

MICROSOFT
HEALTHCARE
USERS GROUP
TECHNICAL
CONFERENCE

Held in conjunction with the
2007 HIMSS Annual Conference & Exhibition
February 25 - March 1, 2007 | New Orleans, LA

MS-HUG
Tech Forum
February 25, 2007

Microsoft

MS-HUG
MICROSOFT HEALTHCARE USERS GROUP

HIMSS
USERS Groups

www.mshug.org

Smart Phones and Windows Mobile 5 in a Clinical Setting

The Challenge

- Deliver clinical information “anywhere and anytime”
- Secure delivery
- Wireless (cellular and 802.11)
- Full screen capability
- Single device for phone, calendar, email and system access

Additional Challenges

- Select new, low-cost, comprehensive cellular phone service to all locations where executive staff does business
- Implement service and smart phone technology in a budget neutral manner

Even more challenges

- Select proven, long-term supportable product
- Enforce federal, state and local regulatory and legislative guidelines

The Environment

- 631 Bed
- Academic Health Sciences Center
- Private Medical College
- 25 County Trauma Center

Environmental Assessment

- Aging physical plant presents hostile environment for implementation
- Customer base education varies by age of user and degree of technology desire
- Risk averse organization prefers to avoid early adoption projects

Tactics to assure success

- Resign, move to the Adirondack mountains and learn to live off the land
- Designate project as “learning effort” and assign project to newest (most expendable) employee
- Prepare and issue RFP to cellular providers capable of partnering on effort

Keys to RFP

1. Convertibility of pilot devices
2. Unlimited data access
3. Robust cellular network
4. 24 x 7 Technical support for all devices
5. Discounted plans for employee base
6. 802.11 and Cellular Compatible

AMC Choice

Verizon Wireless®

- Best coverage in desired coverage areas
- Analog service in remote locations
- Discounted plan available through purchasing cooperative
- Dedicated local sales force
- Discounted plans for employee base

Smartphone Device Options

Blackberry® 7250

- 32 Mb Memory
- 240 x 160 Backlit Display
- Speakerphone
- BlackBerry handheld OS
- Integrated 802.11



Smartphone Device Options

Palm® Treo™ 650/700 P/W

- 21 Mb Storage
- 240 x 240 Backlit Display
- Speakerphone
- Palm OS or Windows Mobile
- Mini-SDIO Slot



Smartphone Device Options

UTStarcom® XV6700

- 128 Mb Memory
- 240 x 320 Backlit Display
- Speakerphone
- Windows Mobile
- Integrated 802.11



Pilot Test Selection #1

Palm® Treo™ 650W

- Most well known device
- Accepted by physicians
- Excellent phone quality
- Device cache



Pilot Test Failure #1

Palm® Treo™ 650W

- Extremely difficult to configure
- Limited memory
- No integrated 802.11
- Required battery removal reset procedure

Time lost – 4.5 Weeks

Pilot Test Selection #2

Palm® Treo™ 700W

- Newer model
- Met device cache requirement
- Reputed to solve 650 issues



Pilot Test Failure #2

Palm® Treo™ 700W

- Still difficult to configure
- Limited memory
- No integrated 802.11
- 802.11 Security non-existent
- Still need battery removal reset

Time lost – 3.5 Weeks

Pilot Test Selection #3

UTStarcom® XV6700

- Unknown device
- Integrated 802.11b
- Larger memory
- Fair phone quality
- Fails device cache test



Device Selected

UTStarcom® XV6700

- Most integrated features
- Most on board memory
- Marginal phone quality
(you can't have it all)



Project Status

Successes

- XV6700 Supports secure ICA Client (Citrix®)
- Service coverage excellent
- Supports desired clinical applications
 - Soarian®
 - Calendar
 - VitalWorks®
 - Stentor iSite®
 - Email
 - Epocrates®

Project Status

Successes (continued)

- Integrated secure 802.11 b minimizes data download time
- Text messaging a most used feature

Project Status

Challenges

- Transition between cell and 802.11 use not 'seamless'
- Routine synchronization issues and user error nearly stopped pilot
- Most Smartphone applications do not clean up after themselves

Project Status

Challenges (continued)

- Pager replacement feature not supported by device or cellular vendor
- Reluctant and time constrained customer group expected minimal training need
- Data security requires use of device lock

Project Status

Challenges (continued)

- Treo “device envy” factor difficult to overcome
- Accessories were not “cool”

This issue also became know as:

MICROSOFT
HEALTHCARE
USERS GROUP
TECHNICAL
CONFERENCE

Held in conjunction with the
2007 HIMSS Annual Conference & Exhibition
February 25 - March 1, 2007 | New Orleans, LA

MS-HUG
Tech Forum
February 25, 2007

Microsoft

MS-HUG
MICROSOFT HEALTHCARE USERS GROUP

HIMSS
USERS Groups

www.mshug.org

“The Curse of the Man Purse”



Challenges (continued)

- The “Man Purse” and alternatives are not designed for women



MICROSOFT
HEALTHCARE
USERS GROUP
TECHNICAL
CONFERENCE

Held in conjunction with the
2007 HIMSS Annual Conference & Exhibition
February 25 - March 1, 2007 | New Orleans, LA

MS-HUG Tech Forum

February 25, 2007

Microsoft

MS-HUG
MICROSOFT HEALTHCARE USERS GROUP

HIMSS
USERS Groups

www.mshug.org



Challenges (continued)

- Our answer for women



Project Status

Challenges (continued)

- Replacement cases and accessories add considerable expense
 - Handago™ Spb Pocket Plus \$24.95
 - Vera Bradley Small Cosmetic Case - \$18.00
 - Krusell Leather Case - \$35.50
 - Krusell Clip Package - \$12.22
 - Jabra™ Freespeak BT250 Headset - \$76.99
 - Per device added cost - \$149.66

Pilot Results

- “It looks and feels like a brick”
- “This is awful as a phone”
- “Password makes the phone difficult to use”
- “I have been able to access needed applications from virtually anywhere”

Pilot Results

- Phone is too hard to use as it doesn't have voice dialing capability
- It won't stay on my belt and keeps poking me in the stomach
- I couldn't transfer info from my Sony Clie/Outlook to the phone
- Would rather not have to reboot once/month