Focusing on Future Needs: Better Data, Faster Data

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ACS Cancer Programs
American College of Surgeons

Outline

- Rapid Cancer Reporting System (RCRS)
  - Progress and Direction
  - Completeness, Submission Compliance, Benchmark Reports
- Accreditation Standards
  - 6.4 – RCRS Data Submission Standard
    - 1-3 months (incidence case data items, min RCRS submission)
    - 12-24 months, 90% Completeness
    - 1-15 years follow up
  - 7.1 – Quality Measures Standard
    - New Quality Measures
    - Quality measures tied to performance
    - Red, Yellow, Green

Infrastructure

The Great Migration to Real Time…

C4D – Annual Batch Production

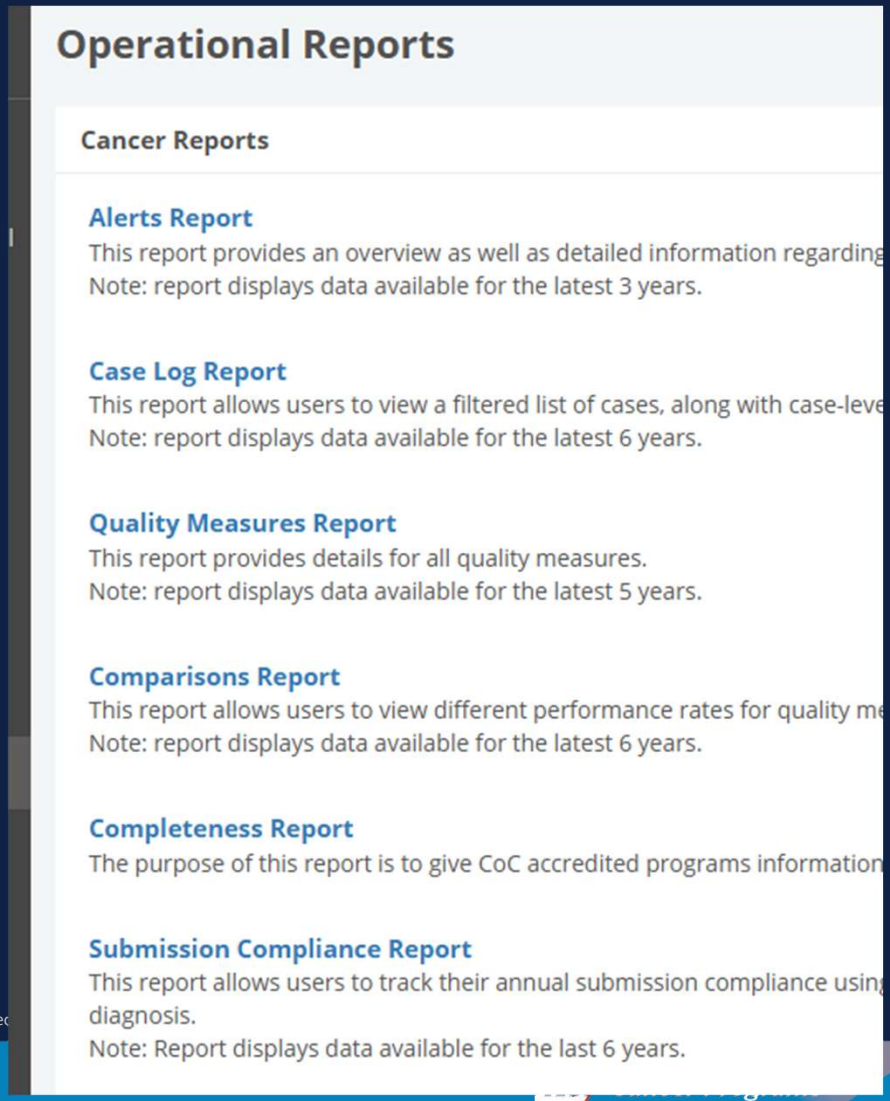
- RQRS
- C3PR
- Completeness Report
- Benchmark Report
- Site by Stage Report
- CQIP
- Survival
- PUF

RCRS – Real Time

- Quality Measures
  - Alerts
- Comparisons
- Completeness Data Items
- Benchmarks (2025)
- Case Log
- Submission Compliance (new)

RCRS Updates

- Completeness Report
  - Data Items
  - ~~Cohort Completeness~~
- Submission Compliance Report (formerly Cohort Completeness)
- Benchmark and Query Tool
  - In progress

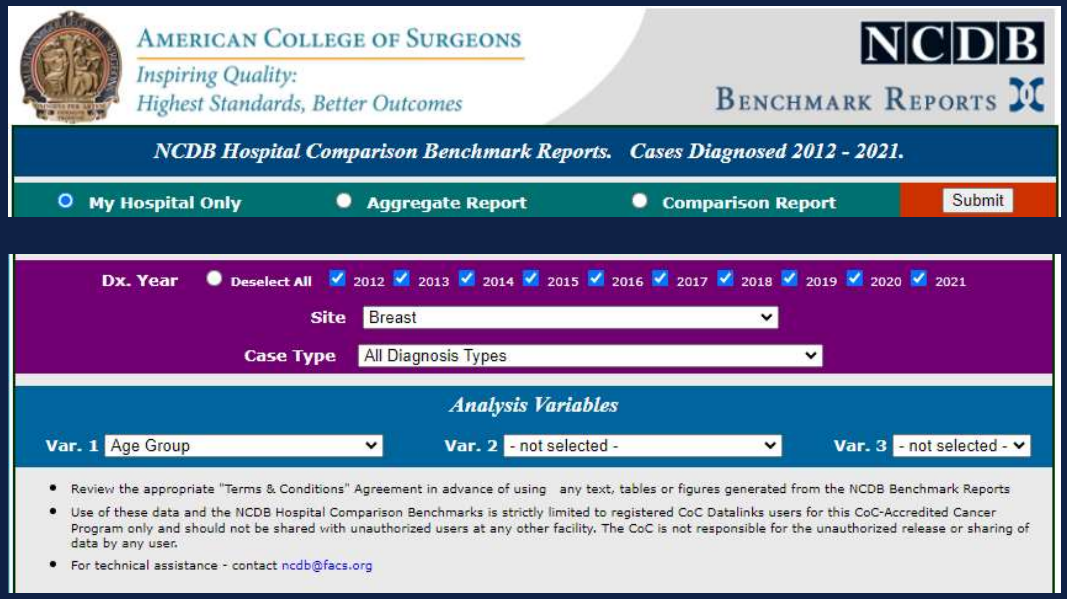


Submission Compliance Report

- Guide to compliance with submission standard (90% rule)
  - Complete, error free cases
- Update coming to support monthly submission compliance

Benchmark and Site by Stage Reports

- User guided query and comparison tool
- Large number of data items
  - Patient demographics
  - 1st course therapy
  - Days to Rx
  - Tumor Characteristics
- New data query and visualization techniques within RCRS

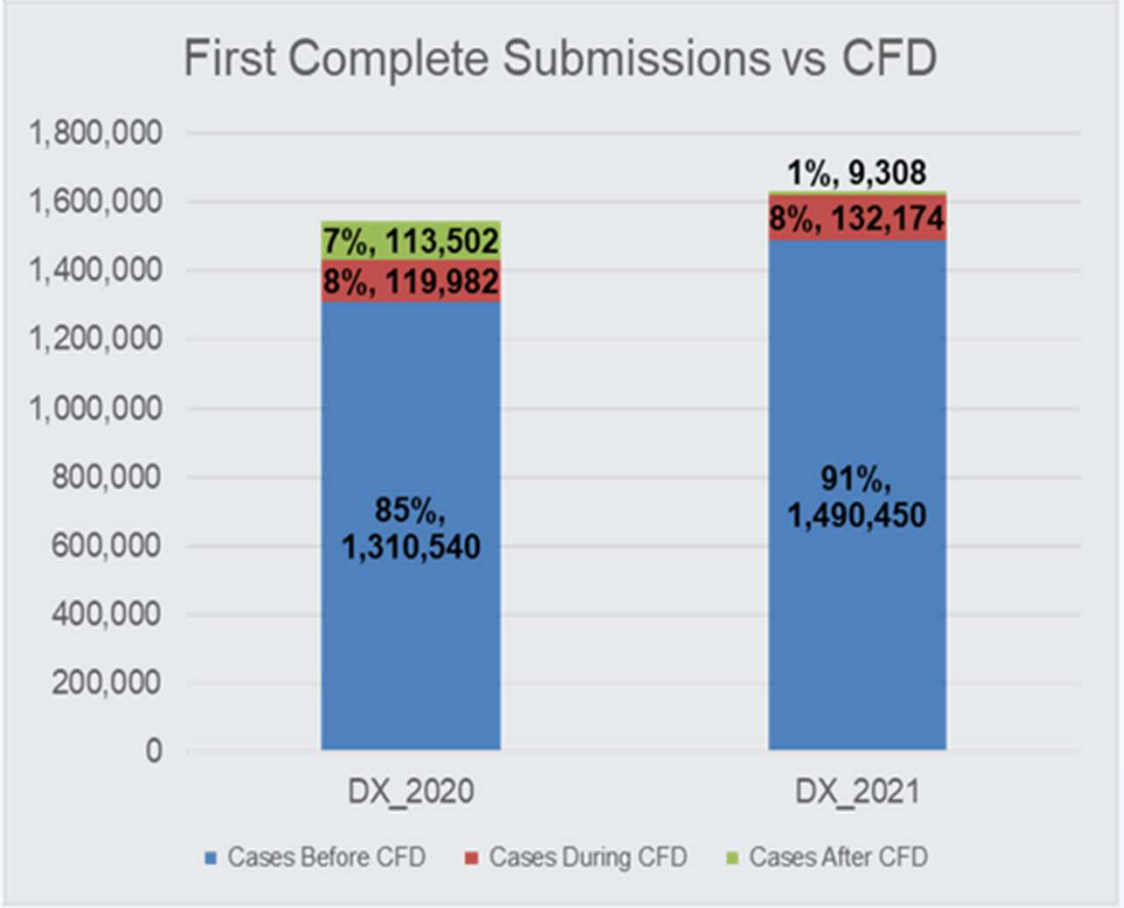


Direction of Submission Standard Update

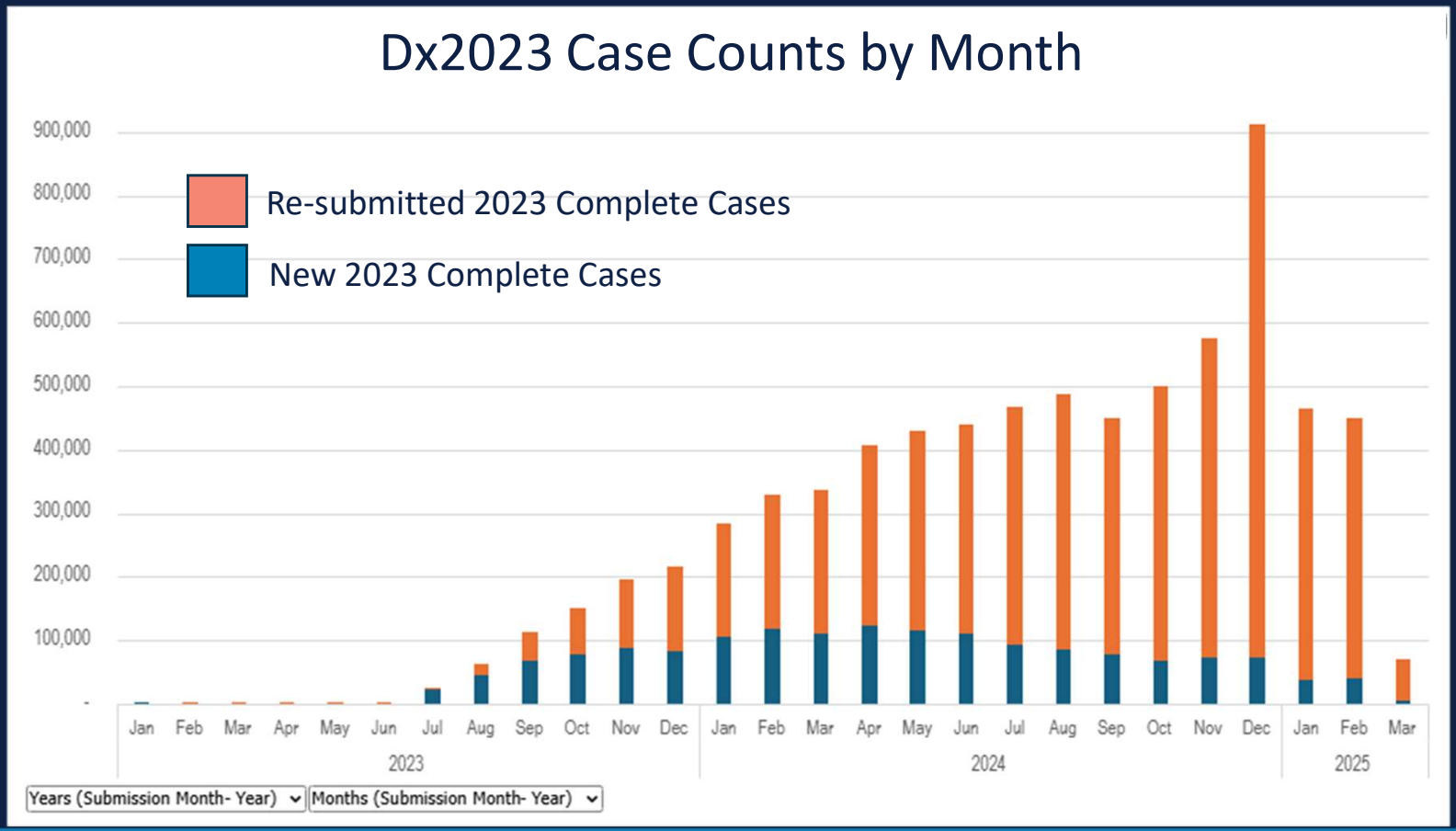
- Concurrent Abstraction
  - Timely submission of newly diagnosed incidence cases
  - ~15 data items
- Annual Completeness
  - Monthly submissions of “new and updated” added together
  - Replacing call for data with annual assessment
  - No edit errors (cases are complete)
- Long Term Follow Up
  - 15 years of mortality follow up

Call for Data 2.0

- "Virtual" Call for Data
- Dec 31 cutoff
  - 12/31/24→ all 2023 cases were due
  - Site Reviews one year more current
  - NCDB Tools Oct -> July
- Supported by RCRS Submission Compliance Report
- Reduce redundant, "check box" CTR work and data processing



Transition from Call for Data



December 31, 2024, assessed completeness of dx2023 cohort

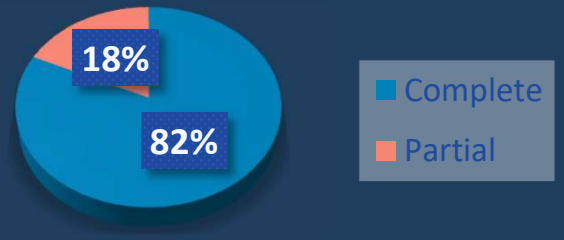
1,533,568 2023 cases
vs
1,326,954 2022 cases

Net increase of 207k or 16%

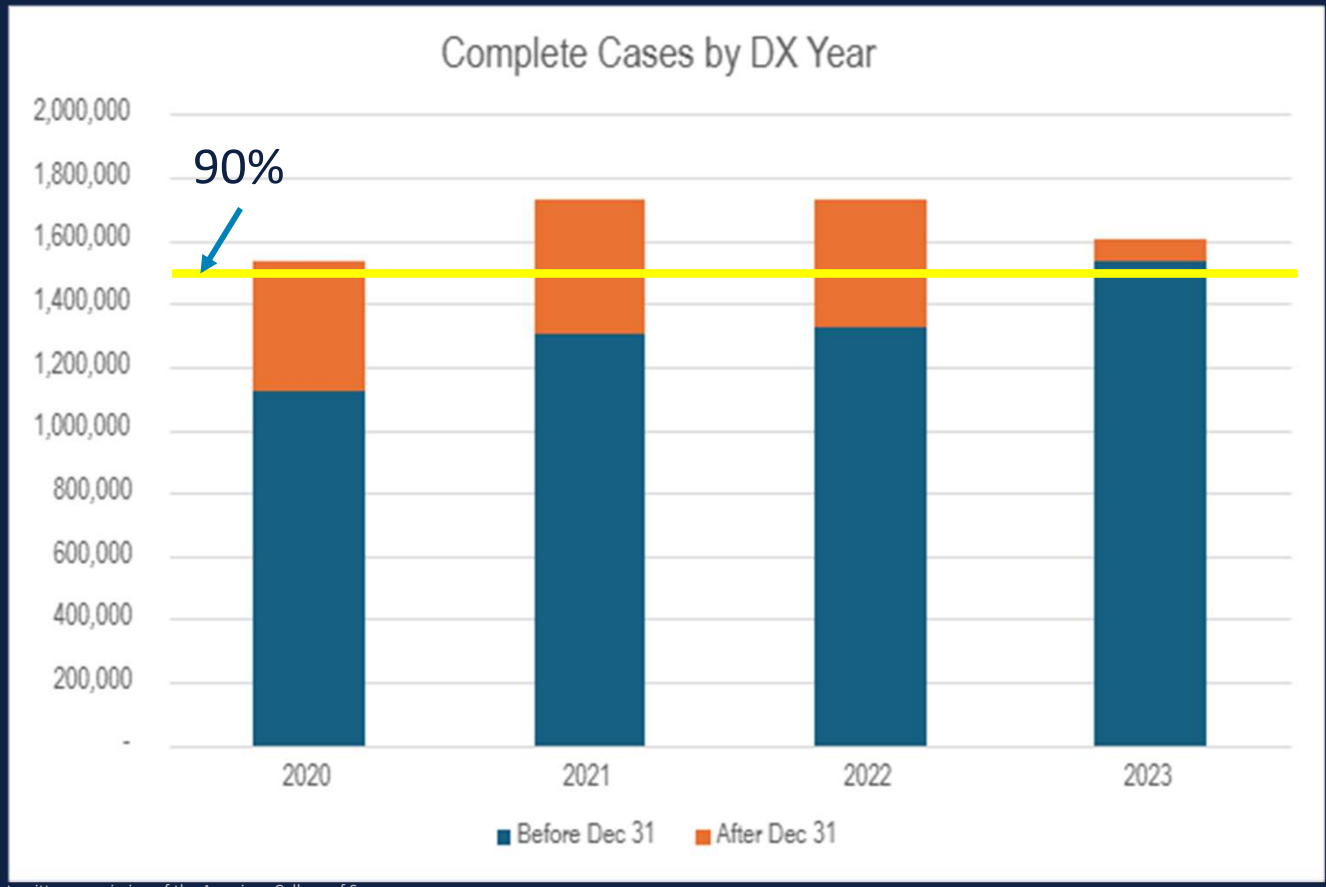
914 programs compliant

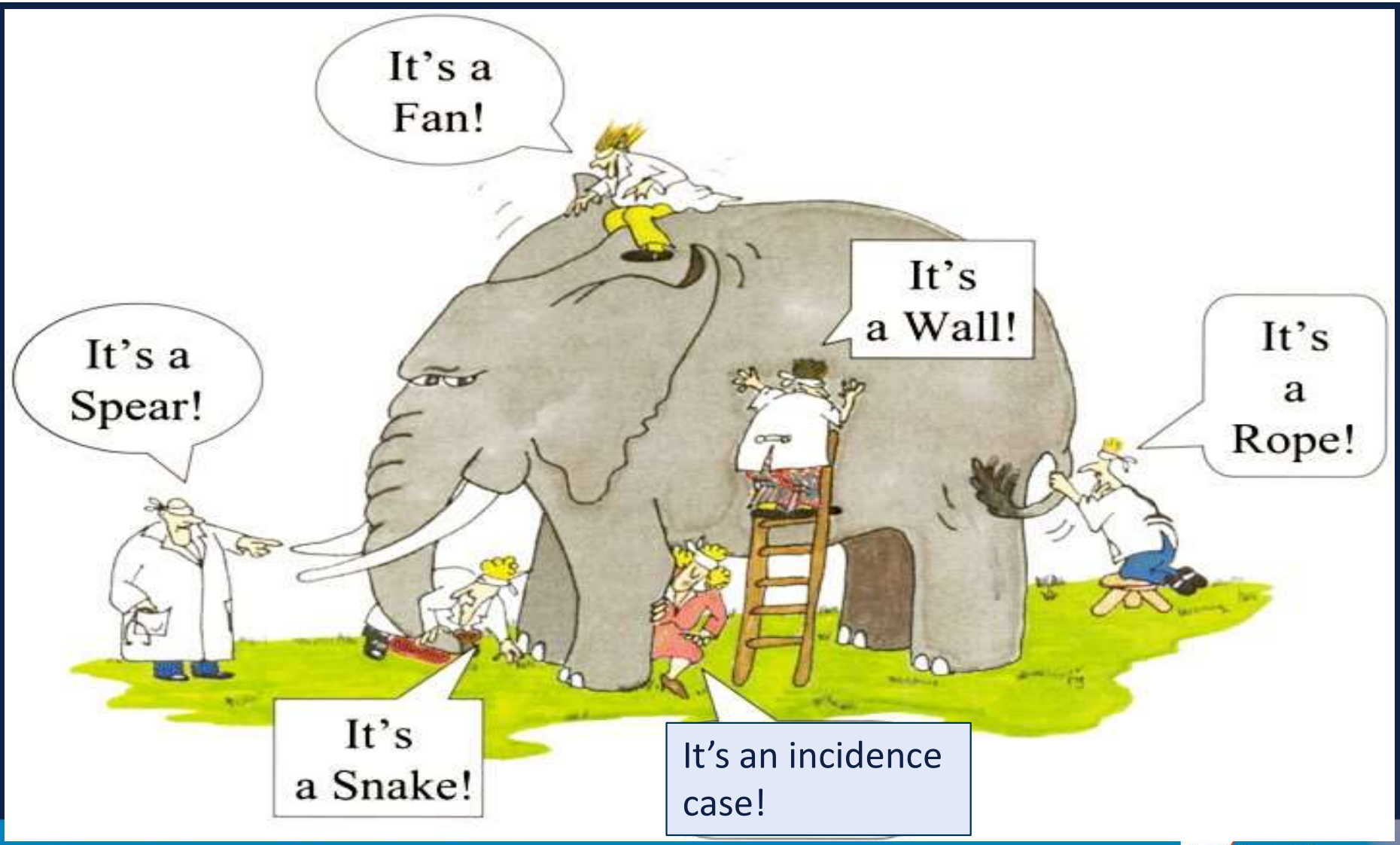
Current Counts

First Submission

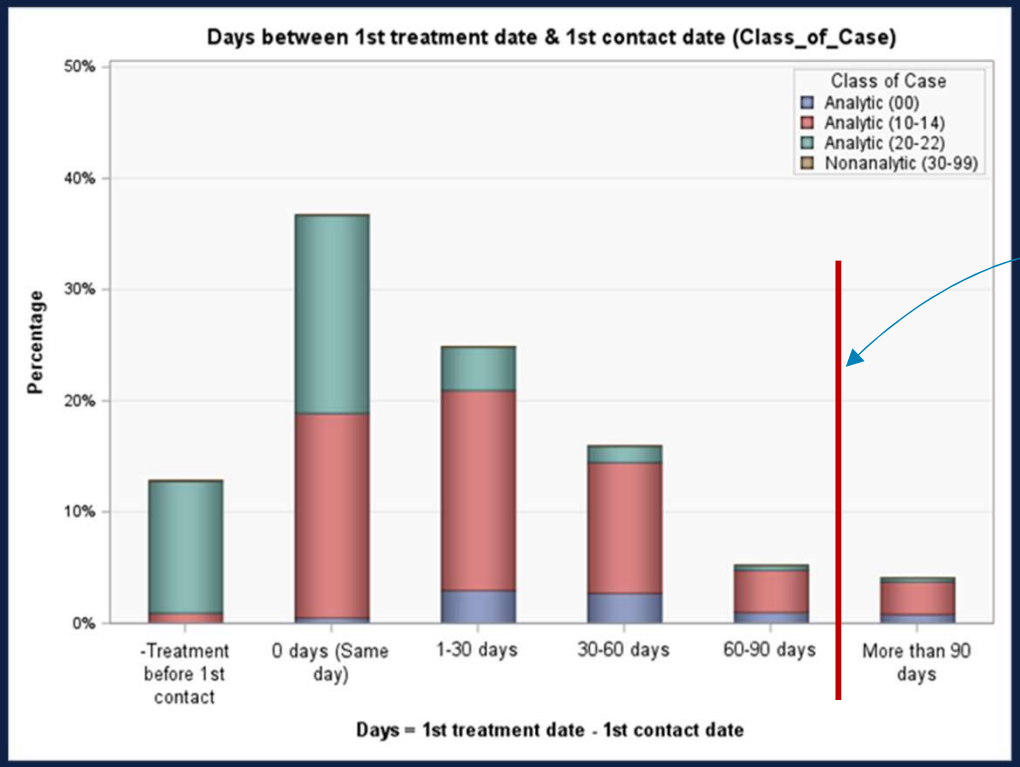


- Completeness criteria for PUF and Survival
  - Jan: 37k
  - Feb: 40k
  - Mar: ?



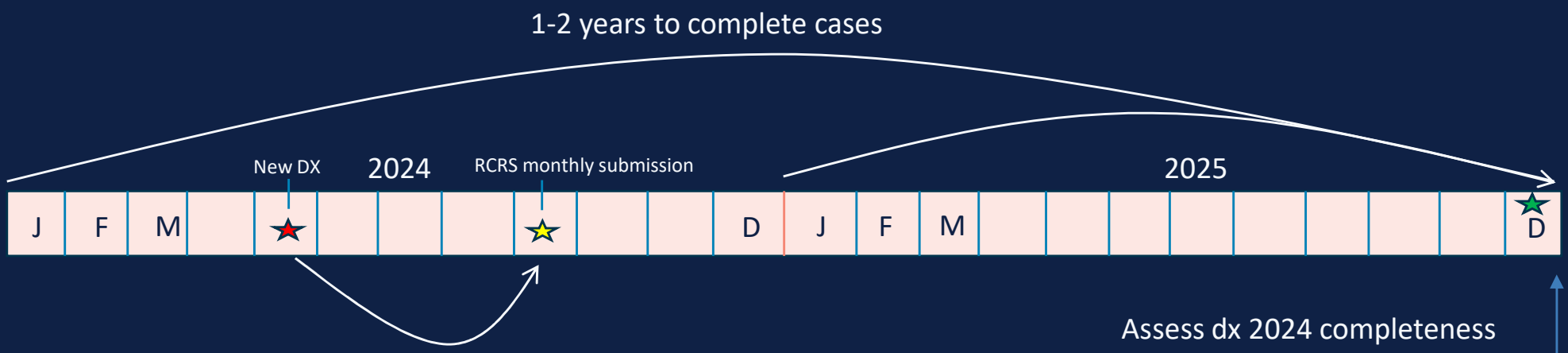

It's a Fan!
It's a Spear!
It's a Wall!
It's a Rope!
It's a Snake!
It's an incidence case!

Concurrent Abstraction Standard?



95% of cases start treatment in less than 3 months

Timeline from Incidence to Completeness



3 months to start incidence case

- Suspense cases?
- May cause extra RCRS deletes
- Date Dx vs Date 1st Contact (Class of Case?)

Assess dx 2024 completeness
90% of 2021,2022,2023 cases

Incidence Case Reporting

- What defines an incidence case?

FIN	Accession #	Sequence #
Record Type	Primary Site	Class of Case
Zip Code at Dx	Histology	Date Last Contact
Sex	Behavior	NAACCR Version
Date of Dx	Date 1st Contact	Archive FIN

: Three-key unique case identifier for NCDB/RCRS

: Supportive of NAACCR and USCDI+

: Additional data items needed for RCRS submission

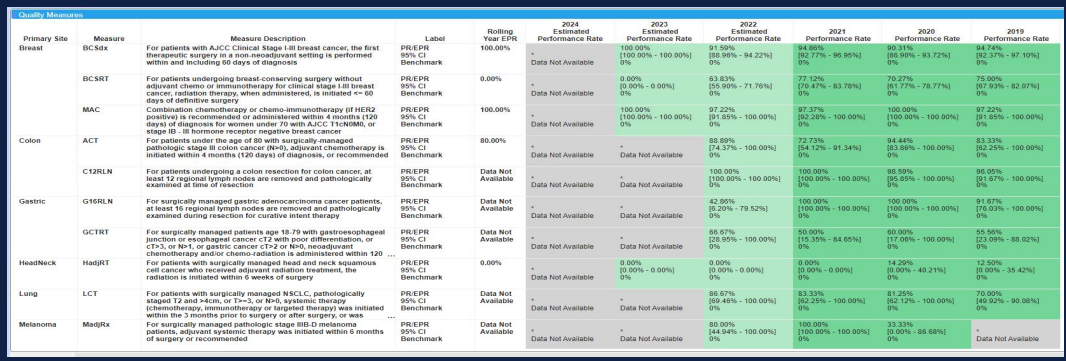
What are some sample report ideas we could run from data like these?

2025 New Quality Measures in RCRS – this spring

- For patients age >= 70, grade 1 -2, hormone receptor positive and HER2 negative **invasive breast carcinoma** with tumor size <=2cm and AJCC clinical N0, who underwent breast conserving surgery, a sentinel lymph node biopsy or axillary lymph node dissection was not performed.
- For patients with newly diagnosed **oropharyngeal squamous cell carcinoma**, p16 status by immunohistochemistry (IHC) is documented.
- Patients with **cholangiocarcinoma or pancreatic ductal adenocarcinoma** that is stage I or II and underwent curative surgery should have no residual tumor after resection of the primary.
- For patients with stage I or II **cholangiocarcinoma (BTC) or pancreatic ductal adenocarcinoma** (PDAC), who had upfront curative surgery, adjuvant chemotherapy is initiated within 6 months, or recommended.
- For hepatocellular carcinoma of any stage, AFP (alpha fetoprotein) is obtained at diagnosis.

2026 7.1 Quality Measures in RCRS

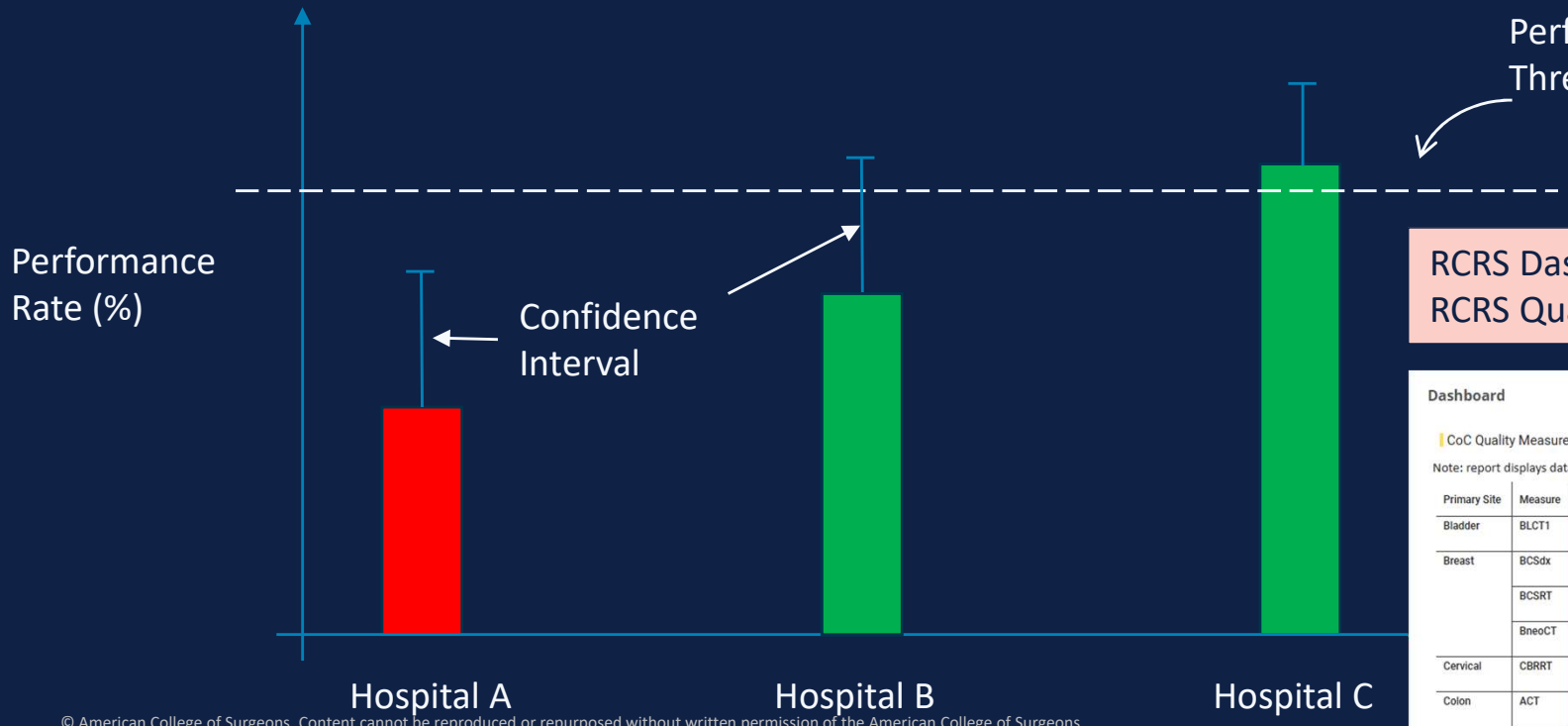
- C12RLN: For patients undergoing a **colon** resection for colon cancer, at least 12 regional lymph nodes are removed and pathologically examined at time of resection.
- ACT: For patients under the age of 80 with surgically-managed pathologic stage III **colon** cancer (N>0), adjuvant chemotherapy is initiated within 4 months (120 days) of diagnosis, or recommended.
- LCT: For patients with surgically managed **NSCLC**, pathologically staged T2 and >4cm, or T>=3, or N>0, systemic therapy (chemotherapy, immunotherapy or targeted therapy) was initiated within the 3 months prior to surgery or after surgery, or was recommended.
- BCSdx: For patients with AJCC Clinical Stage I-III **breast** cancer, the first therapeutic surgery in a non-neoadjuvant setting is performed within and including 60 days of diagnosis.



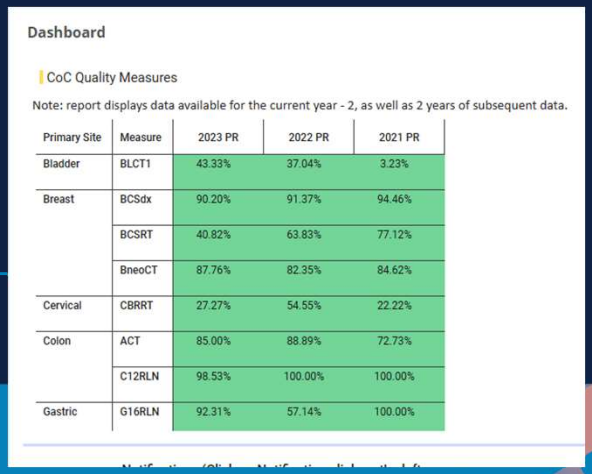
Quality Measures

Primary Site	Measure	Measure Description	Label	Rolling Year EPR	2024 Estimated Performance Rate	2023 Estimated Performance Rate	2022 Estimated Performance Rate	2021 Performance Rate	2020 Performance Rate	2019 Performance Rate
Breast	BCSdx	For patients with AJCC Clinical Stage I-III breast cancer, the first therapeutic surgery in a non-neoadjuvant setting is performed within and including 60 days of diagnosis	PR/EPR 95% CI Benchmark	100.00%	* Data Not Available	100.00% [100.00% - 100.00%] 0%	91.59% [88.96% - 94.22%] 0%	94.86% [92.77% - 96.95%] 0%	90.31% [86.90% - 93.72%] 0%	94.74% [92.37% - 97.10%] 0%
	BCSRT	For patients undergoing breast-conserving surgery without adjuvant chemo or immunotherapy for clinical stage I-III breast cancer, radiation therapy, when administered, is initiated <= 60 days of definitive surgery	PR/EPR 95% CI Benchmark	0.00%	* Data Not Available	0.00% [0.00% - 0.00%] 0%	63.83% [55.90% - 71.76%] 0%	77.12% [70.47% - 83.78%] 0%	70.27% [61.77% - 78.77%] 0%	75.00% [67.93% - 82.07%] 0%
	MAC	Combination chemotherapy or chemo-immunotherapy (if HER2 positive) is recommended or administered within 4 months (120 days) of diagnosis for women under 70 with AJCC 11cN0M0, or stage IB - III hormone receptor negative breast cancer	PR/EPR 95% CI Benchmark	100.00%	* Data Not Available	100.00% [100.00% - 100.00%] 0%	97.22% [91.85% - 100.00%] 0%	97.37% [92.28% - 100.00%] 0%	100.00% [100.00% - 100.00%] 0%	97.22% [91.85% - 100.00%] 0%
Colon	ACT	For patients under the age of 80 with surgically-managed pathologic stage III colon cancer (N>0), adjuvant chemotherapy is initiated within 4 months (120 days) of diagnosis, or recommended	PR/EPR 95% CI Benchmark	80.00%	* Data Not Available	* Data Not Available	88.89% [74.37% - 100.00%] 0%	72.73% [54.12% - 91.34%] 0%	84.44% [83.89% - 100.00%] 0%	83.33% [62.25% - 100.00%] 0%
	C12RLN	For patients undergoing a colon resection for colon cancer, at least 12 regional lymph nodes are removed and pathologically examined at time of resection	PR/EPR 95% CI Benchmark	Data Not Available	* Data Not Available	* Data Not Available	100.00% [100.00% - 100.00%] 0%	100.00% [100.00% - 100.00%] 0%	98.59% [95.85% - 100.00%] 0%	96.95% [91.67% - 100.00%] 0%
Gastric	G16RLN	For surgically managed gastric adenocarcinoma cancer patients, at least 16 regional lymph nodes are removed and pathologically examined during resection for curative intent therapy	PR/EPR 95% CI Benchmark	Data Not Available	* Data Not Available	* Data Not Available	42.86% [6.20% - 79.52%] 0%	100.00% [100.00% - 100.00%] 0%	100.00% [100.00% - 100.00%] 0%	91.97% [76.03% - 100.00%] 0%
	GCTRT	For surgically managed patients age 18-79 with gastroesophageal junction or esophageal cancer cT2 with poor differentiation, or cT>3, or N>1, or gastric cancer cT>2 or N>0, neoadjuvant chemotherapy and/or chemo-radiation is administered within 120 ...	PR/EPR 95% CI Benchmark	Data Not Available	* Data Not Available	* Data Not Available	66.67% [28.95% - 100.00%] 0%	50.00% [15.35% - 84.65%] 0%	80.00% [17.06% - 100.00%] 0%	55.56% [23.09% - 88.02%] 0%
HeadNeck	HadjRT	For patients with surgically managed head and neck squamous cell cancer who received adjuvant radiation treatment, the radiation is initiated within 6 weeks of surgery	PR/EPR 95% CI Benchmark	0.00%	* Data Not Available	0.00% [0.00% - 0.00%] 0%	0.00% [0.00% - 0.00%] 0%	0.00% [0.00% - 0.00%] 0%	14.29% [0.00% - 40.21%] 0%	12.50% [0.00% - 35.42%] 0%
Lung	LCT	For patients with surgically managed NSCLC, pathologically staged T2 and >4cm, or T>=3, or N>0, systemic therapy (chemotherapy, immunotherapy or targeted therapy) was initiated within the 3 months prior to surgery or after surgery, or was ...	PR/EPR 95% CI Benchmark	Data Not Available	* Data Not Available	* Data Not Available	86.67% [69.46% - 100.00%] 0%	83.33% [62.25% - 100.00%] 0%	81.25% [62.12% - 100.00%] 0%	70.00% [49.92% - 90.08%] 0%
Melanoma	MadjRx	For surgically managed pathologic stage IIIB-D melanoma patients, adjuvant systemic therapy was initiated within 6 months of surgery or recommended	PR/EPR 95% CI Benchmark	Data Not Available	* Data Not Available	* Data Not Available	80.00% [44.94% - 100.00%] 0%	100.00% [100.00% - 100.00%] 0%	33.33% [0.00% - 86.68%] 0%	* Data Not Available

7.1 Red, Yellow, Green



RCRS Dashboard/Home
RCRS Quality Measure Reports



Dashboard

CoC Quality Measures

Note: report displays data available for the current year - 2, as well as 2 years of subsequent data.

Primary Site	Measure	2023 PR	2022 PR	2021 PR
Bladder	BLCT1	43.33%	37.04%	3.23%
Breast	BCSdx	90.20%	91.37%	94.46%
	BCSRT	40.82%	63.83%	77.12%
	BneoCT	87.76%	82.35%	84.62%
Cervical	CBRRT	27.27%	54.55%	22.22%
Colon	ACT	85.00%	88.89%	72.73%
	C12RLN	98.53%	100.00%	100.00%
Gastric	G16RLN	92.31%	57.14%	100.00%

Strategic Plan: Better Data, Faster Data

Concurrent Abstraction → **Reduce Time Dx → QI Desktop** ← Real-Time Reporting

- ✓ Monthly Submissions
  - ✓ All Disease Sites
  - ✓ All New and Updated Cases
- ✓ Retired 60 Useless Data Items
- ✓ Truncated LT Follow Up to 15 Years
- ✓ STORE Manual, Annual Updates (AJCC, SOP)
- Call for Data 2.0
- Redefine Data Submission Standard
  - Dx and Suspense Case Lists
    - Tx Data
      - LT Follow Up/Progression

- ✓ Rapid Cancer Reporting System (nightly)
  - ✓ Quality Measures
  - ✓ Alerts
  - ✓ Case Log
  - ✓ Comparisons
- ✓ 44% Time Reduction in Data Processing/QA
- ✓ Completeness Reports to RCRS (2023)
  - ✓ Data Item Completeness
- ✓ Submission Compliance (2024)
- Benchmark + Site by Stage Reports to RCRS (2025)
- Evaluate PUF and Survival for newer data inclusion
- Evaluate CQIP 2.0
  - What to remove?
  - What are we missing?
  - "Personalized" Data for Hospitals?

Thank you…

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