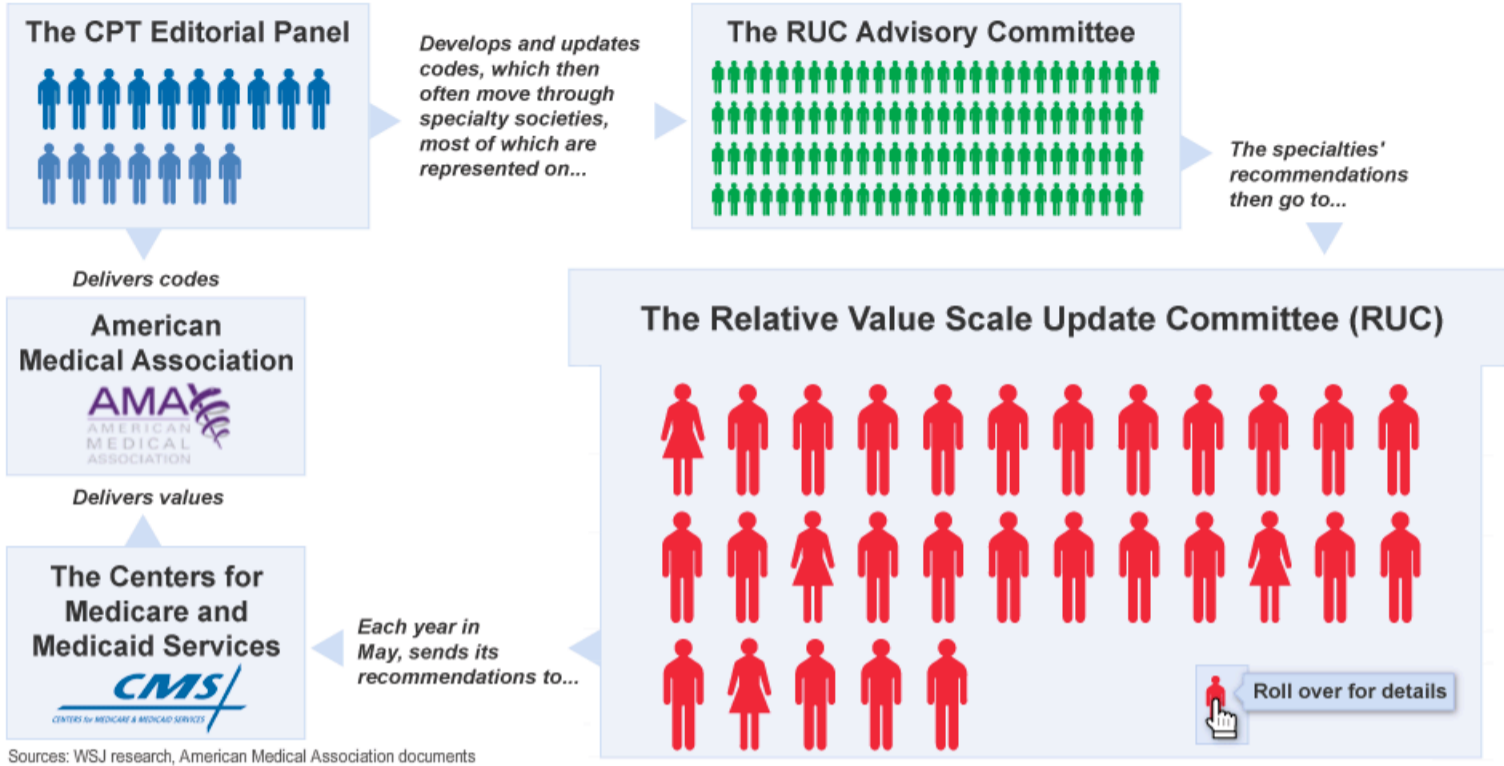


# Economics of Breast Imaging & PQRS

Barbara Monsees  
Pam Wilcox

# Pricing Medicare's Codes

Committees tied to the American Medical Association have a strong influence on the process the Centers for Medicare and Medicaid Services use to identify, and assign payment values to, doctors' services.



Sources: WSJ research, American Medical Association documents

Wsj.com 10/26/10

# CPT Codes Current Procedural Terminology

---

- Developed in 1966
  - Owned by the AMA
  - Revenue source
  - About 8000 5-digit codes
  - Radiology codes are mostly 70000 series
  - Categories:
    - Category I codes
    - Category II codes
    - Category III codes
- 

## Category I codes

---

- Procedures in medical practice that are widely performed.
- Approved by the (FDA)
- Clinical efficacy is proven and documented
- **Literature support**

## Category II and III codes

---

- Developed in 1966
- Owned by the AMA
- Revenue source
- About 8000 5-digit codes
- Radiology codes are mostly 70000 series
- Categories:
  - Category I codes
  - Category II codes
  - Category III codes

---

## New codes and payment?

---

- Having a Cat I code is not a guarantee of payment
- A Cat III code can be paid
- Budget neutrality: fixed pool of \$ in the MPFS
- Evaluation of a new code can shine light on existing codes in the “family”

# How are codes valued?

---

- Relativity and Magnitude estimation
- Time and effort compared to a reference
- Survey process
- Review by the RUC
  - Societies' initial recommended value often modified

---

## Medicare

---

- Established in 1965
- Covers adults over 65 and those with chronic diseases
- 4 parts
  - Part A hospital coverage
  - **Part B includes payments to physicians**
  - Part C Medicare Advantage
  - Part D prescription drug coverage
- Administered by CMS



## Some terms

---

- DRG: fixed payment to a hospital for caring for a patient with a certain condition (Part A)
- HOPPS: bundled payment for outpatient services based on costs of performing the service (Part B APC)
- MPFS: Medicare Physician Fee Schedule (Part B)

---

## Some terms

SITE OF SERVICE	DOING EXAM	READING EXAM
Inpatient	DRG	MPFS PC
Hospital Outpatient	HOPPS	MPFS PC
Independent Radiology office	MPFS TC	MPFS PC

# How is the Medicare MPFS payment calculated?

---

$$(RVU_{Work} + RVU_{Practice Expense} + RVU_{Prof Liability}) * CF * GPCI = Payment$$

$RVU_{Work}$  Physician work

$RVU_{Practice Expense}$  Overhead expense including labor and supplies

$RVU_{Professional Liability}$ ) Risk adjusted for specialty and type of procedure

$CF$  Monetary scaling factor (\$35.8228 for 2014)

$GPCI$  Geographic practice cost index

San Francisco 1.378

Mississippi 0.841

---

## Medicare payments to physicians

---

- Established yearly through the Federal Rule issued in November
- Cannot over or underbill patients

## Practice Expense

---

- Resources needed to perform the service in the outpatient setting
  - These costs are covered by the DRG payment in the hospital
  - Supplies and labor
    - Feet of table paper, cc of gel
    - Staff type
  - Type of equipment
    - Small box ultrasound
  - Amount of time equipment /room is used
- 

## Practice Expense

---

- Utilization rate changes
  - Was 50%, then 75%, now 90% for 2014 (10% drop)
- Indirect costs are applied on a per hour basis
- Simple 19 step calculation to get PERVU
- Recent changes in CMS assumptions
  - Room time

## The RUC process

---

- RUC makes a recommendation to CMS
  - Final determination by CMS, published each November
  - Fee schedule in effect the following January
  - Values are confidential until published by CMS
- 

## Who decides what you get paid?

---

- CMS is the final arbiter of the Medicare Physician Fee Schedule (MPFS)
- Private payers generally use the MPFS as a template for payment
- Payments can be set outside the normal process (G codes for digital mammography)
- Local Medicare Carriers can set policy

# CMS

---

- 
- Historically accepted >90% of RUC recommendations, not now
- Arbitrary reductions of work and practice expense
- Refinement panel access limited
- MPPR

---

## How do other payers differ from Medicare?

---

- Medicaid
  - typically lower rates
  - Opaque rules
- Commercial payers
  - Rates often a percentage of MC depending on negotiations
  - Coverage typically mimics MC but not always
  - Networks of providers
  - Utilization management

## So what about the G codes?

---

- Created by Congressional mandate\*
- Industry lobby influenced their creation
- Set technical payment rate for both screening and bilateral diagnostic FFDM at 150% of rate for bilateral diagnostic FSM mammography (CPT 76091)
- Professional payment was unchanged

\*section 104(d) of the Medicare, Medicaid, and SCHIP Benefits Improvement and Protection Act of 2000 (BIPA)

---

## So what about the G codes?

---

- Technically expired in 2001
- CMS could convert to CPT at any time
- Risks of conversion to CPT
  - Time data
  - Decreased equipment costs
  - Hostile climate

# Mammo and Tomosynthesis codes

Screening codes					
	Code	Prof RVU	PC	Tech RVU	TC
FFDM	G0202	.99	\$35.40	2.78	\$99.40
Film	77057	1.00	\$35.75	1.31	\$54.35
Tomo	77063	.85	\$30.39	.72	\$25.74
Diagnostic codes					
	Code	Prof RVU	PC	Tech RVU	TC
FFDM uni	G0206	.99	\$35.40	2.63	\$94.03
FFDM bilat	G0204	1.24	\$44.34	3.35	\$119.78
Tomo uni	G0206 + G0279	.99 +.86= 1.85	\$66.15	2.63 +.72= 3.35	\$119.77
Tomo bilat	G0204 + G0279	1.24 + .86= 2.1	\$75.09	3.35+ .72= 4.07	\$145.22
Film	77055, 77056	1.00, 1.26	\$35.75, \$44.34	1.52, 2.00	\$54.35, \$71.51

# Mammo and Tomosynthesis codes

Screening codes					
	Code	Prof RVU	PC	Tech RVU	TC
FFDM	G0202	.99	\$35.40	2.78	\$99.40
Film	77057	1.00	\$35.75	1.31	\$54.35
Tomo	77063	.85	\$30.39	.72	\$25.74

## So what about the G codes?

Diagnostic codes					
	Code	Prof RVU	PC	Tech RVU	TC
FFDM uni	G0206	.99	\$35.40	2.63	\$94.03
FFDM bilat	G0204	1.24	\$44.34	3.35	\$119.78
Tomo uni	G0206 + G0279	.99 + .86 = 1.85	\$66.15	2.63 + .72 = 3.35	\$119.77
Tomo bilat	G0204 + G0279	1.24 + .86 = 2.1	\$75.09	3.35 + .72 = 4.07	\$145.22
Film	77055, 77056	1.00, 1.26	\$35.75, \$44.34	1.52, 2.00	\$54.35, \$71.51

# Is the whole mammo family going to be reviewed?

---

- Why?
  - Mammo codes G0202, G0204, and G0206 were initially caught on the CMS/Other utilization >250,000 screen. From that screen, CMS and the RUC expanded the family to include 77055-77057.

---

# Is the whole mammo family going to be reviewed?

---

- When?
  - Per the 2015 MPFS PR, CPT code 77057 was recently brought forward at the February 2015 CPT Editorial Panel to revise the descriptor language to eliminate the reference to “film” due to the conversion to digital.
  - Unless any further CPT action is required, the ACR will be expected to survey the mammography family for the April 2015 RUC meeting, which would create new valuations for CY2016. The ACR is considering further changes to the code family through the CPT EP, but any such structure is preliminary at this point.

# Is the whole mammo family going to be reviewed?

- What is the process for this?
  - The ACR RUC Team anticipates that the AMA will request survey of the mammo family for the April 2015 RUC. This requires that the ACR survey a random sample of our membership, gathering data to prepare recommendations for the RUC Panel in Chicago in April. These recommendations will be reviewed by CMS and implemented in the 2016 MPFS.

## Breast and axilla ultrasound codes

- Both breast codes are unilateral

Procedure	Code	RVU Prof	RVU tech	Prof \$	Tech \$
Focused/Limited	76642	.98	1.54	\$35.04	\$55.06
Complete including axilla	76641	1.05	2.01	\$37.54	\$71.87
Axilla alone	76882	.70	.32	\$25.03	\$11.44

# MPPR: Multiple Procedure Payment Reduction

---

- TC MPPR imposed as part of DRA
- PC MPPR imposed in 2012
- ACR successful in reducing from 50% to 25%
- Group practice PC MPPR imposed in 2013
- MPPR NOT expanded to all imaging in 2014, just advanced (CT, MR, PET)

---

## Bundled Coding

---

- CMS believes there is duplication of work
- CMS less concerned about describing exactly what was done
- Bundling mandated for services performed together most of the time i.e most radiology biopsy/interventional codes

## Component coding: Vacuum assisted breast biopsy

Code	Descriptor	Value
19103	Biopsy of breast; percutaneous, automated vacuum assisted or rotating biopsy device, using imaging guidance	3.69
76942	Ultrasonic guidance for needle placement (eg, biopsy, aspiration, injection, localization device), imaging supervision and interpretation	0.67
Clip placement	Image guided placement, metallic localization clip, percutaneous, during breast biopsy/aspiration	0.00

# Bundled coding: Vacuum assisted breast biopsy

Code	Descriptor	Value
<b>19083</b>	<b>Biopsy, breast, with placement of breast localization device(s) (eg, clip, metallic pellet), when performed, and imaging of the biopsy specimen, when performed, percutaneous; first lesion, including ultrasound guidance</b>	
<b>3.10 RVU (29% decrease)</b>		
Clip placement	Image guided placement, metallic localization clip, percutaneous, during breast biopsy/aspiration	0.00

# Physician Work RVU

- How does what you do compare with other doctors' work?
  - Bundled stereo biopsy 3.29 rvu
  - 1 hour of critical care management 3.60 rvu

## Table of breast interventional codes and their values

Procedure	Code(s)	RVU Office	RVU Hospital	Nonfacility \$	Facility \$
Stereo core bx	19081	18.86	4.84	\$674.33	\$173.03
US core bx	19083	18.43	4.77	\$658.96	\$170.55
MR core bx	19085	29.12	5.80	\$1041.18	\$207.38
Mammo Loc	19281	6.80	2.84	\$243.13	\$105.12
Stereo Loc	19283	7.75	2.95	\$277.10	\$105.48
US Loc	19285	12.64	2.51	\$451.94	\$89.74
MR Loc	19287	24.70	3.96	\$883.14	\$141.59

# Guidance on using interventional codes

---

- Second lesion the same breast
- Lesion in the other breast
- Bracket localization of single extent
- Second procedure another day?
- Specimen radiography
- Clip placement with a biopsy
- Clip placement without a biopsy

---

## Biopsy of the Axilla alone, without the breast

---

- Biopsy of an axillary lymph node using US guidance
  - 76942: Ultrasound guidance for needle placement
  - 38505: Core: By needle superficial (eg. Cervical, Inguinal and axillary), or
  - 10022: FNA: with imaging guidance
- Placement of clip in the axilla
- 76882: Ultrasound Extremities: limited anatomic specific

## Mammography Coding Q&A

---

- Physical exam w/ mammo or US
  - Only bill for consultation if provided and documented according to established E/M guidelines
- Physical exam w/interventional
  - Considered part of the surgical procedure code

---

## Mammography Coding Q&A

---

The wording in the 2014 National Correct Coding Initiative (NCCI) narrative now allows the coding of the post-procedure mammogram when a different modality is used for the breast biopsy, as noted in the following:

If a breast biopsy, needle localization wire, metallic localization clip, or other breast procedure is performed with mammographic guidance (e.g., 19281, 19282), the physician should not separately report a post procedure mammography code (e.g., 77051, 77052, 77055-77057, G0202-G0206) for the same patient encounter. The radiologic guidance codes include all imaging by the defined modality required to perform the procedure.

# NMD, PQRS and Metrics

# NRDR: Data Warehouse of ACR Registries

NRDR is a data warehouse of ACR registries that compares radiology facilities regionally and nationwide according to facility type:

CT Colonography (CTC)

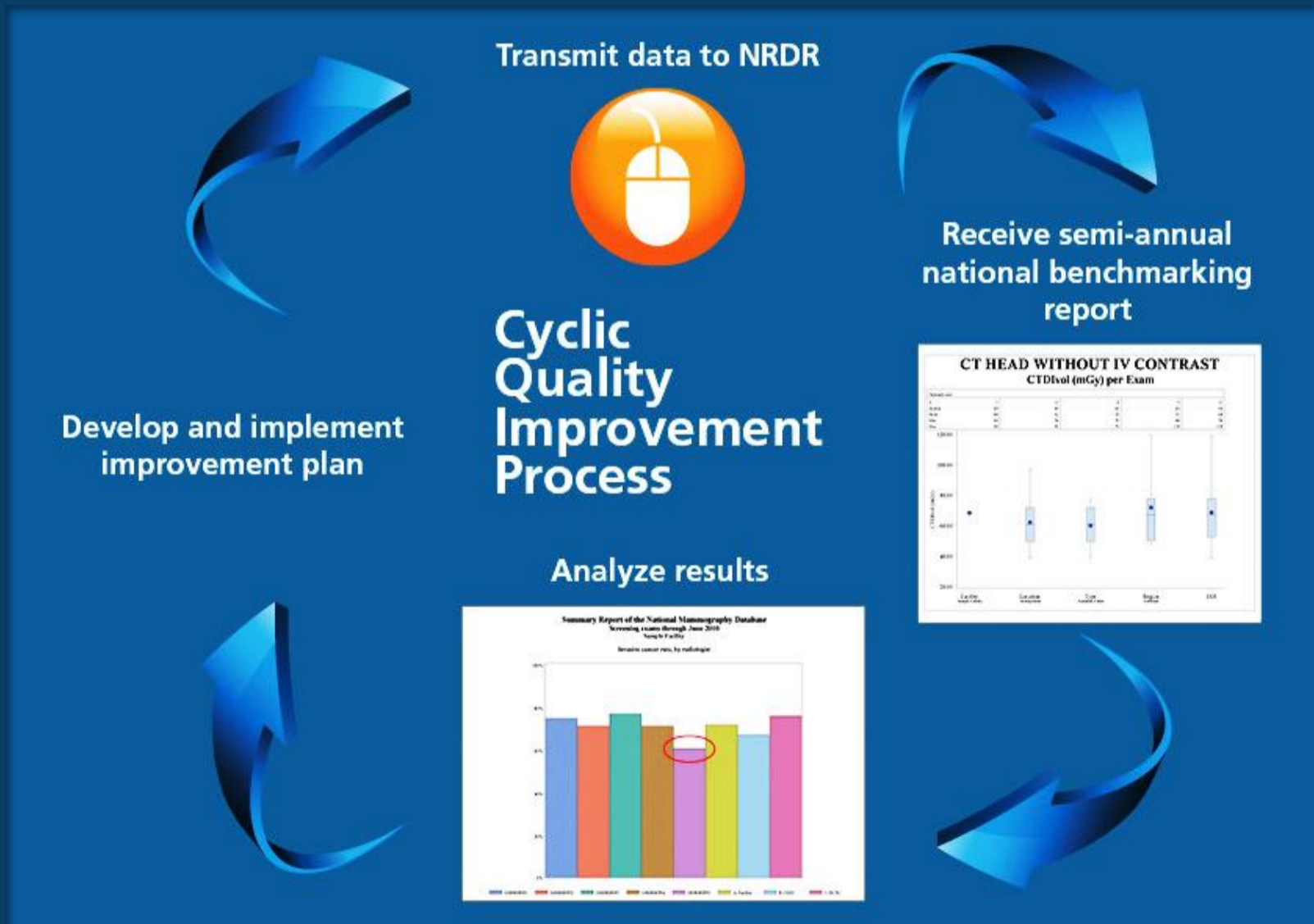
National Mammography Database (NMD)

Dose Index Registry (DIR)

General Radiology Improvement Database (GRID)

IV Contrast Extravasation Registry (ICE)

## Guiding principle behind registries



# What is NMD?

A quality registry for breast imaging that empowers facilities and physicians to monitor and improve quality, with minimal effort and complexity, using standardized data elements and measures consistent with BI-RADS®

## NMD: Component of NRDR



# Data collection process

---

- Uses data already collected under MQSA
- Data elements and standard audit measures derived directly from BI-RADS®, and developed by the NMD Committee
- Work with commercial software vendors and homegrown systems to enable one-click upload of registry data

---

## NMD-certified software vendors

---



# NMD Participation Benefits

---

- Receive semi-annual audit reports that meet and exceed MQSA requirements
- Plus receive benchmarks and comparisons to peers
- Enroll to earn Practice Quality Improvement credit from the ABR
- Use NMD to report metrics for CMS PQRS program
- Audits for MRI and ultrasound will be added later in 2015

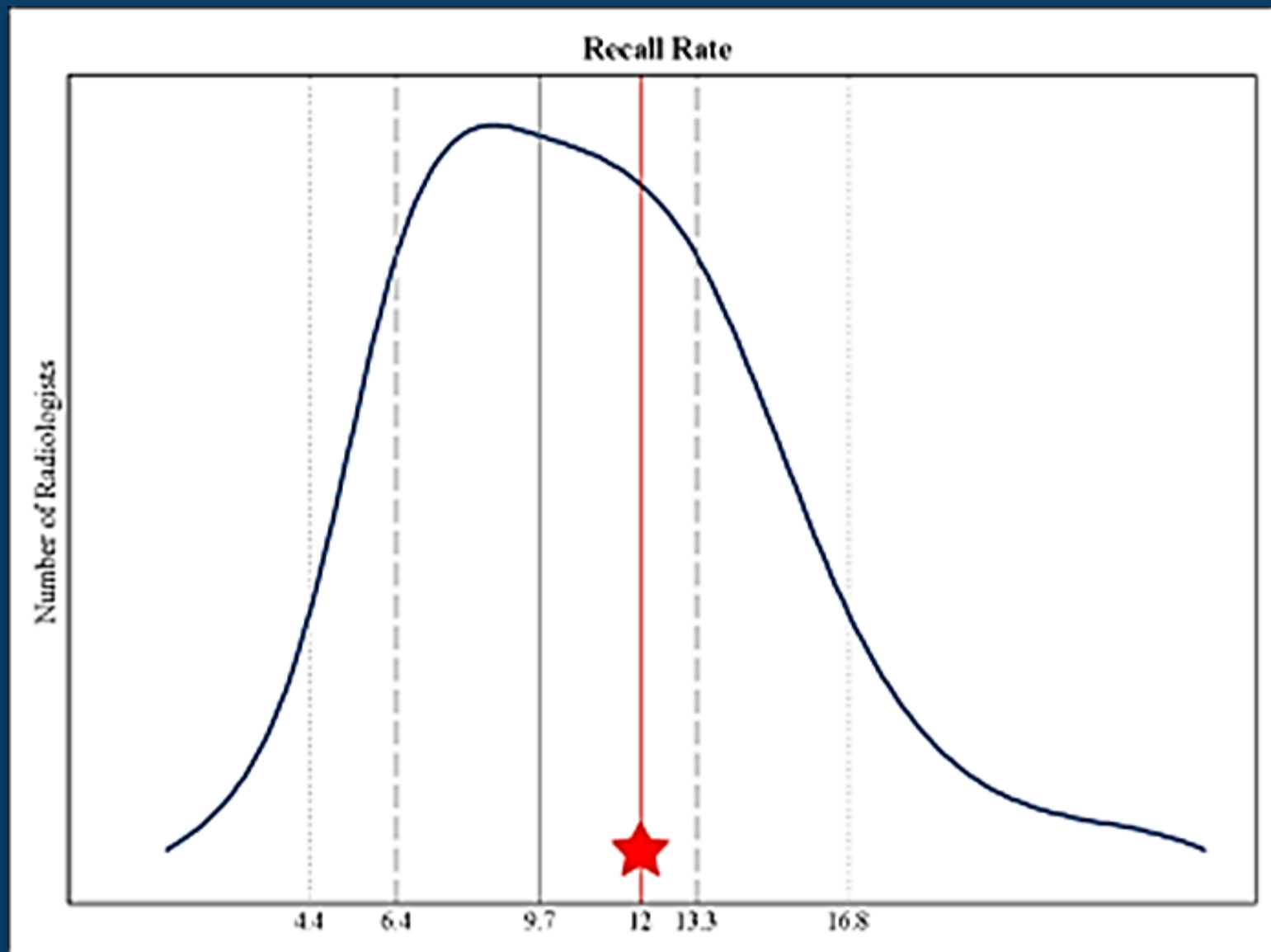
---

## Why participate in NMD

---

- Access this easy-to-use and accurate tool to obtain audit data reports and comparisons.
- If you know you are doing a good job, use your NRDR data reports to monitor and publicize the evidence.
- Use your NMD reports to proactively implement improvement plans.

# Collaboration with the Breast Cancer Surveillance Consortium (BCSC) to provide BCSC benchmarks alongside NMD data



# PQRS Qualified Clinical Data Registry (QCDR)

---

- “Traditional” registries only include PQRS measures, i.e. “Use of BI-RADS 3”, “Reminder System”
- ACR National Radiology Data Registry (NRDR) and other specialty society registries may qualify as a QCDR
- Allowed to report “non-PQRS” measures for successful PQRS participation
- ACR self-nominated to be QCDR in 2014; approved May
  - Re-applied for 2015
- Include 6 mammography measures from NMD; 2 PQRS measures

---

## CMS Quality Reporting Programs Breast Imaging Measures

---

- Physician Quality Reporting System (PQRS)
  - Increasing requirements for reporting – 9 measures/3 domains
  - Potential penalties for non-participation began 2013
  - 2014 reporting period basis for 2016 -2.0% non-participation penalty
  - Individual physician or physician group reporting
  - Claims based reporting still an option BUT
  - Moving more towards registry reporting – “traditional” or new option “qualified clinical data registry” (QCDR)

## QCDR Mammography Measures

---

- Screening Mammography Cancer Detection Rate (CDR)
  - Screening Mammography Invasive Cancer Detection Rate (ICDR)
  - Screening Mammography Abnormal Interpretation Rate (Recall Rate)
  - Screening Mammography Minimal Cancer Rate
  - Screening Mammography Node Negativity Rate
  - Screening Mammography Positive Predictive Value 2 (Biopsy Recommended)
- 

## CMS Physician Value Modifier (VM) Program

---

- PQRS incentive/penalty based on reporting
- VM transitions to incentive/penalty based on quality (PQRS) and cost performance
- 2016: potential -2.0% VM penalty for non-participation in 2014 PQRS (in addition to -2.0% PQRS penalty); potential for +1.0% incentive
- 2016: applies to groups of 10+ eligible providers
- 2017: applies to all physicians

# Value Modifier Calculation

- Quality measure performance
  - PQRS scores standardized against national mean
  - QCDR scores comparatively across registry
  - Six domain scores (patient safety, etc) – measures scores averaged within domain
  - Domain scores averaged into quality composite score, equally weighted
- High, average or low quality based on percentile
- -1 or +1 standard deviation from mean = low or high

## Value Modifier Quality Tiering

Each group's composite scores are based on **standardized performance** (how far from the national mean)

Statistically significant outliers are identified and assigned to **high** or **low** quality and cost tiers

Quality/Cost	Low Cost	Average Cost	High Cost
High Quality	+2.0x*	+1.0x*	0.0%
Average Quality	+1.0x*	0.0%	-1.0%
Low Quality	0.0%	-1.0%	-2.0%

\* Additional +1.0x possible if quality measure data is reported for high risk beneficiaries.  
X factor is determined after assignment of downward adjustment – program is budget neutral.

## PQRS Breast Imaging Measure

---

- Inappropriate Use of BIRADS 3
  - Denominator: All final reports for screening mammograms
  - Numerator: Final reports classified as “probably benign”
  - Seven “Quality Data Codes” (CPT II category codes) corresponding to each BIRADS assessment category (0-6) developed for reporting measure to CMS

---

## PQRS Breast Imaging Measure

---

- Mammography Reminder System
  - Denominator: All patients aged 40 years and older undergoing a screening mammogram
  - Numerator: Patients whose information is entered into a reminder system with a target due date for the next mammogram

# HOPPS Breast Imaging Measure

- Mammography Follow-up Rates
  - Denominator: Patients who had received a screening mammography study.
  - Numerator: Patients who had a diagnostic mammography study or an ultrasound breast study following a screening mammography study (within 45 days).
  - Measure identifies recall rates greater than 10 to 14 percent as generally unusual unless explained by the morbidity of the underlying population.
  - More info at [www.imagingmeasures.com](http://www.imagingmeasures.com)

## Hospital Compare Table

▼ Use of medical imaging					
Measures	MT SINAI HOSPITAL MEDICAL CENTER	SAINT ANTHONY HOSPITAL	NORTHWESTERN MEMORIAL HOSPITAL	Illinois Average	National Average
<p><b>Outpatients with low back pain who had an MRI without trying recommended treatments first, such as physical therapy</b></p> <p>(If a number is high, it may mean the facility is doing too many unnecessary MRIs for low back pain.)  <b>Lower percentages are better</b></p>	Not Available <sup>1</sup>	Not Available <sup>1</sup>	33.3%	36.0%	36.5%
<p><b>Outpatients who had a follow-up mammogram, ultrasound, or MRI of the breast within 45 days after a screening mammogram</b></p> <p>(A follow-up rate near zero may indicate missed cancer; a rate higher than 14% may mean there is unnecessary follow up.)</p>	4.2%	6.2%	7.5%	8.5%	8.8%

# Helpful Links

---

- PQRS = <http://www.acr.org/Quality-Safety/Quality-Measurement/PQRS>
- Value Modifier = <http://www.acr.org/Quality-Safety/Quality-Measurement/Physician-Modifier-New>
- NMD = <http://www.acr.org/Quality-Safety/National-Radiology-Data-Registry/National-Mammography-DB>