



# Clinical Documentation Improvement Leaders Peer to Peer Session

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## Overall Learning Objectives



- Discuss the impact of benchmarking data to improve a variety of hospital measures and patient outcomes.
- Identify potential obstacles when implementing a patient safety indicator (PSI) improvement program.
- Describe the techniques used to collaborate at the C-suite level to align goals and facilitate change.
- Explain how data transparency can drive engagement.



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# Completing the Puzzle of Creating a Successful PSI Review Program

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About Us

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Licensed Beds	
System Total	1,207 (plus 90 bassinets)
Medical Center	818 (plus 69 bassinets)
HealthAlliance-Clinton Hospital	181 (plus 21 bassinets)
Marlborough Hospital	79
Harrington	129
Active Medical Staff	
System Total	1,322
Medical Group	1,261*
Harrington Physician Group	61

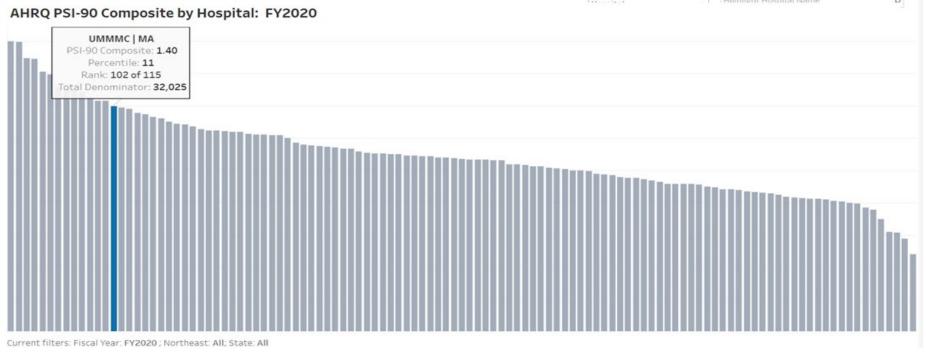


BEFLECTION

# Identifying the Need for Change

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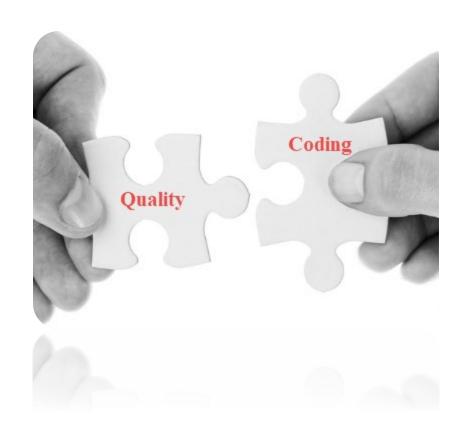
 In 2020, UMass Memorial Medical Center's Vizient Patient Safety Indicator (PSI) 90 composite score was 1.40



 A review of our internal workflow and feedback from Vizient's network of top performing institutions revealed that greater collaboration between the Quality and Coding department was needed

# Establishing a Stronger Partnership





- Creation of a core leadership team consisting of executive clinical leaders, quality officers, coders, and project managers
- Establish every other week meeting schedule
- Quality Department directed process improvement efforts on high priority PSIs
- Coding education sessions focused on general coding guidelines and AHRQ PSI criteria



## Learning from Other Institutions

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- The PSI core leadership team actively reached out to numerous Vizient top performers to gain insight into their successful PSI review programs
- Benchmarking revealed that greater collaboration between the Quality, Coding, and CDI departments was needed
- Best practice workflows were identified and immediately adopted

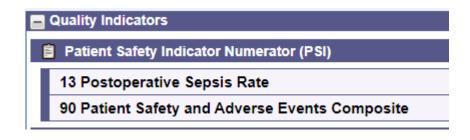


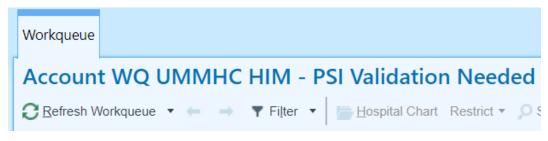
BEELESTION

## PSI Workflow Improvements



- PSI flagging software was identified in an encoder product that allowed us to identify every account qualifying for a PSI
- An interface was created within the UMMH EMR and a Stop Bill was created to prevent claim processing
- Each PSI undergoes a coding review to validate qualifying criteria and to look for avoidance opportunities
- Quality is then notified and a final review occurs – every PSI reviewed by Chief Quality Officer





Screenshot from UMMH EMR.



# **Building Trust and Sharing Insight**





- Physician Quality Officers provide insight into clinical scenarios contributing to observed PSIs
  - Clinical documentation intent
  - Specialty specific common phrases
- Coding and Quality review all PSI related queries to ensure compliance and clinical relevance
- Coders can reach out to governing agencies to seek clarification for accurate code selection

BEELESTION

#### **Team Expansion**



#### **Creation of Zero Harm Teams**

#### SAFER Teams

- Pressure Injury (PI)
- DVT/PE (Mobility)
- Falls (Mobility)
- C-diff
- SSI
- CAUTI
- CLABSI
- Sepsis
- Hospice

#### Coding Leadership Inclusion

- Identify how current documentation impacts PSI observed rates
- Assist in documentation template creation



#### Focused Efforts: PSI 03

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#### Coding/CDI Support

Identification of inconsistent documentation

- Hyperlinks automatically pulled in PI stages from nursing documentation
- Staging for Mucosal Injuries
  - Raising awareness of the impact of using "unstageable" in the context of Mucosal injuries
- Deep Tissue Injuries (DTI)
  - DTIs evolving into a stage 3 PI vs. revealing itself to be a stage 3 PI
- Internal Coding Reviews of Patient's Diagnosed with Skin Failure

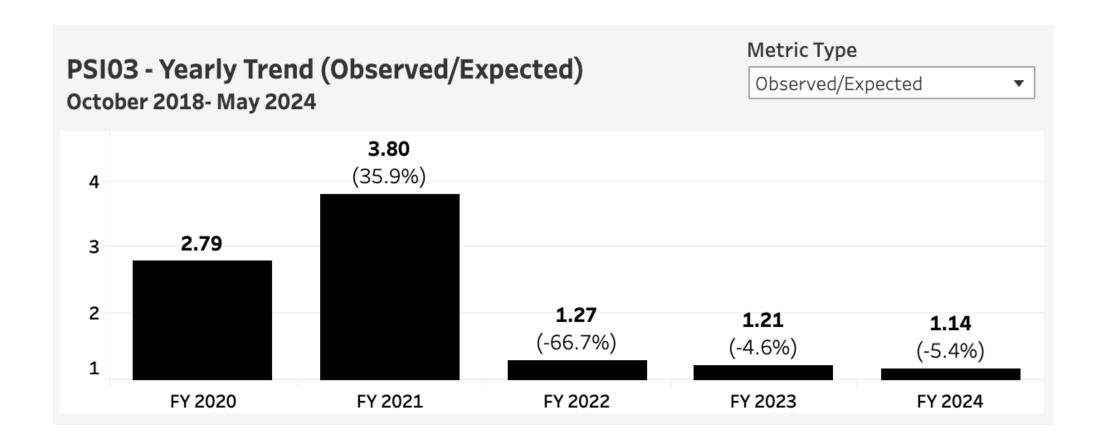
PI Safer Committee Initiatives

- Adopt a stricter definition of pressure injuries
- Accurate capture of mucosal injuries
- Developed criteria for Acute Skin Failure



#### Focused Efforts: PSI 03 Results







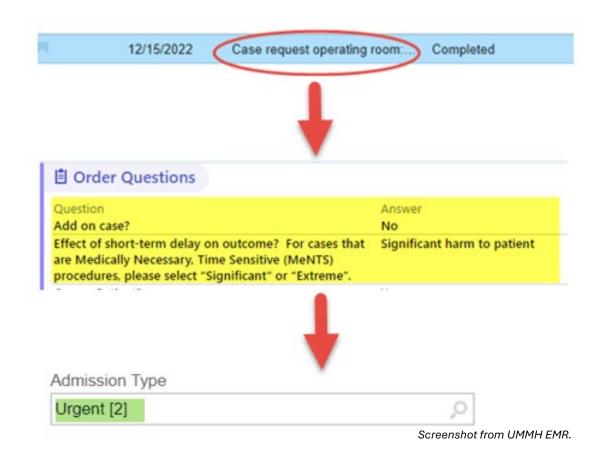
## Focused Efforts: Elective PSIs 10, 11, 13

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- Adopt an organizational protocol for admission type designation
  - EMR rule to update admission type based on an ordering physician's response to Case Request Operating Room questions
  - "Effects of short-term delay on outcome?"

Response	Admission Type					
Extreme	Urgent					
Significant	Urgent					
All Other	Elective					

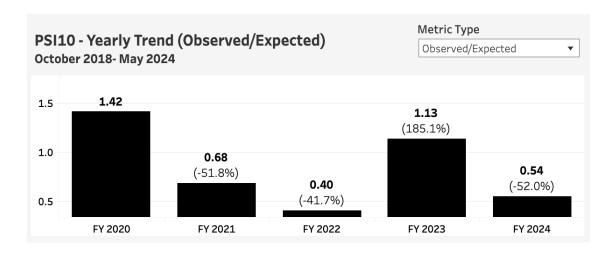
 Rarely, if there is no response to order question, Coders and Quality work collaboratively with proceduralist to understand case urgency

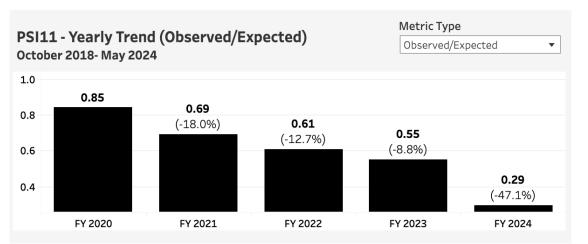


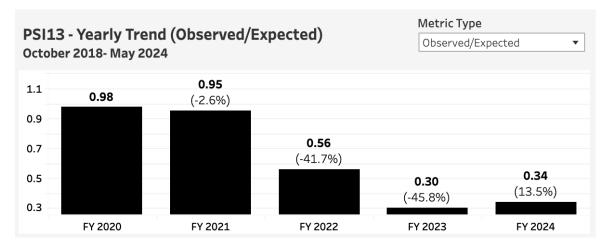


#### Focused Efforts: Elective PSIs 10, 11, 13 Results





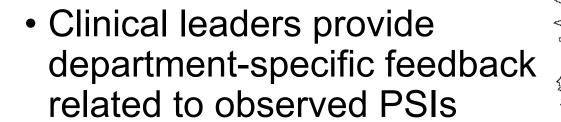






#### Feedback and Education

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- Coding & CDI assist in the creation of hand outs
  - Post-op respiratory failure
  - Intra and post-operative hematomas



QUALITY, CDI AND CODING DOCUMENTATION TIP

#### **Postoperative Hematomas and Hemorrhages**

Postoperative hematomas and hemorrhages are two common wound complications. The label of complication doesn't mean that there was a lack of quality care provided to the patient. In fact, there may be contributing factors that make this condition difficult if not impossible to avoid.

#### **Potential Contributing Factors**

- Coagulation Disorders: document any coexisting coagulation disorders like thrombocytopenia, pancytopenia, hereditary deficiency, myelophthisis, and platelet defects
- Anticoagulation Therapy: Be sure to document the link between the patient's anticoagulation therapy and the resulting post-operative hematoma

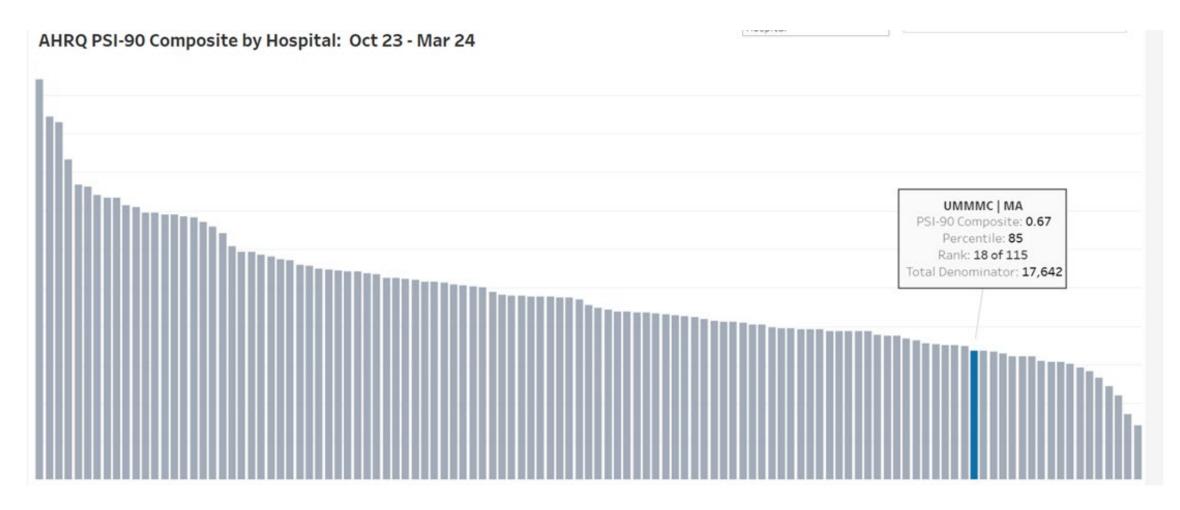
#### Importance of Documentation

While contributing factors may be considered clinically self-evident, only documentation confirming the cause-and-effect relationship will ensure a proper representation of the patient's health status via accurate diagnosis code selection.

Avoid a Query!

#### Where We Are Today

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## Pressing forward

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- Continuing efforts include
  - Weekly meetings to review PSI specific queries
  - Monthly expanded meetings to review metrics, patterns and trends
  - In depth review of annual AHRQ PSI updates
- Expansion of collaborative efforts to include mortality O/E opportunities
  - Inclusion of Vizient's mortality predictors into CDI and Coding efforts



#### Lessons Learned



- To make significant gains, you have to be open to adopting new practices quickly.
- Improving PSI performance involves developing internal core team workflows as well as clinical process improvement.
- Even when working quickly, sustainable change takes time.

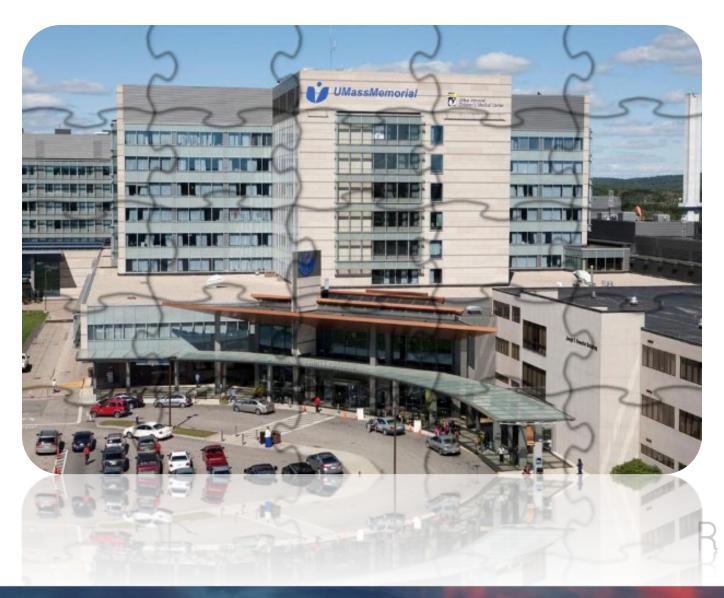




- Close relationship with aligned goals and philosophy between Quality,
   Coding, and CDI is critical to success take the time to develop trust.
- There was no single solution that led to success. It takes scrutinizing each PSI for opportunity.
- Need strong and active clinical leadership participation to help improve clinical workflows as well as working with physicians on documentation

# Completing the Puzzle

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This educational session is made possible through the collaboration of Vizient Member Networks.





# Navigating to Clinical Excellence: Vizient Benchmarking Unleashed in the Cloud

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Hackensack Meridian Health
Assistant Professor of Medical Sciences
Hackensack Meridian School of Medicine
Edison, NJ

#### Who We Are: Hackensack Meridian Health

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#### 18 Hospitals and More Than 500 Patient Care Locations



- Academic **Medical Centers**
- University **Teaching Hospital**
- Community Hospitals
- Rehabilitation Hospitals
- Children's
- Hospitals Behavioral
- **Health Hospital**
- Long Term Acute Care Hospital AND
- Center for Discovery & Innovation
- School of Medicine





**Operating Revenue** 



**Physicians** 



**Team Members** 





177,362 **Patient Admissions** 



650,086 **Emergency Visits** 



103,669

Surgeries (Inpatient and Outpatient)



16,545



In addition to our hospitals, we are home to ambulatory care centers, surgery centers, home health services, long-term care and assisted living communities, ambulance services, lifesaving air medical transportation, urgent care centers, physician practice locations and a fitness and wellness center.

# Benchmarking: A standard of how something is compared

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- External Benchmarking: Compare outcomes to external hospitals
- Internal Benchmarking: Compare outcomes between internal entities
- **Fixed Benchmarking**: Compare performance to a predefined target
- Historical Benchmarking:
   Compare results pre vs post process changes



## Why Benchmark?

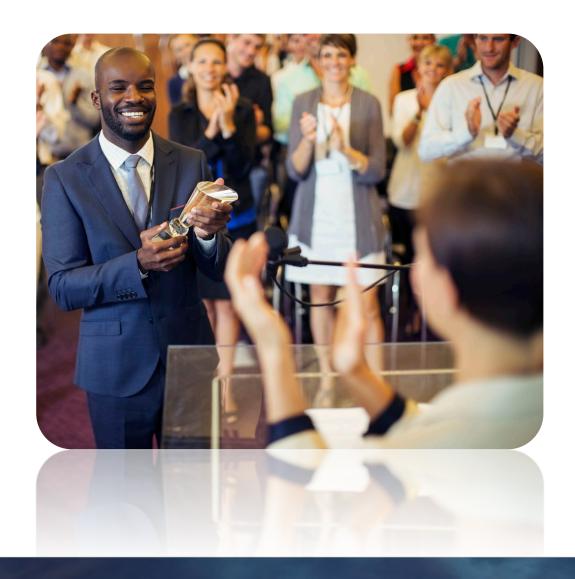
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- Improve Patient Care
- Enhance Operational Efficiency
- Thrive in value-based care
- Gain a competitive advantage



## Gain a competitive advantage





- U.S. News & World Report
- CMS Stars
- Newsweek World's Best Hospitals
- Leapfrog Hospital Safety Grades
- Healthgrades 100 Best Hospitals

# **Experience with External Reporting**



#### **Performance Years Measured in External Reports**



#### Where can you get more up-to-date benchmarks?

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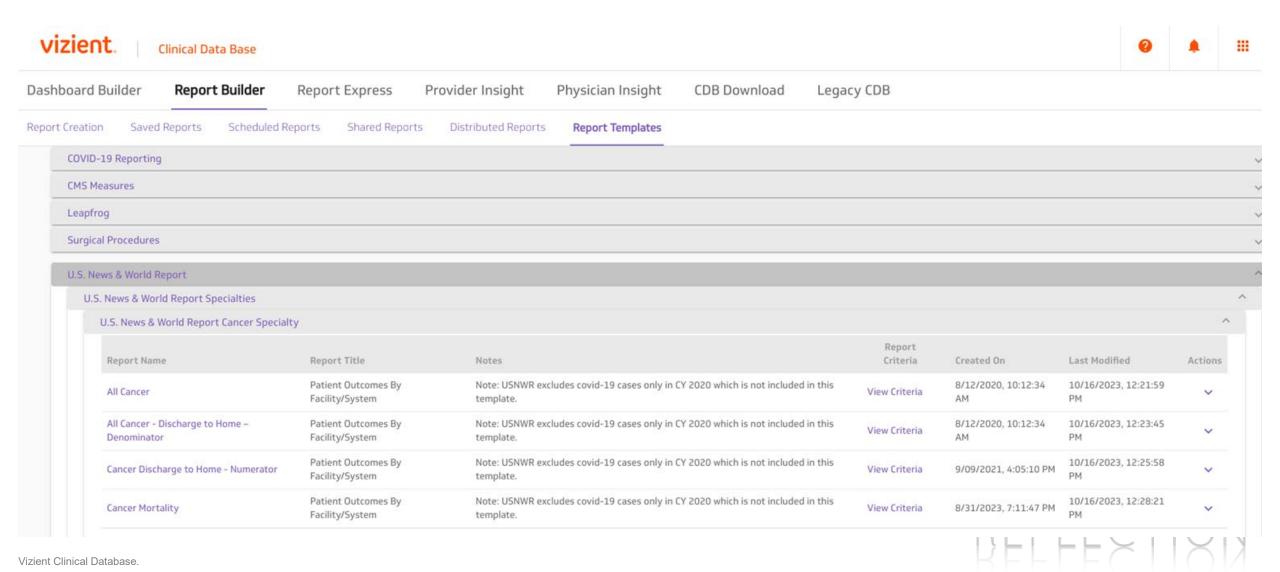


# CMS Data

(data.CMS.gov)

## What we used to do (1/2)

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#### What we used to do (2/2)

Report Creation

Saved Reports

Scheduled Reports

Shared Reports

Distributed Reports

Report Temp

#### All Cancer - Discharge to Home - Denominator

#### Advanced restrictions B AND C AND D AND O AND (A RESTRICTIONS MS-DRG (014 Allogeneic bone marrow transplant, 016 Autologous bone marrow transplant w cc/mcc or t-cell immunotherapy, 017 Autologous bone marrow transplant w/o CC/MCC, 054 Nervous system neoplasms w/o MCC, 146 Ear, nose, mouth & throat malignancy w MCC, 147 Ear, nose, mouth & throat malignancy w MCC, 148 Ear, nose, mouth & throat malignancy w MCC, 181 Respiratory neoplasms w MCC, 182 Respiratory neoplasms w MCC, 183 Respiratory neoplasms w MCC, 184 Ear, nose, mouth & throat malignancy w MCC, 180 Respiratory neoplasms w MCC, 180 Respiratory malignancy w MCC, 375 Digestive malignancy w CC, 376 Digestive malignancy w/o CC/MCC, 435 Malignancy of hepatobiliary system or pancreas w MCC, 436 Malignancy of hepatobiliary system or pancreas w CC, 437 Malignancy of hepatobiliary system or pancreas w MCC, 436 Malignancy of hepatobiliary system or pancreas w MCC, 436 Malignancy of hepatobiliary system or pancreas w MCC, 436 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M3130, M3131, M4840XA, M4841XA, M4842XA, M4843XA, M4844XA, M4845XA, M4845XA, M4850XA, M4850XA, M4850XA, M485XA, M80012A, M80019A, M80021A, M80022A, M80029A, M80031A, M80032A, M80032A, M8003A, M8003A, M8003A, M8008A, M800A, M80 M80821A, M80822A, M80829A, M80831A, M80832A, M80839A, M80841A, M80842A, M80849A, M80851A, M80852A, M80859A, M80861A, M80869A, M80871A, M80872A, M80879A, M80879A, M8083XA, M8431XA, M84311A, M84312A, M84312A, M84312A, M8432XA, M8431A, M8431 M84329A, M84331A, M84332A, M84333A, M84334A, M84339A, M84344A, M84344A, M84345A, M84345A, M84350A, M84353A, M84353A, M84353A, M8436A, M84451A, M84452A, M84453A, M84453A, M84459A, M84461A, M84462A, M84462A, M84464A, M84469A, M84471A, M84471A, M84473A, M84473A, M84476A, M84478A, M84478A, M84478A, M8448A, M8450XA, M8450XA, M8451A, M8 M84576A, M8458XA, M8460XA, M84611A, M84612A, M84612A, M84621A, M84622A, M84622A, M84623A, M84631A, M84632A, M84634A, M84634A, M84642A, M84642A, M84651A, M84651A, M84651A, M84653A, M84653A, M84651A, M84663A, M8463A, M846A, M84A, M846A, M84A, M846A, M84A, M M84664A, M84669A, M84671A, M84672A, M84673A, M84673A, M84675A, M84675A, M8468XA, M84750A, M84751A, M84752A, M84753A, M84753A, M84755A, M84757A, M84758A, M84758A, M84750A, M84 MS-DRG (595 Major skin disorders w MCC, 596 Major skin disorders w/o MCC) Any Diagnosis (C430, C4320, C4321, C4322, C4330, C4321, C4322, C4330, C4331, C4339, C434, C4351, C4352, C4359, C4360, C4361, C4362, C4370, C4371, C4372, C438, C439, C4A0, C4A11, C4A12, C4A20, C4A21, C4A22, C4A30, C4A31, C4A39, C4A4, C4A51, C4A52, C4A59, C4A60, C4A61, C4Â62, C4A70, C4A71, C4A72, C4A8, C4A9, D030, D0320, D0321, D0322, D0330, D0339, D034, D0351, D0352, D0359, D0360, D0361, D0362, D0370, D0371, D0372, D038, D0391 MS-DRG (808 Major hematol/immun diag exc sickle cell crisis & coagul w MCC, 809 Major hematol/immun diag exc sickle cell crisis & coagul w CC/MCC) Any Diagnosis (T8600, T8601, T8602, T8603, T8609) MS-DRG (826 Myeloprolif disord or poorly diff neopl w maj O.R. proc w MCC, 827 Myeloprolif disord or poorly diff neopl w maj O.R. proc w CC/MCC, 829 Myeloprolif disord or poorly differentiated neoplasms w other procedure w cc/mcc, 830 Myeloproliferative disorders or poorly diff neopl diag w MCC, 844 Other myeloprolif dis or poorly diff neopl diag w MCC, 845 Other myeloprolif dis or poorly diff neopl diag w/o CC/MCC) Any Diagnosis Not (28500, 28501, 285020, 285028, 285030, 285038, 285040, 285048, 28505, 285060, 285068, 28507, 28509, 28511, 28512, 28520, 28521, 28522, 285230, 285238, 28529, 2853, 28540, 28541, 28542, 28544, 28545, 28546, 28547, 28548, 28548, 28548, 28548, 28548, 28548, 28548, 28548, 28548, 28548, 28548, 28548, 28548, 28548, 28548, 28548, 28548, 28548, 28548, 28548, 28548, 28548, 28548, 28548, 28548, 28548, 28548, 28548, 28548, 28548, 28548, 28548, 28548, 28548, 28548, 28548, 28548, 28548, 28548, 28548, 28548, 28548, 28548, 28548, 28548, 28548, 28548, 28548, 28548, 28548, 28548, 28548, 28548, 28548, 28548, 28548, 28548, 28548, 28548, 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(Hospice claims only), Expired - place unknown (Hospice claims only), Discharged/transferred to an inpatient rehabilitation facility including rehabilitation distinct part units of a hospital, Discharged/transferred to court/law enforcement with a planned acute care hospital inpatient readmission)

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Benjamin Schleich Report Count 1,000,000

## Benchmarking Process Optimization



#### **Old Process:**

Log in to Vizient CDB, select criteria, run report, download as Excel, combine data, generate rates and benchmarks.

#### **New Process:**

Download all Vizient participant data, generate queries in BigQuery, retrieve benchmarks in seconds.

Updating logic and creating queries with multiple KPIs or cohorts is easier in the new process.

We currently have over 200 benchmarks available



## Benchmarking in the Cloud (BigQuery)

from hmh-datalake-prod-c5b4.vizient\_staging.ENCOUNTER enc

and SequenceNumber=1

and PrinDiaCountInc >0 and enc.AdmissionAgeYears>=18

58 having N>100

then 1 else 0 end) as PrinDiaCountInc

ON enc.RECORDID = readmit.RECORDID

and enc.QANDACOHORT IN ('AMC', 'LCMC', 'COMM', 'CCMC')

on dia.recordid=enc.recordid

[163549', '16359', '1636', '1638', '16381', '16389', '1639', '16781', '16782', '16789')

from <a href="hmh-datalake-dev.vizient\_staging.DIAGNOSIS">hmh-datalake-dev.vizient\_staging.DIAGNOSIS</a> group by RecordID) as dia

left outer JOIN <a href="https://hmh-datalake-prod-c5b4.vizient\_staging.READMISSION">hmh-datalake-prod-c5b4.vizient\_staging.READMISSION</a> readmit

Where Cast(enc.DISCHARGEDATE as DATETIME) between '2022-10-1' and '2023-9-30'

left join 'quality\_reporting\_staging.lookup\_hmh\_vizient\_hospitals' hosp on enc.UNIVCODE=hosp.univcode

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#### hmh-datalake-prod-c5b4

- Saved queries
  - AHRQ PSI Benchmark Data
  - Benchmark CMIadjLOS
  - Benchmark CMS AMI
  - Benchmark CMS CHF
  - Benchmark CMS COPD
  - Benchmark CMS PN
  - Benchmark CMS STK
  - Benchmark USN-2023-24 AKF
  - Benchmark USN-2023-24 AMI
  - Benchmark USN-2023-24 CHF
  - Benchmark USN-2023-24 COPD
  - Benchmark USN-2023-24 Diabetes
  - Benchmark USN-2023-24 PN
  - Benchmark USN-2023-24 STK

```
Benchmark CMS STK
                                       This query will process 18.24 GB when rur
     "CMS_STK" as Cond,
    case when hosp.hospital is not Null then hosp.hospital else
    enc.UNIVCODE end as Hospital.
    count(enc.recordid) as N.
                                                                                                                                                                                                          RESULTS
                                                                                                                                                                                                                               CHART
                                                                                                                                                                         JOB INFORMATION
    COALESCE(sum(case when enc. DischargeStatusCode in (50,51) then 1
    else enc.DeathFlag end), 0) as MortHospiceNum,
    COALESCE(COALESCE(sum(case when enc. DischargeStatusCode in (50,51) then 1
    else enc.DeathFlag end), 0)/count(distinct enc.RecordID), 0) as MortAdjHospRate
                                                                                                                                                                         Job ID
                                                                                                                                                                                                           hmh-datalake-prod-c5b4:US.bquxjc
              readmit.ChemotherapyFlag =0
                                                                                                                                                                         User
                                                                                                                                                                                                           benjamin.schleich@hmhn.org
             and readmit.RehabilitationFlag =0
             and readmit.RadiationTherapyFlag =0
             and readmit.DeliveryBirthFlag =0
                                                                                                                                                                         Location
             and readmit.PsychFlag =8
             and readmit.DaysToReadmit between 1 and 30
             and enc.deathflag=0
                                                                                                                                                                         Creation time
                                                                                                                                                                                                           Jul 26, 2024, 3:44:08 PM UTC-4
             and enc.DischargeStatusCode!=7
                                                                                                                                                                         Start time
                                                                                                                                                                                                           Jul 26, 2024, 3:44:08 PM UTC-4
         when enc.deathflag=0 and enc.DischargeStatusCode!=7
           then 0
                                                                                                                                                                         End time
                                                                                                                                                                                                           Jul 26, 2024, 3:44:19 PM UTC-4
    Count (
              readmit.ChemotherapyFlag =0
                                                                                                                                                                         Duration
                                                                                                                                                                                                           11 sec
             and readmit.RehabilitationFlag =0
             and readmit.RadiationTherapyFlag =0
                                                                                                                                                                         Bytes processed
                                                                                                                                                                                                           18.24 GB
             and readmit.DeliveryBirthFlag =0
             and readmit.PsychFlag =0
             and readmit.DaysToReadmit between 1 and 30
                                                                                                                                                                         Bytes billed
                                                                                                                                                                                                           18.24 GB
             and enc.deathflag=0
             and enc.DischargeStatusCode!=7
         when enc.deathflag=0 and enc.DischargeStatusCode!=
    end) as reamit_rate
```

LEFT JOIN (Select distinct RecordID, sum( case when DiagnosisCode in ('6469','6461','6462','6464','6465','6462','6462','6462','6462','6462','6462','6462','6462','6462','6462','6462','6462','6462','6462','6462','6462','6462','6462','6462','6462','6462','6462','6462','6462','6462','6462','6462','6462','6462','6462','6462','6462','6462','6462','6462','6462','6462','6462','6462','6462','6462','6462','6462','6462','6462','6462','6462','6462','6462','6462','6462','6462','6462','6462','6462','6462','6462','6462','6462','6462','6462','6462','6462','6462','6462','6462','6462','6462','6462','6462','6462','6462','6462','6462','6462','6462','6462','6462','6462','6462','6462','6462','6462','6462','6462','6462','6462','6462','6462','6462','6462','6462','6462','6462','6462','6462','6462','6462','6462','6462','6462','6462','6462','6462','6462','6462','6462','6462','6462','6462','6462','6462','6462','6462','6462','6462','6462','6462','6462','6462','6462','6462','6462','6462','6462','6462','6462','6462','6462','6462','6462','6462','6462','6462','6462','6462','6462','6462','6462','6462','6462','6462','6462','6462','6462','6462','6462','6462','6462','6462','6462','6462','6462','6462','6462','6462','6462','6462','6462','6462','6462','6462','6462','6462','6462','6462','6462','6462','6462','6462','6462','6462','6462','6462','6462','6462','6462','6462','6462','6462','6462','6462','6462','6462','6462','6462','6462','6462','6462','6462','6462','6462','6462','6462','6462','6462','6462','6462','6462','6462','6462','6462','6462','6462','6462','6462','6462','6462','6462','6462','6462','6462','6462','6462','6462','6462','6462','6462','6462','6462','6462','6462','6462','6462','6462','6462','6462','6462','6462','6462','6462','6462','6462','6462','6462','6462','6462','6462','6462','6462','6462','6462','6462','6462','6462','6462','6462','6462','6462','6462','6462','6462','6462','6462','6462','6462','6462','6462','6462','6462','6462','6462','6462','6462','6462','6462','6462','6462','6462','6462','6462','6462','6462','6462','6462','6462','6462','6



## External and Fixed Benchmarking in Action



Measure Name	Desired Direction	Bottom Q	Median	Top Q	Baseline	Baseline Quartile	YTD Value (Annualized)	Target	Target Status	YTD Quartile	Quartile Movement
Readmission: PN	1	14.17%	12.12%	9.74%	16.54%	Bottom QRTL	14.67%	15.71%	Met	Bottom QRT	0
Readmission: CHF	1	18.56%	16.25%	13.37%	20.77%	Bottom QRTL	18.41%	19.73%	Met	Worse Than	1
Readmission: Cancer Specialty	1	18.23%	15.64%	13.19%	21.90%	Bottom QRTL	18.35%	20.81%	Met	Bottom QRT	0
Hospice Adjusted Mortality: Cancer Specialty	1	23.53%	19.21%	15.88%	15.01%	Top QRTL	11.86%	14.71%	Met	Top QRTL	0
Hospice Adjusted Mortality: Stroke	<b>+</b>	9.80%	7.35%	5.31%	8.66%	Worse Than Me	10.28%	8.23%	Not Met	Bottom QRT	-1
Discharge to Home	1	77.67%	81.56%	84.93%	85.08%	Top QRTL	85.21%	86.21%	Not Met	Top QRTL	0

The goal creation usually follows the logic of moving performance to the next quartile but not more than 5% to make the improvement feasible and at a minimum of 2%.



## Composite Measure - HMH Hospital GPS



#### Where are we? Where do we want to be? Are we there yet?

This strategic, long-term tool aligns KPIs with goals, facilitating communication and accountability.

#### **Key Features:**

- O **Near-time data tracking:** Provides visibility into hospital performance.
- O Route optimization: Streamlines operations through "performance analytics" and "KPI diagnostics."
- O Composite measures: Summarizes complex issues for decision-makers.
- O Internal/external benchmarks: Drives innovation in performance improvement.

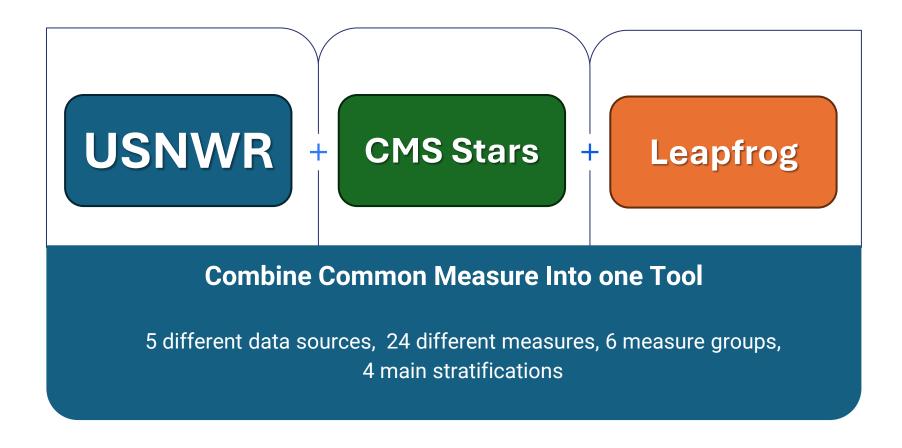
#### **Benefits:**

- O Improved communication and accountability.
- O Enhanced operational efficiency.
- O Data-driven decision-making.
- O Continuous performance improvement.



#### **Problem Solved**

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## Composite Snapshot

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Hospital	Hospital-wide	Medicare	Procedure and Condition Composite		
Поѕрна	Composite	Composite	Medicare (65+)	All Patients	
Hospital 1	44.64%	69.42%	20.79%	45.83%	
Hospital 2	69.35%	97.55%	85.59%	37.32%	
Hospital 3	91.43%	46.38%	61.37%	73.38%	
Hospital 4	44.64%	1.42%	90.76%	73.35%	
Hospital 5	90.23%	86.68%	94.45%	42.21%	
Hospital 6	8.01%	5.14%	71.37%	6.31%	
Hospital 7	56.38%	71.41%	34.67%	70.93%	
Hospital 8	97.08%	24.57%	26.33%	35.38%	
Hospital 9	26.00%	24.59%	81.63%	61.50%	
Hospital 10	60.22%	13.21%	7.28%	96.96%	
Hospital 11	68.51%	51.79%	31.82%	64.66%	
Hospital 12	2.42%	32.24%	62.98%	72.01%	

#### "Procedure and Condition Composite"

Selecting all patients (all payers) is a "Clinical Excellence" composite. Version 1 is "common" conditions and procedures (20) - over time we can add more to our clinical excellence composite.

Select each of common procedures and conditions and filter by Medicare payer type and the composite measure will mimic the US News' procedure and condition methodologies. Common clinical outcomes measures are assessed within each procedure and condition:

Clinical Outcomes Measures	: Weighting :
Discharge to Home Rate	25%
30 day Readmission Rate	25%
Average Length of Stay (LOS)	25%
Inpatient Mortality Rate	25%

#### "Balanced Scorecard"

Clear and concise way to track progress on 23 KPIs and identify areas of improvement. Leaders can use a balanced scorecard view to align various department activities in one hospital with one another. Categorized in STEEEP framework with category scores in addition to overall score.

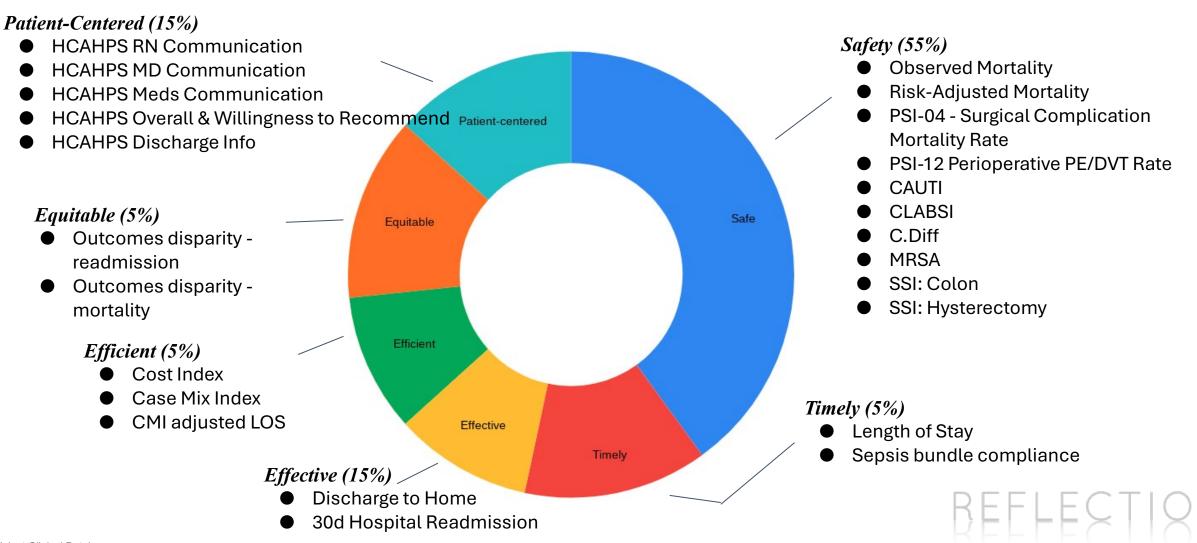
#### "Medicare Composite"

Performance change over time for all the relevant CMS Hospital Compare measures per each HMH hospital facility against national benchmarks. Views: 1) Overall score mimics CMS Star Ratings, 2) Comparison of possible vs achieved, 3) Composite and CMS Star Ratings categorical scores shown over time



#### Measure Selection





## **Composite Measure Scoring**



- Individual KPIs are scored by comparing actual performance to benchmark tiers. Most benchmarks were derived from Vizient CDB data (N>100).
- > Three national benchmarks were created for each measure; bottom quartile, median, and top quartile performance.

#### **Performance:**

- below the bottom quartile received a score of 0.
- between the bottom quartile and median received 0.25 points,
- between the median and top quartile received 0.5 points,
- above the top quartile received 0.75 point.
- Individual measure weights are assigned proportionally based on the number of measures within a group. If a group had 10 measures and the total group weights was 50% then each measure was worth 5%.
- > The group score is the average of the measure-specific scores and the composite score is the sum product of the group scores and the group weights.



#### **GPS** Overview



Recent 12 Month Performance Summary

Hospital	^	Hospital-Wide Composite	Medicare 65+ Composite	Procedures & Conditions Composite - All Inpatients	Procedures & Conditions Composite - Medicare 65+ Only
HUMC		42.75	39.64	28.18	26.25
PMC		43.67	47.71	32.81	34.82
JFKUMC		46.58	38.75	31.06	36.46
BMC	-	49.83	51.46 cm	34.38	38.39
OBMC	9	42.33	44.38	36.81	37.50
RBMC		48.00	49.69	42.19	35.94
JSUMC (		50.17	44.05 ****	27.94 ···	27.36 ****
OUMC		42.21	45.21	33.52	41.46
RMC		48.83	48.13 ****	38.14	39.58 ···
SOMC		48.96	43.33	40.28	46.09

This page illustrates each hospital's most recent 12-month performance in each composite. Scores range from 0-75, with 75 being the best possible value.



#### **GPS STEEEP Overview**



Recent 12 Month Performance - Overall

Recent 12 Months [ 2023-06-01 to 2024-05-31 ]

Prior Months 13 - 24 [ 2022-06-01 to 2023-05-31 ]

Safe Score



Prior Months 25 - 36 [ 2021-06-01 to 2022-05-31 ]



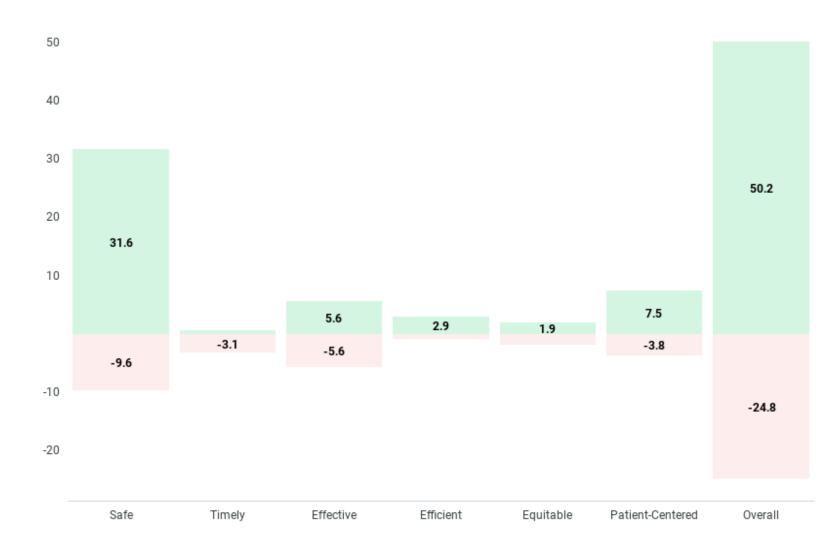
Efficient Score

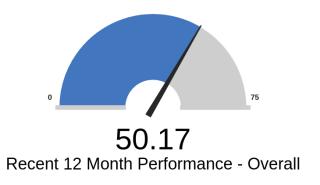
Interval Name	Recent 12 Months	Prior Months 13 - 24	Prior Months 25 - 36
Interval Period	2023-06-01 to 2024-05-31	6-01 to 2024-05-31 2022-06-01 to 2023-05-31	
STEEEP Group	Group Score	Group Score	Group Score
Safe	57.50	30.00	35.00
Timely	12.50	12.50	50.00
Effective	37.50	25.00	25.00
Efficient	58.33	66.67	66.67
Equitable	37.50	37.50	0.00
Patient-Centered	50.00	50.00	55.00

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## **GPS STEEEP Opportunities**

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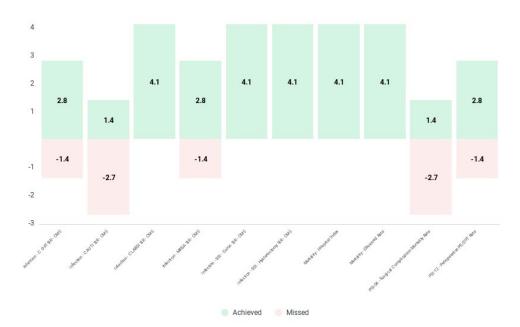




## Safe Group Performance

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Measure Name	Desired Direction	Measure Value	Lower Quartile	Median	Upper Quartile
Infection - C. Diff SIR - CMS	<b>+</b>	0.3534	0.6700	0.4200	0.2100
Infection - CAUTI SIR - CMS	<b>+</b>	0.8932	0.9200	0.5600	0.2500
Infection - CLABSI SIR - CMS	<b>↓</b>	0.1733	1.0200	0.6700	0.3300
Infection - MRSA SIR - CMS	<b>↓</b>	0.7110	1.1300	0.7200	0.3900
Infection - SSI - Colon SIR - CMS	<b>↓</b>	0.2426	1.2000	0.7500	0.3500
Infection - SSI - Hysterectomy SIR - CMS	<b>.</b>	0.0000	1.4900	0.8000	0.3200
Mortality - Hospital Index	<b>↓</b>	0.5742	0.9855	0.8101	0.6389
Mortality - Observed Rate	<b>+</b>	1.8104	3.1000	2.5000	1.9000
PSI-04 - Surgical Complication Mortality Rate	<b>↓</b>	36.2229	162.5000	121.7000	62.5000
PSI-12 - Perioperative PE/DVT Rate	<b>+</b>	1.4322	4.3000	2.4000	0.0000

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## Procedure and Condition Composite



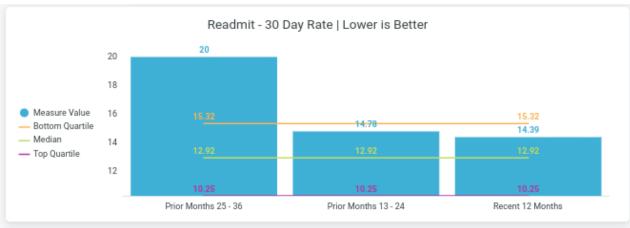
Interval Name	Recent 12 Months 2023-06-01 to 2024		Prior Months 13 - 24 2022-06-01 to 2023		Prior Months 25 - 36 2021-06-01 to 2022	
Interval Period						
Procedure / Condition	Composite Score	Cases	Composite Score	Cases	Composite Score	Cases
Abdominal Aortic Aneurysm Repair (AAA)	Ø	0	Ø	12	31.25	40
Aortic Valve Surgery (AVR)	43.75	117	25.00	105	56.25	89
Back Surgery (Spinal Fusion)	16.67	123	25.00	161	8.33	179
Chronic Obstructive Pulmonary Disease (COPD)	25.00	131	12.50	218	18.75	183
Colon Cancer Surgery	37.50	97	25.00	110	12.50	80
Coronary Artery Bypass Graft (CABG)	31.25	435	56.25	442	18.75	385
Diabetes	50.00	269	25.00	244	56.25	263
Heart Attack (AMI)	12.50	627	18.75	782	18.75	775
Heart Failure (HF)	18.75	1,159	12.50	922	12.50	908
Hip Fracture	37.50	391	31.25	337	31.25	315
Hip Replacement	0.00	16	25.00	24	50.00	76
Kidney Failure	18.75	614	25.00	525	25.00	488
Knee Replacement	25.00	36	33.33	46	41.67	178
Lung Cancer Surgery	50.00	106	33.33	76	41.67	100
Ovarian Cancer Surgery	66.67	25	41.67	21	25.00	28
Pneumonia	31.25	923	31.25	849	18.75	569
Prostate Cancer Surgery	0.00	19	0.00	30	25.00	76
Stroke	12.50	641	6.25	526	6.25	574
Transcatheter Anrtic Valve Replacement (TAVR)	25.00	167	31 25	204	12 50	205

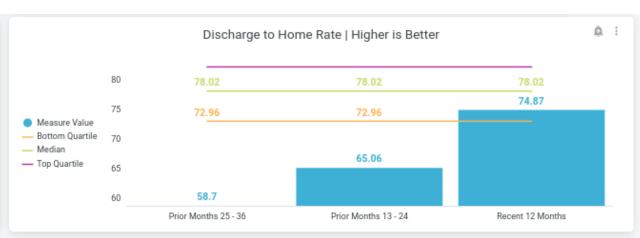


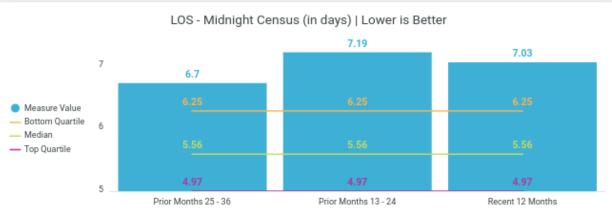
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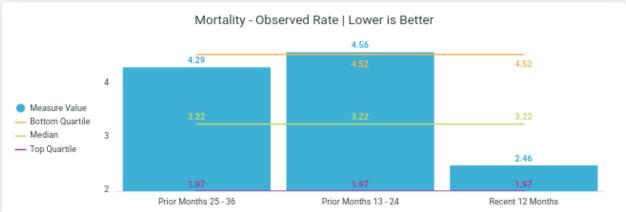
#### Procedure and Condition - Pneumonia USN







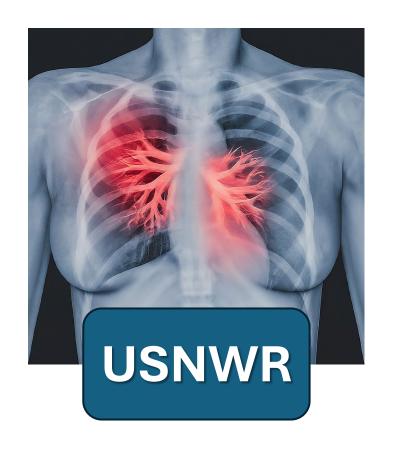




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#### Need for Governance - Variation in External Cohorts





Pneumonia





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## Benefits of Governance and Measure/Cohort Catalogs



#### Improved Data Quality and Consistency

- Standardized definitions: Ensures everyone is using the same definition for each measure, leading to more consistent and reliable data.
- Reduced errors: Having a single source of truth for measure definitions helps to eliminate errors caused by outdated or inaccurate information.
- Improved data lineage: Makes it easier to track how measures are calculated and used, which can be helpful for troubleshooting and auditing purposes.

#### **Increased Transparency and Trust**

- Clear and accessible documentation: Makes it easy for stakeholders to understand how measures are defined and calculated, which builds trust in the data.
- Enhanced collaboration: Encourages collaboration between different teams by providing a shared understanding of the data.
- Review and maintenance: Allows you to easily review and update measure definitions as needed, ensuring that your reports remain relevant and reliable.
- Transparency and credibility: Builds trust in your reports by providing clear and accessible documentation about how measures are defined and calculated.

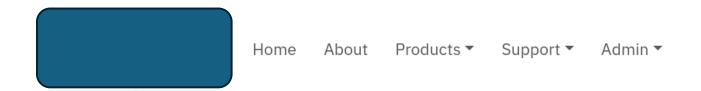
#### Streamlined Reporting and Analysis

- Faster report generation: Having readily available, up-to-date measure definitions allows for quicker report creation.
- Improved data analysis: Consistent and reliable data makes it easier to analyze trends and identify areas for improvement.
- Reduced duplication of effort: Eliminates the need to repeatedly define and document measures, freeing up time for other tasks.



## Measure and Cohort Catalog

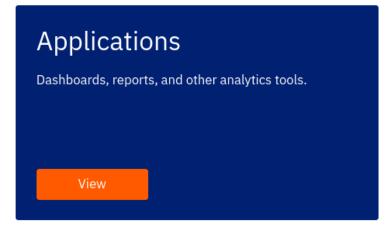




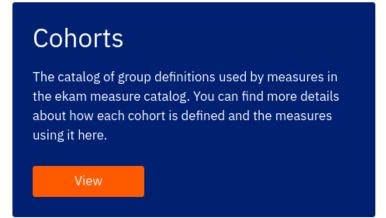


#### ekam Portal

Welcome to the ekam Portal – the directory of all of HMH's Data & Analytics products available to team members: dashboards, reports, analytics tools, and quality measures, and more.





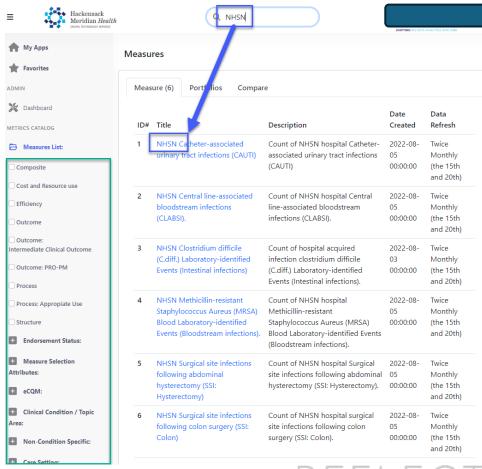


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## Creating Trust through Data Governance



- All measures, dashboards, cohorts, flags, and other data elements will be listed in the data catalog.
- Scorecards and analytics tools have links ("hover overs" and "click throughs") for obtaining more information on that measure.
- The catalog also can be assessed, browsed, and filtered as a knowledge management tool.
  - For example, this screen shot shows search results from NHSN data source



## Governance - Measure Transparency





#### Lessons Learned



- Leveraging cloud-based solutions for benchmarking can significantly improve efficiency and accessibility.
- Composite measures can provide valuable insights and focus improvement
- Data governance is crucial for ensuring transparency and trust in measure definitions.



#### Key Takeaways



- Collaboration and communication are essential for driving adoption and impact.
- Create data groups within Vizient client groups that can share these reports; meet regularly to identify areas of ongoing performance improvement.
- Potentially create/develop Analytics position.

#### References



- Five-Star Quality Rating System CMS.gov. <a href="https://www.cms.gov/medicare/health-safety-standards/certification-compliance/five-star-quality-rating-system">https://www.cms.gov/medicare/health-safety-standards/certification-compliance/five-star-quality-rating-system</a>
- Leapfrog Hospital Safety Grade. https://www.hospitalsafetygrade.org/

 Vizient Clinical Database, Vizient Quality and Accountability Study. <a href="https://www.vizientinc.com/">https://www.vizientinc.com/</a>



#### Questions?





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This educational session is made possible through the collaboration of Vizient Member Networks.







# Two Levers: Documenting Better and Just Being Better

Shawn Usery, MD, MBA, SFHM

Senior Vice President, Chief Medical Officer CoxHealth, Springfield, Mo.

Corrine Fugitt, RN-BSN, MBA, CPHQ

Administrative Director of Quality & Safety CoxHealth, Springfield, Mo.



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Meyer Orthopedic Rehabilitation Hospital



Cox Medical Center South



Cox North Hospital



Cox Medical Center Branson

#### **Cox Medical Centers**



Cox Barton County Hospital



Cox Monett Hospital

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#### **Staff**

- 14,000 employees & growing!
- >1600 providers
- 2,213 bedside nurses
- 1,200 volunteers







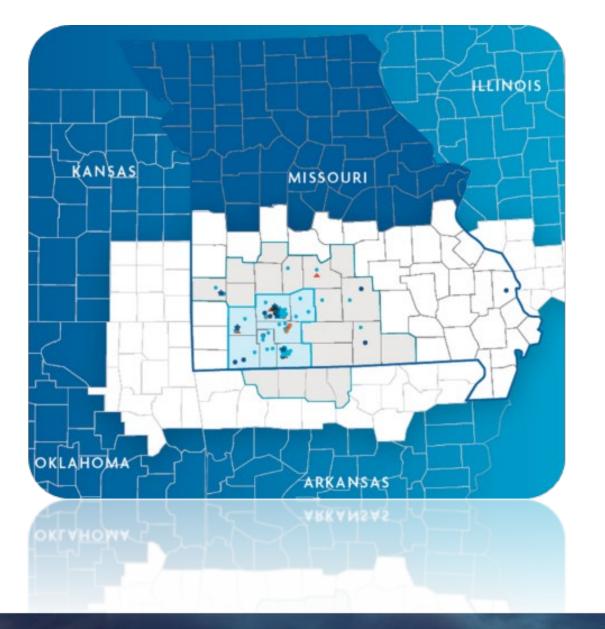


#### **Facilities**

- 80+ physician clinics
- 6 hospitals across the region
- 1,194 licensed beds



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## **Lead in Market Share Primary Service Locations**

#### **Patient Services:**

- 1,643,028 clinic/outpatient visits
- 176,404 ED encounters
- 221,238 urgent care visits
- 62,497 admissions/observations
- 41,991 surgeries
- 4,231 babies born

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#### Where we were: 2021

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Program	Overall	Mortality
CMS Star Rating	1 Star	-2.02
Leapfrog Safety Grade	D	PSI-04: 216.88
Vizient Q&A	1 Star	1.87 O/E

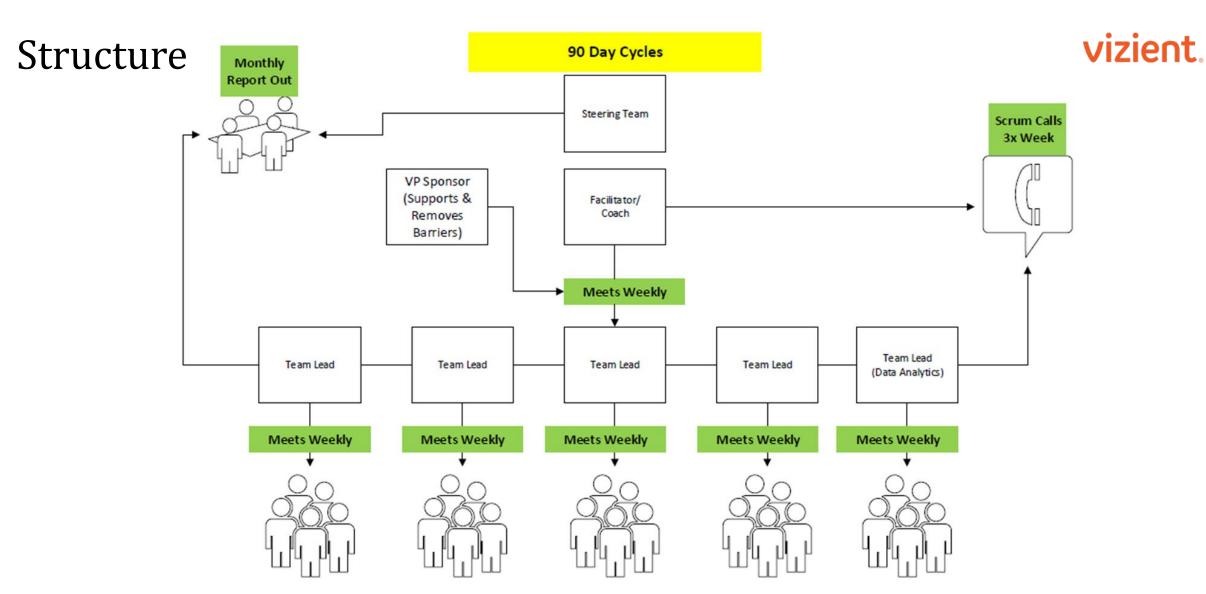
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## How did we get here?



Excuse	Reality
Tertiary Care Center	Under performing Vizient Q&A cohort
COVID	COVID patients improved our O/E
The data is old, we are better now	Vizient Mortality O/E 1.68
Patients/Families want everything	Unwillingness to have difficult conversations
Its our EHR: problem list	Poor risk capture
CDI/Coding	Finance focused/ Lack of training
My service line is great	Lack of Data Transparency





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#### Lever 1: Document Better

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- Partnership with Vizient
- Training for CDI, Coding and Providers
- Vizient mortality risk calculator
- CDI model change
- Sustainability Plan
- Learn from Success



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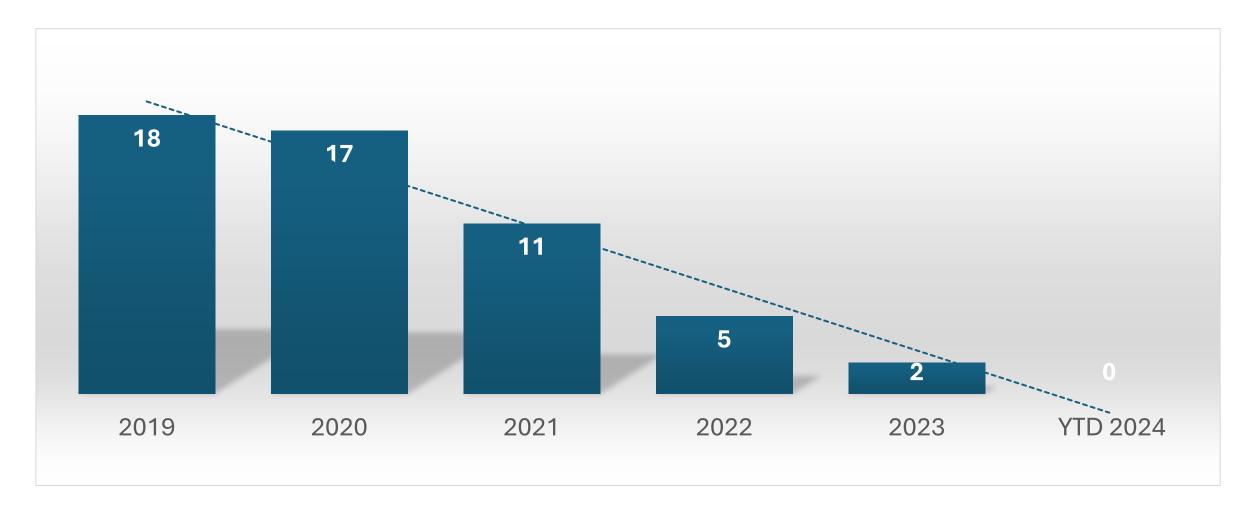
## "That which is measured improves. That which is measured and reported improves exponentially." - Karl Pearson

- Key Stakeholders: Surgeons, CMO, Quality, Infection Prevention, CDI/Coding
- 20 case reviews
- Safe space for ownership and learning



Results: SSI

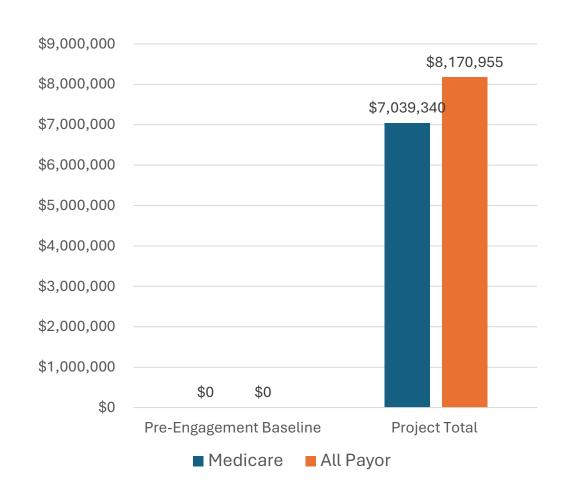
## vizient.

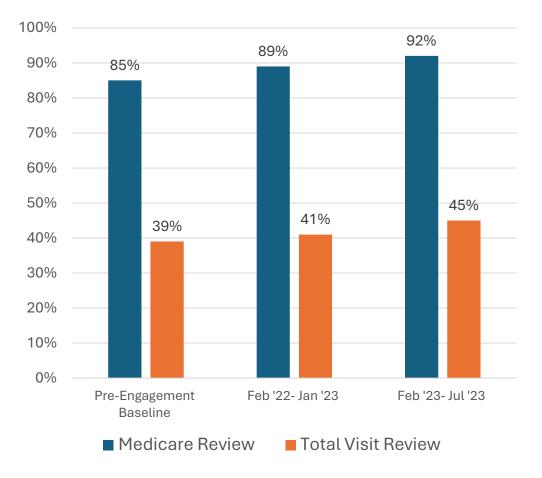




## Direct Query Financial Improvement & CDI Productivity





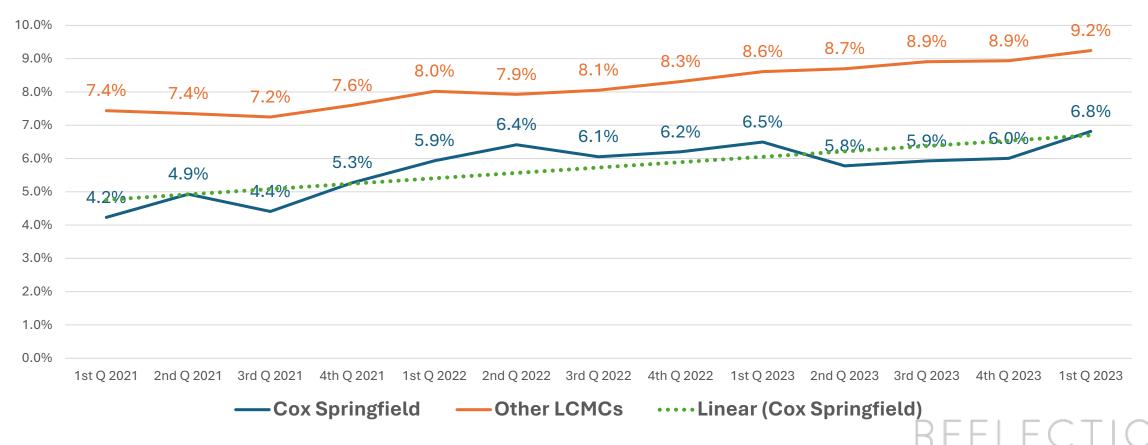




## Vizient Variable Capture Trends: Malnutrition (POA)



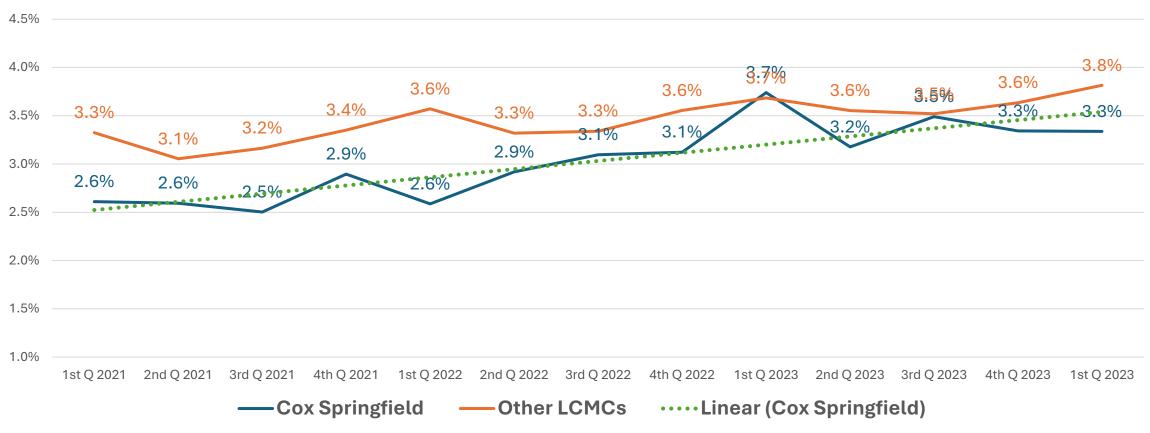
#### **Vizient Variable: Malnutrition**



## Vizient Variable Capture Trends: Shock (POA)



#### **Vizient Variable: Shock**



#### Lever 2: Be Better

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- Transfer Center
- End of Life Care
- Mortality Review
- Sepsis



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SNF Transfers

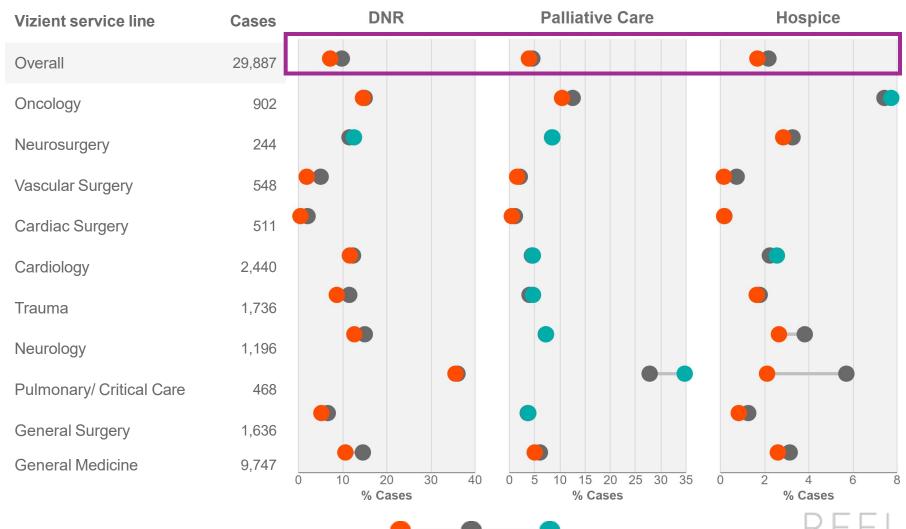
**DNR POA** 

Standardize Process

Telehealth: Stroke

### End of Life Care

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Source: Vizient Clinical Database (CDB) (4Q19 - 3Q20) DNR: ICD10 code Z66; Palliative Care: ICD10 code Z515; Hospice: Discharge status: Hospice - home, Hospice - medical facility

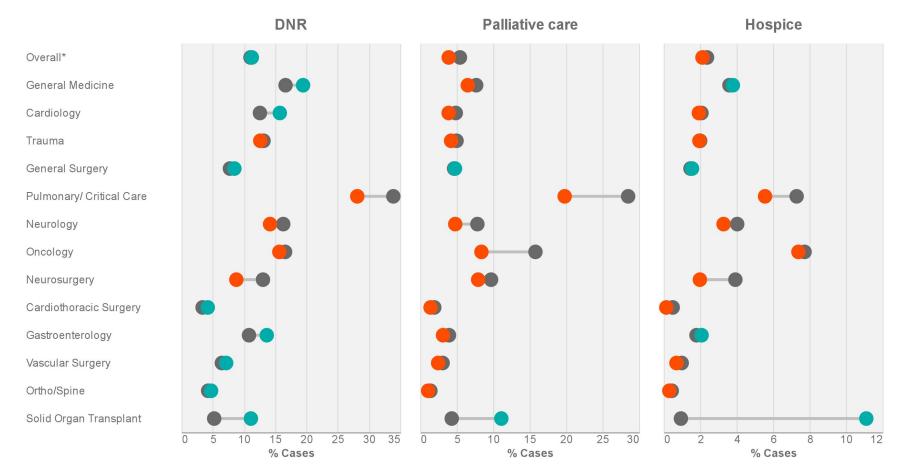


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# How does your organization support end of life care

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Compared to Your Peers





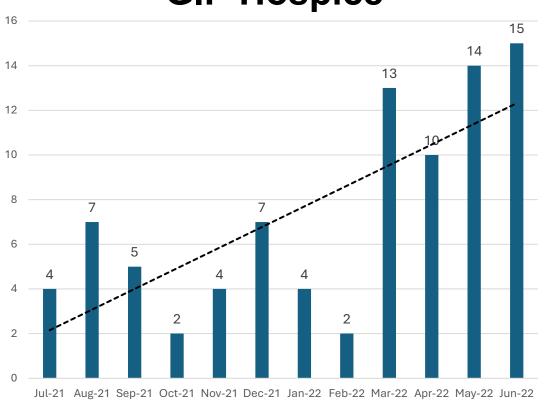




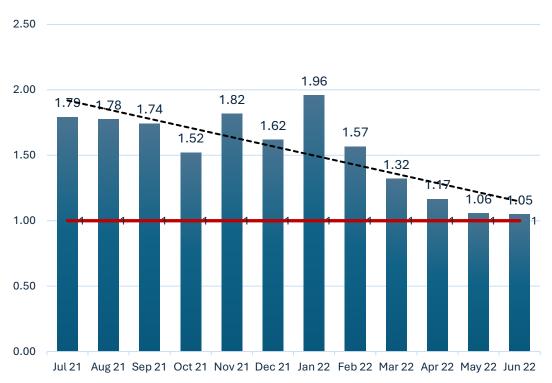
## End of Life Care



## **GIP Hospice**



## **Risk Adjusted Mortality**





# Mortality Review

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Quality & CDI Review

Physician Review

Scoring

Mortality
Review
Committee

Action

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# Sepsis



#### Baseline:

○ Sep-1: 6.7%

Mortality: 24%,1.72 O/E

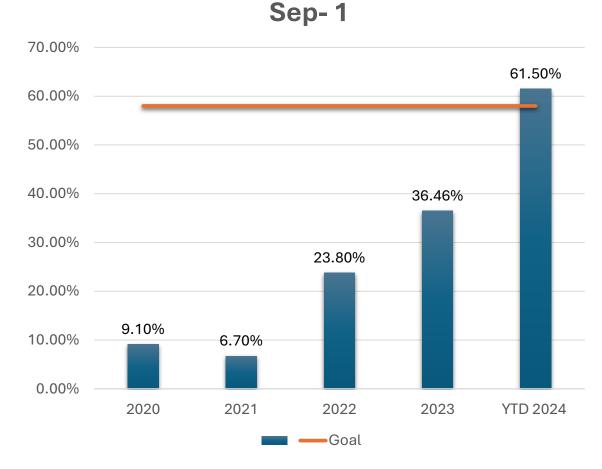
o LOS: 10.88 days

#### • Current:

○ Sep-1: 61.5%

o Mortality: 9.7%, 0.89 O/E

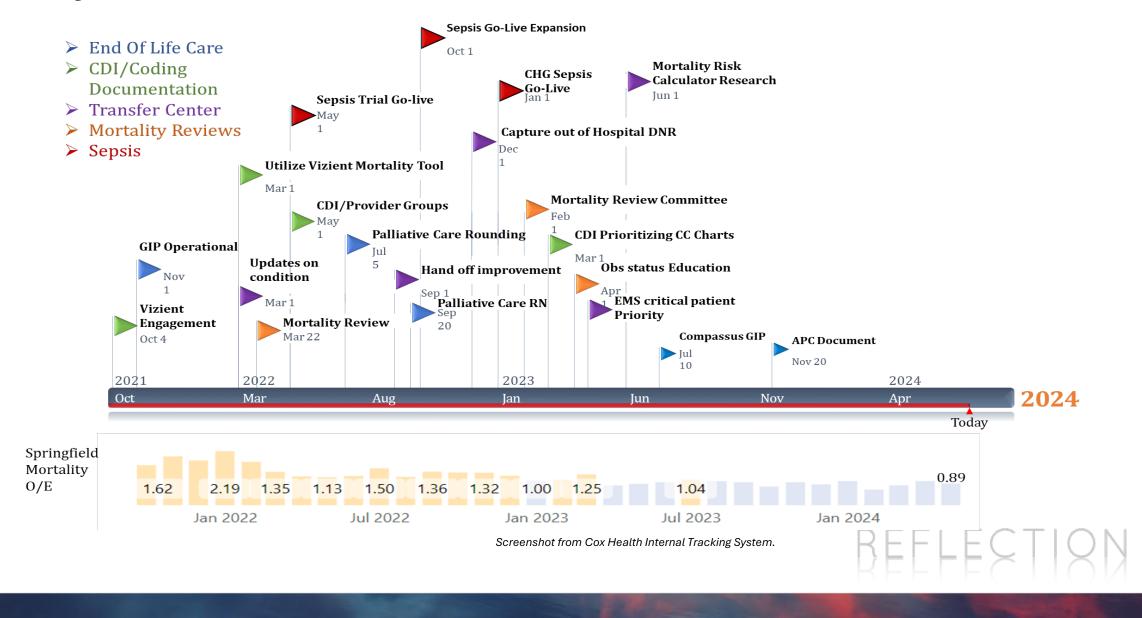
o LOS: 8.66 days





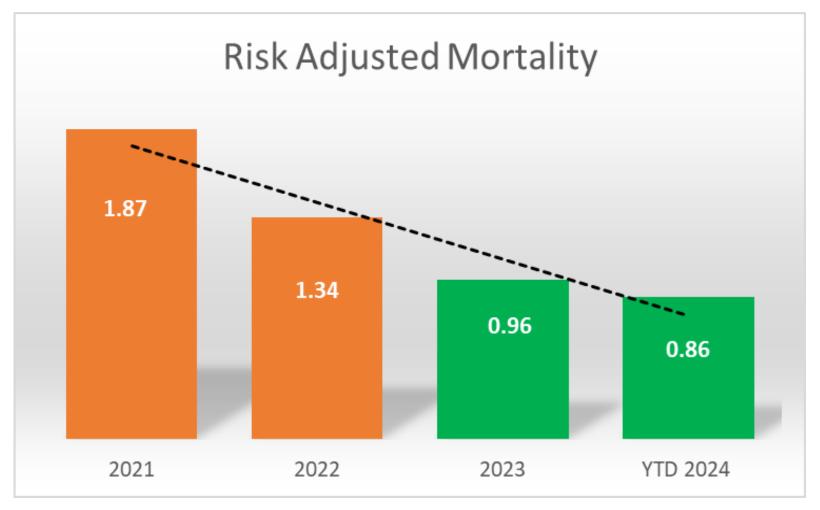
# **Mortality Cohort Initiatives**





## **Current State**

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### Where we are now



Program	Overall	Mortality
CMS Star Rating	3 Stars	-0.89
Leapfrog Safety Grade	С	PSI-4: 199.15
Vizient Q&A	2 Star	0.86 O/E

# 1 star to 3 star!

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#### Where we are Headed – CMS Stars







# The Work Continues: Current Quality/CDI Collaborative



- Timely/accurate data
- PSI-4 and 90
- Admit type/status
- Heart Failure EDAC
- Readmissions



### Lessons Learned

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- Own your performance
- Transparency is key
- Find what works and replicate it
- Results take time; be patient, stay focused
- Celebrate wins

## **Key Takeaways**

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- Improving quality is a team sport
- Leadership commitment is imperative
- Use data to tell the story
- Build a structure that promotes accountability



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## Contact:

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