU
- **Phase Four:** Spring 2016 - Enterprise plan

Clinical Feedback



References

Amcom Software, (2012) *Six Lessons Learned About Hospital Smartphone Integration*. [White Paper].

Parker, C., (2014, November) Evolution or Revolution? Smartphone use in nursing practice. *American Nurse Today*, 9 (11) 1-4.

Thomairy, N., Mummaneni, M., Alsalama, S., Moussa, N., Coutasse, A., (2015, October – December) Use of Smartphones in Hospitals. *Health Care Manager*, 34 (4) 297-307.