Inpatient Case Study

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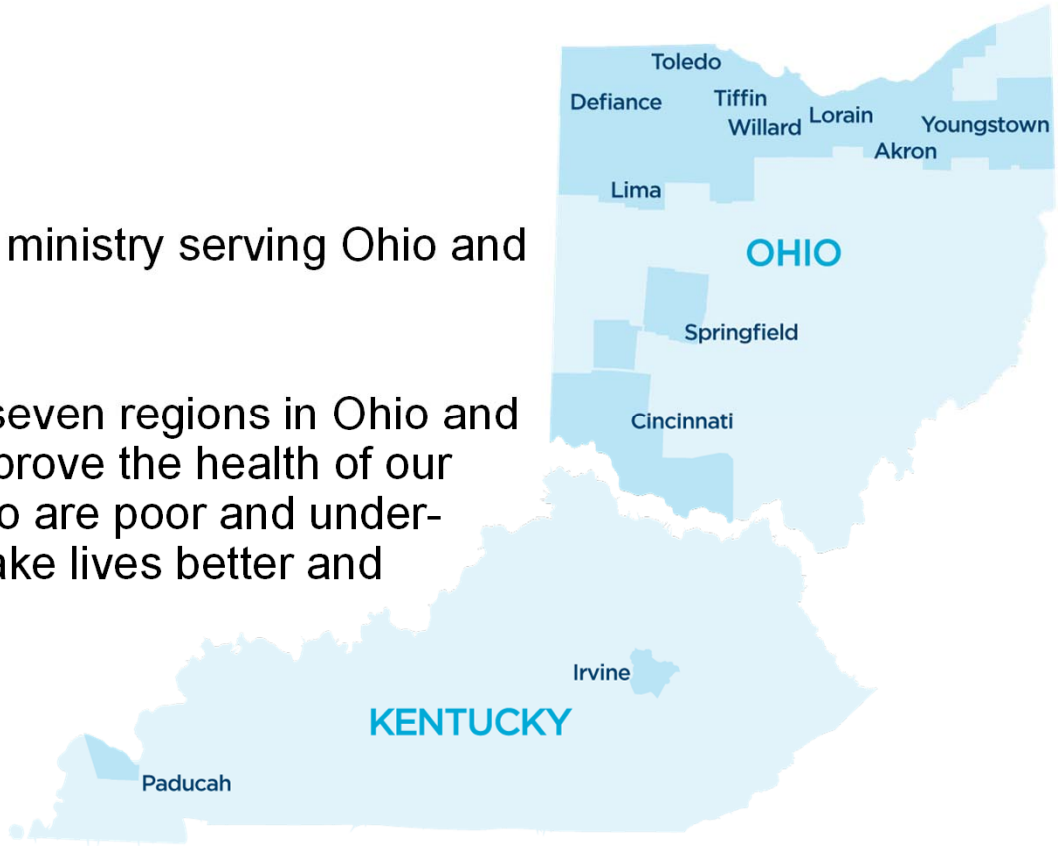
Our Footprint

- Mercy Health is a Catholic healthcare ministry serving Ohio and Kentucky.

- Mercy Health is one ministry serving seven regions in Ohio and Kentucky, pursuing one Mission to improve the health of our communities, emphasizing people who are poor and under-served. Together, our passion is to make lives better and make healthcare easier.



Our Impact

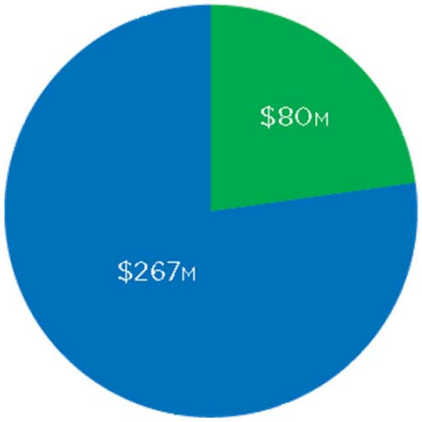
Communities We Serve
- Mercy Health — Cincinnati
- Mercy Health — Kentucky
- Mercy Health — Lima
- Mercy Health — Lorain
- Mercy Health — Springfield
- Mercy Health — Toledo
- Mercy Health — Youngstown

Serving Through Our Partners
- Akron — Summa Health

Facts & Stats
- Nearly 500 Places to Receive Care
- 23 Hospitals
- 7 Senior Health and Housing Facilities
- 7 Home Health Agencies
- Over 33,500 Employees
- 1,300 Employed Providers
- $10.1 Billion/Year in Economic Impact in Ohio

In 2017:
- 6.8 Million Patient Encounters
- $6.8 Billion Total Assets
- $4.7 Billion in Net Operating Revenue

Our Mission In Action



Investing over $1 million a day

- In 2017, Mercy Health invested $384 million to benefit the communities where we provide care, most of it targeted to help people who are poor and under-served.
  - $267 million directly benefited the poor and under-served.
  - $80 million went to benefit the broader community.

CarePATH Overview

CarePATH is Mercy Health's branding of Epic

CarePATH is a comprehensive, safety-oriented, patient-centered clinical information system using Epic information technology.

The "PATH" in CarePATH is: Patient-centered Access to Team-based Healthcare

Informatics Governance Structure

- Build is governed by the clinically led CarePATH Informatics Committees
- Recommendations for system changes come from the end users and are vetted with the respective system committees
- Inpatient Informatics is co-chaired by two providers (medical and surgical) and two nurse leaders
- Ambulatory Informatics is co-chaired by both providers and a RN
- Currently have 15 certified Physician Builders, including two from our Connect partner and three working to certify

Recent Accolades

2018 HIMSS Davies Award Recipient

HIMSS Stage 7 Certifications

- All Mercy Ambulatory Practices
- 7 Acute Care facilities

Most Wired Advanced Winner

System Uptime Recognition from Epic

Epic Summa Cum Laude for Honor Roll

MERCYHEALTH

Flowsheet Charging for Bedside Procedures

Background

- **Bedside procedures** are inpatient procedures that fall outside the scope of routine services included within the inpatient room and board rate[1]
- Historically, it has been ambiguous whether organizations could charge for bedside procedures in addition to the room and board rate, but in the last several years, CMS provided guidance that charges should be uniformly applied to both inpatients and outpatients[2]
- Capturing bedside procedure charges became a revenue cycle operations initiative in late 2016

[1] CMS, *Provider Reimbursement Manual*, Part I, Section 2202.8, 2018.

[2] CMS, *Provider Reimbursement Manual*, Part I, Section 2202.4, 2018.

Problem: Workflow

- Initially, bedside procedures were accessed from the Charge Capture navigator, a separate section from the Flowsheets activity where most clinical documentation took place

- Having charging and clinical documentation in separate sections of the chart resulted in a cumbersome workflow that led to missed opportunities to capture charges for billable services performed

- Nursing leadership provided feedback that they were struggling to operationalize charging for bedside procedures

Problem: Missed Revenue

- Revenue cycle operations inferred that we were leaving missed revenue on the table
  - Charge volumes for bedside procedures were lower than expected compared to the census at each of our acute care facilities

- Believed that simplifying the charge capture workflow would lead to:
  - An increase in gross revenue
  - Improvements in productivity reporting for nursing units
  - A more accurate accounting of the cost of care for each of our patients

Opportunity

- Both revenue cycle leadership and clinical leadership recognized the need for a more streamlined workflow

- While providing patient care will always be the priority for our nurses, capturing revenue enables Mercy Health to fulfill its mission to improve the health of our communities with emphasis on the poor and under-served

- CarePATH continuously looks for opportunities to improve efficiency
  - We believed we could streamline the workflow so that clinicians could capture missed revenue while still prioritizing patient care

Design

- Hypothesis: If we embed charge capture within the flowsheet rows where clinicians are spending most of their documentation time, they will be more likely to capture charges

- The CarePATH Orders, ClinDoc, and Hospital Billing teams worked with Revenue Cycle Operations to develop a flowsheet charging workflow

- The charge rows appear within the flowsheet where the documentation of the procedure takes place

Process

- We implemented flowsheet row charging in two phases:
  - Phase 1 included 22 of the most commonly performed bedside procedures that were less complex to create (July 2017)
  - Phase 2 introduced an additional 12 flowsheet charge rows (September 2017)
- Collaborated with nursing leaders to determine where to incorporate chargeable flowsheet rows
- Built the flowsheets rows to be shared by all Mercy Health sites
- Reorganized the Charge Capture navigator into 4 standard folders
  - Our goal was to make the Charge Capture section more intuitive and help eliminate missed revenue

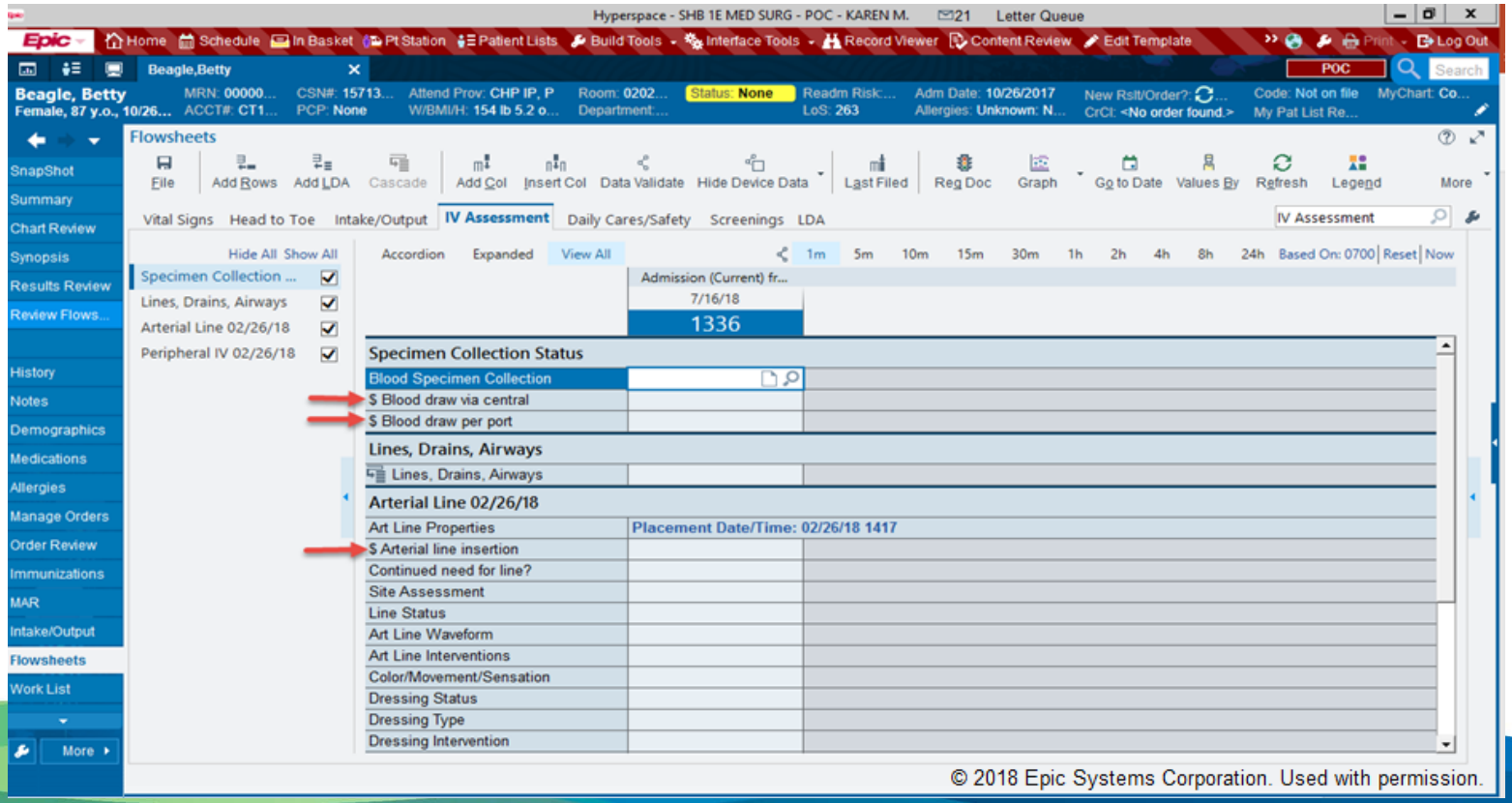
Flowsheet Row Charges Added Phase 1

- Arterial line placement
- Chest tube insertion
- Gastrostomy
- Central line insertion
- Intraosseous line intubation emergent
- Disposable NPWT <= 50 sq. cm
- Disposable NPWT > 50 sq. cm
- Standard NPWT <= 50 sq. cm
- Standard NPWT > 50 sq. cm
- Cystostomy tube change
- Temporary external pacing
- Continuous bladder irrigation
- Bladder scan
- Blood draw from central line
- Cath urethra simple- Foley
- Cath urethra straight
- Aspiration bone marrow
- Biopsy bone marrow
- Lumbar puncture diagnostic
- Paracentesis
- Phlebotomy therapeutic
- Thoracentesis without imaging

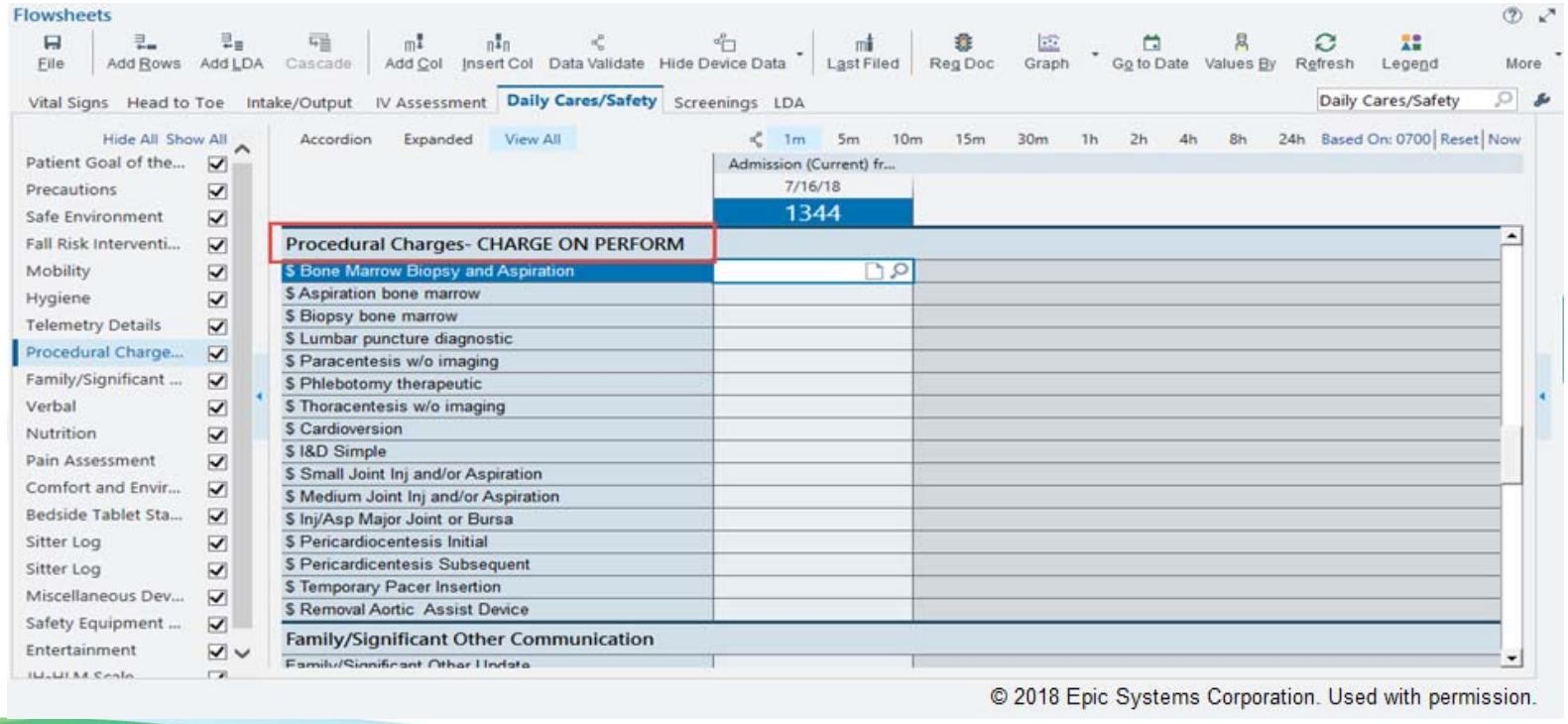
Flowsheet Row Charges Added Phase 2

- Incision and drainage, simple
- Small joint injection or aspiration
- Medium joint injection or aspiration
- Injection/aspiration major joint or bursa
- Halo
- Trach change
- Pericardiocentesis initial
- Pericardiocentesis subsequent
- Temp pacer insertion
- Aortic assist device
- Cardioversion
- Insert Swan-Ganz catheter (pulmonary artery)
- Blood draw per port

Design: Charge Row Embedded in Workflow



Design: Procedural Charges Group



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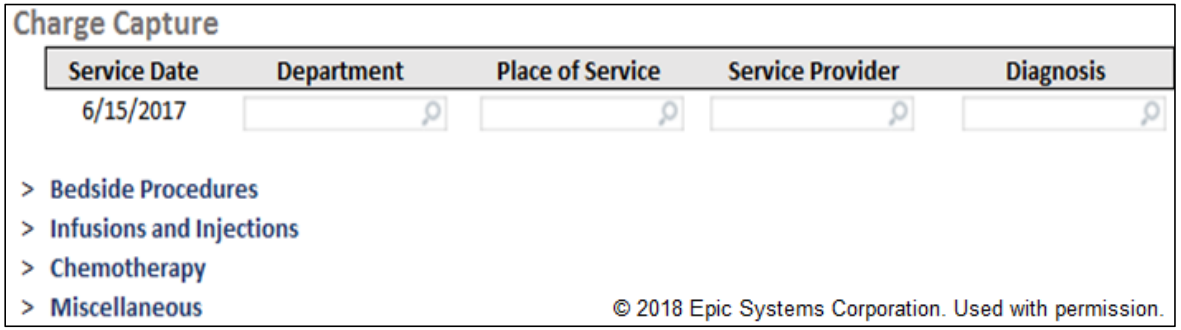
Design: Reorganized Charge Capture Folders



Timeline

Oct 2016	• Added bedside procedure charges to charge capture
Dec 2016	• Received feedback that nursing units were struggling with the workflow
Jan 2017	• Revenue Cycle Governance and Inpatient Clinical Informatics Committee decided to pursue flowsheet row charging for bedside procedures
Mar 2017	• Had initial meeting with project team

Timeline

May 2017
- Defined the scope of procedures to be incorporated into flowsheet rows

June 2017
- Completed flowsheet and charge capture build and testing
- Developed tip sheet for end users

July 2017
- Phase I Go-Live

Sep 2017
- Phase II Go-Live

Training

- Because the change in workflow was relatively simple, we did not use formal training
- We created a tip sheet that outlined how to access each chargeable flowsheet row
- Communicated this workflow change in multiple forums: CarePATH e-News letter, site specialists, nursing leadership meetings, revenue cycle operations meetings

Monitoring Flowsheet Charging

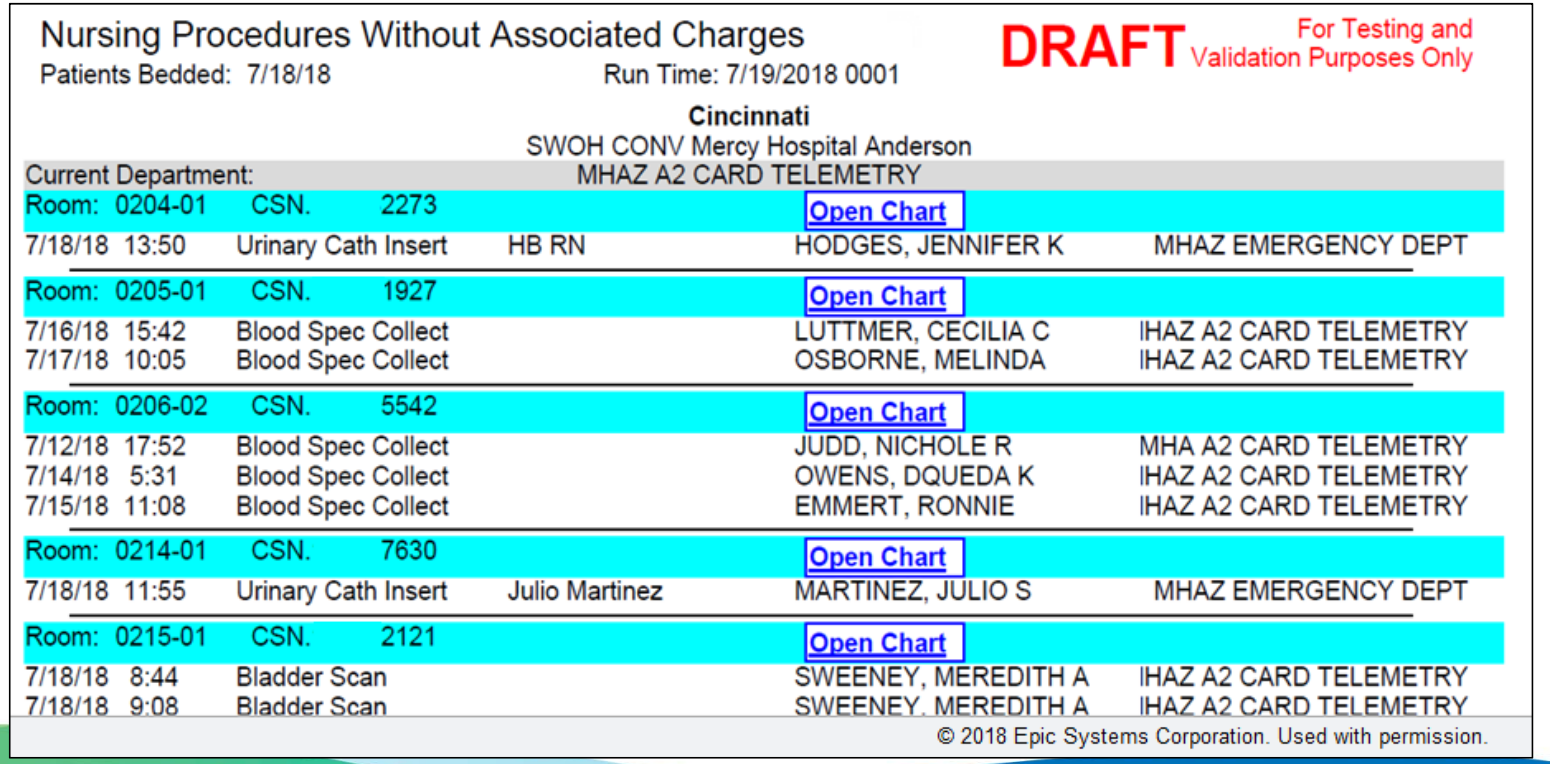
Used reporting to compare charges from baseline:

- By Market
- By Hospital

Developed a “mis-match” report to identify missed charging opportunities

- The MH IP Nursing Procedures Without Associated Charges was designed to capture discrete pieces of nursing documentation and evaluate whether or not a charge was captured
- If the report finds that a charge has been missed, it returns the documentation information for further evaluation and potential charge entry

Mis-Match Report



Nursing Procedures Without Associated Charges

DRAFT For Testing and Validation Purposes Only

Patients Bedded: 7/18/18 Run Time: 7/19/2018 0001

Cincinnati

SWOH CONV Mercy Hospital Anderson

Current Department: MHAZ A2 CARD TELEMETRY

Room: 0204-01 CSN. 2273			Open Chart	
7/18/18 13:50	Urinary Cath Insert	HB RN	HODGES, JENNIFER K	MHAZ EMERGENCY DEPT
Room: 0205-01 CSN. 1927			Open Chart	
7/16/18 15:42	Blood Spec Collect		LUTTMER, CECILIA C	IHAZ A2 CARD TELEMETRY
7/17/18 10:05	Blood Spec Collect		OSBORNE, MELINDA	IHAZ A2 CARD TELEMETRY
Room: 0206-02 CSN. 5542			Open Chart	
7/12/18 17:52	Blood Spec Collect		JUDD, NICHOLE R	MHA A2 CARD TELEMETRY
7/14/18 5:31	Blood Spec Collect		OWENS, DQUEDA K	IHAZ A2 CARD TELEMETRY
7/15/18 11:08	Blood Spec Collect		EMMERT, RONNIE	IHAZ A2 CARD TELEMETRY
Room: 0214-01 CSN. 7630			Open Chart	
7/18/18 11:55	Urinary Cath Insert	Julio Martinez	MARTINEZ, JULIO S	MHAZ EMERGENCY DEPT
Room: 0215-01 CSN. 2121			Open Chart	
7/18/18 8:44	Bladder Scan		SWEENEY, MEREDITH A	IHAZ A2 CARD TELEMETRY
7/18/18 9:08	Bladder Scan		SWEENEY, MEREDITH A	IHAZ A2 CARD TELEMETRY

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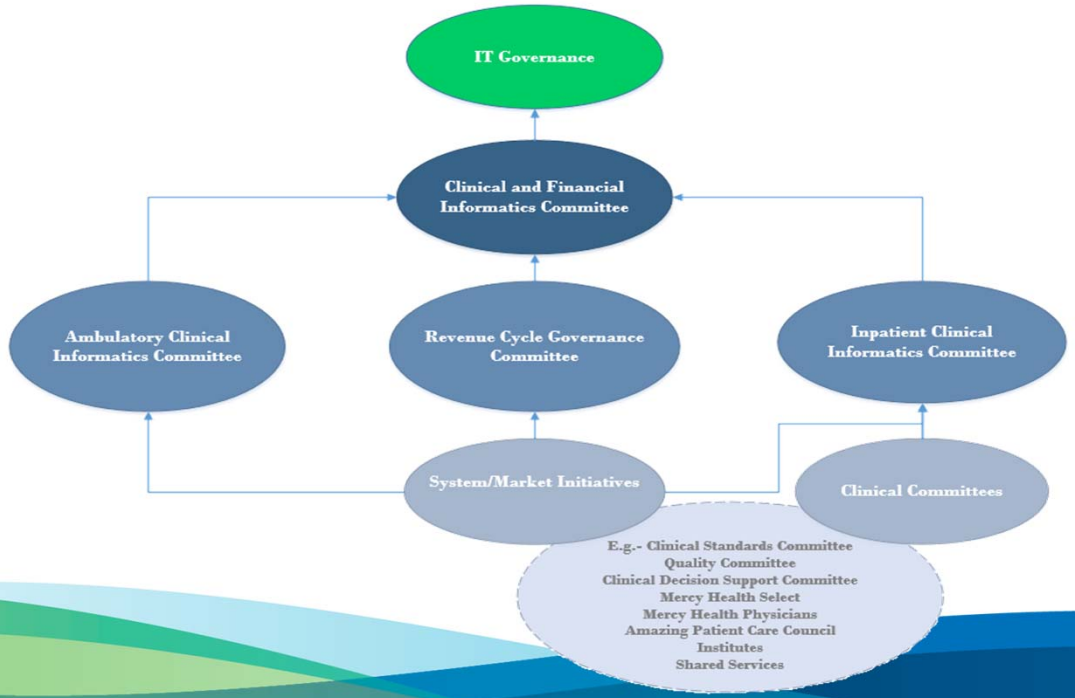
Governance

Mercy's Revenue Cycle Governance and Inpatient Clinical Informatics Committee work together to guide decisions on flowsheet row charging



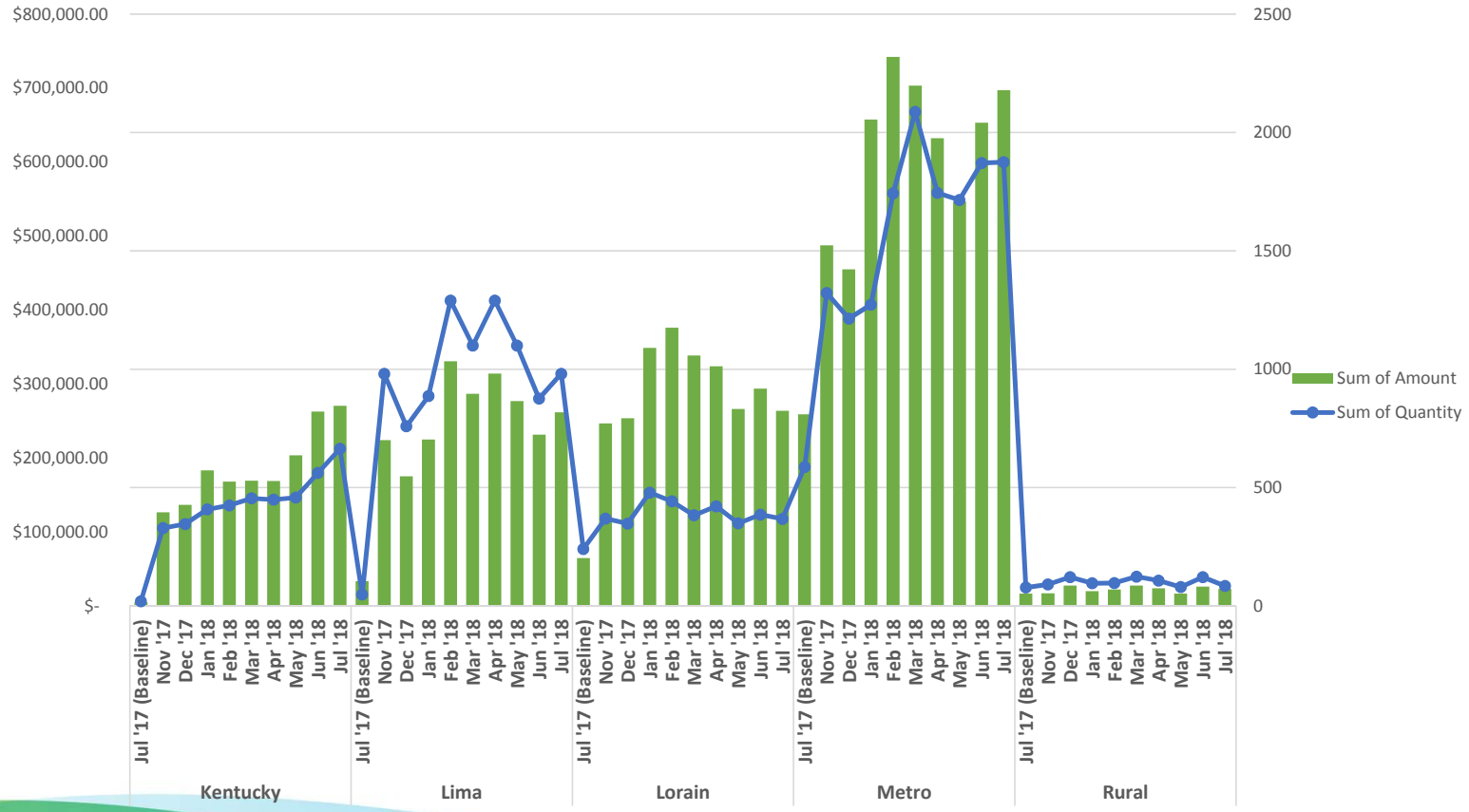
Return on Investment

- Baseline period June-July 2017
  - Number of charges: 978
  - Dollars charged: $379, 082.70

- 1 month post implementation
  - Number of charges: 3092
    - 216% increase from baseline
  - Dollars charged: $1,102,066.00
    - 190% increase from baseline

- 1 year post implementation
  - Average number of charges: 3630 per month
  - Average dollars charged: $1,389,781.89

All Markets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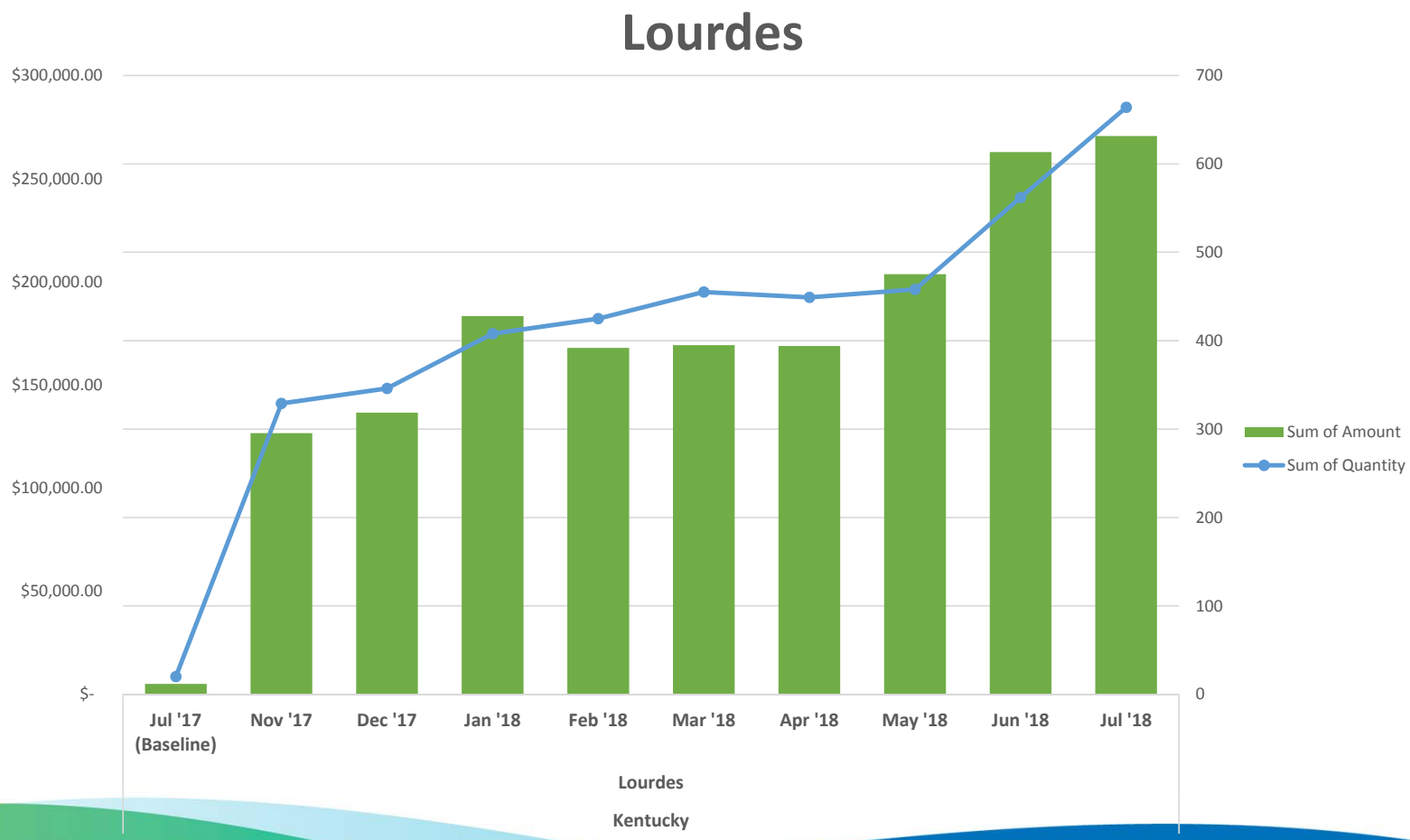
$700,000.00
$600,000.00
$500,000.00
$400,000.00
$300,000.00
$200,000.00
$100,000.00
$-
2500
2000
1500
1000
500
0
Sum of Amount
Sum of Quantity
Jul '17 (Baseline)
Nov '17
Dec '17
Jan '18
Feb '18
Mar '18
Apr '18
May '18
Jun '18
Jul '18
Kentucky
Lima
Lorain
Metro
Rural


Lourdes
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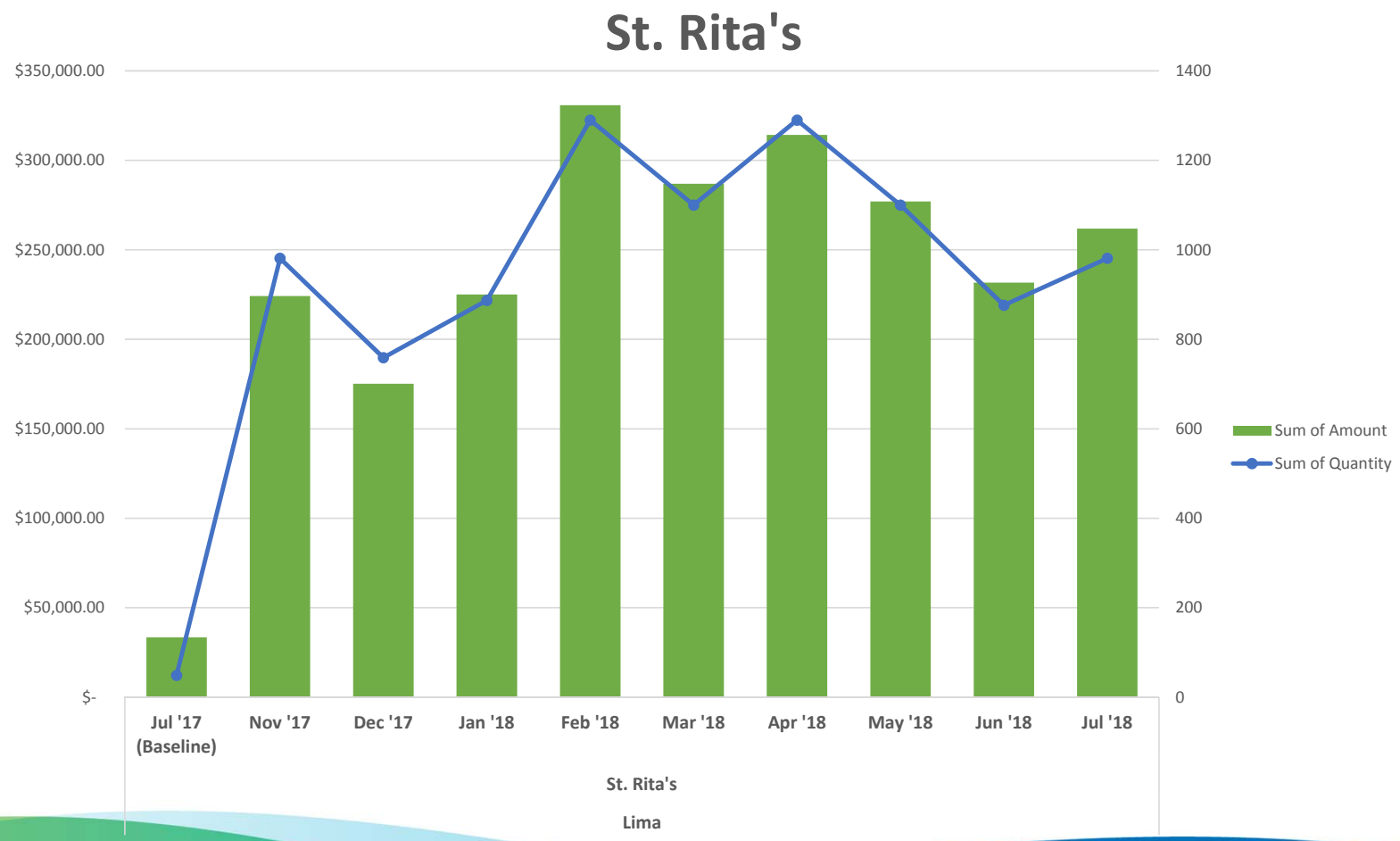
Lourdes
Kentucky


St. Rita's
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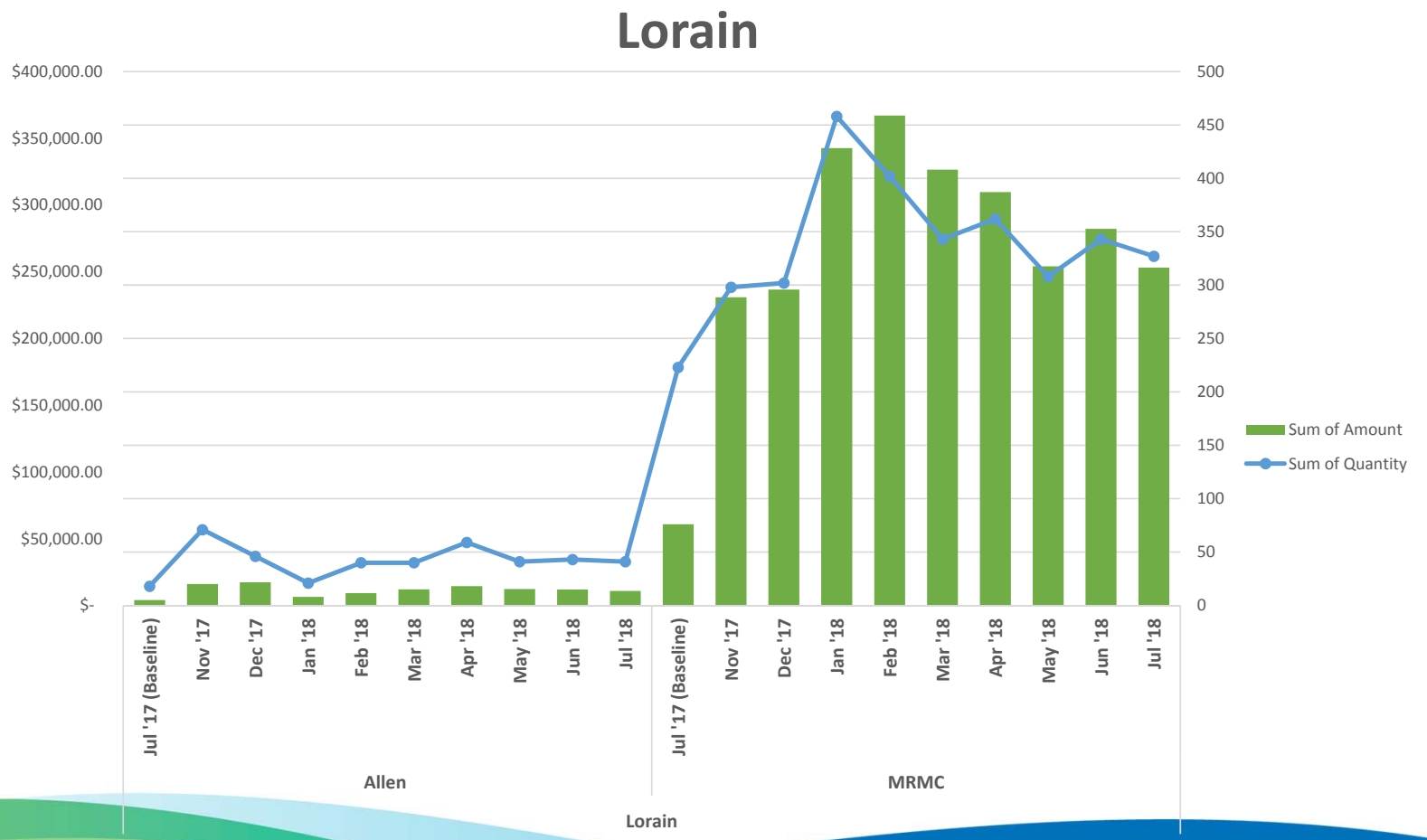
St. Rita's
Lima


Lorain
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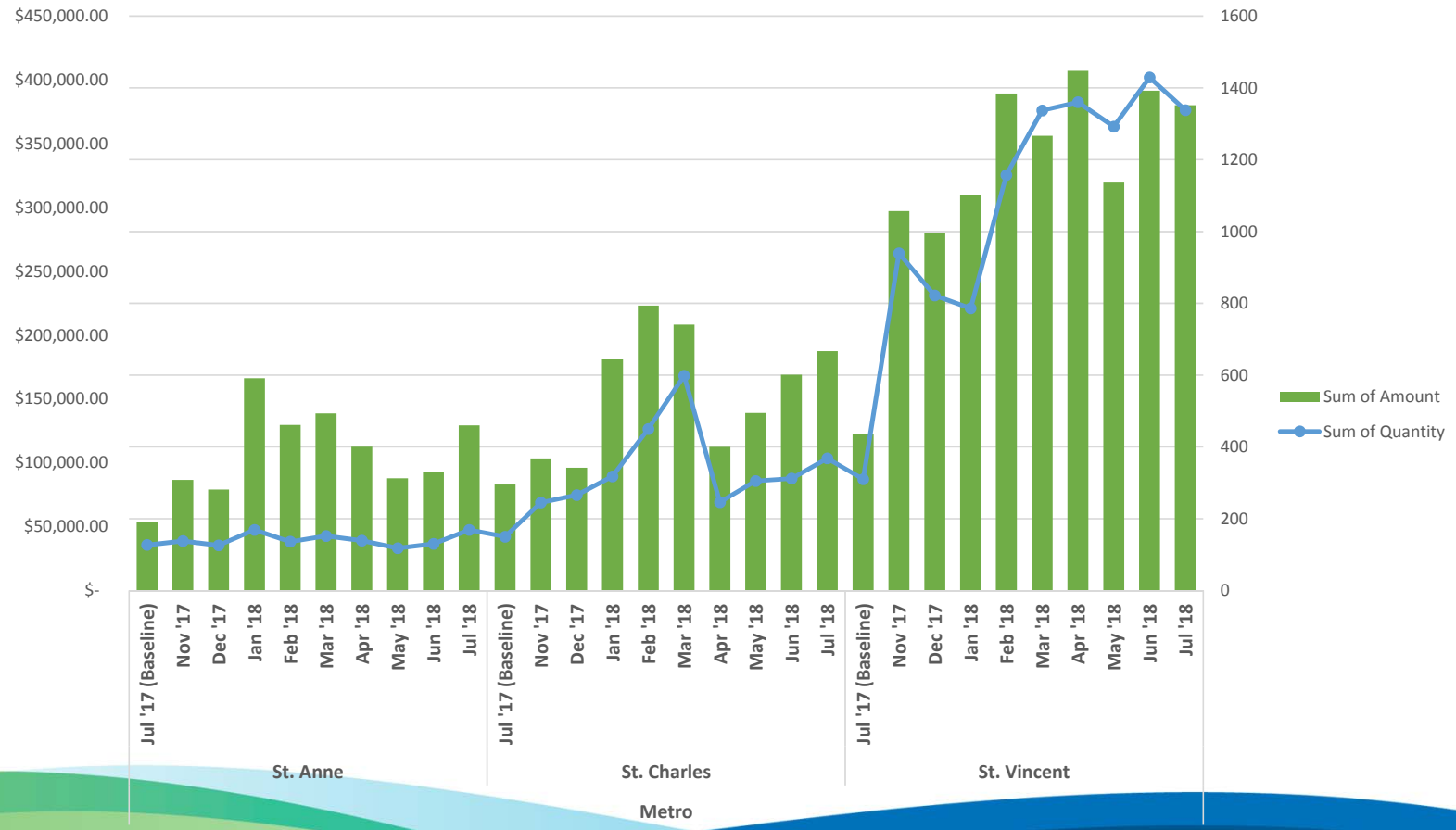
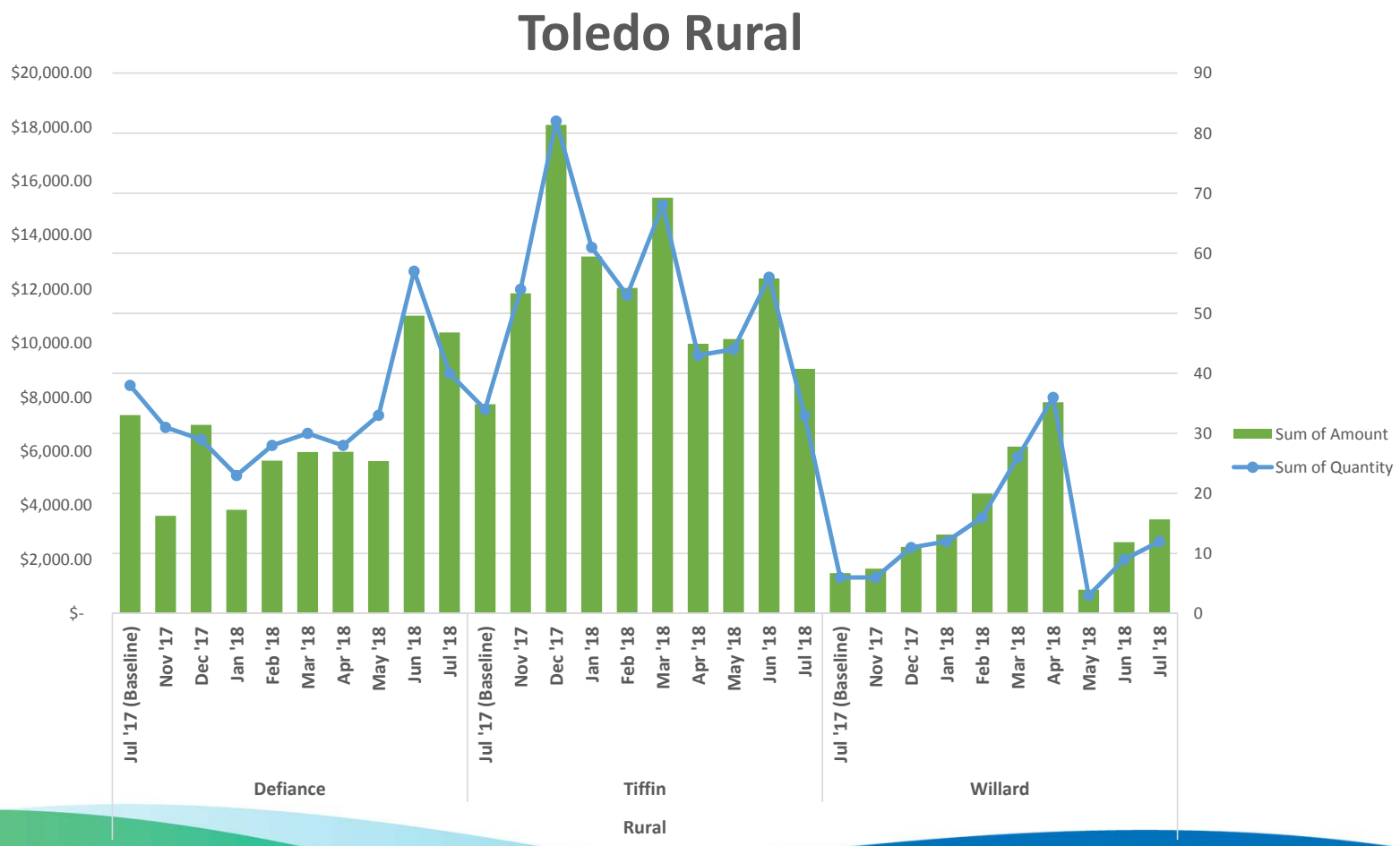
Allen
MRMC
Lorain

Toledo Metro




Toledo Rural
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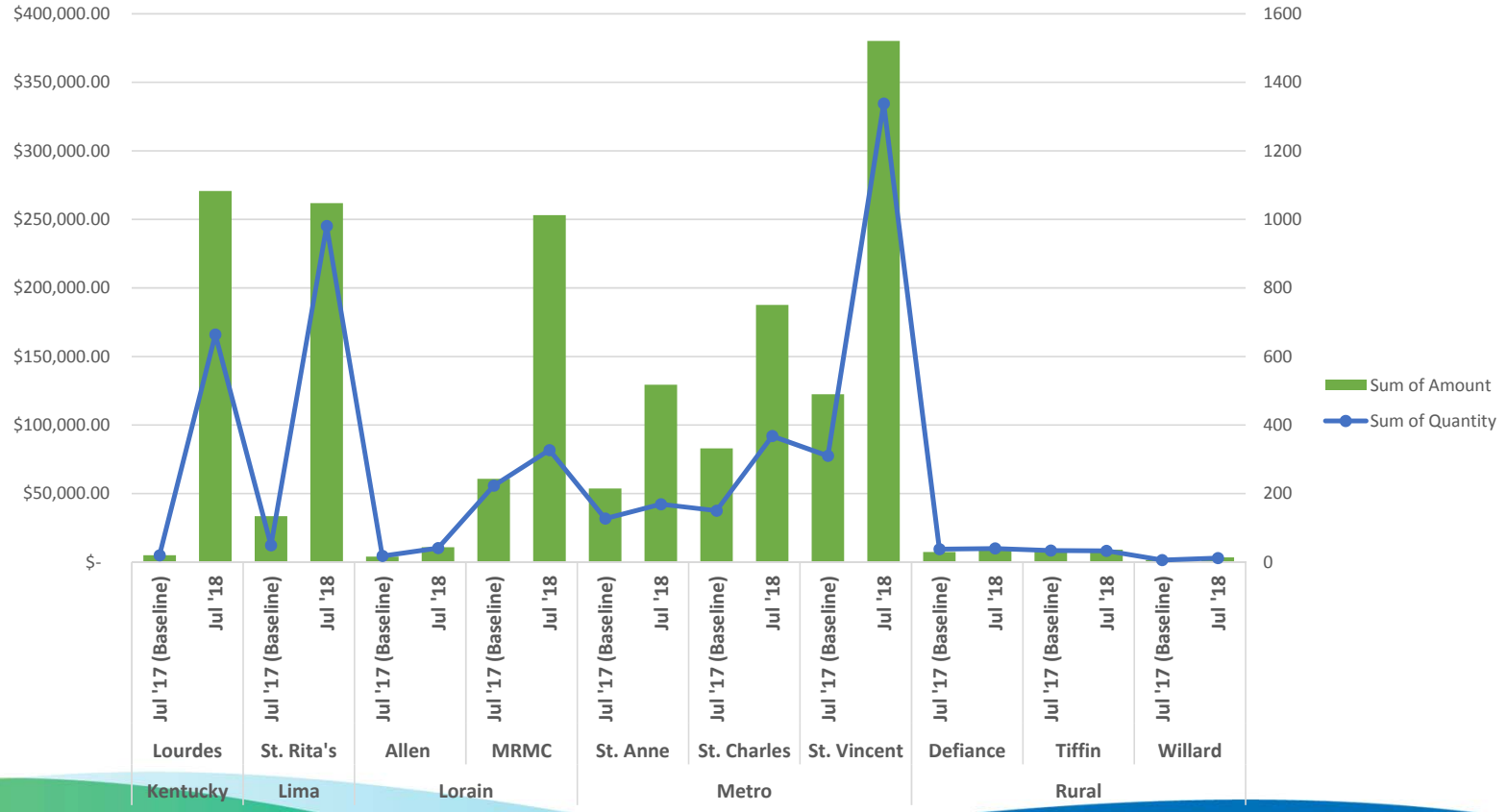
Willard
Rural

July '17 vs. July '18



Qualitative Outcome

“This has been a great opportunity to automate processes for our nurses so they can spend more time at the bedside caring for the needs of the patients. Not only were we able to make the process more efficient for our nurses but we positively impacted our revenue for the ministry.”

- Jodi Pahl, Chief Nursing Executive Northern Markets, Mercy Health

Overview of Cost

- Capital Expense
  - None
- Operational Expense
  - Analyst hours:
    - Phase 1 170 hours
    - Phase 2 110 hours
- Our team is becoming more efficient at implementing flowsheet row charging, suggesting that we will be able to scale this functionality out at increasingly lower cost

Next Steps & Lessons Learned

- CarePATH is with collaborating with revenue cycle operations to implement flowsheet charging for new service lines
  - All Respiratory Therapy departments across Mercy Health will go live with flowsheet charging on September 22, 2018
  - Outpatient Therapy departments have expressed interest; date TBD
- We are working to expand the scope of the “Mis-Match” report to identify missed charging opportunities
- Communication and education are vital to the success of the new workflow
- Flowsheet charging was a unique opportunity for clinical and revenue cycle teams to work together to achieve a common goal

MERCYHEALTH

Thank you.