Using Technology to Facilitate a Patient-Centered Care Delivery Process

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BJC HealthCare

- The St. Louis metropolitan area population was shifting to the south and west

- This area was underserved by existing hospitals

- Financial and demographic data supported a decision by BJC HealthCare to build a new, 72 bed, full service, greenfield hospital in the southern corridor of St. Charles County

*B*ackground

BJC HealthCare

- One of the largest non-profit healthcare organizations in the United States

- Delivers services to residents in the greater St. Louis, Southern Illinois, and mid-Missouri regions

- With net revenues of $2.6 billion, BJC's scope of business includes 13 hospitals and multiple community health locations

Progress West HealthCare Center
The Vision

- Create a differentiated patient experience anchored by the following:
  - Guiding Principles for Patient and Family Centered Care
  - Service Theme
  - Service Priorities

- Heavily integrate technology in building design and process development
  - Charter a dedicated team to oversee the I.T. implementations and the development and implementation of patient and family centered processes

Assessment

Old Approach	*New Approach*	*Technology*
Registration in Lobby	Registration at Point of Service	Registration WOWs
Centralized Nurses Station	Care Team Areas	WOWs/Charts in the room
Multiple Sign-on's	Reduced Sign-on	RFID and Biometrics
Decentralized Pharmacy	Pharmacy at the bedside	Applications at Point-of-Care

Old Approach	*New Approach*	*Technology*
Patient Educational Brochures	Computer Based Education	Bedside Flat Screen Monitors
Paper Requisitions sent to Lab	Electronic Orders and Results	Portable/Wireless Phlebotomy Device
Phones/Pagers/ Overhead pages	Hands Free Communication	Wearable Voice Communication Device

Recommendations

Challenges:

- Plan and build a new facility with no resident experts
- Hiring and on-boarding of staff
- Training
  - Staff had six weeks to learn policy/procedures and all new technology
  - No "real" patients
- Medical Staff unknown; undeveloped relationships between medical staff and hospital staff
- No real idea of the number of support staff needed for opening
- Integration and interfaces of technology and processes
- Unproven technology; alpha code in some cases

Successes:

- New facility, new employees facilitated the creation of a patient-centered culture
- Medical Staff new to facility; electronic systems rather than paper systems expected
- Successful integration of multiple systems
- Electronic access to patient record available on-site and remotely
- Increased time spent with patient
- Communication tools well received
- Quiet environment
- Movement toward goal to decrease FTEs/AOB
- Increased patient and employee satisfaction
- Improved safety

"A Brand New Hospital~
A Whole New Approach!"

Appendix and Supplemental Reference Guide

Guiding Principles

- **The patient is the source of control for their care.**
- Care is based on continuous healing relationships.
- Care is customized and reflects patient needs, values, and choices.
- Families and friends of the patient are considered an essential part of the care team.
- All Team Members are considered as Caregivers.
- Care is provided in a healing environment of comfort, peace, and support.
- Knowledge and information are freely shared between and among patients, care partners, physicians, and other caregivers.
- Transparency is the rule in the care of the patient.
- Patient safety is a visible priority.
- Systems are designed to anticipate patients' needs.
- All Caregivers cooperate with one another through a common focus on the best interests and personal goals of the patient.
- Patients are not "discharged" but rather transitioned to another level of care.

Vision

- Service Theme:
  - "Together We Make Progress"

- Service Priorities:
  - Safety
  - Courtesy
  - Expertise
  - Efficiency

Vision (continued)

- Service Behaviors:
  - **ACT** in the best interest of our patients, visitors, and each other

    A – Acknowledge and greet
    Ask how the person would like to be addressed
    Ask how you may help

    C – Carefully listen and take ownership to see situations through

    T – Take time to ensure satisfaction
    Thank them for using Progress West HealthCare

Workstation On Wheels (WOWs)

- Mobile bedside computer
- Tethered bar code readers
- Secured patient medication bins

Registration WOW

- Mobile bedside registration device
- Thermal armband printers
- Document scanners

Wearable Voice Communication Device

- Hands free communication device
- User friendly; recognizes names or titles

- Ability to send broadcast messages
- Stores messages, both voice and text
- Attachable headsets provide privacy and protection patient-sensitive information
- Interfaces with patient call and physiological monitor systems

Portable/Wireless Phlebotomy Device

- Wireless hand-held PC with associated wireless printer

- Wireless printer allows patient-specific labels to be printed at bedside

- Gives an error when patient has no lab orders

- When used properly, you will always draw the right patient for the right lab at the right time

Bedside Flat Screen Monitors

- System allows clinicians to assign educational material to patients

- Patients and families view education material at the bedside when convenient for them

- Facilitates ordering and receiving meals at times designated by the patient

- Provides searchable, helpful tips for leading a healthy, well-balanced lifestyle

RFID and Biometrics

- Sign-in once per workstation and fingerprint authentication is automatic for all covered applications

- No need to remember multiple passwords

- Centralized encrypted storage of application credentials means it works on any hospital within the organization

Pharmacy Applications at Point-of-Care

- Decentralized the pharmacy resulting in Pharmacists working at the patient's bedside

- Pharmacists review medication history with patient and physician to create a drug therapy plan

- Computer-aided analysis and entry of all physician medication orders are done in the patient room by pharmacist