Streamlining Patient Flow using IMT OQM™ Business Process Tools

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Introductions

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We strive to be just one thing:

IDENTITY
Niche Focused
Identity Challenges
Innovative
Agile

SOLUTIONS
Healthcare
Life Sciences
eGovernment
Insurance & Payers

EXPERTS
Global Recognition
Proven (100+ Projects)
End-to-End Solutions
Committed to R&D
About Cabell Huntington

• Located in Huntington, WV
Serving 29 counties in WV, eastern KY and southern OH

• 303 bed teaching hospital affiliated with
Marshall University School of Medicine

• The main campus of Cabell Huntington Hospital (CHH) includes the Edwards Comprehensive Cancer Center, Hoops Family Children’s Hospital, and Marshall Health

• CHH also has several outlying health facilities, family medical centers and a unique outreach facility called Huntington’s Kitchen.
Challenges with orders and results

Cabell and Marshall Health faced many challenges when managing the clinical orders and results lifecycle between physicians and our lab and imaging centers. Like many healthcare organizations, we still had these challenges:

- MH’s EMR structures orders differently than CHH testing systems required.
- Our EMRs, lab and diagnostic system may use different test and result codes.
- MH Ordering system does not know Cabell’s patient MRN needed by the billing system.
- CHH required a new registration before an MH order can be loaded.
- Electronic results routing challenges means results are received but not tied to the order/provider.
Challenges

- Competing priorities for CHH, ECCC, MH
- Order catalog alignment
- Resistance to change
- Acceptance/trust of data between facilities
Multiple data sources

- Cabell Huntington
  - Affinity
  - Cerner
  - SoftLab
  - PACS

- ECCC
  - Affinity
  - Varian

- MarshallHealth
  - Centricity
  - Allscripts TouchWorks EHR
Impact

- Patients’ dissatisfaction
- Dual registration between CHH and MH
- Significant rework required
- Issues with missing orders and results
Prior to OQM

Stacks of orders and registrations for radiology accounts would build up each day, waiting for manual processing for end-of-month billing.
Project Goals

- Identify correct patient across continuum
- Streamline order processing for efficiency
- Send complete, signed orders downstream
- Tie results to the correct patient, for the correct provider
Project Phases

1. Implement MDM
   - Resolve Potential Duplicates in Sources
   - Resolve Potential Linkages across Systems
   - Ensure that Patients across Hospitals are the Same Patient
     (Mary Jones @ CHH = Mary Smith @ MH)

2. Gather Requirements
   - Workflow analysis
   - Analysis of ADT and orders feed
   - Mapping data fields between disparate systems
   - Order compendiums mapped between systems
   - Development of custom logic

3. Deploy OQM
   - Lab specimens
     (Registrations & Orders)
   - Radiology walk-in clinics
     (Registrations)
OQM Workflow Process

1. Order written and specimen collected
2. Patient validated against MDM and codes against Compendium
3. Specimen received in Lab
4. OQM – Orders registered and released (and patient created if needed)
5. Insurance Verification Check
6. Orders sent downstream
7. Results matched to patient and sent to correct provider

Order documents in EHR
Orders fed to EHR and ancillary systems
Coding Process Improved
Eliminated scanning of registration and order documents
Appropriate notification of results to provider
Improvements

• Eliminated delays in registration
  – Reduced overtime required to update registration
  – Reduced delay to 0 days; registrations are immediate
  – Eliminated mountains of paperwork and scanning
  – No missing orders
  – CAC program “reads” orders to aid in coding
  – Reduced creation of duplicate orders in ordering system due to unmatched incoming results
Specimen Process Improvements

- Live Since March 2015
- Exception-based Workflow
- Specimen accounts created in OQM: 32,008
- Lab accounts processed using OQM: 62%
- Old Process: 4-6 Minutes Per Order
- New Process < 1 sec
- 2,670 Hours Saved (approx. 1.25 FTE)
Lab Walk-in Process Improvements

Live Since Sept 2017

Exception-based Workflow

Old Process: Sign-in to Collection 28m 17s

NOW 17min

23,160 OQM Registrations Annually

4,355 Hours Saved (Patient throughput times)
Radiology Process Improvements

- Live Since Jan 2017
- Old Process: 2-5 Minutes Per Order
- NOW: <1 sec
- Exception-based Workflow
- 20,831 OQM Registrations Annually
- Orders Available On Every OQM Registration
- NOW: 1215 Hours Saved (approx. .58 FTE)
Facility Billing Registrations

• Clinic Billing Office Experience
  – New Scheduling and billing feeds are utilized
  – Staff determines if existing account may be used or if new account must be created
  – Visit matching app is layered on OQM and MDM technology
  – Allows staff to create registrations within seconds
Billing Process Improvements

- Live Since Feb 2017
- Exception-based Workflow
- 61,008 OQM Registrations Annually
- Old Process: 15 Sec to 1 Min Per Account
- NOW: <1 sec
- 593 Hours Saved (approx. .3 FTE)
## Value and Benefits from OQM

### Operational Productivity
- Automated hospital registration
- Eliminates duplicate order entry processes
- Web-based access to all ordered tests for the patient to ensure all are performed
- Easily route orders to other facilities within the health system

### Patient Satisfaction
- Faster check in
- Eliminates responsibility to handle orders
- Reduction in duplicate tests across providers

### Physician Satisfaction
- Eliminates risk of lost orders
- Viewable order statuses to track progress
- Automates the EMR orders flows
- Automates results posting into EMRs
Thank You!

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• Share this story with your colleagues:
  LINK TO WEBINAR IN YOU TUBE
The Cost of These Issues

Cost to the Lab or Imaging Center

A Lab supporting 150 Ordering Providers can spend over $200K/Year in manual registrations and order issue resolution

5 minutes per order to resolve issues

90 minutes spent per week per provider
- Creating new registrations
- Manually entering orders
- Faxing results

Cost to the Provider Practice

A Practice with 20 Providers will spend over $40K/Year fixing order and result problems

3 hours per provider per week to:
- Locating missing orders
- Handling results
- Providing missing info to the lab staff

Up to 60 hours per week to track down results and clarify orders