



AVANT-GARDE
HEALTH

Let's Take a Closer Look™

NERVES Annual Meeting

**Are you Measuring
What Matters?**

April 2023

Optimize Surgical Care with the Avant-garde CareMeasurement Applications

CM Cost Management

Receive insights and coaching to improve care processes, supplies, and personnel costs



CM Coding

Ensure accurate coding of surgeries, beyond what CDI teams do

CM Throughput

Increase surgical throughput by predicting patient volumes and flow throughout the day



CM Quality

Analyze 70+ variables in ERAS protocols, PROs, and other quality measures to improve care



CareMeasurement Cost Management

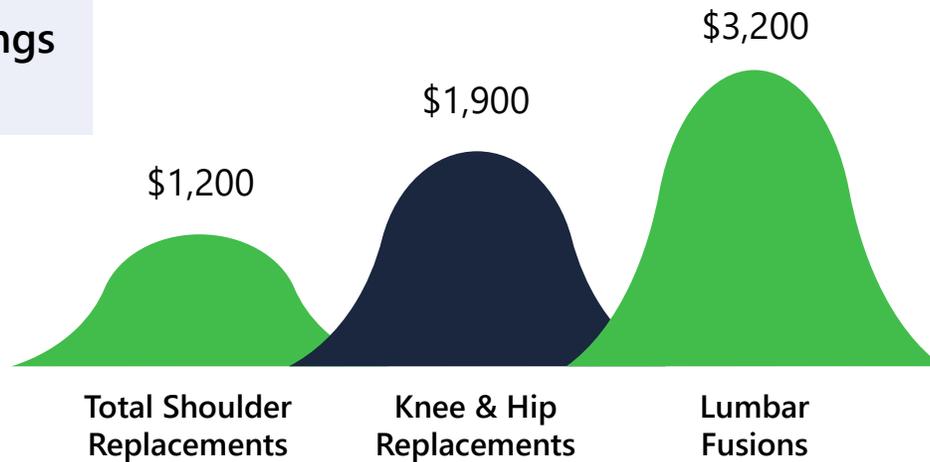
New England Baptist Hospital

\$11.7M
Cost Savings per Year

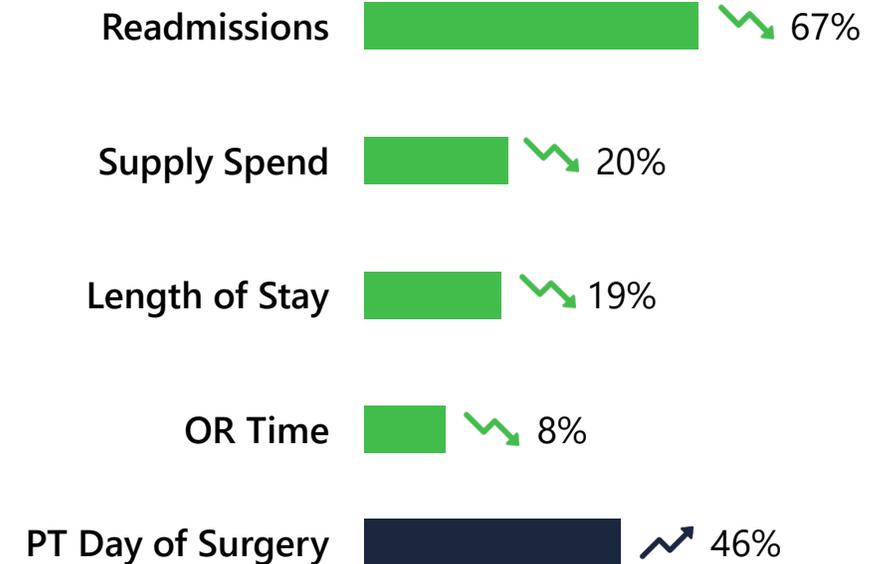


Beth Israel Lahey Health
New England Baptist Hospital

Inpatient Cost Savings Per Case



Improvements for Joint Replacements



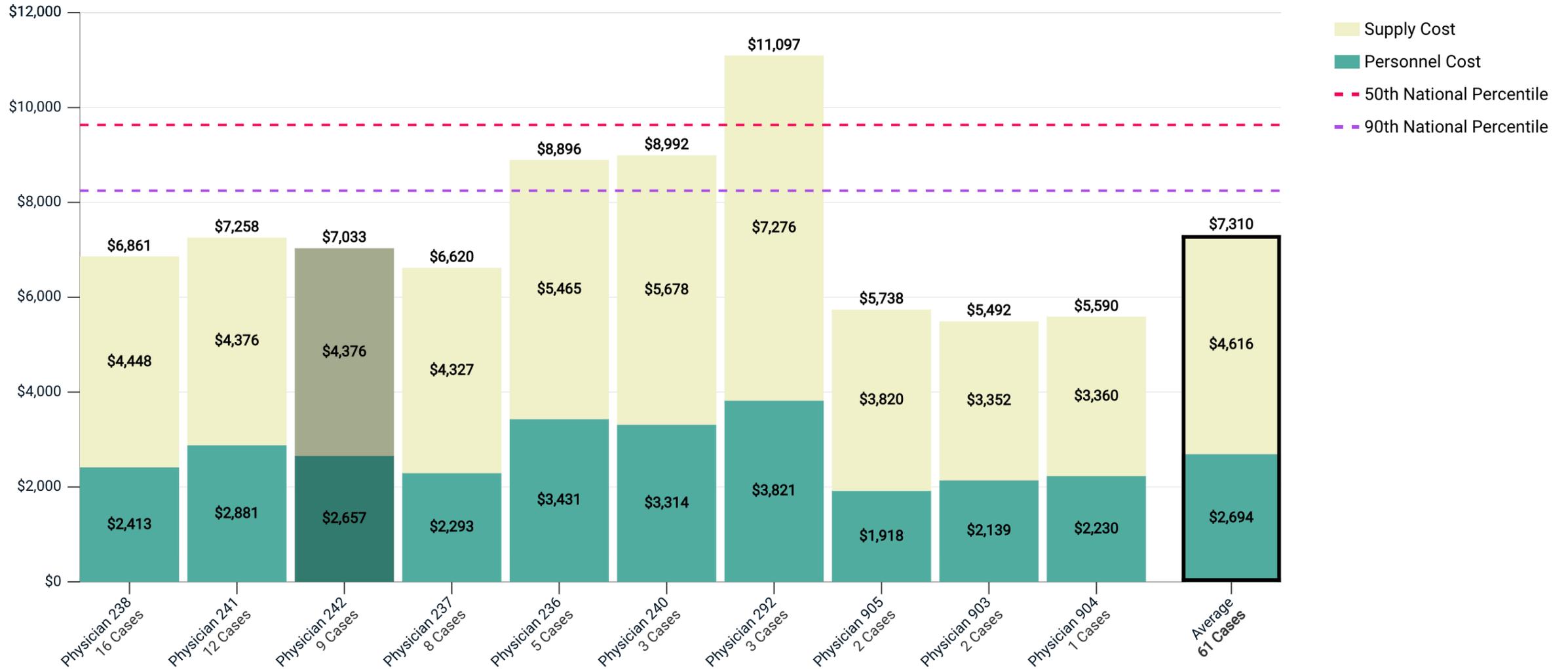
Summary View with National Benchmarks

Case Volume

Average In-Hospital Costs/Case

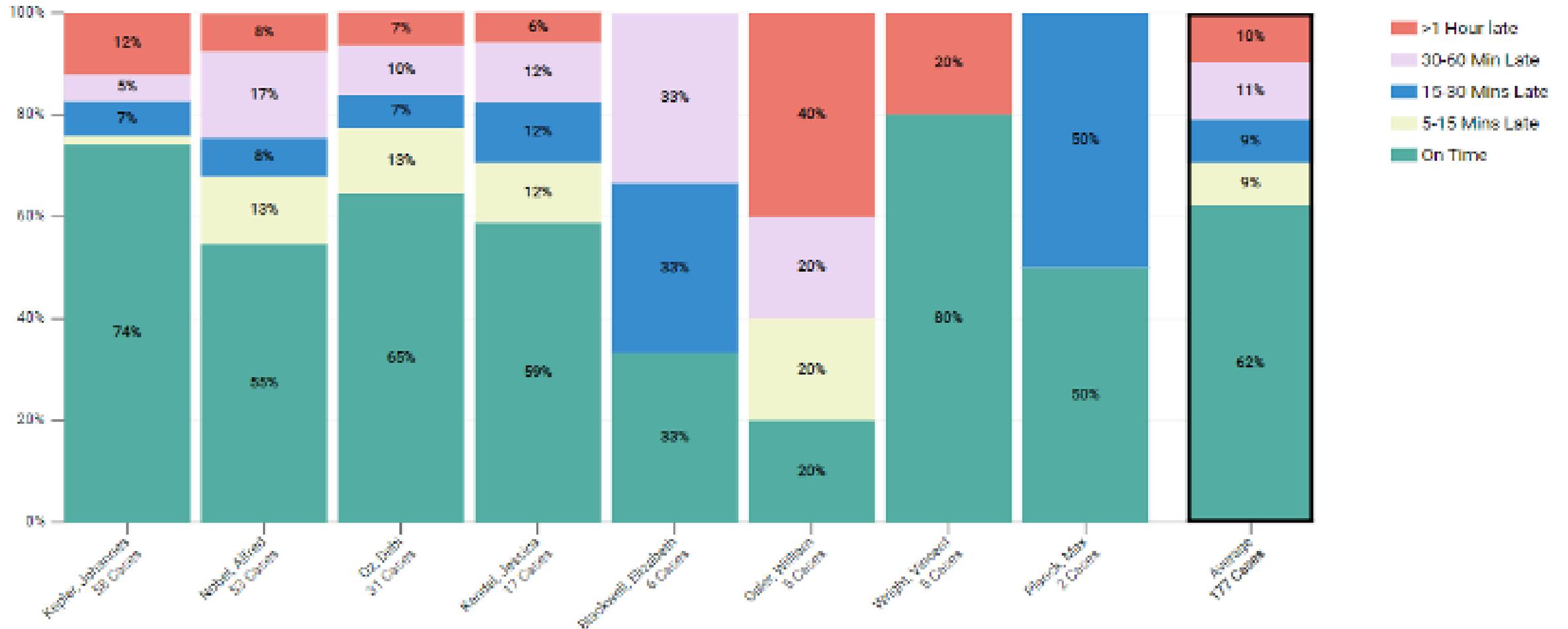
Procedure (Ranked by Case Volume)	180-Day Trend Sep 01, 2022 - Feb 28, 2023	365-Day Total Mar 01, 2022 - Feb 28, 2023	180-Day Trend Sep 01, 2022 - Feb 28, 2023	Your Hospital Mar 01, 2022 - Feb 28, 2023	National 50th Percentile	National 90th Percentile	More
Single-Level ALIF/LLIF Inpatient DRG 455, 460, and Outpatient Degenerative		103		\$23,832	\$20,317	\$17,531	⋮
Single-Level PLIF/TLIF Inpatient DRG 455, 460, and Outpatient Degenerative		49		\$22,414	\$16,413	\$14,223	⋮
Single-Level ACDF Inpatient DRG 471, 472, 473, and Outpatient Degenerative		36		\$11,350	\$7,335	\$5,790	⋮
Single-Level ALIF/LLIF Inpatient DRG 454, 456, 459 Degenerative		35		\$28,776	\$25,997	\$20,635	⋮
Single-Level Posterior Fusion Inpatient DRG 455, 460, and Outpatient Degenerative		29		\$17,903	\$12,489	\$10,420	⋮
2-Level ACDF Outpatient Degenerative		25		\$15,635	\$8,529	\$7,076	⋮

Cost Variations by Physician with National Benchmarks



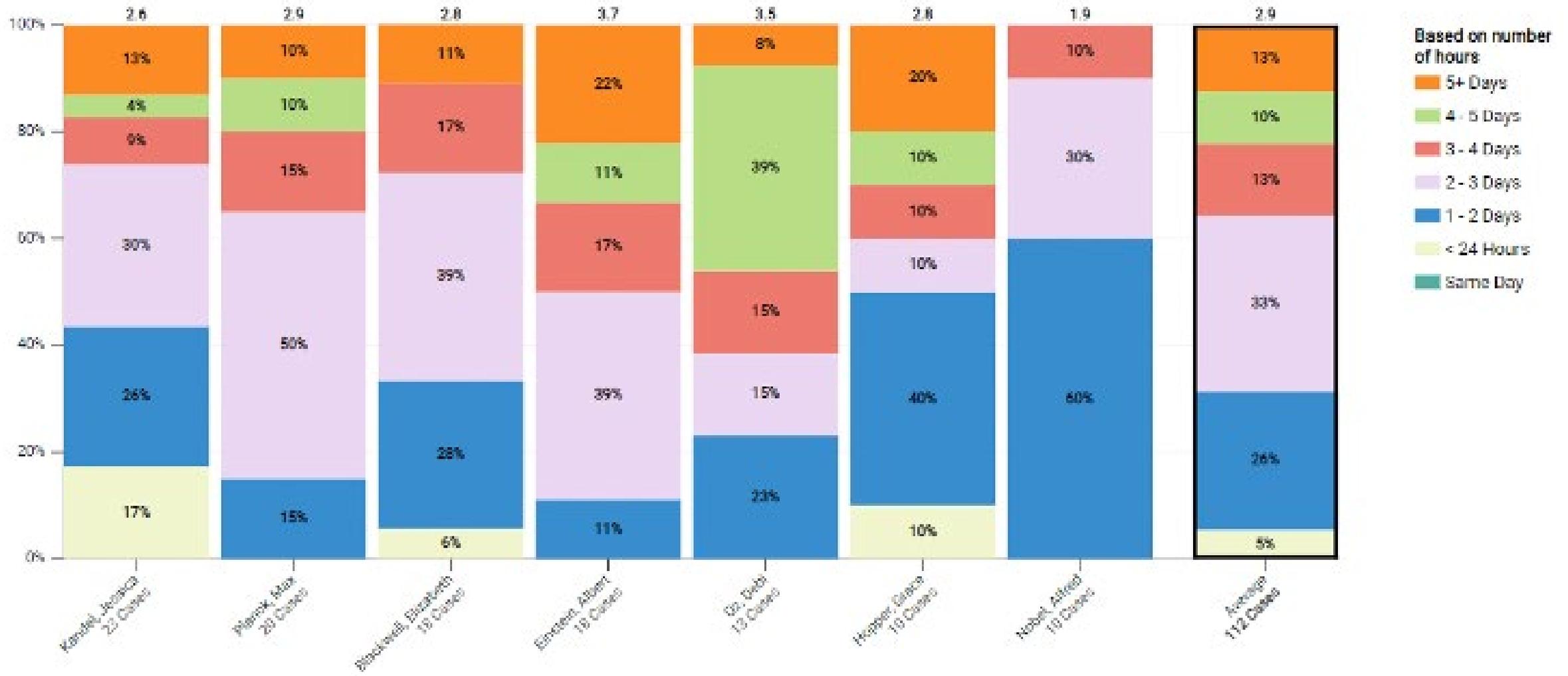
Detailed Metrics by Physician

Percent of On Time OR Starts by Physician



Comparison of Outcomes Across Physicians

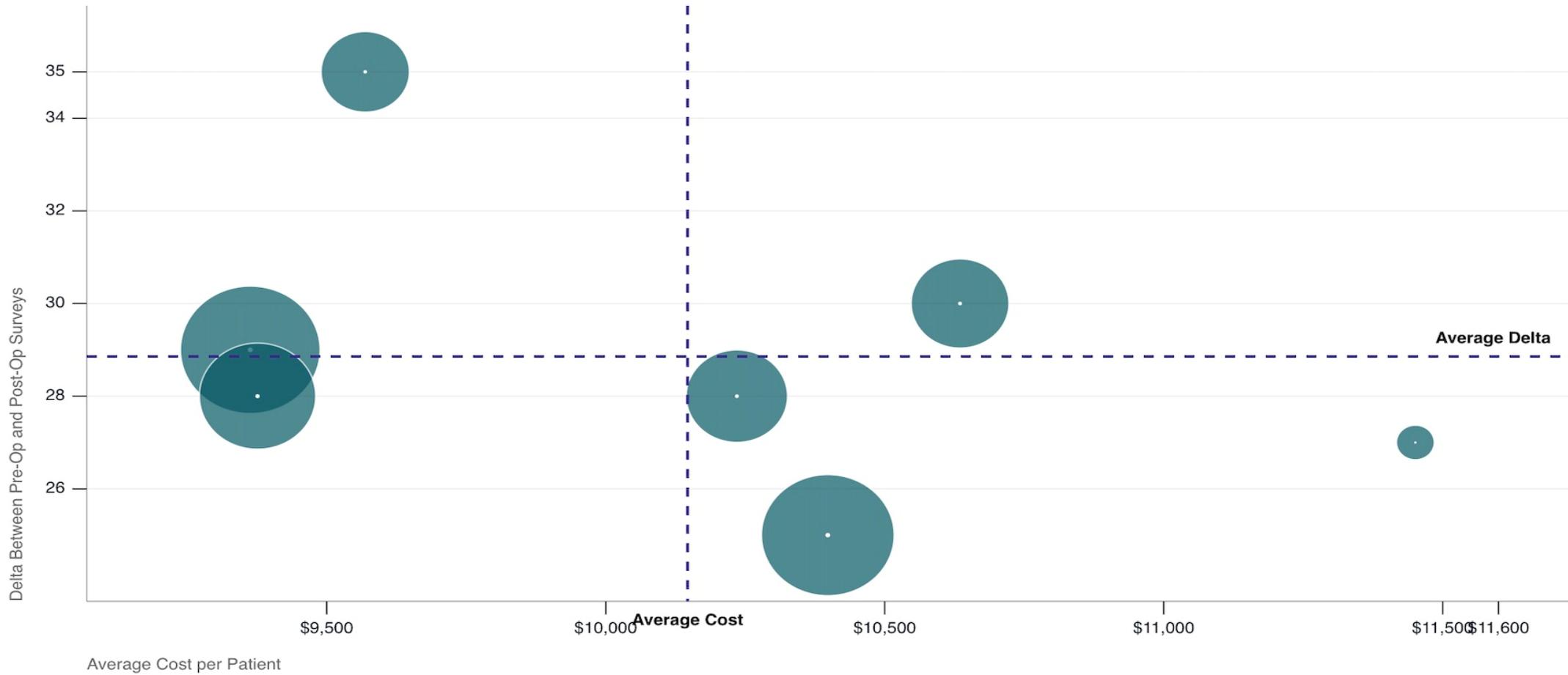
Average Length of Stay (%) by Physician



Comparison of Outcomes Across Physicians

Comparison of Cost with Delta in Patient Reported Outcomes (PRO), by Physician

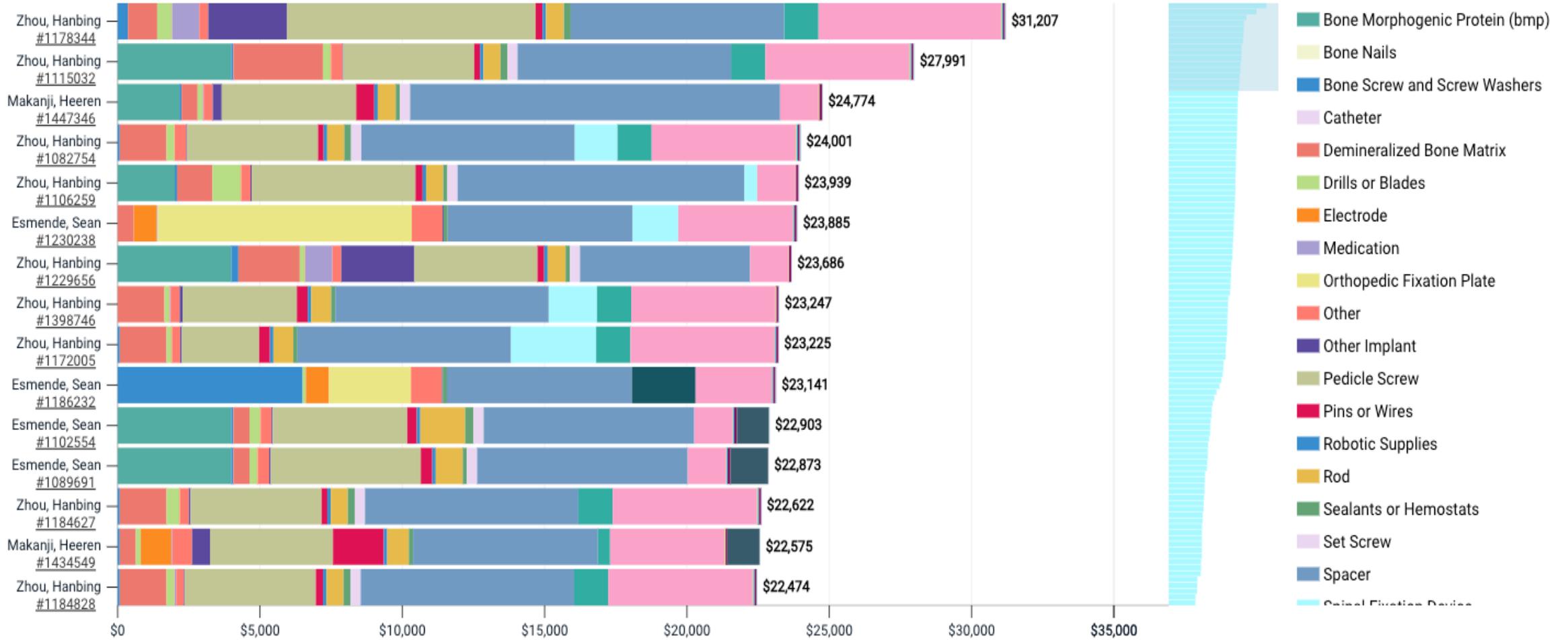
Note: Bubble sizes correspond to the number of cases for each physician for the specified date range.



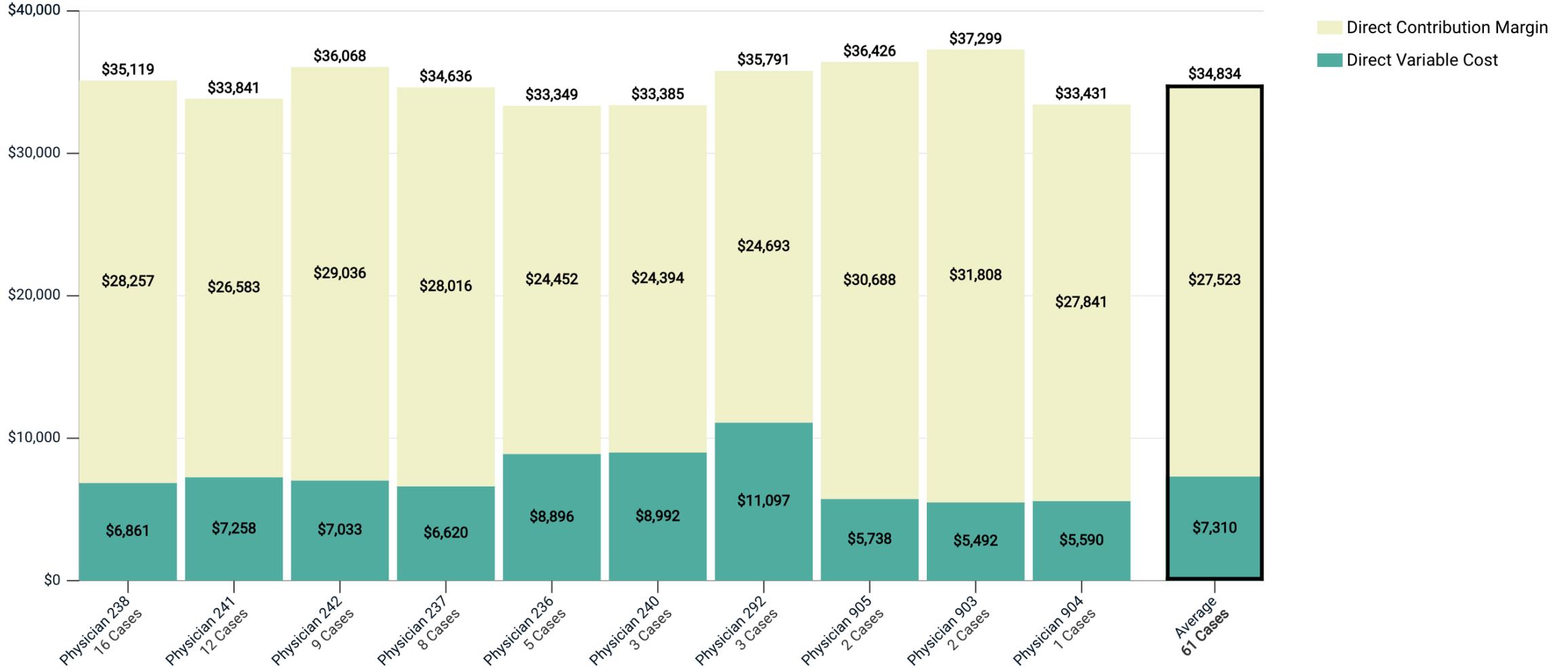
Detailed Categorized Views of Supply Utilization

Supply Cost Details by Case

103 cases total



Financial Reporting





CareMeasurement Throughput

Community Hospital PACU Backups Addressed



The Challenge

Patient holds in PACU due to unavailable floor beds



The Solution

CM Throughput data used in daily huddles among PACU, Floor, & Case Management



Results Achieved

20% Decrease in PACU Length of Stay

Eliminated PACU Nurse Overtime

Eliminated OR patient holds

Predicted Daily PACU Patient Volumes

Your Selections (Clear All)

Daily detail: 03/29/2023 ✕

Total Scheduled Surgical Volume

80

Total Scheduled Floorbed Volume

13

Predicted Daily PACU Patient Volumes

PACU Volumes

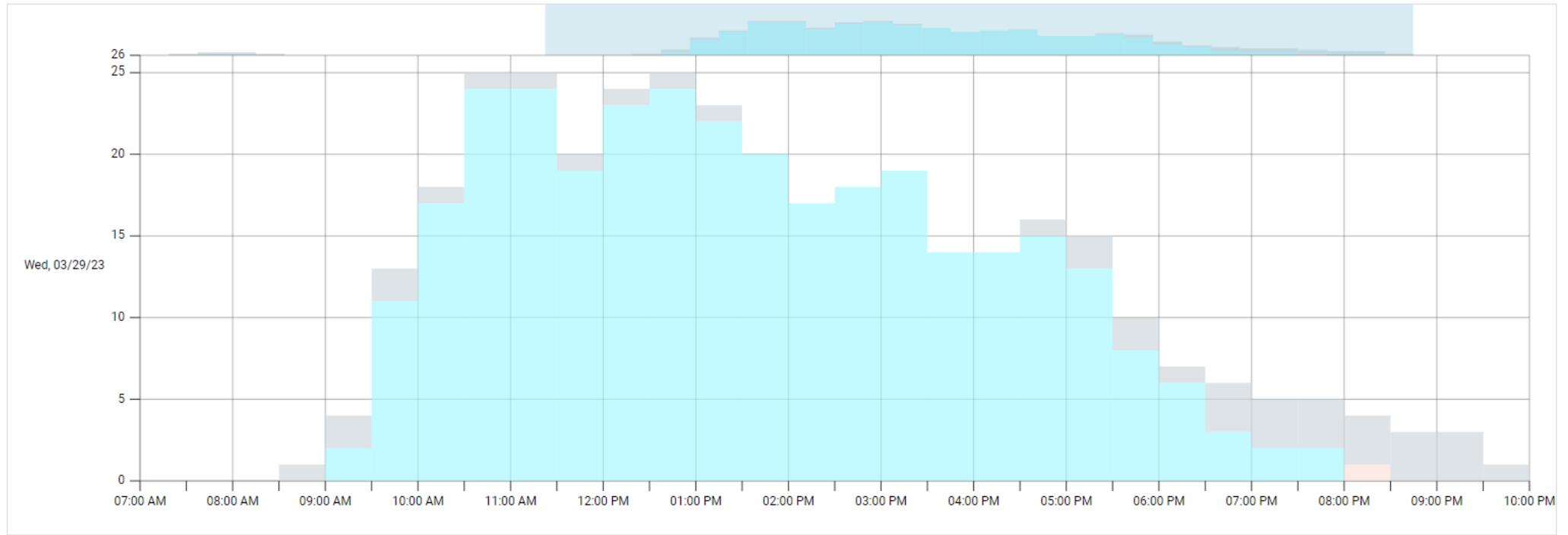
Floor Arrivals

< Previous

Next >

📅 Date Range

⚙️ Chart Options



Off-hours Scheduled Volume Scheduled Volume Add-on Volume

Predicted Daily Surgical-Patient Floor Bed Needs

Your Selections (Clear All)

Daily detail: 03/20/2023

Total Scheduled Surgical Volume

29

Total Scheduled Floorbed Volume

10

Predicted Daily Inpatient Floor Arrivals

PACU Volumes

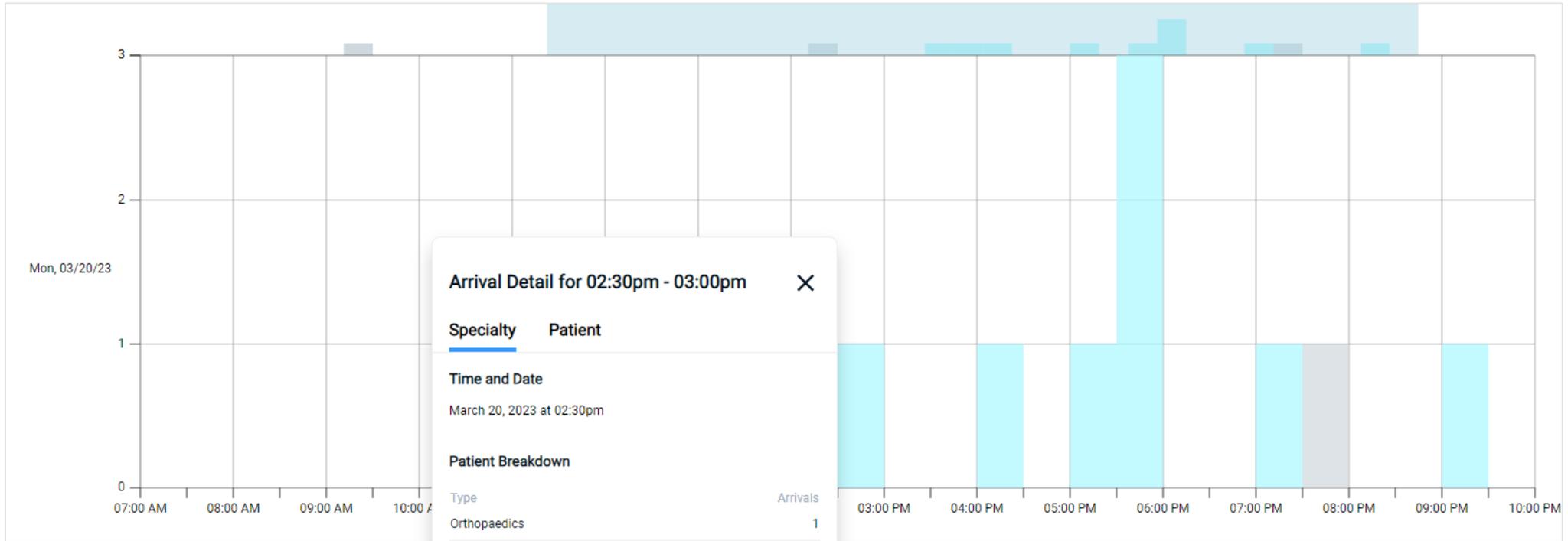
Floor Arrivals

< Previous

Next >

📅 Date Range

⚙️ Chart Options



Arrival Detail for 02:30pm - 03:00pm

Specialty Patient

Time and Date

March 20, 2023 at 02:30pm

Patient Breakdown

Type	Arrivals
Orthopaedics	1

Total PACU Volume 1

Off-hours Scheduled Arrivals Scheduled Arrivals



CareMeasurement Quality (ERAS)

ERAS Streamlined at Brigham and Women's Hospital



The Challenge

ERAS required 3-4 Data Coordinators



The Solution

Manual Work Reduced by 75%

One of only
four certified
ERAS Centers
of Excellence
in the United
States

BWH Data Coordinators highlight their
“Easy access to credible data and the ability
to quickly identify issues and trends”

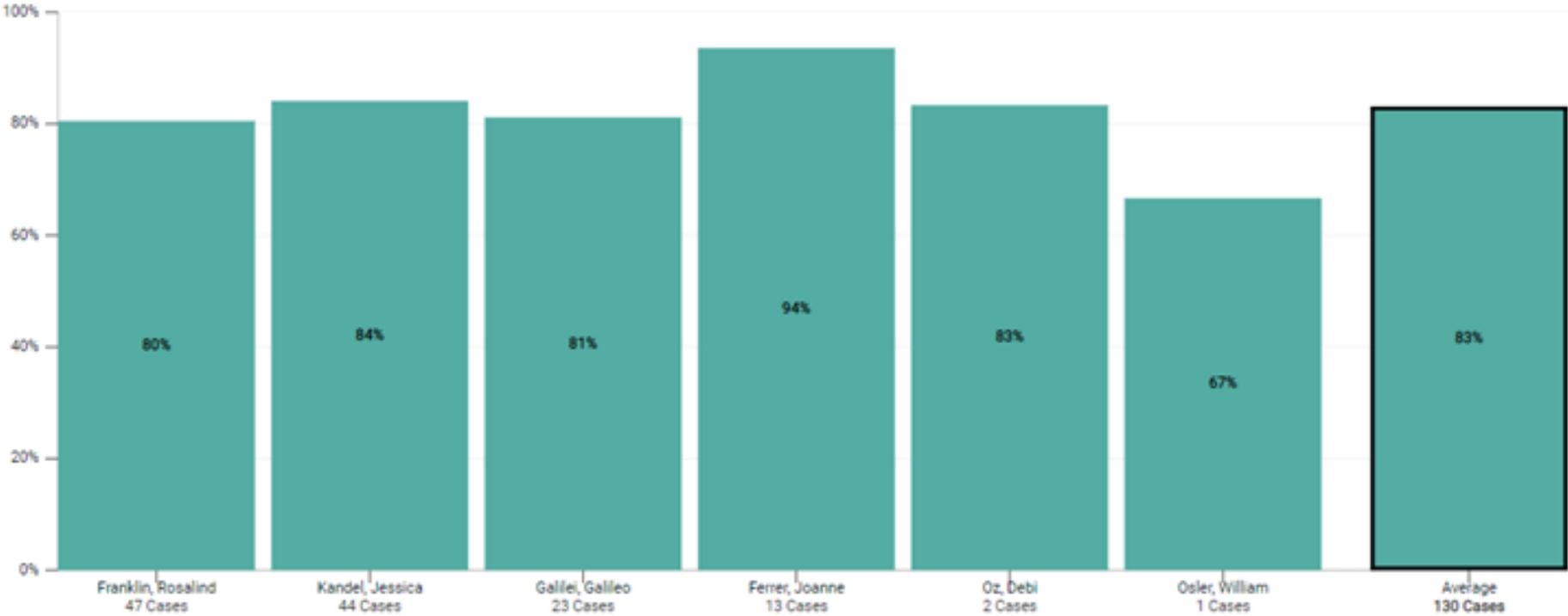
ERAS Pre-op Compliance by Physician

Your Selections (Clear All)

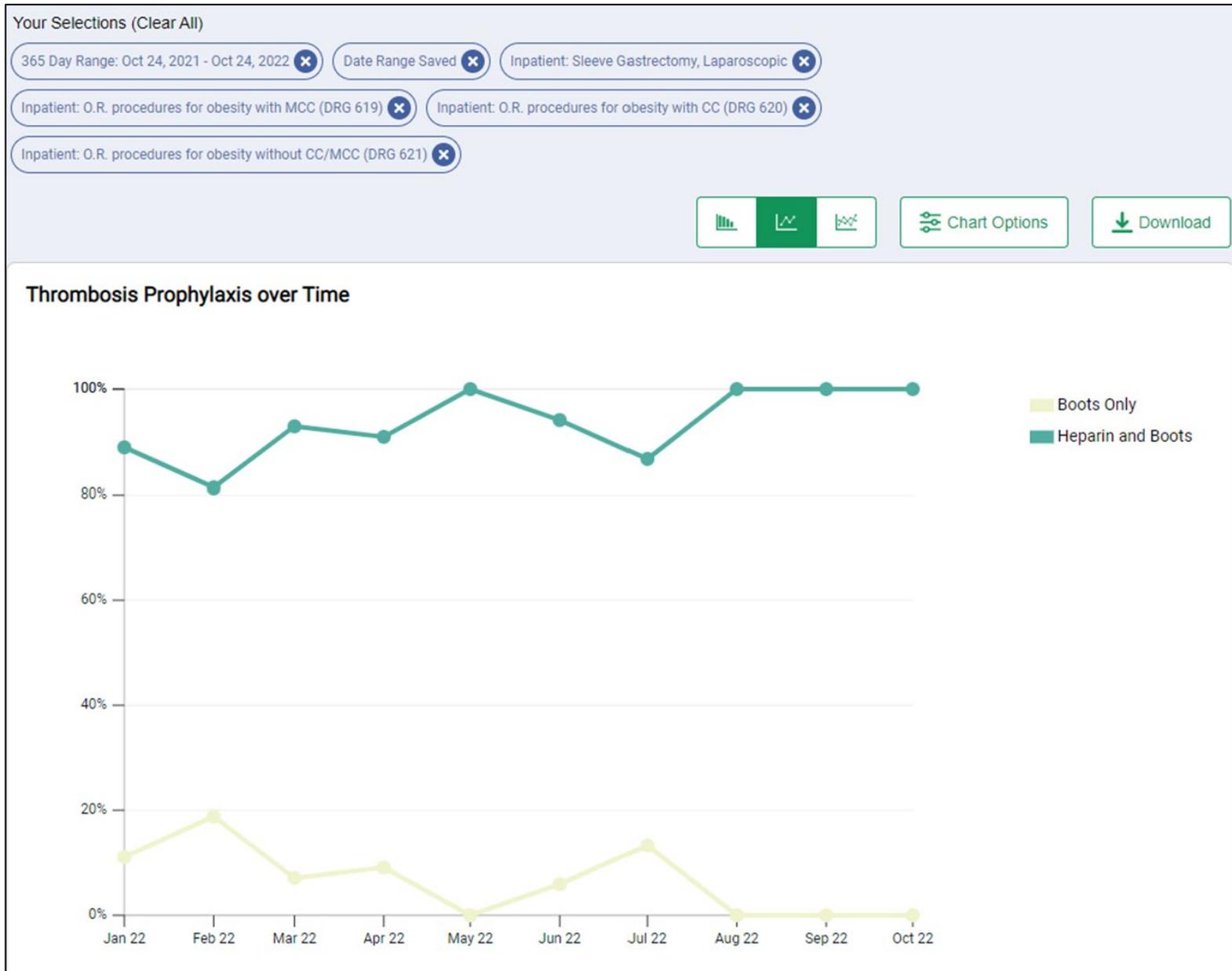
- 365 Day Range: Oct 24, 2021 - Oct 24, 2022
- Date Range Saved
- Inpatient: Sleeve Gastrectomy, Laparoscopic
- Inpatient: O.R. procedures for obesity with MCC (DRG 619)
- Inpatient: O.R. procedures for obesity with CC (DRG 620)
- Inpatient: O.R. procedures for obesity without CC/MCC (DRG 621)

Chart Options Download

Pre-op Compliance by Physician



Quality Compliance Trend



Physician Score Card with Cost and Quality Benchmarks (Part 1)

Metrics

180-Day Trend
Dec 02, 2021 - May 31, 2022

365-Day Performance
May 31, 2021 - May 31, 2022

Case Volume



35 cases



In-Hospital Costs



\$21,568



Personnel Cost



\$6,162



Supply Cost



\$15,406



Physician Score Card with Cost and Quality Benchmarks (Part 2)

OR Time



198 minutes



Best Performer
196 minutes

Length of Stay



2.1 days



Best Performer
1.9 days

Discharge Home



100%



Best Performer
100%

PT on Day of Surgery



80%



Best Performer
100%



CareMeasurement Coding

Coding Errors Corrected: \$580,000 Total Additional Revenue



Hospital uses Avant-garde to supplement advanced coding and clinical documentation teams

Health System #1

Recognized by US News & World Report in its annual “Best Hospitals” rankings. Spine procedure coding opportunities identified yielding **\$800,000** in additional reimbursement revenue

Health System #2

This Health System is part of a top 10 US Healthcare System and recognized by US News and World Report in its annual rankings. Spine procedure coding opportunities identified yielding **\$530,000** in additional reimbursement revenue

Coding Errors Flagged Based on Supplies Used



Specialties ▼

PAC Tools

Coding Optimization



Hi, Dina!
Demo A

Miscodings: Jun 30, 2022 - Jul 30, 2022

Search

Download



Menu

Total Cases Displayed

25

Hospital Case No.	Hospital Patient ID	Physician	Date of Surgery	Procedure	Miscoding Reasons	
428739	116747468	Leverett, Ben	Jul 28, 2022	Total Hip Replacement: Hip Joint	Revision component found in Primary Total Joint Replacement procedure	see details
431361	117058258	Hopper, Grace	Jul 23, 2022	Total Knee Replacement: Knee Joint	Revision component found in Primary Total Joint Replacement procedure	see details
72c5fd6a175e	9df71dab5520	Osler, William	Jul 09, 2022	Esophagogastroduodenoscopy (EGD)	Stents should not be in EGDs	see details
6c762b8dafcd	d6ef65cd79ff	Osler, William	Jul 08, 2022	Esophagogastroduodenoscopy (EGD)	Stents should not be in EGDs	see details
c91df36932ad	a6d7bcff4af3	Henry, Joseph	Jul 07, 2022	Esophagogastroduodenoscopy (EGD)	Stents should not be in EGDs	see details
S-999-AGH	S-999	Jones, Megan	Jul 01, 2022	Single-Level Posterior Fusion: Lumbar	Spacers should be in DRG 455 (Combined Anterior/Posterior Spinal Fusion W/ CC/MCC)	see details
250309-AGH	1056585	Oz, Debi	Jul 01, 2022	Single-Level Posterior Fusion: Lumbar	Spacers should be in DRG 455 (Combined Anterior/Posterior Spinal Fusion W/O CC/MCC)	see details



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