Using Mobile Apps to Create Active Patient Engagement
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Conflict of Interest

• James Sturiano – OhioHealth
  • No real or apparent conflicts of interest

• Frank Nydam – VP, Healthcare Solutions, VMware AirWatch
  • Enterprise Mobile Management vendor utilized in this project
Agenda

• Learning Objectives
• OhioHealth – Overview
• Overview of the Mobility Digital Patient Engagement Program
• Transforming the patient’s experience
• Transforming the clinician’s experience
• Results
• Next Steps
• Recommendations
Learning Objectives

1. Identify applications that deliver tailored experiences and build durable, positive interactive relationships with patients

2. Illustrate the use of mobile tools to influence patient behavior and workforce use

3. Explain how to ensure compliance with regulations amidst multiple patient-use for mobile devices
**STEPS**

- **STEPS**
  - Satisfaction
    - Measurements of patient and employee satisfaction
  - Treatment
    - Safety
    - Accuracy of patient notes/ data collection within specimen collection app
  - Electronic Secure Data
    - Mobile Device Management profiles and device provisioning
  - Patient engagement
    - Education / engagement
  - Savings
    - Anecdotal data
    - Workflow efficiency
OhioHealth

- Not-for-profit based in Columbus, Ohio
- 3.6K physicians, 21K associates and 3.6K volunteers
- $3.3B in operating revenue
- 11 hospitals, 50+ ambulatory sites, spanning a 40 county area
- Specialties
  - Cancer Care
  - Orthopedics
  - Sports Medicine
  - Bariatrics
  - Heart and Vascular
  - Neurosciences and Stroke
  - Maternity and Women's Health
  - Trauma Services
- Epic EMR
Polling Question

Is your organization implementing hospital owned mobile devices for patient use?
1. Yes
2. No
3. Currently testing
Vision

Foster digital patient engagement to deepen the patient’s commitment to their health
Drivers for Patient Engagement

• Executive Initiatives
• Continue to cultivate a more customer focused environment
• Take cues from the best customer service experiences that are:
  - Customer centric
  - “Create customer delight!”

• Create clinical efficiencies for care providers through the latest mobile technology
• Create competitive differentiation for both patients and providers
What is the key purpose for the implementation of mobile devices within your organization?

1. Improve patient satisfaction
2. Improve the quality of care
3. Improve patient engagement with the intent being to reduce readmission
4. TBD
The Program

Intent
• Provide a next generation patient experience
• Identify clinical workflows with the potential to benefit from mobile devices

Measurement
• Measurement based on surveys distributed to patients and clinicians participating in the mobile programs
“We’d like to start out being very involved with you but eventually be drawn away to much more interesting cases on Twitter.”
The Program

The Team

• 2 Mobility Engineers
• Business Relationship Managers
• Clinical Leadership and Super Users
• Application Analysts
The Program

Technology
The Program

Technology

- Enterprise Mobility Management
- Mobile Applications
  - Inpatient Patient Portal
  - Outpatient Rehab Patient Assessment System
  - Specimen Collection
  - Mobile Pharmacy
Transforming the Patient Experience
Transforming the Patient Experience

Inpatient Patient Portal

Target Audience

• Grant Medical Center- General Medicine
• Riverside Methodist Hospital- Neurology / Spine units
• Patients capable of using a tablet at the discretion of their care team
“This is an unrealistic expectation when caring for multiple patients”

-Nurse
Rinse and Repeat Workflow
This device is being reset by GroundControl.

Please wait...
This device is ready to be used.
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Scan a code

MyChart Bedside lets you and your family see your medical record while you’re in the hospital.

Step 1
Bring your tablet to a member of the patient’s care team.

Step 2
The care team member will use the tablet to scan a barcode.

Step 3
You’re now ready to use MyChart Bedside!

Tap Here to Start
Scan the barcode to activate this tablet
Results
Patient Results

- 55% of patients felt that the patient portal was easy to use.
- 75% of patients felt that the patient portal improved their communication with nurses.
- 75% of patients felt entertainment apps improved their stay.
Transforming the Patient Experience

Challenges
- Employee comprehension and adoption
- Patient awareness and education around portal applications

Next steps…
- Continued monitoring of satisfaction for patients and employees
- Best practices provided by nurse “super users” shared with entire staff as a script or role play
- Staged deployment (1300 devices) to all hospitals with dedicated support during the first week of each stage; possible dedicated resource for sites struggling with acceptance
Additional Patient Engagement Projects
Outpatient Rehab

Previous Workflow
- Treatment
  - Mobile applications unavailable through laptops
- Survey
  - Distributed by receptionist on laptop

New Workflow
- Mobile applications used during treatment
- Surveys distributed to patients on tablets before, during, or after therapy sessions
Outpatient Rehab

Benefits
- Survey response rates have increased 7% for intake and 12% for subsequent visits over previous quarter
- The use of mobile apps allows for a broader spectrum of therapy to take place

Challenges
- Evaluate workflow when using tablet for survey versus therapy

Next steps…
- Record and evaluate patient observations in real time using tablet
- Evaluational of additional apps
Specimen Collection

Previous Workflow
- Label often printed at nearby nurses station
- Orders and draw lists created manually
- Lack of patient notes

New Workflow
- Phlebotomist is ‘self contained’
- Barcode specimen label prints from on-hip printer
Specimen Collection

Benefits
- Patient information is highly detailed
- Collection and processing information is available in app
- Improved sorting capabilities
- Improve draw list assignment

Challenges
- Support Workflow
- Battery life of device

Next steps…
- Investigate use of smartphone native camera for barcode scanning
- Staged roll out of 800 devices to entire organization
Mobile Pharmacy

Previous Workflow
- Patients able to purchase discharge medications on site
- Patient had to be discharged, then take prescription to pharmacy and wait
- Added wait time when they just want to leave
- Potential for medications to be left unfilled

New Workflow
- Patients sign for and pay for medication at the bedside
- Utilizes iPhone app to sign and pay for prescription
Mobile Pharmacy

Benefits
- An increase in prescriptions being filled upon discharge
- $2K net new revenue stream

Challenges
- Cash payment is inconvenient

Next steps…
- Investigation of an enterprise standard mobile payment system
What we learned

• Employee acceptance is a priority.
• Convenience equals increased patient response
• Clinical involvement
• The "consumer simplicity" of a mobile device doesn’t always translate in an enterprise setting
Recommendations

- Work with “super users” to understand clinical workflows
- Make training a collaborative effort
- Build towards a solution, not an implementation
- Focus on quality interactions
Polling Question

When do you believe your organization will implement hospital owned mobile devices for patient use?
1. Within 12 months
2. Within 12 to 24 months
3. Within 24 to 36 months
4. None of the above
STEPS

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Questions?

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