Novel Quality Measure Set: Closing the Completion Loop on Radiology Follow-up Recommendations for Noncritical Actionable Incidental Findings

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Abstract

Background: Care gaps occur when radiology follow-up recommendations are poorly communicated or not completed, resulting in missed or delayed diagnosis potentially leading to worse patient outcomes. This ACR-led initiative assembled a technical expert panel (TEP) to advise development of quality measures intended to improve communication and drive increased completion rates for radiology follow-up recommendations.

Materials and methods: A multistakeholder TEP was assembled to advise the development of quality measures. The project scope, limited to noncritical actionable incidental findings (AIFs), encourages practices to develop and implement systems ensuring appropriate communication and follow-up to completion.

Results: A suite of nine measures were developed: four outcome measures include closing the loop on completion of radiology follow-up recommendations for nonemergent AIFs (with pulmonary nodule and abdominal aortic aneurysm use cases) and overall cancer diagnoses. Five process measures address communication and tracking of AIFs: inclusion of available evidence or guidelines informing the recommendation, communication of AIFs to the practice managing ongoing care, identifying when AIFs have been communicated to the patient, and employing tracking and reminder systems for AIFs.

Conclusion: This ACR-led initiative developed a measure set intended to improve patient outcomes by ensuring that AIFs are appropriately communicated and followed up. The intent of these measures is to focus improvement on specific areas in which gaps in communication and AIF follow-up may occur, prompting systems to devote resources that will identify and implement solutions to improve patient care.

Key Words: Expectations, medicolegal risk, radiology testing, value, volume

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BACKGROUND

Actionable incidental findings (AIFs) are imaging findings unrelated to the clinical indication for the imaging test for which follow-up is recommended and occur commonly across diverse imaging modalities [1]. However, specific recommendations in the radiology report on the timing and modality of follow-up are often lacking [2]. As many as a third of AIFs lack documentation of completion in the medical record [3,4]. In emergency departments, radiology follow-up completion rates may be as low as 17% and even lower for patients impacted adversely by social determinants of health [5-7]. When follow-up is completed as recommended, diagnoses are established in 45% of patients, including up to 5% cancer diagnoses [8-10]. Gaps in communication and follow-up tracking pose significant safety issues for patients and medicolegal risks to providers, particularly in vulnerable populations.

Some practices adopt closed-loop tracking systems for actionable results to ensure recommendations are communicated and followed. Although closed-loop result communication alone may not significantly improve the completion rates for AIFs [11], closed-loop systems tracking AIF follow-up recommendations to completion show substantially increased follow-up rates [9,10,12,13]. Despite this evidence, standardized quality measures evaluating different interventions and guiding quality improvement are lacking. In a survey of radiologists and emergency physicians, 60% of respondents reported using software to track follow-up recommendations, but not specifically AIFs. Of those, 20% reported their programs were supported by an full-term employee [14]. The majority of radiologists (86%) reported having a departmental guideline for incidental findings that require closed-loop communication. The completion of incidental finding follow-up recommendations, however, was reported by a minority of radiologists (23%). Similarly, 64% of emergency physicians reported that tracking of incidental finding follow-up did not occur, and only 10% stated there was tracking [14]. The availability of standardized quality measures for completing radiology follow-up recommendations may foster the development of system-level approaches that incorporate health information technology (HIT) solutions.

This ACR-led initiative assembled a multidisciplinary technical expert panel (TEP) to advise the development of quality measures focusing on the communication and completion of follow-up for nonemergent AIFs [15]. These measures were designed to serve various purposes, including local improvement, national benchmarking, and potentially public reporting. Each measure was refined according to TEP consensus to ensure transparency in measure development, implementation, and dissemination.

MATERIALS AND METHODS

ACR assembled a multidisciplinary TEP that was cochaired by two ACR-appointed radiologists and two American College of Emergency Physicians–appointed emergency physicians. Consistent with national quality measure development guidelines [16], the TEP represented an array of stakeholders, recruited through multimedia messaging (eg, an open call on the ACR website, targeted invitations to ACR Committee and Commission chairs, staff of other medical societies, patient and family advisors [PFAs]) (Table 1). ACR staff and a measure development consultant supported the TEP.

The measure development process followed ACR's established quality measure development process based on nationally recognized best practice guidance (Fig. 1) [16-18]. Once oriented to the project topic, goals, process, and timeline, the TEP provided oversight of the environmental scan, informed the evolving measure list, and reviewed iterative revisions to measure specifications. Additional activities associated with the development include an initial 30-day public comment period (December 2020), alpha and ongoing beta testing, and a 180-day public comment period (May through December 2021) [15].

The TEP used a process map illustrating a radiology workflow for AIF result communication to define a standard nomenclature, educate nonradiology panelists, and identify opportunities for improvement (Fig. 2).

The TEP determined that developing noncritical AIF quality measures met patients' and providers' salient, high-value topics (Fig. 3). Radiology findings and recommendations that are expected, or findings that ae unexpected and "critical," are likely to be directly addressed by clinicians and were not felt to represent significant care gaps. By limiting the scope to noncritical AIFs, we acknowledge that the primary goal of this measure set is to encourage radiology practices to improve communication and implement effective tracking systems that ensure timely and appropriate follow-up of AIFs.

RESULTS

Nine measures focusing on appropriately communicating and closing the completion loop on radiology follow-up recommendations for AIF were developed (Table 2), including four outcomes and five process measures [15]. Note, the term "outcome measures" used throughout this article includes "intermediate outcome" measures as defined by CMS: "An intermediate outcome measure is a measure that assesses the change produced by a healthcare intervention that leads to a long-term outcome" [16].

Table 1. TEP composition*

Panelist ID	Member Category	Stakeholder Representation
1	Cochair	Radiologist
2	Cochair	Radiologist
3	Cochair	Emergency medicine physician
4	Cochair	Emergency medicine physician
5	Member	Radiologist
6	Member	Radiologist
7	Member	Radiologist
8	Member	Radiologist
9	Member	Radiologist
10	Member	Internal medicine and oncology physician
11	Member	Urologist
12	Member	HIT consulting, practice manager
13	Member	HIT vendor CMIO, MD
14	Member	PFA
15	Member	PFA
16	Member	PFA
17	Member	Measure developer/ methodologist, MD
18	Member	Hematology and oncology physician, quality director
19	Member	Practice manager/quality administrator
20	Member	Practice manager/quality administrator
21	Member	Payer
i	ACR staff	Samantha Shugarman, quality programs director
ii	ACR staff	Judy Burleson, quality management programs senior director
iii	ACR staff	Nancy Fredericks, quality programs senior advisor
iv	ACR staff	Mike Simanowith, quality registry director
v	ACR staff	Karen Campos, quality management programs associate
vi	ACR staff	Zachary Smith, quality management programs associate

CMIO = chief medical and informatics officer; HIT = health information technology; MD = medical doctor; PFA = patient and family advisor; TEP = technical expert panel.

*There were 4 cochairs, 16 panelists, and 6 ACR staff persons. Stakeholders represented in the TEP included radiologists, clinicians, HIT experts, patients, practice managers, quality leaders and administrators, a payor representative, and a measure developer and methodologist.

Outcome Measures

The outcome measures address the project's goal of closing the loop on completion of radiology follow-up recommendations for nonemergent AIFs through one generic measure, two end-to-end use-case measures, and one measure capturing cancer detection rate (Table 2).

Closing the Loop on Completion of Follow-up Recommendations for AIFs (Table 2, Measure 1). This measure serves the initiative's primary goal, evaluating the percentage of patients with at least one AIF who received follow-up imaging within the recommended time interval.

In determining measure follow-up examination completion timeliness, panelists balanced variable health system factors (eg, available appointments, examination wait times, and human factors like provider-patient availability issues) with precise guideline recommendations. Hence, successful follow-up was defined as completing an imaging study within 30 days before and 60 days after the recommended follow-up interval.

The TEP accepted denominator exceptions for medical and patient reasons to address complexities of patient care. Medical reasons for incomplete recommended follow-up may include patients' health status (eg, palliative care, deceased, stable finding by comparison to prior imaging not available at the time of original interpretation, or alternative evidence-based guidance not supporting the follow-up recommendation). Patient reasons may include patient abstention after a shared decision-making process (eg, risk tolerance, preference regarding overdiagnosis, expected diagnostic yield, financial hardship, or underinsurance). Although some measure exceptions, like lacking insurance coverage, could be addressed through improvement initiatives, it was argued that they are beyond radiologist control. The TEP decided such denominator exceptions support the measure's early adoption and implementation. It is understood that such exceptions would be very difficult to identify and either require extensive chart review or development of tools that can gather this information. The purpose of including this measure is to support and inform practices' development of infrastructure for robust follow-up tracking systems.

Use Case: Closing the Loop on Completion of Follow-up Recommendations for AIFs of Abdominal Aortic Aneurysms (Table 2, Measure 2). This measure determines the percentage of patients, aged 18 years and older, with a 4.0- to 4.9-cm abdominal aortic aneurysm (AAA) AIFs who received follow-up imaging within the recommended time interval. AAA ruptures are catastrophic events nearing 100% mortality if untreated [19]. The incidence of AAA rupture in the United States is reportedly 7.29 per 100,000 population [19]. Serial ultrasonography surveillance is recommended for patients with AAA <5 cm to facilitate surgical repair for

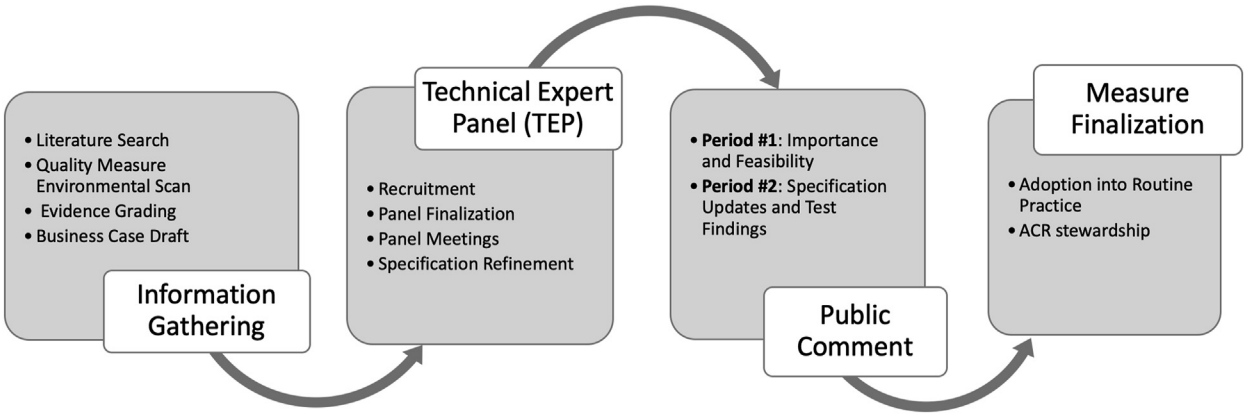

Fig. 1. Measure development process. Adapted from the CMS Blueprint [15].

progressing AAA [20]. Thus, AAA presents a reasonable use case due to the clinical importance and the well-defined role of imaging in follow-up and management.

Use Case: Closing the Loop on Completion of Follow-up Recommendations for AIFs of Pulmonary Nodules (Table 2, Measure 3). This measure assesses timely follow-up imaging for a single pulmonary nodule greater than 6 mm incidentally identified on CT scans in patients 35 years or older. Lung nodules were selected as a use case because they are common and well-developed follow-up guidelines exist. Despite decreases in smoking, lung cancer remains the most common fatal cancer and the second leading cause of death in the United States [21]. As many as one-fifth of chest CTs will harbor an incidental lung nodule [22]. Appropriate follow-up for incidental lung nodules can increase early-stage cancer detection by 36% to 71% [21]. Fleischner Society guidelines for managing incidental pulmonary nodules detected on CT studies incorporate current evidence [23] and are well known among radiologists practicing in the United States [24]. Adherence to evidence-based guidelines can significantly improve patient outcomes while decreasing downstream costs for incidental lung nodule follow-up tests [25].

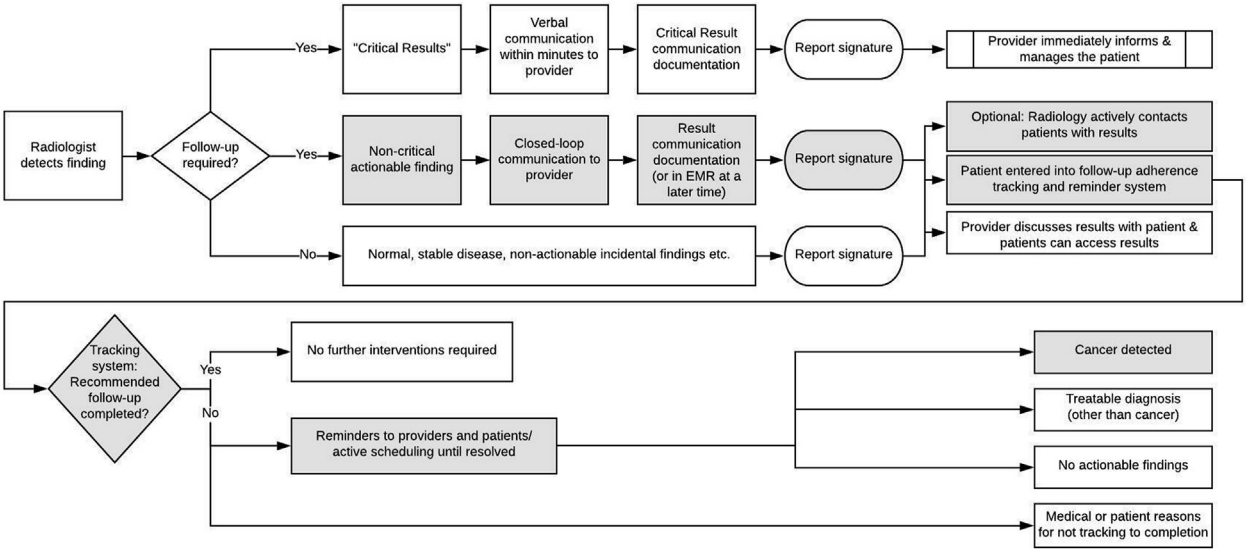

Fig. 2. Radiology follow-up recommendation tracking process map. As soon as a noncritical actionable incidental finding is identified, the radiologist communicates the finding via closed-loop communication and the patient is entered into a tracking system, and completion of the recommended follow-up is tracked. If the recommended follow-up has not been completed within the recommended time frame, reminder communications are issued to providers and may include notifications to patients, until either the follow-up has been completed or a rationale for not completing the follow-up has been documented. Out of many important outcomes that could be measured, detection of cancer is likely the most impactful. EMR = electronic medical record.

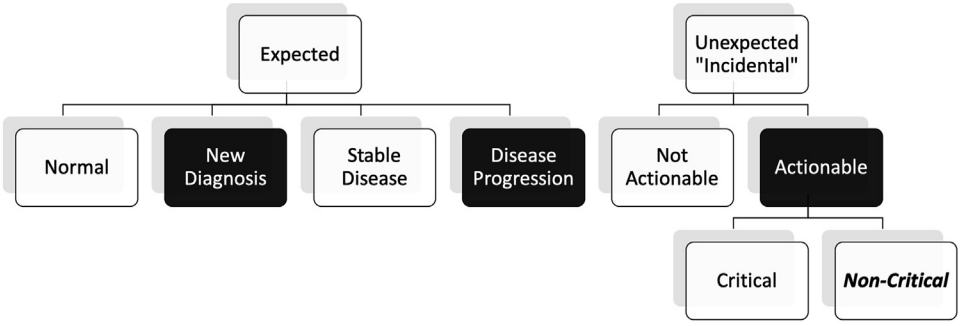

Fig. 3. Types of radiology findings. Findings that definitely benefit from closed-loop result communication and could theoretically benefit from tracking to completion include a new diagnosis, progression of disease, and actionable incidental findings (black background). Among these, the highest benefit for tracking recommendations to completion is likely for noncritical actionable incidental findings (in italic).

Percent Cancers Detected (Table 2, Measure 9). This measure aims to determine cancer detection rates related to interventions from AIF follow-up recommendation tracking systems. Two programs have reported cancer detection rates between 2.3% and 4.5% in follow-up tests that were completed due to tracking system interventions [9,10].

Although it is reasonable to assume that cancer detection through completing radiology follow-up recommendations would lead to better patient outcomes, this has not been demonstrated unambiguously. The authors believe that benchmarking cancer detection rates will demonstrate the clinical impact of follow-up tracking systems and may promote investments into such systems. Cancer detection rates form screening programs vary but may be helpful to consider in this context. For example, the cancer detection rate of screening mammograms is 0.51% [26], the colorectal cancer detection rate for immunologic fecal occult blood tests is 1.1% [27], and the detection rate for stage I lung cancer with low-dose CT screening is 2.9% [28]. Malignancy rates of incidental imaging findings vary by organ and are highest for incidental breast lesions (~40%), followed by renal, thyroid, and ovarian incidentalomas (~25%). Extracolonic, prostatic, and colonic incidentalomas are less frequently malignant (~15%) and uncommon for the brain and parotid and adrenal glands (<5%) [1].

Process Measures

The TEP developed five process measures encouraging best practices for communicating follow-up recommendations to patients and to practices managing ongoing care, standardizing follow-up recommendations, documenting available evidence or guidelines that inform recommendations, and using tracking and reminder systems for AIFs.

Specificity of Follow-up Imaging Recommendations for AIFs (Table 2, Measure 4). This measure calculates the percentage of all final radiology reports containing AIFs with follow-up recommendations, including (1) anatomic location of the lesion that triggered the follow-up recommendation, (2) specific time interval for follow-up completion, and (3) follow-up modality [28].

A number of existing follow-up guidelines can serve as reference for radiologists to determine which follow-up intervals may be appropriate. For the many lesions for which there are no published guidelines yet, follow-up intervals given in the radiology report may be arbitrarily determined by reading radiologists based on their perceived and educated level of urgency or risk. Although omitted from this measure, recommendations phrased in absolute terms, such as "Follow-up chest CT recommended," achieve higher completion rates in comparison with conditional phrases, such as "Consider follow-up" [29]. Furthermore, incorporating a "Recommendations" section to the report Impression can prevent clinicians from overlooking follow-up recommendations [30].

Evidence Documentation in Follow-up Imaging Recommendations for AIFs (Table 2, Measure 5). Referencing evidence or guidelines significantly improves adherence to radiology follow-up recommendations [31,32]. Therefore, this measure analyses the percentage of all final reports containing AIFs with recommendations for follow-up imaging that include references to evidence-based recommendations within the impression or conclusion section. Guidelines may be locally developed or adapted given the number of conditions for which evidence and formal evidence-based guidance are lacking [33] and given many barriers to accepting formal evidence-based guidelines [13,34]. TEP discussion resulted in a recommendation that "evidence" is "informed by integrating expert opinion with the best available clinical evidence from systematic research. These recommendations come from a variety of sources including national, international, or local clinical practice guidelines informed by peer reviewed evidence."

Table 2. Draft measure set overview*

Measure Title	Measure Type
Measure #1: Closing the loop on completion of follow-up recommendations for actionable incidental findings Denominator: All patients with actionable incidental findings Numerator: Patients who received follow-up imaging within a 90-d period beginning 30 d before and ending 60 d after the time interval recommended for follow-up	Outcome
Measure #2: Closing the loop on completion of follow-up recommendations for actionable incidental findings of AAA Denominator: All patients, aged 18 y and older, with a 4.0- to 4.9-cm AAA actionable incidental finding Numerator: Patients who received follow-up imaging within a 90-d period beginning 30 d before and ending 60 d after the time interval recommended for follow-up	Outcome
Measure #3: Closing the loop on completion of follow-up recommendations for actionable incidental findings of pulmonary nodules Denominator: All patients aged, aged 35 y and older, with a single >6.0-mm pulmonary nodule actionable incidental finding discovered on a CT examination Numerator: Patients who received follow-up CT imaging within a 90-d period beginning 30 d before and ending 60 d after the recommended time interval	Outcome
Measure #4: Specificity of follow-up imaging recommendations for actionable incidental findings Denominator: All final reports containing one (or more) actionable incidental finding(s) with recommendations for follow-up imaging Numerator: Actionable incidental findings with recommendations for follow-up imaging that include all following elements within the impression or conclusion section: (1) location of lesion (organ; position with organ, eg, lobe; laterality for paired organs); (2) at least one specific recommended follow-up modality; *and* (3) time interval or range for follow-up imaging	Process
Measure #5: Evidence documentation in follow-up imaging recommendations for actionable incidental findings Denominator: All final reports containing one (or more) actionable incidental finding(s) with recommendations for follow-up imaging Numerator: Actionable incidental findings include a reference to an evidence-based recommendation within the impression or conclusion section	Process
Measure #6: Communication to the practice managing ongoing care Denominator: All final reports containing one (or more) actionable incidental finding(s) with recommendations for follow-up imaging Numerator: Actionable incidental findings with documentation of direct communication of findings to the referring physician within 5 business days of examination interpretation	Process
Measure #7: Communication of nonemergent actionable incidental findings to the patient Denominator: All final reports containing one (or more) actionable incidental finding(s) with recommendations for follow-up imaging Numerator: Actionable incidental findings with documentation of direct communication of findings to the patient within 30 business days of examination interpretation	Process
Measure #8: Tracking and reminder system for incidental findings Denominator: All final reports containing one (or more) actionable incidental finding(s) with recommendations for follow-up imaging Numerator: Actionable incidental findings with targeted follow-up imaging due dates were entered into a tracking and reminder system	Process
Measure #9: Patients' cancer detection rate with follow-up imaging (surveillance measure) Denominator: All patients with actionable incidental findings with radiologist recommendations for follow-up imaging Numerator: Patients who received diagnosis of cancer or confirmed nonprogression of cancer of the lesion 5 y after the initial actionable incidental finding	Outcome

AAA = abdominal aortic aneurysm.

*A draft measure set of nine measures was developed. Measure types include four outcomes measures: the overarching goal (measure #1), two use cases (measures #2 and #3), and one research outcome (measure #9). There are five process measures involving the specificity of follow-up recommendations (measure #4), documentation of evidence-based practice guides (measure #5), closed-loop result communication with practices (measure #6) and with patients (measure #7), and a tracking system for actionable follow-up recommendations (measure #8). The full measure set including exceptions, definitions, guidance and updates based on public comments is available online at https://www.acr.org/-/media/ACR/Files/Quality-Programs/Moore-Fnd/CtL-Full-Set-May-28-2021.pdf.

Communication to the Practice Managing Ongoing Care (Table 2, Measure 6). This measure calculates the percentage of final reports containing AIFs with recommendations for follow-up imaging in which the findings were directly communicated to the referring physician or clinician. Closed-loop communication, a key element of radiology tracking systems for radiology follow-up recommendations [9,10,12], may remind clinical providers of pending follow-up. This process can trigger notifications until the follow-up is completed and reasons for not pursuing the follow-up recommendation are captured [9,10,12].

The ACR practice parameter for communication of diagnostic imaging findings mandates closed-loop result communication documentation for critical results [35]. It is conceivable that closed-loop result communication can similarly benefit noncritical findings when the interpreting radiologist perceives likelihood of adverse impacts to patient health if not acted upon within a reasonable time frame [36]. Given the nonurgent nature, both digital and verbal communications are acceptable for achieving and documenting closed-loop communication [37].

Communication of AIFs to the Patient (Table 2, Measure 7). This facility- and system-level measure tabulates the percentage of final reports containing AIFs with recommendations for follow-up imaging in which the findings were communicated to the patient. The TEP's PFAs strongly advocated for directly notifying patients at the time AIF follow-up recommendations are issued. However, it is unclear how patients may interpret and respond to medical documents that could potentially cause distress [29,38]. For instance, feeling distressed may discourage patients from pursuing follow-up tests [39]. To establish comfortable result communication practices with patients, the numerator may be satisfied through medical record documentation stating the clinician or practice communicated the findings to the patient verbally, by postal delivery, shared electronic health record, electronic patient portal, or other HIT tools. It is understood that collecting those data in the current environment may be unreasonably cumbersome, but the TEP included this measure to support and inform practices' development of infrastructure that will enable participation in this measure.

Tracking and Reminder System for Incidental Findings (Table 2, Measure 8). This facility- and system-level measure assesses the percentage of final reports containing AIFs with recommendations for follow-up imaging in which the findings were communicated to the patient. Panelists used the term "tracking and reminder system" to harmonize with an existing mammography system measure previously included in CMS programs [40]. At a minimum, the recommendation follow-up tracking elements comprise patient identifier, contact information, and details relevant to the recommended follow-up, like modality and timing. The measure guidance allows local tracking systems to determine their own workflow and process [9]. Some tracking programs may contact patients directly, thus maintaining their contact information [9,12]. Other programs explicitly do not contact patients [10].

DISCUSSION

This ACR-led initiative convened a TEP to guide development of this measure set to improve communication of incidental findings and support radiology follow-up tracking programs based on current scientific evidence and expert consensus. The measure set comprises four outcomes and five process measures. Two of the four outcome measures focus on AAA and pulmonary nodule use cases. The authors find the development of these measures timely considering CMS' prioritization of measures of patient outcomes [41].

We used CMS' definition for process measures [16] as measures that quantify a desired outcome. We did not include any structure measures, which are binary measures (yes or no) regarding features of a health care organization or clinician relevant to its capacity to provide good health care. Many radiologists, clinicians, and administrators maintain that tracking and managing follow-up recommendation completion is beyond the scope of radiology services [14,42]. However, models for successful radiology-driven tracking systems, such as radiology-managed mammography screening tracking systems, lung cancer screening programs [26], or AIF tracking systems, exist [9,10,12,43]. We believe that achieving success in the measures we have defined will likely require structural implementation of HIT tracking systems, although we did not choose to specifically define these as structural measures. Follow-up completion can likely improve patient outcomes and provide positive return on investment through fewer adverse patient outcomes, lower provider medicolegal risk, and increased reimbursement for follow-up studies inside and outside of radiology. Thus, it could be argued that the system, not radiology practices, should make the investment in tracking systems.

Implementing tracking programs would greatly benefit from the availability of commercial HIT solutions. HIT developments could minimize the human role in tracking programs over time. The ACR has engaged various HIT vendors to raise awareness of the measure set and spark the development that facilitates the tracking process.

Debates continue over if, when, and how to include patients in follow-up tracking processes. Although TEP PFA representatives favored early communication regarding the follow-up to patients, other members voiced concerns. The State of Pennsylvania mandates that radiology practices send letters to patients for noncritical results that require patient's attention and follow-up [44]. This "active" communication (ie, contacting patients with information) raises issues of health literacy and comprehensibility of radiology reports for most patients, given the use of advanced language grade levels [45]. Sending letters, as opposed to using digital communication tools, may be a less effective communication method given the inability to track whether the messages were read and making two-way communication more difficult. It is unclear how patients may react when receiving a radiology report with "bad news," especially when immediate access to further information or clinical support is unavailable, such as after-hours [46].

"Passive" communication approaches allow patient access to information on their own terms, with 20% to 50% of patients currently accessing radiology results on the electronic health record portal [47,48]. Simple radiology report macros, such as Info-RADS, could passively inform patients of recommended follow-up care [38]. Info-RADS provides a message for nonemergent actionable findings that the patient should discuss with their provider [38]. The drawbacks to passive communication include barriers that prevent some patient populations from accessing medical information [48-52].

Limitations

There are several limitations inherent to TEPs, including panelists with varying motives for participation, like intellectual and financial conflicts, or pressing a preconceived outcome [53]. TEP selection could have been biased by including those who possess expertise in this subject area and favor their institutions' tracking program design [53] or maintain scholarly and personal loyalties with each other before joining the panel. The ACR used a standard disclosure and transparency process for measure development [54].

During meetings, the TEP members discussed their common denominators, which could promote tacit agreements leading to narrowly representing divergent opinions, instead of openly opposing related broader views [53]. PFAs described feeling intimidated by the TEP's physicians. Therefore, the ACR conducted separate conversations with PFAs on certain topics.

Although well publicized, the public comment periods were time bound and may not have reached the entire target audience. The ACR will accept ongoing comments for review by the appropriate ACR committee to confirm medical validity and by ACR staff for technical validity.

Challenges to this measure set's utilization exist until supportive information technology tools are widely available. The ACR engages in ongoing dialogue with the HIT community to promote new and existing commercial products that could enable or facilitate measure participation.

It is understood that implementation of tracking programs requires investments in various resources. This measure imitative supported by the ACR emphasizes the value of adopting tracking programs to ensure completion of AIF follow-up recommendations and hopes to encourage local investments in requisite staffing for successful programs.

Conclusion

This multidisciplinary, multistakeholder initiative developed a measure set that provides an opportunity to improve patient outcomes beyond the radiology reading room walls. The measure set represents a general framework that emphasizes effective communication practices, patient inclusion, tracking to completion, and outcome data collection. It offers a systems approach to closing patient safety gaps, such as missed cancer diagnoses, that may result from incomplete recommended follow-up. When paired with ongoing developments and improvements in HIT, these measures may efficiently and effectively improve patient outcomes and provide additional evidence for the appropriate management of incidental findings.

TAKE-HOME POINTS

- The Actionable Incidental Findings ACR measure set fosters a systems approach to closing patient safety gaps, such as missed cancer diagnoses, that may result from incomplete recommended follow-up.
- The measure set encourages the implementation of tracking systems that comprise effective communication practices, patient inclusion, tracking to completion, and outcome data collection.
- Some measures may currently seem unreasonably cumbersome, such as documenting that findings have been communicated to patients, but the technical expert panel included such measures to support and inform practices' development of infrastructure that will enable best practices

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