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# ACR Update on Value-Based **Care** in Radiology

Jacqueline A Bello, MD, FACR *Chair, ACR Board of Chancellors*



# The ACR Learning Network

A deliberate organizational structure to facilitate meaningful improvement across multiple organizations. . .

*Knowing it can be done, and how to do it, w/ dedicated resources and effort*

Lung Cancer Screening  
Improvement Collaborative

Mammography Positioning  
Improvement Collaborative

Recommendations Follow-up  
Improvement Collaborative

Prostate MR Image Quality  
Improvement Collaborative



ACR LEARNING  
NETWORK



# Features of the ACR Network



Teams solve the same problem at their respective institutions



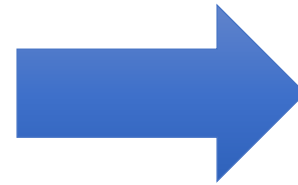
Supported by ACR ImPower, a team- and project-based, multidisciplinary and structured improvement program



Learn and share with each other



Develop performance measures and validated improvement strategies at multiple local sites



## Improvement Project Support and Training

- Improve performance locally
- Use QI methodology
  - Define the problem
  - Measure performance
  - Deeply understand the current state
  - Develop, test, refine, and implement interventions
  - Ensure sustainability

## The Learning Community

- Deepen expertise
- Develop world class performance
- Visit and learn from one another
- Share ideas with each other
- Deepen relationships
- Welcome new members
- Publish learnings to the outside world

# Improvement Driven Measures



## Mammography Positioning Improvement Collaborative

### ACR LEARNING NETWORK

Improve % of images that meet mammographic positioning criteria

- Based on ACR positioning guidelines
- Meet all major criteria plus 9 of 12 minor criteria



## Prostate MR Image Quality Improvement Collaborative

### ACR LEARNING NETWORK

Improve % of images that meet requirements for excellent quality

- Pi-Qual score 4-5
- DWI sequences rating is optimal



## Lung Cancer Screening Improvement Collaborative

### ACR LEARNING NETWORK

Increase the percentage of LCS eligible patients being screened.



## Recommendations Follow-up Improvement Collaborative

### ACR LEARNING NETWORK

Appropriateness: Increase the % of exams that receive an appropriate recommendation

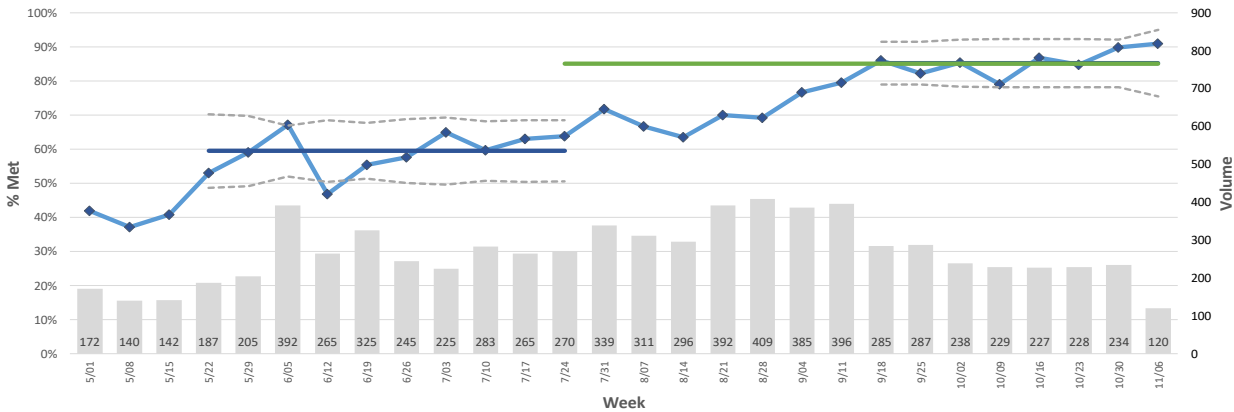
Completion: Increase the % of exams that have completed the recommendation



# Cohort 1 (Apr-Nov '22) Results

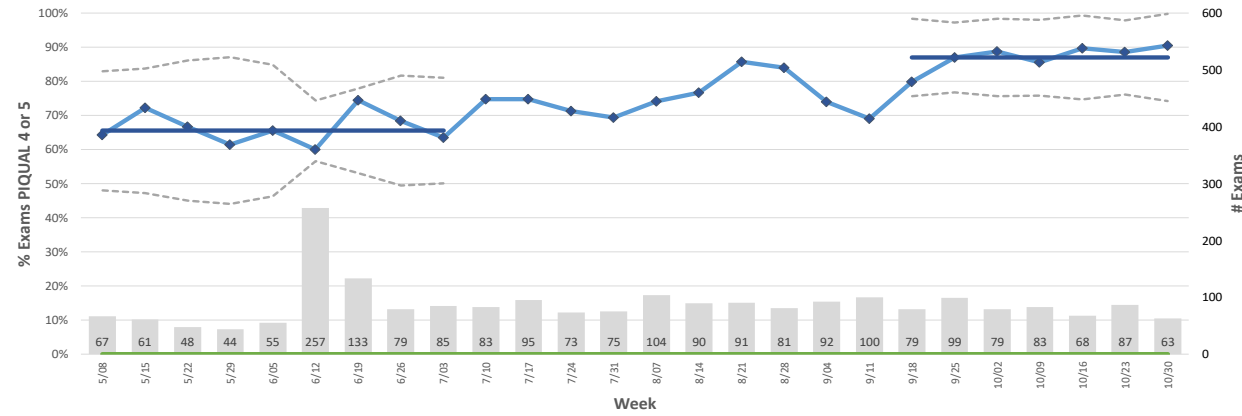
## Mammography Positioning Improvement Collaborative

Mammography Positioning Improvement Collaborative



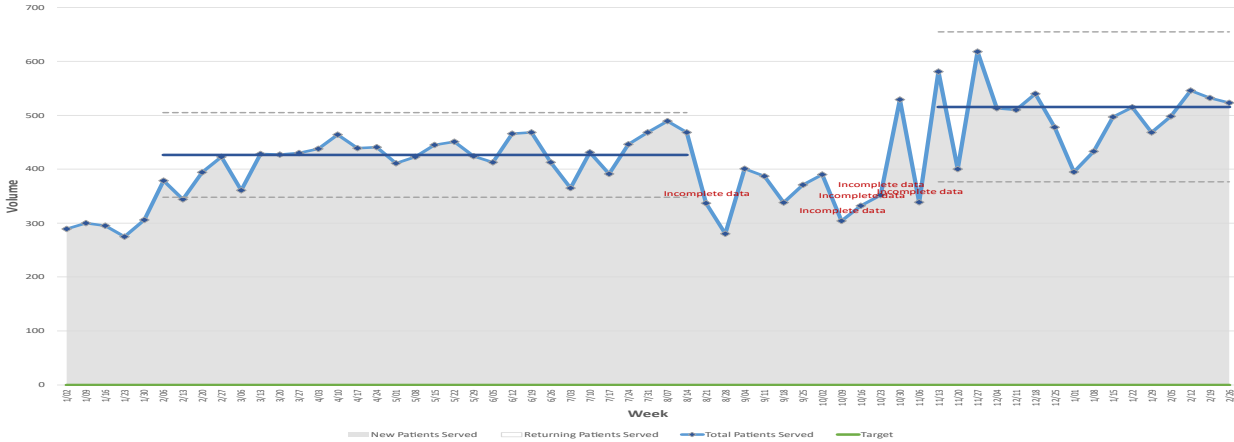
## Prostate MR Image Quality Improvement Collaborative

Prostate Cohort 1 PIQUAL Measure



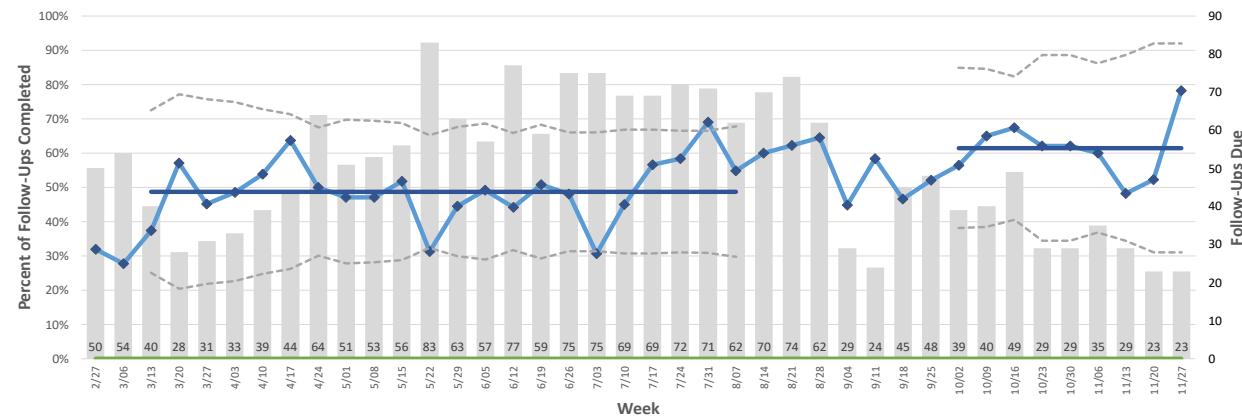
## Lung Cancer Screening Improvement Collaborative

Cohort 1 LDCT Volumes



## Recommendations Follow-up Improvement Collaborative

RFU Completeness



# ACR Appropriateness Criteria

**Quality & Safety**

## ACR Appropriateness Criteria® (AC) now includes:



- 227** diagnostic imaging and interventional radiology documents.
- 1,080** clinical variants.
- 3,000** clinical scenarios.
- 108** AC patient-friendly summaries published in JACR®.

### AC Portal

An interactive way to access the AC topics, variants, clinical scenarios, and recommendations. Use keyword filters and search features to more easily find all content.



Explore by topic

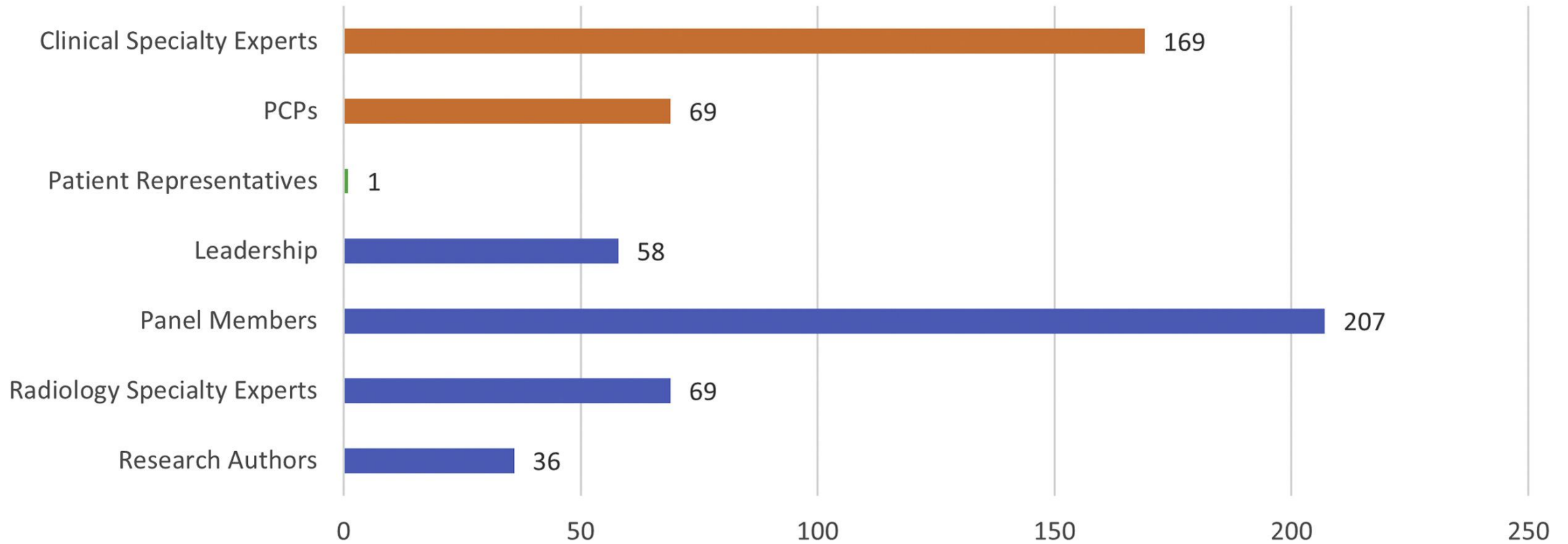


Explore by scenario



Explore by procedure

## NUMBER OF PARTICIPANTS ON TOPICS BY ROLE



[Kurth DA, Karmazyn BK, Waldrip CA, Chatfield M, Lockhart ME. ACR Appropriateness Criteria® Methodology. J Am Coll Radiol. 2021 Nov;18\(11S\):S240-S250. doi: 10.1016/j.jacr.2021.03.021. Epub 2021 Jul 9.](#)



## CASE STUDIES IN CLINICAL PRACTICE MANAGEMENT



## Incidental Findings: A Survey of Radiologists and Emergency Physicians

Christopher L. Moore, MD, Nadja Kadom, MD, David Seidenwurm, MD, Gregory Nicola, MD, Nancy Fredericks, MBA, Samantha Shugarman, MS, Arjun Venkatesh, MD

### DESCRIPTION OF THE PROBLEM

Incidental findings (IFs) are defined as a “mass or lesion, detected by an imaging examination performed for an unrelated reason” [1]. Approximately a quarter of imaging tests will identify an IF, with nearly a third of CT scans revealing one [2,3]. As CT utilization has grown since the 1970s, the prevalence and burden of IFs have increased [1]. The ACR IF Committee has published white papers outlining imaging and clinical criteria for follow-up of IFs that may represent early cancer [4]. However, institutional programs enabling tracking follow-up recommendations and assurance of follow-up tests’ completion for IFs remain sparse [5].

from primary care providers. Even when a primary care provider is involved, emergency physicians (EPs) often struggle to contact primary care providers or specialists after hours. It is unclear what resources are employed in the ED setting to ensure appropriate follow-up.

In 2019, the ACR received a grant from the Gordon and Betty Moore Foundation entitled “Closing the Results Loop on Incidental Findings,” which aims to improve quality relating to IF communication and follow-up. The project aims to develop a suite of quality measures that ensure the communication and ultimate follow-up of evidence and expert consensus-based recommendations for IFs. A multi-stakeholder technical expert panel

patients, and personnel involved in systems, quality, and health information technology. The TEP first convened in February 2020 and has met regularly via teleconference.

Using an iterative process, the TEP cochairs and ACR staff developed initial surveys for radiologists, referring clinicians, support staff, and patients. The TEP reviewed the surveys for face and construct validation and incorporated changes and suggestions into the final survey that included a maximum of 24 questions for radiologists and 22 questions for EPs. The question types were multiple choice, sliding scale, rank order, and matrix rating scale with a 13-min projected completion time (e-only Appendix 1 and 2).

ORIGINAL ARTICLE ■ *Clinical Practice Management*

## White Paper: Best Practices in the Communication and Management of Actionable Incidental Findings in Emergency Department Imaging



Christopher L. Moore, MD<sup>a</sup>, Andrew Baskin, MD<sup>b</sup>, Anna Marie Chang, MD, MSCE<sup>c</sup>, Dickson Cheung, MD, MBA, MPH<sup>d</sup>, Melissa A. Davis, MD, MBA<sup>e</sup>, Baruch S. Fertel, MD, MPA<sup>f</sup>, Kristen Hans, RN, MS<sup>g</sup>, Stella K. Kang, MD, MSc<sup>h</sup>, David M. Larson, MD<sup>i</sup>, Ryan K. Lee, MD, MBA<sup>j</sup>, Kristin B. McCabe-Kline, MD<sup>k</sup>, Angela M. Mills, MD<sup>l</sup>, Gregory N. Nicola, MD<sup>m</sup>, Lauren P. Nicola, MD<sup>n</sup>

### Abstract

**Purpose:** Actionable incidental findings (AIFs) are common in radiologic imaging. Imaging is commonly performed in emergency department (ED) visits, and AIFs are frequently encountered, but the ED presents unique challenges for communication and follow-up of these findings. The authors formed a multidisciplinary panel to seek consensus regarding best practices in the reporting, communication, and follow-up of AIFs on ED imaging tests.

**Methods:** A 15-member panel was formed, nominated by the ACR and American College of Emergency Physicians, to represent radiologists, emergency physicians, patients, and those involved in health care systems and quality. A modified Delphi process was used to identify areas of best practice and seek consensus. The panel identified four areas: (1) report elements and structure, (2) communication of findings with patients, (3) communication of findings with clinicians, and (4) follow-up and tracking systems. A survey was

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*THANK YOU*

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**IS3R  
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