Using Health IT Beyond the EHR to Support Changing Care Models
Session NI4, February 11, 2019

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Ann Lockhart, MN, RN-BC, Assistant Vice President, Clinical Informatics and Transformation, Ochsner Health System
Conflict of Interest

MaryAnn Connor, MSN, RN-BC, CPHIMS, Director, Nursing Informatics, Memorial Sloan Kettering Cancer Center

Jean Adams, RN, BS, CNIO, ACIO, Geisinger

Ann Lockhart, MN, RN-BC, Assistent Vice President, Clinical Informatics and Transformation, Ochsner Health System

Have no real or apparent conflicts of interest to report.
Learning Objectives

• Outline what happens before and after patients are in acute care including care transitions across the spectrum

• Discuss key indicators for demonstrating the impact of changing care models and the role of health information and technology

• Share success stories for how an organization positively impacted patient care and experience
Ann Lockhart, MN, RN-BC, Assistent Vice President, Clinical Informatics and Transformation, Ochsner Health System

Virtual Innovative Patient (VIP) Nursing Care Using Technology to Enhance Patient Care
VIP Project

• Telemedicine technology
• Medical Surgical Nurses use technology to enhance nursing care
• Redesigned care model
• Virtual registered nurse (VN) who is an active supporting member of the care team
VIP Model of Care

TEAM 1

LPN
PCT
PatientS
RN
Attending (Virtual) RN

TEAM 2

PCT
PatientS
RN
LPN
Anticipated Benefits

• Improved HCAHPS scores for communication with nurses, pain management, responsiveness of hospital staff, communication about medications, discharge information

• Early intervention for patient deterioration

• Improved Patient Safety and Quality Outcomes

• Efficiency with Patient Throughput

• Leaner staffing model

• Improve Nursing Turnover rate

• Greater Employee Satisfaction
VIP Project Teams

Clinical
• Pursuit of Value Black Belt (project manager)
• Nursing Informatics – Quality and Safety team
• Nursing Research
• Nursing Unit Teams
• Nursing Leadership

Information Technology
• Nursing Informatics – Information technology (project manager)
• EMR build team
• Information Technology Technical Team
• Telemedicine Team
Implementation

• Scope of practice - LPN/RN/nursing assistant and Virtual Nurse
• Change management sessions- team building, change in practice
• Technology adoption and use strategy
• Operational standards for practice changes
• Go live readiness assessment
• Legal considerations related to video monitors
• Metrics selected and real time dashboard created
Technology

Use of Technology - Patient room monitors:

Hardware Configuration in patient room includes:

- 32 inch computer **Monitor-clinician use**
- Pan, Tilt, Zoom **Camera**
- **Speaker & Microphone**
- **Tablet**

Monitor on patient wall displays:

Room Number, Fall Risk, Pref Language, Treatment Team, Schedule, ‘Paint Board’, Code/RRT event log

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Technology

Use of Technology - Telemedicine Bunker
Technology

Use of Technology- Tablet for Patient use

• Each Tablet has a shared video account to allow for 2 way video between the patient and Virtual Nurse

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Big Wins

• Patient/Family expressing real time/anytime access to lab results and education
• Providers view x-rays in room with patient and family
• Nurse good catches
  • Elevated K+, arranged dialysis
  • Allergic reaction to a medication, notified response team
• Proactive care including early discharge planning
Opportunities

• Technology selection
• Consistent use of technology
• Unit implementation at same time
• Nursing team Communication (report, during shift huddles)
• Handoff report structure and length
• Patient bed placement and assignment of staff nurse
  • Geographical, acuity and repeat assignment
Jean Adams, RN, BS, CNIO, ACIO, Geisinger
Our Values and Strategy

Foundational elements
- Patient and Member Partnership
- Value & Affordability
- Accountability
- Integrated Delivery

Our values
- Kindness
- Excellence
- Learning
- Innovation
Where We Care for People

Pennsylvania

New Jersey

GBH Geisinger Bloomsburg Hospital
GCMC Geisinger Community Medical Center
GJSH Geisinger Jersey Shore Hospital
GSH Geisinger Lewistown Hospital
GMC Geisinger Medical Center
GSACH Geisinger Shamokin Area Community Hospital
GSSB Geisinger South Wilkes-Barre**
GWW Geisinger Wyoming Valley Medical Center
GHS Geisinger Holy Spirit

ARMC AtlanticCare Regional Medical Center, a Member of Geisinger
The Challenges

Significant efforts have been focused on improving health:

- Patient-centered primary care
- Hospital TOC
- Post-acute network redesign
- Best practice pharmacy management

Primary care redesign
- Access
- Visit approach
- Quality
- Patient experience
- Staff experience

Care management expansion
- Primary Care
- Emergency Department

Specialty integration
- Hospital transitions
- Heart Failure
- Chronic pulmonary disease
- Biologics
The solution
Care closer to home
Significant opportunity remains
Small portion of patients drive majority of medical costs

Member Population

- 8–10% Medicare patients
- 55–60% Medicare patient costs

Total Medical Costs
Creating a Care Model in our Communities
- Supporting those with serious & significant health conditions

Geisinger at Home

**Longitudinal Medical Care**
- Comprehensive assessment of disease burden
- Condition optimization & management
- Close coordination with PCP/SCPs

**Integrated Social & BH**
- Social determinants of health
- Behavioral health

**Acute Care**
- Mobile paramedics
- Case Management
- Home Health

**Advanced Illness**
- Plan of care
- Symptom management
- Palliative care
- Timely transition to hospice
<table>
<thead>
<tr>
<th>Who are we focused on?</th>
<th>How are we identifying them?</th>
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<tr>
<td><strong>Multiple chronic conditions and high utilization</strong></td>
<td>Proactive identification from claims analysis</td>
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<tr>
<td><strong>Palliative care or advancing illness</strong></td>
<td>Provider or family referral, claims</td>
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<tr>
<td><strong>High risk hospital or emergency department utilization</strong></td>
<td>Transitions of care</td>
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Regional Medical Director

In-home team

- 1 AP
  - 360–400 pts

  - 4 RNS
    - 3 direct care
    - 1 acute

  - 1 CHA

- 1 AP
  - 360–400 pts

  - 4 RNS
    - 3 direct care
    - 1 acute

  - 1 CHA

- 1 AP
  - 360–400 pts

  - 4 RNS
    - 3 direct care
    - 1 acute

  - 1 CHA

- 1 AP
  - 360–400 pts

  - 4 RNS
    - 3 direct care
    - 1 acute

  - 1 CHA

Social Worker, Dietitian, Pharmacist, Behavioral Health, Palliative Care, Paramedic
Geisinger at Home Enrollment Trending

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<th>Enrollment As Of Date</th>
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<th>Total Disenrolled</th>
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Total Disenrolled: 597
Total Ever Enrolled: 2376
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<td>Immunocompromised</td>
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Note for Provider after both ROS and PE have been completed: all positives show in Red

Geisinger at Home
Provider Visit
Date: 1/11/2019 Time: 4:20 PM

HPI:
Mrs. Test Patient is an 85 year old female seen in her home for a routine initial provider visit.

ROS:
Review of Systems
Constitutional: Positive for fever and unexpected weight change.
Respiratory: Positive for cough, chest tightness, shortness of breath and wheezing.
Cardiovascular: Positive for chest pain and leg swelling.

Physical Exam:
BP 190/100 | Pulse 120 | Temp 101.8 | Resp 24 | Wt 130 lbs (58.968kg) | BMI 22.31 kg/m² | BSA 1.63 m² | SaO2 88%

Physical Exam
Constitutional: She is oriented to person, place, and time. She appears well-developed. She appears distressed.

HENT:
Head: Normocephalic and atraumatic.
Eyes: Pupils are equal, round, and reactive to light.
Cardiovascular: Tachycardia present.
Pulmonary/Chest: She is in respiratory distress. She has decreased breath sounds in the right middle field and the right lower field. She has wheezes in the right upper field and the left upper field. She has rhonchi in the right upper field, the right middle field, the left upper field and the left middle field. She has rales in the right lower field.
Abdominal: Normal appearance.
Musculoskeletal:
  Right knee: She exhibits swelling.
  Left knee: She exhibits swelling.
  Right ankle: She exhibits swelling.
  Left ankle: She exhibits swelling.
Neurological: She is alert and oriented to person, place, and time.
Skin: Skin is warm and dry.
More than $500 PMPM improvement

More satisfied patients
More coordinated care
Lower utilization

38% reduction in ED visits
26% reduction in IP admissions

(per 1,000)
Restoring Meaning to there is no place like home
BEYOND THE EHR

Using Health IT to Support Changing Care Models

MaryAnn Connor, MSN, RN-BC, CPHIMS
Director, Nursing Informatics | Memorial Sloan Kettering Cancer Center
1884
**New York Cancer Hospital**
First U.S. institution devoted to oncology

Nov. 2019
**David H. Koch Center for Cancer Care**
Final large building project

- Hospital moves to present location
- Sloan Kettering Institute
- Schwartz Research
- Rockefeller Research Labs
- Sleepy Hollow first regional outpatient facility
- Hauppauge outpatient
- Rockefeller Outpatient Pavillion (53rd Street)
- Josie Robertson Surgery Ctr.
- Zuckerman Research Ctr.
- Basking Ridge outpatient
- Commack outpatient
- Westchester outpatient
- Bergen outpatient
- Monmouth outpatient
- BIC outpatient
- April Nassau outpatient
By the Numbers

Total Visits at MSK performed in an Outpatient Setting

- Chemotherapy
- Radiation Oncology
- (OP/AXR) Surgery

<table>
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<tr>
<th>Visits Type</th>
<th>2016</th>
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<td>4,184</td>
<td>4,515</td>
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<td>AXR</td>
<td>2,338</td>
<td>2,524</td>
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<td>JRSC Surgical Visits</td>
<td>6,522</td>
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Value-Based Care

Clinical Quality & Safety

Unmatched Patient Experience

Efficiency and Cost-Effectiveness

Innovation, Collaboration, and Continuous Improvement
Technologies Impacting MSK Care Models

Transitions of Care

» MyMSK
  › MSK Prepare
  › MSK Engage
  › My Learning

Key Indicators

» AHS and High Risk Referrals
» JRSC Electronic Care Pathways
» Recovery Tracker Pathways
The Patient Portal
Available to patients since 2006
A digital resource designed to guide people from their initial contact with MSK to their **first appointment**
Our electronic tool that enables the collection and visualization of patient-generated health data (PGHD). MSK clinicians can collect data from new and active patients both remotely and on-site.
Adult Health Screening (AHS)

A self-reported form completed by the patient or designee prior to receiving care
MyMSK

New Patient
Appointment Scheduled
Outpatient Visit
Pre-Surgery
JRSC Surgery
Outpatient Follow-Up

MSK Prepare
MSK Engage

Health Information Systems
My Learning

AHS and High Risk Referrals

Used to assess patient risk factors and initiate appropriate referrals based on positive screening factors and establishes the nurse-patient relationship.
Pre-Surgical Preparation

- Patient Education Documentation Form (PEDF)
- Enhanced Recovery After Surgery (ERAS) Program
JRSC Electronic Care Pathways

- CPOE Orders
  - Pathway Order Within Order Set
- Flowsheets
  - Pathway – Specific Events
- CIS Status Board
  - Display Observations
Patient Education and Discharge Instructions

Patient & Caregiver Education

- Caring for Your Wound after Your Skin Biopsy Without Sutures
  - This information explains how to care for your wound after your skin biopsy without sutures.

- Caring for Your Wound after Your Skin Excision or Biopsy With Sutures
  - This information explains how to care for your wound after your skin excision or biopsy with sutures.
    - Diseases: Adult Cancer Care
    - Categories: Procedures
Recovery Tracker Pathway

- Post-Op RN calls patient the next day
- Patient receives recovery tracker messages
- Office Practice RN receives RT alert or referral from Post-Op RN

MyMSK
- New Patient
- Appointment Scheduled
- Outpatient Visit
- Pre-Surgery
- JRSC Surgery
- Outpatient Follow-Up

MSK
- Prepare
- Engage

Health Information Systems

My Learning
2017 JRSC Quality Metrics

36%

2,799/
7,695
AXR
Cases
Thank You

MaryAnn Connor
connorm@mskcc.org
Questions