American Spine Registry

A partnership between

American Association of Neurological Surgeons

American Academy of Orthopaedic Surgeons

New American Spine Registry Dashboard Enhancements You Should Know About

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Learning Objectives

- Learn about ASR progress
- View an overview of the dashboard updates
- Learn what contributes to the future of ASR
- Understand how to join the ASR

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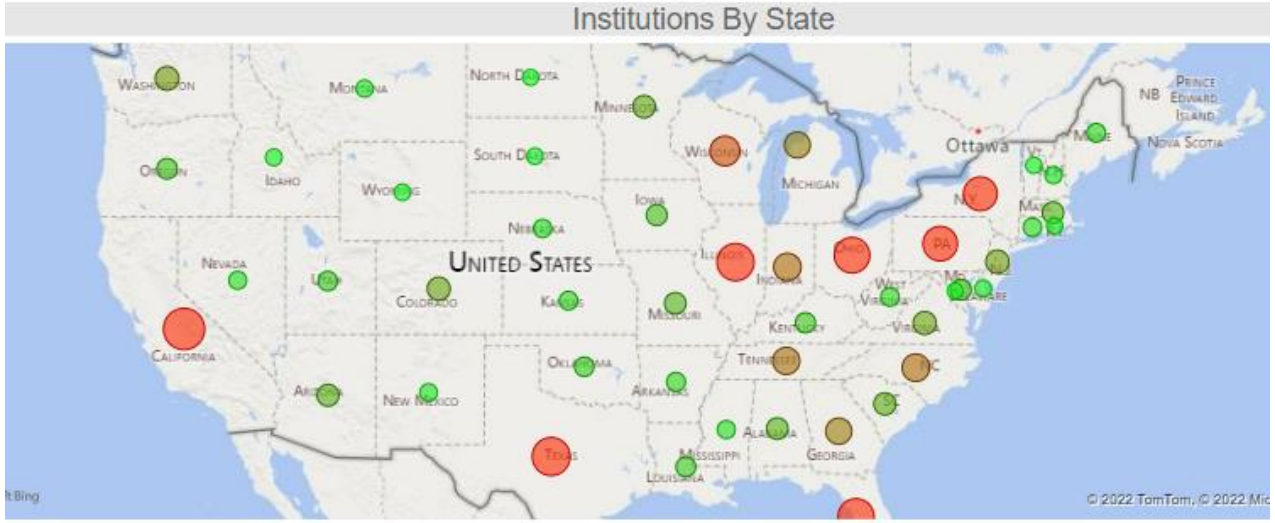
Current ASR Status

ASR Participation and volume

- Over **250** ***participating sites*** contracted and **600 registered surgeons** across all 50 states

- Data representing ***over 100,000 procedures*** *and* ***over 90,000 patients***



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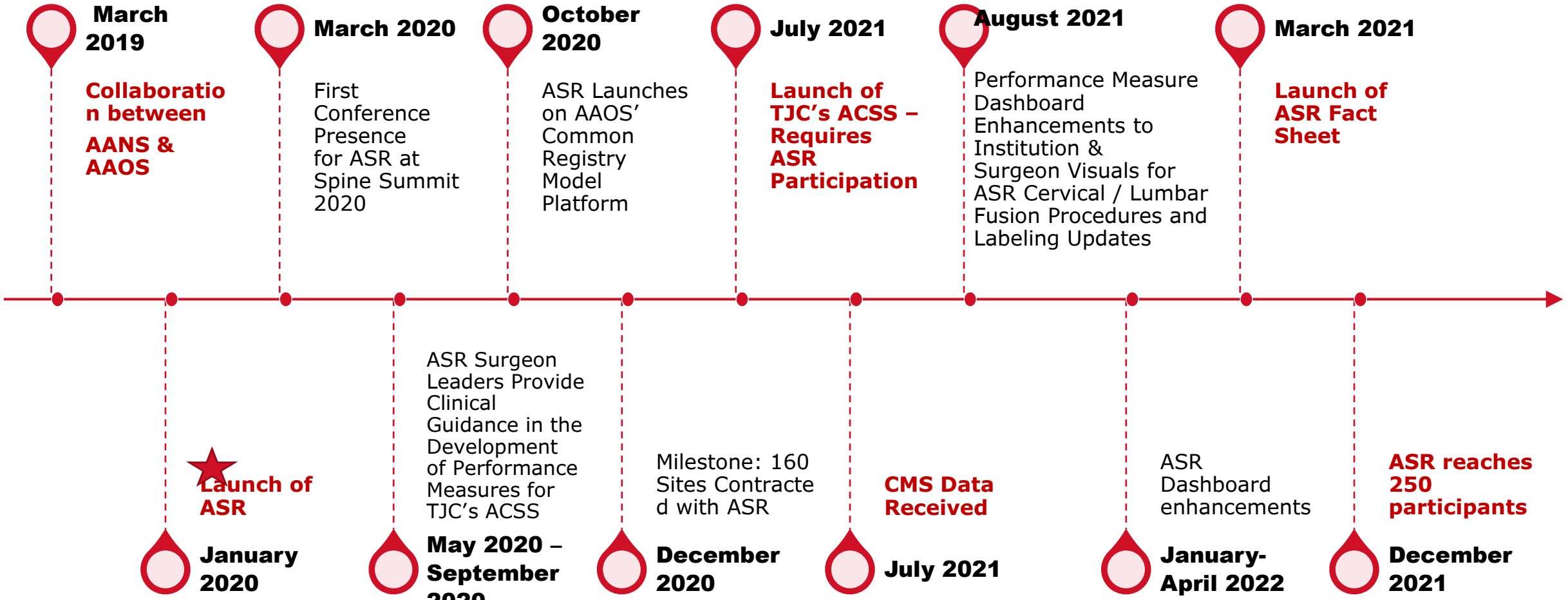
ASR Milestones

ASR Milestones



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Dashboard Updates

Surgeon Dashboard Update Overview

New Features and Updates:

Overall Dashboard Updates

- **Merged All (National) and Your tabs**
  - One chart with your surgeon data and comparison against national

PROMs

- **New 3-month PROMs visual**
- Update to PROMs view
- Added ODI 2.0 on PROMs
  - Pre-Op Dashboards
- New Pre-Op PROMs tab added

Procedures

- **Add ASR Specific Filters to Dashboard**
- Approach filter
  - Primary vs Revision - Procedure Status
  - Change dashboard default to Lumbar
  - Primary Diagnosis
- **Structural Pathology**
  - Split into two visuals one for **cervical** and one for **lumbar**
  - Disclaimer text under these charts

- Remove Anesthesia Type & Surgical Times charts
- Procedural Discharge Disposition Rate
- Display Several Procedure Types per Case
- Added procedure type categories

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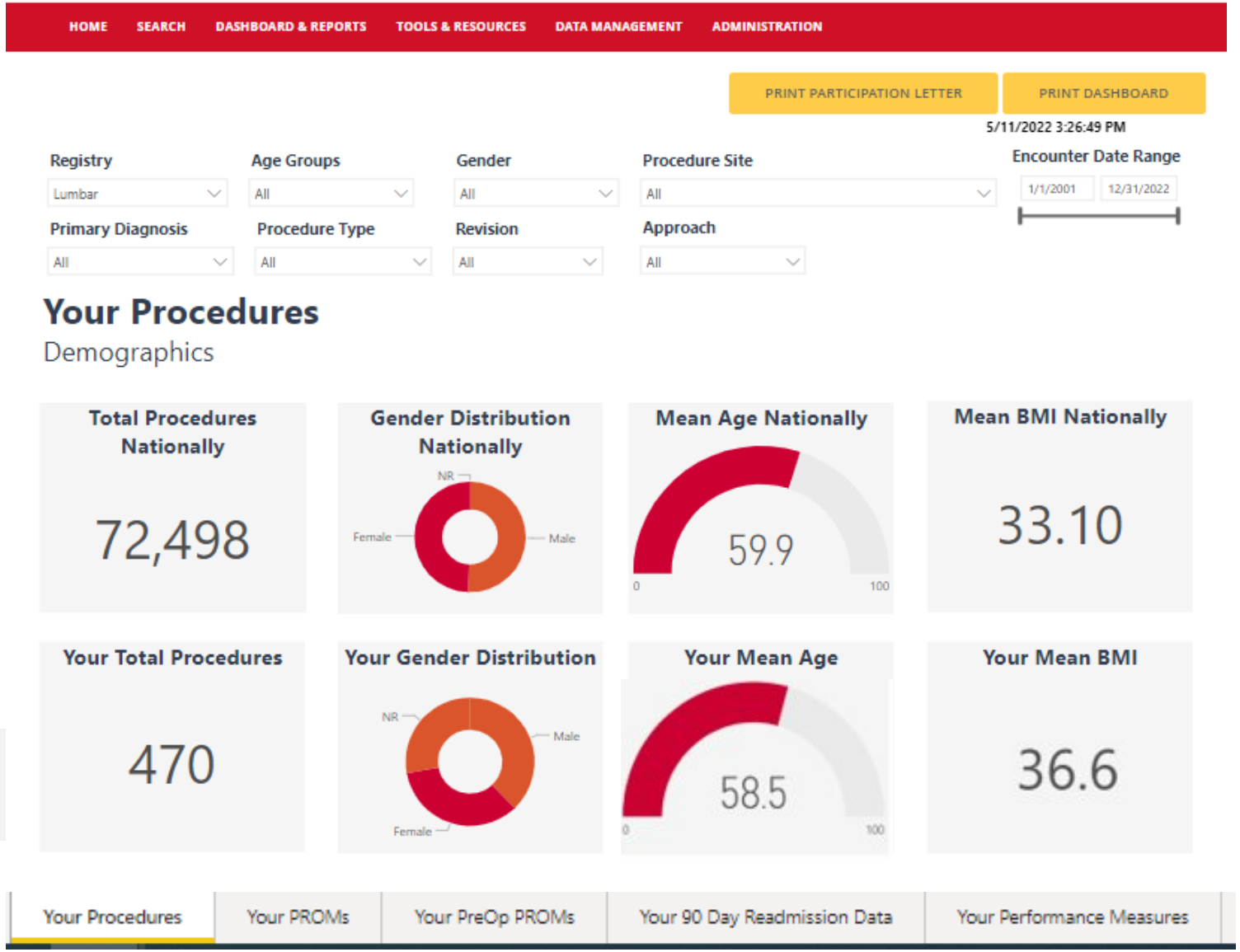
ASR Dashboard Enhancements

ASR Dashboard Enhancements

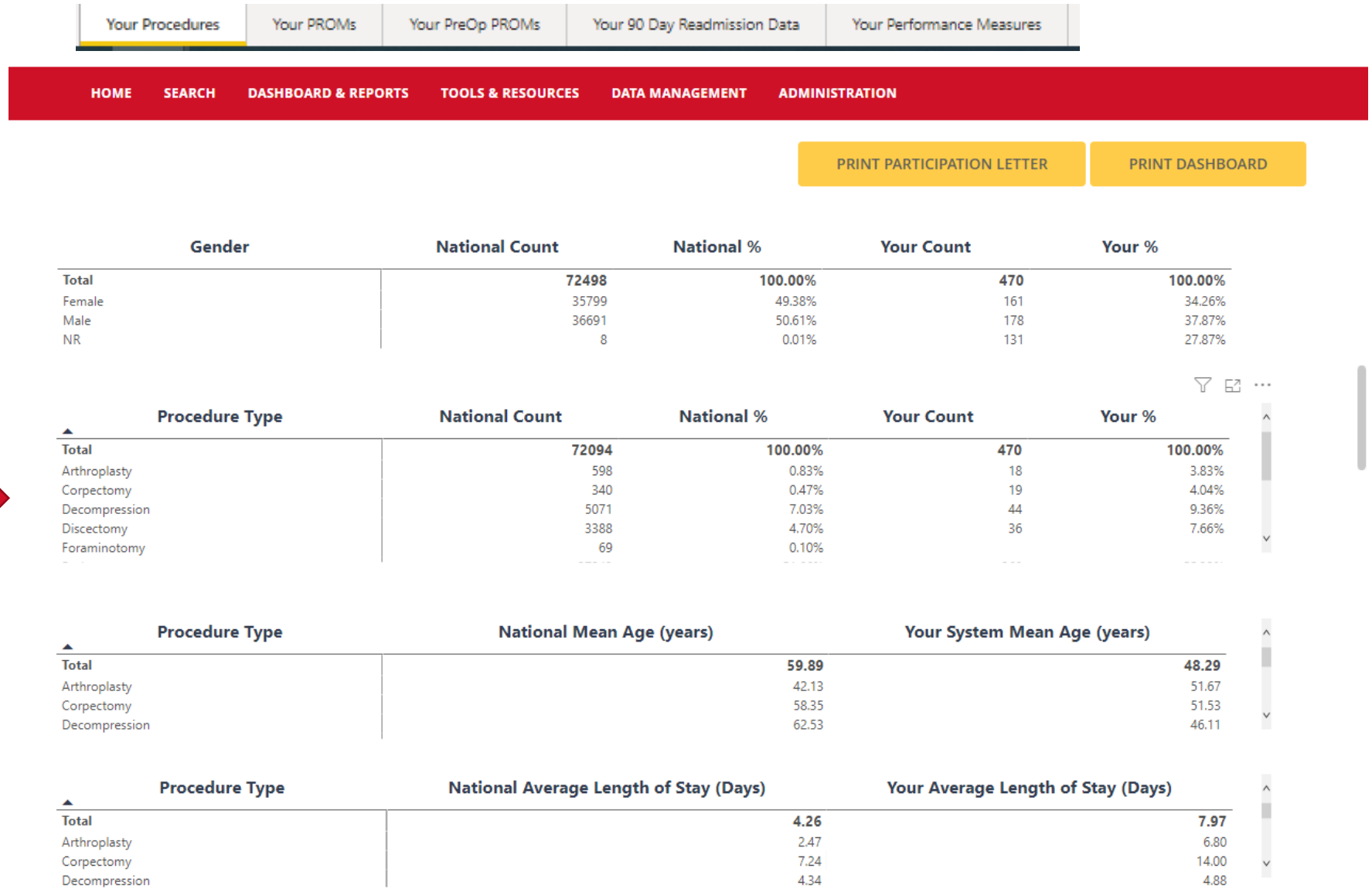
- ✓ New landing page: Lumbar Module
- ✓ Updated data filters:
  - Approach,
  - Primary vs Revision,
  - Primary Diagnosis
- ✓ Removal of Anesthesia Type chart
- ✓ Removal of Surgical Times chart
- ✓ Combined Institution and National tab

As part of our user engagement plan, enhancements were communicated to ASR users via email on 02.02.2022



Your Procedures | National and Your Procedure Data

- Merged National Data and Your Procedures Tab
- Added procedure type count, mean procedure age, and LOS by procedure type



Gender	National Count	National %	Your Count	Your %
Total	**72498**	**100.00%**	**470**	**100.00%**
Female	35799	49.38%	161	34.26%
Male	36691	50.61%	178	37.87%
NR	8	0.01%	131	27.87%

Procedure Type	National Count	National %	Your Count	Your %
Total	**72094**	**100.00%**	**470**	**100.00%**
Arthroplasty	598	0.83%	18	3.83%
Corpectomy	340	0.47%	19	4.04%
Decompression	5071	7.03%	44	9.36%
Discectomy	3388	4.70%	36	7.66%
Foraminotomy	69	0.10%		

Procedure Type	National Mean Age (years)	Your System Mean Age (years)
Total	**59.89**	**48.29**
Arthroplasty	42.13	51.67
Corpectomy	58.35	51.53
Decompression	62.53	46.11

Procedure Type	National Average Length of Stay (Days)	Your Average Length of Stay (Days)
Total	**4.26**	**7.97**
Arthroplasty	2.47	6.80
Corpectomy	7.24	14.00
Decompression	4.34	4.88

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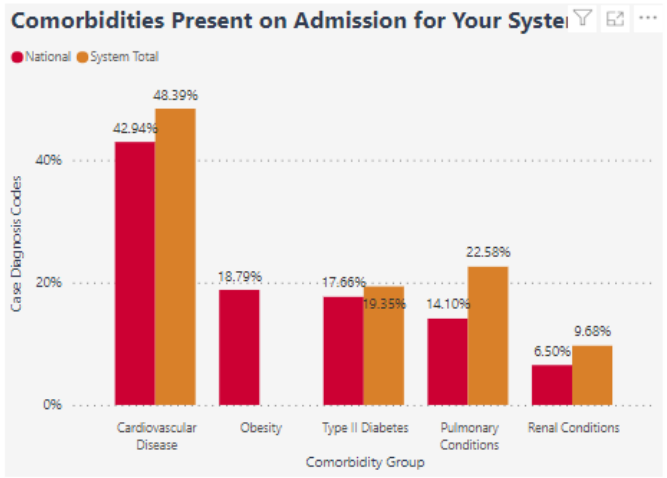
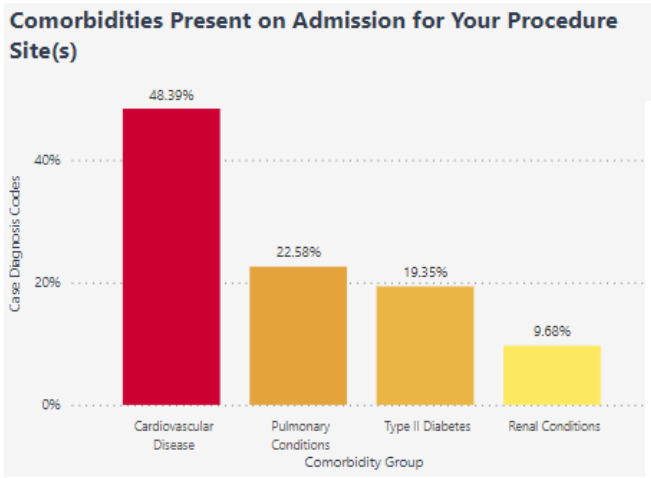
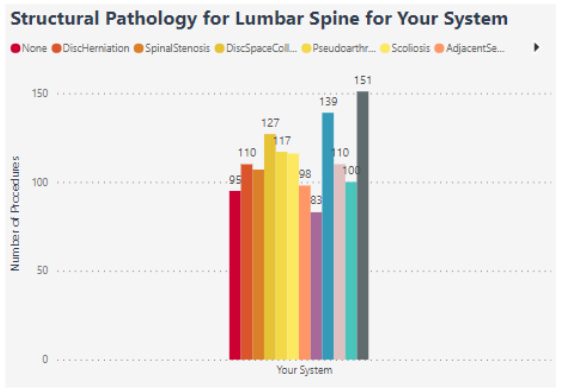
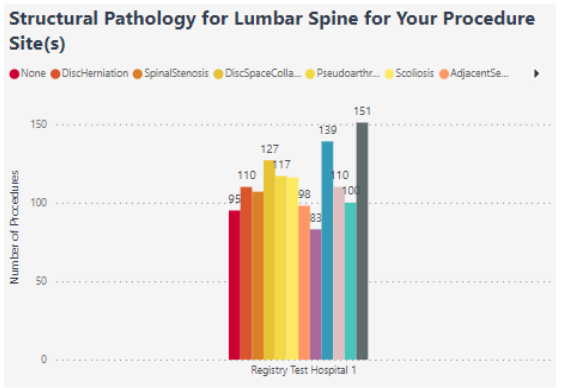
Your Procedures | National and Your Procedure Data









*Structural Pathology is a Vanguard data element available on the ASR Operative Form. Data will populate in this chart if Structural Pathology was submitted to ASR via the operative form.

Comorbidities Present upon admission for your site, system, and nationally

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Structural Pathology-split into **Cervical** and **Lumbar** Charts

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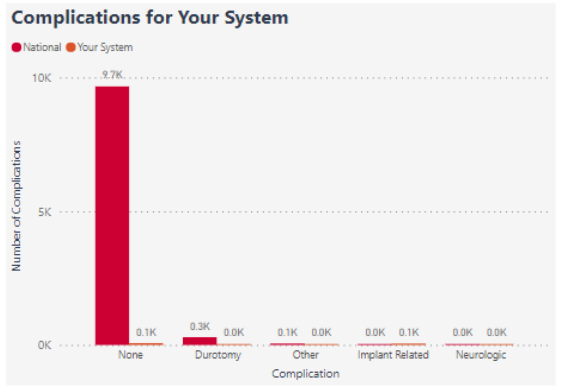
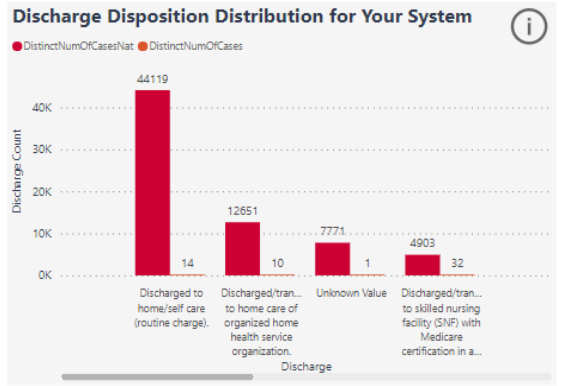
Complications

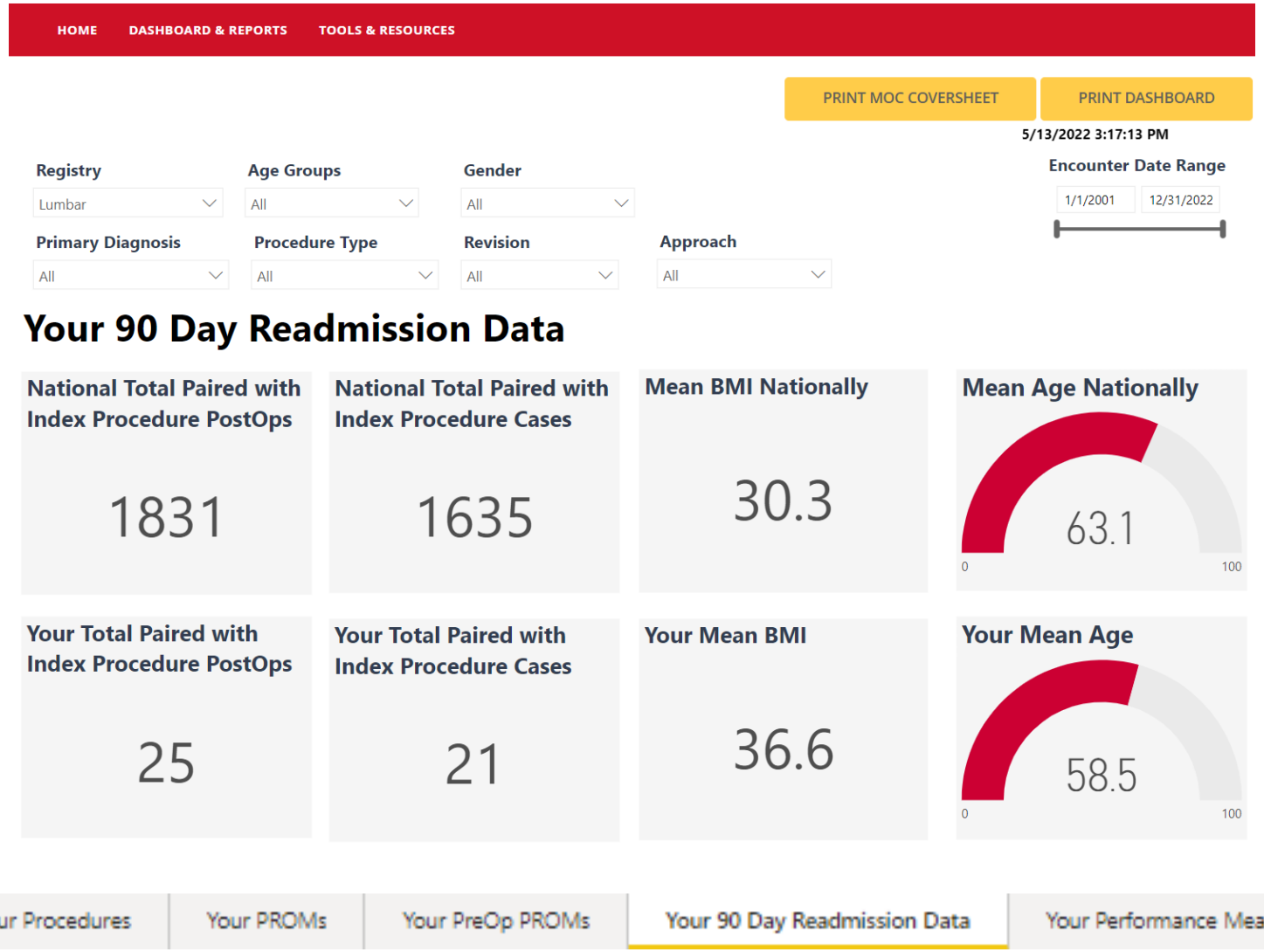
Average Length of Stay





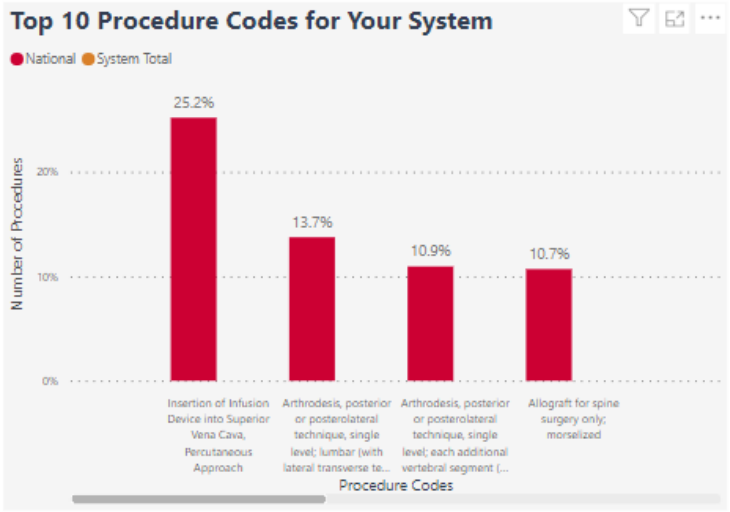
All Post-Operative Data| National and Your 90 Day Readmission Data

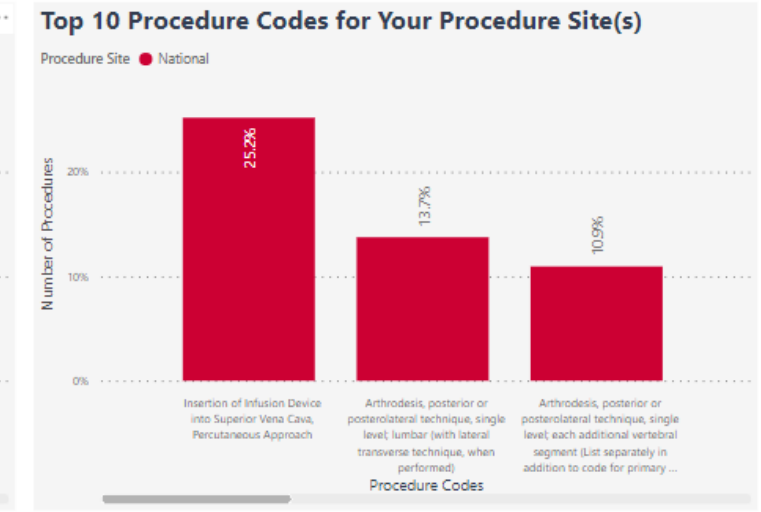
- Tiles display total aggregate view of National Data for Post-Operative Procedures
- Now National and site/surgeon level data are on the same tab
- *Calculation Details*
  - **Linked postops** = the number of postop encounters linked to a patient with a replacement procedure by patient ID, anatomical site, and laterality.
  - **Linked cases** = same as above, but this identifies the number of linked readmissions on a case-level, excluding multiple encounters

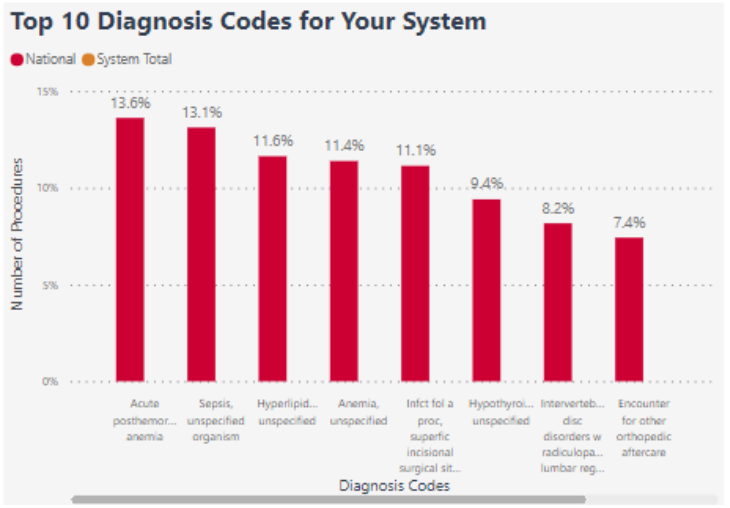


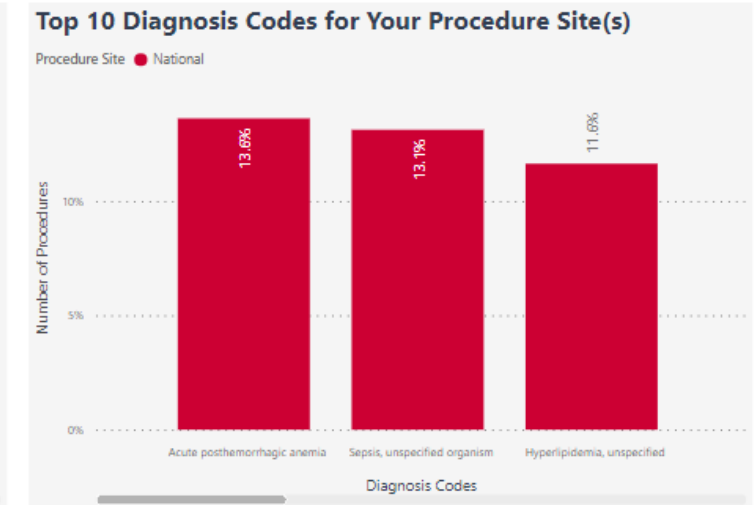
All Post-Operative Data| National and Your 90 Day Readmission Data

Count of Top 10 Diagnosis and Procedure Codes for Your Institution & System









All PROMs Data| National and Your PROMs Data

Your PROMs

Your Procedures | Your 90 Day Readmission Data | Your PROMs | Your Performance Measures

Your Paired with Index Procedure PROMs

Neck Disability Index				
4	25.00%	0.00%	(Blank)	
PreOp Assessment Count	% Linked at 3 Months PostOp	% Linked at 12 Months PostOp	% MCID Achieved at 12 Months PostOp	
NRS Cervical				
8	25.00%	0.00%	(Blank)	
PreOp Assessment Count	% Linked at 3 Months PostOp	% Linked at 12 Months PostOp	% MCID Achieved at 12 Months PostOp	
NRS Lumbar				
434	13.36%	46.08%	30.00%	
PreOp Assessment Count	% Linked at 3 Months PostOp	% Linked at 12 Months PostOp	% MCID Achieved at 12 Months PostOp	
Oswestry Disability Index				
231	18.61%	46.75%	26.92%	
PreOp Assessment Count	% Linked at 3 Months PostOp	% Linked at 12 Months PostOp	% MCID Achieved at 12 Months PostOp	

- Your Institution or Your Surgeon Data vs. National PROMs collection
  - # of received PROMs for Pre-op, 3-month, and 1-year follow up surveys
  - % of Pre-op PROMs linked to a post-op PROM
  - % minimal clinically important difference (MCID) Achieved at 12 months post-op

Paired with Index Procedure PROMs Nationally

Neck Disability Index			
4902	51.24%	36.94%	68.24%
PreOp Assessment Count	% Linked at 3 Months PostOp	% Linked at 12 Months PostOp	% MCID Achieved at 12 Months PostOp
NRS Cervical			
8246	51.39%	38.52%	69.81%
PreOp Assessment Count	% Linked at 3 Months PostOp	% Linked at 12 Months PostOp	% MCID Achieved at 12 Months PostOp
NRS Lumbar			
16051	54.50%	42.00%	72.05%
PreOp Assessment Count	% Linked at 3 Months PostOp	% Linked at 12 Months PostOp	% MCID Achieved at 12 Months PostOp
Oswestry Disability Index			
9150	54.09%	41.18%	72.11%
PreOp Assessment Count	% Linked at 3 Months PostOp	% Linked at 12 Months PostOp	% MCID Achieved at 12 Months PostOp

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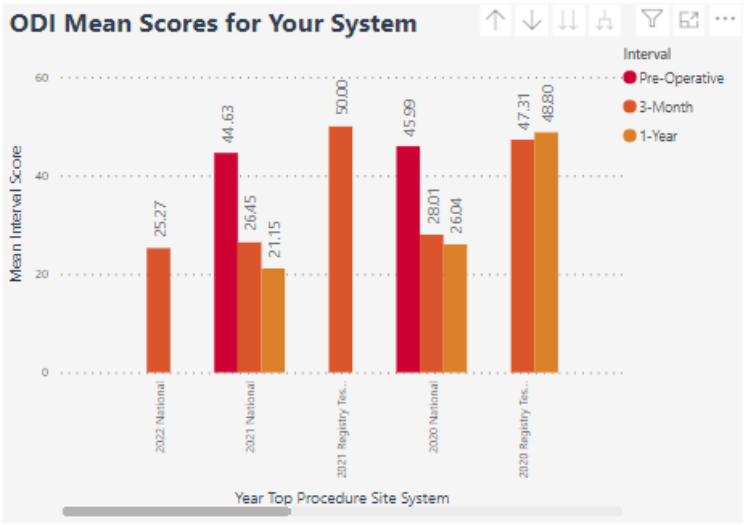
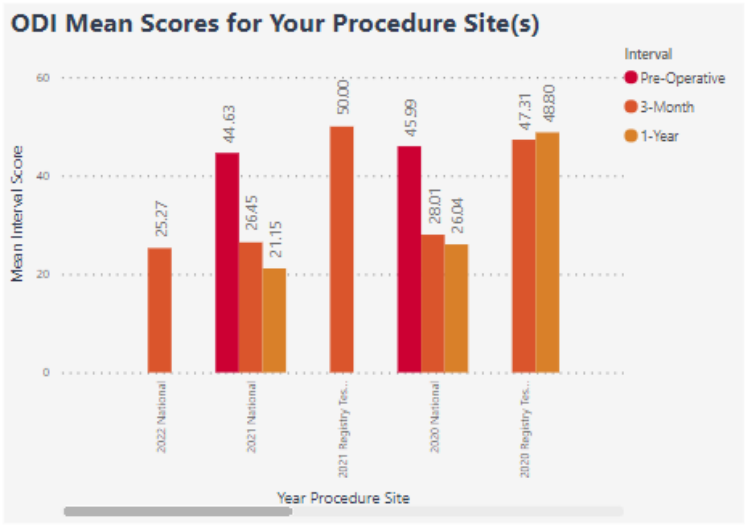
All PROMs Data| National and Your PROMs Data

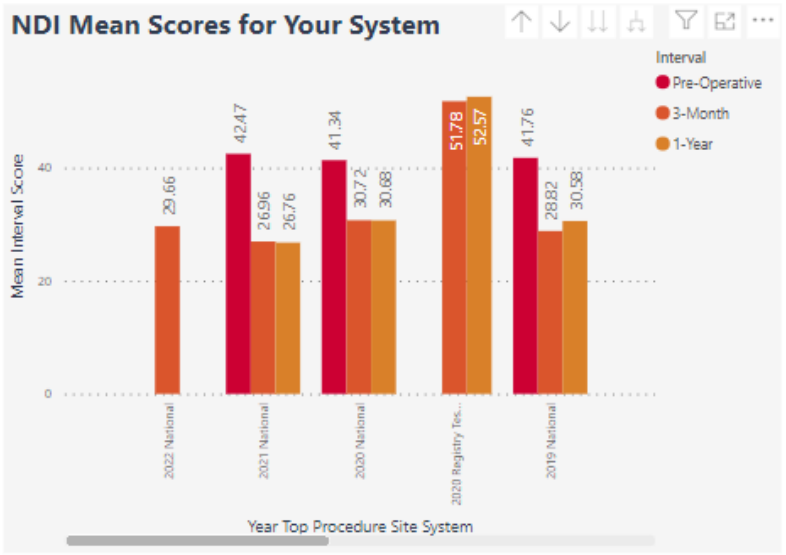


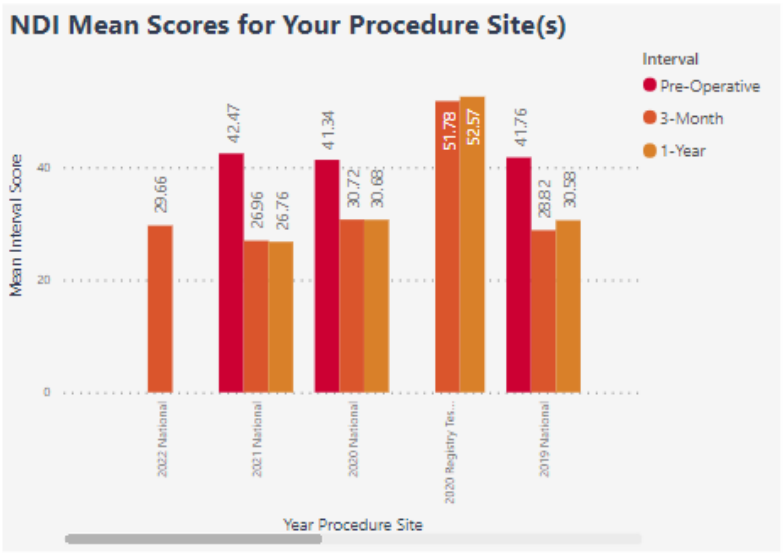


*For Oswestry D

Your Procedures | Your PROMs | Your PreOp PROMs | Your 90 Day Readmission Data | Your Performance Measures

- Added a new 3-month interval benchmark to accompany pre-op and 1-year post-op PROMs
- Benchmarked PROMs
  - ODI
  - NDI
  - NRS pain scale
  - VR-12
  - PROMIS-10
  - ODI 2.0





*For Neck Disability Index (NDI) Lower scores indicate higher levels of function and lower levels of neck pain.

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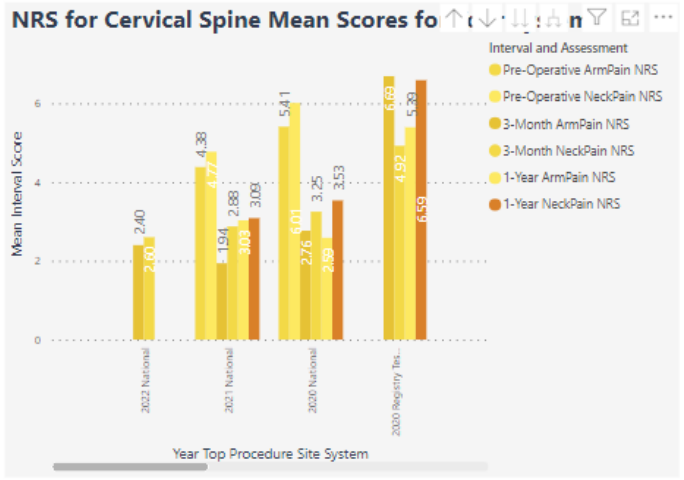
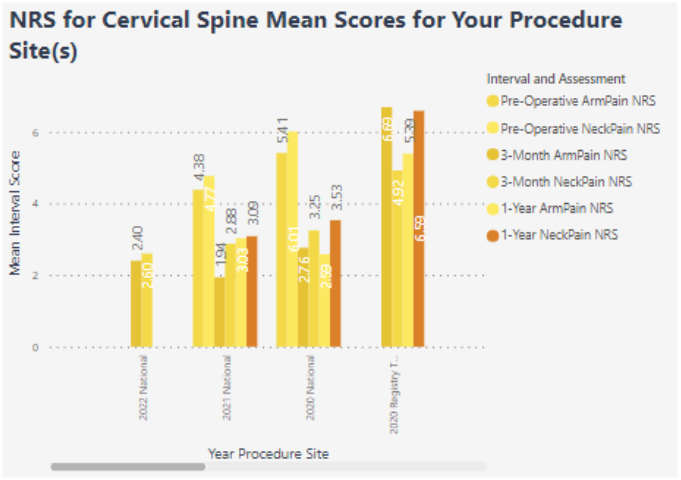
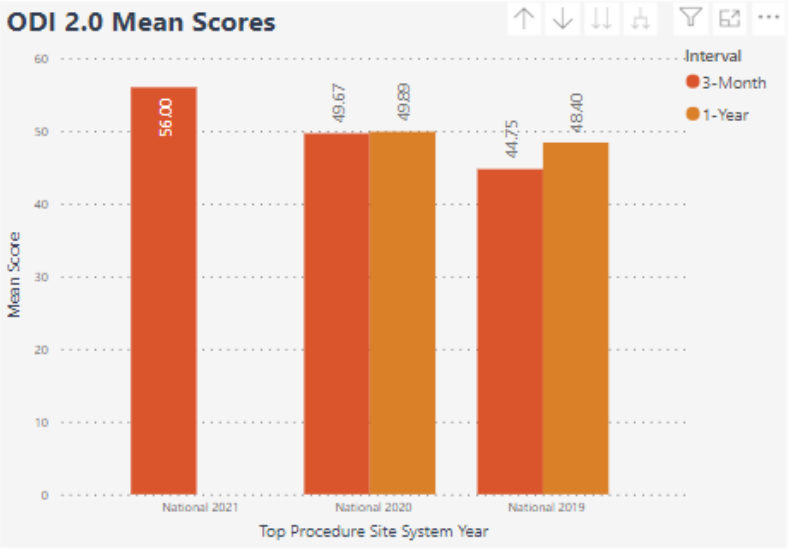
All PROMs Data| National and Your PROMs Data

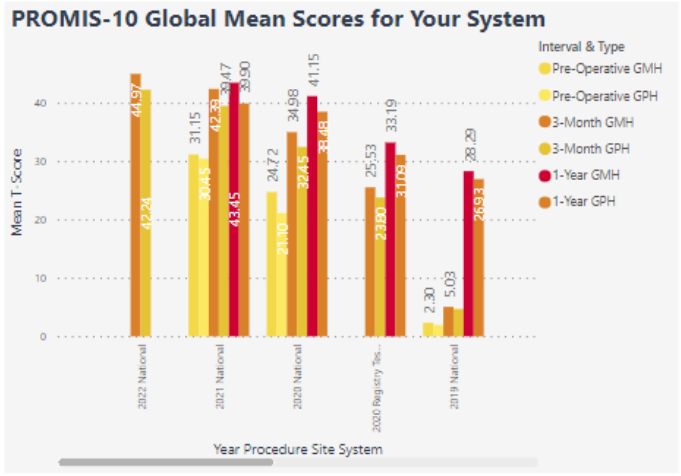


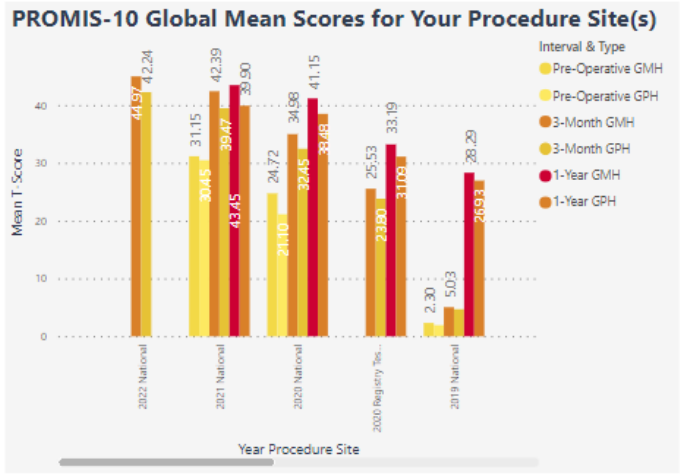


*For Numeric Rating Scale (NRS), lower scores indicate lower levels of reported pain.



*For Oswestry Disability Index (ODI) Lower scores indicate higher levels of function and lower levels of back pain.





*For PROMIS-10 Global, higher scores indicate greater patient health.

- Added new version of ODI-->ODI 2.0
- New Pre-op PROM dashboard to display only Pre-Op Scores

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Your Procedures | Your PROMs | Your PreOp PROMs | Your 90 Day Readmission Data | Your Performance Measures

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Future of ASR

Future of ASR

- ASR aims to incorporate participant feedback for continuous improvement
- New PRO Portal enhancements for User Experience
- Updates to ASR Data Dictionary to clarify data elements
- Ease Participant data submission burden by providing improved error messaging and additional data extract development support
- ASR will be launching a user group network to connect sites and maximize the data provided by the registry
- ASR to provide research capability

Data Reuse Opportunities

Confirmed ROI for participants include:

- ABOS Maintenance of Certification (MOC) and ABNS Continuous Certification (CC) Programs
- Aetna Institutes of Quality (IOQ) Orthopaedic Surgery
- BlueCross BlueShield Blue Distinction Specialty Care
- Centers for Medicare & Medicaid Services (CMS) Merit-based Incentive Payment System (MIPS) Quality Payment Program (QPP)
- CMS Bundled Payments for Care Improvement Advanced (BPCI-A)
- CMS MIPS Promoting Interoperability (PI)
- The Joint Commission's Advanced Certification for Spine Surgery (ACSS)
- DNV GL Orthopaedic Center of Excellence

For more information visit: www.americanspineregistry.org/data-reuse-opportunities/

ASR™

Unique Capabilities

- ASR provides the first ever national database to longitudinally track **implant survivorship** in spine patients, focused on:
  - Using data to inform spine practice through **actionable feedback** to care teams
  - Accepting historical **data back to ICD-10** implementation (late 2015, early 2016)
  - Learning from **patient reported outcomes** alongside clinical outcomes and implant survivorship
  - **Improving coding** and documentation for spine procedures
  - Providing a resource for **device surveillance** and monitoring for early implant failures

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How to Join ASR

Steps to a Successful Start

Contract & Welcome

- Execute contract
- Schedule a welcome call to identify your site's key contacts and roles with the Registry

Data Collection & File Build

- Walk through file development and file build
- File submission (SFTP/HTTPS) account creation

Test File Submission

- Two rounds of test file submissions

Live File Submission

- Final production set up and first live data submission

RegistryInsights® Walkthrough

- Once data has been submitted, sites will have a walkthrough with staff to review dashboards, reports, PROMs, and other platform functionality

Why Join?
Delivering Value for AANS & AAOS Spine Surgeons

On-demand practice and surgeon specific dashboards

Comparison to national performance benchmarks

Monitor longitudinal patient outcomes **(Medicare data)**

Maintenance of Certification credit **(ABOS and ABNS) 10 SAE Credits for ABOS**

Qualify for national distinction programs (Aetna, AAAHC, Blue Distinction, DNV, TJC)

CMS quality improvement programs (MIPS & BPCI-A)

Improve the **value of care** delivered to patients

ASR

Questions

ASR