A Digital Journey-Making it Meaningful

RWJBarnabas Health

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RWJUH’s New Brunswick and Somerset campuses now serve as the flagship hospital of Robert Wood Johnson Health System, New Jersey’s premier health system of choice which currently has $1.5 billion dollars in revenue, more than 10,100 employees, 3,250 medical staff members and 1,733 beds.
Robert Wood Johnson University Hospital is a 965-bed hospital with campuses in New Brunswick and Somerville, offering Central New Jersey residents expanded access to the highest quality medical services and a wider array of innovative therapies available at only a small number of elite academic medical centers nationwide such as our strategic partnership with the Cancer Center of New Jersey which resides on our Campus.
Awards and Recognition

- Ranked among the best hospitals in America by U.S. News & World Report six times and has been selected by the publication as a high performing hospital in several specialties.

- **Robert Wood Johnson Health System Hospitals Named Among 2017 “Most Wired” by Hospitals & Health Networks Magazine**

- The Bristol-Myers Squibb Children’s Hospital has ranked among the nation’s Best Children’s Hospitals by U.S. News & World Report for two consecutive years.

- Rated among the nation’s best comprehensive cancer centers by The American College of Surgeons’ Commission on Cancer

- The hospital’s Comprehensive Stroke Center is certified by the Joint Commission to provide complex stroke care.

- Rated as one of the 50 exceptional U.S. hospitals

- Four-time recipient of the prestigious Magnet Award for Nursing Excellence.

- The AHA has recognized RWJUH with the 2015 Equity of Care Award for its effort to promote diversity and reduce health disparities.
The Most Respected Name in Nursing

Award

• The NDNQI Award for Outstanding Nursing Quality® is a recognition program that identifies excellence in overall performance in nursing quality indicators. An analysis is done annually on participating NDNQI® hospitals.

• 2011 & 2012 Winners:

• Robert Wood Johnson University Hospital, New Brunswick, NJ – Academic Medical Center

• decreased rates of patient falls by 33 percent and pressure ulcers acquired by patients during a hospital stay by 60 percent over three years.
Quality Data

• Falls – decreased nearly 33% over 3 years
• HAPrU – decreased over 60% over 3 years
• HAI – set 2011 goals to meet NHSN 25th percentile
  – 4 of 6 ICUs met goal for CAUTI and VAP
  – 3 of 6 ICUs met goal for CLBSI
• Pediatric PIV – no IV infiltrations for over past 5 years
• Pediatric Pain – hospital medians consistently > 90% compliance with AIR cycle over past 3 years
• RN Sat Survey – over last 5 years
  – Participation improved over 40%
  – Job satisfaction scores improved nearly 17%
IT DOESN’T ALWAYS GO RIGHT
“The Iceberg Hits”

• Within 8 weeks of the implementation concluding, all adult ICU staff were back on paper documentation

• The electronic module was removed

• 5 months later the organization experienced a work stoppage for the nursing collective bargaining unit

• The difficulties experienced by the staff during the electronic documentation initiative was cited as a major issue that influenced the vote
The Ship Begins to Sink

- As a result of the work stoppage all electronic documentation is removed from the organization
- All staff must be retrained 6 months after the work stoppage at significant cost to the organization
What Went Wrong?

- Cultural Values Assessments
- Leadership support
- End user involvement
What could have saved this ship?

Involve the right key stakeholders:

• The RIGHT stakeholders
• At the RIGHT time
• With the RIGHT resources
• For the Right reasons
Redefining your stakeholders

• Valuing Production and Consumption
  – Nursing is the largest producer of data within the EMR
  – In addition there are 3 nurses to every 1 physician
Magic Bullet to Success

Structural empowerment

• SCM End User Council

What made this group different?

The executive power to approve all decisions related to the EMR was delegated to the bedside nurse through this forum.

Physician leadership formally abdicated executive power decisions to the SCM end user group.
The Trinity

Dr. Bershad

Dr. Harangozo

Dr. Covit
SCM End User Council Webpage

- Downtime Patient Data
- Discharge Instructions
- Training
- STAT
- Order Information
- Forms
- SCM End User Council
- SCM ICU Survival Guide
- Accessing and Using RWJ SCM Remotely via Netilla for PC
- SCM Remote Printing Instructions for MAC
- SCM Intranet Communication
  - View My Mailbox Communications
- Nursing LEAN End Users
Make it Personal

ADOPTION
Technology Acceptance Model (TAM) Components - Key Concepts

Created by Fred Davis 1989

- “fundamental determinants of user acceptance” (Davis, 1989)
- behavioral intention (BI)
- Perceived Usefulness (PU)- (National Institute of Health, 2014)
- Perceived Ease of Use (PEOU)- (Davis, 1989)

Figure 2: Original TAM proposed by Fred Davis (Davis, 1986, p. 24).
Stakeholder Analysis

• Essential to project success
Taking a personalized approach to adoption

- Adoption begins at the boots on the ground level

- Stakeholder Analysis
  - Move beyond the project management tool and make it personal and meaningful

- Evaluating key stakeholder groups to identify workflow enhancements that THEY perceive as helpful
The 1980’s- They gave us more than the second British Invasion
Understanding what makes us alike in the use of EMR

• End User evaluation of documentation across the following domains of care identified that 80% or greater of their documentation is the same
  – Nurses
  – Physicians
  – Physical Therapy Respiratory Therapy
  – Care Management
Moving away from specialty specific templates

- Leverage the power of the EMR
  - Use Logic to identify situational context and present the user with information or fields that deviate from the standard at the right time
One note to rule them all

- Piloted with nursing
  - One flowsheet for all adult patients
  - Logic evaluates location and orders
  - Hard codes items that are appropriate for that patient so that the nurse isn’t presented with options that don’t apply or missing items they need
  - EXTREMELY SUCCESSFUL
Application to other disciplines

- Physician
  - Cardiothoracic
  - Trauma
  - Neurology
  - Behavioral Health
Resource Allocations

• Made a conscious decision to devote resources to maintaining logic not notes

• Can evolve more rapidly over time
  – Progresses as you are culturally ready
INTEGRATION
RWJ Vitals Strategy

1 – Cluster or Critical Care Bed
   - Wired Dash or Solar

2 – Med/Surg Bed
   - Dinamap and Carefusion Handheld

3 – Transfer / Transport
   - Roving Dash or TRAM module

Aware Gateway
- Carefusion
- SCM Flowsheet
Healthcare kit

Integrated Wireless Health Kit
Automation

• Secure Text Message Alerts
  – Ebola
  – MEWS
  – PEWS

• End User driven algorithm development
PATIENT CENTERED
Problem: What we believe the patient is experiencing

Problem: What we know the patient is really experiencing

• “We just wanted to see how we can make your stay more pleasant so we woke you up to check”
Information is the key to the patient experience and outcomes

• The challenge of today is:
  – How do we align our communication to keep the patient in the center of our care, without being the center of communication?

http://ministryhealth.org/MinistryMedicalGroup/MinistryMedicalHome.nws
Patient Education 2.0

Old Process

New Process
GOOD EVENING
PCP T.

Your Room
informatics

Attending Physician
Rosenfeld

Nurse
Nicole, RN

Care Tech
John, CCT

My Plan of Care
Speak up and let us know how we can meet your needs.
Hello PCP T.

To view your content, please confirm that you are PCP T.

[Confirm] [That's Not Me]
Teach Me

- Bed Top Exercise - Upper Body
- Chair Exercises - Whole Body
- Asthma Triggers

Survey Me

- Patient Ed Survey
Patient Completed Survey

Choose the sentence that best fits your feelings about this video.

a = I understand all of the information shown to me.

b = I understand some of the information.

c = I do not understand any of the information.

d = This does not apply to me.

Submit
Creates a document in SCM
Patient Engagement Platform Integration

“TEXT at 2pm”

Reinforce M in the Box

- Your patients that opted to receive text messages at admission are now receiving a text at 2pm each day that gives them a brief survey and provides them with a list of their medications and side effects.
- Please ensure that you are reviewing the patient’s medication and side effects using the text at 2pm and ensure that they understand the side effect of their medication.

What is HealthGrid / CareNotify?

- Continually engaged patients through their care journey will not revisit our health system if they received text messages during registration.
- Texts and messages before, during, and after visits
  - Patient outreach and education
  - Medications and updates about your care plan
  - Marketing content about services and medications
  - Return on care
  - Manage care and reminders

- Daily update of the patient’s plan of care message
  - Medications to take and side effects
  - Reminder to take medications
  - Patients can add family and friends to the notifications

- Mobile app
  - Update messages on daily visit schedule
  - 2PM on Day 1, 2, 3, 4, 5, etc.
  - 9AM on Day 6, 7, 8, 9, etc.
  - Only if new updates are available

- Patient satisfaction with their test results and data of birth.
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  - Patients can add family and friends to the notifications

- App
  - Update messages, satisfaction, and information about new medications the patient received will be sent to them.
  - If they have questions about their medications, they can access the app in a way that will help them speak with their care teams.
MOBILE CARE
Mobile Care

- Medical grade case with hot-swappable battery
- Integrated laser bar-code scanner
- Bedside vitals and I/O collection
- Bar-Coded Medication Administration
- Real-time Orders, Documents, and Results review
- Built-in full-iphone telephone for voice calls
EMRs are more than a medical record

- They are the center of an microcosm of possibilities to enhance the health and safety of the patients we serve
Outcomes

• Quality
  – Management of Health Issues
    – Acute
    – Chronic

• Employee Engagement
  – Reduction in over-processing costs

• Patient Experience
  – Improvement in the patient centered experience
The Journey ....

• Focus on your stakeholders
• Leverage your resources
• Integrate and adapt continuously
Thank you!

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