MUSIC
Michigan Urological Surgery Improvement Collaborative

Data Abstractor Breakout

June 21, 2024

Agenda

- **Welcome**

- Dr. Lewicki PET PSMA Overview

- General Updates:
  - VBR Updates
  - Audit and Billing Report for 2023 entered cases
  - Registry Transition

- Case Entry/Program Updates
  - Prostate
  - KIDNEY
  - ROCKS

- Upcoming Important Dates/Events
- Q&A

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Outline

- What is PSMA – PET?
- Who gets it, how is it used?
- How is it read; what does a report look like?

PSMA PET Basics

- PET (positron emission tomography) imaging uses **radiotracers** to demonstrate targeted anatomy/physiology

- **Many different** radiotracers → PET scan can serve **many different** purposes

- Some show metabolic activity of tissue (e.g., FDG-PET, Axumin), others show presence of structural ligands (e.g., PSMA-PET)
  - Useful in cancer diagnosis

PSMA PET Basics cont'd

- PSMA (Prostate specific membrane antigen)
  - expressed on the surface of prostate and other cells (parotid glands)
  - expressed in high concentration of the surface of prostate cancer cells

- PSMA-PET, therefore, can be used to identify the presence of prostate cancer cells

- Coupled with CT (PSMA-PET/CT), can tell us if normal looking tissues have prostate cancer, or whether abnormal looking tissues look that way because of prostate cancer

- Relatively new technology (1st FDA approval 12/2020)

PSMA Tracers

- There are a few different radiotracers for PSMA you may encounter

- Differences between them are not super critical to understand

- Ga68-PSMA was first to market
- F18-PSMA (”Pylarify”) also widely used
- Others

How/Why PSMA PET is used

- A few ways*

- Staging for patients with higher risk prostate cancer
  - Could change treatment– mets/LNs? may move away from surgery

- Adjunct imaging in post-treatment rising PSA, when conventional imaging neg and local options exhausted

- Guide certain PSMA-based treatments (PSMA not just for PET!!) in metastatic setting

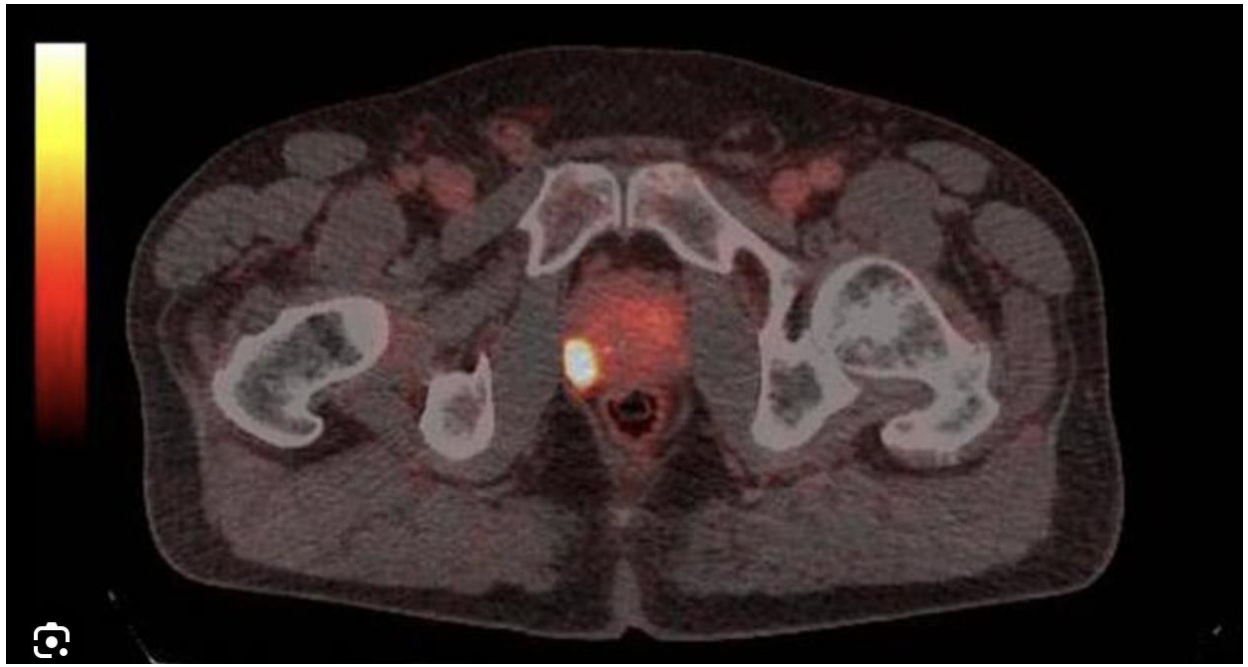
- Localized prostate cancer– role still a bit unclear

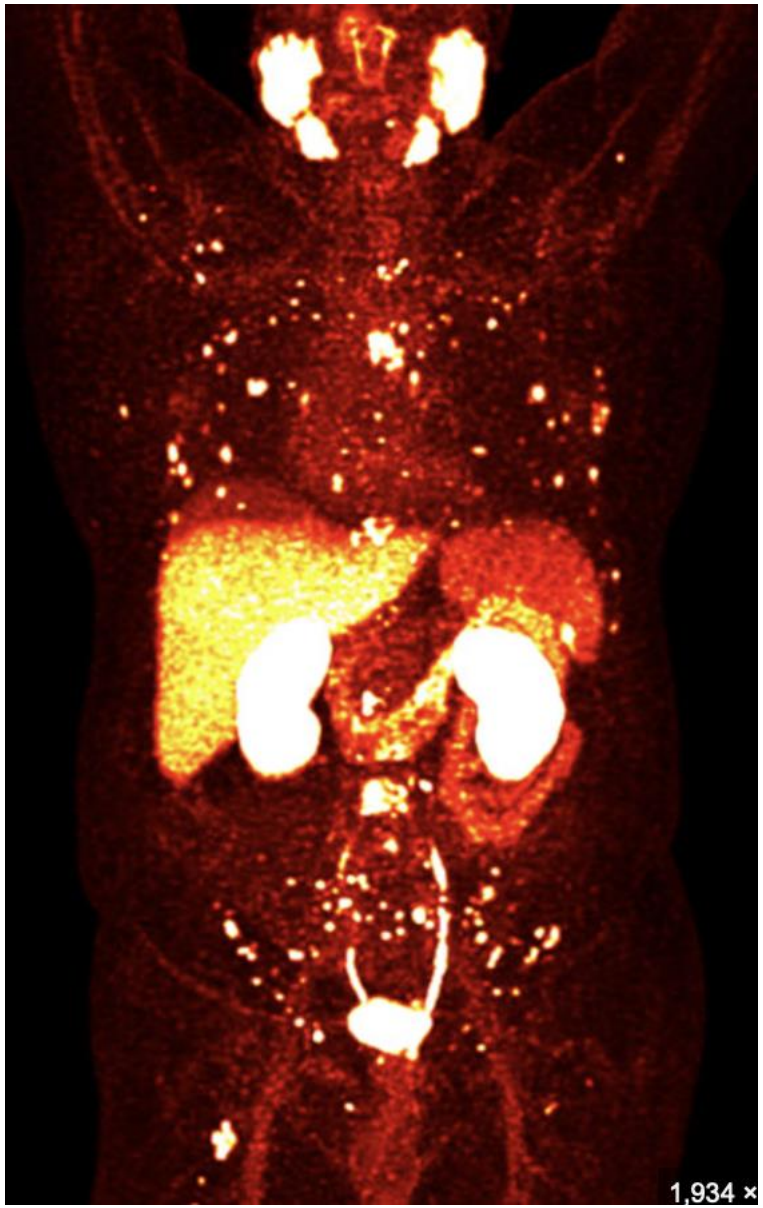
PSMA PET Reporting 101

- Report areas of “avidity” (avid = bright w/ radiotracer)
- “Brightness” is measured as SUV (standardized uptake value)
- Generally, avid lesions are concerning for prostate cancer at that location
- Excreted in urine, so often bladder and/or ureter will contain tracer
- Avidity is not “cut and dry”– there is no single SUV below which there is 0% chance of cancer and above which the chance is 100%
  - “equivocal,” “indeterminate”
  - “cutoffs” have wide reported range but generally > ~ 5-6

Example Images

- These images are from Google





PSMA PET reports

- Items for abstraction:
  - Type of PET
  - Tracer type
  - Positive or negative
  - Site (if positive)
    - Prostate (if they have a prostate)
    - Prostate bed (if prostate has been removed– i.e., post-prostatectomy)
    - Pelvis outside of prostate/prostate bed (i.e., pelvic lymph nodes)
    - Bone
    - Other

PSMA PET Report: Example 1

*** Final Report ***

Reason For Exam
PROSTATE CA

PE Report
EXAM DESCRIPTION: PET/CT-Imaging-Skull to Thigh

TECHNIQUE: Following IV injection of gallium 68 PSMA and a standard uptake period, a non-contrast CT scan followed by a PET scan was acquired from top of head to mid thighs.The non-contrast CT was used for anatomic localization and photon attenuation correction of the PET scan.

BLOOD GLUCOSE LEVEL: Not applicable

FDG DOSE: Gallium 68 illuccix does: 5.4 mCi

CORRELATIVE STUDIES: MR pelvis dated 3/22/2024

INDICATION: Prostate carcinoma. Initial staging.

FINDINGS: As detailed below:

Maximum background blood pool activity: 1.3
Maximum background liver activity: 5.6
Maximum background parotid gland activity: 13.9

SKULL BASE/NECK: No significant focal pain PSMA activity identified. Symmetric physiological activity in the nasopharyngeal tonsils, lacrimal and salivary glands

CHEST: No significant focal PSMA activity identified in the thorax. No thoracic lymphadenopathy.

ABDOMEN/PELVIS: Normal physiological activity in the liver, spleen, urinary and bowel system.

Focal PSMA activity is present in the peripheral zone of right prostatic lobe at 6-9 o'clock positions (CT image 304 with maximum SUV of: 15.1)

SKELETON: No significant focal PSMA activity identified.

IMPRESSION: 1. Focal PSMA activity throughout the right peripheral zone at 6-9 o'clock positions consistent with known primary malignancy.
2. No evidence of regional or distant metastasis.

PSMA PET Report: Example 2

Reason For Exam
routine

PE Report
LOCATION: Karmanos Cancer Center

EXAM DESCRIPTION: PET/CT-Imaging-Skull to Thigh

TECHNIQUE: Following IV injection of Ga-68 Gozetotide, and a standard uptake period, a non-contrast CT scan followed by a PET scan was acquired from base of skull to mid thighs .The non-contrast CT was used for anatomic localization and photon attenuation correction of the PET scan.

BLOOD GLUCOSE LEVEL: N/A

RADIOTRACER DOSE: 5.21 mCi Ga-68 Gozetotide given intravenously.

COMPARISON: 3/14/2023

INDICATION: Prostate cancer.

FINDINGS: Please see below.

Mean background uptake in the liver: 5.9 SUVs.
Mean background uptake in the blood pool: 1.3 SUVs.
Mean background uptake in the parotid gland: 19.0 SUVs.

SKULL BASE/NECK: No significant hypermetabolic focus. Specifically, no discrete radiotracer avid cervical chain lymph node is present. Physiologic activity is present.

PSMA PET Report: Example 2 cont'd

CHEST: There are few subtle tiny opacities/nodular densities involving both lungs, some of which demonstrate increased radiotracer activity. For example, there is ground-glass opacity/nodular density along the medial aspect of the right lower lobe (series 4, image 147) which demonstrates mildly increased radiotracer activity measuring up to 5.9 SUVs. Similarly, there is an area of increased radiotracer activity in the left suprahilar region (series 4, image 113) measuring up to 5.6 SUVs. A punctate nodular density in the anterior aspect of the left upper lobe (series 4, image 103) demonstrates faint radiotracer activity measuring up to 2.1 SUVs.

There are radiotracer avid mediastinal lymph nodes. A few representative examples include a 1.1 x 1.0 cm anterior mediastinal lymph node (series 4, image 113), which demonstrates a maximum SUV of 6.7; and a 1.1 cm subcarinal lymph node (series 4, image 122), which demonstrates a maximum SUV of 19.6.

ABDOMEN/PELVIS: Prostate gland is similar in size. There is faint heterogenous radiotracer activity corresponding to the prostate gland measuring up to 3.6 SUVs. No focal area of marked radiotracer activity is present.

No discrete radiotracer avid abdominal or pelvic lymph node is present.

There is physiologic activity in the spleen, proximal small bowel and renal collecting system. Incident note is made of a circumaortic left renal vein. Colonic diverticulosis.

PSMA PET Report: Example 2 cont'd

SKELETON: Stable sclerotic changes involving the left iliac bone demonstrate no suspicious radiotracer activity (series 4, image 238).

There are multiple small radiotracer avid osseous metastases, which are essentially CT occult. A few of these areas demonstrate very subtle ground-glass changes/sclerosis. A few representative examples are as follows:
- radiotracer activity in the right ischial tuberosity (series 4, image 281) measures up to 8.9 SUVs.
- a faint ground-glass focus in the right lateral aspect of the sacrum (series 4, image 246) demonstrates a maximum SUV of 5.1.
- radiotracer avid focus in the midline of the upper sacrum (series 4, image 235) demonstrates a maximum SUV of 11.4.
- a radiotracer avid focus along the medial aspect of the left scapula (series 4 image 102) demonstrates a maximum SUV of 8.2.
- radiotracer activity along the anterior aspect of L3 vertebral body (series 4 image 205) demonstrates a maximum SUV of 12.8. Multiple other such examples are possible.

IMPRESSION:
1. Multiple radiotracer avid osseous lesions presumably reflect osseous metastases. These lesions are essentially CT occult.
2. Radiotracer avid mediastinal nodal metastases, as detailed above.
3. Faint to mild radiotracer activity corresponding to ground-glass opacities/nodular densities in the lungs are indeterminate. Possibility of metastases is not excluded. These areas can be assessed on subsequent follow-up CT examination.
4. Faint heterogenous radiotracer activity corresponding to the prostate gland without a focal area of marked radiotracer uptake.

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Value-Based Reimbursement (VBR) 2025 Payout: — Standard Measures (3%)

Population-based Performance Measure*	Baseline Performance	Target Performance	Current Performance
PSA testing within 90 days of radical prostatectomy	92%	≥ 95%	92%
Opioid-limited partial and radical nephrectomy	59%	≥ 60%	53%

**MUSIC as a collaborative must meet the target for both metrics to be eligible for the "standard" VBR*

Value-Based Reimbursement (VBR) 2025 Payout: — Additional Measures (2%)

Population-based Performance Measure*	Baseline Performance	Target Performance	Current Performance
Ureteral stenting following URS in pre-stenting patients	63%	≤ 62%	54%
Radical nephrectomy for benign renal masses	8%	≤ 6%	7%
Renal mass surveillance follow-up	45%	≥ 50	59%

**MUSIC as a collaborative must meet the target for two of the three metrics to be eligible for the "additional" VBR*

Value-Based Reimbursement (VBR) 2025 Payout: — Smoking Cessation Measures (2%)

Population-based Performance Measure*	Baseline Performance	Target Performance	Current Performance
Smokers receiving **smoking cessation counseling**	82%	≥ 85%	86%
Establish a baseline for **smokers who have quit at 3 months post-RP**	27%	≥ 30%	33%

**MUSIC as a collaborative must meet the target for both metrics to be eligible for the "smoking cessation" VBR*

How Can You Help?

Complete all Enter Post-Surgery Lab tasks

AND

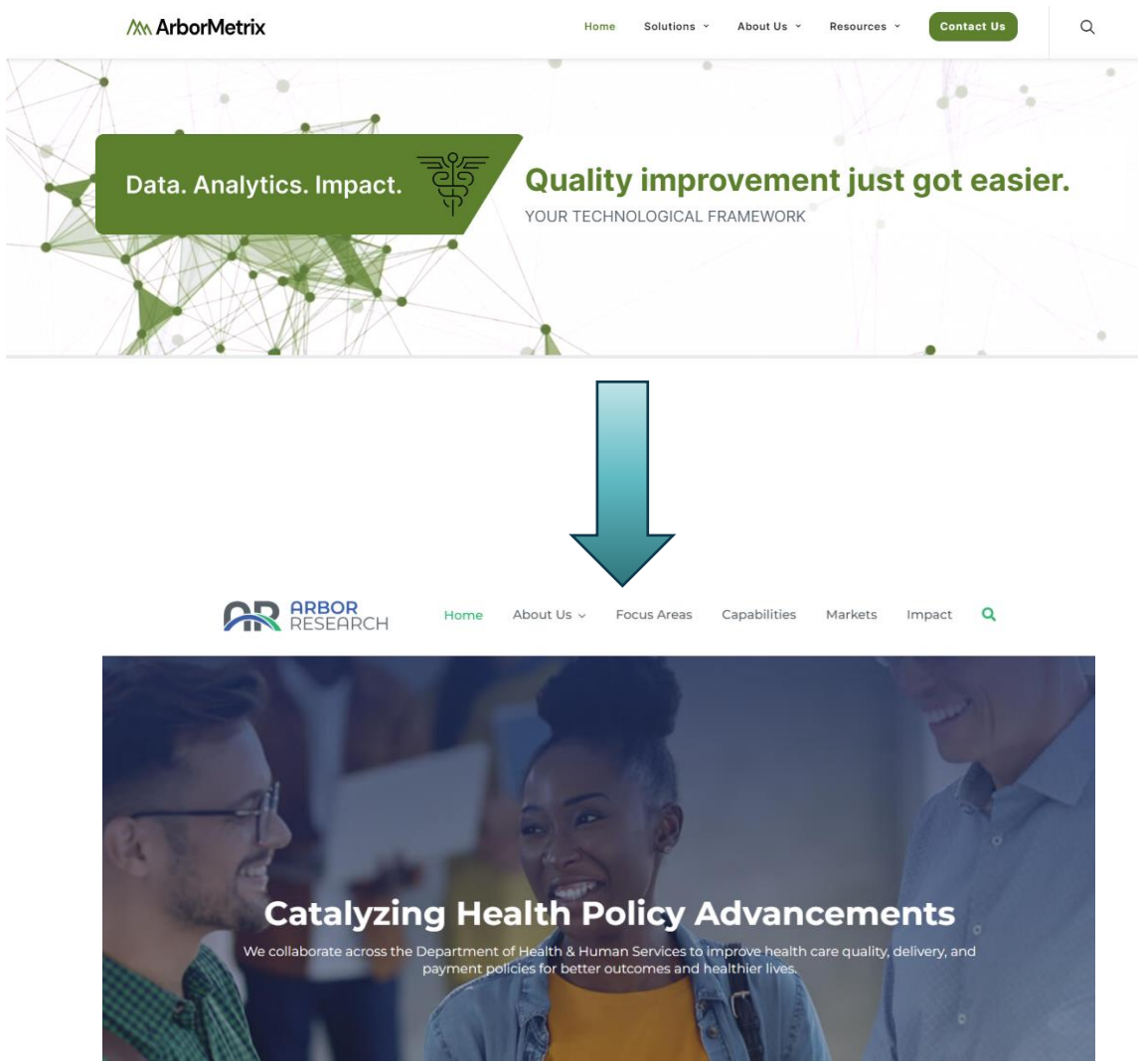
Complete KIDNEY Follow-up tasks!

Case Entry Audits: 2023 Cases

- Rabia to complete case entry audits
  - Finishing up 2021-2022 case entry audits
  - Will be scheduling 2023 case entry audits
    - Scheduling into November 2024
- To receive credit for the upcoming QI participation metric, each site MUSIC submit a billing report
  - More details to come in an email from Rabia

Registry Transition

- Transitioning from ArborMetrix to Arbor Research
- Plan to roll out trainings for new Registry in Fall 2024
- Last day for AM data entry – 10/28/2024
- Last day to log in to AM – 12/31/2024
- Please work on clearing up the task list



Registry Transition: KIDNEY Entry Order

- KIDNEY Labs

- KIDNEY Imaging

- Initial Renal Mass

- RENAL Score

- KIDNEY Biopsy (if applicable)

- Treatment

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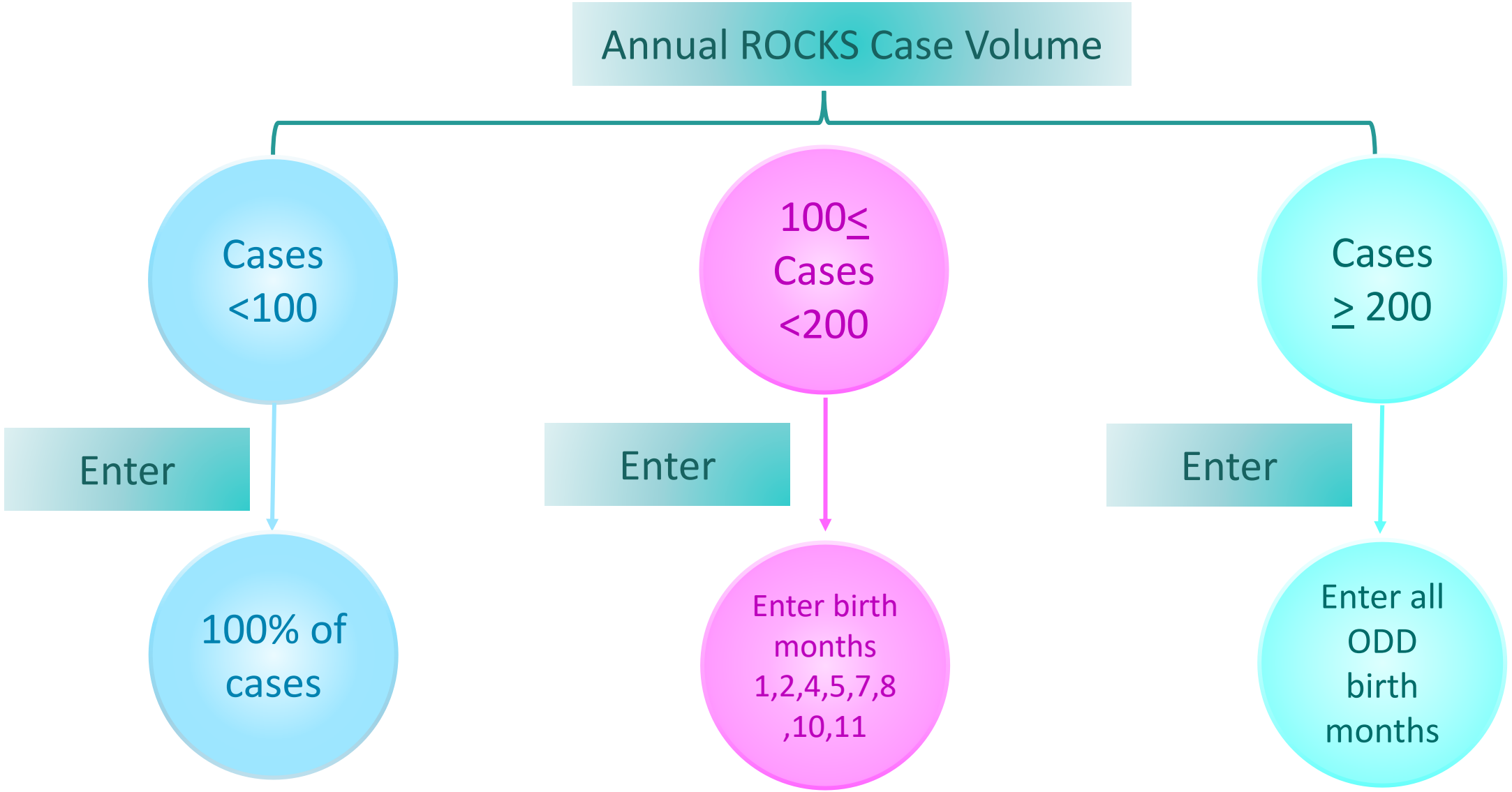
Prostate Sampling

- Sites will follow their ROCKS Sampling Strategy

- Sites can NOT opt out of Prostate Sampling

- Sampling begins with Prostate Encounter Dates of July 01, 2024 and onward
  - Sampling will continue through transition to new Registry

Prostate Sampling Strategy cont'd



PSMA PET Entry: Clarification

- If PSMA PET report reads equivocal OR indeterminate – consider it negative

- If PSMA PET report states suspicious/probable/possible – consider it positive

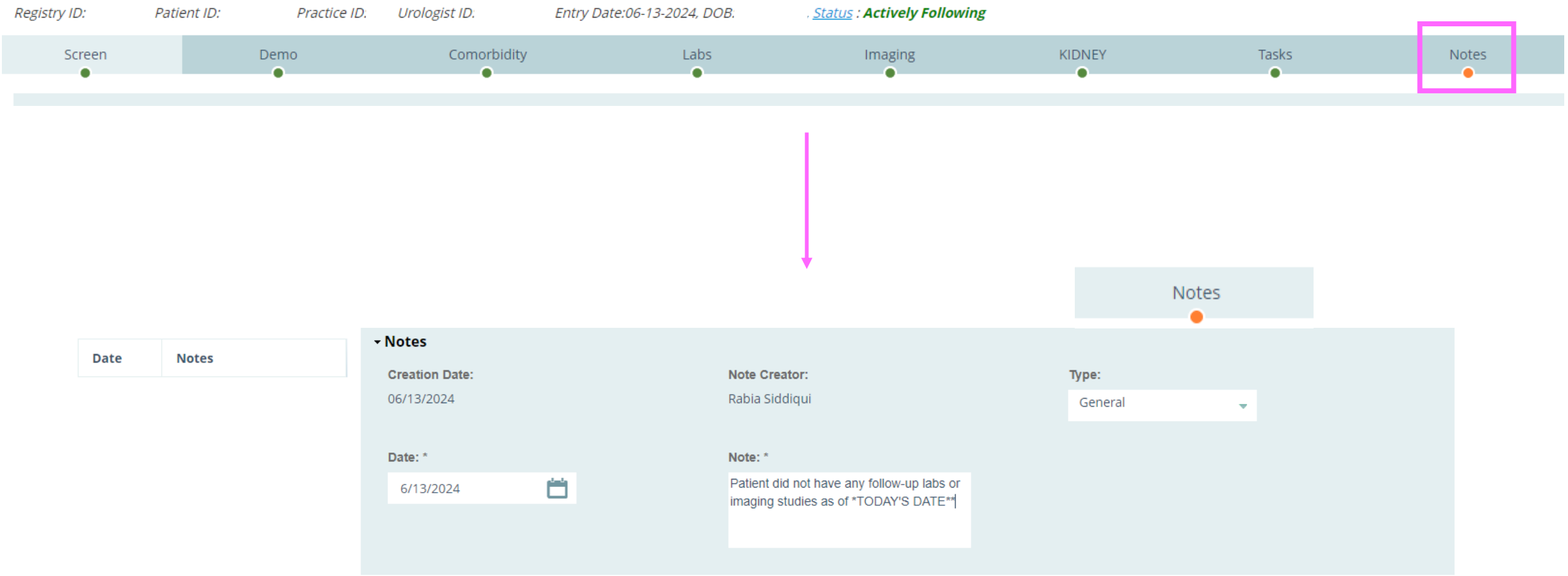
KIDNEY: Documentation of N and M stage

- RCC will almost always be cN0 cM0
  - cNx if indeterminate lymph nodes (small, <1 cm, shoddy, “cannot r/o”, etc. on imaging)
  - cN1 if suspicious lymph nodes (>1 cm, “suspicious”, on imaging)
  - cMx if indeterminate lung or liver (add note from imaging)
  - cM1 if suspicious for RCC met on imaging (add note from imaging)
  - If other cancer than RCC, add text from imaging and record as Mx or M1 if unsure

If incorrect documentation is noted in the Office Note, encourage your physicians to update their documentation with the above guidelines….

KIDNEY Updates: Imaging/Labs missing on patients

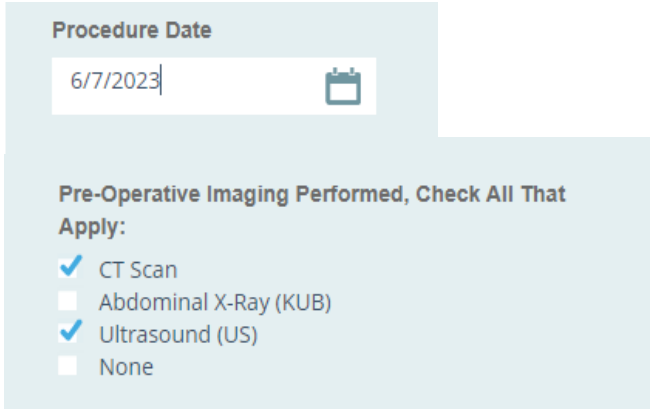
- If patient's do not have updated Labs or Imaging to enter, please add a comment on the Notes Tab



ROCKS Case Entry

- Pre-Op Imaging Field
  - Please include ALL types of Pre-Op imaging on entry
  - Can be within 1 year of procedure date

	06/06/2023 00:06	CT Abdomen Pelvis wo Contrast	06/05/2023	CT Abdomen Pelvis	Final result
	12/07/2022 23:11	CT Abdomen Pelvis wo Contrast	12/07/2022	CT Renal Stone Standard	Final result
	12/06/2022 15:53	CT Angio Chest for PE	12/06/2022	CT Chest Pulmonary Embolism	Final result
	12/05/2022 14:50	US Retroperitoneum Complete	12/05/2022	US Kidneys	Final result
	12/05/2022 10:25	XR Chest 2 Views	12/05/2022	XR Chest PA and Lateral	Final result



BLUES Trial Update

- Only a few patients left to accrue and randomize

- **End of Day Monday, July 01, 2024**

- Coordinating Center will be working on auditing BLUES patients

SOUL Trial General Reminders

- Please enter ALL SOUL trial patients as close to the 60-day window as possible

- Site will not get payment for participant if data is not entered in Registry

- SOUL trial participant data entry take priority

SOUL Data Entry: Health Care Utilization

- Please only consider phone calls/messages to the Urology Office
  - If a patient messages a PCP, or any other non-urology provider, those calls/message do not need to be included.

- Definition of post-op urinalysis positivity
  - Only considered positive if NITRITES are positive

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Important Registry Dates

- Last day for case entry in current Registry
  - **End of Day, Monday, October 28, 2024**

- Last day to access current Registry
  - **End of day, Tuesday, December 31, 2024**

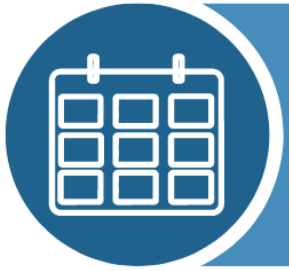
Important Upcoming Dates

Save the Dates

KIDNEY Skills Workshop Webinar

Wednesday
September 25th
6:00-7:30PM ET

Fall Collaborative-wide Meeting



Friday
October 18th

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THANK
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